

136-006 4000K specific configuration

Introduction

Purpose of this Document

This document provides information for 136-006 4000K. 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	7.3 W
Correlated Colour Temperature	3930 K
Total lumen output	616 lm
Efficiency	85 lm/W

Electrical measurement details

Input Power

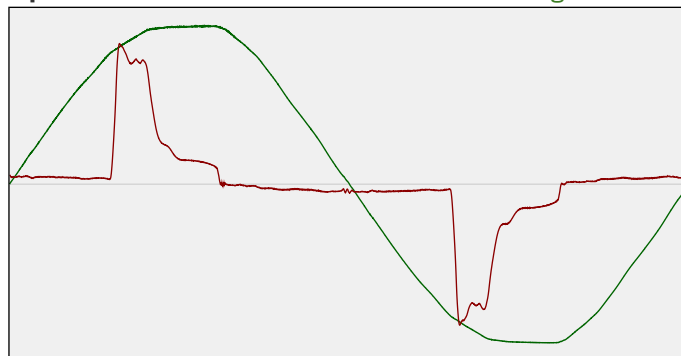
RMS Input voltage feed. V_{RMS}	229 V
RMS Input current feed. I_{RMS}	0.054 A
Total input power	7.3 W

Frequency of input power	50 Hz
Power factor	0.59
Displacement power factor	0.89

Total harmonic distortion of the current	112.07%
Total harmonic distortion of the voltage	2.41%

Input Power Curve

Voltage - Current



Efficiency

Radiated power efficiency: 27.2%



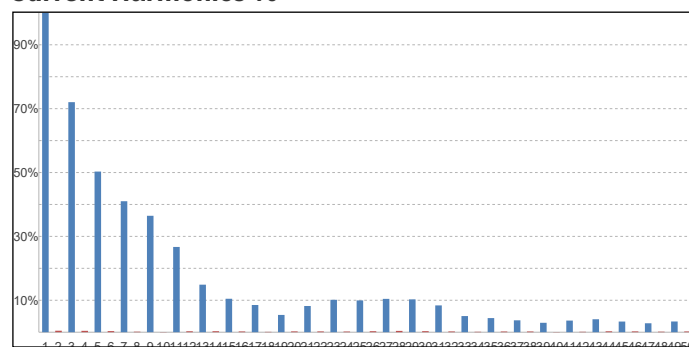
Lumen efficiency: 85 lm/W



Harmonics

3rd Harmonic	72.03%
5th Harmonic	50.3%
7th Harmonic	41.01%
9th Harmonic	36.46%
11th Harmonic	26.69%

Current Harmonics %



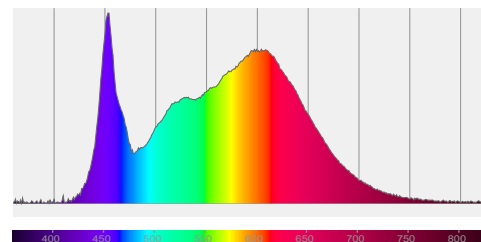
136-006 4000K specific configuration

Colour measurement details

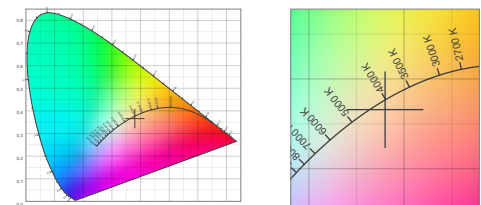
Total lumen output 616 lm
 Correlated Colour Temperature 3930 K
 Colour coordinates CIE 1931 (x;y) = (0.380;0.366)
 Colour deviation from BBL Duv = -0.0051

TM30-18 Colour Fidelity Index R_f 87.4
 TM30-18 Colour Gamut Index R_g 97.8
 Colour Rendering Index (Ra) CRI 89.2
 Colour Rendering Index. (red component) $R_9 = 36.3$

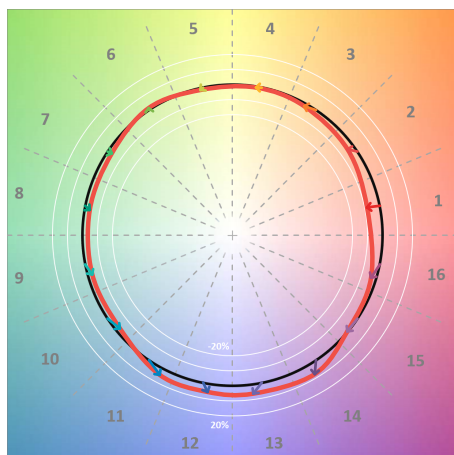
Colour Quality Scale CQS = 86.6
 Television Lighting Consistency Index TLCI = 79



Relative spectral power distribution



TM30 details

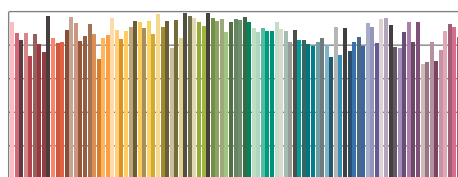


TM30 Colour vectors per hue bin

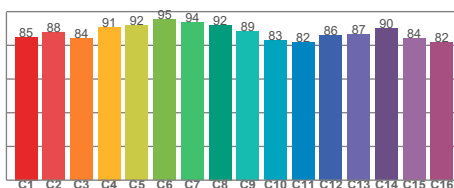


TM30 Colour distortion

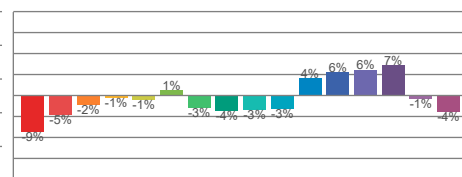
Hue Bin	R_f	Shifts (%)	
		Chroma	Hue
C1	85	-9%	1%
C2	88	-5%	5%
C3	84	-2%	8%
C4	91	-1%	4%
C5	92	-1%	2%
C6	95	1%	-1%
C7	94	-3%	-1%
C8	92	-4%	2%
C9	89	-3%	7%
C10	83	-3%	10%
C11	82	4%	11%
C12	86	6%	4%
C13	87	6%	-7%
C14	90	7%	-6%
C15	84	-1%	-11%
C16	82	-4%	-10%



TM30-18 R_f -values per reference colour

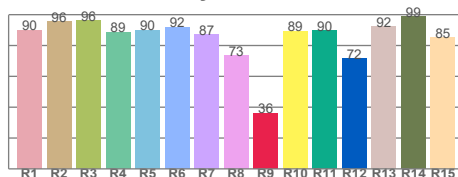


TM30-18 R_f -values per hue bin

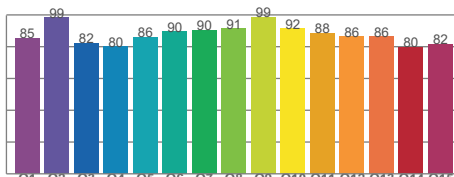


TM30 Chroma shift

Colour Quality details



Colour Rendering Index



Colour Quality Scale