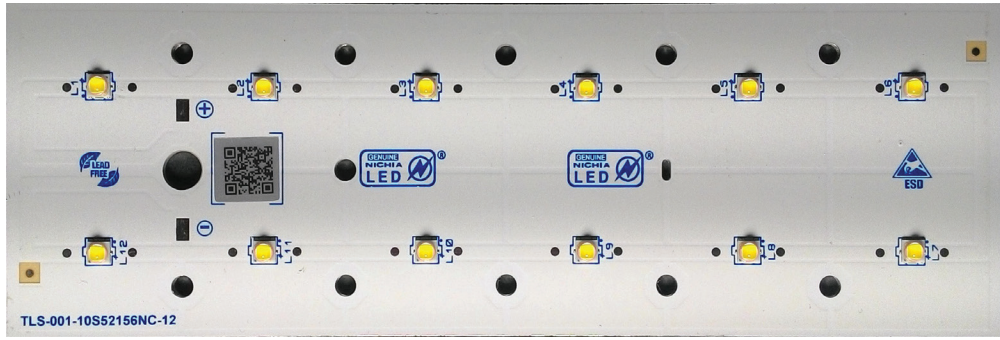
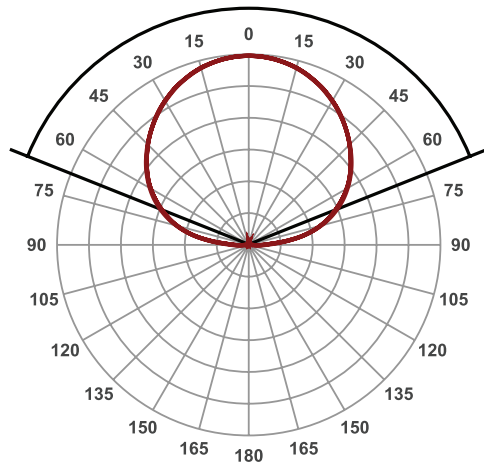


SPECIFICATIONS



PHOTOMETRY

Beam angle **130°** (2 C-PLANES)



FEATURES

ORDER CODE X-MS52156NC-xx-NVSx219C-12

Default driving method is constant current input.
Ask for alternatives depending on your project.

IES and LDT Files Provided Upon Request

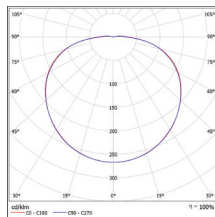
For your orders please call us:
+90 444 27 33

