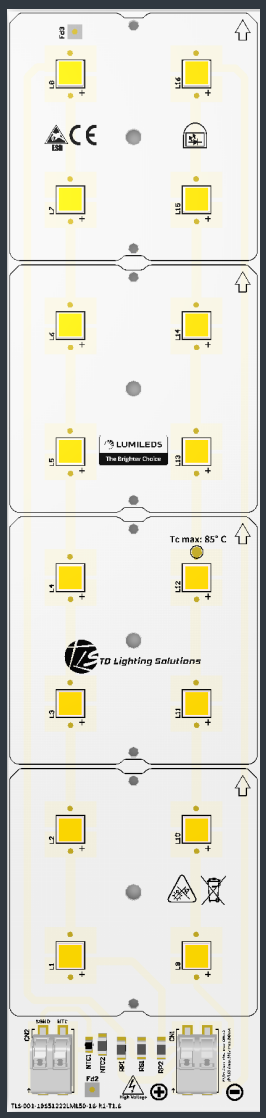


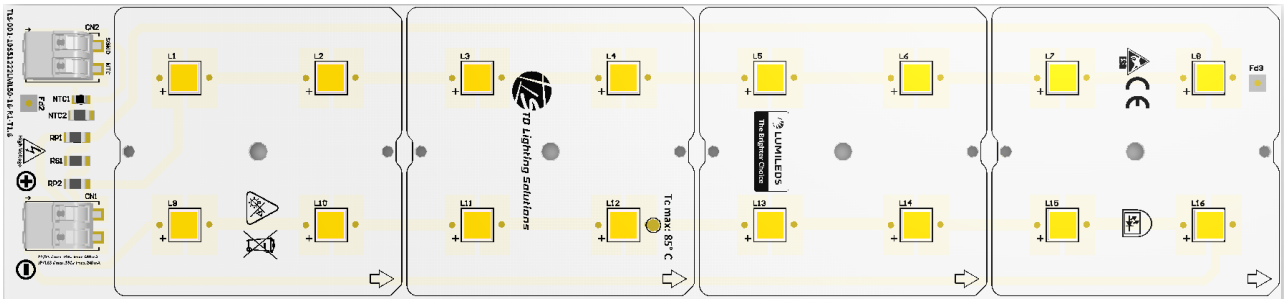
TD Lighting Solutions

X-MS51222LML-4070-5050-16

Square Series

www.**tlsteknoloji**.com

PRODUCT PHOTO



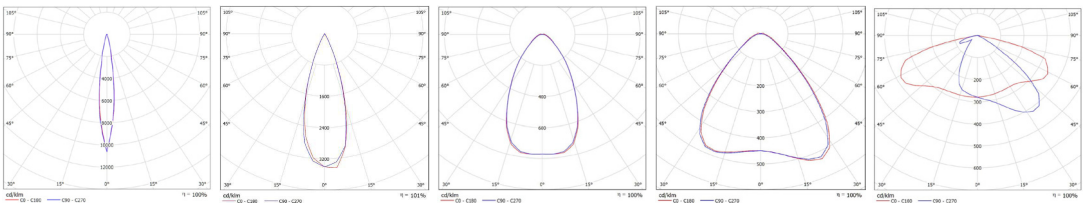
SPECIFICATIONS

- Default driving method is constant current input.
- CCT Range from 2200K up to 6500K
- Luminous flux range from 5696 lm to 10816 lm
- Efficiency of the module up to 185 lm/W
- CRI 70 is standard, CRI 80 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- Simple installation (e.g. screw)
- Long life-time > 60,000 hours
- 5 years guarantee at specified conditions

