

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: P1060440

Luminaire Tested: S124RDRP-S350D935-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060440  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S350D935-X4F0-XX-UDD-SVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

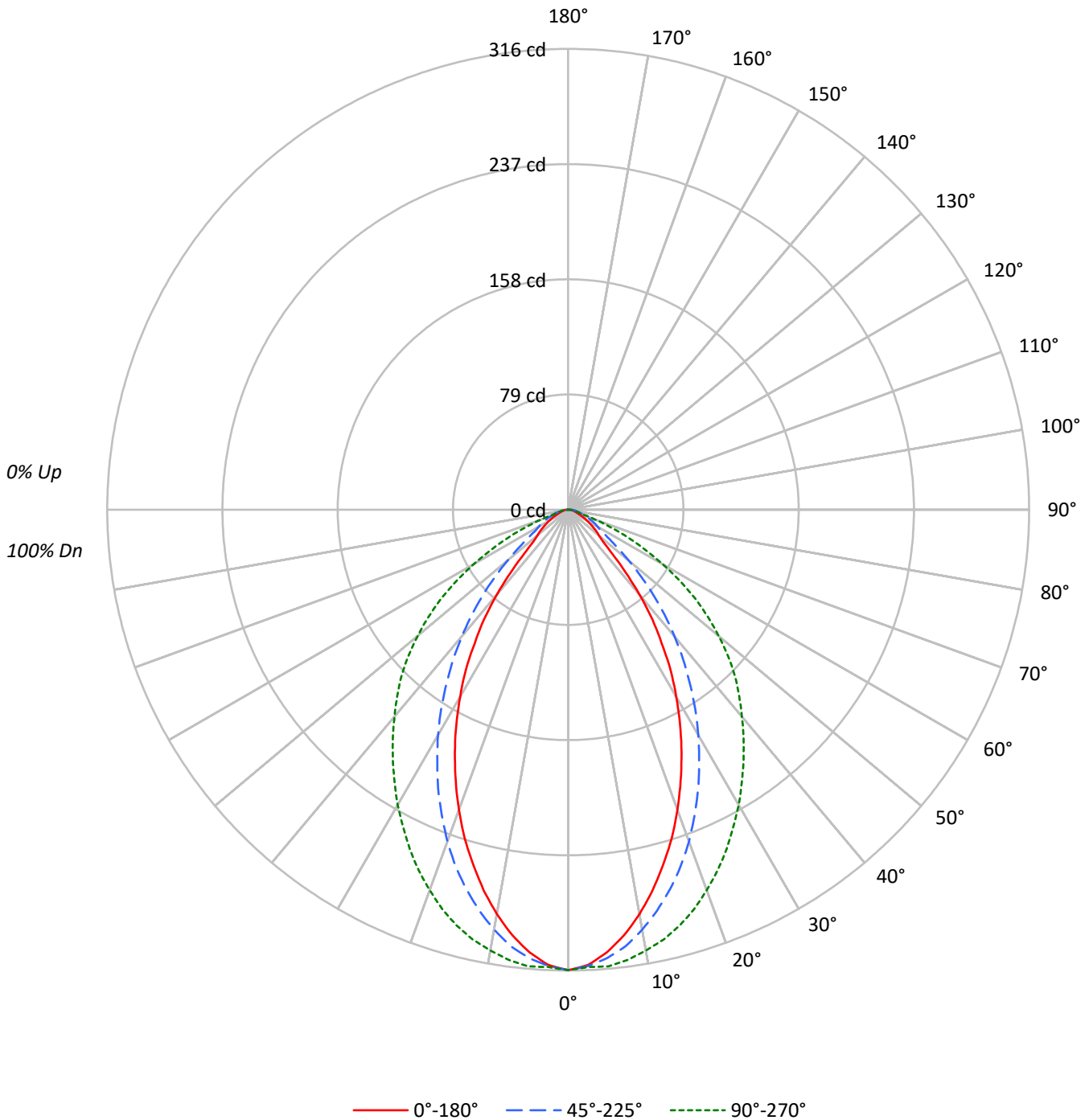
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 446.8 lumens  
Efficiency: N/A  
Efficacy: 35.7 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	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	104	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	72	67	77	71	66	75	70	66	73	68	65	63																												
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57																												
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51																												
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47																												
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43																												
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39																												
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36																												

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

	0°	45°	90°
0°	2719	2719	2719
5°	2634	2668	2717
10°	2461	2557	2684
15°	2245	2403	2632
20°	2007	2218	2544
25°	1746	2004	2440
30°	1473	1775	2325
35°	1172	1527	2202
40°	852	1272	2082
45°	515	1005	1972
50°	368	727	1805
55°	312	492	1594
60°	255	401	1288
65°	202	359	927
70°	169	302	488
75°	153	283	246
80°	159	278	243
85°	207	415	277

