

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: P1060439

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060439  
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-S350D935-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

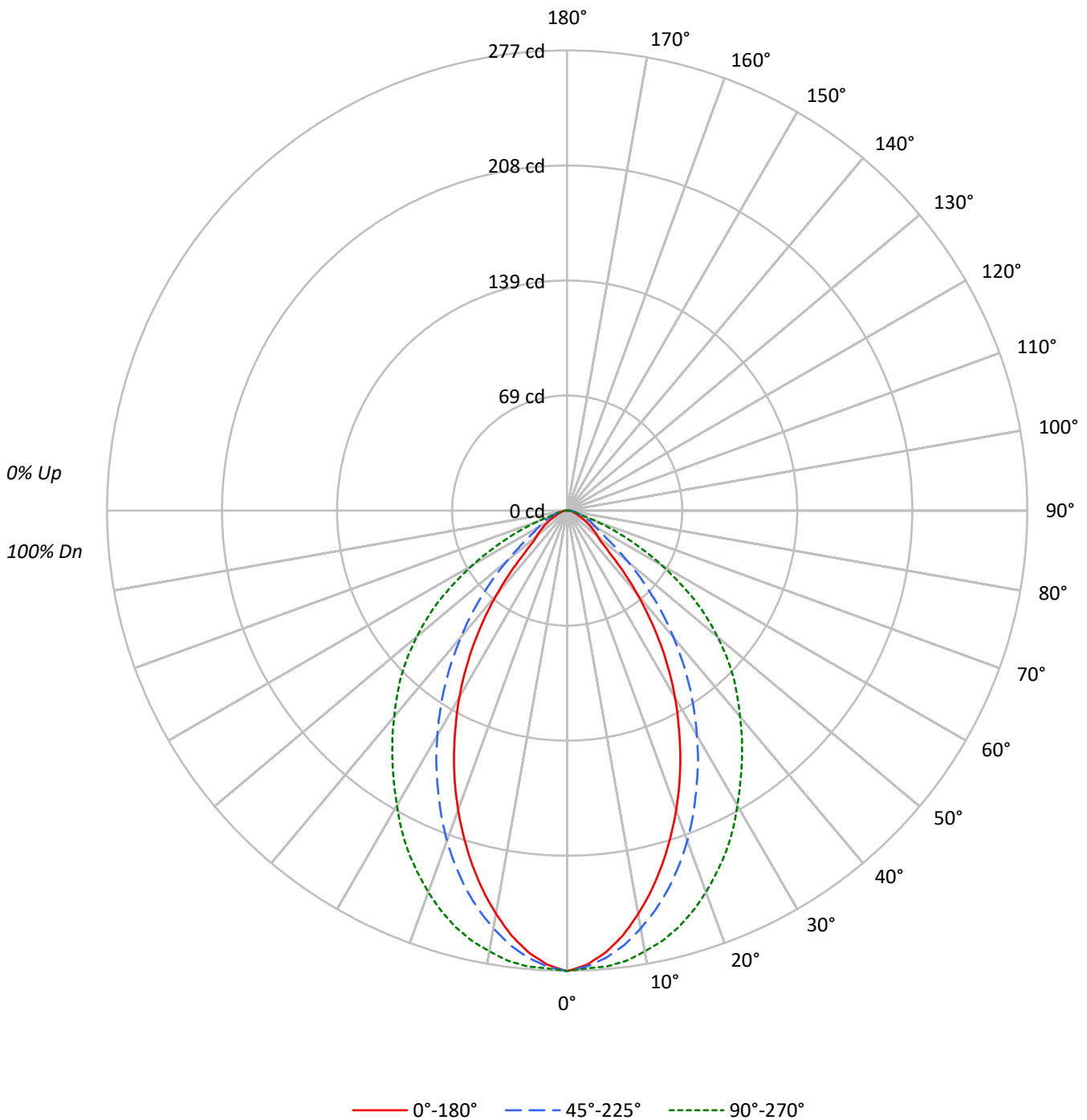
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 389.7 lumens  
Efficiency: N/A  
Efficacy: 31.2 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

TEST NUMBER: P1060439

CATALOG NUMBER: S124RDRP-S350D935-X4F0-XX-UDD-SVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1060439

CATALOG NUMBER: S124RDRP-S350D935-X4F0-XX-UDD-SVL-S

**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	72	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°	2387	2387	2387
5°	2307	2335	2381
10°	2155	2232	2356
15°	1968	2100	2313
20°	1758	1939	2240
25°	1532	1749	2151
30°	1291	1553	2037
35°	1030	1346	1928
40°	741	1117	1820
45°	447	880	1722
50°	322	638	1582
55°	270	429	1402
60°	219	339	1130
65°	173	310	811
70°	151	257	436
75°	140	236	210
80°	139	243	193
85°	207	346	247

