X5 Dot RGBL

RGB Wide

Photometric Report

Report 2026-03-16-1

GLP German Light Products GmbH
GLP LightLab

Maximum Total Lumens	568	lm
Maximum Intensity	1040	cd
CRI	72	
Energy Efficiency Class	C	
Energy Efficiency Index	1.02	
Power Consumption	50	$\frac{\text{kW h}}{1000\,\text{h}}$

Serial Number	00045
Measurement Date	2026-03-16 14:51
Analysis SW Version	3.0.3

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1 Light Distribution RGBL, Wide Beam

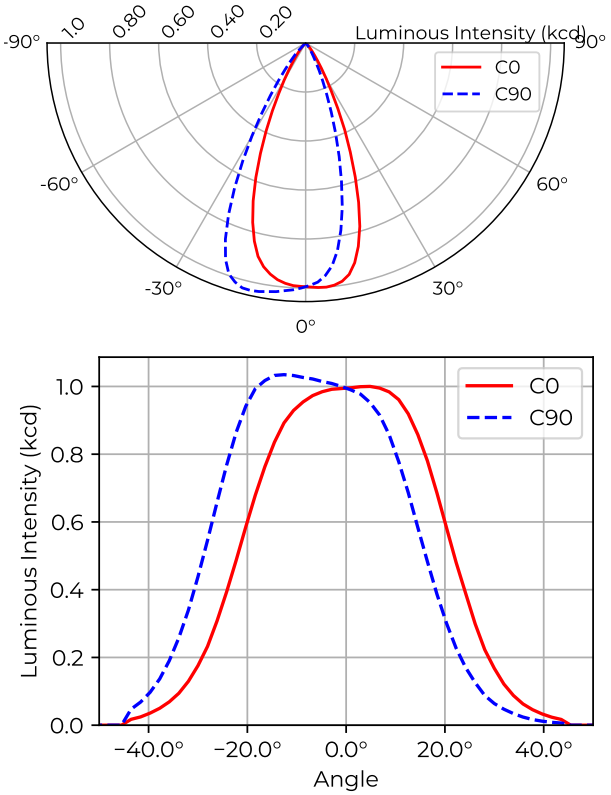


Figure 1: Polar and cartesian light intensity distributions. RGBL, Wide

Type B measurement, 2304 data points.

Table 1: Opening angles for different intensity thresholds. RGBL, Wide

		C0	C90
Beam Angle	50 %	45°	44°
Field Angle	10 %	68°	67°
Cutoff Angle	3 %	81°	79°

Table 2: Luminous flux, integrated over the beam for several minimum threshold intensities. RGBL, Wide

		Flux (lm)
Half-Peak Output	@50 %	392
Tenth-Peak Output	@10 %	541
Total Lumen Output	@3 %	568

$$\text{diameter} = 0.83 \times \text{distance}$$

$$\text{illuminance} = \frac{995\ \text{lx}}{(\text{distance}\ [\text{m}])^2}$$

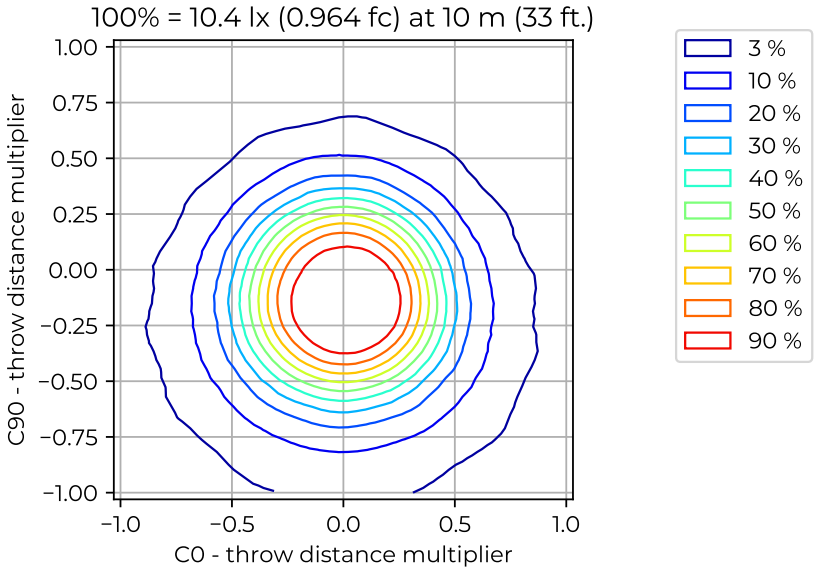


Figure 2: Iso-illuminance diagram of projected beam. RGBL, Wide
dist. from origin = throw dist. × throw dist. multiplier

Table 3: Quick calculation diagram for illuminance and beam diameter. RGBL, Wide

		Projection Distance [m]								
Parameter	Factor	5	7.5	10	12.5	15	17.5	20	22.5	25
Diameter [m]	0.83	4.1	6.2	8.3	10	12	14	17	19	21
Illuminance [lx]	995	40	18	9.9	6.4	4.4	3.2	2.5	2.0	1.6

2 White Quality – RGBL

Table 4: Summary for RGBL spectral measurement results and color metrics.

