

173-042 20W 4000K specific configuration
LED panel | 60*120 | 20/25/32/36/40W | 3-CCT | EU plug

Introduction

Purpose of this Document

This document provides information for 173-042 20W 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	18.3 W
Correlated Colour Temperature	4254 K
Total lumen output	3043 lm
Efficiency	166 lm/W

Electrical measurement details

Input Power

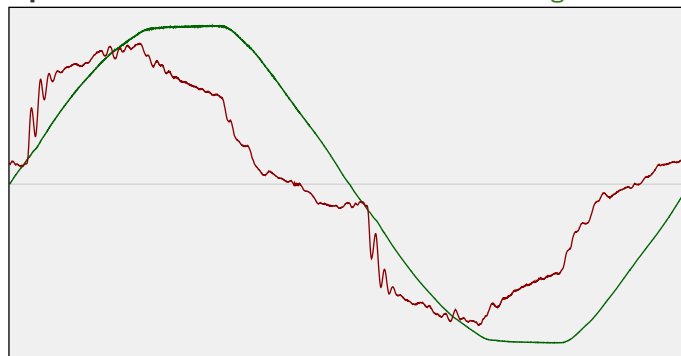
RMS Input voltage feed. V_{RMS}	228 V
RMS Input current feed. I_{RMS}	0.093 A
Total input power	18.3 W

Frequency of input power	50 Hz
Power factor	0.86
Displacement power factor	0.88

Total harmonic distortion of the current	19.38%
Total harmonic distortion of the voltage	2.7%

Input Power Curve

Voltage - Current



Efficiency

Radiated power efficiency: 50.2%



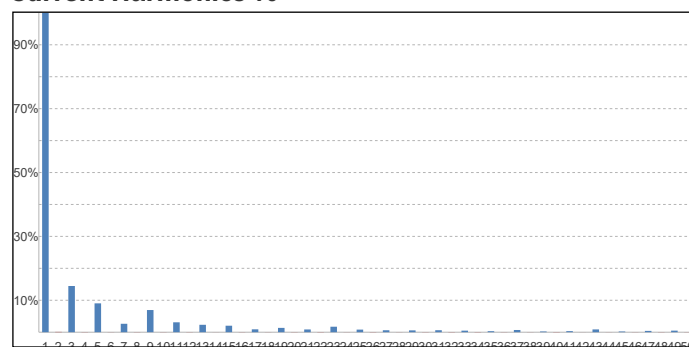
Lumen efficiency: 166 lm/W



Harmonics

3rd Harmonic	14.47%
5th Harmonic	9.03%
7th Harmonic	2.64%
9th Harmonic	6.94%
11th Harmonic	3.1%

Current Harmonics %



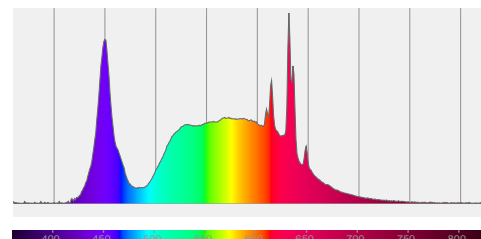
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Colour measurement details

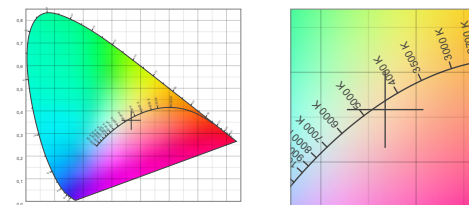
Total lumen output 3043 lm
 Correlated Colour Temperature 4254 K
 Colour coordinates CIE 1931 (x;y) = (0.368;0.358)
 Colour deviation from BBL Duv = -0.0048

TM30-18 Colour Fidelity Index R_f 81.4
 TM30-18 Colour Gamut Index R_g 101.8
 Colour Rendering Index (Ra) CRI 85.1
 Colour Rendering Index. (red component) $R_9 = 45.8$

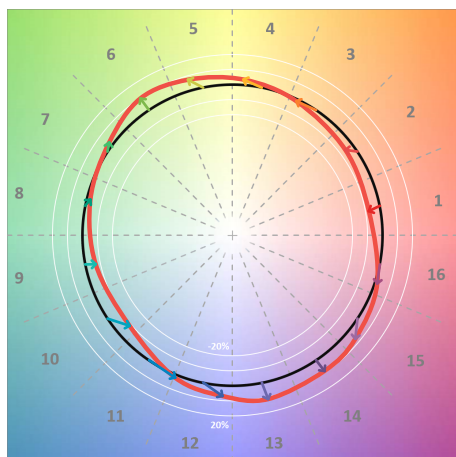
Colour Quality Scale CQS = 81.6
 Television Lighting Consistency Index TLCI = 70



Relative spectral power distribution



TM30 details

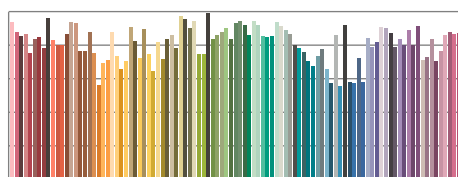


TM30 Colour vectors per hue bin

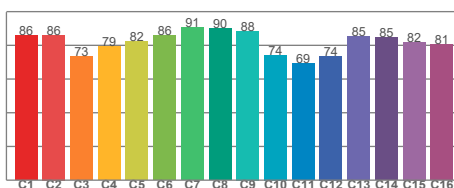


TM30 Colour distortion

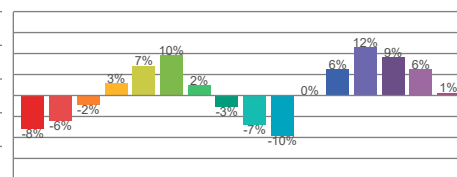
Hue Bin	R_f	Shifts (%)	
		Chroma	Hue
C1	86	-8%	-2%
C2	86	-6%	5%
C3	73	-2%	14%
C4	79	3%	13%
C5	82	7%	9%
C6	86	10%	0%
C7	91	2%	-6%
C8	90	-3%	-5%
C9	88	-7%	1%
C10	74	-10%	12%
C11	69	0%	21%
C12	74	6%	14%
C13	85	12%	2%
C14	85	9%	1%
C15	82	6%	-12%
C16	81	1%	-13%



TM30-18 R_f -values per reference colour

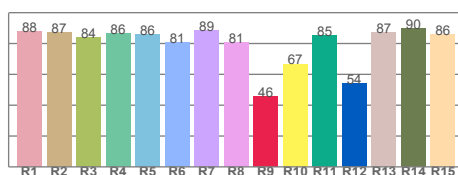


TM30-18 R_f -values per hue bin

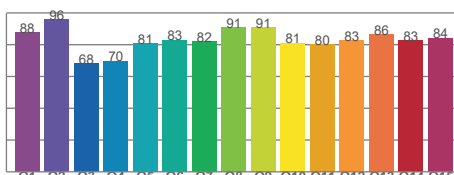


TM30 Chroma shift

Colour Quality details



Colour Rendering Index



Colour Quality Scale