

136-820 7W DTW specific configuration
Spot | 82x82mm | square | white | 5/7W | 3CCT/DTW

Introduction

Purpose of this Document

This document provides information for 136-820 7W DTW. 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	6.4 W
Correlated Colour Temperature	3082 K
Total lumen output	352 lm
Efficiency	55 lm/W

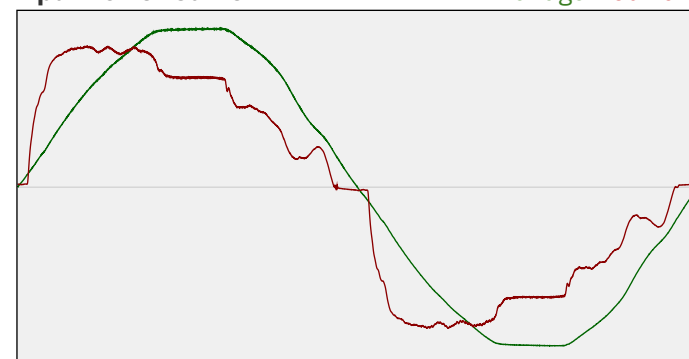
Electrical measurement details

Input Power

RMS Input voltage feed. V_{RMS}	230 V
RMS Input current feed. I_{RMS}	0.031 A
Total input power	6.4 W
Frequency of input power	50 Hz
Power factor	0.92
Displacement power factor	0.94
Total harmonic distortion of the current	22.57%
Total harmonic distortion of the voltage	2.57%

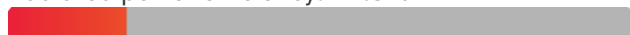
Input Power Curve

Voltage - Current



Efficiency

Radiated power efficiency: 19.3%



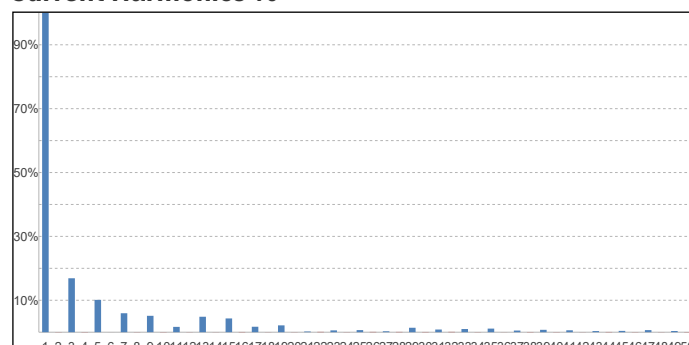
Lumen efficiency: 55 lm/W



Harmonics

3rd Harmonic	16.89%
5th Harmonic	10.13%
7th Harmonic	5.94%
9th Harmonic	5.13%
11th Harmonic	1.67%

Current Harmonics %



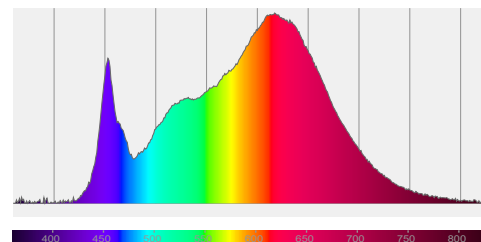
136-820 7W DTW specific configuration

Colour measurement details

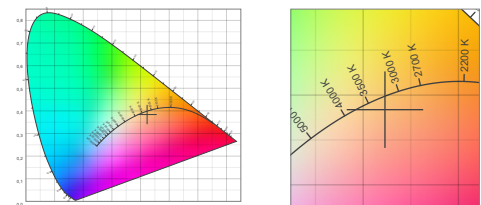
Total lumen output 352 lm
 Correlated Colour Temperature 3082 K
 Colour coordinates CIE 1931 (x;y) = (0.423;0.384)
 Colour deviation from BBL Duv = -0.0063

TM30-18 Colour Fidelity Index R_f 92.2
 TM30-18 Colour Gamut Index R_g 102.0
 Colour Rendering Index (Ra) CRI 94.8
 Colour Rendering Index. (red component) $R_9 = 70.9$

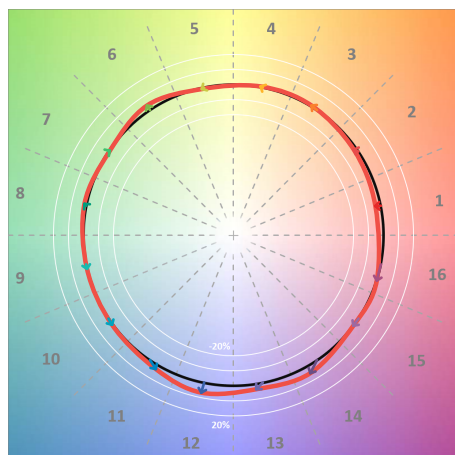
Colour Quality Scale CQS = 91.6
 Television Lighting Consistency Index TLCI = 91



Relative spectral power distribution



TM30 details

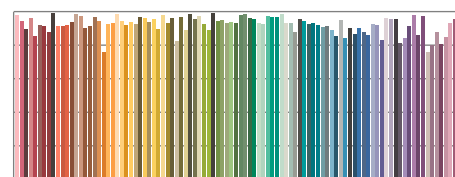


TM30 Colour vectors per hue bin

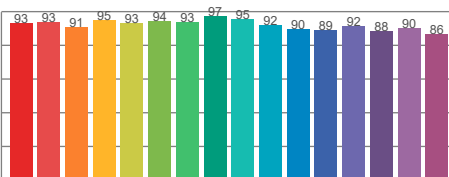


TM30 Colour distortion

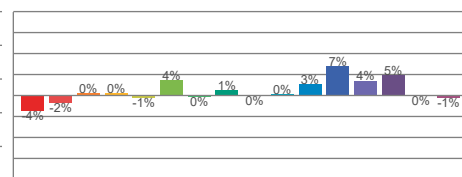
Hue Bin	R_f	Shifts (%)	
		Chroma	Hue
C1	93	-4%	1%
C2	93	-2%	3%
C3	91	0%	5%
C4	95	0%	2%
C5	93	-1%	2%
C6	94	4%	0%
C7	93	0%	-1%
C8	97	1%	-1%
C9	95	0%	3%
C10	92	0%	5%
C11	90	3%	7%
C12	89	7%	-1%
C13	92	4%	-5%
C14	88	5%	-8%
C15	90	0%	-6%
C16	86	-1%	-11%



TM30-18 R_f -values per reference colour

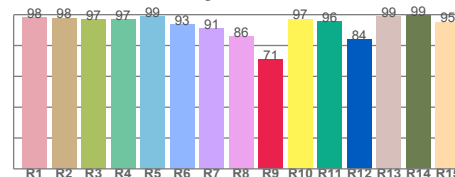


TM30-18 R_f -values per hue bin

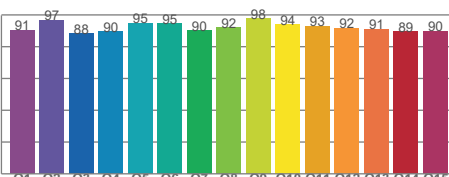


TM30 Chroma shift

Colour Quality details



Colour Rendering Index



Colour Quality Scale