Metric	Value
CCT	13 950 K
CCT D_{uv}	-0.012
CRI R_a	72
CRI R_9	-66
TLCI-2012	61
TM-30-15 R_f	120
TM-30-15 R_g	74
CIE 1931 x	0.275
CIE 1931 y	0.259
CIE 1960 u	0.198
CIE 1960 v	0.280

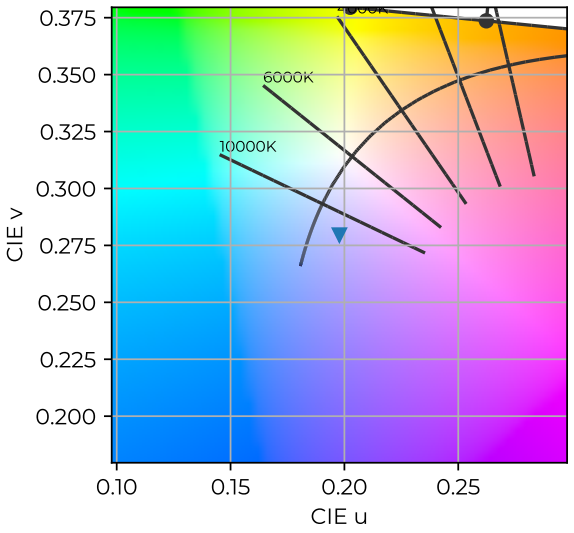


Figure 3: Color coordinates in CIE 1960 chromaticity diagram. RGBL

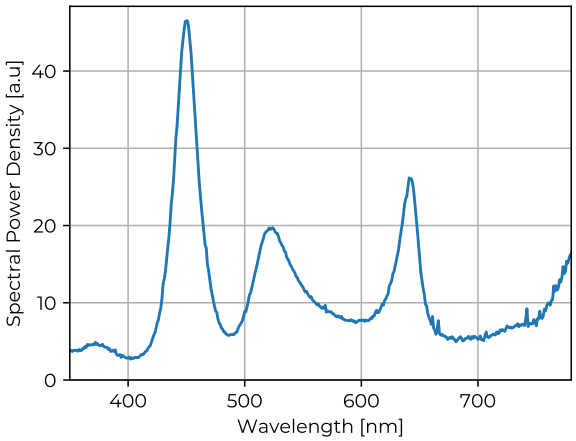
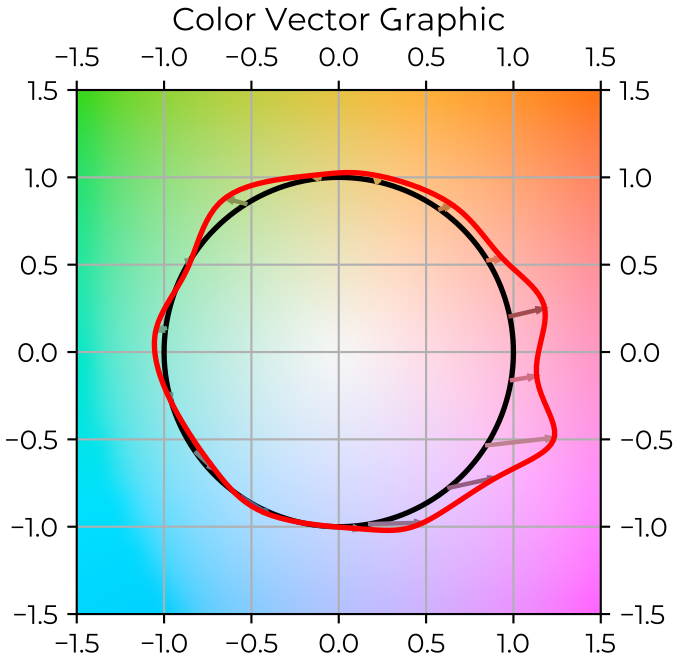
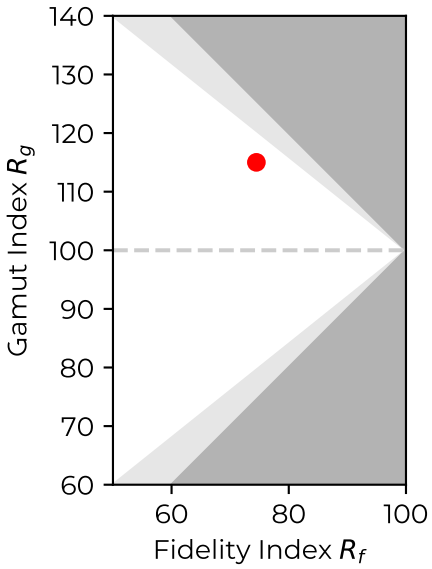
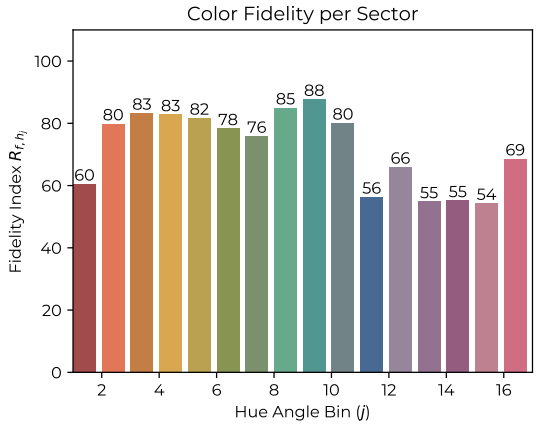


