

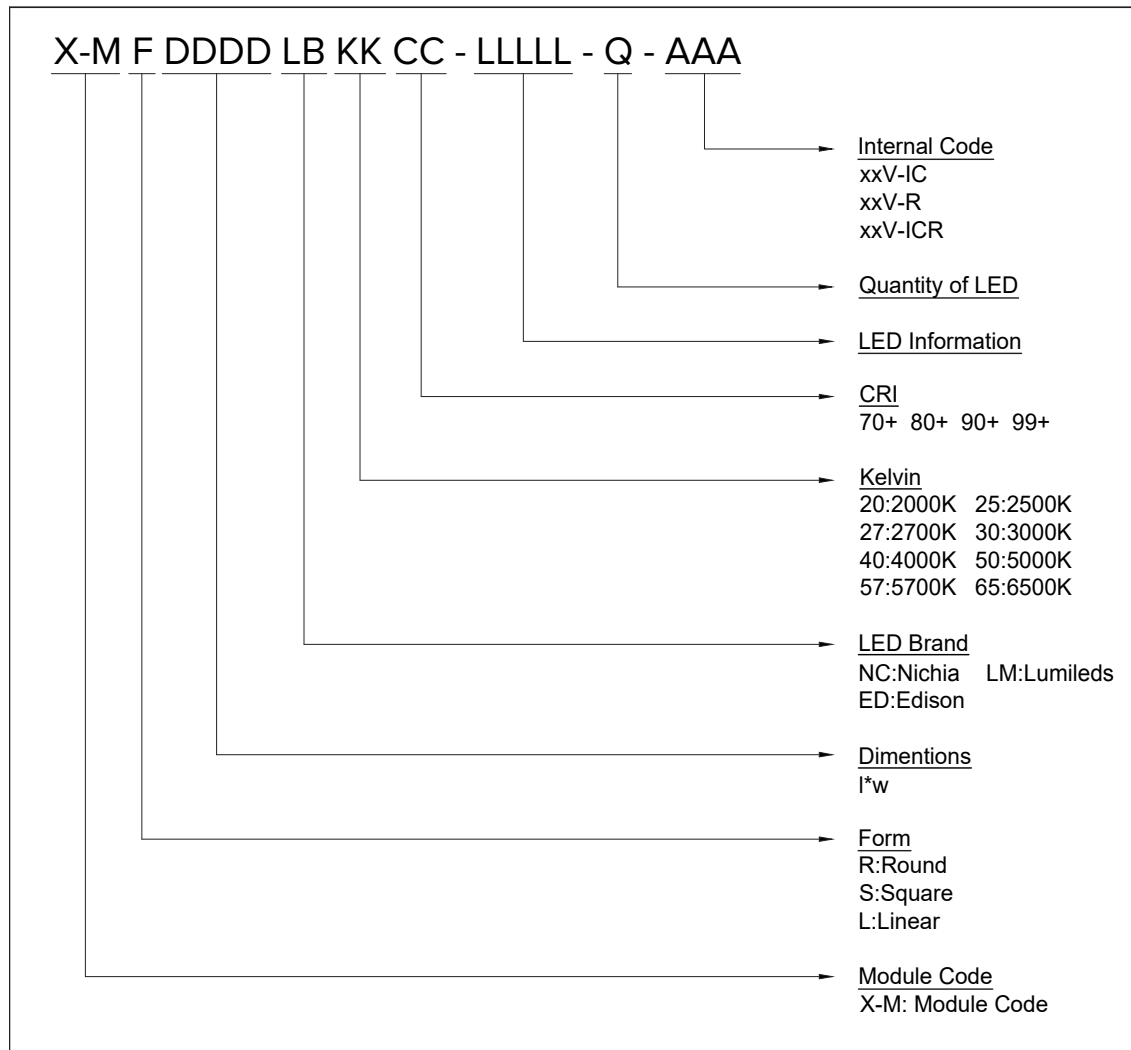




## TECHNICAL DATA

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	37 V
Insulation test voltage	2kV
ESD classification	Class 1
Risk group (EN 62471:2008)	2
Type of protection	IPO0

