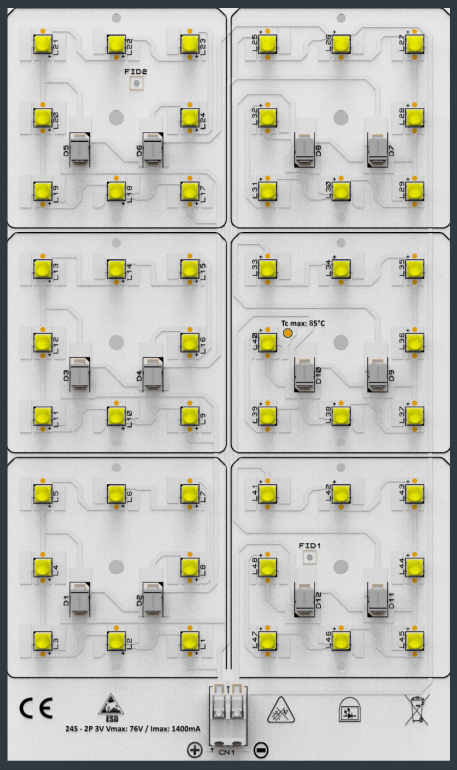


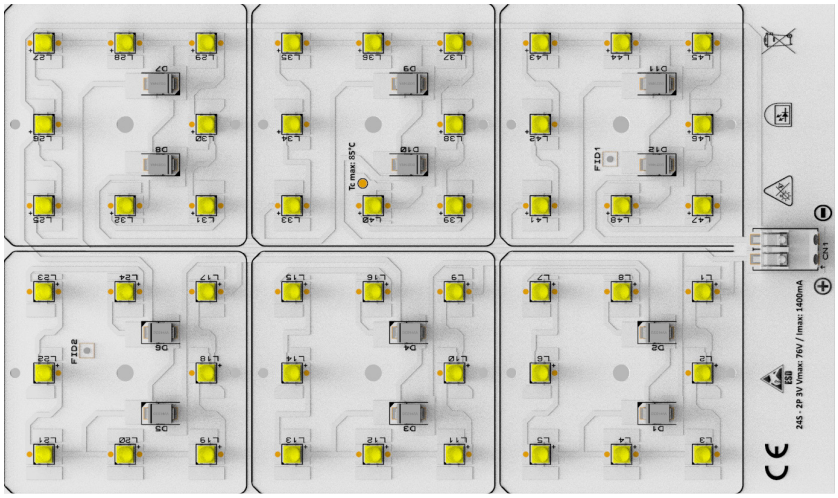
TD Lighting Solutions

X-MS170100NCxx-NVSW219F-48

Square Design

www.**tlsteknoloji**.com

PRODUCT PHOTO



SPECIFICATIONS

- Default driving method is constant current input
- CCT Range from 2700K up to 6500K
- This module can be used as 24 series 2 parallels.
- Luminous flux range from 9843 lm to 15087 lm
- Efficacy of the module up to 166 lm/W
- CRI 70 is standard.CRI 80 and CRI 90 is 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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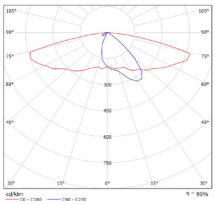
APPLICATIONS

