

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: P1060457

Luminaire Tested: S124RDRP-S350D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060457  
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-S350D950-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: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

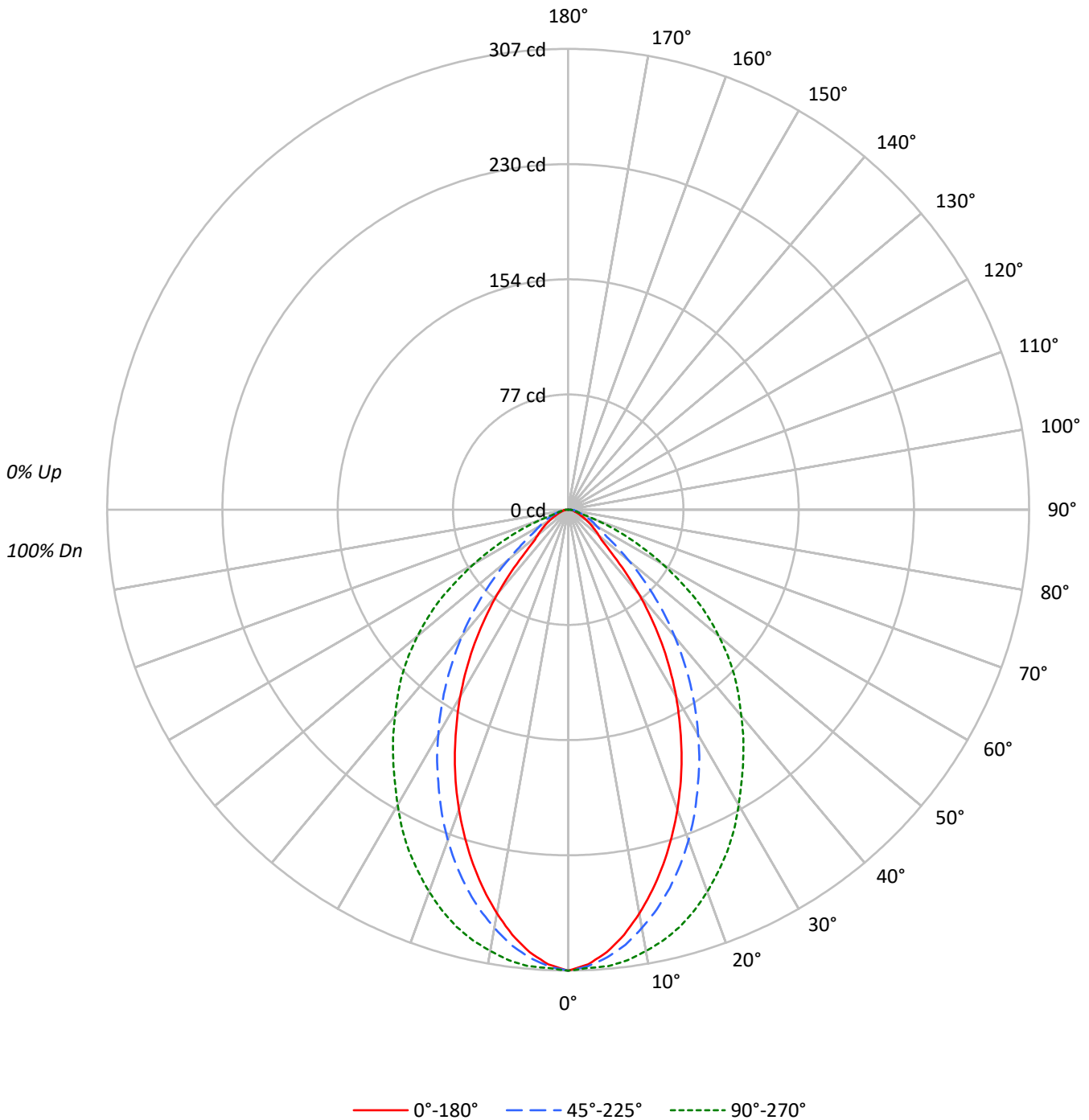
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 431.8 lumens  
Efficiency: N/A  
Efficacy: 34.5 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°	2644	2644	2644
5°	2557	2587	2638
10°	2388	2474	2610
15°	2181	2327	2564
20°	1948	2148	2482
25°	1697	1938	2384
30°	1430	1721	2257
35°	1142	1491	2136
40°	822	1239	2016
45°	494	975	1908
50°	356	706	1754
55°	299	474	1554
60°	243	377	1252
65°	192	342	901
70°	166	285	481
75°	156	260	233
80°	154	273	213
85°	227	385	267