## ORDERING INFORMATION



## DRIVING CURRENT VS LUMEN OUTPUT SPECIFICATION

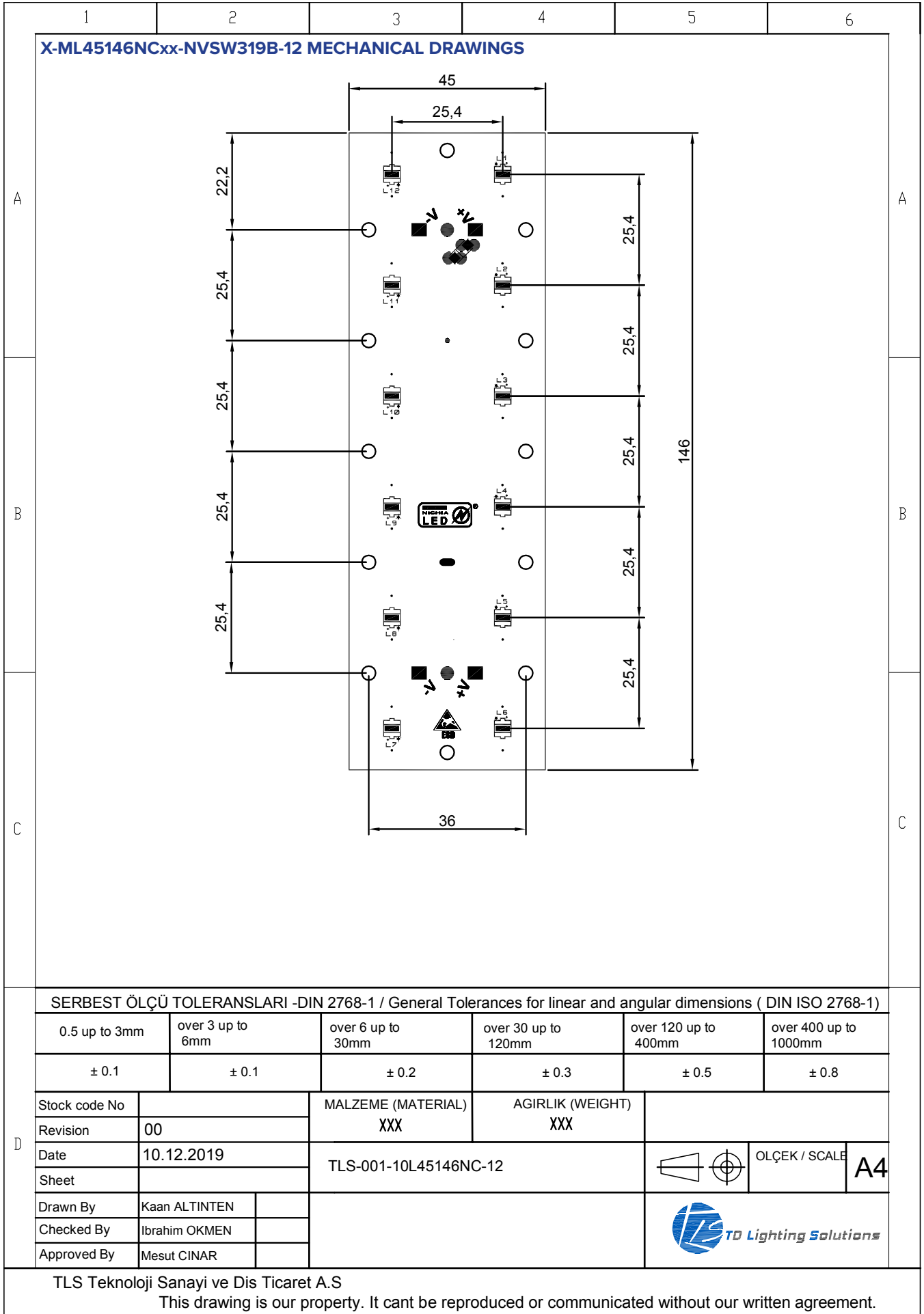
Common Characteristic [ @Tj : 85°C ] ;			
Module Code	X-ML45146NCxx-NVSW319B-12		
PCB Material	ALU	Electrical Connection	
Operating Temperature (°C)	-40 ~ +100	Parallel	1
Storage Temperature (°C)	-40 ~ +55	Series	12
Thermal Conductivity (W/m-K)	1>	LED Quantity	12
<b>LED NVSW319B_R8000</b>			
Correlated Color Temperature (CCT)	4000K		
Color Rendering Index (CRI)	80+		
Module Operating Voltage (V)	32,64	34,08	35,88
Module Operating Current (mA)	350	700	1400
Branch Operating Current (mA)	350	700	1400
Module Power (W)	11,42	23,86	50,23
Module Light Output (lm)	1.885	3.602	6631
Module Efficiency (lm/W)	165	151	132
<b>LED NVSW219F-V1_R8000</b>			
Correlated Color Temperature (CCT)	4000K		
Color Rendering Index (CRI)	80+		
Module Operating Voltage (V)	33,48	34,8	36,72
Module Operating Current (mA)	350	700	1400
Branch Operating Current (mA)	350	700	1400
Module Power (W)	11,72	24,36	51,41
Module Light Output (lm)	1.875	3.557	6477
Module Efficiency (lm/W)	160	146	126
<b>LED NVSW219F_R70</b>			
Correlated Color Temperature (CCT)	4000K		
Color Rendering Index (CRI)	70+		
Module Operating Voltage (V)	33,48	34,8	36,72
Module Operating Current (mA)	350	700	1400
Branch Operating Current (mA)	350	700	1400
Module Power (W)	11,72	24,36	51,41
Module Light Output (lm)	2.109	3.946	7094
Module Efficiency (lm/W)	180	162	138

