

173-032 13W 4000K specific configuration
LED panel | 30*60 | 6/8/10/13/15W | 3-CCT | EU plug

Introduction

Purpose of this Document

This document provides information for 173-032 13W 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	11.9 W
Correlated Colour Temperature	4311 K
Total lumen output	1778 lm
Efficiency	149 lm/W

Electrical measurement details

Input Power

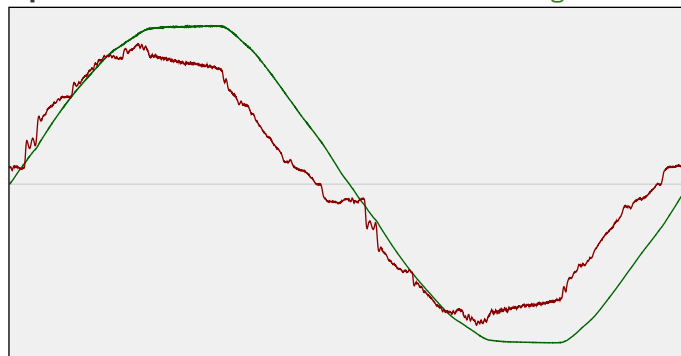
RMS Input voltage feed. V_{RMS}	231 V
RMS Input current feed. I_{RMS}	0.054 A
Total input power	11.9 W

Frequency of input power	50 Hz
Power factor	0.95
Displacement power factor	0.96

Total harmonic distortion of the current	10.6%
Total harmonic distortion of the voltage	2.56%

Input Power Curve

Voltage - Current



Efficiency

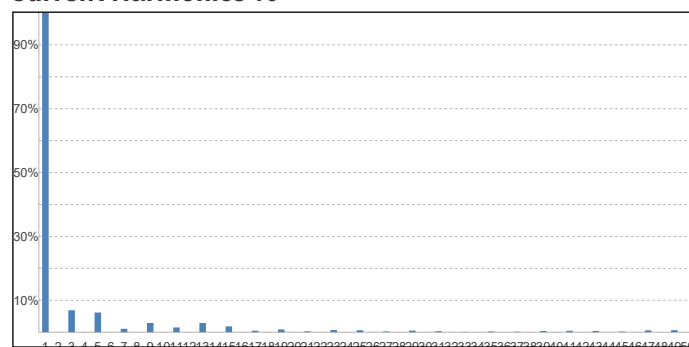
Radiated power efficiency: 44.7%

Lumen efficiency: 149 lm/W

Harmonics

3rd Harmonic	6.88%
5th Harmonic	6.16%
7th Harmonic	1.07%
9th Harmonic	2.89%
11th Harmonic	1.49%

Current Harmonics %



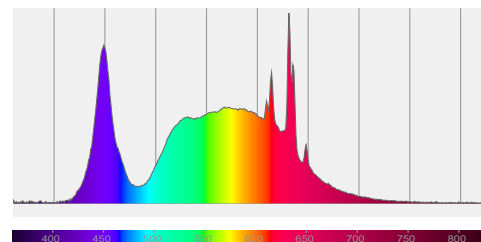
173-032 13W 4000K specific configuration

Colour measurement details

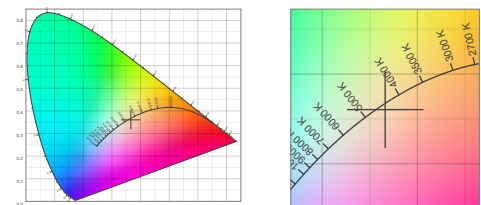
Total lumen output 1778 lm
 Correlated Colour Temperature 4311 K
 Colour coordinates CIE 1931 (x;y) = (0.366;0.360)
 Colour deviation from BBL Duv = -0.0034

TM30-18 Colour Fidelity Index R_f 80.5
 TM30-18 Colour Gamut Index R_g 101.2
 Colour Rendering Index (Ra) CRI 83.2
 Colour Rendering Index. (red component) $R_9 = 35.0$

