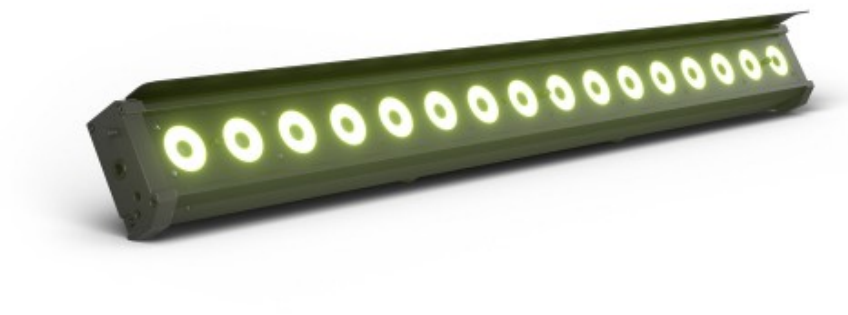


ROOT® BAR 6

PHOTOMETRIC TEST REPORT

Cameo® is a registered brand of the Adam Hall Group I Adam Hall GmbH I Adam-Hall-Str. 1 I 61267 Neu-Anspach I Germany I Phone: +49 6081 9419-0 I adamhall.com

ROOT® BAR 6

Table of Contents

Report Introduction 3

Overview 4

Full On 5

Cameo® is a registered brand of the Adam Hall Group | Adam Hall GmbH | Adam-Hall-Str. 1 | 61267 Neu-Anspach | Germany | Phone: +49 6081 9419-0 | adamhall.com

Report Introduction

About this report

We measure total luminous flux with state-of-the-art equipment, such as an integrating sphere and a goniophotometer, based on a 6-Axis industry Robot. In this process we rely on our professional Cameo photometric laboratory or certified partners. Our measurements reflect the utilised flux emitted from the luminaire at all radiating angles considering the zoom range.
We process our measurement data in a specialized software to calculate all photometric data. This photometric report includes spectra, light distribution, TM30-15, TLCI, and many other standardised reports. Additionally, we provide photometric data in IES and LDT file format.

Measurement conditions

- Stabilised laboratory room temperature for absolute consistency
- Stabilised luminaires (max. +-0.5% flux for at least 15min)
- Goniophotometer resolution: gamma = 5° and C-level = 0.1°
- Distance > photometric limit distance (tolerance < 1.0%)
- Calibrated and accurate tools

Equipment

- Goniometer with 6-Axis Robogonio by Opsira including Spectral Radiometer Spec`3 and frc-f-I, a fast Class-L Photometer for flicker etc.
- Integrating sphere UKU800 by Opsira
- Spectral Radiometer Spec`3 by Opsira
- Luxmeter Gossen MavoLux 5032-C
- Handheld-Spectrometer Gossen MavoSpec M600A
- Handheld-Spectrometer UPR-Tec MK350S Premium

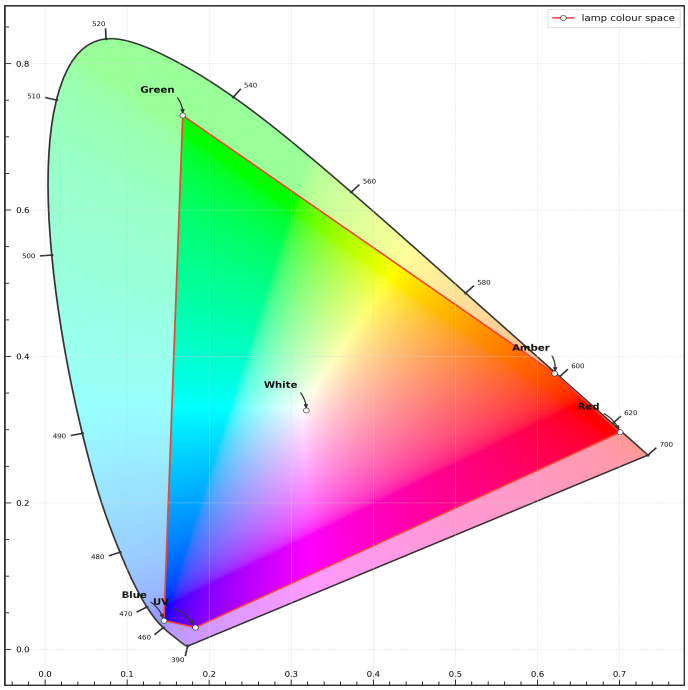
Cameo® is a registered brand of the Adam Hall Group I Adam Hall GmbH I Adam-Hall-Str. 1 I 61267 Neu-Anspach I Germany I Phone: +49 6081 9419-0 I adamhall.com

