

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: P1060385

Luminaire Tested: S124RDRP-S350D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060385  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S350D830-X4F0-XX-UDD-SVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

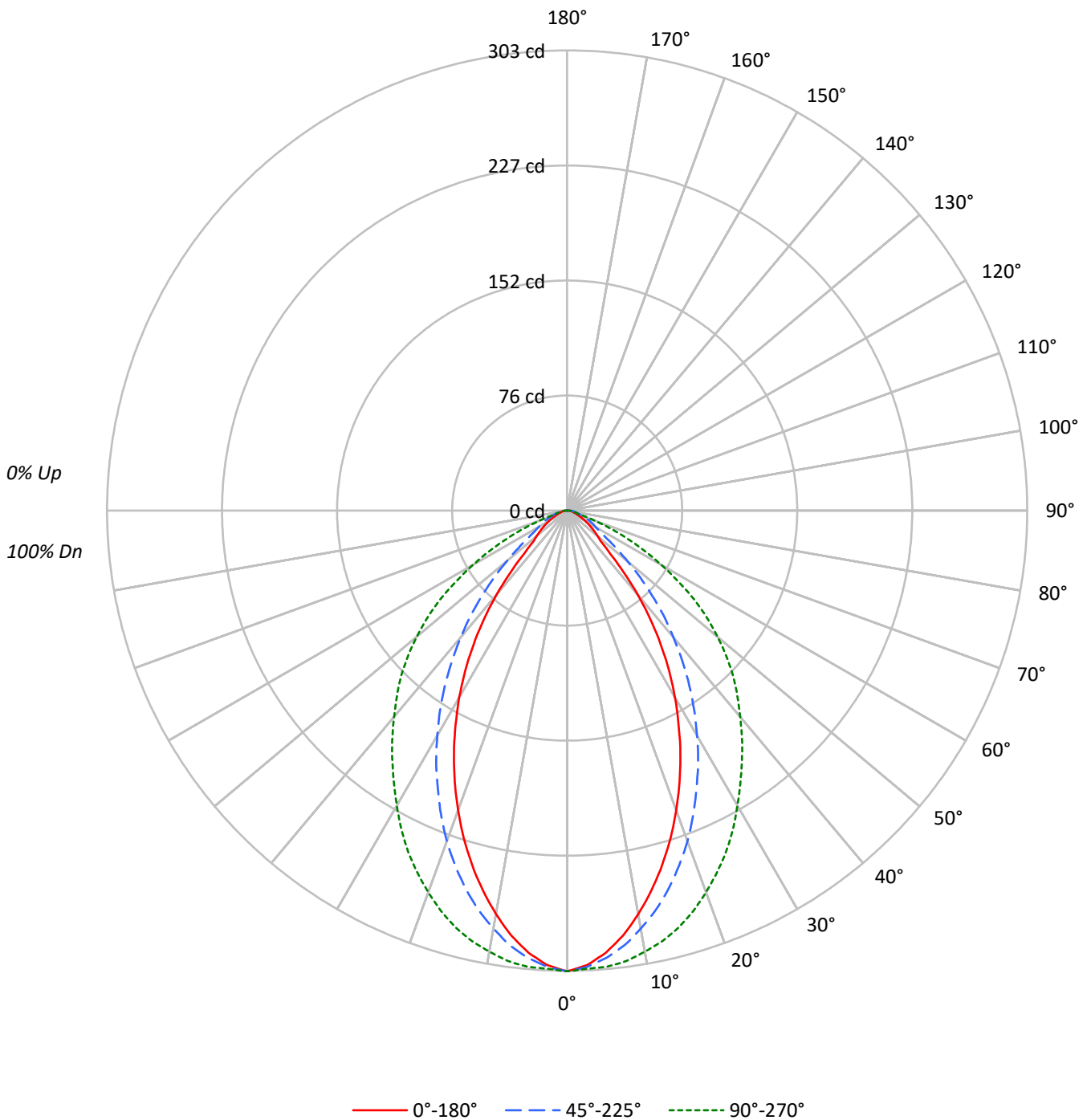
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 426.6 lumens  
Efficiency: N/A  
Efficacy: 34.1 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 12.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	73	67	77	71	67	75	70	66	73	68	65	63
5	84	73	66	61	82	72	65	60	70	64	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	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2613	2613	2613
5°	2526	2556	2606
10°	2359	2444	2579
15°	2155	2299	2533
20°	1924	2122	2451
25°	1676	1915	2354
30°	1413	1700	2230
35°	1128	1473	2110
40°	812	1224	1992
45°	488	963	1885
50°	352	698	1732
55°	296	470	1536
60°	239	372	1237
65°	189	338	888
70°	166	282	476
75°	153	256	230
80°	154	268	208
85°	227	385	267

