



GLP JDC Burst 1
Power Mode Max Plate
Photometric Report

Report 2025-03-17-1

GLP German Light Products GmbH
GLP LightLab

Maximum Total Lumens	33800	lm
Maximum Intensity	12300	cd
Energy Efficiency Class	A	
Energy Efficiency Index	0.20	
Power Consumption	250	$\frac{\text{kWh}}{1000\text{h}}$

Serial Number	2013000308
Measurement Date	2025-03-17 19:34
Analysis SW Version	3.0.0rc7





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1 Light Distribution

Table 1: Summary of beam opening angles for different fixture configurations.

Beam	Beam Angle (50 %)		Field Angle (10 %)		Cutoff Angle (3 %)	
	C0	C90	C0	C90	C0	C90
Red, Max Plate	110°	110°	160°	150°	170°	160°
Green, Max Plate	110°	110°	150°	150°	170°	160°
Blue, Max Plate	110°	110°	150°	150°	170°	160°
White, Max Plate	110°	110°	160°	150°	170°	160°
RGBW, Max Plate	110°	110°	160°	150°	170°	160°

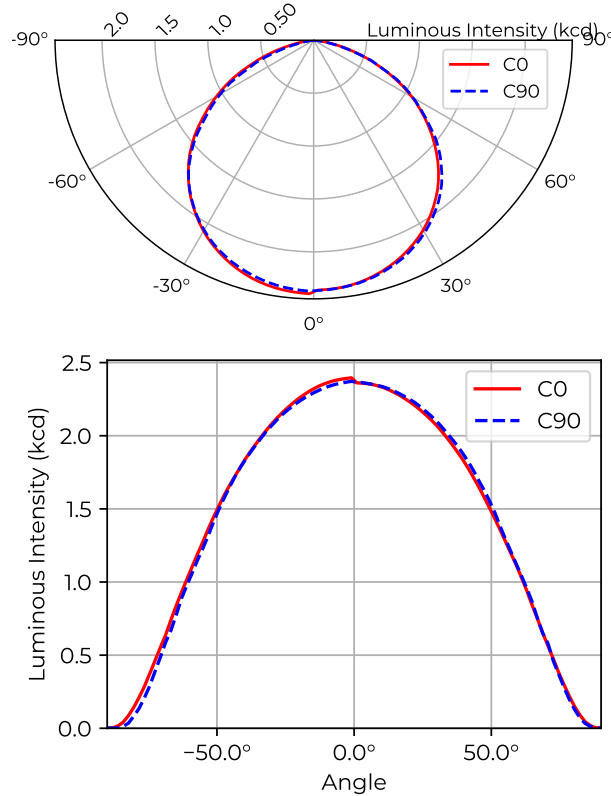
Table 2: Summary of luminous flux and intensity for different fixture configurations.

Beam	Total Lumen Output	Peak Luminous Intensity)
Red, Max Plate	6.75 klm	2.40 kcd
Green, Max Plate	10.1 klm	3.75 kcd
Blue, Max Plate	1.66 klm	604 cd
White, Max Plate	16.7 klm	5.89 kcd
RGBW, Max Plate	33.8 klm	12.3 kcd

Table 3: Approximate illuminance and beam diameter at different projection distances, calculated with the inverse-square law. The approximation is valid only for large distances, compared to the size of the fixture output port.

Beam	Parameter	Factor	Projection Distance [m]								
			5	7.5	10	12.5	15	17.5	20	22.5	25
Red, Max Plate	Diameter [m]	3.1	15	23	31	39	46	54	62	69	77
	Illuminance [lx]	2.36k	94	42	24	15	10	7.7	5.9	4.7	3.8
Green, Max Plate	Diameter [m]	2.9	14	22	29	36	43	50	58	65	72
	Illuminance [lx]	3.73k	150	66	37	24	17	12	9.3	7.4	6.0
Blue, Max Plate	Diameter [m]	2.9	15	22	29	37	44	52	59	66	74
	Illuminance [lx]	599	24	11	6.0	3.8	2.7	2.0	1.5	1.2	960m
White, Max Plate	Diameter [m]	3.1	15	23	31	38	46	53	61	69	76
	Illuminance [lx]	5.88k	240	100	59	38	26	19	15	12	9.4
RGBW, Max Plate	Diameter [m]	3.0	15	22	30	37	45	52	60	67	75
	Illuminance [lx]	12.1k	480	220	120	77	54	40	30	24	19

1.1 Red, Max Plate Beam



Type C measurement, 1536 data points.