ROOT® BAR 6

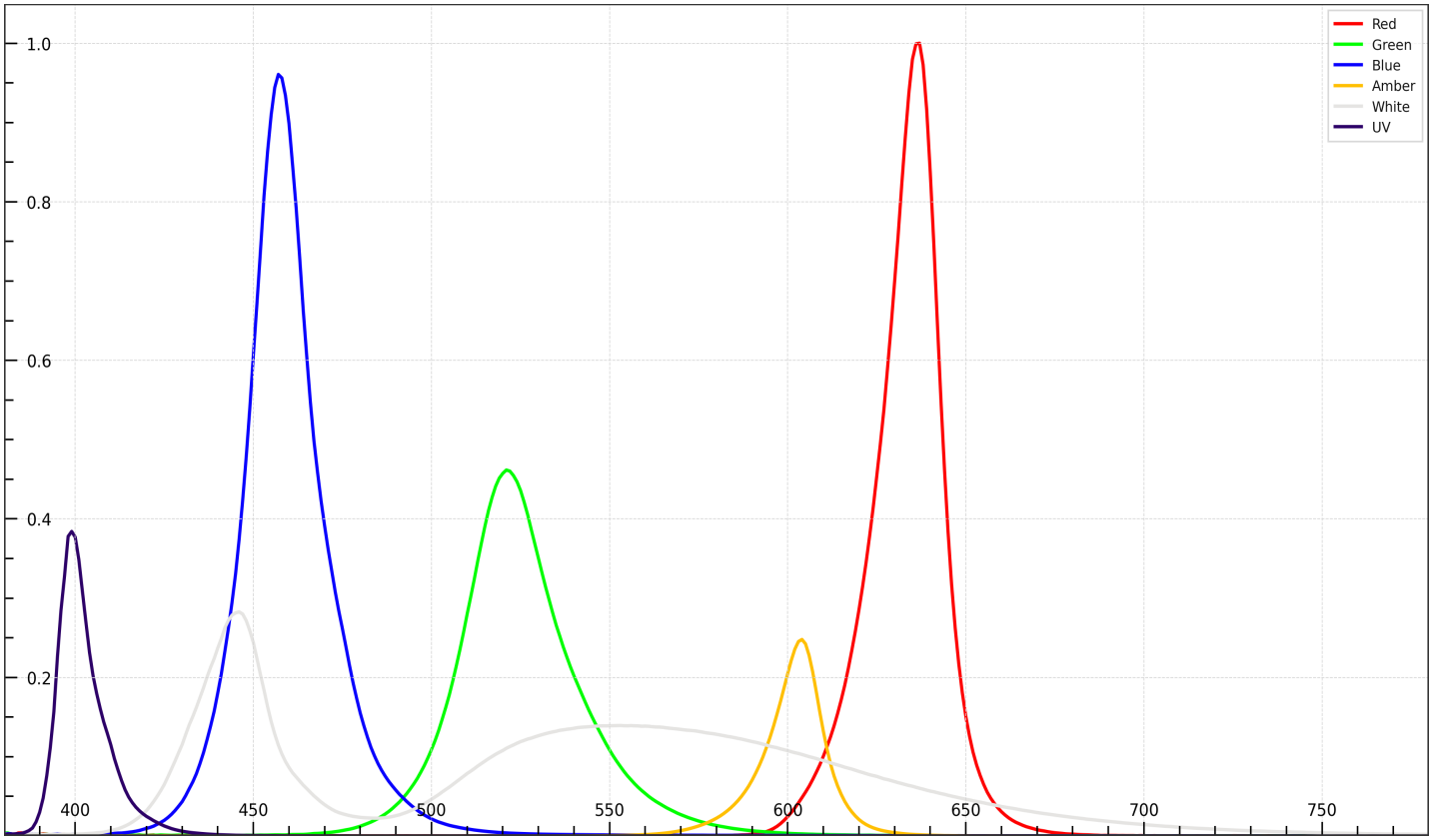
Overview

LED Colours	Lum flux [lm]	x	y
Red	675	0.7007	0.2966
Green	1546	0.1678	0.7292
Blue	223	0.1449	0.0394
Amber	373	0.6209	0.3769
White	1521	0.3183	0.3264
UV	4	0.1831	0.0299

