

220-042 12W 4000K specific configuration
Post top light | silver | 12/20/30/40W | 2700K/3300K/4000K

Introduction

Purpose of this Document

This document provides information for 220-042 12W 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	12.7 W
Correlated Colour Temperature	4139 K
Total lumen output	1183 lm
Efficiency	93 lm/W

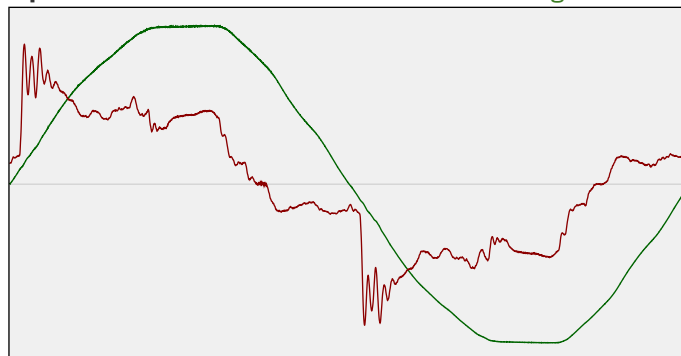
Electrical measurement details

Input Power

RMS Input voltage feed. V_{RMS}	231 V
RMS Input current feed. I_{RMS}	0.078 A
Total input power	12.7 W
Frequency of input power	50 Hz
Power factor	0.71
Displacement power factor	0.74
Total harmonic distortion of the current	31.46%
Total harmonic distortion of the voltage	2.48%

Input Power Curve

Voltage - Current



Efficiency

Radiated power efficiency: 26.7%



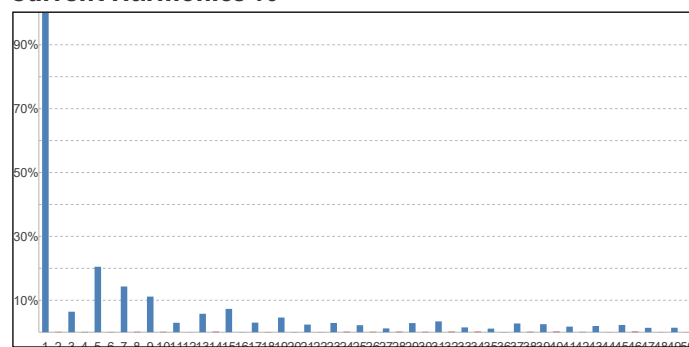
Lumen efficiency: 93 lm/W



Harmonics

3rd Harmonic	6.42%
5th Harmonic	20.5%
7th Harmonic	14.32%
9th Harmonic	11.15%
11th Harmonic	2.95%

Current Harmonics %



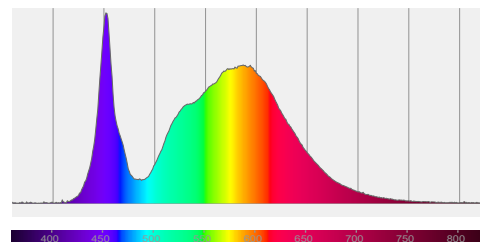
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Colour measurement details

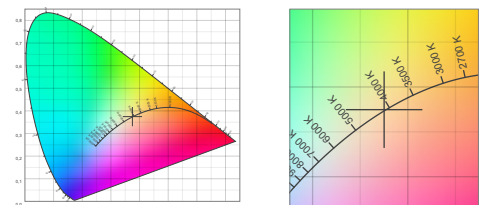
Total lumen output 1183 lm
 Correlated Colour Temperature 4139 K
 Colour coordinates CIE 1931 (x;y) = (0.375;0.375)
 Colour deviation from BBL Duv = 0.0007

TM30-18 Colour Fidelity Index R_f 75.0
 TM30-18 Colour Gamut Index R_g 92.1
 Colour Rendering Index (Ra) CRI 73.2
 Colour Rendering Index. (red component) $R_9 = -32.7$

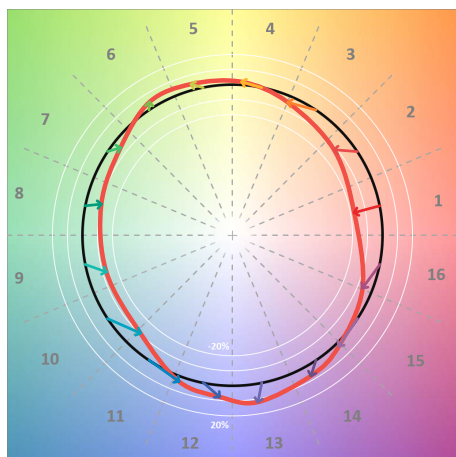
Colour Quality Scale CQS = 71.7
 Television Lighting Consistency Index TLCI = 48



Relative spectral power distribution



TM30 details

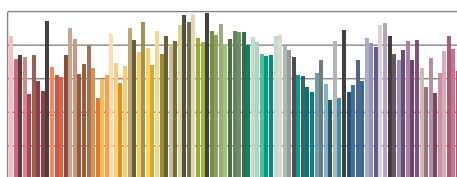


TM30 Colour vectors per hue bin

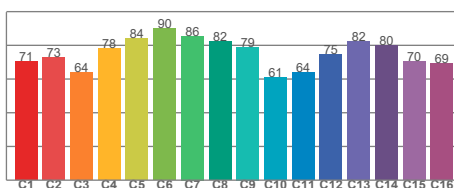


TM30 Colour distortion

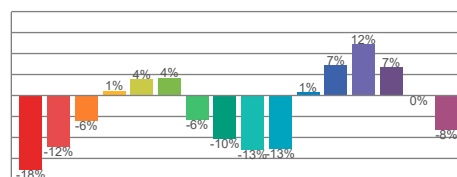
Hue Bin	R_f	Shifts (%)	
		Chroma	Hue
C1	71	-18%	-1%
C2	73	-12%	10%
C3	64	-6%	18%
C4	78	1%	14%
C5	84	4%	7%
C6	90	4%	-3%
C7	86	-6%	-7%
C8	82	-10%	-3%
C9	79	-13%	8%
C10	61	-13%	20%
C11	64	1%	24%
C12	75	7%	13%
C13	82	12%	-5%
C14	80	7%	-9%
C15	70	0%	-22%
C16	69	-8%	-18%



TM30-18 R_f -values per reference colour

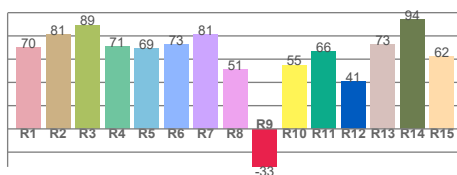


TM30-18 R_f -values per hue bin

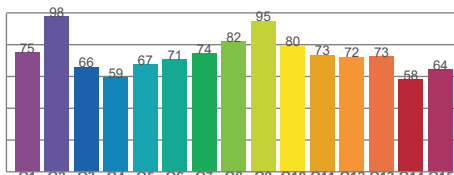


TM30 Chroma shift

Colour Quality details



Colour Rendering Index



Colour Quality Scale