



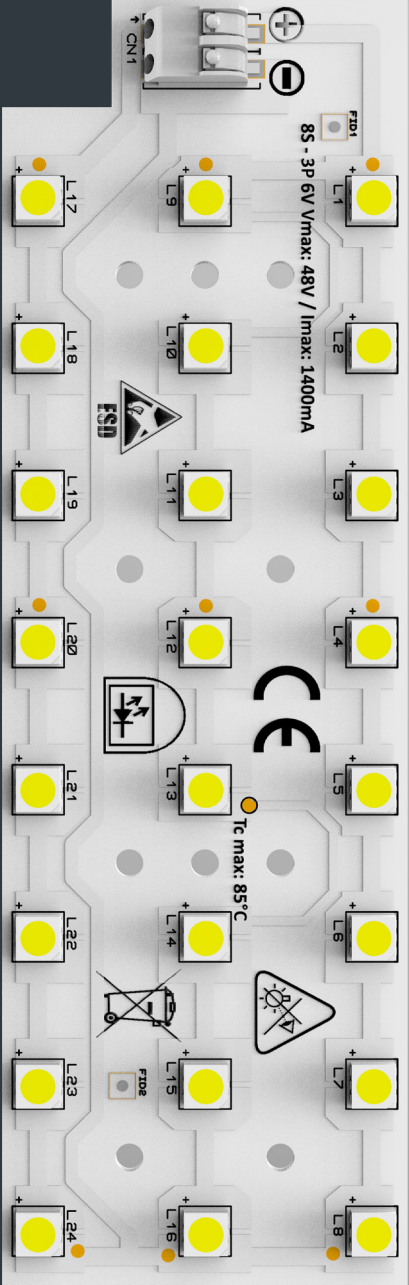
TD Lighting Solutions

X-ML46147LM-4070-5050-24

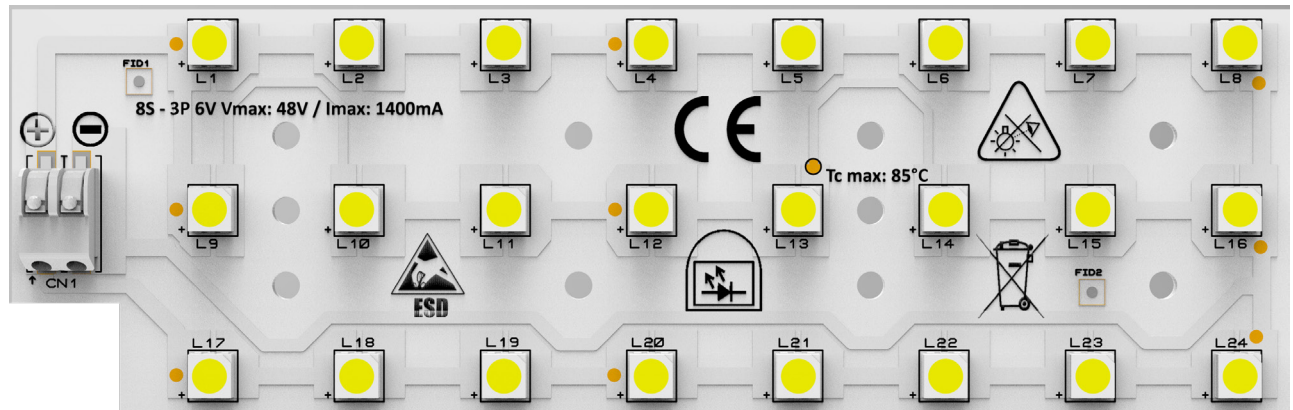
Linear Series



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PRODUCT PHOTO



SPECIFICATIONS

- Default driving method is constant current input.
- CCT Range from 2000K up to 6500K
- Luminous flux range from 9.033 lm to 16.482 lm
- Efficacy of the module up to 193 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