CIE 1931 Chromaticity Diagram - 2° Standard Observer



Spectral Distribution for Colours (Wavelength [nm] --> relative Intensity)

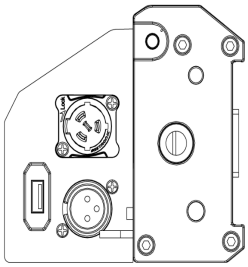


Cameo® is a registered brand of the Adam Hall Group | Adam Hall GmbH | Adam-Hall-Str. 1 | 61267 Neu-Anspach | Germany | Phone: +49 6081 9419-0 | adamhall.com

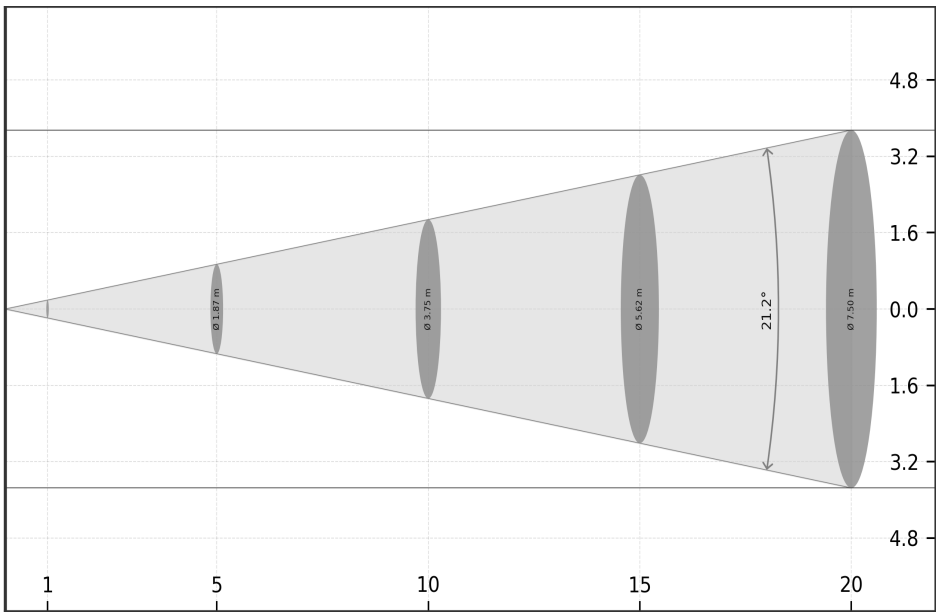
ROOT® BAR 6

Full On – Photometric Report

Beam Angle [°]	Field Angle [°]	Luminous flux [lm]	Power [W]	Luminous Efficacy [lm/W]
21.2	38.5	4351	133	32.7

