

169-276 4000K 45 degree specific configuration  
Track spot | black | spot | 8W | 930-935-940 | 45° | dim.

## Introduction

### Purpose of this Document

This document provides information for 169-276 4000K 45 degree. 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

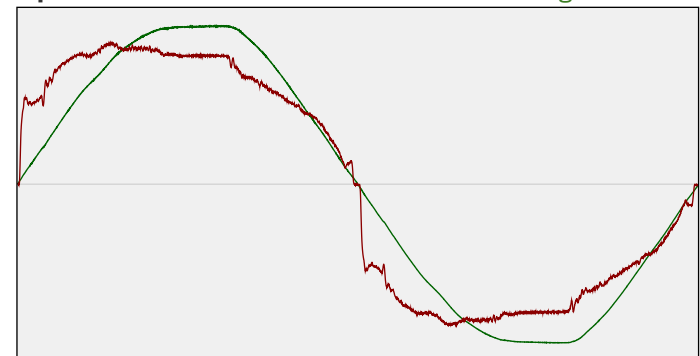
Total input power	8.4 W
Correlated Colour Temperature	4090 K
Total lumen output	530 lm
Efficiency	63 lm/W

## Electrical measurement details

### Input Power

RMS Input voltage feed. $V_{RMS}$	232 V
RMS Input current feed. $I_{RMS}$	0.038 A
Total input power	8.4 W
Frequency of input power	50 Hz
Power factor	0.96
Displacement power factor	0.98
Total harmonic distortion of the current	20.58%
Total harmonic distortion of the voltage	2.81%

### Input Power Curve



### Efficiency

Radiated power efficiency: 21.6%



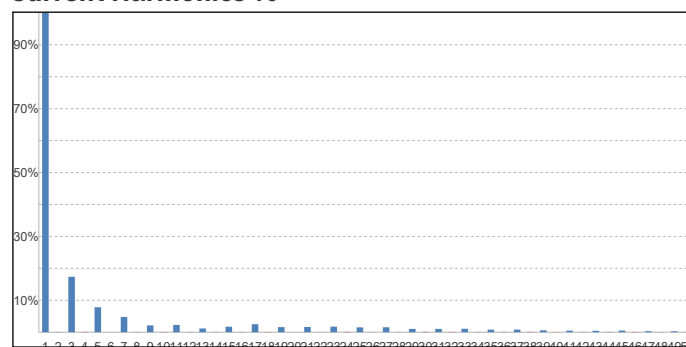
Lumen efficiency: 63 lm/W



### Harmonics

3rd Harmonic	17.35%
5th Harmonic	7.8%
7th Harmonic	4.75%
9th Harmonic	2.13%
11th Harmonic	2.27%

### Current Harmonics %



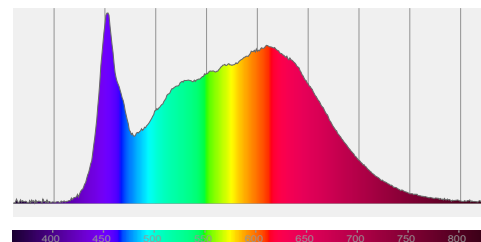
## 169-276 4000K 45 degree specific configuration

### Colour measurement details

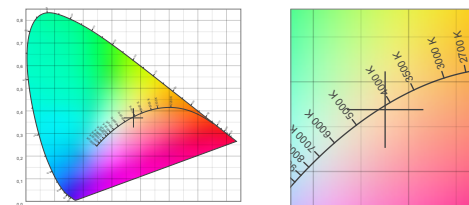
Total lumen output 530 lm  
 Correlated Colour Temperature 4090 K  
 Colour coordinates CIE 1931 (x;y) = (0.375;0.369)  
 Colour deviation from BBL Duv = -0.0022

TM30-18 Colour Fidelity Index  $R_f$  90.6  
 TM30-18 Colour Gamut Index  $R_g$  98.6  
 Colour Rendering Index (Ra) CRI 94.0  
 Colour Rendering Index. (red component)  $R_9 = 67.6$

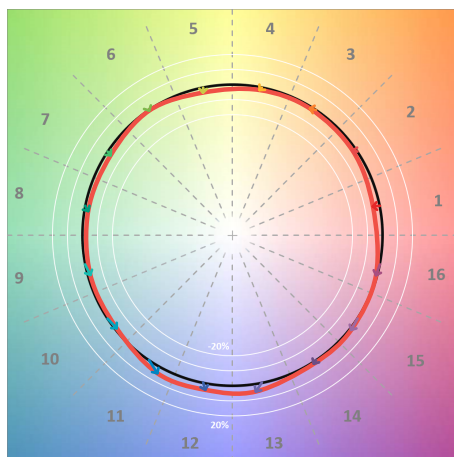
Colour Quality Scale CQS = 91.7  
 Television Lighting Consistency Index TLCI = 93



Relative spectral power distribution



### TM30 details

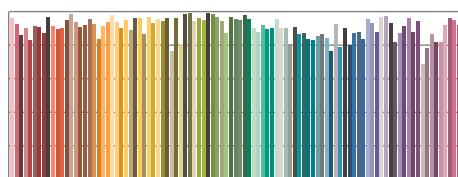


TM30 Colour vectors per hue bin

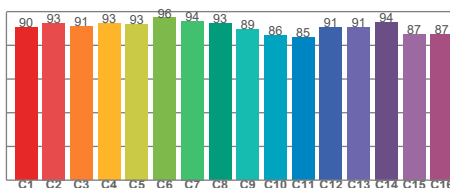


TM30 Colour distortion

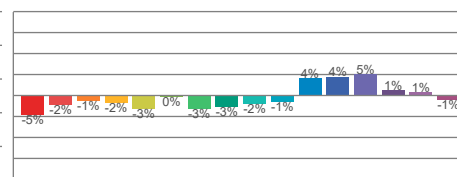
Hue Bin	$R_f$	Shifts (%)	
		Chroma	Hue
C1	90	-5%	0%
C2	93	-2%	2%
C3	91	-1%	4%
C4	93	-2%	1%
C5	93	-3%	1%
C6	96	0%	0%
C7	94	-3%	1%
C8	93	-3%	3%
C9	89	-2%	8%
C10	86	-1%	9%
C11	85	4%	9%
C12	91	4%	2%
C13	91	5%	-5%
C14	94	1%	-3%
C15	87	1%	-9%
C16	87	-1%	-7%



TM30-18  $R_f$ -values per reference colour

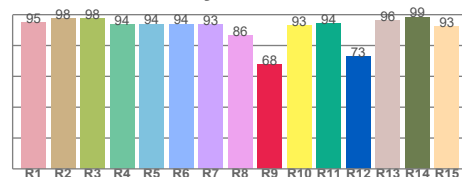


TM30-18  $R_f$ -values per hue bin

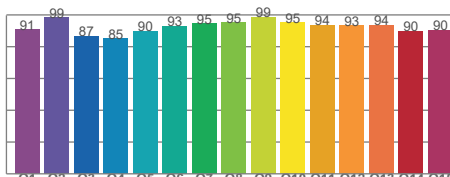


TM30 Chroma shift

### Colour Quality details



Colour Rendering Index



Colour Quality Scale