X5 Dot RGBL

RGB Narrow

Photometric Report

Report 2026-03-16-2

GLP German Light Products GmbH
GLP LightLab

Maximum Total Lumens	502	lm
Maximum Intensity	5910	cd
CRI	73	
Energy Efficiency Class	C	
Energy Efficiency Index	1.08	
Power Consumption	50	$\frac{\text{kW h}}{1000\,\text{h}}$

Serial Number	00045
Measurement Date	2026-03-16 16:04
Analysis SW Version	3.0.3

Contents

1 Light Distribution RGBL, Narrow Beam **2**

2 White Quality – RGBL **3**
2.1 TM-30-15 Detail Plots 4
2.2 TLCI-2012 Results 6

1 Light Distribution RGBL, Narrow Beam

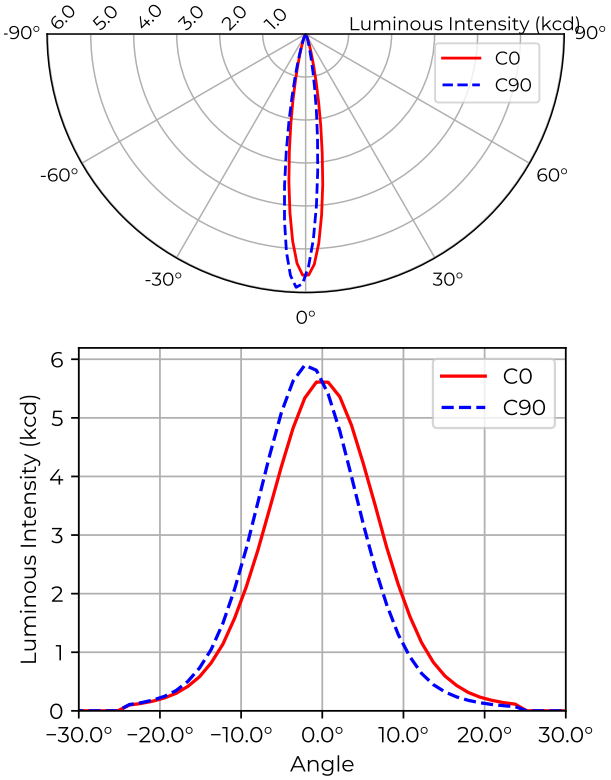


Figure 1: Polar and cartesian light intensity distributions. RGBL, Narrow

Type B measurement, 1296 data points.

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

		C0	C90
Beam Angle	50 %	16°	15°
Field Angle	10 %	31°	29°
Cutoff Angle	3 %	42°	39°

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

		Flux (lm)
Half-Peak Output	@50 %	229
Tenth-Peak Output	@10 %	444
Total Lumen Output	@3 %	502

$$\text{diameter} = 0.27 \times \text{distance}$$

$$\text{illuminance} = \frac{5610\,\text{lx}}{(\text{distance}\,[\text{m}])^2}$$

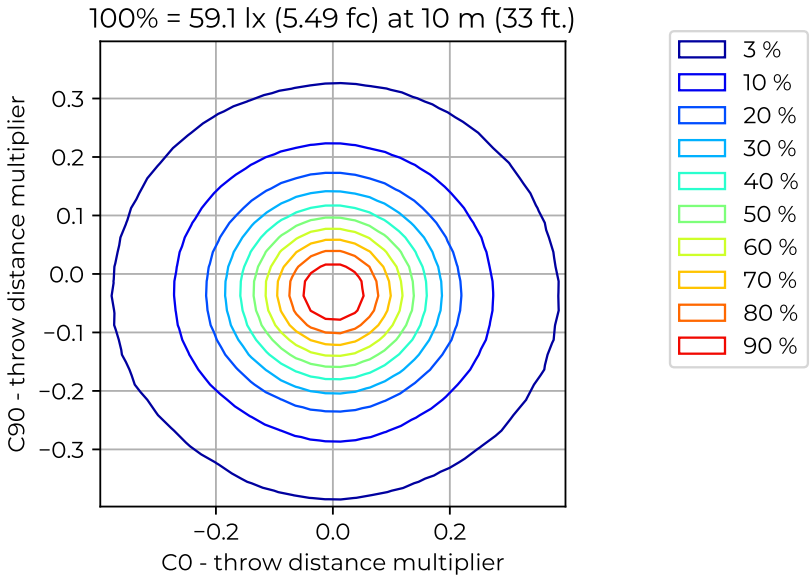


Figure 2: Iso-illuminance diagram of projected beam. RGBL, Narrow
dist. from origin = throw dist. × throw dist. multiplier