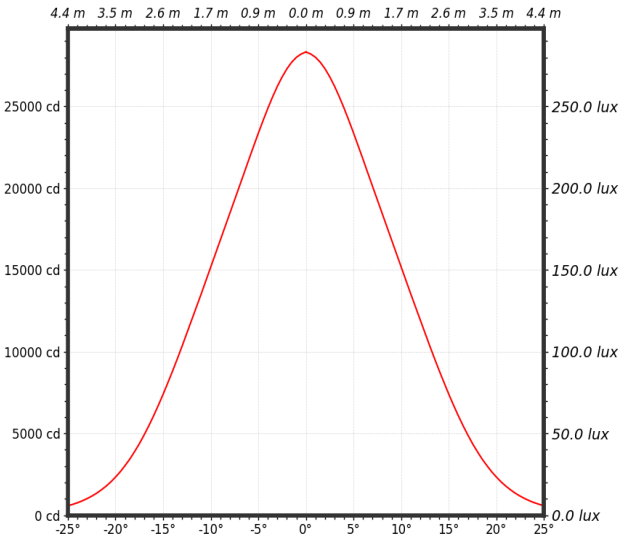


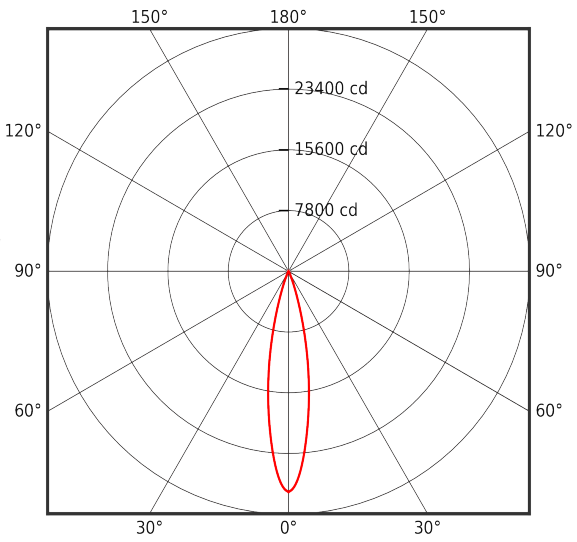
Distance-Diameter-Diagram (Distance [m] --> Beam Opening [m])



Distance [m]	1	5	10	15	20
Illuminance [lx]	28327	1133	283	126	71
Diameter [m]	0.37	1.87	3.75	5.62	7.50

Light Distribution Diagrams / Illuminance





Fixture Settings: Dimmer at 100%; RGBWAUV at 100%

Cameo® is a registered brand of the Adam Hall Group I Adam Hall GmbH I Adam-Hall-Str. 1 I 61267 Neu-Anspach I Germany I Phone: +49 6081 9419-0 I adamhall.com

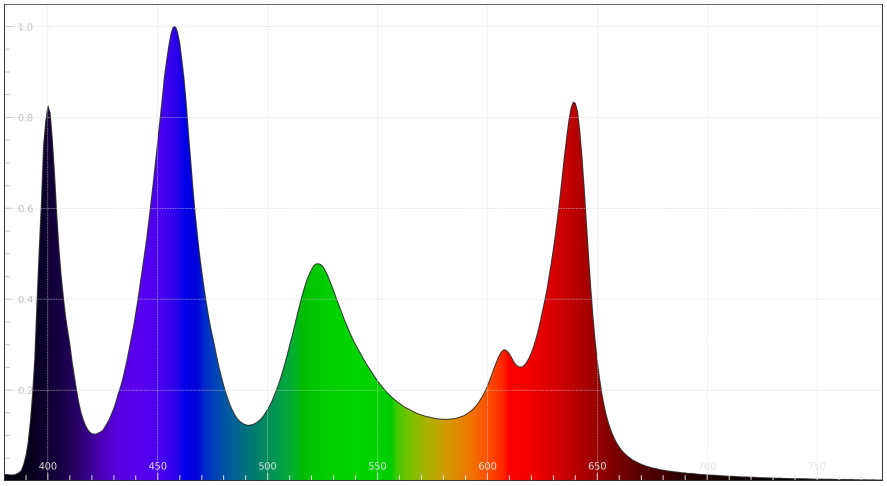
ROOT® BAR 6

Full On – Colorimetric Report

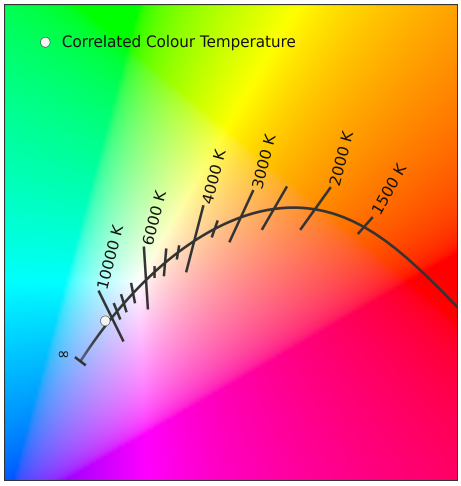
Colorimetric Characteristics

Correlated Colour Temperature [K]	**CCT**	11239	Luminous Flux [lm]	**Lum Flux**	4351
Colour Deviation from Black	**D_{uv}**	-0.0226	Colour Rendering Index	**CRI Ra**	55
Colour Coordinate CIE 1931	**x**	0.2888	Red Component	**CRI R9**	-146
Colour Coordinate CIE 1931	**y**	0.2581	Colour Fidelity	**TM30 R_f**	73
Colour Coordinate CIE 1976	**u'**	0.2093	Colour Gamut	**TM30 R_g**	118
Colour Coordinate CIE 1976	**v'**	0.4208	Television Lighting Consistency Index	**TLCI**	3
Spectral Similarity Index	**SSI[CIE D11239]**	51			