APPLICATIONS

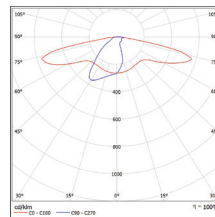


Street Lighting

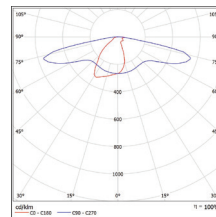
PHOTOMETRY



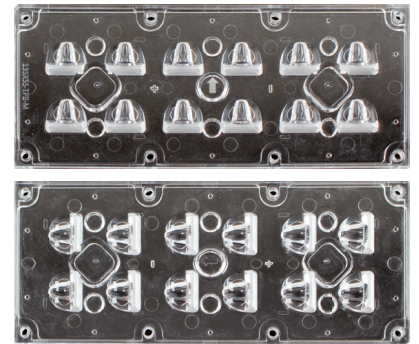
W/O LENS

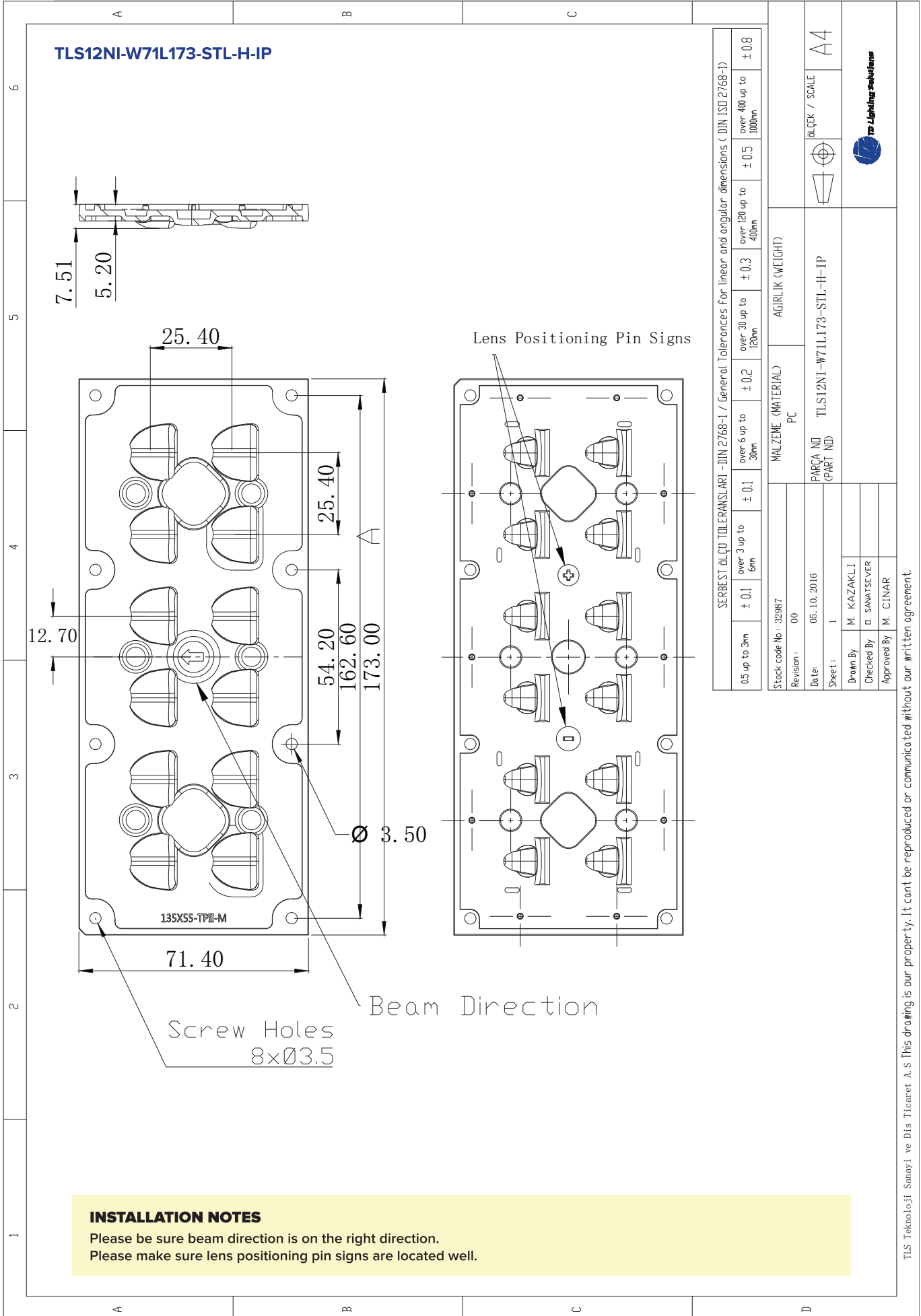


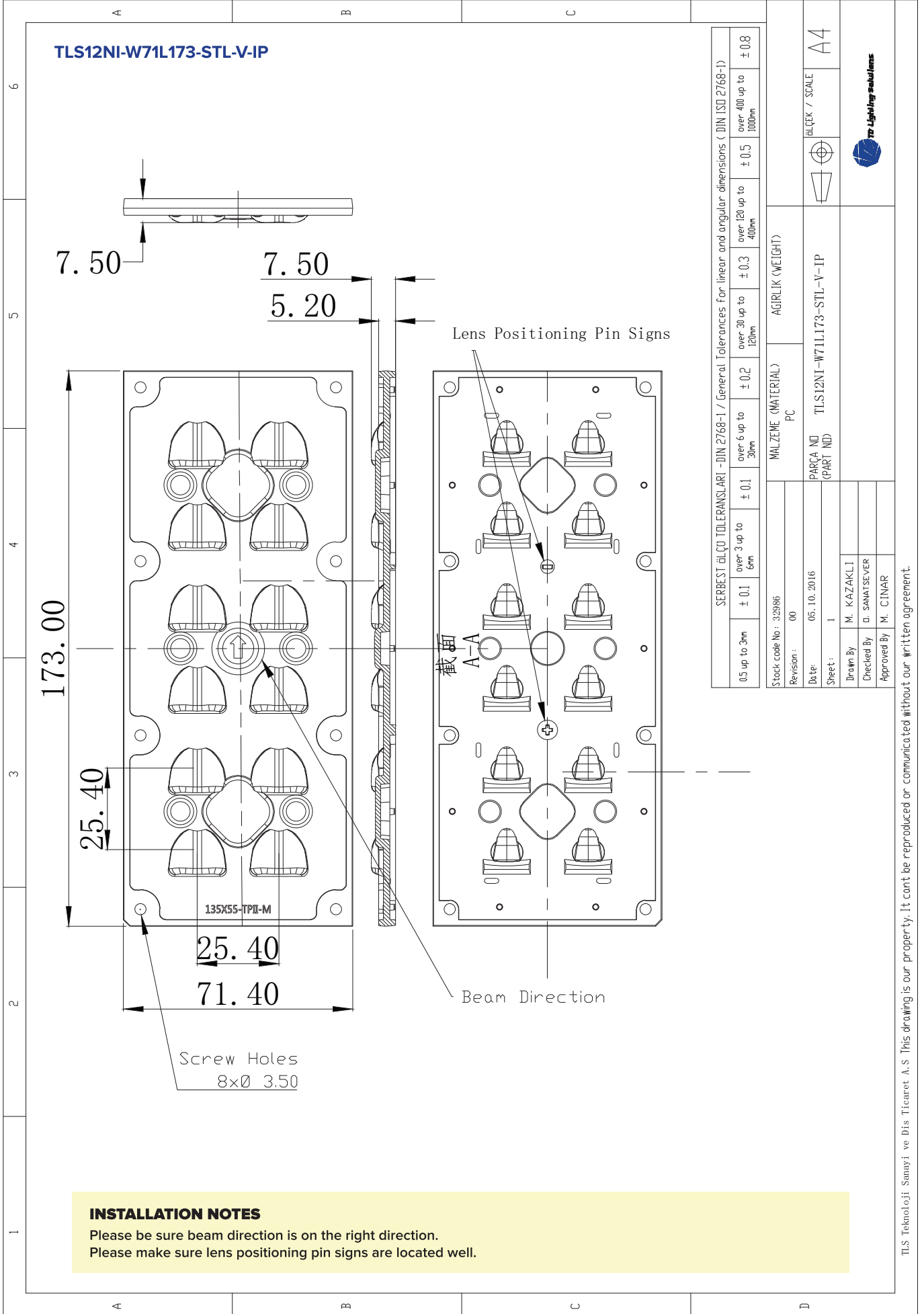
TLS12NI-W71L173-STL-H-IP



TLS12NI-W71L173-STL-V-IP







SERBEST İLÇÜ 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
over 120 up to 400mm	± 0.5	over 400 up to 1000mm	± 0.8			

Stock code No : 329986	MALZEME (MATERIAL)	PC	AGIRLIK (WEIGHT)	
Revision : 00	PARÇA NO (PART NO)	TLS12NI-W71L173-STL-V-IP		
Date: 05. 10. 2016	ÇİZİM / SCALE	A4		
Sheet: 1	ÇİZİM / SCALE	A4		
Drawn By: M. KAZAKLI				
Checked By: D. SANATSEVER				
Approved By: M. CINAR				