Street Lighting

PHOTOMETRY

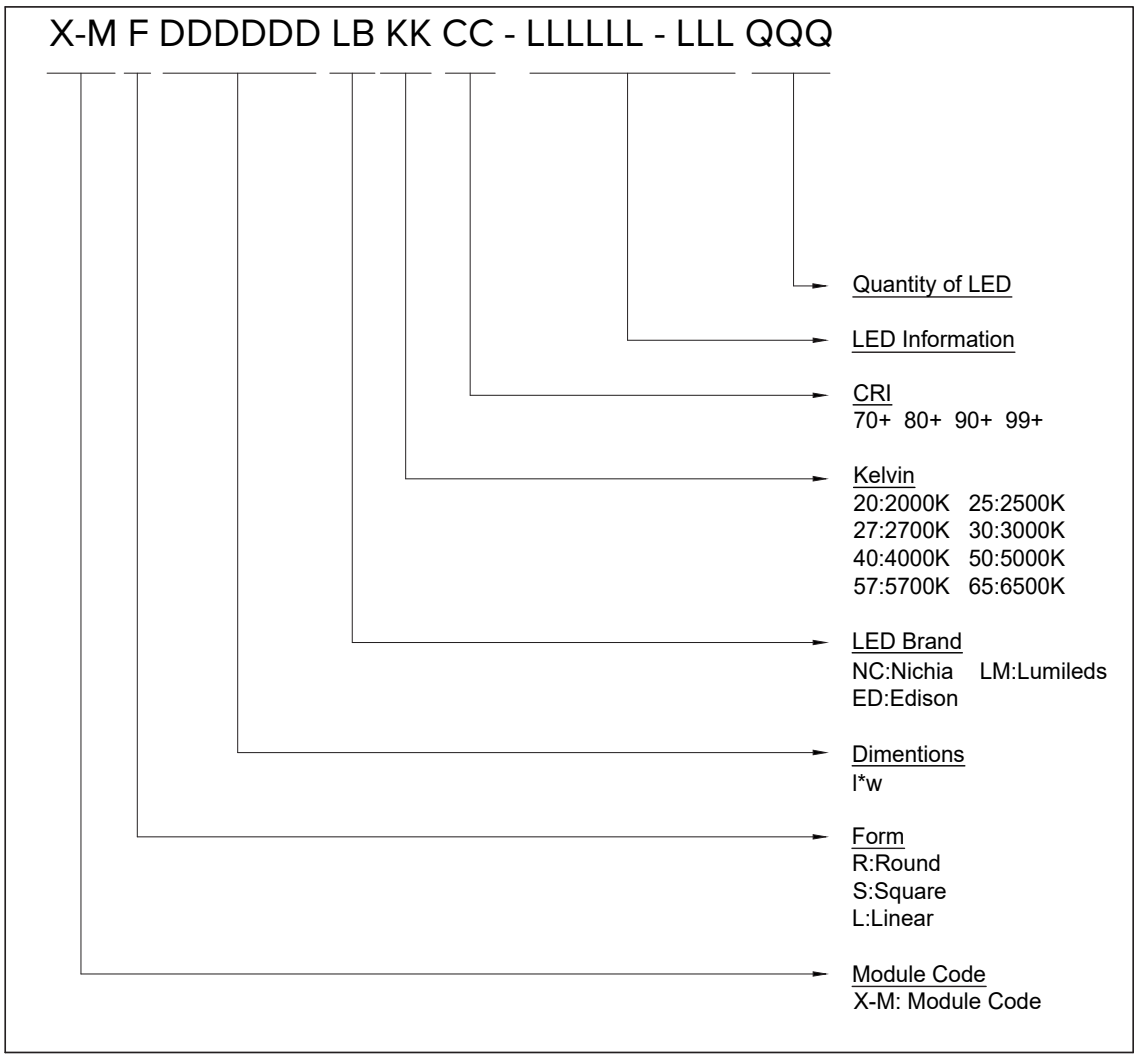


TLS08NI-5050-STL-M2M3

TECHNICAL DATA

Beam Angle	120°
Ambient temperature range	-25° ~ +55°C
Tc max	100°C
Max. DC forward current	1400mA
Typical voltage of LED Module at max current	69 V
Insulation test voltage	2kV
ESD classification	Class 1
Risk group (EN 62471:2008)	2
Type of protection	IP00

ORDERING INFORMATIONS



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DRIVING CURRENT VS LUMEN OUTPUT SPECIFICATION

Common Characteristic [@Tj : 85°C] ;				
Module Code	X-M170100NCxx-NVSW219F-48			
PCB Material	ALU		**Electrical Connection**	
Operating Temperature (°C)	-40 ~ +100		Parallel	2
Storage Temperature (°C)	-40 ~ +55		Series	24
Thermal Conductivity (W/m-K)	1>		LED Quantity	48
LED		**NVSW219F-V1_R8000**		
Correlated Color Temperature (CCT)		**4000K**		
Color Rendering Index (CRI)		80+		
Module Operating Voltage (V)	67	68	69	
Module Operating Current (mA)	1000	1200	1400	
Branch Operating Current (mA)	500	600	700	
Module Power (W)	66,96	81,50	96,10	
Module Light Output (lm)	9.843	11.655	13453	
Module Efficiency (lm/W)	147	143	140	
LED		**NVSW219F_R70**		
Correlated Color Temperature (CCT)		**4000K**		
Color Rendering Index (CRI)		70+		
Module Operating Voltage (V)	67	68	69	
Module Operating Current (mA)	1000	1200	1400	
Branch Operating Current (mA)	500	600	700	
Module Power (W)	66,96	81,50	96,10	
Module Light Output (lm)	11.115	13.122	15087	
Module Efficiency (lm/W)	166	161	157	