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1885 cd/sqm

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CATALOG NUMBER: S124RDRP-S350D830-X4F0-XX-UDD-SVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.9	6.5
10°-20°	73.0	17.1
20°-30°	94.7	22.2
30°-40°	91.0	21.3
40°-50°	67.5	15.8
50°-60°	41.4	9.7
60°-70°	20.1	4.7
70°-80°	7.7	1.8
80°-90°	3.4	0.8
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°	195.5	45.8
0°-40°	286.6	67.2
0°-60°	395.5	92.7
0°-90°	426.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	426.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	303	303	303	303	303	
5°	292	296	296	298	302	27
15°	242	249	258	273	284	67
25°	176	185	202	227	248	81
35°	107	117	140	173	201	66
45°	40	50	79	121	155	33
55°	20	20	31	71	102	18
65°	9	10	17	26	44	10
75°	5	7	8	7	7	5
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	303.4	303.4	303.4	303.4	303.4
2.5°	299.6	303.0	300.7	301.5	301.9
5°	292.2	296.5	295.7	298.4	301.5
7.5°	282.2	287.2	288.8	294.2	299.2
10°	269.8	276.0	279.5	288.4	294.9
12.5°	256.3	262.9	269.5	281.4	290.3
15°	241.7	248.6	257.9	273.3	284.1
17.5°	226.2	233.9	245.1	263.7	276.4
20°	210.0	218.1	231.6	252.1	267.5
22.5°	193.4	201.9	217.0	239.7	257.9
25°	176.4	185.3	201.5	227.4	247.8
27.5°	159.0	168.3	186.8	214.3	236.6
30°	142.1	150.9	171.0	200.7	224.3
32.5°	124.7	134.0	155.6	186.8	212.3
35°	107.3	117.0	140.1	173.3	200.7
37.5°	89.6	100.0	124.3	160.2	189.2
40°	72.2	82.2	108.9	146.7	177.2
42.5°	55.2	66.0	94.2	133.2	166.0
45°	40.1	50.2	79.1	120.8	154.8
47.5°	30.1	36.3	65.2	109.2	142.4
50°	26.3	27.4	52.1	96.5	129.3
52.5°	22.8	23.5	40.5	82.6	116.2
55°	19.7	20.5	31.3	70.6	102.3
57.5°	16.6	17.4	25.1	59.1	86.5
60°	13.9	14.7	21.6	47.1	71.8
62.5°	11.6	12.0	19.3	35.9	57.5
65°	9.3	10.0	16.6	26.3	43.6
67.5°	7.7	8.5	13.5	18.1	30.5
70°	6.6	8.5	11.2	12.7	18.9
72.5°	5.4	7.7	9.3	8.9	8.9
75°	4.6	7.3	7.7	6.9	6.9
77.5°	3.9	6.6	6.2	5.8	5.4
80°	3.1	5.4	5.4	4.6	4.2
82.5°	2.7	4.2	4.2	4.2	3.5
85°	2.3	3.9	3.9	3.5	2.7
87.5°	1.5	3.1	3.5	3.1	1.9
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	3.16	4.50	3.52	4.81	5.13	12.25	13.59	12.62	13.90	14.22
	3H	4.20	5.39	4.58	5.72	6.08	12.75	13.94	13.13	14.27	14.63
	4H	4.71	5.82	5.11	6.17	6.55	12.77	13.87	13.17	14.22	14.61
	6H	5.17	6.19	5.58	6.56	6.95	12.76	13.78	13.18	14.15	14.55
	8H	5.36	6.32	5.79	6.71	7.12	12.76	13.72	13.19	14.11	14.52
	12H	5.57	6.49	6.00	6.87	7.30	12.76	13.68	13.19	14.06	14.49
4H	2H	4.25	5.36	4.65	5.71	6.09	12.14	13.25	12.54	13.60	13.98
	3H	5.52	6.43	5.93	6.83	7.23	12.72	13.62	13.13	14.03	14.43
	4H	6.22	7.03	6.65	7.45	7.89	12.76	13.57	13.20	13.99	14.44
	6H	6.86	7.56	7.32	8.00	8.47	12.82	13.52	13.28	13.96	14.43
	8H	7.10	7.75	7.57	8.20	8.67	12.83	13.49	13.30	13.93	14.40
	12H	7.37	7.95	7.86	8.43	8.91	12.87	13.44	13.35	13.93	14.40
8H	4H	6.65	7.30	7.12	7.75	8.22	12.71	13.37	13.18	13.81	14.28
	6H	7.53	8.06	8.03	8.56	9.04	12.81	13.34	13.31	13.84	14.32
	8H	7.93	8.41	8.45	8.92	9.42	12.86	13.35	13.39	13.86	14.35
	12H	8.41	8.83	8.92	9.33	9.90	12.97	13.39	13.48	13.89	14.46
12H	4H	6.69	7.27	7.18	7.75	8.22	12.69	13.26	13.17	13.75	14.22
	6H	7.64	8.12	8.16	8.63	9.13	12.78	13.27	13.30	13.78	14.27
	8H	8.15	8.57	8.66	9.07	9.64	12.89	13.31	13.40	13.81	14.38