Table 4: Opening angles for different intensity thresholds. Red, Max Plate

	C0	C90
Beam Angle	50 % 110°	110°
Field Angle	10 % 160°	150°
Cutoff Angle	3 % 170°	160°

Table 5: Luminous flux, integrated over the beam for several minimum threshold intensities. Red, Max Plate

	Flux (lm)	
Half-Peak Output	@50 %	5250
Tenth-Peak Output	@10 %	6670
Total Lumen Output	@3 %	6750

$$\text{diameter} = 3.1 \times \text{distance}$$

$$\text{illuminance} = \frac{2360 \text{ lx}}{(\text{distance [m]})^2}$$

Figure 1: Polar and cartesian light intensity distributions. Red, Max Plate

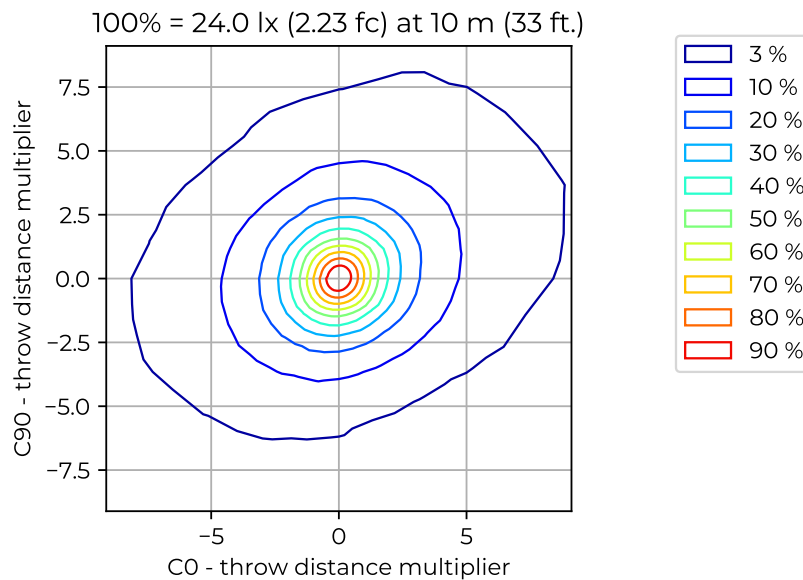
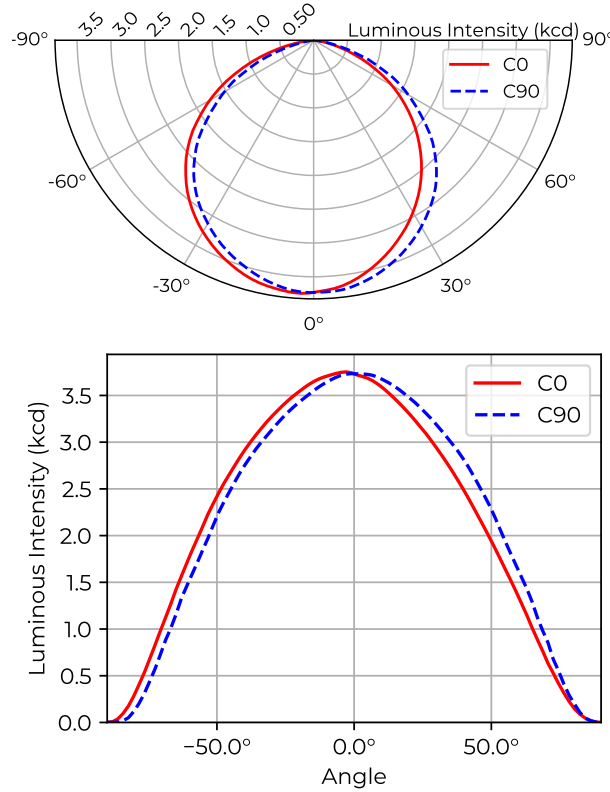


Figure 2: Iso-illuminance diagram of projected beam. Red, Max Plate
dist. from origin = throw dist. × throw dist. multiplier

Table 6: Quick calculation diagram for illuminance and beam diameter. Red, Max Plate

Parameter	Factor	Projection Distance [m]									
		5	7.5	10	12.5	15	17.5	20	22.5	25	
Diameter [m]	3.1	15	23	31	39	46	54	62	69	77	
Illuminance [lx]	2.36k	94	42	24	15	10	7.7	5.9	4.7	3.8	

1.2 Green, Max Plate Beam



Type C measurement, 1536 data points.