For your orders please call us:
+90 444 27 33

APPLICATIONS

PHOTOMETRY



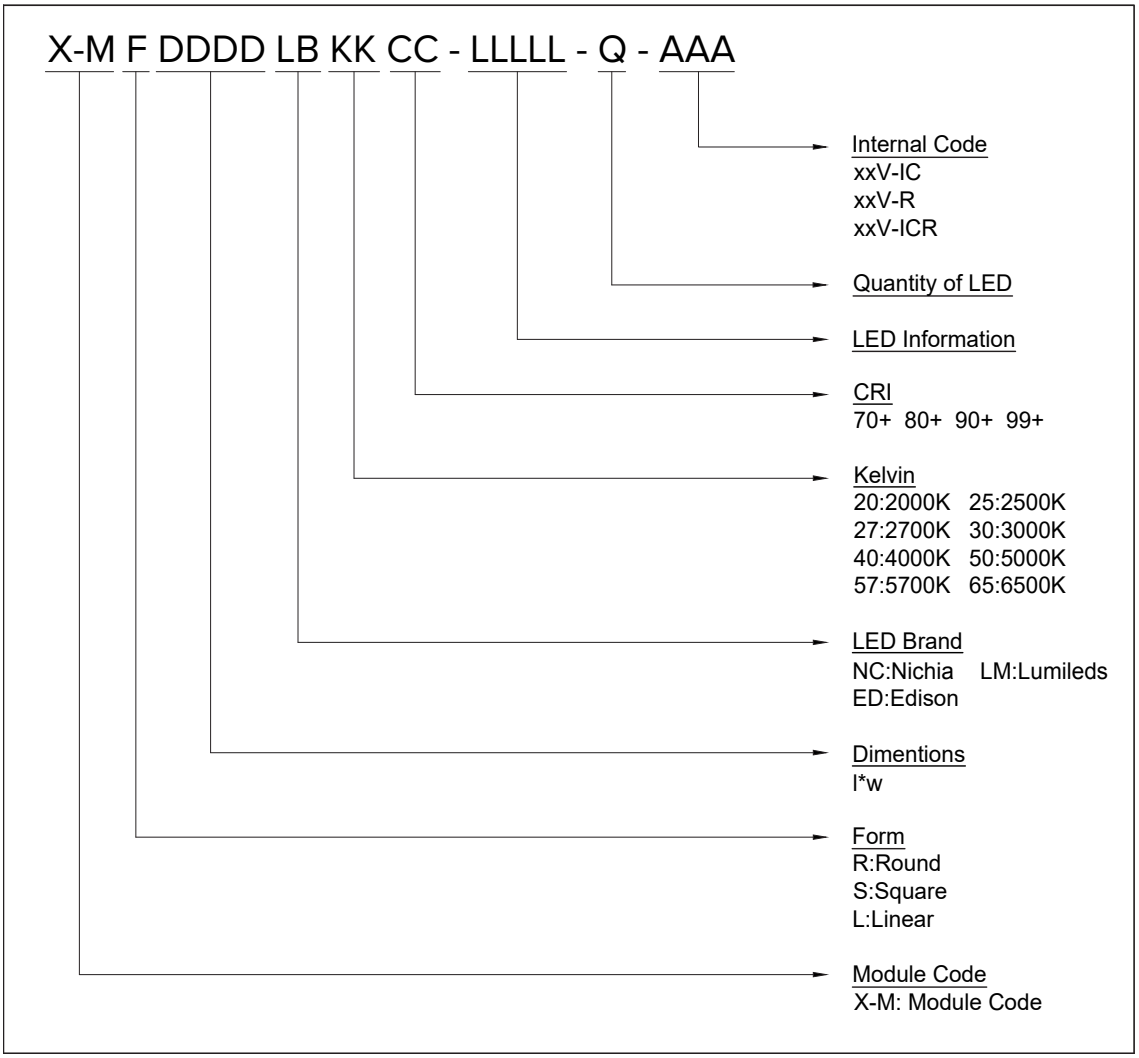
TLS04NI-5050-10-UNB | TLS04NI-5050-30 | TLS04NI-5050-60-MB | TLS04NI-5050-90-WB | TLS04NI-5050-STL-M2M3

Akçaburgaz Mahallesi 3080. Sokak No:5 Esenyurt / İstanbul | www. tlsteknoloji.com | TEL: +90 444 27 33

TECHNICAL DATA

Beam Angle	120°
Ambient temperature range	-25° ~ +55°C
Tc max	85°C
Max. DC forward current	1400mA
Typical voltage of LED Module at max current	48V
Insulation test voltage	2kV
ESD classification	Class 1
Risk group (EN 62471:2008)	2
Type of protection	IP00

