

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: P1060327

Luminaire Tested: S124RDRP-S1195D850-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060327
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S1195D850-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

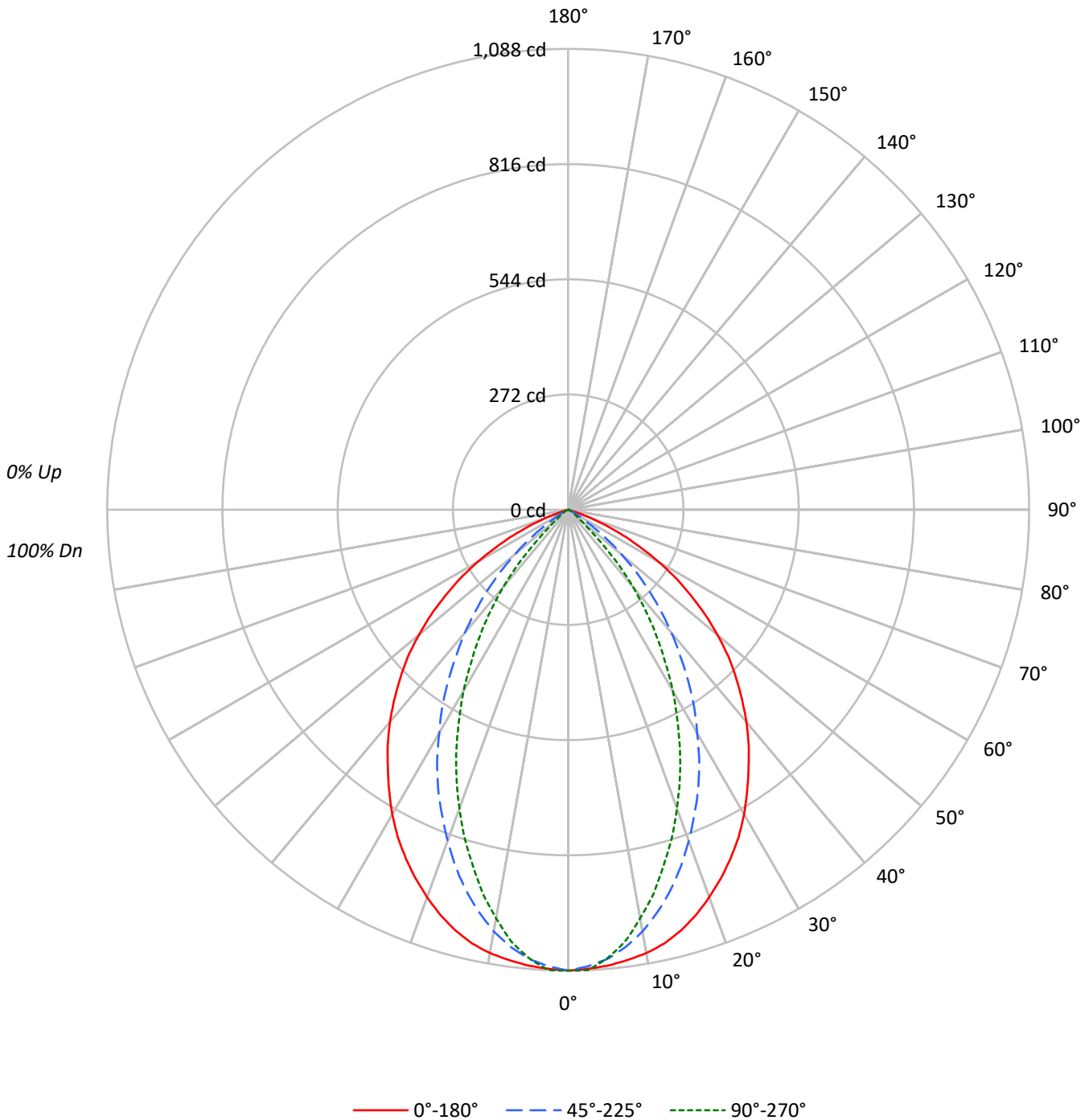
Lumens per Lamp: N/A
Luminaire Lumens: 1420.9 lumens
Efficiency: N/A
Efficacy: 34.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (A_{in}): 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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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9370	9370	9370
5°	9338	9202	9189
10°	9295	8841	8566
15°	9168	8299	7752
20°	8919	7622	6874
25°	8621	6903	5932
30°	8256	6050	4909
35°	7802	5190	3818
40°	7353	4260	2669
45°	6817	3275	1321
50°	6152	2212	442
55°	5312	1133	306
60°	4252	406	217
65°	2916	224	96
70°	1307	118	78
75°	0	53	53
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6817 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.5	7.1
10°-20°	263.4	18.5
20°-30°	341.0	24.0
30°-40°	324.0	22.8
40°-50°	229.4	16.1
50°-60°	117.8	8.3
60°-70°	41.2	2.9
70°-80°	3.6	0.3
80°-90°	0.0	0.0
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°	704.9	49.6
0°-40°	1028.9	72.4
0°-60°	1376.1	96.8
0°-90°	1420.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1420.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1088	1088	1088	1088	1088	
5°	1080	1082	1065	1065	1063	103
15°	1028	997	931	887	870	289
25°	907	836	726	649	624	417
35°	742	634	494	398	363	464
45°	560	431	269	154	108	431
55°	354	233	76	22	20	316
65°	143	69	11	6	5	142
75°	0	2	2	2	2	12
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1088.1	1088.1	1088.1	1088.1	1088.1
2.5°	1085.0	1088.1	1078.7	1086.6	1088.1
5°	1080.3	1081.8	1064.6	1064.6	1063.0
7.5°	1072.4	1069.3	1041.0	1030.0	1028.4
10°	1063.0	1052.0	1011.1	987.5	979.6
12.5°	1048.8	1028.4	973.3	938.8	929.3
15°	1028.4	996.9	930.9	886.9	869.6
17.5°	1003.2	962.3	883.7	830.3	813.0
