

149-244 90 graden specific configuration  
Wall lamp | 200x101x100 | black | 20W | 2700K | dim

## Introduction

### Purpose of this Document

This document provides information for 149-244 90 graden. 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	21.3 W
Correlated Colour Temperature	2748 K
Total lumen output	948 lm
Efficiency	45 lm/W

## Electrical measurement details

### Input Power

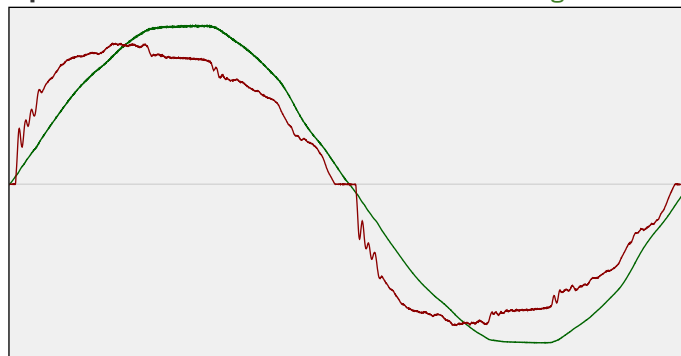
RMS Input voltage feed. $V_{RMS}$	230 V
RMS Input current feed. $I_{RMS}$	0.096 A
Total input power	21.3 W

Frequency of input power	50.1 Hz
Power factor	0.97
Displacement power factor	0.98

Total harmonic distortion of the current	14.44%
Total harmonic distortion of the voltage	2.23%

### Input Power Curve

Voltage - Current



### Efficiency

Radiated power efficiency: 16.4%



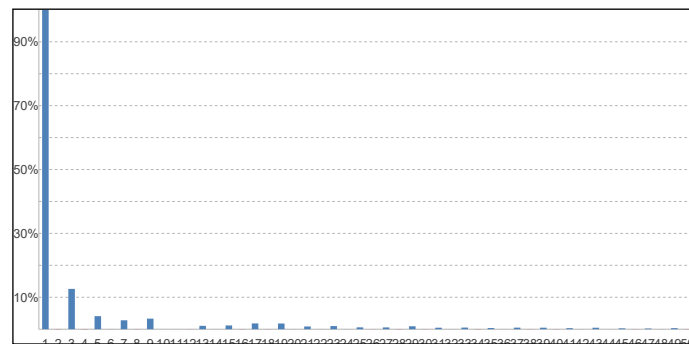
Lumen efficiency: 45 lm/W



### Harmonics

3rd Harmonic	12.62%
5th Harmonic	4.08%
7th Harmonic	2.79%
9th Harmonic	3.3%
11th Harmonic	0.01%

### Current Harmonics %



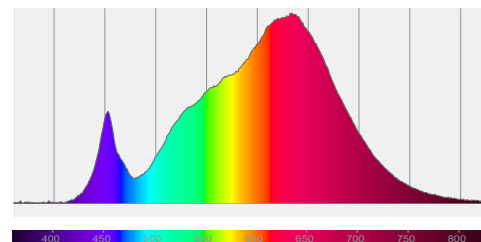
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### Colour measurement details

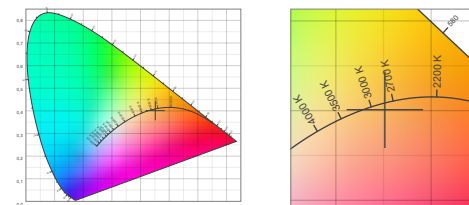
Total lumen output 948 lm  
 Correlated Colour Temperature 2748 K  
 Colour coordinates CIE 1931 (x;y) = (0.451;0.401)  
 Colour deviation from BBL Duv = -0.0029

TM30-18 Colour Fidelity Index  $R_f$  89.6  
 TM30-18 Colour Gamut Index  $R_g$  103.5  
 Colour Rendering Index (Ra) CRI 93.0  
 Colour Rendering Index. (red component)  $R_9 = 72.0$

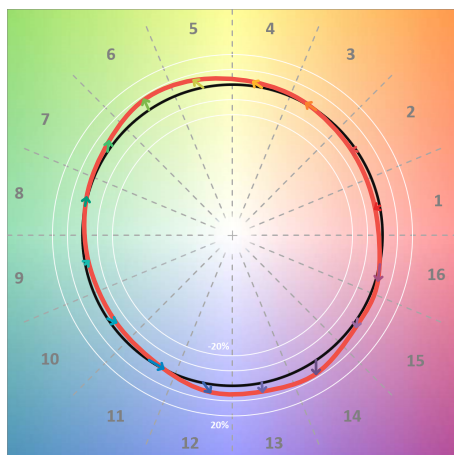
Colour Quality Scale CQS = 88.2  
 Television Lighting Consistency Index TLCI = 87



Relative spectral power distribution



### TM30 details

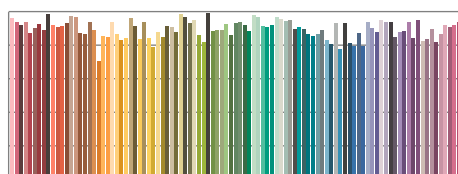


TM30 Colour vectors per hue bin

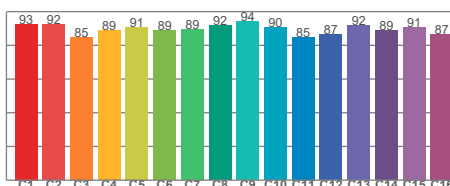


TM30 Colour distortion

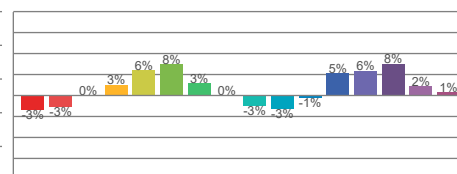
Hue Bin	$R_f$	Shifts (%)	
		Chroma	Hue
C1	93	-3%	-1%
C2	92	-3%	3%
C3	85	0%	8%
C4	89	3%	6%
C5	91	6%	5%
C6	89	8%	-1%
C7	89	3%	-6%
C8	92	0%	-5%
C9	94	-3%	-2%
C10	90	-3%	5%
C11	85	-1%	11%
C12	87	5%	6%
C13	92	6%	-1%
C14	89	8%	-5%
C15	91	2%	-5%
C16	87	1%	-11%



TM30-18  $R_f$ -values per reference colour

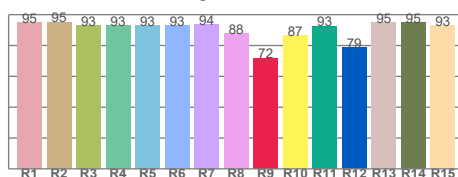


TM30-18  $R_f$ -values per hue bin

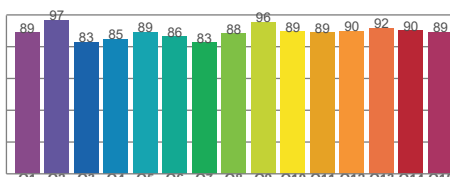


TM30 Chroma shift

### Colour Quality details



Colour Rendering Index



Colour Quality Scale