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APPLICATIONS



Street Lighting

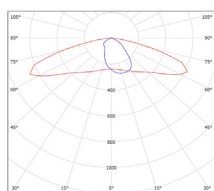


Flood Lighting



High Bay Lighting

PHOTOMETRY

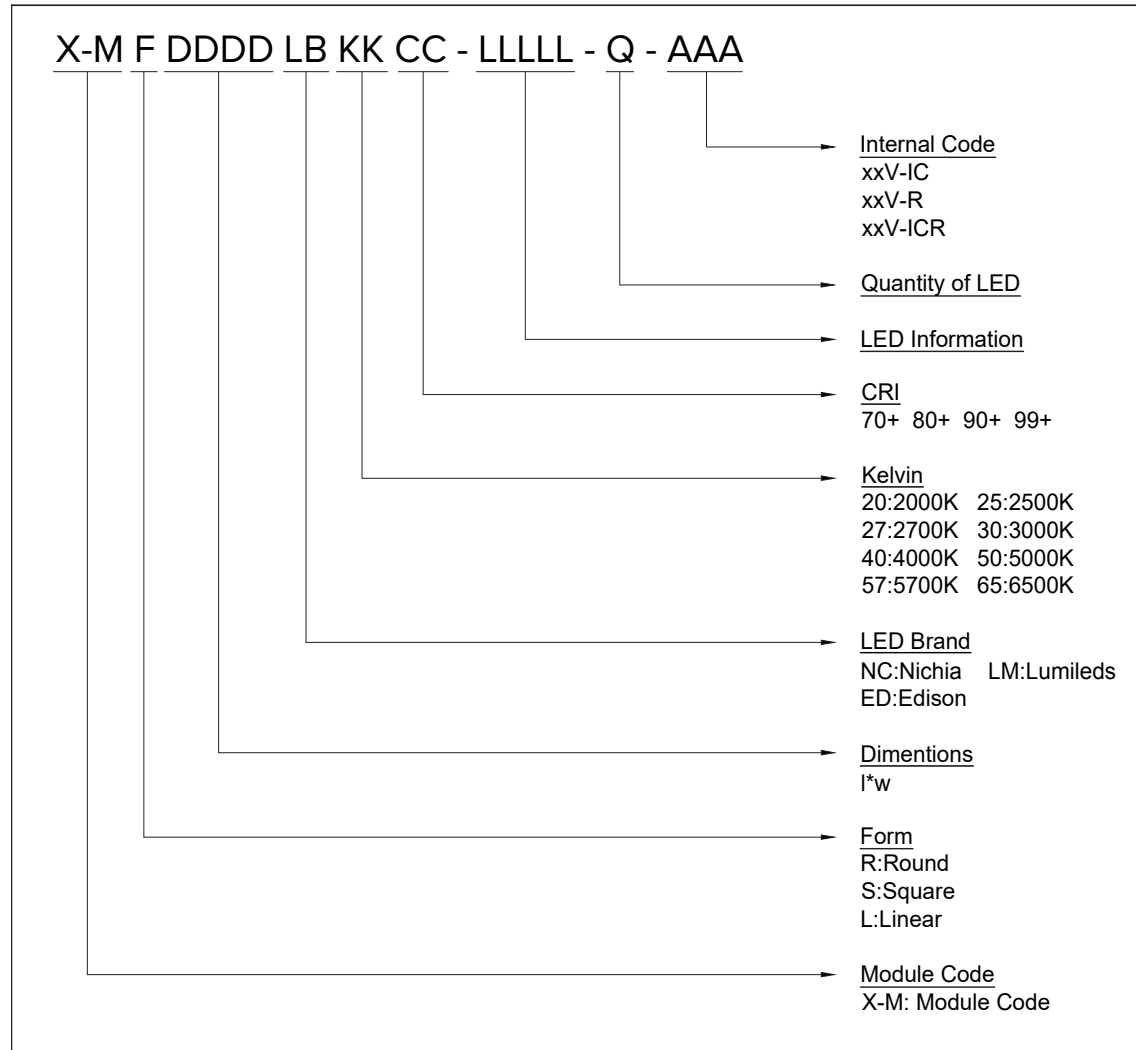


TLS24NI-W71L173-STL-V-M2M3

TECHNICAL DATA

Beam Angle	120°
Ambient temperature range	-25° ~ +55°C
Tc max	85°C
Max. DC forward current	2100mA
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 INFORMATION



