

136-377 18W specific configuration

Refl downl | white | Ø225mm | 60° | 4000K | 18~30W | GST18i3

Introduction

Purpose of this Document

This document provides information for 136-377 18W. 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	17.1 W
Correlated Colour Temperature	4114 K
Total lumen output	1987 lm
Efficiency	116 lm/W

Electrical measurement details

Input Power

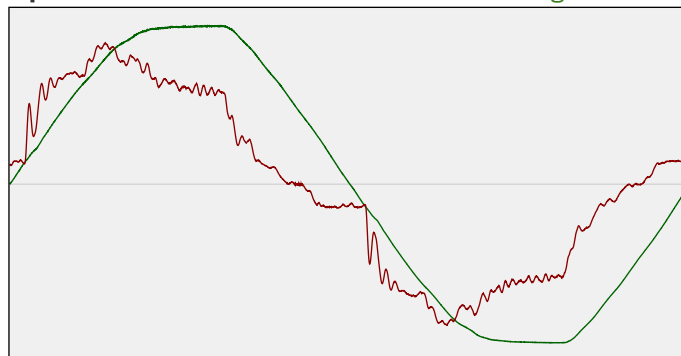
RMS Input voltage feed. V_{RMS}	233 V
RMS Input current feed. I_{RMS}	0.084 A
Total input power	17.1 W

Frequency of input power	50 Hz
Power factor	0.87
Displacement power factor	0.89

Total harmonic distortion of the current	17.32%
Total harmonic distortion of the voltage	2.76%

Input Power Curve

Voltage - Current



Efficiency

Radiated power efficiency: 36.4%



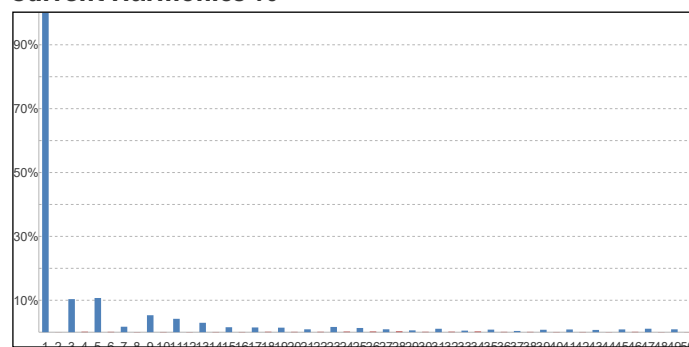
Lumen efficiency: 116 lm/W



Harmonics

3rd Harmonic	10.36%
5th Harmonic	10.71%
7th Harmonic	1.72%
9th Harmonic	5.32%
11th Harmonic	4.2%

Current Harmonics %



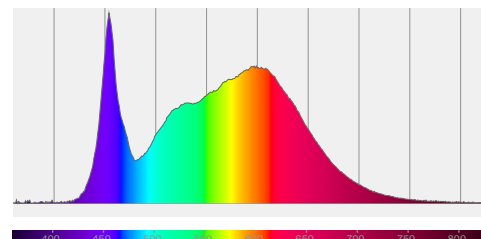
136-377 18W specific configuration

Colour measurement details

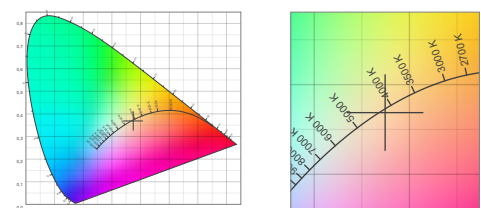
Total lumen output 1987 lm
 Correlated Colour Temperature 4114 K
 Colour coordinates CIE 1931 (x;y) = (0.374;0.369)
 Colour deviation from BBL Duv = -0.0020

TM30-18 Colour Fidelity Index R_f 85.3
 TM30-18 Colour Gamut Index R_g 95.9
 Colour Rendering Index (Ra) CRI 86.7
 Colour Rendering Index. (red component) $R_9 = 25.6$

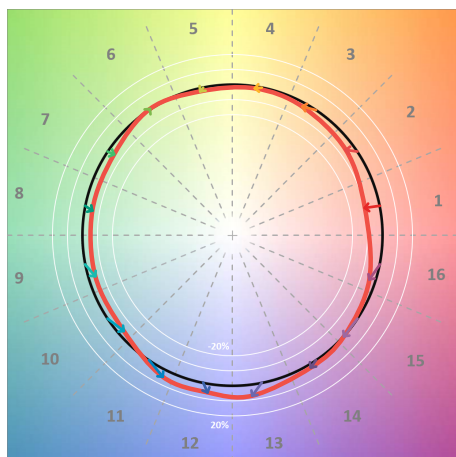
Colour Quality Scale CQS = 84.5
 Television Lighting Consistency Index TLCI = 76



Relative spectral power distribution



TM30 details

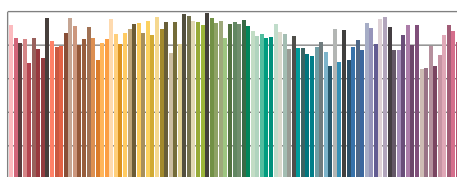


TM30 Colour vectors per hue bin

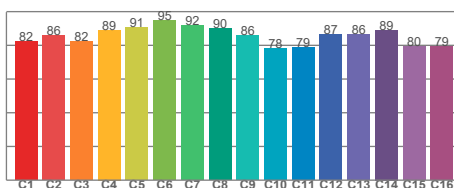


TM30 Colour distortion

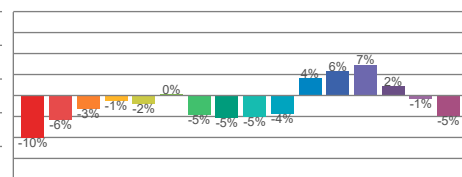
Hue Bin	R_f	Shifts (%)	
		Chroma	Hue
C1	82	-10%	1%
C2	86	-6%	5%
C3	82	-3%	9%
C4	89	-1%	4%
C5	91	-2%	2%
C6	95	0%	-1%
C7	92	-5%	-1%
C8	90	-5%	2%
C9	86	-5%	9%
C10	78	-4%	13%
C11	79	4%	14%
C12	87	6%	4%
C13	86	7%	-8%
C14	89	2%	-6%
C15	80	-1%	-15%
C16	79	-5%	-11%



TM30-18 R_f -values per reference colour

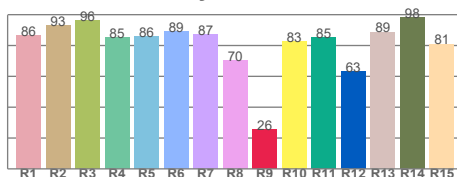


TM30-18 R_f -values per hue bin

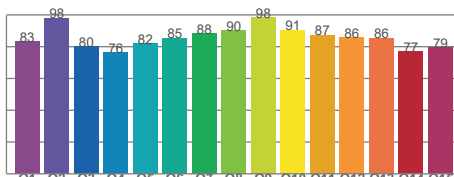


TM30 Chroma shift

Colour Quality details



Colour Rendering Index



Colour Quality Scale