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

		Projection Distance [m]								
Parameter	Factor	5	7.5	10	12.5	15	17.5	20	22.5	25
Diameter [m]	0.27	1.3	2.0	2.7	3.3	4.0	4.6	5.3	6.0	6.6
Illuminance [lx]	5.61k	220	100	56	36	25	18	14	11	9.0

2 White Quality – RGBL

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

Metric	Value
CCT	21 060 K
CCT D_{uv}	-0.0092
CRI R_a	73
CRI R_9	-68
TLCI-2012	58
TM-30-15 R_f	110
TM-30-15 R_g	73
CIE 1931 x	0.263
CIE 1931 y	0.249
CIE 1960 u	0.192
CIE 1960 v	0.274

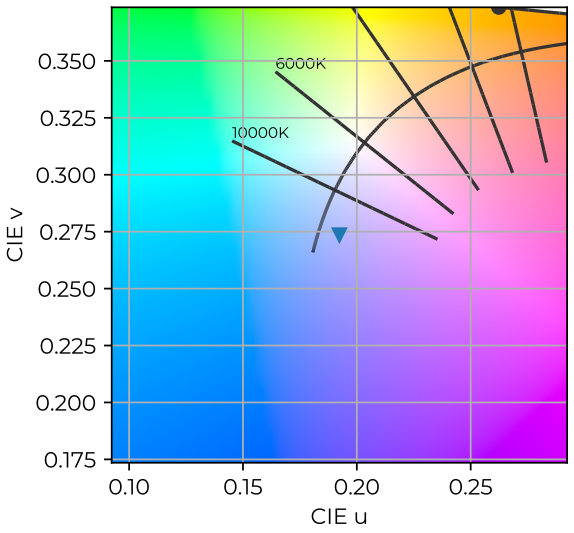


Figure 3: Color coordinates in CIE 1960 chromaticity diagram. RGBL

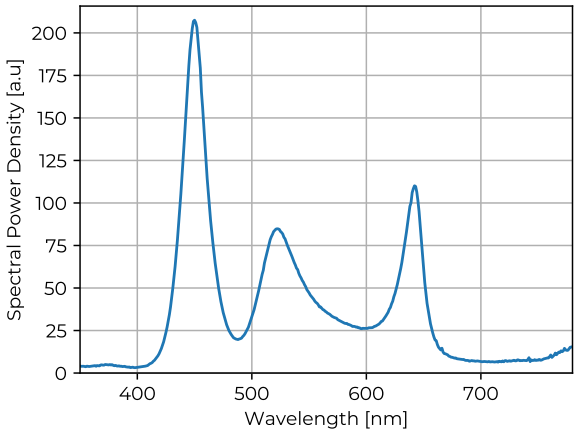
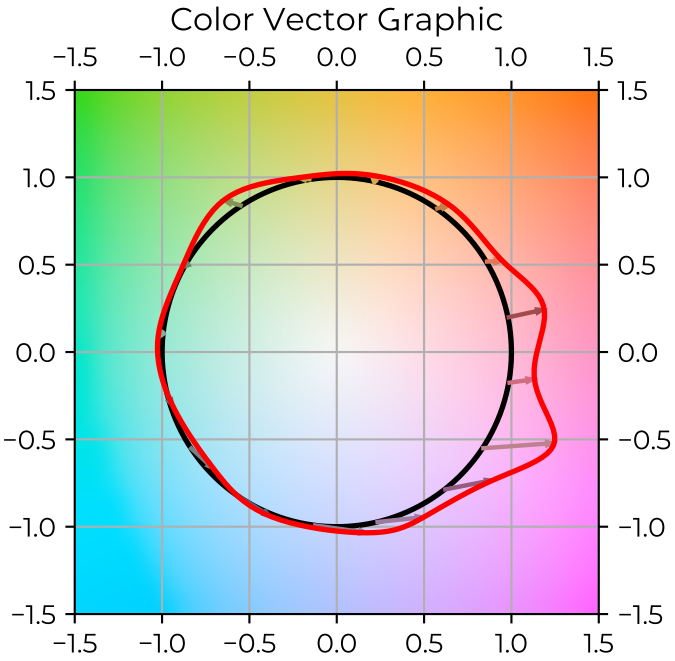
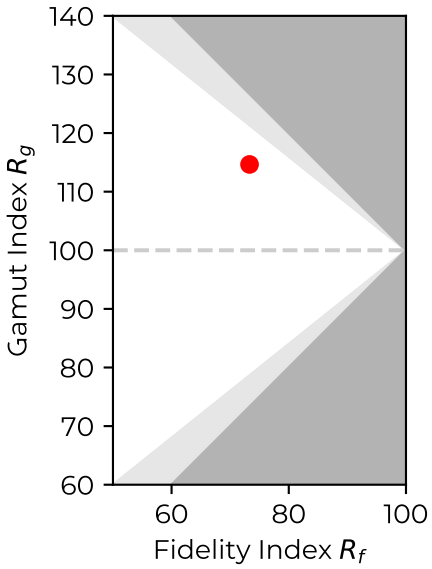
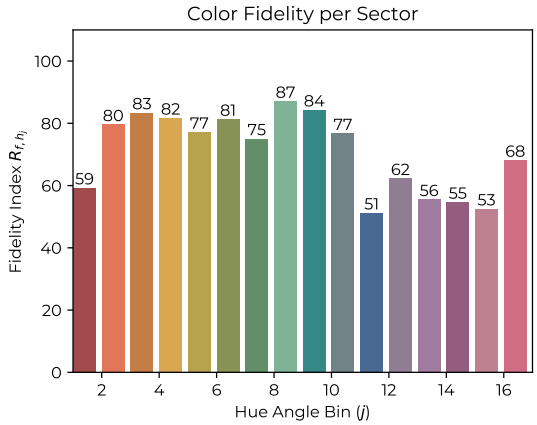