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

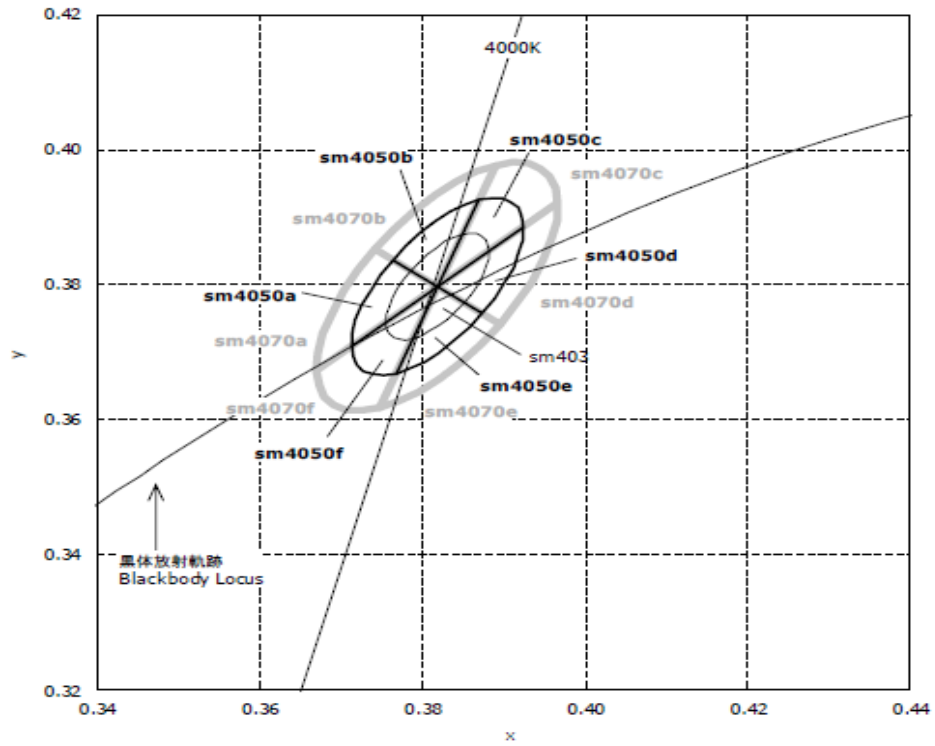
Lumen Output Multiplier					
LED	2700°K (CRI 80)	3000°K (CRI 80)	4000°K (CRI 80)	5000°K (CRI 80)	6500°K (CRI 80)
NVSW319B_R8000	0,92	0,94	1,00	1,01	0,98
NVSW219F-V1_R8000	0,88	0,92	0,96	0,97	0,94

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)



CCT AND BINNING INFORMATION



## LIFE TIME

MODEL NUMBER: NVSW319B

### Test Summary:

Data Set	Case Temperature [°C]	Ambient Temperature [°C]	Drive Current [mA]	Lumen Maintenance at 10K hours [%]	Chromaticity Shift ( $\Delta u'v'$ ) at 10K hours	TM-21 Projection L70(10K) [hours]	TM-21 Projection L80(10K) [hours]	TM-21 Projection L90(10K) [hours]
1	55	> 50	1050	98.5	0.0006	> 60000	> 60000	> 60000
2	55	> 50	1200	98.5	0.0007	> 60000	> 60000	> 60000
3	55	> 50	1500	98.2	0.0008	> 60000	> 60000	55500
4	85	> 80	1050	98.2	0.0008	> 60000	> 60000	> 60000
5	85	> 80	1200	98.0	0.0010	> 60000	> 60000	> 60000
6	85	> 80	1500	97.4	0.0014	> 60000	> 60000	45800
7	105	> 100	1050	97.6	0.0014	> 60000	> 60000	56600
8	105	> 100	1200	97.2	0.0016	> 60000	> 60000	44600
9	105	> 100	1500	88.2	0.0022	22800	15900	9870

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