

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1217395

Luminaire Tested: S124DRP-S1005D927-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217395
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G2-2509-563-3)
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DRP-S1005D927-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

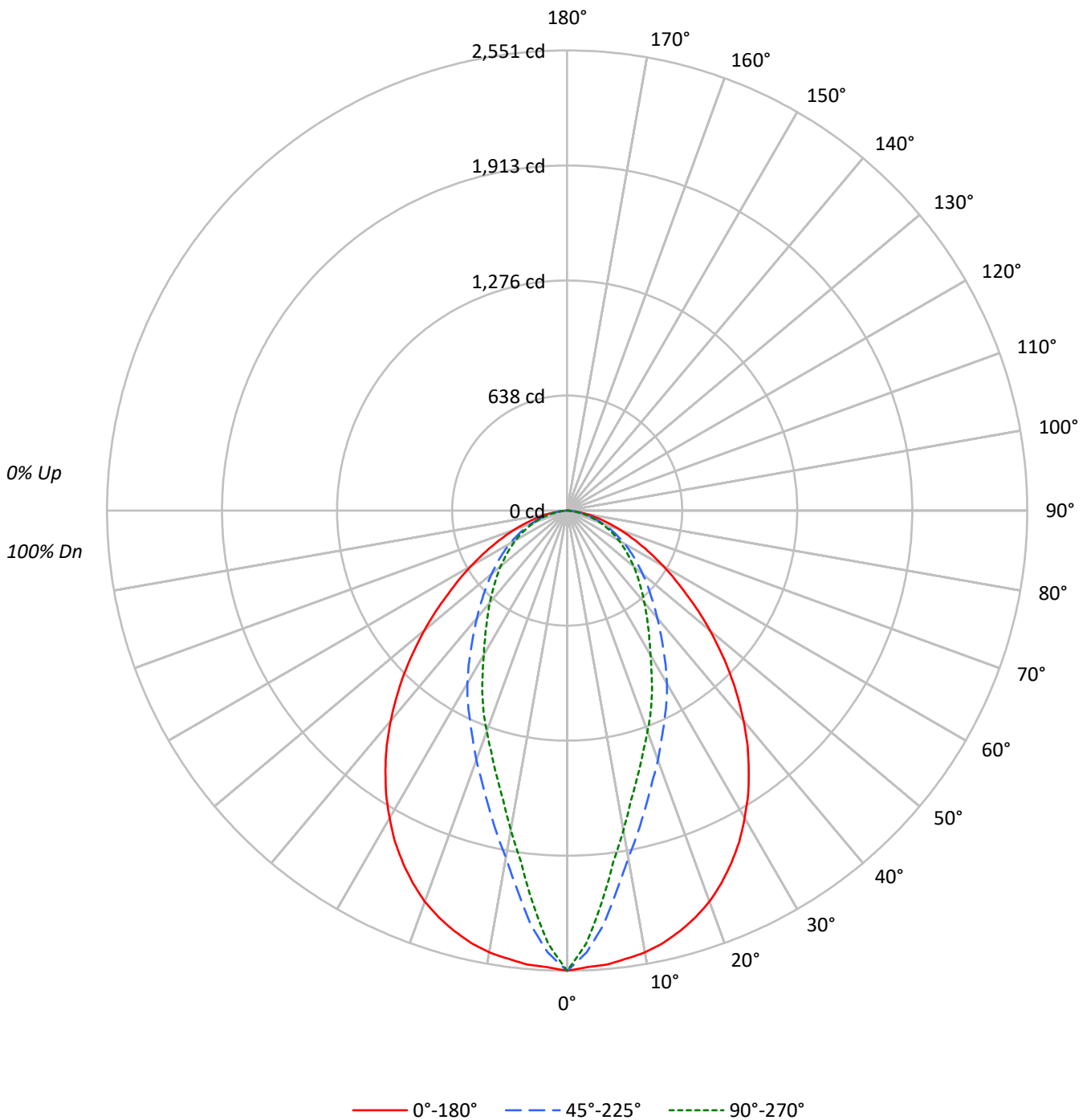
Lumens per Lamp: N/A
Luminaire Lumens: 3577.5 lumens
Efficiency: N/A
Efficacy: 85.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P1217395

CATALOG NUMBER: S124DRP-S1005D927-X4F0-XX-UDD-G-W

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									20									
RC	80									70									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																												
1	110	106	102	99	108	104	100	97	100	97	94	96	94	92	92	90	89	87																												
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75																												
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65																												
4	87	76	68	62	84	75	67	62	72	66	61	70	64	60	68	63	59	57																												
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	51																												
6	75	63	55	49	73	62	54	49	60	53	48	58	52	48	57	52	47	45																												
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41																												
8	66	53	45	40	64	52	45	40	51	44	40	50	44	39	49	43	39	37																												
9	62	49	42	36	60	49	41	36	48	41	36	47	40	36	46	40	36	34																												
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33	31																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22553	22553	22553
5°	22420	20456	19390
10°	22326	17536	16135
15°	22094	15474	13880
20°	21707	13844	12259
25°	21017	12459	10859
30°	20091	11295	9426
35°	18949	10014	8438
40°	17554	8971	7688
45°	15955	8160	7092
50°	14214	7509	6628
55°	12396	6978	6198
60°	10884	6495	5839
65°	9423	5992	5452
70°	8158	5429	5023
75°	6791	4796	4414
80°	5260	3890	3605
85°	3307	2617	2394