CIE 1931 2° Standard Observer (Wavelength [nm] --> relative Spectral Distribution)

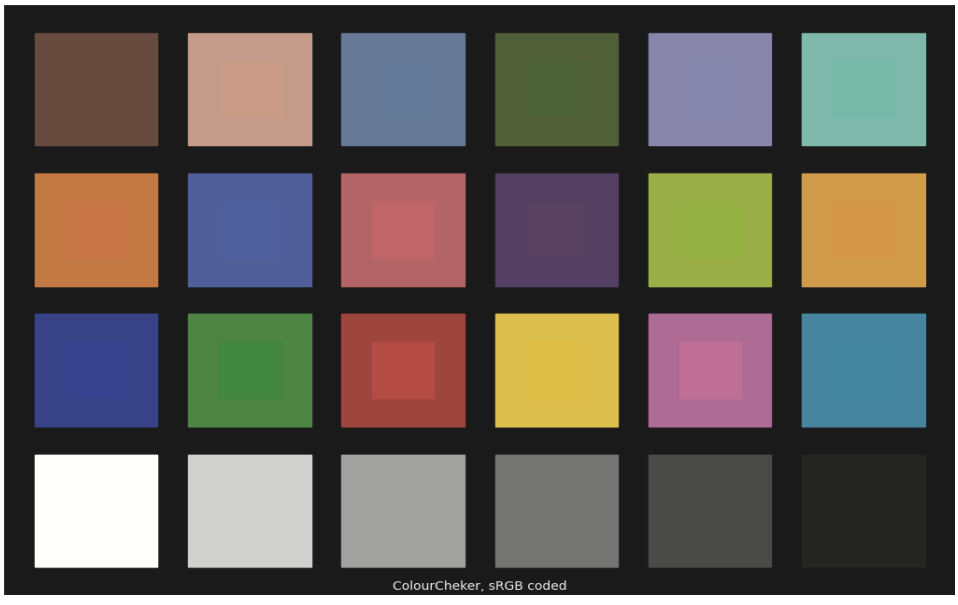


Colour Temperature

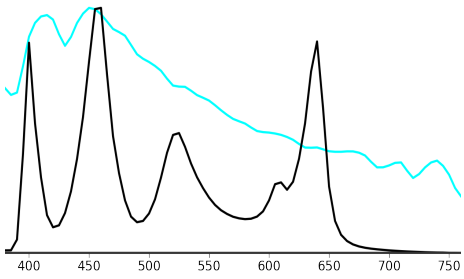


Television Lighting Consistency Index-2012

CCT = D11239 (-4.2) TLCI-2012 : 3 (D11239)



Sector	Lightness	Chroma	Hue
R	-------	----	0
R/Y	0	-	++
Y	0	-	0
Y/G	0	--	---
G	0	---	--
G/C	0	---	+
C	0	-	12*-
C/B	0	0	25*-
B	0	-	0
B/M	0	0	-
M	-	0	---
M/R	-----	--	-----

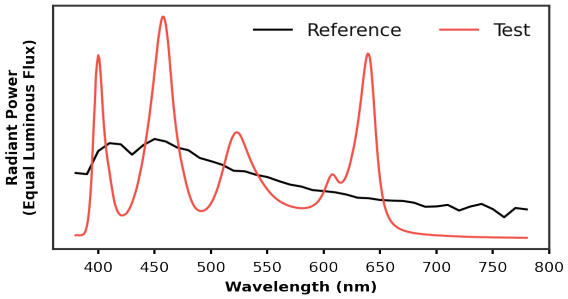


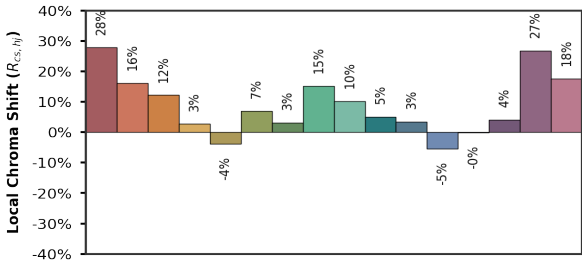
Fixture Settings: Dimmer at 100%; RGBWAUV at 100%

