

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: P1060330

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060330
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S1195D850-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

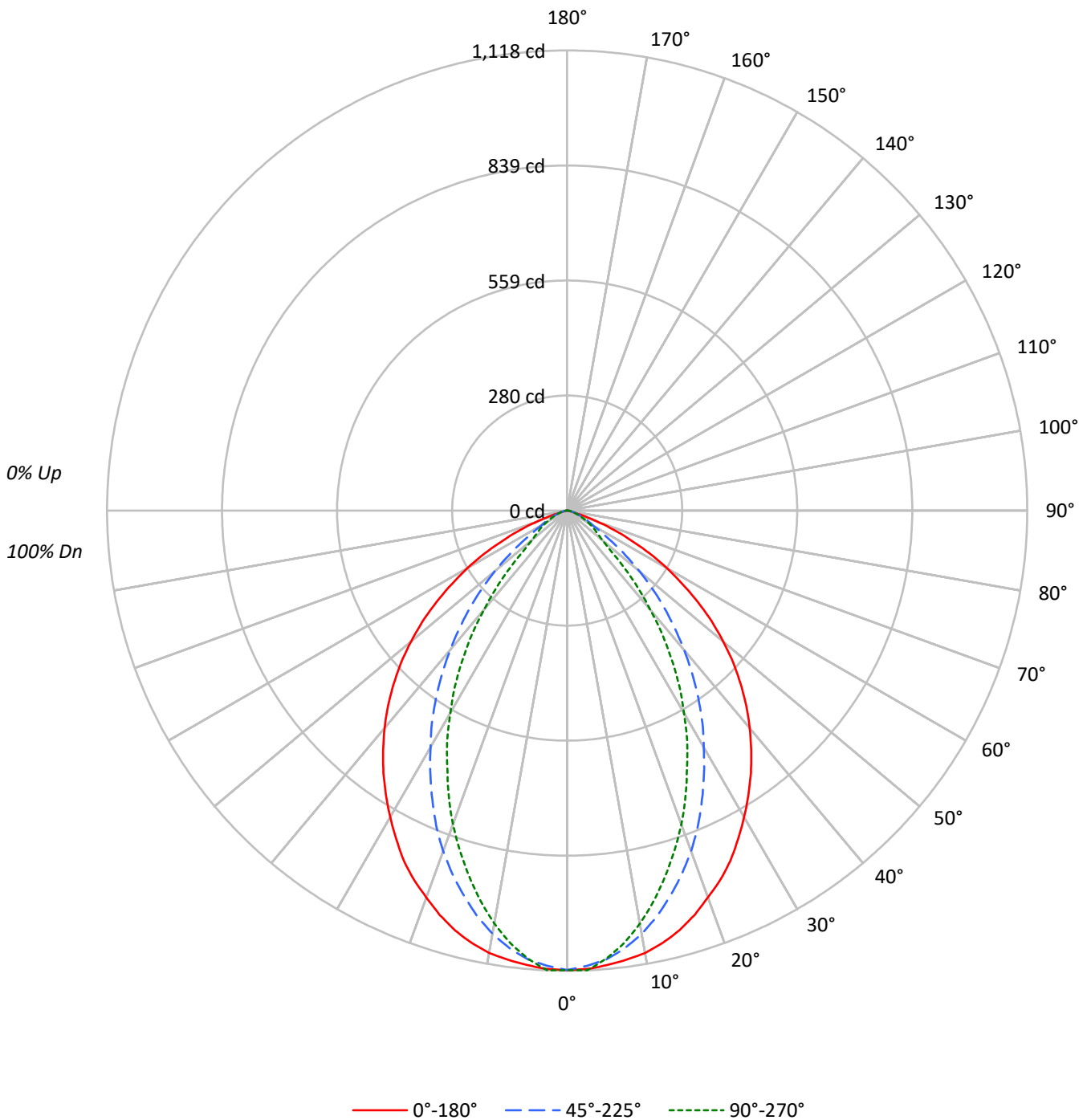
Lumens per Lamp: N/A
Luminaire Lumens: 1646.0 lumens
Efficiency: N/A
Efficacy: 39.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9613	9613	9613
5°	9583	9460	9446
10°	9542	9130	8909
15°	9406	8635	8201
20°	9165	8070	7435
25°	8919	7365	6544
30°	8552	6598	5644
35°	8183	5835	4661
40°	7760	4967	3535
45°	7258	4060	2375
50°	6635	3076	1475
55°	5831	2030	1251
60°	4821	1245	1030
65°	3492	962	833
70°	1901	713	634
75°	419	522	576
80°	312	392	466
85°	306	306	464