Table 7: Opening angles for different intensity thresholds. Green, Max Plate

	C0	C90
Beam Angle 50 %	110°	110°
Field Angle 10 %	150°	150°
Cutoff Angle 3 %	170°	160°

Table 8: Luminous flux, integrated over the beam for several minimum threshold intensities. Green, Max Plate

	Flux (lm)	
Half-Peak Output @50 %	7650	
Tenth-Peak Output @10 %	9990	
Total Lumen Output @3 %	10 100	

$$\text{diameter} = 2.9 \times \text{distance}$$

$$\text{illuminance} = \frac{3730 \text{ lx}}{(\text{distance [m]})^2}$$

Figure 3: Polar and cartesian light intensity distributions. Green, Max Plate

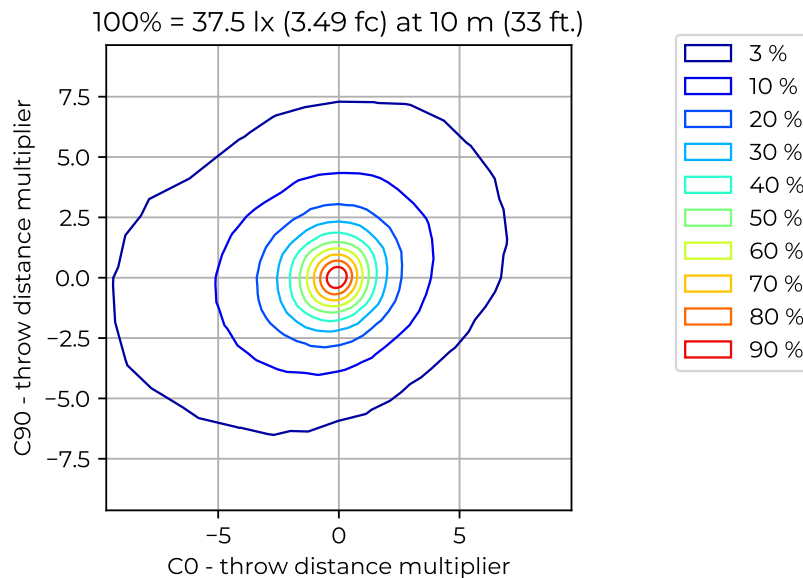
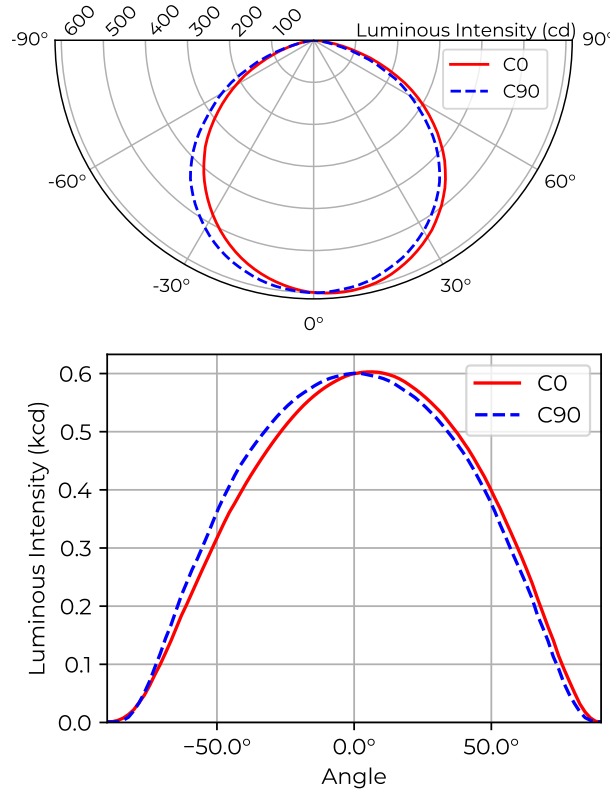