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15955 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.5	6.0
10°-20°	507.2	14.2
20°-30°	648.2	18.1
30°-40°	658.3	18.4
40°-50°	583.6	16.3
50°-60°	458.6	12.8
60°-70°	312.3	8.7
70°-80°	160.3	4.5
80°-90°	35.5	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1368.9	38.3
0°-40°	2027.3	56.7
0°-60°	3069.4	85.8
0°-90°	3577.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3577.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2551	2551	2551	2551	2551	
5°	2526	2462	2305	2216	2185	240
15°	2414	2015	1690	1551	1516	680
25°	2154	1579	1277	1155	1113	990
35°	1756	1196	928	810	782	1095
45°	1276	862	653	585	567	983
55°	804	574	453	412	402	726
65°	450	348	286	266	261	451
75°	199	164	140	134	129	214
85°	33	30	26	26	24	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2550.9	2550.9	2550.9	2550.9	2550.9
2.5°	2532.9	2536.3	2452.0	2421.7	2403.7
5°	2526.1	2462.1	2304.9	2216.1	2184.7
7.5°	2505.9	2366.6	2118.4	1996.0	1963.4
10°	2486.8	2257.7	1953.3	1832.0	1797.2
12.5°	2455.4	2137.5	1820.8	1681.5	1639.9
15°	2413.8	2015.1	1690.5	1551.2	1516.4
17.5°	2364.4	1898.3	1572.5	1438.9	1400.7
20°	2307.1	1790.4	1471.4	1334.4	1302.9
22.5°	2235.2	1683.7	1368.1	1244.5	1209.7
25°	2154.4	1579.3	1277.1	1154.7	1113.1
27.5°	2067.9	1478.2	1192.9	1057.0	1013.2
30°	1967.9	1381.6	1106.4	963.7	923.3
32.5°	1866.8	1286.1	1015.4	880.6	848.0
35°	1755.6	1196.2	927.8	809.8	781.8
37.5°	1643.3	1109.8	849.2	745.8	721.1
40°	1520.9	1025.5	777.3	686.3	666.1
42.5°	1398.4	941.3	712.1	633.5	614.4
45°	1276.0	861.5	652.6	585.2	567.2
47.5°	1152.4	782.9	597.6	538.0	523.4
50°	1033.4	708.8	545.9	494.2	481.9
52.5°	917.7	639.1	496.5	452.7	439.2
55°	804.2	574.0	452.7	412.2	402.1
57.5°	707.6	513.3	408.9	374.0	366.2
60°	615.5	454.9	367.3	338.1	330.2
62.5°	529.0	401.0	325.7	302.1	296.5
65°	450.4	348.2	286.4	266.2	260.6
67.5°	378.5	299.9	246.0	231.4	226.9
70°	315.6	251.6	210.0	197.7	194.3
72.5°	252.7	205.6	174.1	165.1	161.7
75°	198.8	164.0	140.4	133.7	129.2
77.5°	149.4	124.7	107.8	102.2	98.8
80°	103.3	88.7	76.4	74.1	70.8
82.5°	65.1	56.2	49.4	48.3	44.9
85°	32.6	30.3	25.8	25.8	23.6
87.5°	11.2	10.1	10.1	10.1	9.0
90°	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	19.73	21.22	20.10	21.53	21.85	17.05	18.54	17.42	18.86	19.17
	3H	21.32	22.66	21.70	22.98	23.35	18.65	19.99	19.03	20.31	20.68
	4H	21.85	23.10	22.25	23.45	23.83	19.21	20.46	19.61	20.81	21.19
	6H	22.18	23.34	22.60	23.71	24.10	19.57	20.72	19.98	21.09	21.48
	8H	22.26	23.36	22.69	23.75	24.15	19.65	20.75	20.08	21.14	21.54
	12H	22.29	23.34	22.72	23.72	24.15	19.69	20.74	20.12	21.12	21.55
4H	2H	19.96	21.21	20.36	21.56	21.94	17.73	18.98	18.13	19.33	19.71
	3H	21.74	22.78	22.15	23.18	23.58	19.52	20.56	19.93	20.96	21.36
	4H	22.38	23.31	22.82	23.73	24.17	20.18	21.11	20.62	21.53	21.97
	6H	22.83	23.64	23.29	24.08	24.54	20.64	21.45	21.10	21.89	22.35
	8H	22.94	23.70	23.40	24.14	24.61	20.75	21.51	21.22	21.96	22.42
	12H	23.00	23.67	23.48	24.15	24.62	20.82	21.49	21.30	21.97	22.44
8H	4H	22.49	23.24	22.95	23.69	24.15	20.48	21.24	20.95	21.68	22.15
	6H	23.00	23.63	23.50	24.12	24.60	21.03	21.65	21.53	22.15	22.62
	8H	23.16	23.72	23.67	24.23	24.72	21.20	21.76	21.71	22.27	22.76
	12H	23.26	23.75	23.77	24.25	24.81	21.31	21.80	21.82	22.29	22.86
12H	4H	22.48	23.15	22.96	23.63	24.10	20.51	21.18	20.99	21.66	22.13
	6H	23.00	23.56	23.51	24.07	24.56	21.07	21.63	21.58	22.14	22.63
	8H	23.19	23.68	23.70	24.18	24.74	21.28	21.77	21.79	22.27	22.83