

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: P1217350

Luminaire Tested: S124DRP-H1005D927-X4F0-XX-UDD-G-W

Issue Date: 4/9/2026

Test Information

Test Method: LM-79-2024
Report Number: P1217350
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-H1005D927-X4F0-XX-UDD-G-W
Description: DEFINE 4, DIRECT RECESSED WITH GRAZE FLUSH OPTIC
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

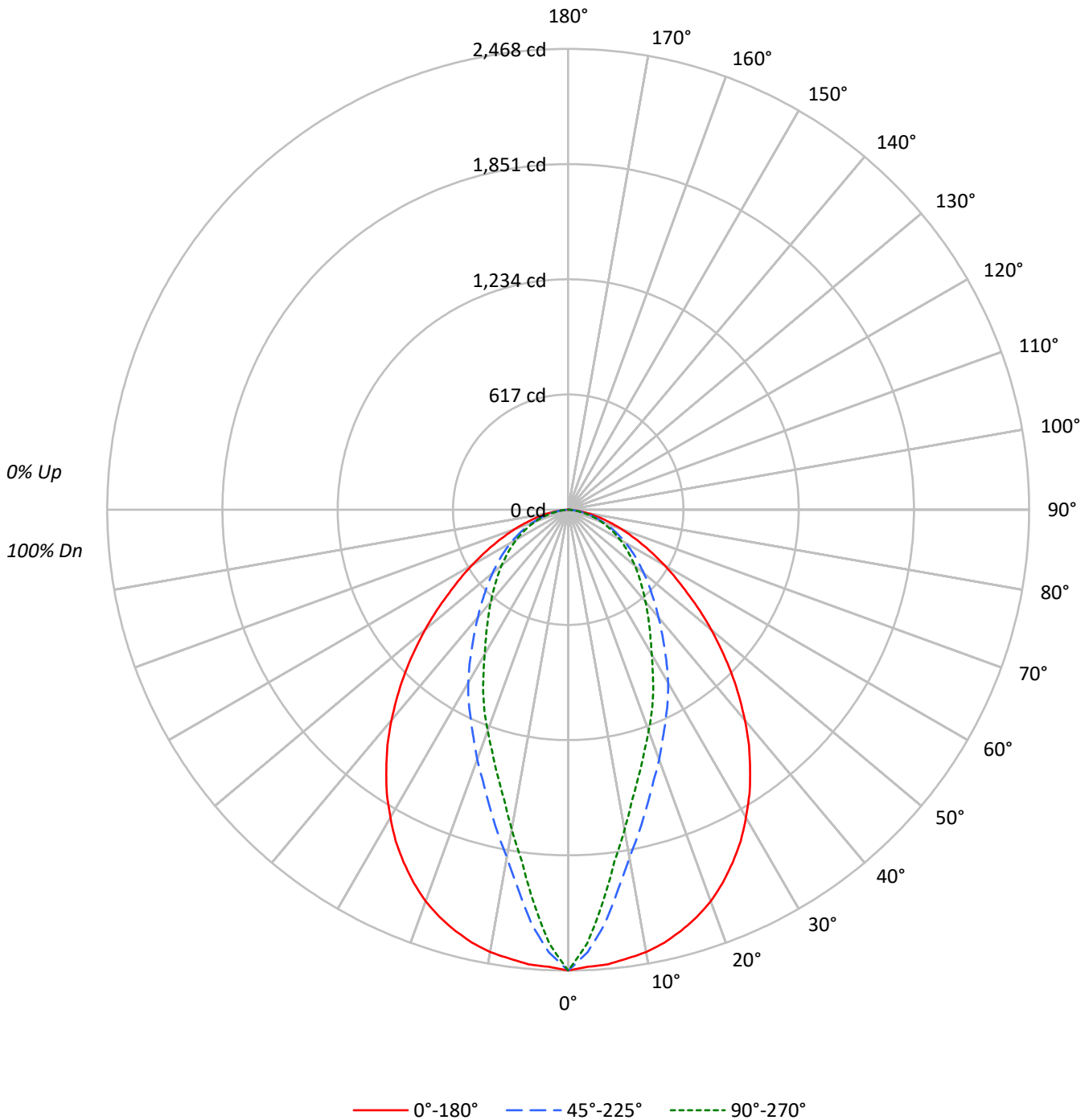
Lumens per Lamp: N/A
Luminaire Lumens: 3460.6 lumens
Efficiency: N/A
Efficacy: 94.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.59 / 0.87
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 36.6
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

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CATALOG NUMBER: S124DRP-H1005D927-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													100															
1	110	106	102	99	108	104	100	97	100	97	94	96	94	92	92	90	89	87													87															
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75													75															
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65													65															
4	87	76	68	62	84	75	67	62	72	66	61	70	64	60	68	63	59	57													57															
5	80	69	61	55	78	68	60	54	66	59	54	64	58	53	62	57	53	51													51															
6	75	63	55	49	73	62	54	49	60	53	48	58	52	48	57	52	47	45													45															
7	70	58	50	44	68	57	49	44	55	48	43	54	48	43	53	47	43	41													41															
8	66	53	45	40	64	52	45	40	51	44	40	50	44	39	49	43	39	37													37															
9	62	49	42	36	60	49	41	36	48	41	36	47	40	36	46	40	36	34													34															
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33	31													31															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21816	21816	21816
5°	21687	19788	18756
10°	21597	16963	15608
15°	21373	14967	13426
20°	20998	13392	11859
25°	20330	12052	10505
30°	19434	10926	9118
35°	18330	9687	8162
40°	16980	8678	7436
45°	15433	7894	6861
50°	13749	7264	6411
55°	11992	6750	5996
60°	10528	6283	5648
65°	9115	5797	5274
70°	7892	5253	4860
75°	6569	4639	4270
80°	5092	3763	3488
85°	3195	2536	2313

