

136-047 10W 5700K specific configuration  
Ceiling light | Ø280mm | 10/15W | 3-CCT

## Introduction

### Purpose of this Document

This document provides information for 136-047 10W 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	10.0 W
Correlated Colour Temperature	5815 K
Total lumen output	1052 lm
Efficiency	105 lm/W

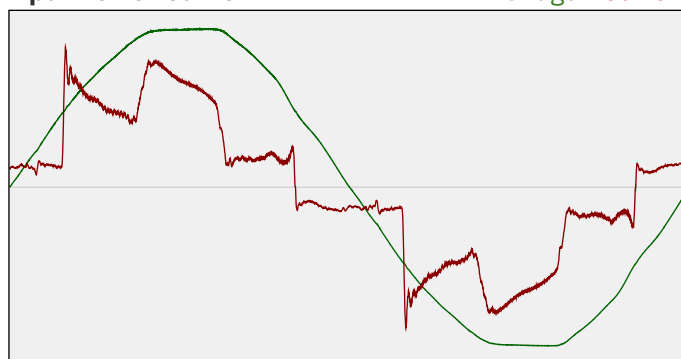
## Electrical measurement details

### Input Power

RMS Input voltage feed. $V_{RMS}$	230 V
RMS Input current feed. $I_{RMS}$	0.050 A
Total input power	10.0 W
Frequency of input power	50 Hz
Power factor	0.88
Displacement power factor	0.94
Total harmonic distortion of the current	34.51%
Total harmonic distortion of the voltage	2.35%

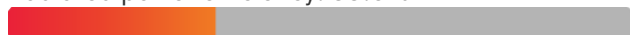
### Input Power Curve

Voltage - Current



### Efficiency

Radiated power efficiency: 33.6%



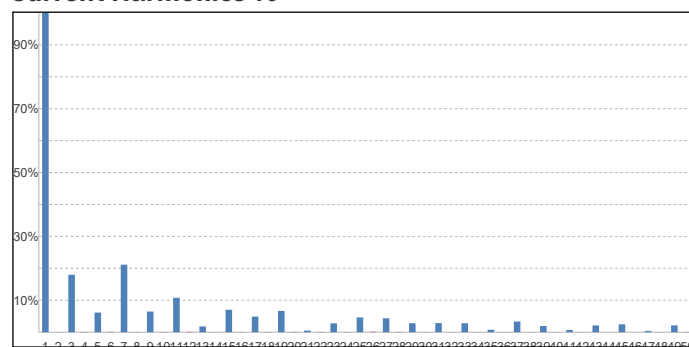
Lumen efficiency: 105 lm/W



### Harmonics

3rd Harmonic	17.98%
5th Harmonic	6.14%
7th Harmonic	21.14%
9th Harmonic	6.47%
11th Harmonic	10.79%

### Current Harmonics %



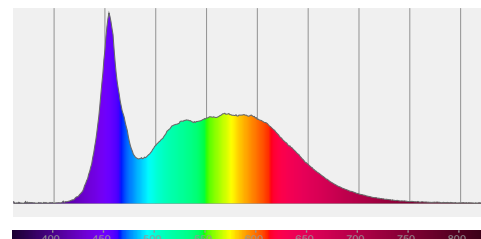
## 136-047 10W 5700K specific configuration

### Colour measurement details

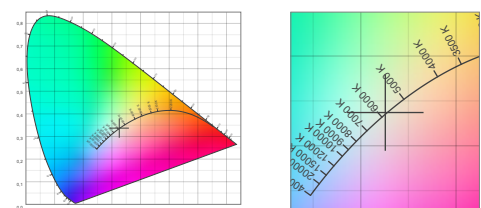
Total lumen output 1052 lm  
 Correlated Colour Temperature 5815 K  
 Colour coordinates CIE 1931 (x;y) = (0.326;0.337)  
 Colour deviation from BBL Duv = 0.0010

TM30-18 Colour Fidelity Index  $R_f$  83.9  
 TM30-18 Colour Gamut Index  $R_g$  94.6  
 Colour Rendering Index (Ra) CRI 85.5  
 Colour Rendering Index. (red component)  $R_9 = 18.1$

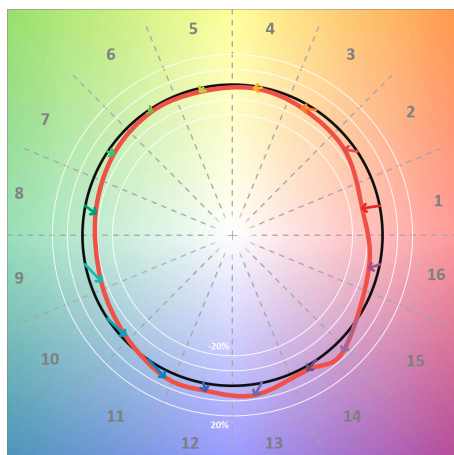
Colour Quality Scale CQS = 81.7  
 Television Lighting Consistency Index TLCI = 77



Relative spectral power distribution



### TM30 details

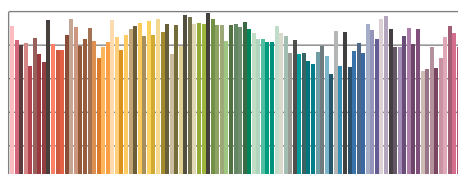


TM30 Colour vectors per hue bin

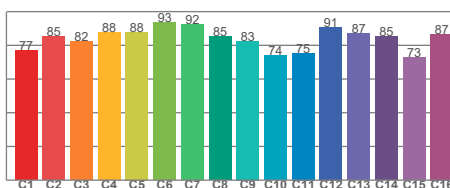


TM30 Colour distortion

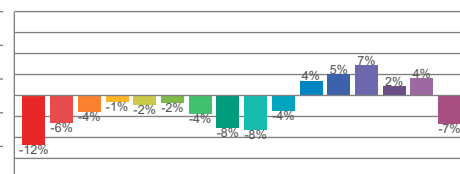
Hue Bin	$R_f$	Shifts (%)	
		Chroma	Hue
C1	77	-12%	1%
C2	85	-6%	6%
C3	82	-4%	9%
C4	88	-1%	5%
C5	88	-2%	2%
C6	93	-2%	-1%
C7	92	-4%	-1%
C8	85	-8%	4%
C9	83	-8%	13%
C10	74	-4%	16%
C11	75	4%	15%
C12	91	5%	3%
C13	87	7%	-6%
C14	85	2%	-8%
C15	73	4%	-23%
C16	87	-7%	-4%



TM30-18  $R_f$ -values per reference colour

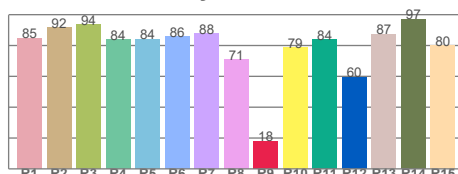


TM30-18  $R_f$ -values per hue bin

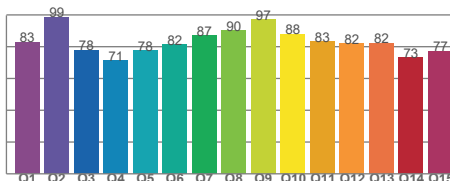


TM30 Chroma shift

### Colour Quality details



Colour Rendering Index



Colour Quality Scale