Figure 4: Iso-illuminance diagram of projected beam. Green, Max Plate
dist. from origin = throw dist. × throw dist. multiplier

Table 9: Quick calculation diagram for illuminance and beam diameter. Green, Max Plate

Parameter	Factor	Projection Distance [m]									
		5	7.5	10	12.5	15	17.5	20	22.5	25	
Diameter [m]	2.9	14	22	29	36	43	50	58	65	72	
Illuminance [lx]	3.73k	150	66	37	24	17	12	9.3	7.4	6.0	

1.3 Blue, Max Plate Beam



Type C measurement, 1536 data points.

Table 10: Opening angles for different intensity thresholds. Blue, Max Plate

		C0	C90
Beam Angle	50 %	110°	110°
Field Angle	10 %	150°	150°
Cutoff Angle	3 %	170°	160°

Table 11: Luminous flux, integrated over the beam for several minimum threshold intensities. Blue, Max Plate

		Flux (lm)
Half-Peak Output	@50 %	1270
Tenth-Peak Output	@10 %	1640
Total Lumen Output	@3 %	1660

$$\text{diameter} = 2.9 \times \text{distance}$$

$$\text{illuminance} = \frac{599 \text{ lx}}{(\text{distance [m]})^2}$$

Figure 5: Polar and cartesian light intensity distributions. Blue, Max Plate

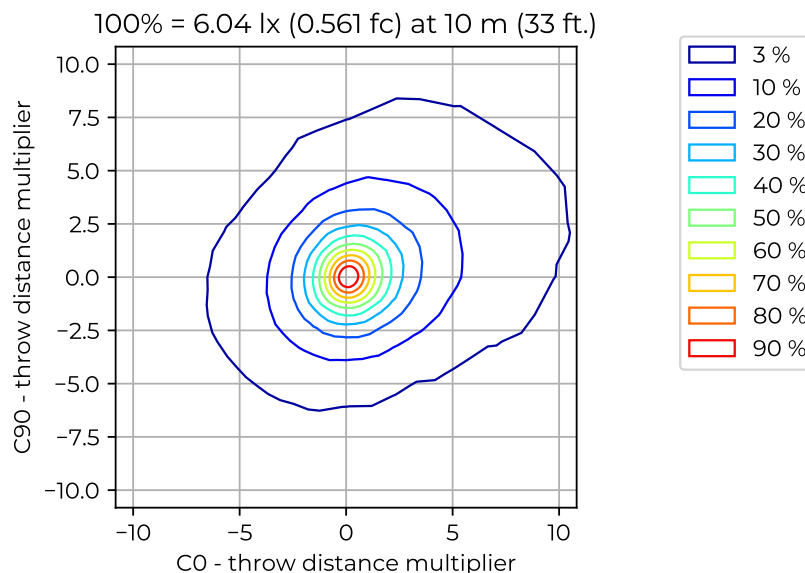
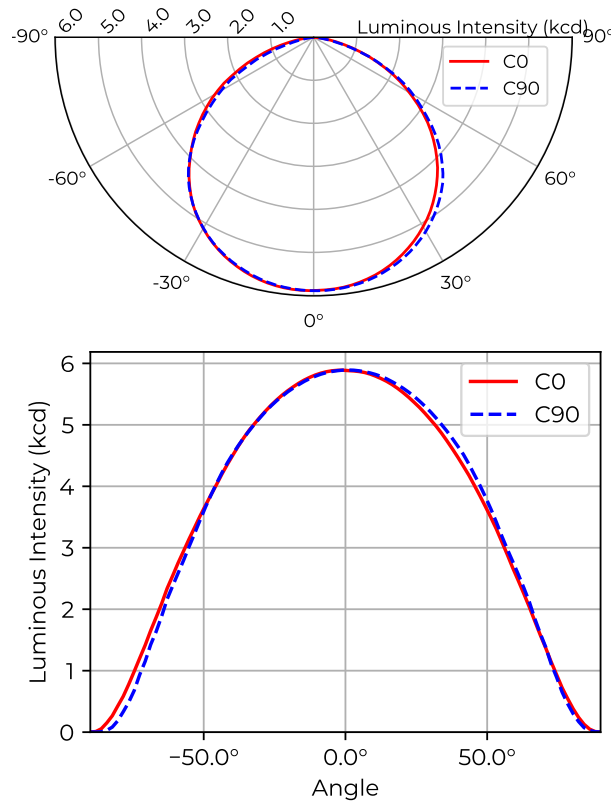


