

220-053 75W specific configuration Street light | 23/38/57/75W | 4000K

Introduction

Purpose of this Document

This document provides information for 220-053 75W. 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	76.6 W
Correlated Colour Temperature	4038 K
Total lumen output	11264 lm
Efficiency	147 lm/W

Electrical measurement details

Input Power

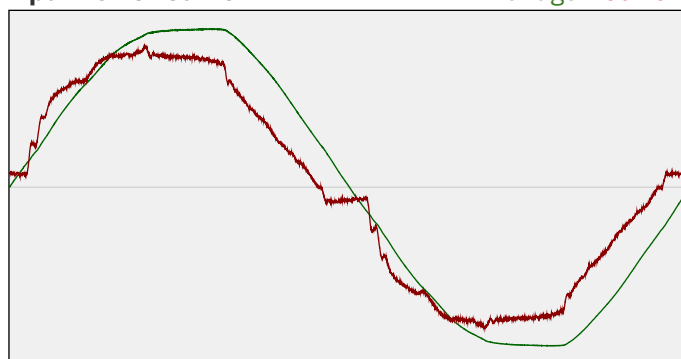
RMS Input voltage feed. V_{RMS}	231 V
RMS Input current feed. I_{RMS}	0.343 A
Total input power	76.6 W

Frequency of input power	50 Hz
Power factor	0.97
Displacement power factor	0.97

Total harmonic distortion of the current	10.23%
Total harmonic distortion of the voltage	2.67%

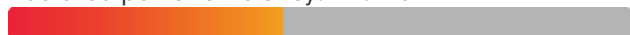
Input Power Curve

Voltage - Current



Efficiency

Radiated power efficiency: 44.4%



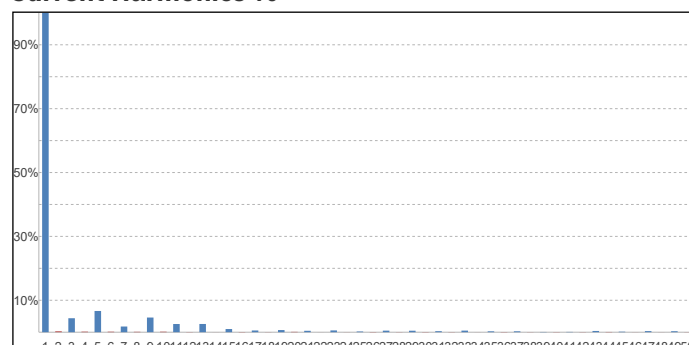
Lumen efficiency: 147 lm/W



Harmonics

3rd Harmonic	4.37%
5th Harmonic	6.65%
7th Harmonic	1.78%
9th Harmonic	4.59%
11th Harmonic	2.56%

Current Harmonics %



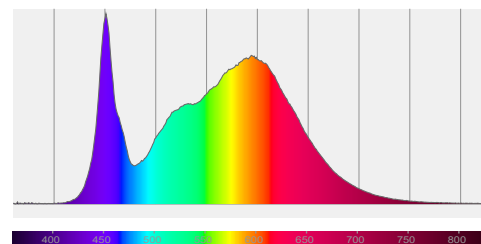
220-053 75W specific configuration

Colour measurement details

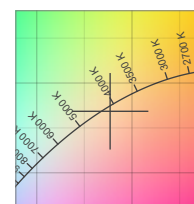
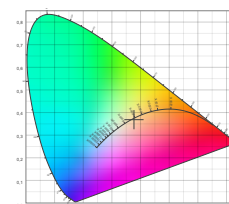
Total lumen output 11264 lm
 Correlated Colour Temperature 4038 K
 Colour coordinates CIE 1931 (x;y) = (0.377;0.368)
 Colour deviation from BBL Duv = -0.0029

TM30-18 Colour Fidelity Index R_f 82.6
 TM30-18 Colour Gamut Index R_g 95.6
 Colour Rendering Index (Ra) CRI 82.3
 Colour Rendering Index. (red component) $R_9 = 2.1$

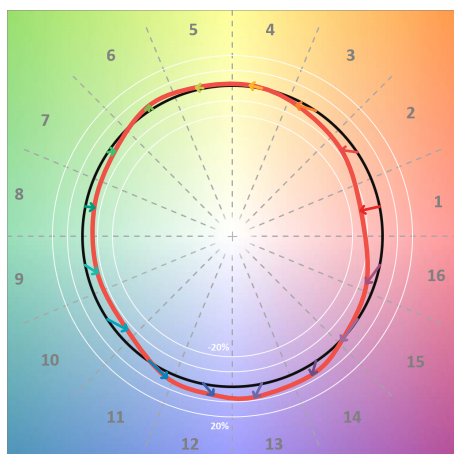
Colour Quality Scale CQS = 80.2
 Television Lighting Consistency Index TLCI = 64



Relative spectral power distribution



TM30 details

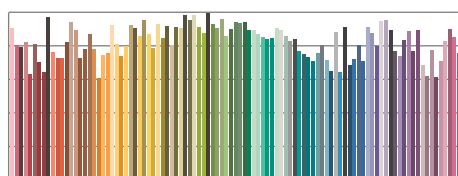


TM30 Colour vectors per hue bin

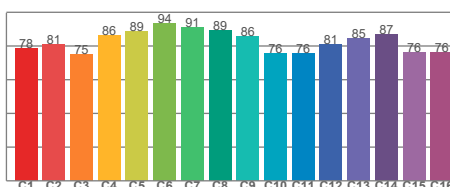


TM30 Colour distortion

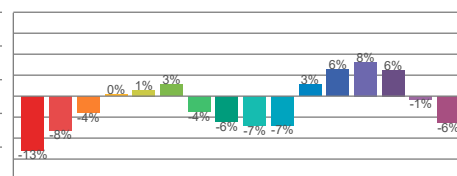
Hue Bin	R_f	Shifts (%)	
		Chroma	Hue
C1	78	-13%	0%
C2	81	-8%	7%
C3	75	-4%	13%
C4	86	0%	8%
C5	89	1%	4%
C6	94	3%	-2%
C7	91	-4%	-3%
C8	89	-6%	0%
C9	86	-7%	7%
C10	76	-7%	13%
C11	76	3%	16%
C12	81	6%	8%
C13	85	8%	-6%
C14	87	6%	-7%
C15	76	-1%	-18%
C16	76	-6%	-13%



TM30-18 R_f -values per reference colour

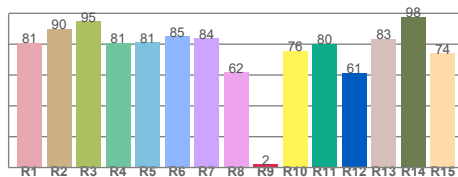


TM30-18 R_f -values per hue bin

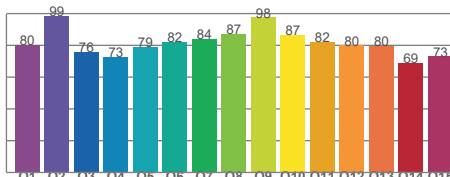


TM30 Chroma shift

Colour Quality details



Colour Rendering Index



Colour Quality Scale