

137-023 2W 5700K specific configuration
Bulkhead | 3-CCT | IK10 | IP65

Introduction

Purpose of this Document

This document provides information for 137-023 2W 5700K. 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	2.2 W
Correlated Colour Temperature	5860 K
Total lumen output	170 lm
Efficiency	78 lm/W

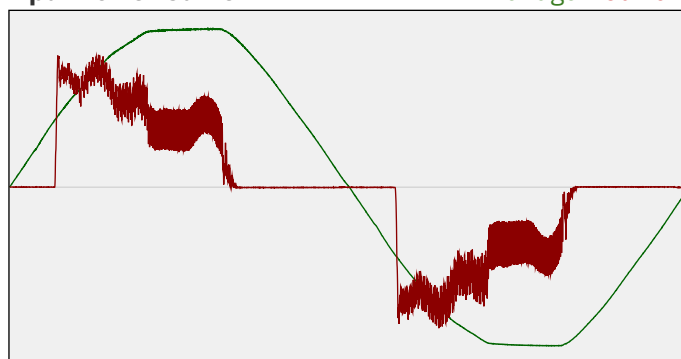
Electrical measurement details

Input Power

RMS Input voltage feed. V_{RMS}	230 V
RMS Input current feed. I_{RMS}	0.012 A
Total input power	2.2 W
Frequency of input power	50 Hz
Power factor	0.77
Displacement power factor	0.89
Total harmonic distortion of the current	54.83%
Total harmonic distortion of the voltage	2.56%

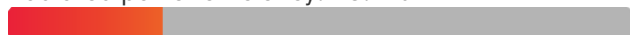
Input Power Curve

Voltage - Current



Efficiency

Radiated power efficiency: 25.1%



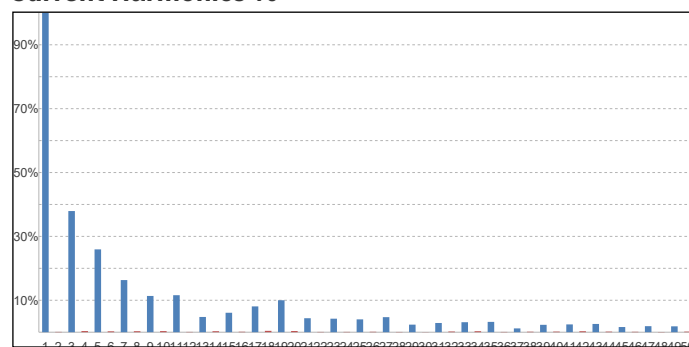
Lumen efficiency: 78 lm/W



Harmonics

3rd Harmonic	37.94%
5th Harmonic	25.94%
7th Harmonic	16.32%
9th Harmonic	11.35%
11th Harmonic	11.59%

Current Harmonics %



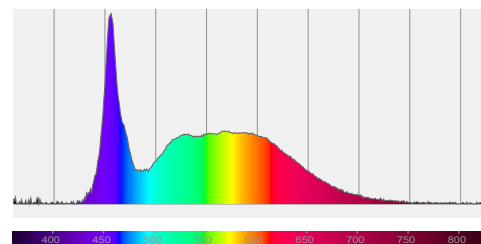
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Colour measurement details

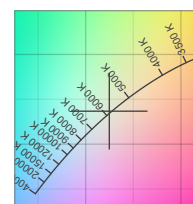
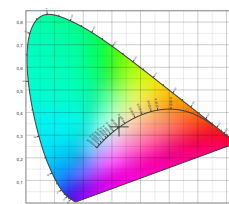
Total lumen output 170 lm
 Correlated Colour Temperature 5860 K
 Colour coordinates CIE 1931 (x;y) = (0.325;0.337)
 Colour deviation from BBL Duv = 0.0013

TM30-18 Colour Fidelity Index R_f 82.5
 TM30-18 Colour Gamut Index R_g 93.6
 Colour Rendering Index (Ra) CRI 85.6
 Colour Rendering Index. (red component) R_9 = 23.0

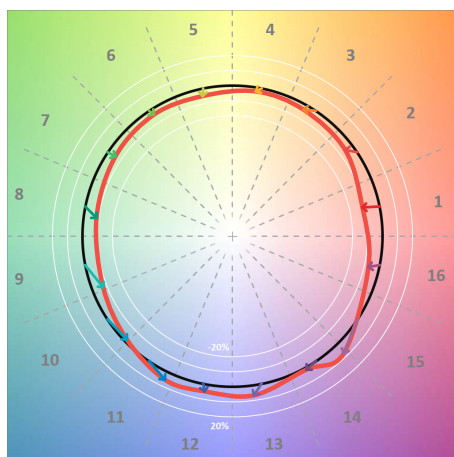
Colour Quality Scale CQS = 81.2
 Television Lighting Consistency Index TLCI = 77



Relative spectral power distribution



TM30 details

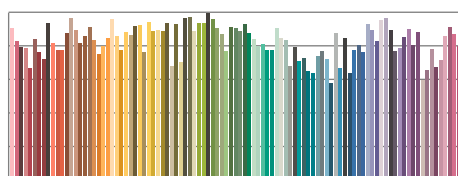


TM30 Colour vectors per hue bin

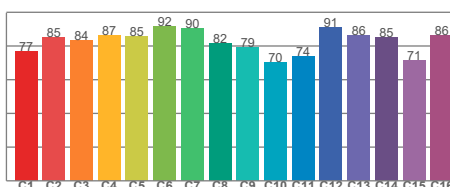


TM30 Colour distortion

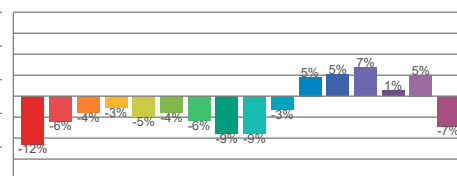
Hue Bin	R_f	Shifts (%)	
		Chroma	Hue
C1	77	-12%	2%
C2	85	-6%	6%
C3	84	-4%	7%
C4	87	-3%	3%
C5	85	-5%	1%
C6	92	-4%	-1%
C7	90	-6%	-1%
C8	82	-9%	6%
C9	79	-9%	17%
C10	70	-3%	18%
C11	74	5%	16%
C12	91	5%	2%
C13	86	7%	-7%
C14	85	1%	-9%
C15	71	5%	-24%
C16	86	-7%	-3%



TM30-18 R_f -values per reference colour

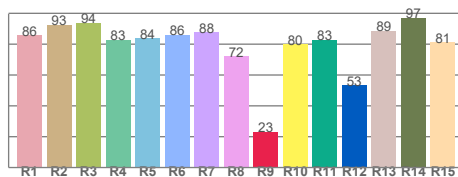


TM30-18 R_f -values per hue bin

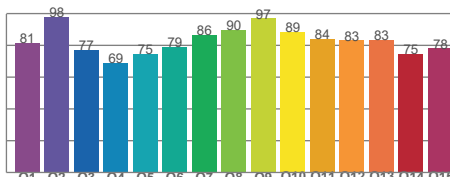


TM30 Chroma shift

Colour Quality details



Colour Rendering Index



Colour Quality Scale