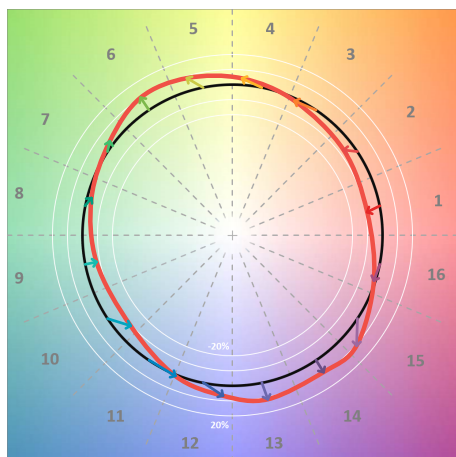
Colour Quality Scale CQS = 80.7
 Television Lighting Consistency Index TLCI = 67



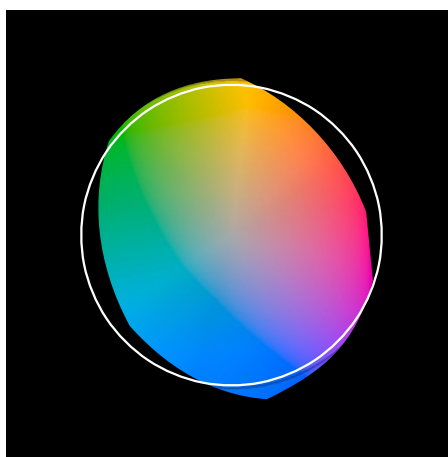
Relative spectral power distribution



TM30 details

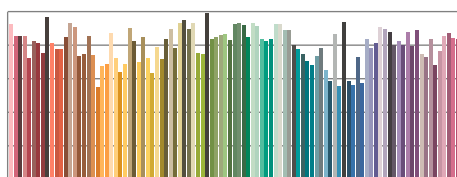


TM30 Colour vectors per hue bin

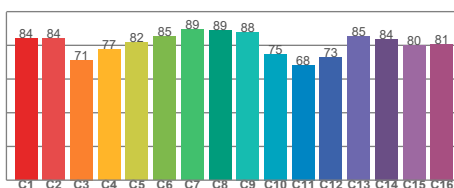


TM30 Colour distortion

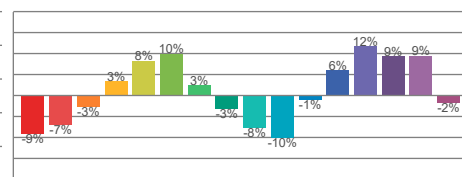
Hue Bin	R_f	Shifts (%)	
		Chroma	Hue
C1	84	-9%	-2%
C2	84	-7%	6%
C3	71	-3%	15%
C4	77	3%	14%
C5	82	8%	9%
C6	85	10%	0%
C7	89	3%	-7%
C8	89	-3%	-6%
C9	88	-8%	0%
C10	75	-10%	13%
C11	68	-1%	20%
C12	73	6%	15%
C13	85	12%	2%
C14	84	9%	0%
C15	80	9%	-15%
C16	81	-2%	-11%



TM30-18 R_f -values per reference colour

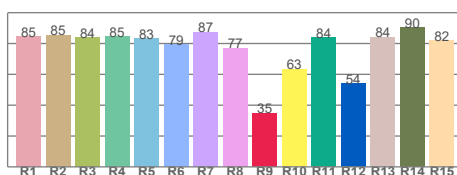


TM30-18 R_f -values per hue bin

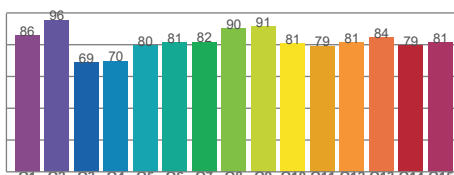


TM30 Chroma shift

Colour Quality details



Colour Rendering Index



Colour Quality Scale