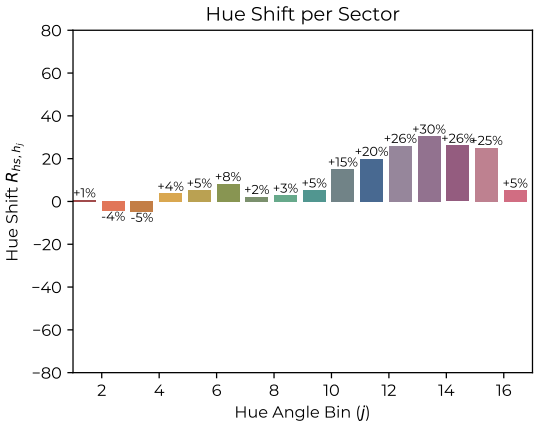
Figure 4: Measured Spectral Power Distribution of light source. RGBL

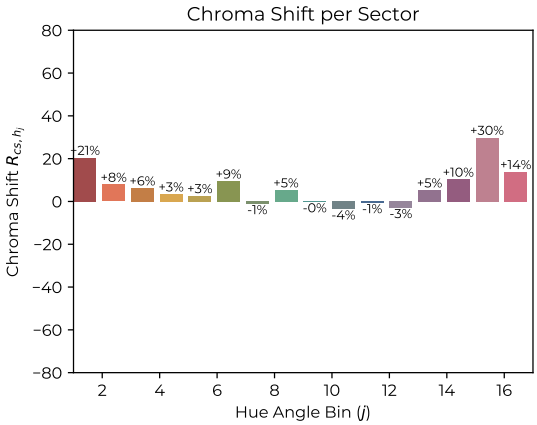
2.1 TM-30-15 Detail Plots

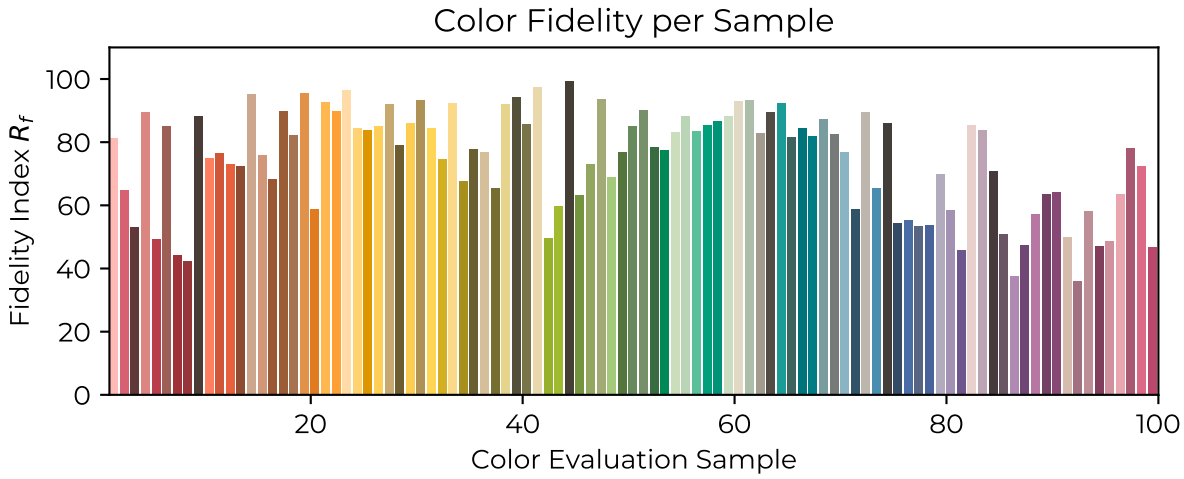






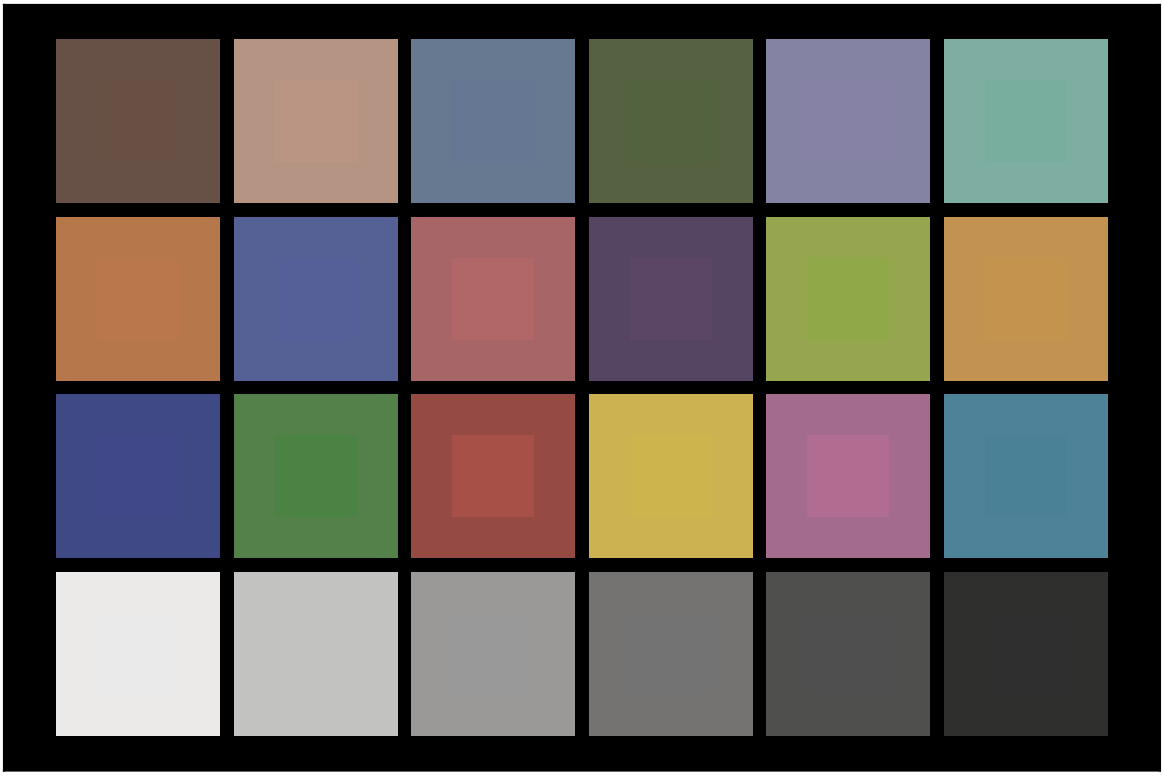


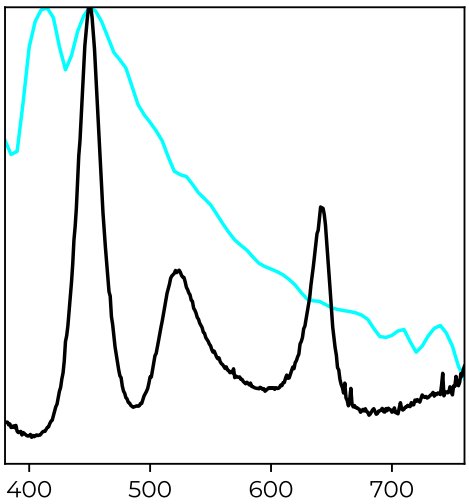



Color Fidelity per Sample
Fidelity Index R_f
100
80
60
40
20
0
20
40
60
80
100
Color Evaluation Sample

2.2 TLCI-2012 Results

X5 Dot RGBL RGBL : CCT = D13 800 − 2.9, TLCI = 61





Sector	Lightness	Chroma	Hue
R	6	6	6
R/Y	2	2	2
Y	1	1	1
Y/G	3	3	3
G	3	3	3
G/C	3	3	3
C	2	2	2
C/B	1	1	1
B	2	2	2
B/M	2	2	2
M	4	4	4
M/R	6	6	6