SPECIFICATION TABLE

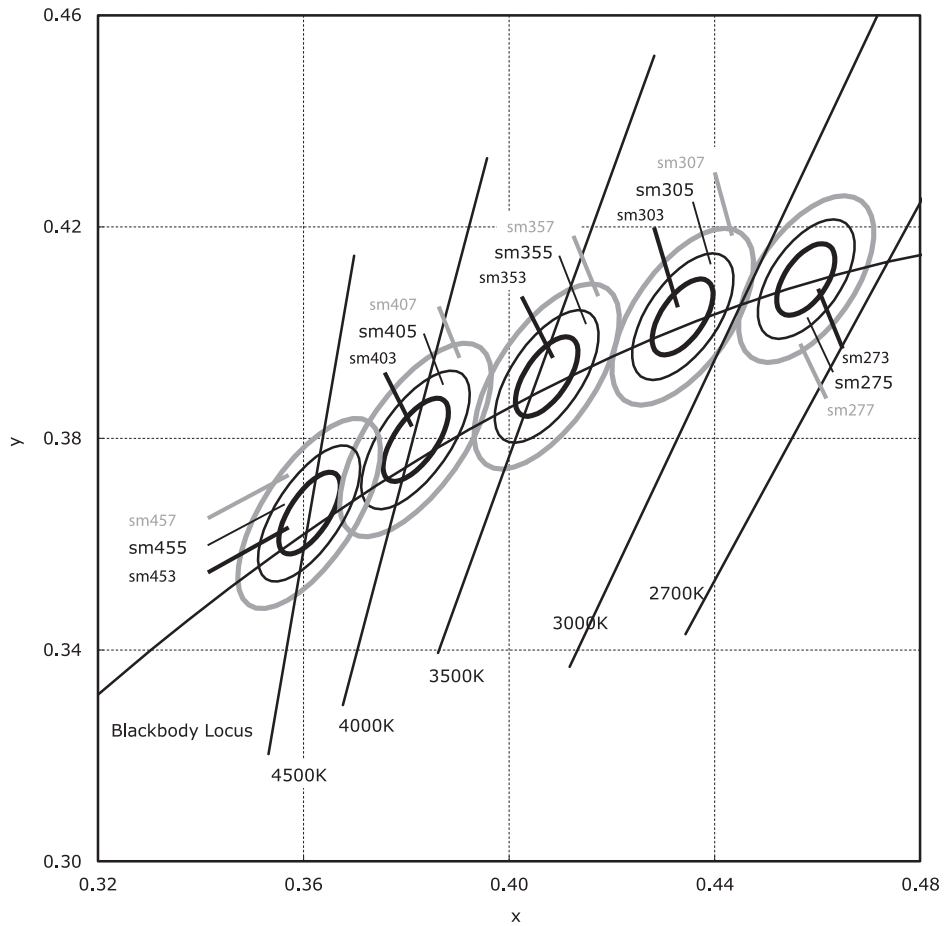
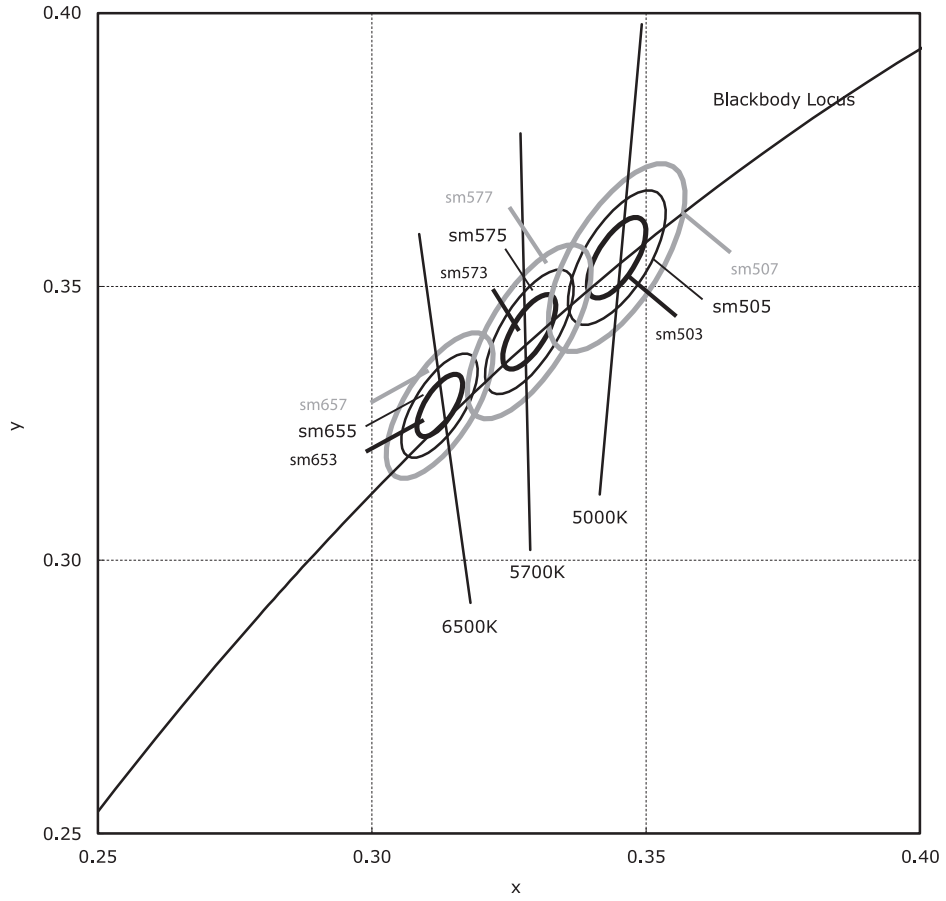
Order Code	X-ML45146NCxx-NVSx219C-12		
LED Type	NVSL219CT 4000°K		
Driving Current	500 mA	700 mA	1050 mA
Lumen @25 Tj	2535	3384	4756
Lumen/Watt @25Tj	145	135	122
Power (DC) @25 Tj	17,4	25	39
Lumen @85 Tj	2283	3047	4284
Lumen/Watt @85Tj	136	127	114
Power (DC) @85 Tj	16,7	24	37,5

