

220-042 20W 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 20W 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

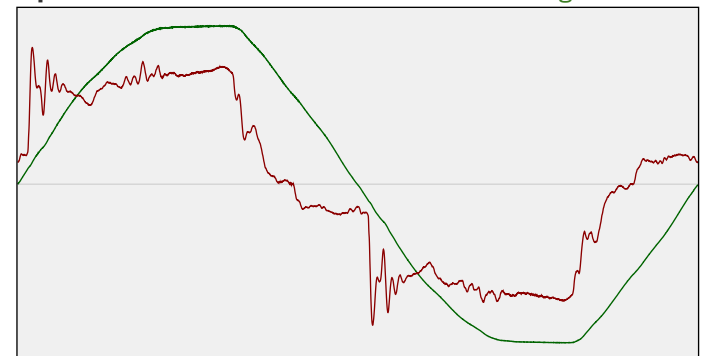
Total input power	19.8 W
Correlated Colour Temperature	2794 K
Total lumen output	1607 lm
Efficiency	81 lm/W

Electrical measurement details

Input Power

RMS Input voltage feed. V_{RMS}	232 V
RMS Input current feed. I_{RMS}	0.099 A
Total input power	19.8 W
Frequency of input power	50 Hz
Power factor	0.86
Displacement power factor	0.88
Total harmonic distortion of the current	23.09%
Total harmonic distortion of the voltage	2.87%

Input Power Curve



Efficiency

Radiated power efficiency: 23.4%



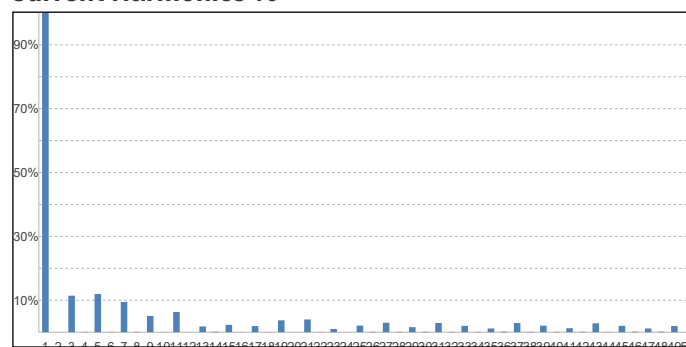
Lumen efficiency: 81 lm/W



Harmonics

3rd Harmonic	11.43%
5th Harmonic	11.98%
7th Harmonic	9.46%
9th Harmonic	5.08%
11th Harmonic	6.31%

Current Harmonics %



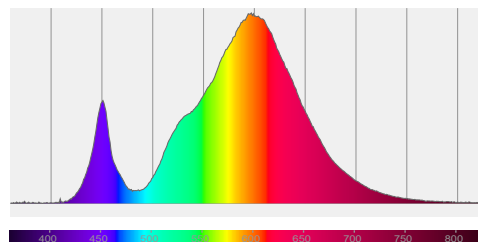
220-042 20W 2700K specific configuration

Colour measurement details

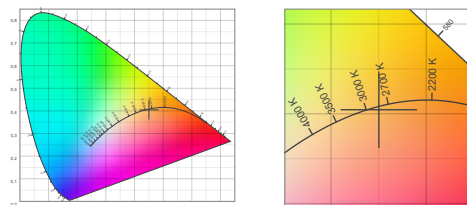
Total lumen output 1607 lm
 Correlated Colour Temperature 2794 K
 Colour coordinates CIE 1931 (x;y) = (0.450;0.404)
 Colour deviation from BBL Duv = -0.0014

TM30-18 Colour Fidelity Index R_f 73.8
 TM30-18 Colour Gamut Index R_g 95.7
 Colour Rendering Index (Ra) CRI 72.0
 Colour Rendering Index. (red component) R_9 = -29.6

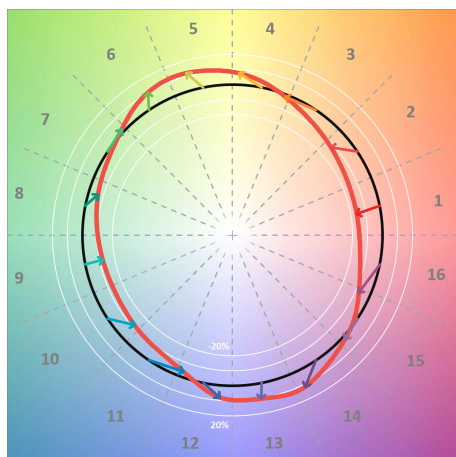
Colour Quality Scale CQS = 70.7
 Television Lighting Consistency Index TLCI = 44



Relative spectral power distribution



TM30 details

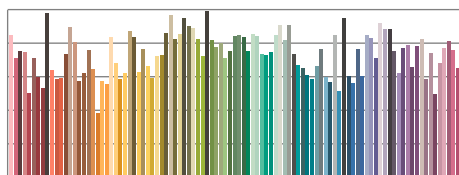


TM30 Colour vectors per hue bin

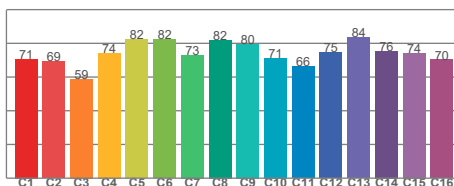


TM30 Colour distortion

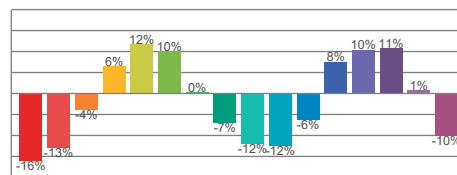
Hue Bin	R_f	Shifts (%)	
		Chroma	Hue
C1	71	-16%	-2%
C2	69	-13%	12%
C3	59	-4%	22%
C4	74	6%	17%
C5	82	12%	9%
C6	82	10%	-6%
C7	73	0%	-17%
C8	82	-7%	-9%
C9	80	-12%	-1%
C10	71	-12%	13%
C11	66	-6%	23%
C12	75	8%	13%
C13	84	10%	-3%
C14	76	11%	-16%
C15	74	1%	-16%
C16	70	-10%	-21%



TM30-18 R_f -values per reference colour

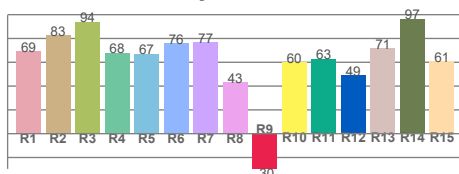


TM30-18 R_f -values per hue bin

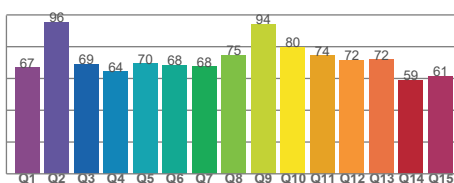


TM30 Chroma shift

Colour Quality details



Colour Rendering Index



Colour Quality Scale