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1972 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.1	6.5
10°-20°	76.2	17.0
20°-30°	98.8	22.1
30°-40°	95.1	21.3
40°-50°	70.7	15.8
50°-60°	43.5	9.7
60°-70°	21.4	4.8
70°-80°	8.3	1.9
80°-90°	3.8	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°	204.0	45.7
0°-40°	299.1	66.9
0°-60°	413.3	92.5
0°-90°	446.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	446.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	316	316	316	316	316	
5°	305	309	309	311	314	28
15°	252	260	270	286	295	70
25°	184	194	211	237	257	84
35°	112	122	145	182	210	70
45°	42	53	82	127	162	35
55°	21	22	33	75	106	19
65°	10	11	18	28	46	10
75°	5	8	8	8	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°	315.7	315.7	315.7	315.7	315.7
2.5°	312.5	316.0	313.2	313.6	313.9
5°	304.7	309.3	308.6	311.4	314.3
7.5°	294.2	299.4	301.9	307.6	311.4
10°	281.5	287.5	292.4	301.6	306.9
12.5°	267.4	274.4	281.5	293.8	301.9
15°	251.8	259.9	269.5	285.7	295.2
17.5°	236.0	244.1	256.4	275.1	287.1
20°	219.0	227.8	242.0	262.8	277.6
22.5°	201.4	210.9	226.4	250.1	267.7
25°	183.8	193.6	210.9	237.4	256.8
27.5°	166.1	175.6	194.3	224.0	245.1
30°	148.1	158.0	178.5	209.5	233.8
32.5°	130.9	140.0	161.9	195.8	221.5
35°	111.5	122.0	145.3	181.6	209.5
37.5°	94.9	104.4	129.4	167.5	197.5
40°	75.8	86.4	113.2	153.8	185.2
42.5°	58.2	68.8	97.7	140.0	173.5
45°	42.3	52.6	82.5	127.3	161.9
47.5°	32.1	38.1	67.7	115.0	148.8
50°	27.5	29.3	54.3	101.6	134.7
52.5°	24.3	25.0	42.3	88.2	120.6
55°	20.8	21.5	32.8	74.8	106.2
57.5°	17.6	18.0	26.5	62.1	90.6
60°	14.8	15.2	23.3	49.7	74.8
62.5°	12.3	12.7	20.8	38.4	59.6
65°	9.9	10.6	17.6	28.2	45.5
67.5°	8.1	9.5	14.8	19.8	31.7
70°	6.7	9.2	12.0	13.8	19.4
72.5°	5.6	8.5	10.2	9.9	9.5
75°	4.6	8.1	8.5	7.8	7.4
77.5°	3.9	7.1	7.1	6.3	6.0
80°	3.2	5.6	5.6	5.6	4.9
82.5°	2.8	4.6	4.9	4.9	3.9
85°	2.1	3.9	4.2	4.2	2.8
87.5°	1.4	3.5	3.9	3.5	2.1
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	3.26	4.60	3.63	4.92	5.23	12.43	13.77	12.79	14.08	14.40
	3H	4.37	5.56	4.75	5.89	6.26	12.94	14.13	13.32	14.46	14.82
	4H	4.89	6.00	5.29	6.35	6.73	12.96	14.07	13.36	14.42	14.80
	6H	5.33	6.35	5.74	6.72	7.11	12.97	13.99	13.38	14.36	14.75
	8H	5.52	6.48	5.94	6.87	7.28	12.97	13.94	13.40	14.33	14.73
	12H	5.69	6.62	6.13	7.00	7.43	12.97	13.90	13.40	14.28	14.71
4H	2H	4.40	5.51	4.80	5.86	6.24	12.32	13.43	12.72	13.78	14.16
	3H	5.74	6.65	6.16	7.06	7.46	12.91	13.82	13.32	14.22	14.63
	4H	6.48	7.29	6.91	7.71	8.15	12.97	13.78	13.40	14.20	14.64
	6H	7.09	7.79	7.55	8.24	8.71	13.04	13.75	13.51	14.19	14.66
	8H	7.33	7.99	7.80	8.44	8.91	13.07	13.73	13.54	14.18	14.65
	12H	7.57	8.15	8.05	8.63	9.10	13.11	13.69	13.60	14.18	14.65
8H	4H	6.95	7.61	7.42	8.05	8.52	12.93	13.58	13.40	14.03	14.50
	6H	7.80	8.33	8.30	8.83	9.31	13.05	13.59	13.55	14.09	14.57
	8H	8.20	8.69	8.72	9.20	9.69	13.13	13.62	13.66	14.13	14.62
	12H	8.63	9.05	9.14	9.55	10.12	13.25	13.68	13.77	14.18	14.75
12H	4H	7.00	7.58	7.49	8.06	8.54	12.90	13.48	13.39	13.96	14.44
	6H	7.93	8.41	8.45	8.92	9.42	13.03	13.52	13.55	14.03	14.52
	8H	8.45	8.88	8.96	9.37	9.94	13.16	13.59	13.68	14.09	14.66