

136-099 6000K specific configuration
Downlight surface mounted | black | 18W | 3-CCT | dim

Introduction

Purpose of this Document

This document provides information for 136-099 6000K. 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	17.6 W
Correlated Colour Temperature	5946 K
Total lumen output	1491 lm
Efficiency	85 lm/W

Electrical measurement details

Input Power

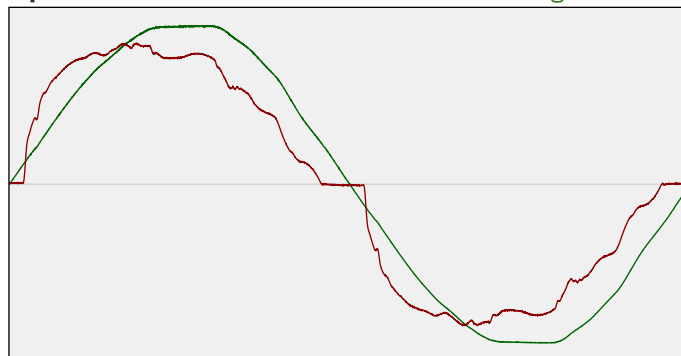
RMS Input voltage feed. V_{RMS}	229 V
RMS Input current feed. I_{RMS}	0.080 A
Total input power	17.6 W

Frequency of input power	50 Hz
Power factor	0.96
Displacement power factor	0.97

Total harmonic distortion of the current	13.56%
Total harmonic distortion of the voltage	2.25%

Input Power Curve

Voltage - Current



Efficiency

Radiated power efficiency: 27.4%



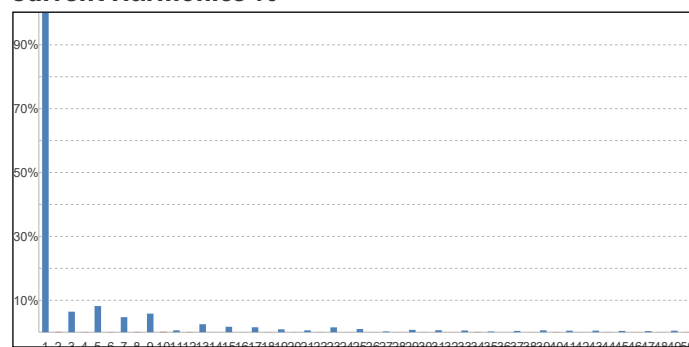
Lumen efficiency: 85 lm/W



Harmonics

3rd Harmonic	6.43%
5th Harmonic	8.2%
7th Harmonic	4.71%
9th Harmonic	5.82%
11th Harmonic	0.59%

Current Harmonics %



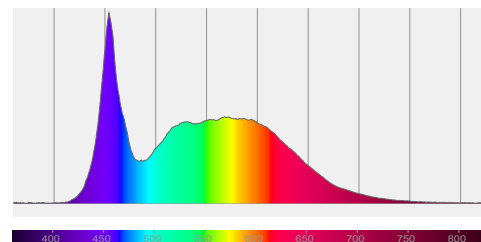
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Colour measurement details

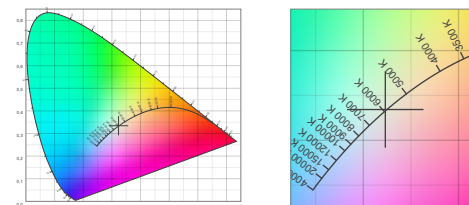
Total lumen output 1491 lm
 Correlated Colour Temperature 5946 K
 Colour coordinates CIE 1931 (x;y) = (0.323;0.334)
 Colour deviation from BBL Duv = 0.0008

TM30-18 Colour Fidelity Index R_f 83.8
 TM30-18 Colour Gamut Index R_g 94.9
 Colour Rendering Index (Ra) CRI 85.5
 Colour Rendering Index. (red component) $R_9 = 20.1$

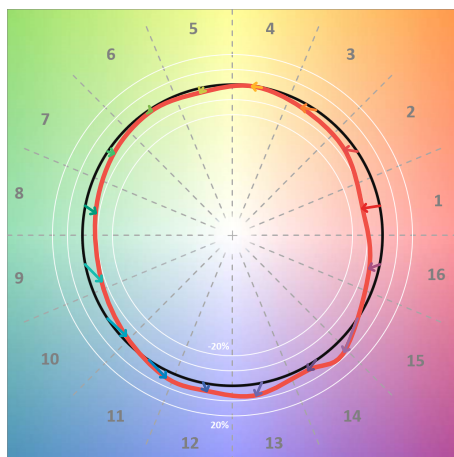
Colour Quality Scale CQS = 81.6
 Television Lighting Consistency Index TLCI = 77



Relative spectral power distribution



TM30 details

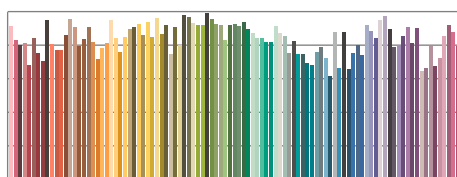


TM30 Colour vectors per hue bin

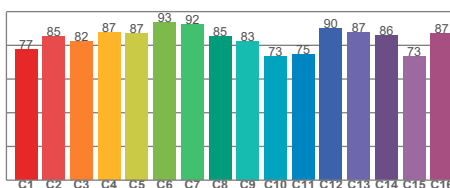


TM30 Colour distortion

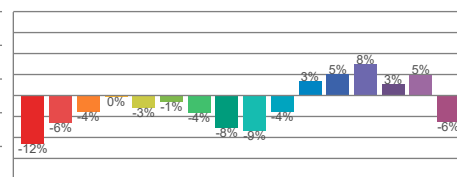
Hue Bin	R_f	Shifts (%)	
		Chroma	Hue
C1	77	-12%	0%
C2	85	-6%	6%
C3	82	-4%	9%
C4	87	0%	6%
C5	87	-3%	2%
C6	93	-1%	-1%
C7	92	-4%	-1%
C8	85	-8%	3%
C9	83	-9%	13%
C10	73	-4%	16%
C11	75	3%	16%
C12	90	5%	3%
C13	87	8%	-5%
C14	86	3%	-8%
C15	73	5%	-23%
C16	87	-6%	-4%



TM30-18 R_f -values per reference colour

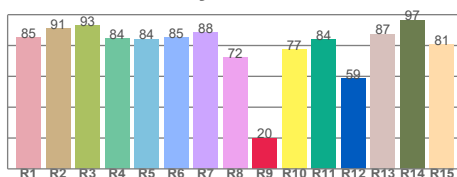


TM30-18 R_f -values per hue bin

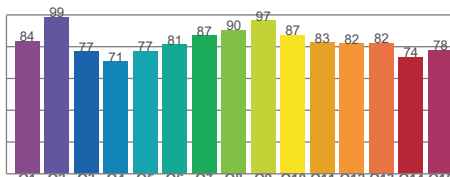


TM30 Chroma shift

Colour Quality details



Colour Rendering Index



Colour Quality Scale