ORDERING INFORMATIONS



DRIVING CURRENT VS LUMEN OUTPUT SPECIFICATION

Common Characteristic [@Tj : 85°C] ;				
Module Code	X-MS51222LML-4070-5050-16			
PCB Material	ALU		**Electrical Connection**	
Operating Temperature (°C)	-25 ~ +100°C		Parallel	2
Storage Temperature (°C)	-25 ~ +100°C		Series	8
Thermal Conductivity (W/m-K)	1		LED Quan	16
LED		**LM-5050-Round.**		
Correlated Color Temperature (CCT)		**4000K**		
Color Rendering Index (CRI)		70		
R9				
Module Operating Voltage (V)	45	46	48	
Module Operating Current (mA)	700	1000	1400	
Branch Operating Current (mA)	350	500	700	
Module Power (W)	31,5	46,5	67,6	
Module Light Output (lm)	5.712	7.888	10.592	
Module Efficiency (lm/W)	181	170	157	
LED		**LM-5050-Square.**		
Correlated Color Temperature (CCT)		**4000K**		
Color Rendering Index (CRI)		70		
R9				
Module Operating Voltage (V)	44	46	47	
Module Operating Current (mA)	700	1000	1400	
Branch Operating Current (mA)	350	500	700	
Module Power (W)	31,1	45,6	65,9	
Module Light Output (lm)	5.696	7.920	10.672	
Module Efficiency (lm/W)	183	174	162	
LED		**LM-5050-HE.**		
Correlated Color Temperature (CCT)		**4000K**		
Color Rendering Index (CRI)		70		
R9				
Module Operating Voltage (V)	45	46	48	
Module Operating Current (mA)	700	1000	1400	
Branch Operating Current (mA)	350	500	700	
Module Power (W)	31,3	46,1	66,8	
Module Light Output (lm)	5.792	8.048	10.816	
Module Efficiency (lm/W)	185	175	162	

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

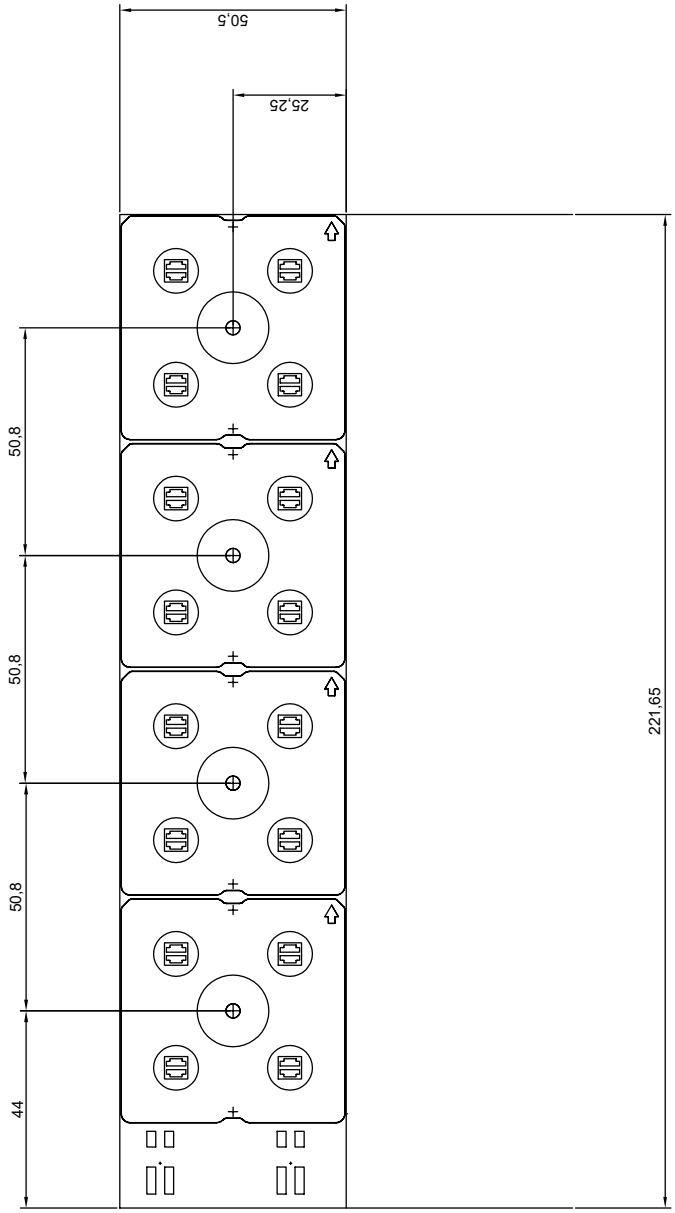
Lumen Output Multiplier					
LED	2700K (CRI 70)	3000K (CRI 70)	4000K (CRI 70)	5000K (CRI 70)	6500K (CRI 70)
L150-4070500600000	0,93	0,96	1,00	1,00	0,98
L150-4070500600S0	0,93	0,96	1,00	1,00	0,98
L150-40705006000H0	0,93	0,96	1,00	1,00	0,98

