



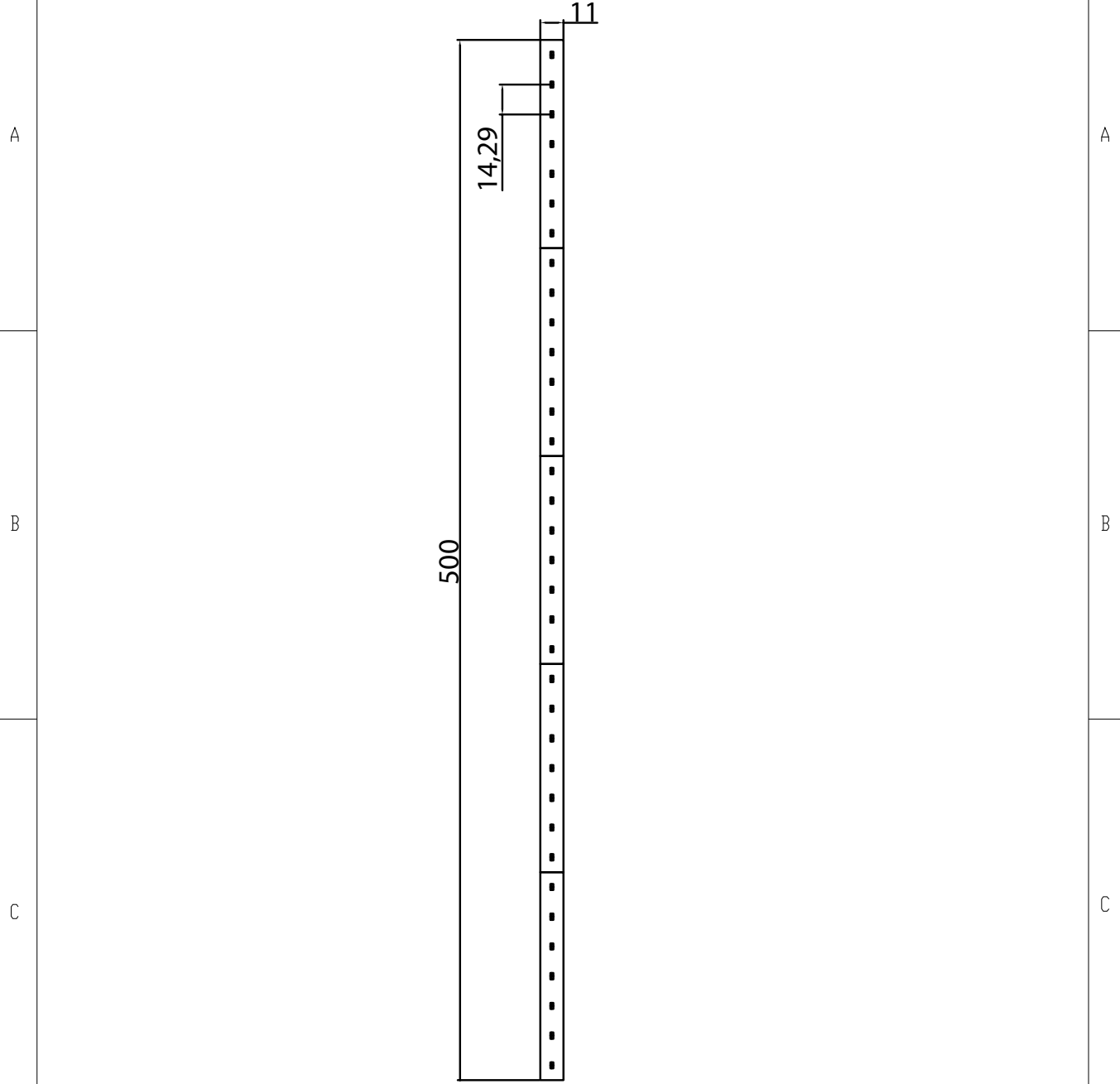





## DRIVING CURRENT VS LUMEN OUTPUT SPECIFICATION

Common Characteristic [ @Tj : 85°C ] ;			
Module Code	X-ML11500LMxx-3014-35-24V-R		
PCB Material	FR4	Electrical Connection	
Operating Temperature (°C)	-40 ~ +85	Parallel	5
Storage Temperature (°C)	-40 ~ +55	Series	7
Thermal Conductivity (W/m-K)	1>	LED Quantity	35
LED	3014		
Correlated Color Temperature (CCT)	4000K		
Color Rendering Index (CRI)	80+		
Module Operating Voltage (V)	24.00		
Module Operating Current (mA)	250	350	500
Branch Operating Current (mA)	50	70	100
Module Power (W)	6,00	8,40	12,00
Module Light Output (lm)	900	1.168	1.656
Module Efficiency (lm/W)	150	139	138

## X-ML11500LMxx-3014-35-24V-R 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	10.12.2019	TLS-001-10L11500LX3014-35			OLÇEK / SCALE
Sheet					A4
Drawn By	Kaan ALTINTEN				
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.



