

DRIVING CURRENT VS LUMEN OUTPUT SPECIFICATION

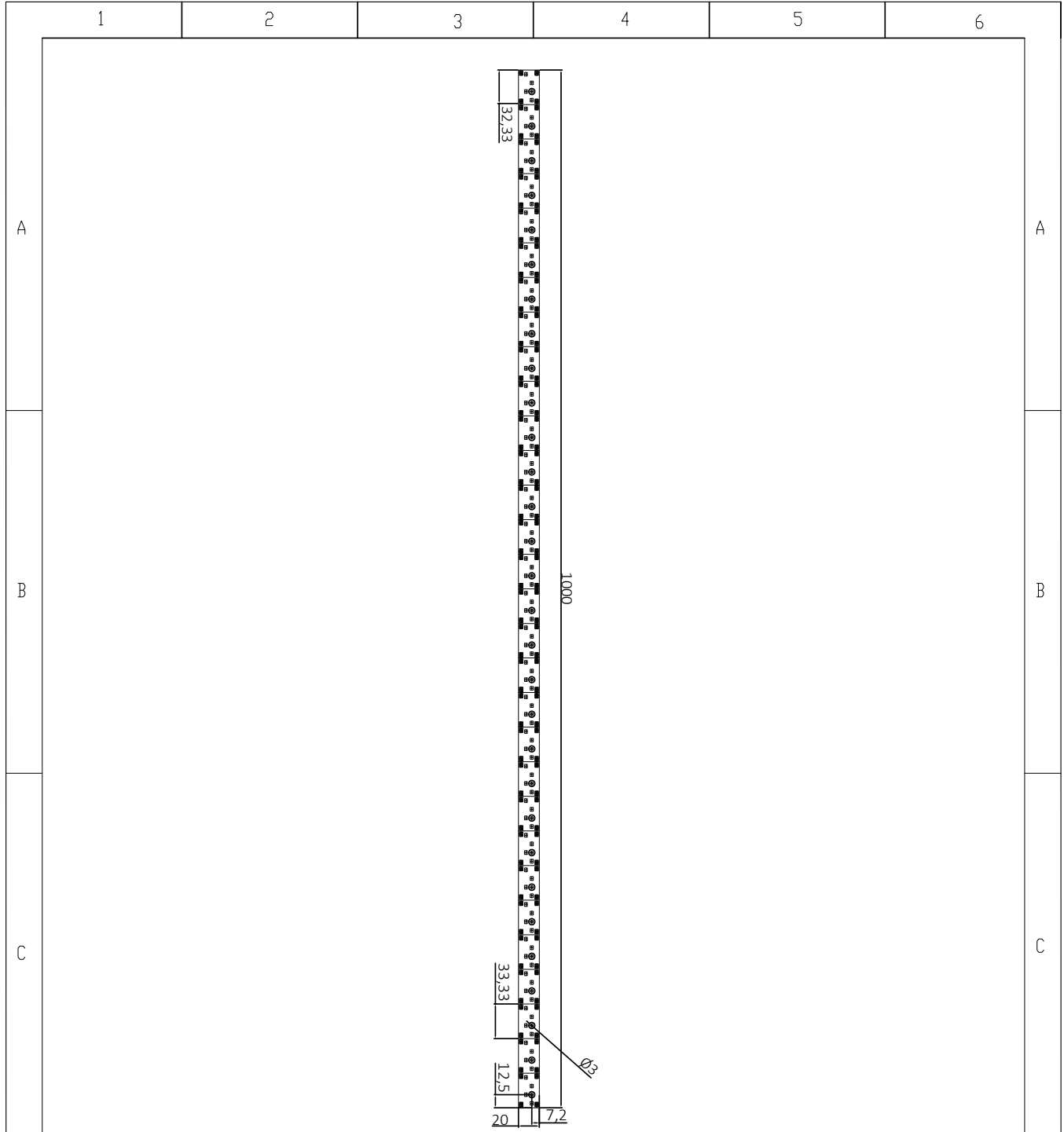
Common Characteristic [@Tj] : 85°C ;			
Module Code	X-ML201000LM4080-2835RA-3S1-120		
PCB Material	FR4	Electrical Connection	
Operating Temperature (°C)	-40 ~ +100	Parallel	4
Storage Temperature (°C)	-40 ~ +40	Series	30
Thermal Conductivity (W/m-K)	1>	LED Quantity	120
LED Lumileds 2835 3S1			
Correlated Color Temperature (CCT)	4000K		
Color Rendering Index (CRI)	80+		
Module Operating Voltage (V)	82	83	84
Module Operating Current (mA)	240	350	400
Branch Operating Current (mA)	60	88	100
Module Power (W)	19,66	29,19	33,64
Module Light Output (lm)	3.794	5.371	6.088
Module Efficiency (lm/W)	193	184	181
LED Lumileds 2835 2K1			
Correlated Color Temperature (CCT)	4000K		
Color Rendering Index (CRI)	80+		
Module Operating Voltage (V)	89	91	93
Module Operating Current (mA)	240	350	400
Branch Operating Current (mA)	60	88	100
Module Power (W)	21,46	31,71	37,20
Module Light Output (lm)	3.819	5.581	6.473
Module Efficiency (lm/W)	178	176	174
LED Lumileds 2835 HE			
Correlated Color Temperature (CCT)	4000K		
Color Rendering Index (CRI)	80+		
Module Operating Voltage (V)	80	81	82
Module Operating Current (mA)	240	350	400
Branch Operating Current (mA)	60	88	100
Module Power (W)	19,22	28,46	32,76
Module Light Output (lm)	3.979	5.719	6.486
Module Efficiency (lm/W)	207	201	198