DATASHEET

X-MS51222LML-4070-5050-16

TD Lighting Solutions

X-MS51222LML-4070-5050-16 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) XXX		
Revision	00				
Date	07.04.2022	P-TLS-001-10S51222LLML50-16-V2-T1.6		OLÇEK / SCALE 1 / 1	A3
Sheet					
Drawn By	Kaan ALTINTEN				
Checked By	Kaan ALTINTEN				
Approved By	İbrahim ÖKMEN				

TD Lighting Solutions

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CCT AND BINNING INFORMATION

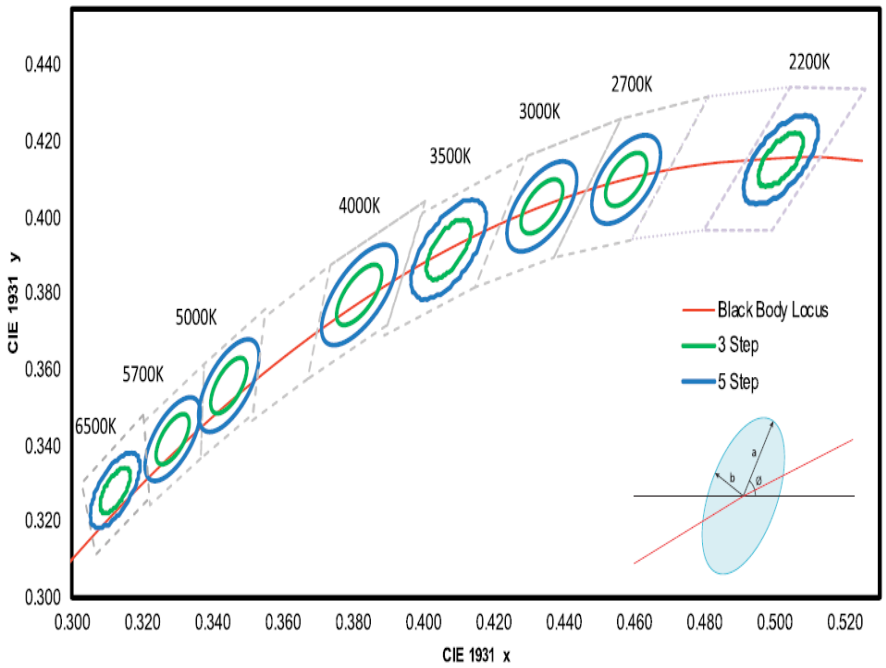


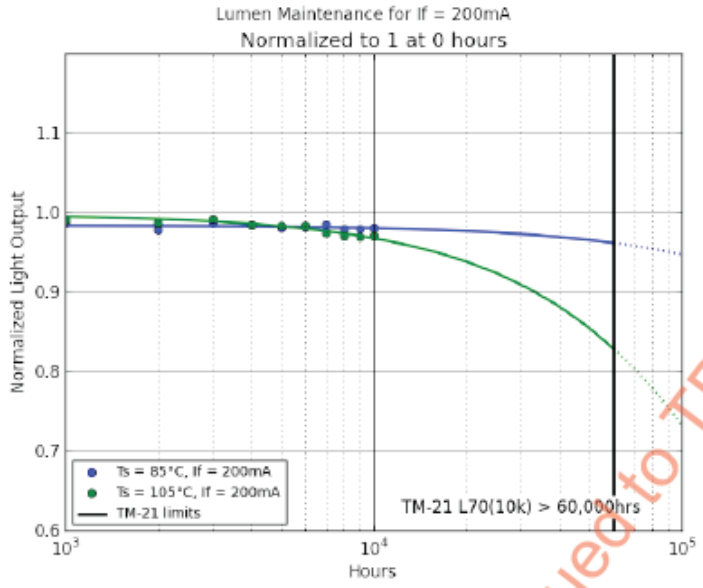
Figure 7. 3- and 5-step MacAdam ellipse illustration for hot-color targeting expected at 85°C.

LIFE TIME

MODEL NUMBER: **5050**

Normalized Flux Statistics for I_f = 200mA

		0hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs	alpha	B	L70
	median =	1.0000	0.9907	0.9887	0.9931	0.9848	0.9845	0.9851	0.9776	0.9735	0.9701	0.9733			
Ts=Tair=105°C	average =	1.0000	0.9910	0.9880	0.9928	0.9844	0.9832	0.9834	0.9756	0.9710	0.9697	0.9711	3.0971e-06	0.9986	114,705
	st dev =	0.0000	0.0067	0.0057	0.0063	0.0055	0.0059	0.0067	0.0065	0.0065	0.0078	0.0067	TM-21 L70(10k) > 60,000hrs		
	min =	1.0000	0.9703	0.9694	0.9731	0.9705	0.9644	0.9674	0.9575	0.9563	0.9479	0.9528			
	max =	1.0000	1.0023	0.9989	1.0026	0.9910	0.9902	0.9921	0.9838	0.9800	0.9804	0.9787			
	median =	1.0000	0.9883	0.9780	0.9885	0.9857	0.9823	0.9822	0.9849	0.9809	0.9806	0.9815			