DRIVING CURRENT VS LUMEN OUTPUT SPECIFICATION TABLE

Detailed specification table for 1 parallels and 12 series of X-MS52156NC-xx-NVSX219C-12

Common Characteristic [@Tj : 25°C & Ts 25] ;						
LED Brand & Type	X-MS52156NC-xx-NVSx219C-12			Electrical Connection		
PCB Material	Aluminium					
Operating Temperature (°C)	-40 ~ 100			Parallel	1	
Storage Temperature (°C)	-40 ~ 100			Series	12	
Thermal Conductivity (W/m-K)	1.5			Total LED Quantity	12	
Specs for Warm White Outputs						
Part Number	X-MS52156NC-xx-NVSx219C-12VWW			X-MS52156NC-xx-NVSx219C-12WW		
Correlated Color Temperature (CCT)	2700 K			3000 K		
Color Rendering Index (CRI)	80 +			80 +		
Module Operating Current (mA)	500	700	1050	500	700	1050
Branch Operating Current (mA)	500	700	1050	500	700	1050
Module Operating Voltage (V)	34,86	35,76	37,14	34,86	35,76	37,14
Module Power (W)	17,4	25	39	17,4	25	39
Module Light Output (lm)	2268,2	3048	4275	2393,2	3216	4511,1
Module Efficiency (lm/W)	130	122	110	137	128	116
Specs for Neutral White Outputs						
Part Number	X-MS52156NC-xx-NVSx219C-12NW					
Correlated Color Temperature (CCT)	4000 K					
Color Rendering Index (CRI)	80 +					
Module Operating Current (mA)	500		700		1050	
Branch Operating Current (mA)	500		700		1050	
Module Operating Voltage (V)	34,86		35,76		37,14	
Module Power (W)	17,4		25		39	
Module Light Output (lm)	2518,2		3384		4746,7	
Module Efficiency (lm/W)	144		135		122	
Specs for Cool White Outputs						
Part Number	X-MS52156NC-xx-NVSx219C-12CW			X-MS52156NC-xx-NVSx219C-12VCW		
Correlated Color Temperature (CCT)	5000 K			6500 K		
Color Rendering Index (CRI)	70 +			70 +		
Module Operating Current (mA)	500	700	1050	500	700	1050
Branch Operating Current (mA)	500	700	1050	500	700	1050
Module Operating Voltage (V)	34,86	35,76	37,14	34,86	35,76	37,14
Module Power (W)	17,4	25	39	17,4	25	39
Module Light Output (lm)	2869,8	3864	5440,7	2745	3696	5204
Module Efficiency (lm/W)	165	154	140	157	148	133