The table below shows how to Module Light Output changes depending on CCT (K)


LED	Lumen Output Multiplier				
	2700K (CRI 80)	3000K (CRI 80)	4000K (CRI 80)	5000K (CRI 80)	6500K (CRI 80)
Lumileds 2835 3S1	0,92857	0,957	1	1	0,9857
Lumileds 2835 2K1	0,9696	0,985	1	1	1
Lumileds 2835 HE	0,97	0,961	1	1	1

Relative luminous intensity versus CCT (K)

X-ML201000LM4080-2835RA-3S1-120 MECHANICAL DRAWINGS



SERBEST ÖLÇÜ TOLERANSLARI -DIN 2768-1 / General Tolerances for linear and angular dimensions (DIN ISO 2768-1)

0.5 up to 3mm	over 3 up to 6mm	over 6 up to 30mm	over 30 up to 120mm	over 120 up to 400mm	over 400 up to 1000mm
± 0.1	± 0.1	± 0.2	± 0.3	± 0.5	± 0.8
Stock code No	MALZEME (MATERIAL)		AGIRLIK (WEIGHT)		
Revision	--		--		
Date	18.05.2023		TLS-001-01L201000LML28-120-T1		OLÇEK / SCALE 1 / 1
Sheet					A4
Drawn By	Esra GENÇ				 TD Lighting Solutions
Checked By	Ibrahim OKMEN				
Approved By	--				

TLS Teknoloji Sanayi ve Dis Ticaret A.S

This drawing is our property. It cant be reproduced or communicated without our written agreement.

CCT AND BINNING INFORMATION

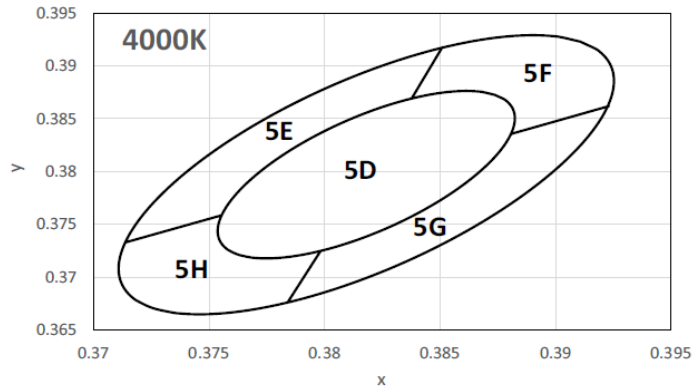


Figure 2d. 1/5th color bin structure for LUXEON 2835 Commercial 4000K at specified test current and binning temperature of $T_j=25^{\circ}\text{C}$.

Table 2d-1. 3- and 5-step MacAdam ellipse color bin definitions for LUXEON 2835 Commercial 4000K, at specified test and binning conditions.

NOMINAL CCT	COLOR SPACE	CENTER POINT ⁽¹⁾ (cx, cy)	MAJOR AXIS, a	MINOR AXIS, b	ELLIPSE ROTATION ANGLE, θ
4000K	Single 3-step MacAdam ellipse	(0.3818, 0.3797)	0.00939	0.00402	53.72°
4000K	Single 5-step MacAdam ellipse	(0.3818, 0.3797)	0.01565	0.00670	53.72°

Table 2d-2. 4 quadrants definition for LUXEON 2835 Commercial 4000K, at specified test and binning conditions.

POINT	x	y
1	0.3851	0.3918
2	0.3714	0.3733
3	0.3784	0.3676
4	0.3923	0.3862
Center	0.3818	0.3797

Notes for Table 2d:

1. Lumileds maintains a tolerance of ± 0.007 on x and y color coordinates in the CIE 1931 color space.

LEGAL NOTICE

Product information provided by TLS Teknoloji Sistemleri San ve Dış Tic AŞ ("TLS") in this document is believed to be correct and accurate. TLS reserves the right to change/correct the specifications and other data or information relating to products without notice but TLS accepts no liability for errors that may appear in this document, howsoever occurring, or liability arising from the use or application of any information or data provided herein. Neither the supply of such information, nor the purchase or use of products conveys any licence or permission under patent, copyright, trademark or other intellectual property right of TLS or third parties.

Products sold by TLS are subject to its standard Terms and Conditions of Sale that are available on request. No warranty is given that products do not infringe the intellectual property rights of third parties, and furthermore, the use of products in certain ways or in combination with TLS, or non-TLS furnished equipments/components may infringe intellectual property rights of TLS.

The purpose of this document is to provide information only and it may not be used, applied or reproduced (in whole or in part) for any purpose nor be taken as a representation relating to the products in question. No warranty or guarantee express or implied is made concerning the capability, performance or suitability of any product, and information concerning possible applications or methods of use is provided for guidance only and not as a recommendation. The user is solely responsible for determining the performance and suitability of the product in any application and checking that any specification or data it seeks to rely on has not been superseded.

Products are intended for normal commercial applications. For applications requiring unusual environmental requirements, extended temperature range, or high reliability capability (e.g. military, or medical applications), special processing/testing/conditions of sale may be available on application to TLS.

CONTACT

TLS Teknoloji Sistemleri San ve Dış Tic AŞ

Akçaburgaz Mahallesi 3080. Sokak No:5 Esenyurt / İstanbul / TURKEY

info@tlsteknoloji.com
+90 444 27 33