Ts=Tair=85°C	average =	1.0000	0.9879	0.9787	0.9880	0.9850	0.9817	0.9827	0.9846	0.9801	0.9800	0.9816	3.8436e-07	0.9846	887,624
	st dev =	0.0000	0.0049	0.0040	0.0048	0.0056	0.0052	0.0048	0.0053	0.0053	0.0055	0.0055	TM-21 L70(10k) > 60,000hrs		
	min =	1.0000	0.9779	0.9721	0.9812	0.9751	0.9732	0.9728	0.9728	0.9699	0.9695	0.9707			
	max =	1.0000	0.9977	0.9888	0.9995	0.9967	0.9920	0.9912	0.9922	0.9899	0.9892	0.9901			



Delta u'v' for I_f = 200mA

		0hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs
	median =	0.0000	0.0012	0.0014	0.0012	0.0015	0.0015	0.0018	0.0019	0.0019	0.0021	0.0021
Ts=Tair=105°C	average =	0.0000	0.0012	0.0014	0.0012	0.0015	0.0015	0.0018	0.0019	0.0019	0.0021	0.0022
	st dev =	0.0000	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0003	0.0003
	min =	0.0000	0.0009	0.0011	0.0009	0.0011	0.0012	0.0014	0.0015	0.0011	0.0014	0.0016
	max =	0.0000	0.0015	0.0017	0.0016	0.0018	0.0018	0.0022	0.0022	0.0023	0.0025	0.0028
	median =	0.0000	0.0013	0.0018	0.0017	0.0019	0.0020	0.0022	0.0022	0.0022	0.0024	0.0024
Ts=Tair=85°C	average =	0.0000	0.0013	0.0017	0.0017	0.0019	0.0020	0.0022	0.0022	0.0022	0.0024	0.0024
	st dev =	0.0000	0.0001	0.0002	0.0002	0.0003	0.0003	0.0002	0.0003	0.0002	0.0002	0.0003
	min =	0.0000	0.0011	0.0012	0.0014	0.0014	0.0015	0.0018	0.0017	0.0018	0.0020	0.0021
	max =	0.0000	0.0015	0.0021	0.0021	0.0022	0.0026	0.0026	0.0027	0.0027	0.0028	0.0030

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