

220-042 40W 2700K 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 40W 2700K. 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	41.2 W
Correlated Colour Temperature	2801 K
Total lumen output	2900 lm
Efficiency	70 lm/W

Electrical measurement details

Input Power

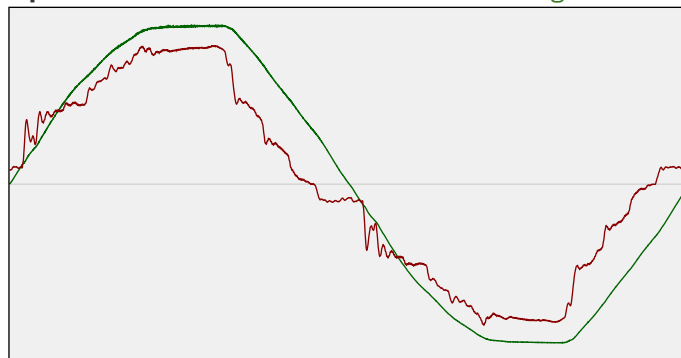
RMS Input voltage feed. V_{RMS}	230 V
RMS Input current feed. I_{RMS}	0.187 A
Total input power	41.2 W

Frequency of input power	50 Hz
Power factor	0.96
Displacement power factor	0.97

Total harmonic distortion of the current	15.52%
Total harmonic distortion of the voltage	2.9%

Input Power Curve

Voltage - Current



Efficiency

Radiated power efficiency: 20.4%



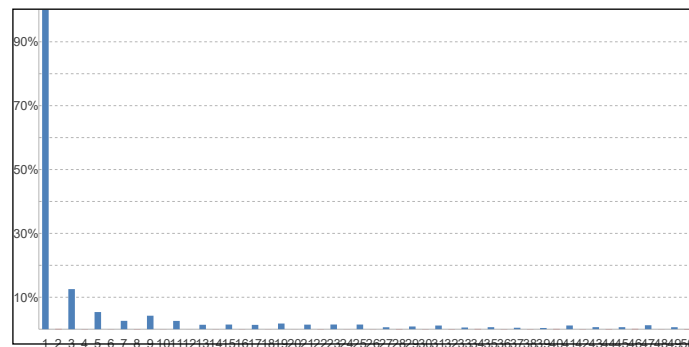
Lumen efficiency: 70 lm/W



Harmonics

3rd Harmonic	12.55%
5th Harmonic	5.37%
7th Harmonic	2.62%
9th Harmonic	4.22%
11th Harmonic	2.6%

Current Harmonics %



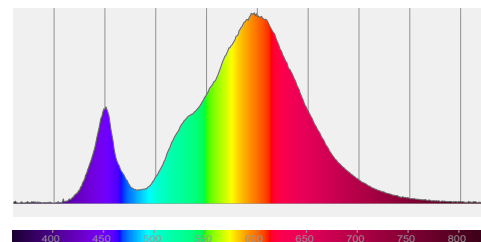
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Colour measurement details

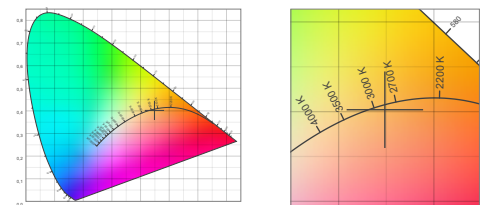
Total lumen output 2900 lm
 Correlated Colour Temperature 2801 K
 Colour coordinates CIE 1931 (x;y) = (0.449;0.402)
 Colour deviation from BBL Duv = -0.0022

TM30-18 Colour Fidelity Index R_f 73.2
 TM30-18 Colour Gamut Index R_g 95.8
 Colour Rendering Index (Ra) CRI 71.7
 Colour Rendering Index. (red component) $R_9 = -30.0$

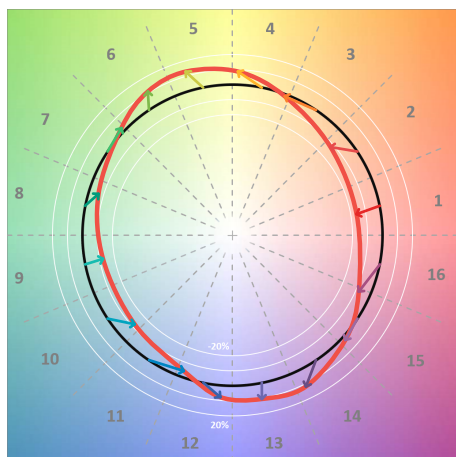
Colour Quality Scale CQS = 70.1
 Television Lighting Consistency Index TLCI = 43



Relative spectral power distribution



TM30 details

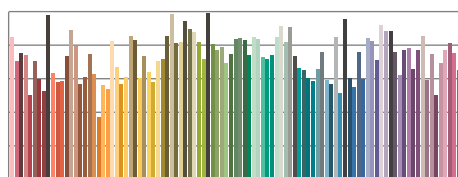


TM30 Colour vectors per hue bin

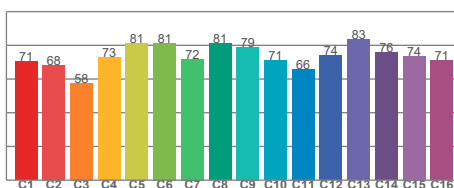


TM30 Colour distortion

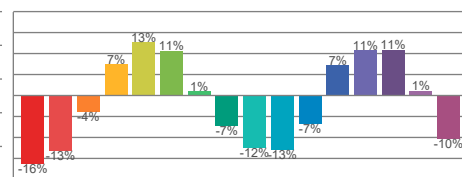
		Shifts (%)	
Hue Bin	R_f	Chroma	Hue
C1	71	-16%	-2%
C2	68	-13%	12%
C3	58	-4%	22%
C4	73	7%	18%
C5	81	13%	9%
C6	81	11%	-6%
C7	72	1%	-18%
C8	81	-7%	-10%
C9	79	-12%	-1%
C10	71	-13%	13%
C11	66	-7%	23%
C12	74	7%	13%
C13	83	11%	-2%
C14	76	11%	-15%
C15	74	1%	-16%
C16	71	-10%	-21%



TM30-18 R_f -values per reference colour

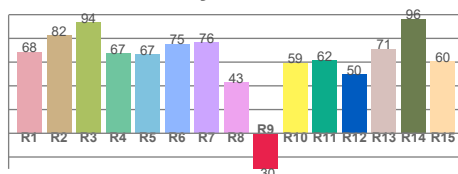


TM30-18 R_f -values per hue bin

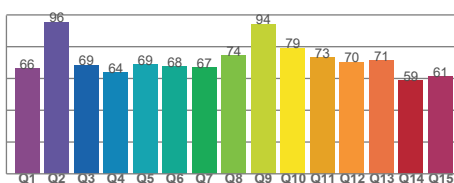


TM30 Chroma shift

Colour Quality details



Colour Rendering Index



Colour Quality Scale