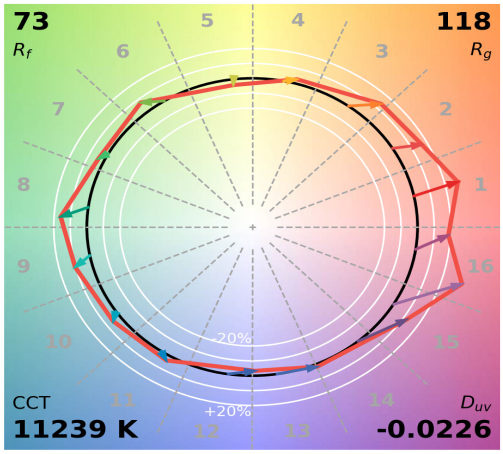
Cameo® is a registered brand of the Adam Hall Group | Adam Hall GmbH | Adam-Hall-Str. 1 | 61267 Neu-Anspach | Germany | Phone: +49 6081 9419-0 | adamhall.com

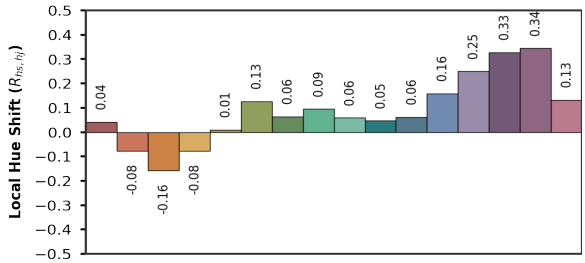
Full On – Colorimetric Report

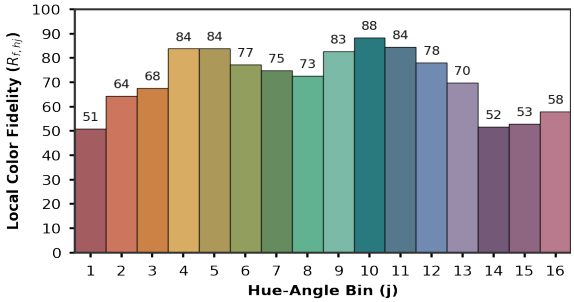
IES TM-30-18 Colour Rendition Report

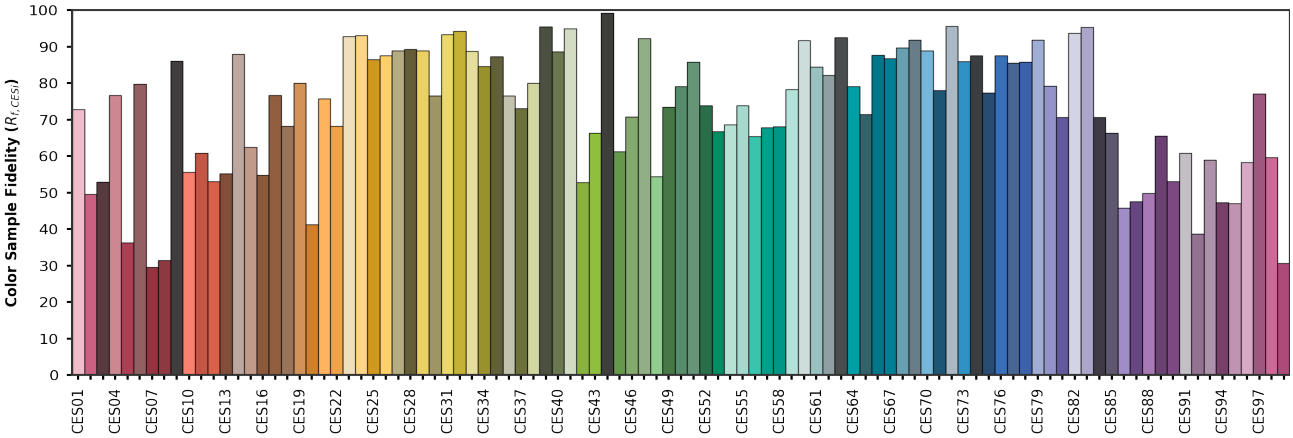












x	0.2888
y	0.2581
u'	0.2093
v'	0.4208

CIE 13.31-1995 (CRI)
R_a **55**
R_9 **-146**

Fixture Settings: Dimmer at 100%; RGBWAUV at 100%

Cameo® is a registered brand of the Adam Hall Group | Adam Hall GmbH | Adam-Hall-Str. 1 | 61267 Neu-Anspach | Germany | Phone: +49 6081 9419-0 | adamhall.com