Figure 6: Iso-illuminance diagram of projected beam. Blue, Max Plate
dist. from origin = throw dist. × throw dist. multiplier

Table 12: Quick calculation diagram for illuminance and beam diameter. Blue, Max Plate

Parameter	Factor	Projection Distance [m]								
		5	7.5	10	12.5	15	17.5	20	22.5	25
Diameter [m]	2.9	15	22	29	37	44	52	59	66	74
Illuminance [lx]	599	24	11	6.0	3.8	2.7	2.0	1.5	1.2	960m

1.4 White, Max Plate Beam



Type C measurement, 1536 data points.

Table 13: Opening angles for different intensity thresholds. White, Max Plate

	C0	C90
Beam Angle 50 %	110°	110°
Field Angle 10 %	160°	150°
Cutoff Angle 3 %	170°	160°

Table 14: Luminous flux, integrated over the beam for several minimum threshold intensities. White, Max Plate

		Flux (lm)
Half-Peak Output	@50 %	12 900
Tenth-Peak Output	@10 %	16 500
Total Lumen Output	@3 %	16 700

$$\text{diameter} = 3.1 \times \text{distance}$$

$$\text{illuminance} = \frac{5880 \text{ lx}}{(\text{distance [m]})^2}$$

Figure 7: Polar and cartesian light intensity distributions. White, Max Plate

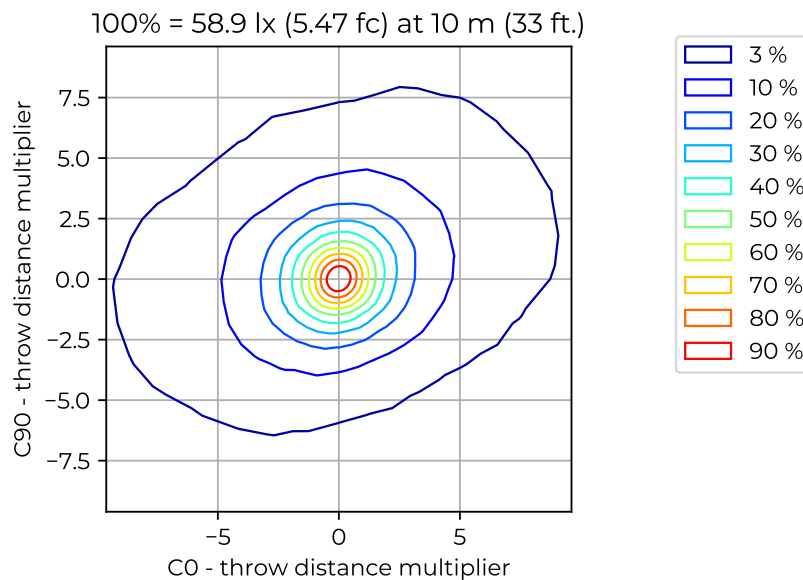
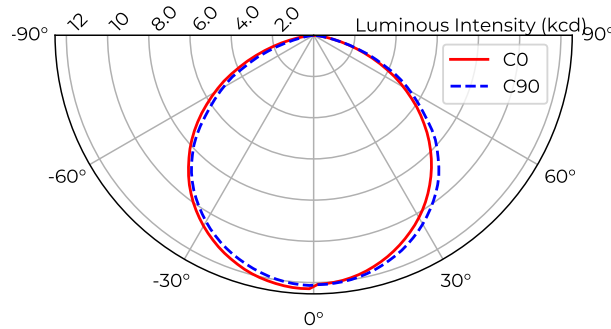


Figure 8: Iso-illuminance diagram of projected beam. White, Max Plate
dist. from origin = throw dist. × throw dist. multiplier

Table 15: Quick calculation diagram for illuminance and beam diameter. White, Max Plate

Parameter	Factor	Projection Distance [m]									
		5	7.5	10	12.5	15	17.5	20	22.5	25	
Diameter [m]	3.1	15	23	31	38	46	53	61	69	76	
Illuminance [lx]	5.88k	240	100	59	38	26	19	15	12	9.4	

1.5 RGBW, Max Plate Beam



Type C measurement, 1536 data points.

