

149-242 90 graden specific configuration
Wall lamp | 200x101x100 | black | 20W | 2700K | dim

Introduction

Purpose of this Document

This document provides information for 149-242 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	21.6 W
Correlated Colour Temperature	3159 K
Total lumen output	1017 lm
Efficiency	47 lm/W

Electrical measurement details

Input Power

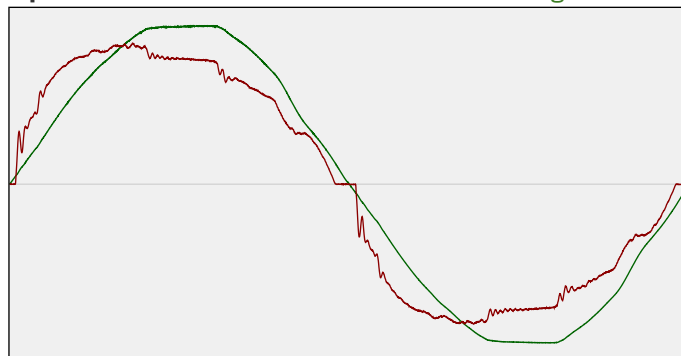
RMS Input voltage feed. V_{RMS}	229 V
RMS Input current feed. I_{RMS}	0.097 A
Total input power	21.6 W

Frequency of input power	50 Hz
Power factor	0.97
Displacement power factor	0.98

Total harmonic distortion of the current	14.28%
Total harmonic distortion of the voltage	2.54%

Input Power Curve

Voltage - Current



Efficiency

Radiated power efficiency: 16.9%



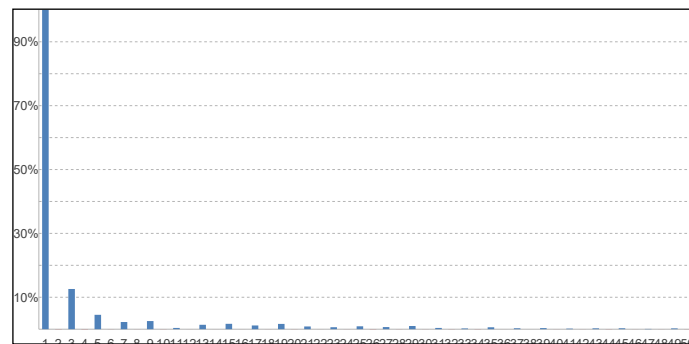
Lumen efficiency: 47 lm/W



Harmonics

3rd Harmonic	12.59%
5th Harmonic	4.51%
7th Harmonic	2.25%
9th Harmonic	2.55%
11th Harmonic	0.4%

Current Harmonics %



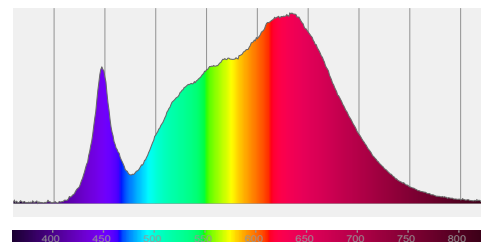
149-242 90 graden specific configuration

Colour measurement details

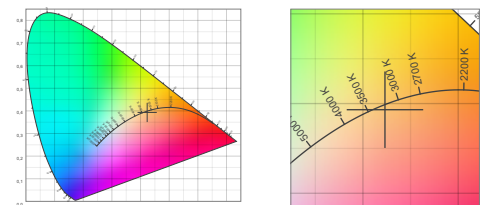
Total lumen output 1017 lm
 Correlated Colour Temperature 3159 K
 Colour coordinates CIE 1931 (x;y) = (0.423;0.393)
 Colour deviation from BBL Duv = -0.0024

TM30-18 Colour Fidelity Index R_f 88.6
 TM30-18 Colour Gamut Index R_g 104.8
 Colour Rendering Index (Ra) CRI 92.0
 Colour Rendering Index. (red component) $R_9 = 75.7$

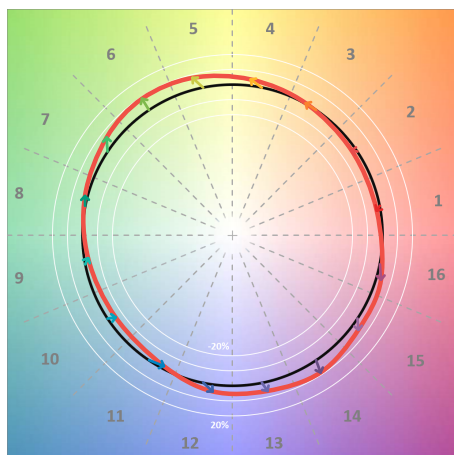
Colour Quality Scale CQS = 88.7
 Television Lighting Consistency Index TLCI = 86



Relative spectral power distribution



TM30 details

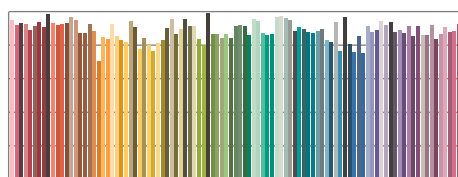


TM30 Colour vectors per hue bin

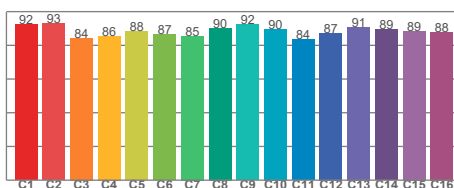


TM30 Colour distortion

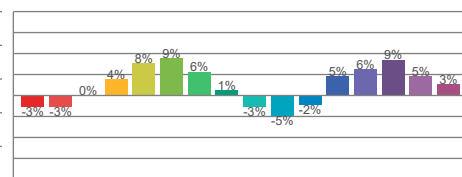
		Shifts (%)	
Hue Bin	R_f	Chroma	Hue
C1	92	-3%	-3%
C2	93	-3%	3%
C3	84	0%	8%
C4	86	4%	8%
C5	88	8%	6%
C6	87	9%	0%
C7	85	6%	-7%
C8	90	1%	-6%
C9	92	-3%	-4%
C10	90	-5%	2%
C11	84	-2%	10%
C12	87	5%	7%
C13	91	6%	3%
C14	89	9%	-2%
C15	89	5%	-6%
C16	88	3%	-10%



TM30-18 R_f -values per reference colour

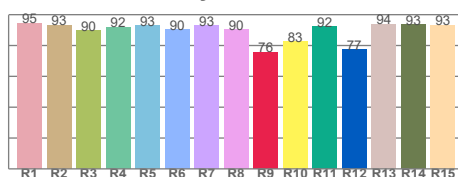


TM30-18 R_f -values per hue bin

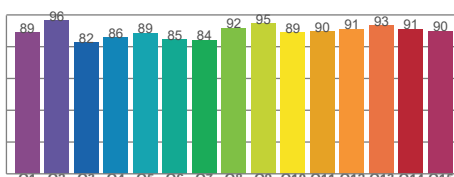


TM30 Chroma shift

Colour Quality details



Colour Rendering Index



Colour Quality Scale