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1908 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	28.2	6.5
10°-20°	73.9	17.1
20°-30°	95.9	22.2
30°-40°	92.1	21.3
40°-50°	68.4	15.8
50°-60°	41.9	9.7
60°-70°	20.3	4.7
70°-80°	7.7	1.8
80°-90°	3.5	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°	197.9	45.8
0°-40°	290.1	67.2
0°-60°	400.3	92.7
0°-90°	431.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	431.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	307	307	307	307	307	
5°	296	300	299	302	305	28
15°	245	252	261	277	288	68
25°	179	188	204	230	251	82
35°	109	118	142	175	203	67
45°	41	51	80	122	157	34
55°	20	21	32	72	104	18
65°	9	10	17	27	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°	307.1	307.1	307.1	307.1	307.1
2.5°	303.2	306.7	304.4	305.2	305.6
5°	295.8	300.1	299.3	302.0	305.2
7.5°	285.6	290.7	292.3	297.7	302.8
10°	273.1	279.4	282.9	291.9	298.5
12.5°	259.4	266.1	272.7	284.8	293.8
15°	244.6	251.6	261.0	276.6	287.6
17.5°	229.0	236.8	248.1	266.9	279.8
20°	212.6	220.8	234.4	255.1	270.8
22.5°	195.8	204.4	219.6	242.6	261.0
25°	178.6	187.6	204.0	230.1	250.9
27.5°	161.0	170.4	189.1	216.9	239.5
30°	143.8	152.8	173.1	203.2	227.0
32.5°	126.2	135.6	157.5	189.1	214.9
35°	108.6	118.4	141.8	175.4	203.2
37.5°	90.6	101.2	125.8	162.2	191.5
40°	73.1	83.2	110.2	148.5	179.3
42.5°	55.9	66.8	95.3	134.8	168.0
45°	40.6	50.8	80.1	122.3	156.7
47.5°	30.5	36.7	66.0	110.6	144.2
50°	26.6	27.7	52.7	97.7	130.9
52.5°	23.1	23.8	41.0	83.6	117.6
55°	19.9	20.7	31.6	71.5	103.5
57.5°	16.8	17.6	25.4	59.8	87.5
60°	14.1	14.8	21.9	47.7	72.7
62.5°	11.7	12.1	19.5	36.3	58.2
65°	9.4	10.2	16.8	26.6	44.2
67.5°	7.8	8.6	13.7	18.4	30.9
70°	6.6	8.6	11.3	12.9	19.1
72.5°	5.5	7.8	9.4	9.0	9.0
75°	4.7	7.4	7.8	7.0	7.0
77.5°	3.9	6.6	6.3	5.9	5.5
80°	3.1	5.5	5.5	4.7	4.3
82.5°	2.7	4.3	4.3	4.3	3.5
85°	2.3	3.9	3.9	3.5	2.7
87.5°	1.6	3.1	3.5	3.1	2.0
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	3.20	4.53	3.56	4.85	5.16	12.29	13.63	12.66	13.94	14.26
	3H	4.24	5.42	4.62	5.75	6.12	12.79	13.98	13.17	14.31	14.68
	4H	4.75	5.86	5.16	6.21	6.59	12.81	13.92	13.21	14.27	14.65
	6H	5.20	6.22	5.61	6.59	6.98	12.81	13.82	13.22	14.19	14.59
	8H	5.39	6.35	5.82	6.74	7.15	12.80	13.77	13.23	14.16	14.56
	12H	5.59	6.52	6.03	6.90	7.33	12.80	13.72	13.23	14.11	14.54
4H	2H	4.29	5.40	4.69	5.75	6.13	12.18	13.29	12.58	13.64	14.02
	3H	5.56	6.46	5.97	6.87	7.27	12.76	13.67	13.17	14.07	14.47
	4H	6.26	7.07	6.69	7.49	7.93	12.81	13.62	13.24	14.04	14.48
	6H	6.89	7.59	7.35	8.03	8.50	12.86	13.56	13.32	14.01	14.47
	8H	7.13	7.78	7.60	8.23	8.70	12.88	13.53	13.35	13.98	14.45
	12H	7.40	7.98	7.89	8.46	8.94	12.91	13.49	13.39	13.97	14.44
8H	4H	6.69	7.34	7.16	7.79	8.26	12.76	13.41	13.22	13.86	14.33
	6H	7.57	8.10	8.07	8.60	9.08	12.85	13.39	13.35	13.88	14.36
	8H	7.97	8.45	8.49	8.97	9.46	12.91	13.39	13.43	13.91	14.40
	12H	8.44	8.87	8.96	9.36	9.93	13.01	13.43	13.52	13.93	14.50
12H	4H	6.73	7.31	7.22	7.79	8.27	12.73	13.31	13.21	13.79	14.26
	6H	7.68	8.16	8.20	8.67	9.17	12.83	13.31	13.35	13.83	14.32
	8H	8.19	8.62	8.71	9.11	9.68	12.94	13.36	13.45	13.86	14.43