Table 16: Opening angles for different intensity thresholds. RGBW, Max Plate

	C0	C90
Beam Angle 50 %	110°	110°
Field Angle 10 %	160°	150°
Cutoff Angle 3 %	170°	160°

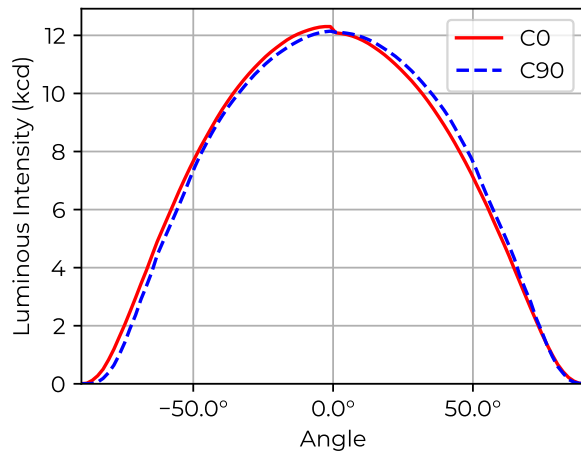


Table 17: Luminous flux, integrated over the beam for several minimum threshold intensities. RGBW, Max Plate

		Flux (lm)
Half-Peak Output	@50 %	25 900
Tenth-Peak Output	@10 %	33 400
Total Lumen Output	@3 %	33 800

$$\text{diameter} = 3.0 \times \text{distance}$$

$$\text{illuminance} = \frac{12\,100 \text{ lx}}{(\text{distance [m]})^2}$$

Figure 9: Polar and cartesian light intensity distributions. RGBW, Max Plate

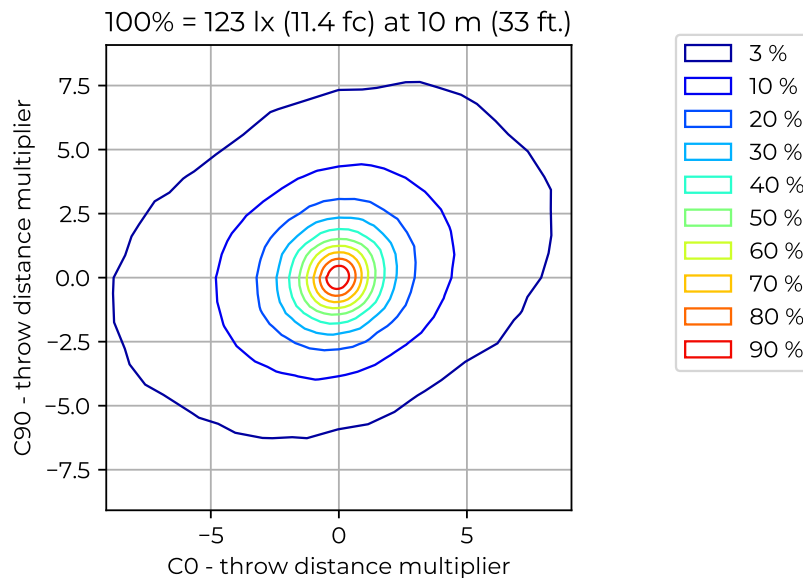


Figure 10: Iso-illuminance diagram of projected beam. RGBW, Max Plate
dist. from origin = throw dist. × throw dist. multiplier

Table 18: Quick calculation diagram for illuminance and beam diameter. RGBW, Max Plate

Parameter	Factor	Projection Distance [m]									
		5	7.5	10	12.5	15	17.5	20	22.5	25	
Diameter [m]	3.0	15	22	30	37	45	52	60	67	75	
Illuminance [lx]	12.1k	480	220	120	77	54	40	30	24	19	