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15433 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.6	6.0
10°-20°	490.7	14.2
20°-30°	627.0	18.1
30°-40°	636.8	18.4
40°-50°	564.5	16.3
50°-60°	443.6	12.8
60°-70°	302.1	8.7
70°-80°	155.1	4.5
80°-90°	34.4	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°	1324.2	38.3
0°-40°	1961.0	56.7
0°-60°	2969.1	85.8
0°-90°	3460.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3460.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2468	2468	2468	2468	2468	
5°	2444	2382	2230	2144	2113	232
15°	2335	1949	1635	1500	1467	658
25°	2084	1528	1235	1117	1077	958
35°	1698	1157	898	783	756	1060
45°	1234	833	631	566	549	951
55°	778	555	438	399	389	703
65°	436	337	277	258	252	436
75°	192	159	136	129	125	207
85°	32	29	25	25	23	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2467.5	2467.5	2467.5	2467.5	2467.5
2.5°	2450.1	2453.4	2371.9	2342.6	2325.2
5°	2443.6	2381.7	2229.6	2143.7	2113.3
7.5°	2424.1	2289.3	2049.2	1930.8	1899.3
10°	2405.6	2183.9	1889.5	1772.1	1738.5
12.5°	2375.2	2067.7	1761.3	1626.5	1586.3
15°	2335.0	1949.2	1635.2	1500.5	1466.8
17.5°	2287.2	1836.2	1521.1	1391.9	1354.9
20°	2231.7	1731.9	1423.4	1290.8	1260.4
22.5°	2162.2	1628.7	1323.4	1203.9	1170.2
25°	2084.0	1527.7	1235.4	1117.0	1076.8
27.5°	2000.3	1429.9	1153.9	1022.4	980.1
30°	1903.6	1336.4	1070.2	932.2	893.1
32.5°	1805.8	1244.1	982.2	851.8	820.3
35°	1698.3	1157.2	897.5	783.4	756.2
37.5°	1589.6	1073.5	821.4	721.5	697.6
40°	1471.2	992.0	751.9	663.9	644.3
42.5°	1352.7	910.5	688.9	612.8	594.3
45°	1234.3	833.4	631.3	566.1	548.7
47.5°	1114.8	757.3	578.0	520.5	506.3
50°	999.6	685.6	528.1	478.1	466.1
52.5°	887.7	618.2	480.2	437.9	424.8
55°	778.0	555.2	437.9	398.8	389.0
57.5°	684.5	496.5	395.5	361.8	354.2
60°	595.4	440.0	355.3	327.0	319.4
62.5°	511.8	387.9	315.1	292.3	286.8
65°	435.7	336.8	277.1	257.5	252.1
67.5°	366.2	290.1	238.0	223.8	219.5
70°	305.3	243.4	203.2	191.2	188.0
72.5°	244.5	198.8	168.4	159.7	156.5
75°	192.3	158.6	135.8	129.3	125.0
77.5°	144.5	120.6	104.3	98.9	95.6
80°	100.0	85.8	73.9	71.7	68.5
82.5°	63.0	54.3	47.8	46.7	43.5
85°	31.5	29.3	25.0	25.0	22.8
87.5°	10.9	9.8	9.8	9.8	8.7
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	19.61	21.10	19.98	21.41	21.73	16.94	18.43	17.30	18.74	19.05
	3H	21.21	22.54	21.59	22.87	23.23	18.54	19.87	18.92	20.20	20.56
	4H	21.74	22.99	22.14	23.34	23.71	19.10	20.35	19.50	20.70	21.07
	6H	22.07	23.22	22.48	23.59	23.98	19.45	20.61	19.86	20.97	21.37
	8H	22.15	23.24	22.57	23.63	24.04	19.54	20.64	19.97	21.03	21.43
	12H	22.18	23.23	22.61	23.61	24.04	19.58	20.63	20.01	21.01	21.44
4H	2H	19.84	21.09	20.24	21.44	21.82	17.62	18.87	18.02	19.21	19.59
	3H	21.63	22.66	22.04	23.06	23.47	19.40	20.44	19.81	20.84	21.24
	4H	22.27	23.20	22.70	23.62	24.05	20.07	21.00	20.50	21.42	21.85
	6H	22.71	23.52	23.17	23.97	24.43	20.52	21.33	20.98	21.78	22.24
	8H	22.82	23.58	23.29	24.03	24.49	20.64	21.40	21.10	21.84	22.31
	12H	22.88	23.56	23.37	24.04	24.51	20.70	21.38	21.18	21.85	22.33
8H	4H	22.37	23.13	22.83	23.57	24.04	20.37	21.12	20.83	21.57	22.04
	6H	22.89	23.51	23.39	24.00	24.48	20.92	21.54	21.41	22.03	22.51
	8H	23.04	23.60	23.56	24.11	24.60	21.08	21.64	21.60	22.15	22.64
	12H	23.14	23.64	23.66	24.13	24.70	21.19	21.68	21.70	22.18	22.74
12H	4H	22.36	23.04	22.84	23.52	23.99	20.39	21.06	20.87	21.54	22.02
	6H	22.88	23.44	23.40	23.95	24.44	20.95	21.51	21.47	22.02	22.51
	8H	23.08	23.57	23.59	24.06	24.63	21.17	21.66	21.68	22.15	22.72