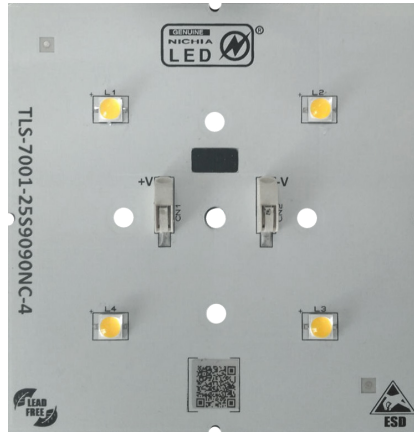


PRODUCT PHOTO



SPECIFICATIONS

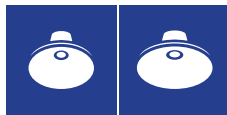
- Default driving method is constant current input
- CCT Range from 2000°K up to 6500°K
- Luminous flux range is about 5040 lm
- Efficacy of the module up to 153 lm/W
- CRI 80 is standard, CRI 70 and CRI 90 are available
- Outstanding system color tolerance MacAdam 3 over the full operating area
- This module is standard and can be connected as 4 series
- Simple installation
- Long life-time > 60,000 hours
- 5 years guarantee at specified conditions



For your orders please call us:

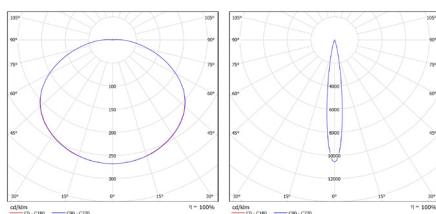
+90 444 27 33

APPLICATIONS



High Bay Lighting Very High Bay Lighting

PHOTOMETRY



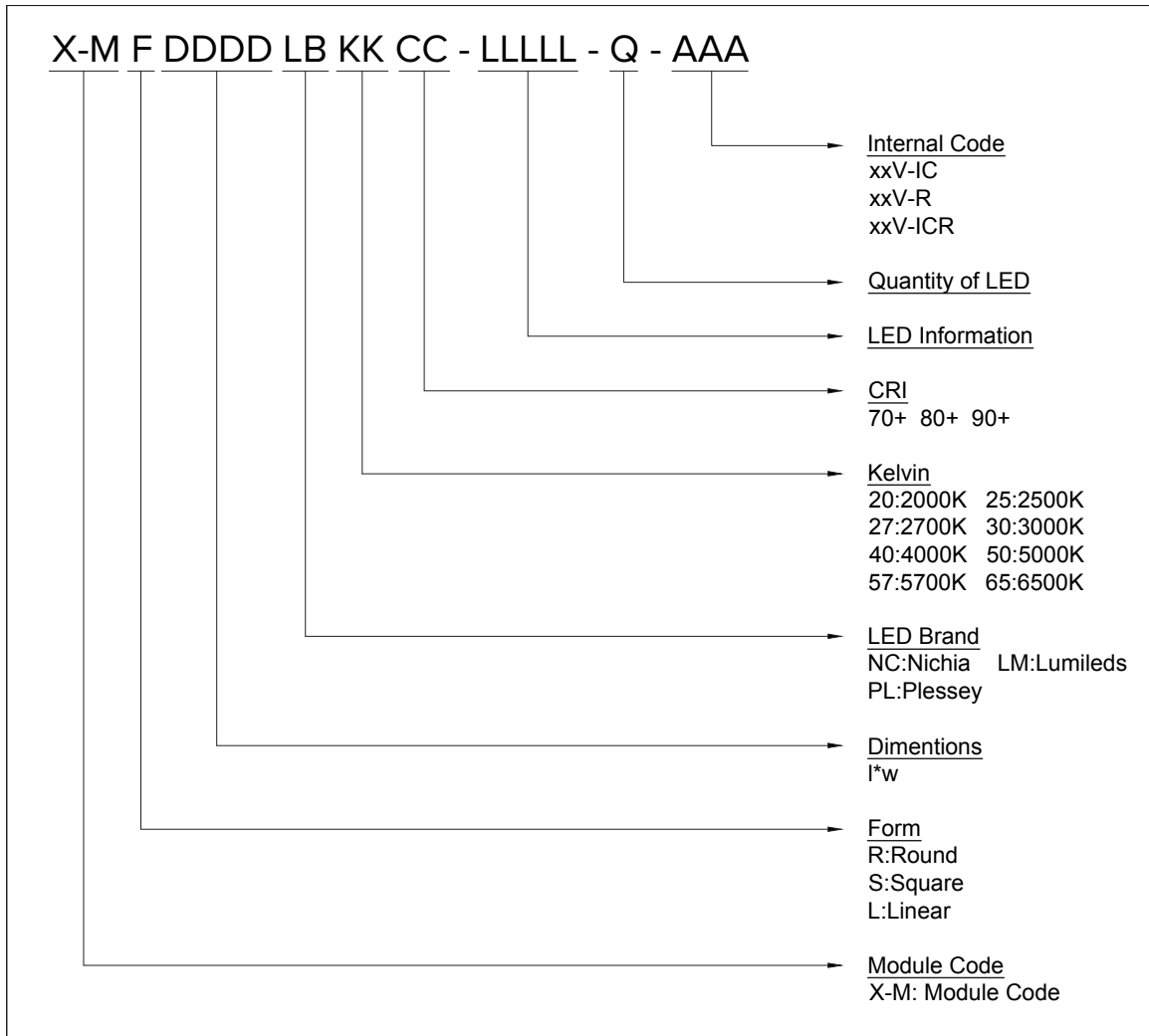
W/O LENS

C14678_LUCIA-S.LEDIL

TECHNICAL DATA

Beam Angle	130°
Ambient temperature range	-40°C ~ +100°C
Tc max	100 °C
Max. DC forward current	700 mA
Typical voltage of LED Module at max current	48 V
Insulation test voltage	2kV
ESD classification	Class 1C
Risk group (EN 62471:2008)	RG2
Type of protection	IP00
Type of protection	IP00