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 1722 cd/sqm



TEST NUMBER: P1060439

CATALOG NUMBER: S124RDRP-S350D935-X4F0-XX-UDD-SVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	25.4	6.5
10°-20°	66.7	17.1
20°-30°	86.5	22.2
30°-40°	83.2	21.3
40°-50°	61.7	15.8
50°-60°	37.8	9.7
60°-70°	18.4	4.7
70°-80°	7.0	1.8
80°-90°	3.1	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°	178.6	45.8
0°-40°	261.8	67.2
0°-60°	361.3	92.7
0°-90°	389.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	389.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	277	277	277	277	277	
5°	267	271	270	273	275	25
15°	221	227	236	250	260	62
25°	161	169	184	208	226	74
35°	98	107	128	158	183	61
45°	37	46	72	110	141	30
55°	18	19	29	64	93	16
65°	8	9	15	24	40	9
75°	4	7	7	6	6	4
85°	2	4	4	3	2	2
90°	0	0	0	0	0	



TEST NUMBER: P1060439

CATALOG NUMBER: S124RDRP-S350D935-X4F0-XX-UDD-SVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	277.2	277.2	277.2	277.2	277.2
2.5°	273.6	276.8	274.7	275.4	275.8
5°	266.9	270.8	270.1	272.6	275.4
7.5°	257.8	262.4	263.8	268.7	273.3
10°	246.5	252.1	255.3	263.4	269.4
12.5°	234.2	240.1	246.1	257.1	265.2
15°	220.8	227.1	235.6	249.7	259.5
17.5°	206.6	213.7	223.9	240.9	252.5
20°	191.8	199.2	211.6	230.3	244.4
22.5°	176.7	184.4	198.2	219.0	235.6
25°	161.2	169.3	184.1	207.7	226.4
27.5°	145.3	153.8	170.7	195.7	216.2
30°	129.8	137.9	156.2	183.4	204.9
32.5°	113.9	122.4	142.1	170.7	194.0
35°	98.0	106.9	128.0	158.3	183.4
37.5°	81.8	91.3	113.6	146.3	172.8
40°	65.9	75.1	99.4	134.0	161.9
42.5°	50.4	60.3	86.0	121.7	151.6
45°	36.7	45.8	72.3	110.4	141.4
47.5°	27.5	33.1	59.6	99.8	130.1
50°	24.0	25.0	47.6	88.2	118.1
52.5°	20.8	21.5	37.0	75.5	106.1
55°	18.0	18.7	28.6	64.5	93.4
57.5°	15.2	15.9	22.9	54.0	79.0
60°	12.7	13.4	19.7	43.0	65.6
62.5°	10.6	10.9	17.6	32.8	52.5
65°	8.5	9.2	15.2	24.0	39.8
67.5°	7.1	7.8	12.3	16.6	27.9
70°	6.0	7.8	10.2	11.6	17.3
72.5°	4.9	7.1	8.5	8.1	8.1
75°	4.2	6.7	7.1	6.3	6.3
77.5°	3.5	6.0	5.6	5.3	4.9
80°	2.8	4.9	4.9	4.2	3.9
82.5°	2.5	3.9	3.9	3.9	3.2
85°	2.1	3.5	3.5	3.2	2.5
87.5°	1.4	2.8	3.2	2.8	1.8
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060439  
 CATALOG NUMBER: S124RDRP-S350D935-X4F0-XX-UDD-SVL-S

**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	2.85	4.19	3.21	4.50	4.82	11.94	13.28	12.30	13.59	13.91
	3H	3.90	5.09	4.28	5.42	5.78	12.44	13.63	12.82	13.96	14.32
	4H	4.41	5.52	4.81	5.87	6.25	12.45	13.56	12.86	13.91	14.29
	6H	4.85	5.87	5.27	6.24	6.63	12.45	13.47	12.87	13.84	14.23
	8H	5.04	6.01	5.47	6.40	6.80	12.45	13.41	12.88	13.80	14.21
	12H	5.26	6.18	5.69	6.56	6.99	12.45	13.37	12.88	13.75	14.18
4H	2H	3.94	5.05	4.35	5.40	5.78	11.83	12.94	12.23	13.29	13.67
	3H	5.22	6.13	5.63	6.53	6.93	12.41	13.31	12.82	13.72	14.12
	4H	5.92	6.73	6.35	7.15	7.59	12.45	13.26	12.89	13.68	14.12
	6H	6.54	7.24	7.00	7.69	8.15	12.50	13.20	12.97	13.65	14.12
	8H	6.79	7.44	7.26	7.89	8.36	12.52	13.17	12.99	13.62	14.09
	12H	7.06	7.64	7.55	8.12	8.60	12.56	13.13	13.04	13.62	14.09
8H	4H	6.34	7.00	6.81	7.44	7.91	12.40	13.05	12.87	13.50	13.97
	6H	7.21	7.75	7.71	8.24	8.72	12.49	13.03	13.00	13.52	14.01
	8H	7.62	8.10	8.14	8.62	9.11	12.56	13.04	13.08	13.55	14.04
	12H	8.10	8.52	8.61	9.02	9.59	12.66	13.08	13.17	13.58	14.15
12H	4H	6.39	6.96	6.87	7.45	7.92	12.37	12.95	12.86	13.43	13.91
	6H	7.32	7.80	7.84	8.32	8.81	12.47	12.95	12.99	13.47	13.96
	8H	7.84	8.27	8.36	8.76	9.33	12.58	13.00	13.09	13.50	14.07