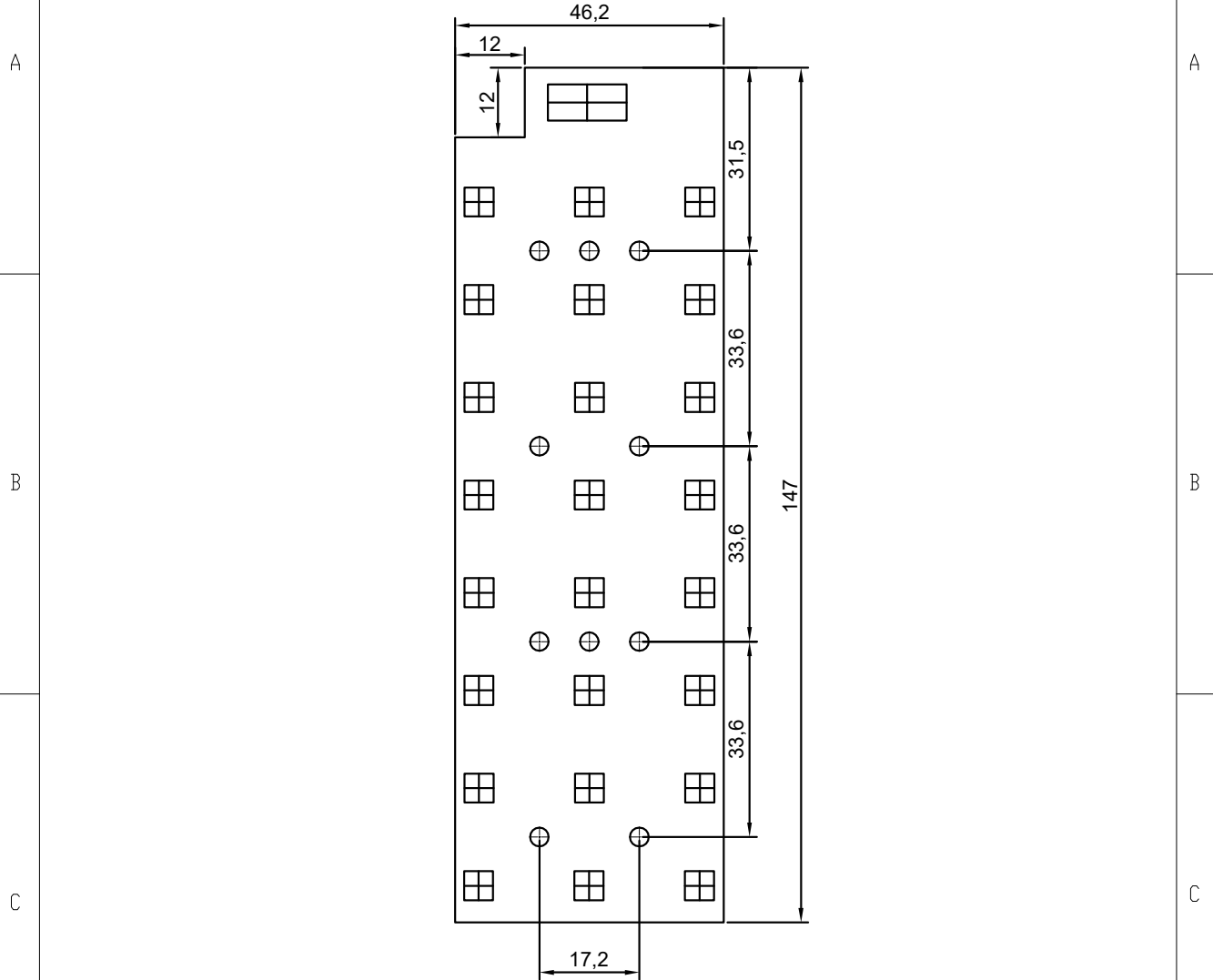
DRIVING CURRENT VS LUMEN OUTPUT SPECIFICATION

Common Characteristic [@Tj : 85°C] ;			
Module Code	X-ML46147LM-4070-5050-24		
PCB Material	ALU	Electrical Connection	
Operating Temperature (°C)	-25 ~ +100°C	Parallel	3
Storage Temperature (°C)	-25 ~ +100°C	Series	8
Thermal Conductivity (W/m-K)	1,5	LED Quantity	24
LED LM-5050-Square			
Correlated Color Temperature (CCT)	4000K		
Color Rendering Index (CRI)	70+		
Module Operating Voltage (V)	45	46	47
Module Operating Current (mA)	1050	1500	2100
Branch Operating Current (mA)	350	500	700
Module Power (W)	47,2	69,0	99,3
Module Light Output (lm)	9.064	12.420	16.482
Module Efficiency (lm/W)	192	180	166
LED LM-5050-Round			
Correlated Color Temperature (CCT)	4000K		
Color Rendering Index (CRI)	70+		
Module Operating Voltage (V)	46	47	47
Module Operating Current (mA)	1050	1500	2100
Branch Operating Current (mA)	350	500	700
Module Power (W)	47,8	70,3	99,3
Module Light Output (lm)	9.033	12.376	15.886
Module Efficiency (lm/W)	189	176	160
LED LM-5050-HE			
Correlated Color Temperature (CCT)	4000K		
Color Rendering Index (CRI)	70+		
Module Operating Voltage (V)	45	46	48
Module Operating Current (mA)	1050	1500	2100
Branch Operating Current (mA)	350	500	700
Module Power (W)	47,5	69,7	100,8
Module Light Output (lm)	9.176	12.550	16.632
Module Efficiency (lm/W)	193	180	165

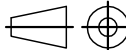
