

Scaled data based on original data using  
LM-79-2019 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: S124RDR-S350D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
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: S124RDR-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: -

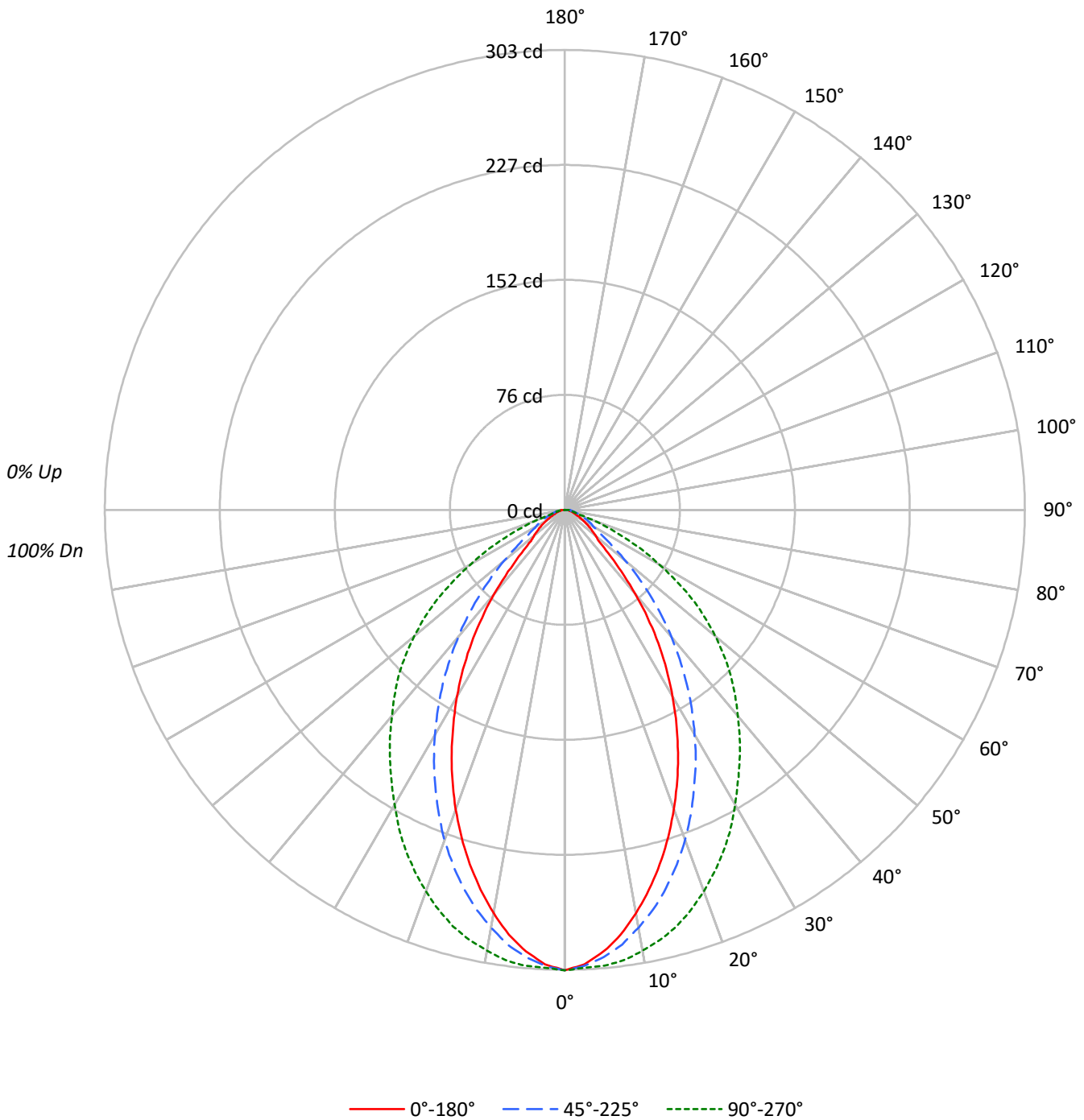
**Summary**

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 (Ain): 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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100	
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89			89	
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79			79	
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70			70	
4	90	80	73	68	88	79	73	67	77	71	67	75	70	66	73	68	65	63			63	
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57			57	
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51			51	
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47			47	
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43			43	
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39			39	
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36			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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**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

(END OF REPORT)