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

	Lumen Output Multiplier				
LED	2700°K (CRI 80)	3000°K (CRI 80)	4000°K (CRI 80)	5000°K (CRI 80)	6500°K (CRI 80)
NVSW219F-V1_R8000	0,88	0,92	0,96	0,97	0,94

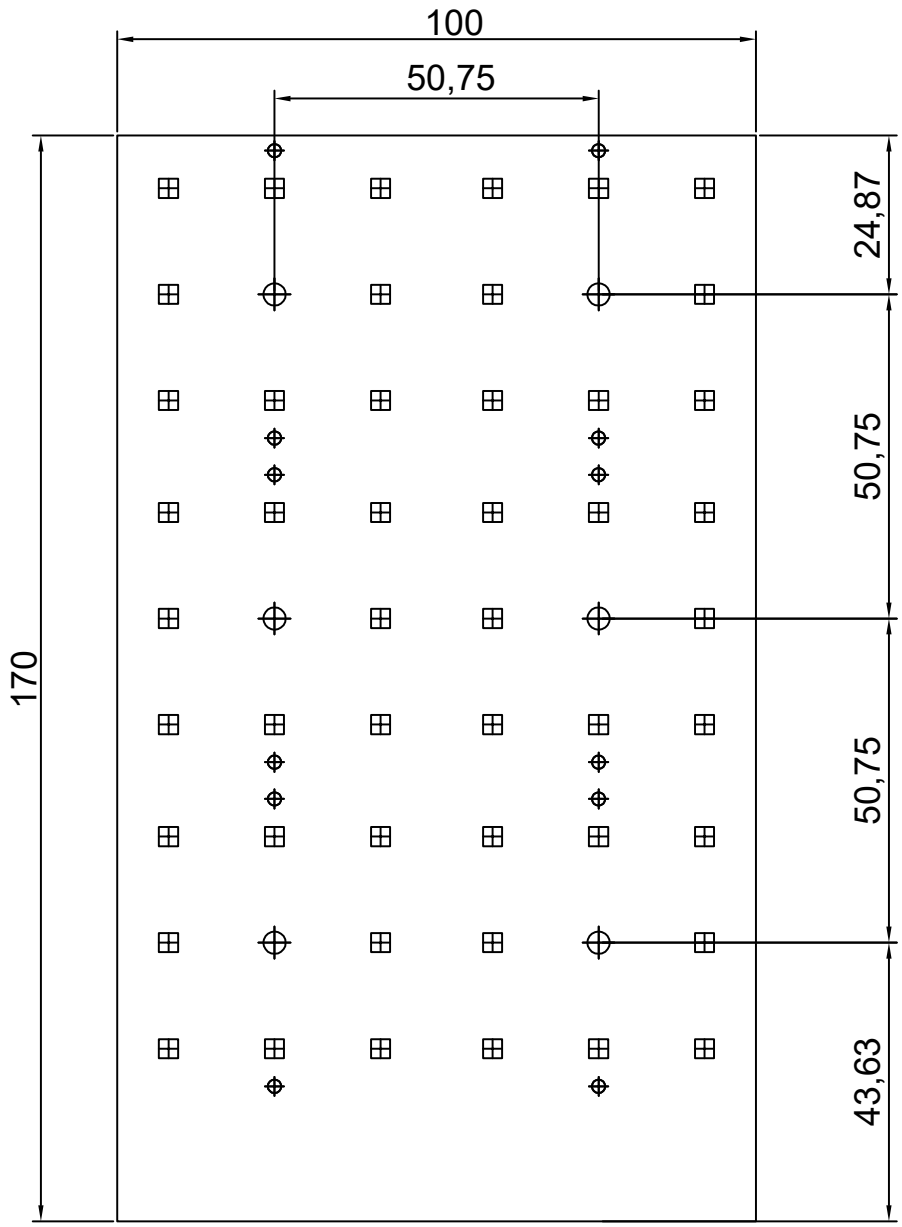
	Lumen Output Multiplier				
LED	2700°K (CRI 70)	3000°K (CRI 70)	4000°K (CRI 70)	5000°K (CRI 70)	6500°K (CRI 70)
NVSW219F_R70	0,93	0,95	1,00	1,01	X