ORDERING INFORMATIONS



DRIVING CURRENT VS LUMEN OUTPUT SPECIFICATION

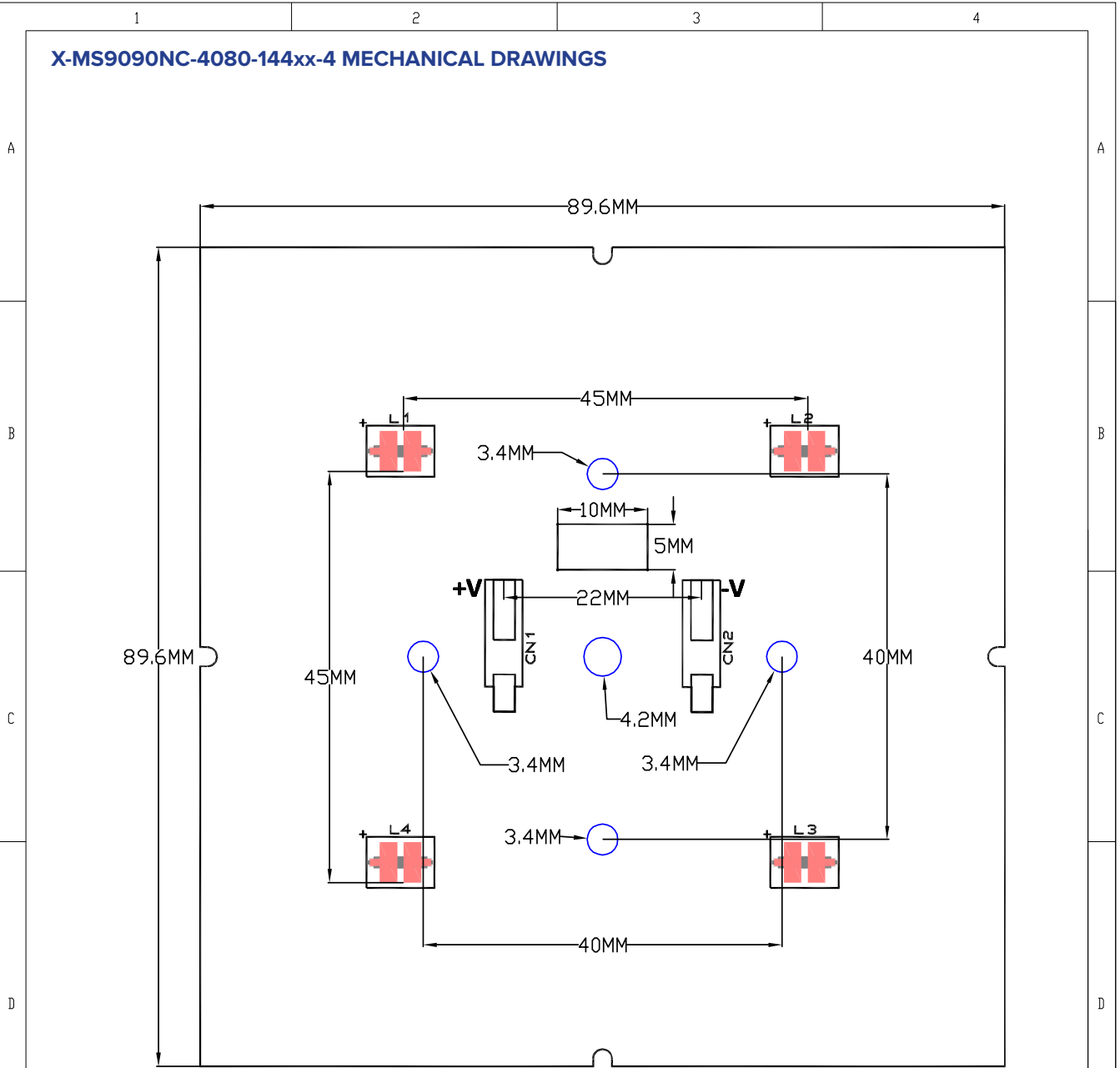
Common Characteristic [@T] : 85°C			
LED Brand & Type	X-MS9090NC-4080-144xx-4		Electrical Connection
PCB Material	Aluminium		
Operating Temperature (°C)	-40°C ~ 100°C		Parallel
Storage Temperature (°C)	-40°C ~ 100°C		Series
Thermal Conductivity (W/m-K)	1,5		Total LED Quantity
LED	NV4L144ART		
Correlated Color Temperature (CCT)	4000K		
Color Rendering Index (CRI)	80+		
Module Operating Current (mA)	700		
Branch Operating Current (mA)	700		
Module Operating Voltage (V)	48V		
Module Power (W)	33,6		
Module Light Output (lm)	5040		
Module Efficiency (lm/W)	153		

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

LED	Lumne Output Multiplier															
	2700°K (CRI 70)	3000°K (CRI 80)	3500°K (CRI 90)	4000°K (CRI 70)	4000°K (CRI 80)	4000°K (CRI 90)	4500°K (CRI 70)	4500°K (CRI 80)	4500°K (CRI 90)	5000°K (CRI 70)	5000°K (CRI 80)	5000°K (CRI 90)	5700°K (CRI 70)	5700°K (CRI 80)	6500°K (CRI 70)	6500°K (CRI 80)
NV4x144AR	0,899	0,944	0,886	1,000	0,913	0,814	0,954	0,899	0,802	1,020	0,984	0,924	1,000	0,902	0,972	0,954

Relative luminous intensity versus CCT (°K)