The table below shows how to Module Light Output changes depending on CCT (°K)

LED	Lumen Output Multiplier				
	2700K (CRI 80)	3000K (CRI 80)	4000K (CRI 80)	5000K (CRI 80)	6500K (CRI 80)
L150-40705006000S0	0,89	0,96	1,00	0,99	0,99
L150-40705006000H0	0,89	0,96	1,00	0,99	0,99
L150-4070500600000	0,89	0,96	1,00	0,99	0,99

X-ML46147LM-4070-5050-24 MECHANICAL DRAWINGS



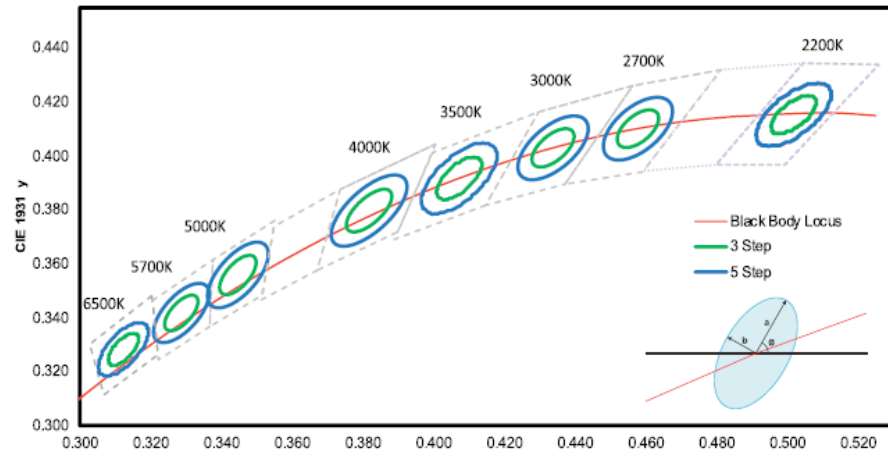
SERBEST ÖLÇÜ TOLERANSLARI -DIN 2768-1 / General Tolerances for linear and angular dimensions (DIN ISO 2768-1)

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	00			--		--					
Date	16.11.2021			X-ML46147LMxx-4080-24						OLÇEK / SCALE	A4
Sheet											
Drawn By	Kaan ALTINTEN							 TD Lighting Solutions			
Checked By	Kaan ALTINTEN										
Approved By	Utku ÖZTÜRK										

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CCT AND BINNING INFORMATION



LIFE TIME

MODEL NUMBER: 5050 Square

Normalized Flux Statistics for $I_f = 200\text{mA}$

	0hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	7000hrs	8000hrs	9000hrs	10000hrs	alpha	B	L70
Ts=Tair=105°C	median =	1.0000	0.9907	0.9887	0.9931	0.9848	0.9845	0.9851	0.9776	0.9735	0.9701	0.9733		
	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		
Ts=Tair=85°C	median =	1.0000	0.9883	0.9780	0.9885	0.9857	0.9823	0.9822	0.9849	0.9809	0.9806	0.9815		
	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		

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