Relative luminous intensity versus CCT (°K)

DATASHEET

X-MS170100NCxx-NVSW219F-48

X-MS170100NCxx-NVSW219F-48 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	XXX	XXX		
Date	14.07.2021	TLS-001-15S170100NC35-48-T1.6		OLÇEK / SCALE	A4
Sheet					
Drawn By	Kaan ALTINTEN				
Checked By	Kaan ALTINTEN				
Approved By	Utku OZTURK				

TD Lighting Solutions

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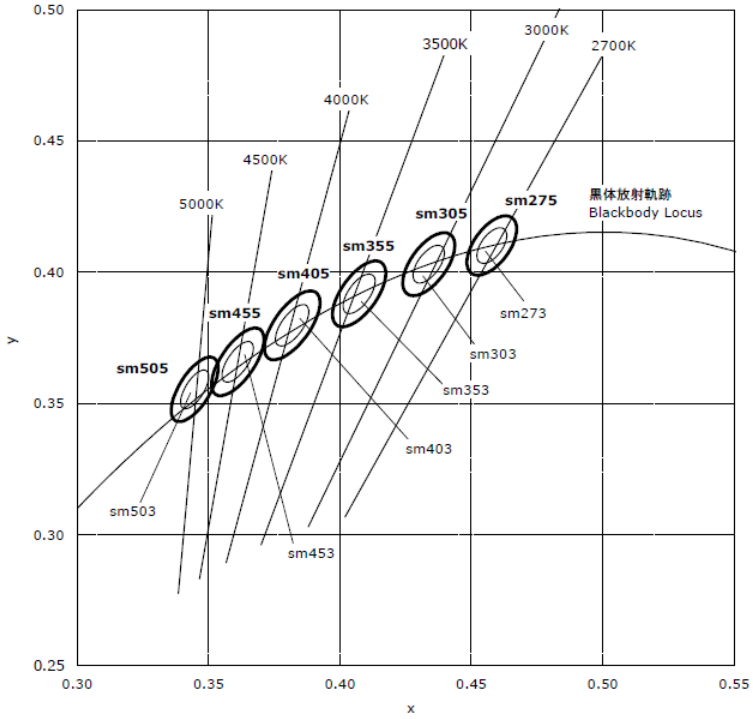
CCT AND BINNING INFORMATION



LIFE TIME

MODEL NUMBER: NVSWF219F

Report No. : SQETMS534401

LM-80 Test Report

This LM-80 testing is performed in accordance with IES LM-80-15.

Part No. NVSW219F

Issue Date:	November 4, 2020	**Revision Date:**	-
Test Initiation Date:	March 29, 2018	**Test Completion Date:**	June 19, 2020
Test Duration:	10,000 hours	**Report No.:**	SQETMS534401

Customer Information:

Company Name: Nichia Corporation
Address: 491-100, Oka, Kaminaka-cho, Anan-shi, Tokushima, 774-8601, JAPAN

Description of Test Samples:

Manufacturer's Name: Nichia Corporation
Classification: LED Package
Part Name: White LED
Part No.: NVSW219F
Nominal CCT: 2700 K

Test Summary:

Data Set	Case Temperature [°C]	Ambient Temperature [°C]	Drive Current [mA]	Luminous Flux 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	55	> 50	700	98.6	0.0005	> 60000	> 60000	> 60000
2	55	> 50	1500	97.6	0.0007	> 60000	> 60000	> 60000
3	85	> 80	700	98.3	0.0005	> 60000	> 60000	> 60000
4	85	> 80	1200	97.7	0.0010	> 60000	> 60000	> 60000
5	85	> 80	1500	96.9	0.0015	> 60000	> 60000	> 60000
6	105	> 100	700	97.6	0.0007	> 60000	> 60000	> 60000
7	105	> 100	1200	95.8	0.0019	> 60000	> 60000	32100
8	105	> 100	1500	83.6	0.0019	15200	11200	7720 *

* The Lp value is reached experimentally in the course of LM-80 testing.

Accredited
ASNITE 0057 Testing

Approved Signatory:

Takara WAKAKI, Lab Manager
Nichia Corporation LED Testing Laboratory
1-1,Tatsumi-Cho, Anan-Shi, TOKUSHIMA 774-0001, JAPAN

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