X-MS9090NC-4080-144xx-4 MECHANICAL DRAWINGS

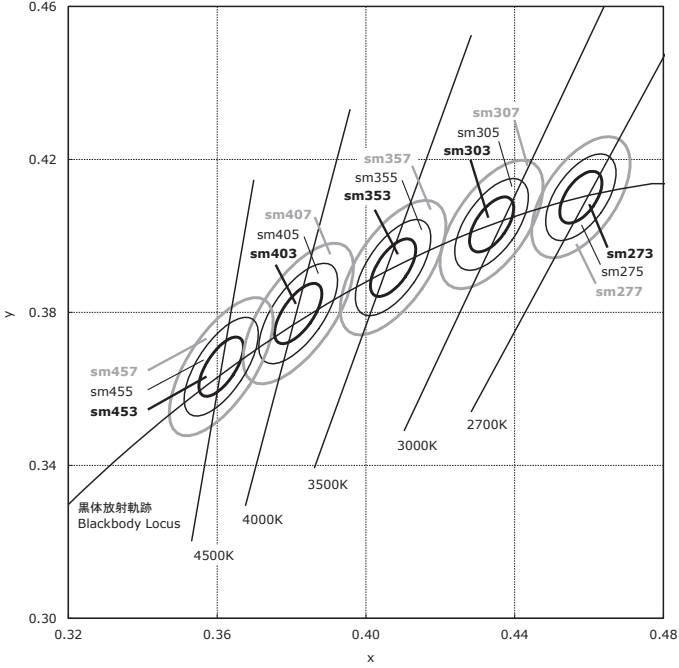


SERBEST ÖlÇÜ TOLERANSLARI -DIN 2768-1 / General Tolerances for linear and angular dimensions (DIN ISO 2768-1)											
0.5 up to 3mm	± 0.1	over 3 up to 6mm	± 0.1	over 6 up to 30mm	± 0.2	over 30 up to 120mm	± 0.3	over 120 up to 400mm	± 0.5	over 400 up to 1000mm	± 0.8

Stock code No : XXXX	MALZEME (MATERIAL) PC	AGIRLIK (WEIGHT)	ÖLÇEK / SCALE A4
Revision : 00	PARÇA NO (PART NO) TLS-7001-25S9090NC-4		
Date : 21.8.2017			
Sheet : 1			
Drawn By : RIDVAN TAS			
Checked By : M. SANATSEVER			
Approved By : M. CINAR			

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CCT AND BINNING INFORMATION



LIFETIME PROJECTION & WORST CONDITION PERFORMANCE

MODEL NUMBER: **NV4L144AR**

Test Summary:

Data Set	Case Temperature [T _c]	Ambient Temperature [T _a]	Drive Current [I _F]	Average Current per Die	Lumen Maintenance at 10,000 hours	Chromaticity Shift (Δu'v') at 10,000 hours	TM-21 Projection L ₇₀ (10K)	TM-21 Projection L ₉₀ (10K)	TM-21 Projection L ₉₀ (10K)
1	85 °C	> 80 °C	700 mA	700 mA	97.6 %	0.0014	> 55000 hours	> 55000 hours	> 55000 hours
2	85 °C	> 80 °C	1400 mA	1400 mA	92.1 %	0.0021	35900 hours	23300 hours	12200 hours
3	105 °C	> 100 °C	700 mA	700 mA	96.7 %	0.0016	> 55000 hours	> 55000 hours	38100 hours
4	105 °C	> 100 °C	1200 mA	1200 mA	90.6 %	0.0033	34500 hours	21800 hours	10600 hours
5	105 °C	> 100 °C	1400 mA	1400 mA	87.3 %	0.0045	25400 hours	16000 hours	7670 hours
6	120 °C	> 115 °C	700 mA	700 mA	94.3 %	0.0027	> 55000 hours	37700 hours	17700 hours
7	120 °C	> 115 °C	1200 mA	1200 mA	80.1 %	0.0062	16000 hours	10700 hours	6110 hours

Data Set 6 : 105°C, 120mA

Test Duration used	0-6000 hrs
B	1,0107
α	2,0007E-01

Curve-fit equation:
 $\Phi(t) = B \exp(-\alpha t)$

Lumen maintenance life equation:
 $L_{70} = \ln(B/0.7)/\alpha$

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