

PRODUCT PHOTO



SPECIFICATIONS

- Default driving method is constant current input
- CCT Range from 2000°K up to 6500°K
- Luminous flux range from 4234 lm to 7464 lm
- Efficacy of the module up to 135 lm/W
- CRI 80 is standart, CRI 70 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



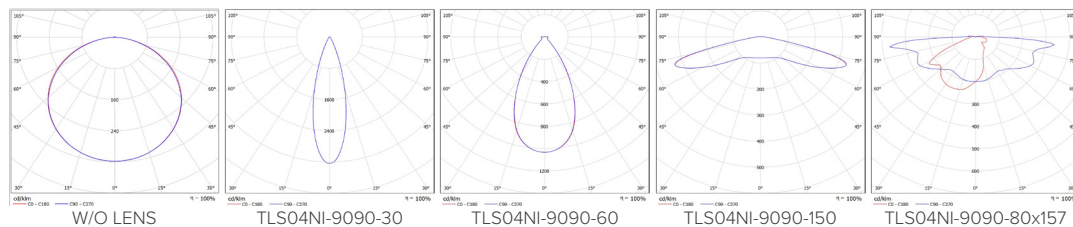
For your orders please call us:
+90 444 27 33

APPLICATIONS



Street Lighting High Bay Lighting Flood Lighting

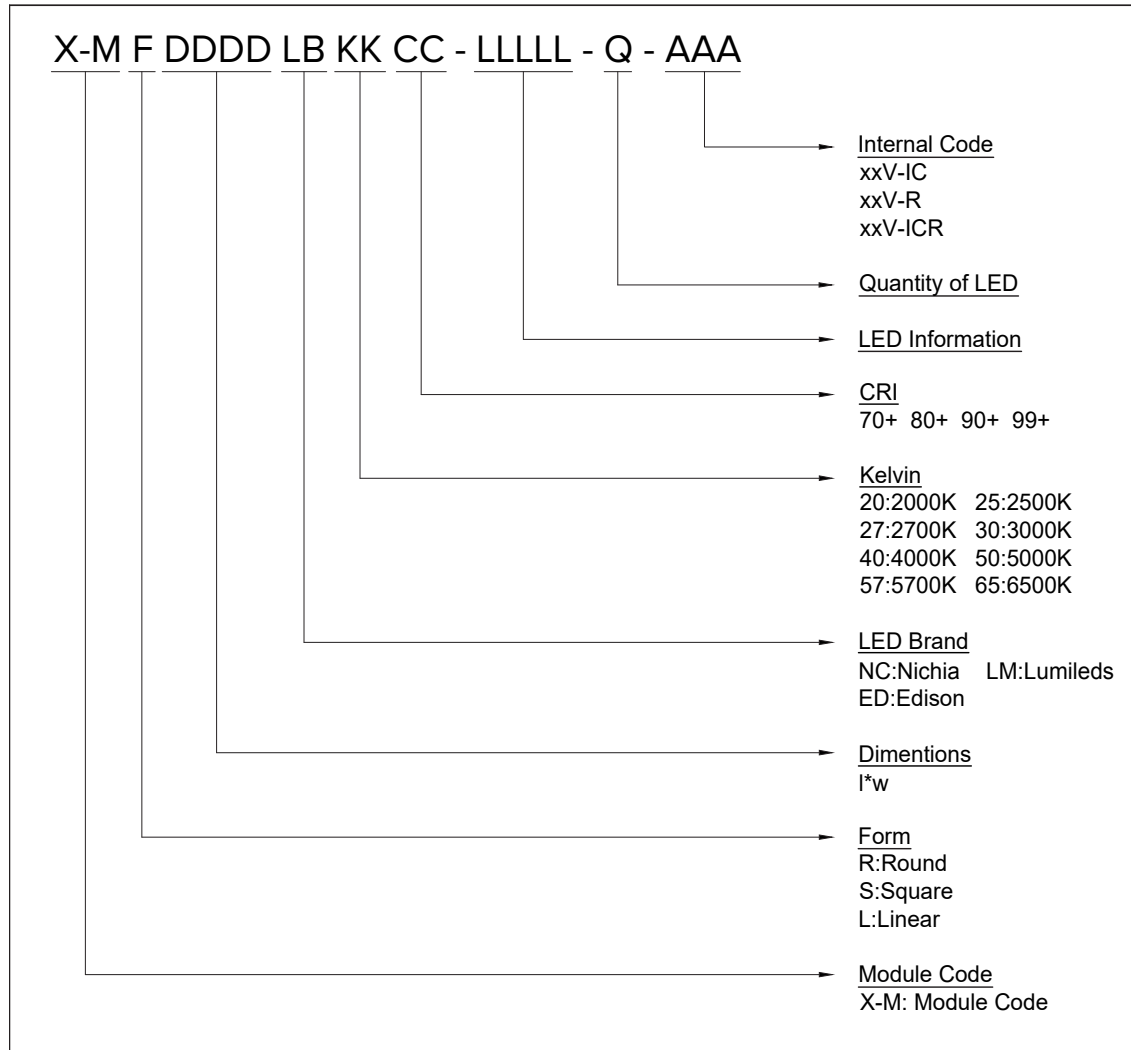
PHOTOMETRY



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)	1
Type of protection	IP00

ORDERING INFORMATION



DRIVING CURRENT VS LUMEN OUTPUT SPECIFICATION

Common Characteristic [@Tj : 85°C] ;			
Module Code	X-MS7070NCxx-NV4L144ART-4		
PCB Material	ALU	Electrical Connection	
Operating Temperature (°C)	-40 ~ +85	Parallel	1
Storage Temperature (°C)	-40 ~ +55	Series	4
Thermal Conductivity (W/m-K)	1,5>	LED Quantity	4
LED			
NV4L144ART			
Correlated Color Temperature (CCT)	4000K		
Color Rendering Index (CRI)	80+		
Module Operating Voltage (V)	44,80	46,00	47,60
Module Operating Current (mA)	700	1050	1400
Branch Operating Current (mA)	700	1050	1400
Module Power (W)	31,36	48,30	66,64
Module Light Output (lm)	4.234	5.941	7.464
Module Efficiency (lm/W)	135	123	112

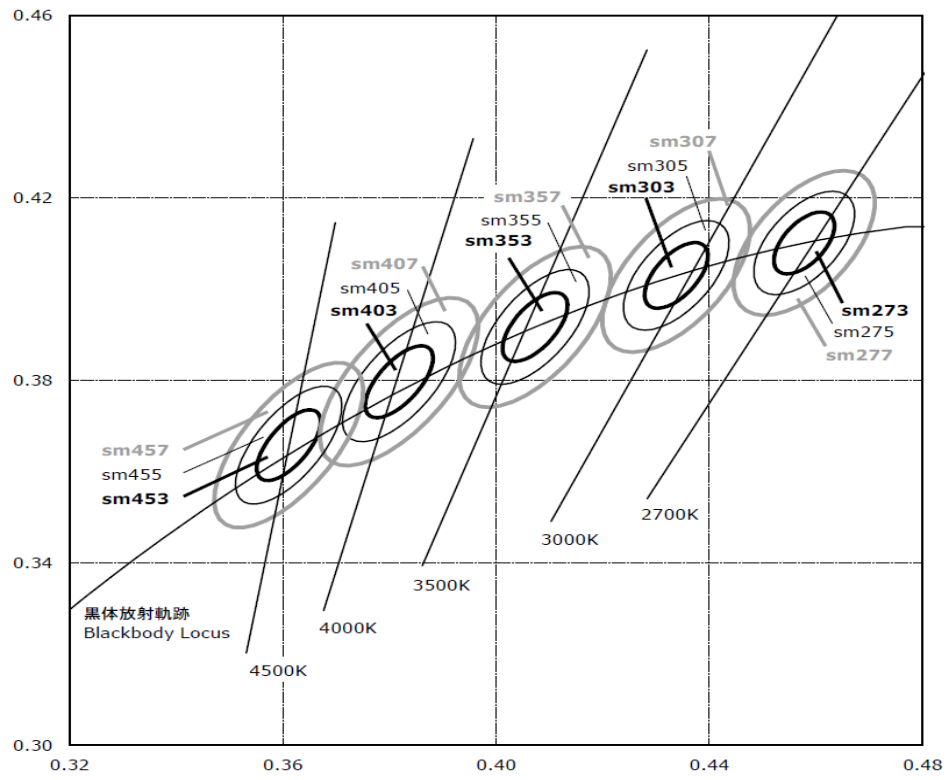
The table below shows how to Module Light Output changes depending on CCT (°K)