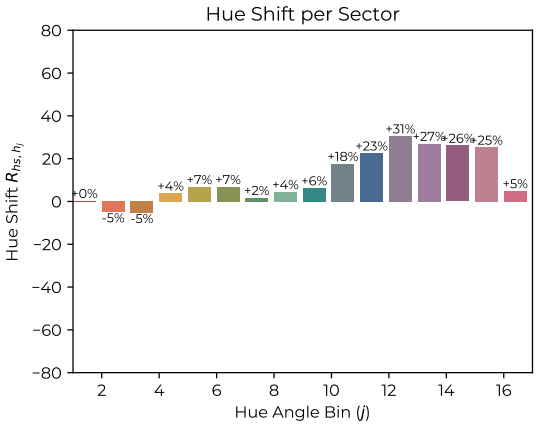
Figure 4: Measured Spectral Power Distribution of light source. RGBL

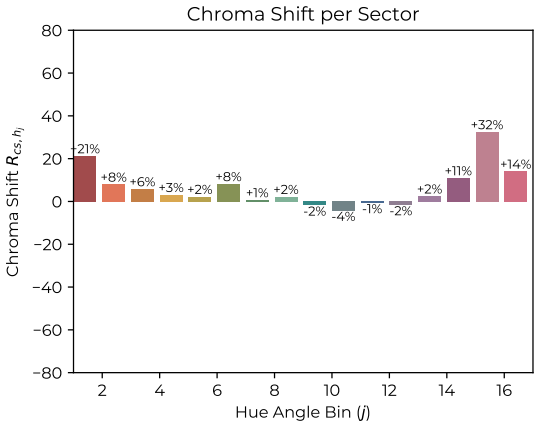
2.1 TM-30-15 Detail Plots

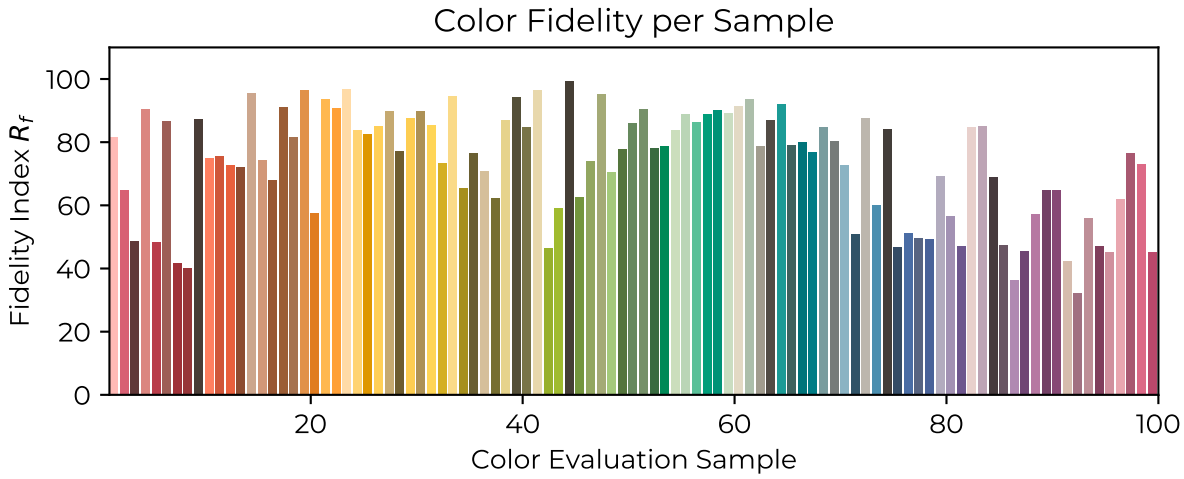






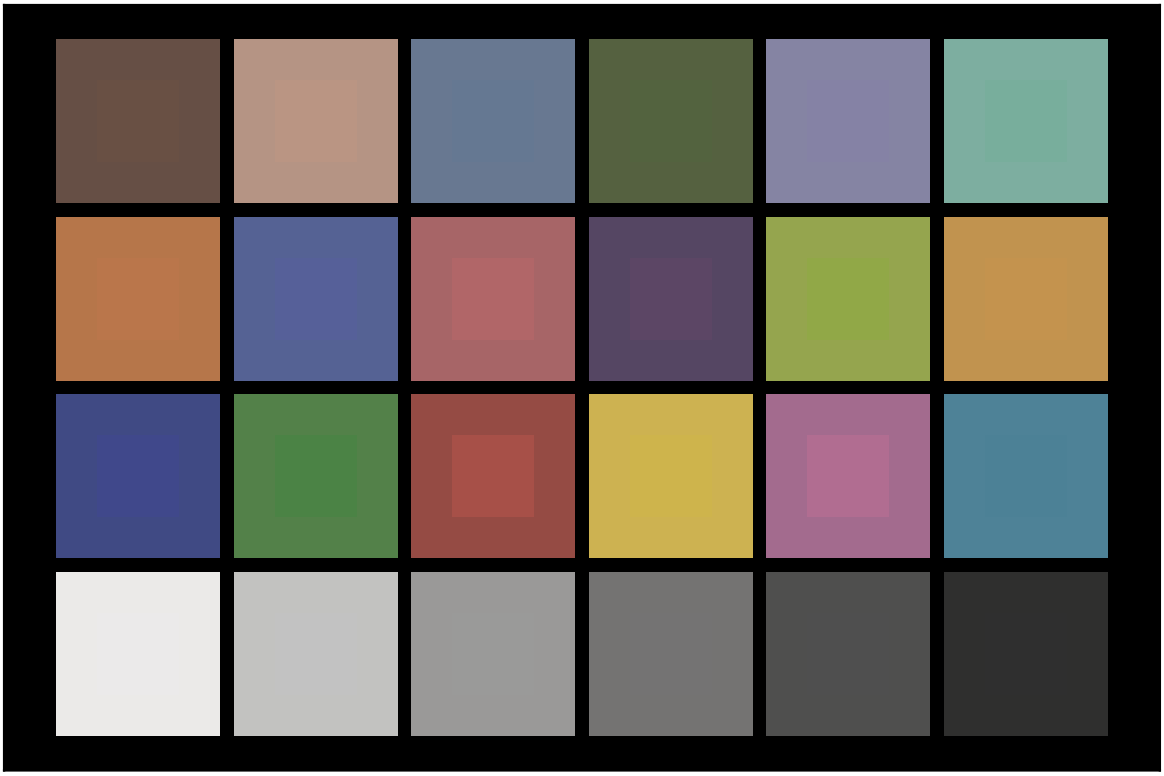


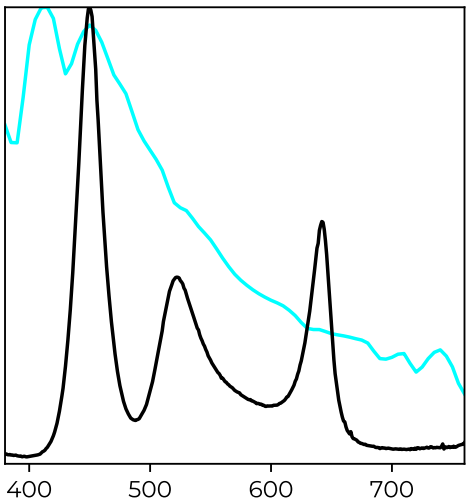



Color Fidelity per Sample
Fidelity Index R_f
100
80
60
40
20
0
20
40
60
80
100
Color Evaluation Sample

2.2 TLCI-2012 Results

X5 Dot RGBL RGBL : CCT = D19 790 − 2.3, TLCI = 58





Sector	Lightness	Chroma	Hue
R	7	7	7
R/Y	2	2	2
Y	1	1	1
Y/G	3	3	3
G	4	4	4
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	7	7	7