136-521 13W 3000K specific configuration
Downlight | Ø140mm | white | 5-CCT | 6~15W | GST18i3

Introduction

Purpose of this Document

This document provides information for 136-521 13W 3000K. During measurement. the product is used in a different mode where output power. colour temperature and/or beam angle are changed from factory standard. These adjustments can be made without altering the product and are designed to be set by the installer. In most cases. the options are set through switches on the product.

Results

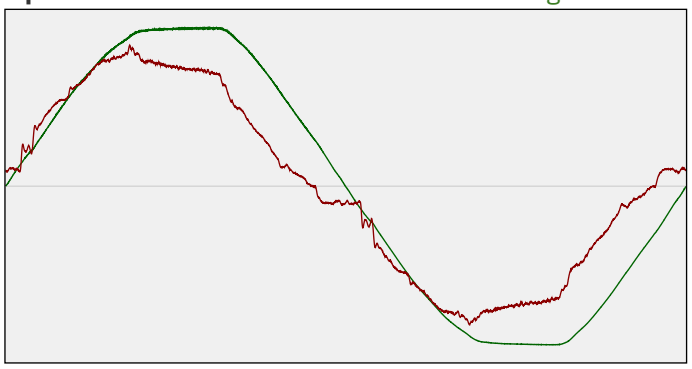
Total input power	11.8 W
Correlated Colour Temperature	2999 K
Total lumen output	1167 lm
Efficiency	99 lm/W

Electrical measurement details

Input Power

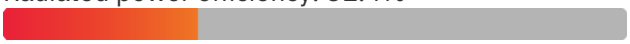
RMS Input voltage feed. V_{RMS}	229 V
RMS Input current feed. I_{RMS}	0.054 A
Total input power	11.8 W
Frequency of input power	50 Hz
Power factor	0.95
Displacement power factor	0.96
Total harmonic distortion of the current	11.38%
Total harmonic distortion of the voltage	2.9%

Input Power Curve Voltage - Current



Efficiency

Radiated power efficiency: 31.4%



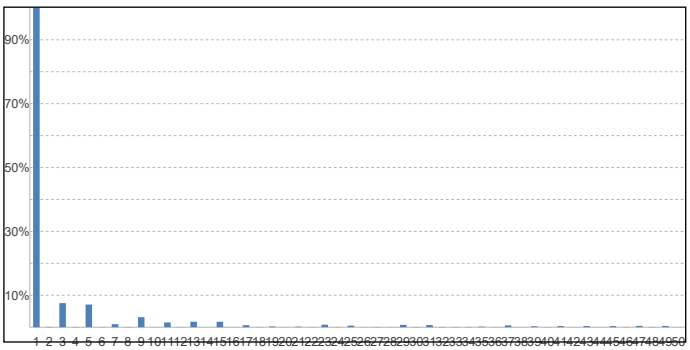
Lumen efficiency: 99 lm/W



Harmonics

3rd Harmonic	7.54%
5th Harmonic	7.09%
7th Harmonic	0.95%
9th Harmonic	3.14%
11th Harmonic	1.47%

Current Harmonics %

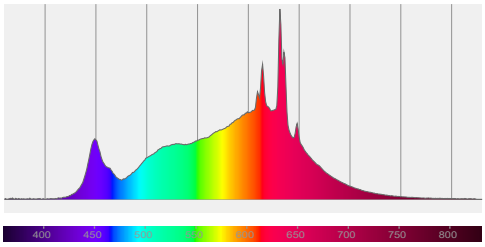


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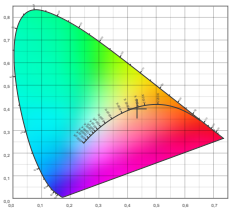
136-521 13W 3000K specific configuration

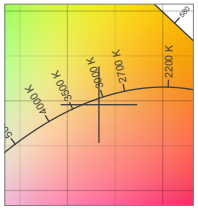
Colour measurement details

Total lumen output	1167 lm
Correlated Colour Temperature	2999 K
Colour coordinates CIE 1931	(x;y) = (0.433;0.396)
Colour deviation from BBL	Duv = -0.0029
TM30-18 Colour Fidelity Index	R_f 92.7
TM30-18 Colour Gamut Index	R_g 101.9
Colour Rendering Index (Ra)	CRI 95.3
Colour Rendering Index. (red component)	R9 = 65.0
Colour Quality Scale	CQS = 92.3
Television Lighting Consistency Index	TLCI = 86

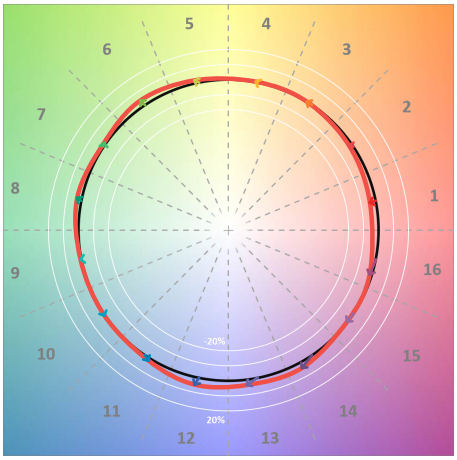


Relative spectral power distribution





TM30 details

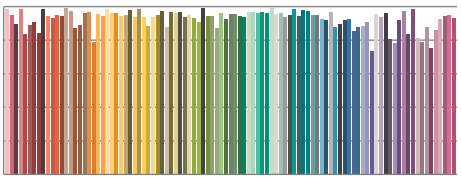


TM30 Colour vectors per hue bin

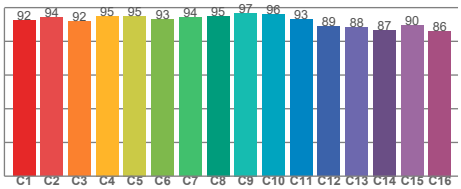


TM30 Colour distortion

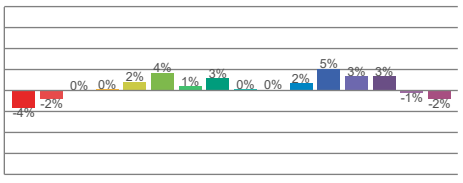
		Shifts (%)	
Hue Bin	R_f	Chroma	Hue
C1	92	-4%	0%
C2	94	-2%	2%
C3	92	0%	4%
C4	95	0%	1%
C5	95	2%	3%
C6	93	4%	1%
C7	94	1%	-2%
C8	95	3%	-1%
C9	97	0%	0%
C10	96	0%	1%
C11	93	2%	4%
C12	89	5%	-2%
C13	88	3%	-8%
C14	87	3%	-10%
C15	90	-1%	-7%
C16	86	-2%	-11%



TM30-18 Rf-values per reference colour

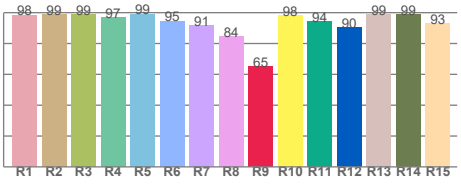


TM30-18 Rf-values per hue bin

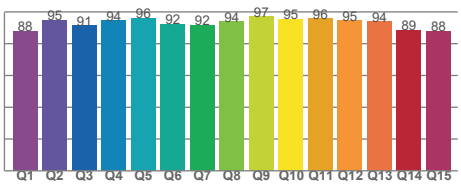


TM30 Chroma shift

Colour Quality details



Colour Rendering Index



Colour Qualitity Scale

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