LED	Lumen Output Multiplier				
	2700°K (CRI 80)	3000°K (CRI 80)	4000°K (CRI 80)	5000°K (CRI 80)	6500°K (CRI 80)
NV4L144AR_R8000	0,8	0,9	1	1	1

Relative luminous intensity versus CCT (°K)

1	2	3	4	5	6	
X-MS7070NCxx-NV4L144ART-4 MECHANICAL DRAWINGS						
A					A	
B					B	
C					C	
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		XXX	XXX		
Date	10.12.2019		TLS-001-15S7070NC-4			OLÇEK / SCALE
Sheet						
Drawn By	Kaan ALTINTEN				A4	
Checked By	Ibrahim OKMEN					
Approved By	Mesut CINAR					
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



LIFE TIME

MODEL NUMBER: NV4L144Ax

Test Summary:

Data Set	Case Temperature [°C]	Ambient Temperature [°C]	Drive Current [mA]	Average Current per Die [mA]	Lumen Maintenance at 10K hours [%]	Chromaticity Shift ($\Delta u'v'$) at 10K hours	TM-21 Projection $L_{70}(10K)$ [hours]	TM-21 Projection $L_{80}(10K)$ [hours]	TM-21 Projection $L_{90}(10K)$ [hours]
1	85	> 80	700	700	97.6	0.0014	> 55000	> 55000	> 55000
2	85	> 80	1400	1400	92.1	0.0021	35900	23300	12200
3	105	> 100	700	700	96.7	0.0016	> 55000	> 55000	38100
4	105	> 100	1200	1200	90.6	0.0033	34500	21800	10600
5	105	> 100	1400	1400	87.3	0.0045	25400	16000	7670
6	120	> 115	700	700	94.3	0.0027	> 55000	37700	17700
7	120	> 115	1200	1200	80.1	0.0062	16000	10700	6110

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@tsteknoloji.com
+90 444 27 33