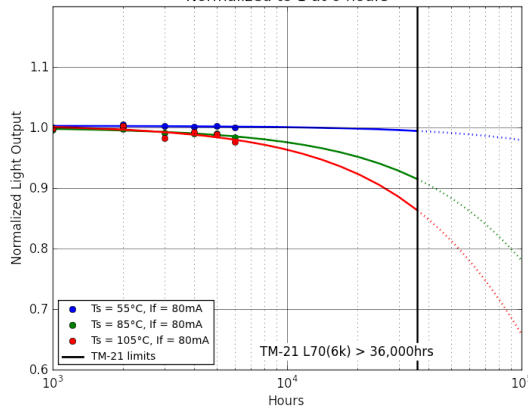
## LIFE TIME

### MODEL NUMBER: 3014

#### Normalized Flux Statistics for $I_f = 80\text{mA}$

	0hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	alpha	B	L70		
Ts=Tair=105°C	median =	1.0000	1.0001	1.0046	0.9850	0.9932	0.9893	0.9775	4.2281e-06	1.0049	85,509	
	average =	1.0000	0.9992	1.0024	0.9828	0.9920	0.9881	0.9765				
	st dev =	0.0000	0.0039	0.0073	0.0071	0.0084	0.0102	0.0117				TM-21 L70(6k) > 36,000hrs
	min =	1.0000	0.9849	0.9751	0.9565	0.9721	0.9644	0.9490				
	max =	1.0000	1.0030	1.0099	0.9938	1.0090	1.0079	0.9927				
Ts=Tair=85°C	median =	1.0000	0.9972	1.0011	0.9917	0.9892	0.9890	0.9831	2.4796e-06	1.0000	143,847	
	average =	1.0000	0.9959	0.9980	0.9909	0.9896	0.9901	0.9837				
	st dev =	0.0000	0.0072	0.0148	0.0168	0.0173	0.0175	0.0189				TM-21 L70(6k) > 36,000hrs
	min =	1.0000	0.9679	0.9529	0.9407	0.9375	0.9379	0.9297				
	max =	1.0000	1.0051	1.0167	1.0179	1.0151	1.0179	1.0124				
Ts=Tair=55°C	median =	1.0000	1.0002	1.0061	1.0026	1.0020	1.0025	1.0005	2.3852e-07	1.0028	1,507,213	
	average =	1.0000	0.9998	1.0050	1.0031	1.0019	1.0019	1.0002				
	st dev =	0.0000	0.0023	0.0058	0.0091	0.0109	0.0111	0.0113				TM-21 L70(6k) > 36,000hrs
	min =	1.0000	0.9928	0.9853	0.9768	0.9713	0.9689	0.9667				
	max =	1.0000	1.0030	1.0139	1.0189	1.0206	1.0212	1.0209				

Lumen Maintenance for  $I_f = 80\text{mA}$   
Normalized to 1 at 0 hours



#### Delta u'v' for $I_f = 80\text{mA}$

	0hrs	1000hrs	2000hrs	3000hrs	4000hrs	5000hrs	6000hrs	
Ts=Tair=105°C	median =	0.0000	0.0002	0.0007	0.0008	0.0009	0.0010	0.0012
	average =	0.0000	0.0002	0.0007	0.0008	0.0009	0.0011	0.0012
	st dev =	0.0000	0.0001	0.0001	0.0001	0.0002	0.0001	0.0002
	min =	0.0000	0.0001	0.0006	0.0006	0.0007	0.0008	0.0007
	max =	0.0000	0.0004	0.0009	0.0010	0.0014	0.0015	0.0018
Ts=Tair=85°C	median =	0.0000	0.0001	0.0005	0.0007	0.0010	0.0009	0.0010
	average =	0.0000	0.0002	0.0006	0.0008	0.0011	0.0010	0.0011
	st dev =	0.0000	0.0002	0.0004	0.0004	0.0005	0.0004	0.0004
	min =	0.0000	0.0000	0.0001	0.0003	0.0004	0.0005	0.0006
	max =	0.0000	0.0009	0.0019	0.0022	0.0026	0.0024	0.0025
Ts=Tair=55°C	median =	0.0000	0.0001	0.0004	0.0006	0.0009	0.0007	0.0009
	average =	0.0000	0.0001	0.0005	0.0006	0.0009	0.0008	0.0009
	st dev =	0.0000	0.0001	0.0001	0.0002	0.0002	0.0002	0.0003
	min =	0.0000	0.0000	0.0003	0.0003	0.0006	0.0004	0.0006
	max =	0.0000	0.0003	0.0009	0.0013	0.0018	0.0016	0.0019

## 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@tlsteknoloji.com  
+90 444 27 33