20°	973.3	921.5	831.8	772.1	750.1
22.5°	941.9	882.1	778.4	710.7	688.7
25°	907.3	836.5	726.5	649.4	624.3
27.5°	871.1	787.8	669.9	589.7	556.6
30°	830.3	739.1	608.5	525.2	493.7
32.5°	786.2	685.6	553.5	463.9	426.1
35°	742.2	633.7	493.7	397.8	363.2
37.5°	699.7	585.0	434.0	333.4	300.3
40°	654.1	531.5	379.0	275.2	237.4
42.5°	607.0	479.6	322.4	215.4	174.5
45°	559.8	430.9	268.9	154.1	108.5
47.5°	512.6	379.0	217.0	97.5	58.2
50°	459.2	328.6	165.1	51.9	33.0
52.5°	408.8	281.5	117.9	29.9	25.2
55°	353.8	232.7	75.5	22.0	20.4
57.5°	301.9	185.5	42.5	17.3	15.7
60°	246.9	143.1	23.6	14.2	12.6
62.5°	191.8	103.8	15.7	9.4	7.9
65°	143.1	69.2	11.0	6.3	4.7
67.5°	94.3	39.3	7.9	3.1	3.1
70°	51.9	18.9	4.7	3.1	3.1
72.5°	18.9	6.3	3.1	1.6	1.6
75°	0.0	1.6	1.6	1.6	1.6
77.5°	0.0	0.0	0.0	0.0	1.6
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	16.30	17.56	16.67	17.87	18.19	0.00	0.23	0.00	0.54	0.85
	3H	16.58	17.68	16.96	18.01	18.38	0.00	0.15	0.00	0.48	0.84
	4H	16.50	17.53	16.91	17.88	18.26	0.00	0.05	0.00	0.40	0.79
	6H	16.42	17.35	16.83	17.73	18.12	0.00	0.00	0.00	0.28	0.68
	8H	16.37	17.26	16.80	17.65	18.05	0.00	0.00	0.00	0.20	0.61
	12H	16.32	17.17	16.76	17.55	17.98	0.00	0.00	0.00	0.11	0.54
4H	2H	16.07	17.10	16.48	17.45	17.84	0.00	0.45	0.00	0.81	1.19
	3H	16.36	17.19	16.77	17.59	18.00	0.00	0.39	0.00	0.79	1.20
	4H	16.27	17.00	16.70	17.42	17.87	0.00	0.28	0.00	0.70	1.15
	6H	16.18	16.81	16.64	17.26	17.72	0.00	0.12	0.00	0.57	1.04
	8H	16.12	16.70	16.59	17.15	17.63	0.00	0.01	0.00	0.46	0.94
	12H	16.07	16.58	16.55	17.07	17.54	0.00	0.00	0.00	0.38	0.85
8H	4H	16.12	16.71	16.59	17.15	17.63	0.00	0.20	0.08	0.65	1.12
	6H	16.01	16.48	16.51	16.98	17.47	0.00	0.00	0.03	0.50	0.98
	8H	15.94	16.37	16.47	16.89	17.38	0.00	0.00	0.00	0.41	0.90
	12H	15.89	16.27	16.41	16.77	17.34	0.00	0.00	0.00	0.28	0.86
12H	4H	16.07	16.58	16.55	17.07	17.54	0.00	0.07	0.05	0.56	1.03
	6H	15.94	16.37	16.47	16.89	17.38	0.00	0.00	0.00	0.41	0.90
	8H	15.89	16.27	16.41	16.77	17.34	0.00	0.00	0.00	0.28	0.86