CCT AND BINNING INFORMATION



LIFETIME PROJECTION & WORST CONDITION PERFORMANCE

MODEL NUMBER: NVSL219C

Data Set	Case Temperature [T _S]	Ambient Temperature [T _A]	Drive Current [I _F]	Lumen Maintenance at 10,000 hours	Chromaticity Shift (Δu'v') at 10,000 hours	TM-21 Projection L ₇₀ (10K)
1	55 °C	> 50 °C	700 mA	99.8 %	0.0016	> 60000 hours
2	55 °C	> 50 °C	1500 mA	99.1 %	0.0019	> 60000 hours
3	85 °C	> 80 °C	700 mA	99.4 %	0.0019	> 60000 hours
4	85 °C	> 80 °C	1200 mA	97.0 %	0.0018	> 60000 hours
5	85 °C	> 80 °C	1500 mA	99.4 %	0.0021	> 60000 hours
6	120 °C	> 115 °C	700 mA	94.4 %	0.0018	> 60000 hours
7	120 °C	> 115 °C	1200 mA	94.5 %	0.0029	> 60000 hours

Data Set 7 : 120 °C, 1200 mA

Actual Case Temperature [T _S]	121.1 °C
Actual Ambient Temperature [T _A]	117.7 °C
Drive Current [I _F]	1200 mA
Measurement Current	1200 mA

NOTES:

T_S and T_A were measured during initial setup.

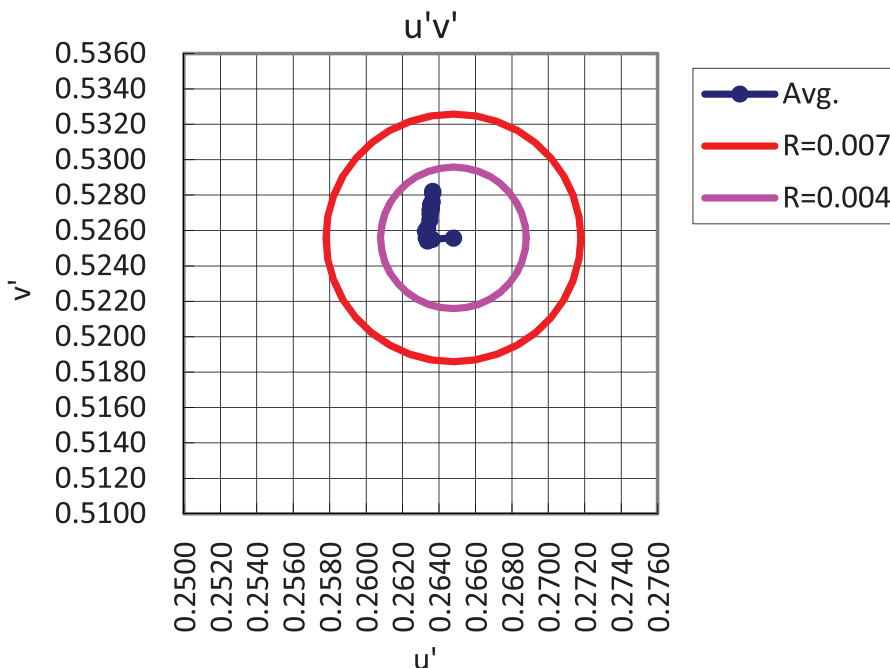
Test duration used	5000 h	to	10000 h
B	0.9777		
α	3.4618E-06		
R ²	0.9182		
Calculated L ₇₀ (10K)	96500	hours	
Reported L ₇₀ (10K)	> 60000	hours	

Curve-fit equation:

$$\Phi(t) = B \exp(-at)$$

Lumen maintenance life equation:

$$L_{70} = \ln(B/0.7) / \alpha$$



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