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7258 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.4	6.3
10°-20°	274.7	16.7
20°-30°	363.9	22.1
30°-40°	361.2	21.9
40°-50°	278.0	16.9
50°-60°	165.7	10.1
60°-70°	75.3	4.6
70°-80°	19.5	1.2
80°-90°	4.3	0.3
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°	742.1	45.1
0°-40°	1103.3	67.0
0°-60°	1546.9	94.0
0°-90°	1646.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1646.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1109	1110	1094	1094	1093	105
15°	1055	1028	969	936	920	297
25°	939	871	775	711	689	431
35°	778	681	555	470	443	486
45°	596	480	333	233	195	459
55°	388	277	135	85	83	346
65°	171	102	47	41	41	172
75°	13	16	16	17	17	26
85°	3	3	3	5	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1116.4	1116.4	1116.4	1116.4	1116.4
2.5°	1114.9	1116.4	1107.0	1114.9	1118.0
5°	1108.6	1110.1	1094.4	1094.4	1092.8
7.5°	1100.7	1097.6	1072.4	1063.0	1059.8
10°	1091.3	1080.3	1044.1	1025.2	1018.9
12.5°	1075.5	1058.2	1009.5	982.8	971.8
15°	1055.1	1028.4	968.6	935.6	919.9
17.5°	1029.9	996.9	926.2	883.7	866.4
20°	1000.1	956.0	880.6	827.1	811.4
22.5°	971.8	916.7	830.2	768.9	751.6
25°	938.7	871.1	775.2	710.7	688.7
27.5°	899.4	827.1	720.2	654.1	632.1
30°	860.1	779.9	663.6	594.4	567.6
32.5°	819.2	731.2	611.7	533.1	507.9
35°	778.4	680.9	555.1	470.2	443.4
37.5°	734.3	630.5	498.5	410.4	380.5
40°	690.3	581.8	441.9	352.2	314.5
42.5°	644.7	531.5	386.8	292.5	254.7
45°	596.0	479.6	333.4	232.7	195.0
47.5°	547.2	430.8	279.9	174.5	139.9
50°	495.3	379.0	229.6	127.4	110.1
52.5°	443.4	328.6	179.3	99.1	94.3
55°	388.4	276.7	135.2	84.9	83.3
57.5°	331.8	229.6	97.5	73.9	70.8
60°	279.9	185.5	72.3	62.9	59.8
62.5°	226.4	139.9	59.8	51.9	48.7
65°	171.4	102.2	47.2	40.9	40.9
67.5°	124.2	69.2	37.7	33.0	31.4
70°	75.5	42.5	28.3	26.7	25.2
72.5°	37.7	25.2	22.0	20.4	20.4
75°	12.6	15.7	15.7	17.3	17.3
77.5°	9.4	11.0	11.0	12.6	12.6
80°	6.3	7.9	7.9	9.4	9.4
82.5°	4.7	4.7	6.3	6.3	7.9
85°	3.1	3.1	3.1	4.7	4.7
87.5°	1.6	1.6	1.6	3.1	3.1
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	16.98	18.32	17.35	18.63	18.94	8.53	9.87	8.90	10.18	10.49
	3H	17.49	18.67	17.87	19.00	19.37	9.35	10.53	9.73	10.86	11.22
	4H	17.46	18.56	17.86	18.91	19.29	9.63	10.73	10.03	11.08	11.46
	6H	17.39	18.40	17.81	18.77	19.16	9.80	10.81	10.22	11.18	11.57
	8H	17.35	18.31	17.78	18.70	19.10	9.87	10.82	10.30	11.21	11.62
	12H	17.32	18.23	17.75	18.61	19.04	9.91	10.82	10.34	11.21	11.64
4H	2H	16.82	17.92	17.23	18.27	18.66	8.97	10.07	9.38	10.42	10.81
	3H	17.38	18.27	17.79	18.68	19.08	9.94	10.83	10.35	11.23	11.64
	4H	17.35	18.14	17.78	18.56	19.01	10.30	11.10	10.73	11.52	11.96
	6H	17.30	17.98	17.76	18.43	18.89	10.55	11.24	11.01	11.68	12.15
	8H	17.25	17.89	17.72	18.34	18.81	10.64	11.28	11.11	11.73	12.20
	12H	17.21	17.77	17.70	18.26	18.73	10.72	11.28	11.20	11.76	12.24
8H	4H	17.24	17.88	17.71	18.32	18.80	10.39	11.03	10.86	11.48	11.95
	6H	17.18	17.70	17.68	18.19	18.68	10.70	11.22	11.20	11.72	12.20
	8H	17.13	17.60	17.65	18.11	18.60	10.83	11.30	11.35	11.81	12.31
	12H	17.10	17.51	17.61	18.01	18.58	10.97	11.38	11.48	11.88	12.45
12H	4H	17.19	17.76	17.68	18.24	18.72	10.36	10.93	10.85	11.41	11.88
	6H	17.12	17.59	17.64	18.10	18.60	10.68	11.15	11.20	11.66	12.16
	8H	17.09	17.51	17.61	18.00	18.57	10.85	11.26	11.37	11.76	12.33