

## 146-371 50W 3000K specific configuration

Floodlight | 50W/75W/100W | 100x60° | 3-CCT | light sensor

### Introduction

#### Purpose of this Document

This document provides information for 146-371 50W 3000K. 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	48.6 W
Correlated Colour Temperature	3036 K
Total lumen output	6836 lm
Efficiency	141 lm/W

### Electrical measurement details

#### Input Power

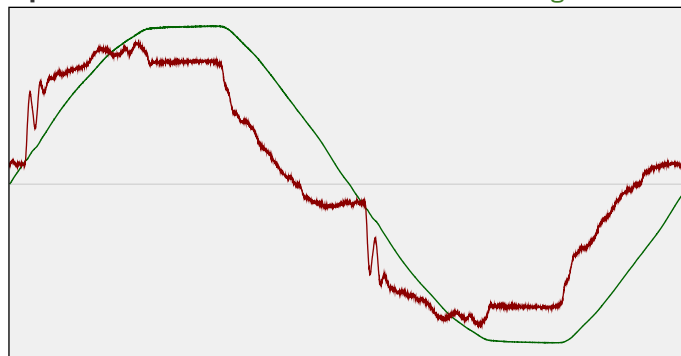
RMS Input voltage feed. $V_{RMS}$	228 V
RMS Input current feed. $I_{RMS}$	0.234 A
Total input power	48.6 W

Frequency of input power	50 Hz
Power factor	0.91
Displacement power factor	0.92

Total harmonic distortion of the current	15.09%
Total harmonic distortion of the voltage	2.45%

#### Input Power Curve

Voltage - Current



#### Efficiency

Radiated power efficiency: 42.7%



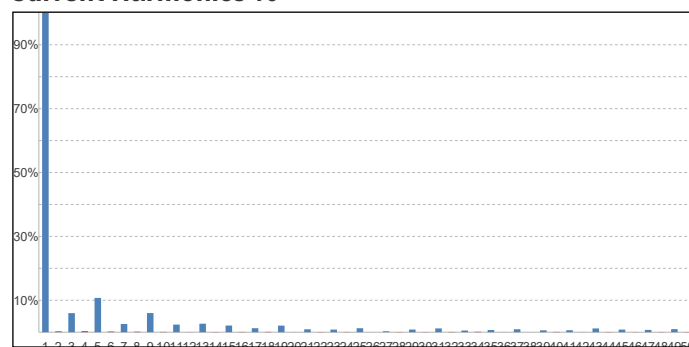
Lumen efficiency: 141 lm/W



#### Harmonics

3rd Harmonic	5.97%
5th Harmonic	10.73%
7th Harmonic	2.57%
9th Harmonic	5.99%
11th Harmonic	2.38%

#### Current Harmonics %



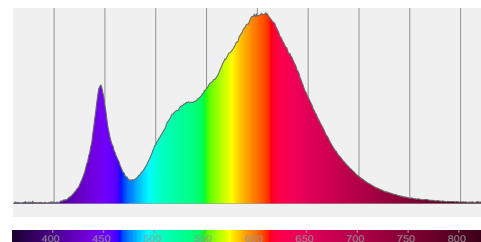
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### Colour measurement details

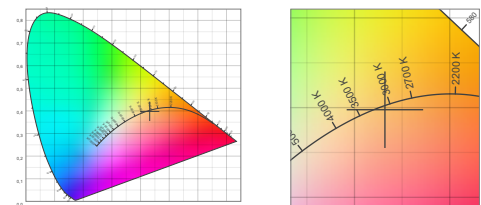
Total lumen output 6836 lm  
 Correlated Colour Temperature 3036 K  
 Colour coordinates CIE 1931 (x;y) = (0.432;0.398)  
 Colour deviation from BBL Duv = -0.0019

TM30-18 Colour Fidelity Index  $R_f$  82.2  
 TM30-18 Colour Gamut Index  $R_g$  99.3  
 Colour Rendering Index (Ra) CRI 82.0  
 Colour Rendering Index. (red component)  $R_9 = 4.5$

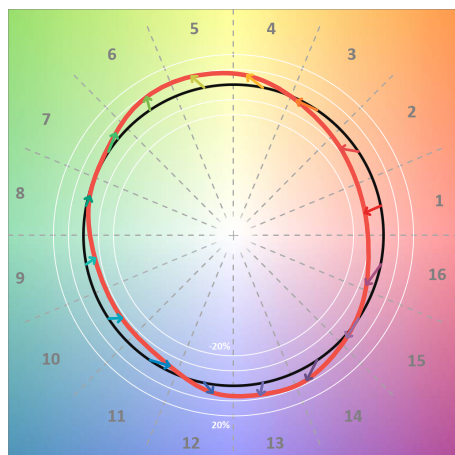
Colour Quality Scale CQS = 80.1  
 Television Lighting Consistency Index TLCI = 61



Relative spectral power distribution



### TM30 details

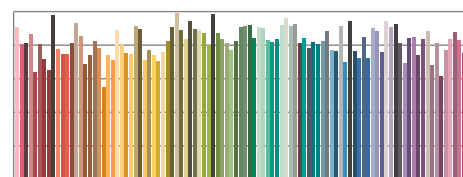


TM30 Colour vectors per hue bin

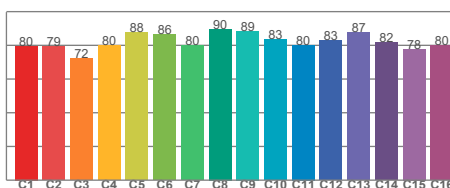


TM30 Colour distortion

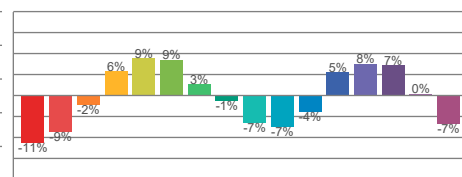
Hue Bin	$R_f$	Shifts (%)	
		Chroma	Hue
C1	80	-11%	-3%
C2	79	-9%	8%
C3	72	-2%	15%
C4	80	6%	12%
C5	88	9%	7%
C6	86	9%	-3%
C7	80	3%	-13%
C8	90	-1%	-6%
C9	89	-7%	-3%
C10	83	-7%	5%
C11	80	-4%	13%
C12	83	5%	7%
C13	87	8%	-3%
C14	82	7%	-13%
C15	78	0%	-15%
C16	80	-7%	-15%



TM30-18  $R_f$ -values per reference colour

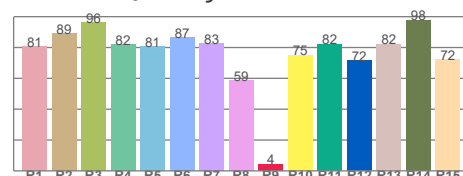


TM30-18  $R_f$ -values per hue bin

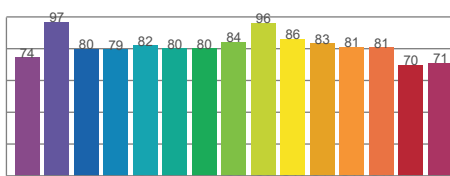


TM30 Chroma shift

### Colour Quality details



Colour Rendering Index



Colour Quality Scale