

220-042 12W 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 12W 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	12.7 W
Correlated Colour Temperature	2794 K
Total lumen output	1061 lm
Efficiency	83 lm/W

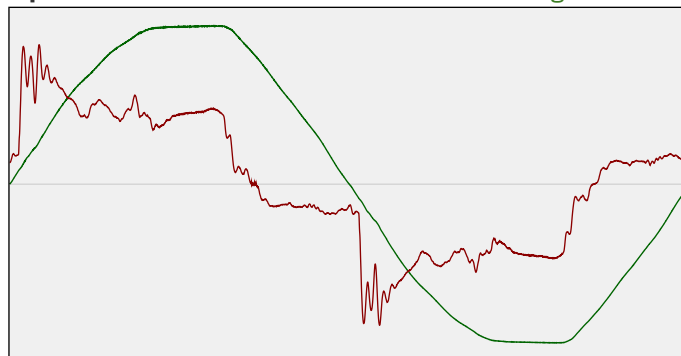
## Electrical measurement details

### Input Power

RMS Input voltage feed. $V_{RMS}$	231 V
RMS Input current feed. $I_{RMS}$	0.079 A
Total input power	12.7 W
Frequency of input power	50 Hz
Power factor	0.7
Displacement power factor	0.74
Total harmonic distortion of the current	32.59%
Total harmonic distortion of the voltage	2.75%

### Input Power Curve

Voltage - Current



### Efficiency

Radiated power efficiency: 24.0%



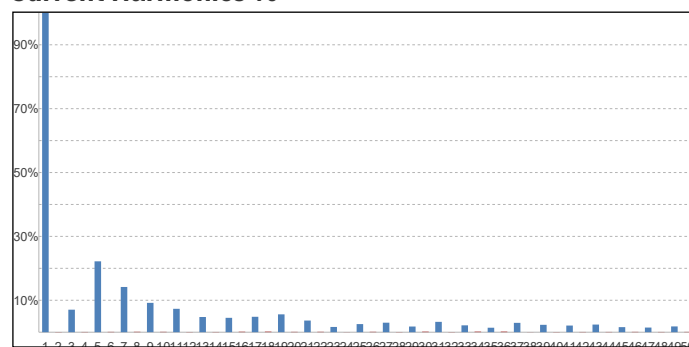
Lumen efficiency: 83 lm/W



### Harmonics

3rd Harmonic	7.05%
5th Harmonic	22.19%
7th Harmonic	14.16%
9th Harmonic	9.19%
11th Harmonic	7.33%

### Current Harmonics %



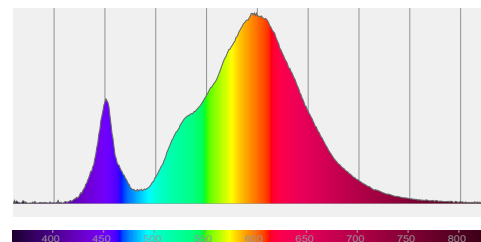
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### Colour measurement details

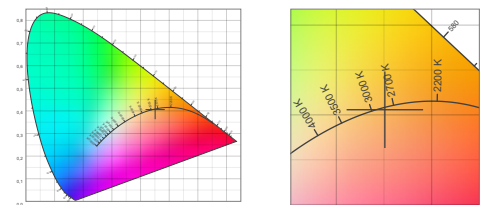
Total lumen output 1061 lm  
 Correlated Colour Temperature 2794 K  
 Colour coordinates CIE 1931 (x;y) = (0.451;0.406)  
 Colour deviation from BBL Duv = -0.0010

TM30-18 Colour Fidelity Index  $R_f$  74.2  
 TM30-18 Colour Gamut Index  $R_g$  95.3  
 Colour Rendering Index (Ra) CRI 72.1  
 Colour Rendering Index. (red component)  $R_9 = -29.5$

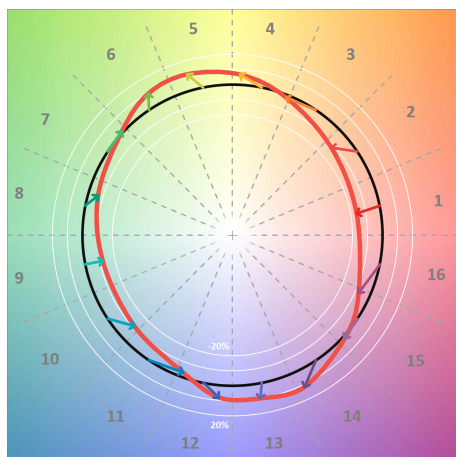
Colour Quality Scale CQS = 71.0  
 Television Lighting Consistency Index TLCI = 44



Relative spectral power distribution



### TM30 details

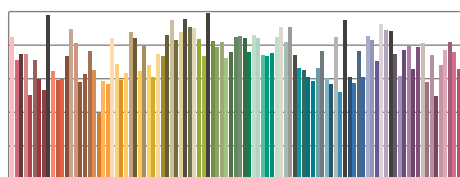


TM30 Colour vectors per hue bin

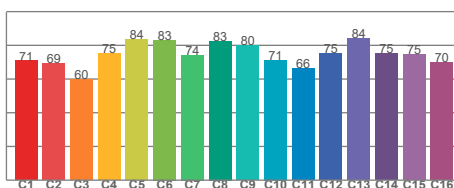


TM30 Colour distortion

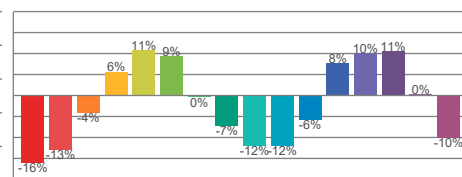
Hue Bin	$R_f$	Shifts (%)	
		Chroma	Hue
C1	71	-16%	-2%
C2	69	-13%	12%
C3	60	-4%	21%
C4	75	6%	16%
C5	84	11%	9%
C6	83	9%	-6%
C7	74	0%	-17%
C8	83	-7%	-8%
C9	80	-12%	0%
C10	71	-12%	14%
C11	66	-6%	23%
C12	75	8%	12%
C13	84	10%	-3%
C14	75	11%	-16%
C15	75	0%	-16%
C16	70	-10%	-21%



TM30-18  $R_f$ -values per reference colour

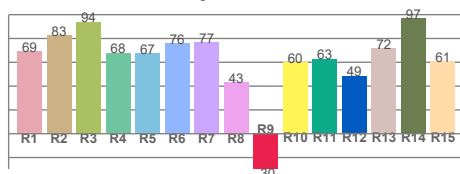


TM30-18  $R_f$ -values per hue bin

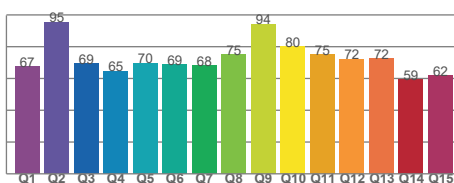


TM30 Chroma shift

### Colour Quality details



Colour Rendering Index



Colour Quality Scale