

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: P1060388

Luminaire Tested: S124RDR-S350D830-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060388  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S350D830-X4F0-XX-UDD-WVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

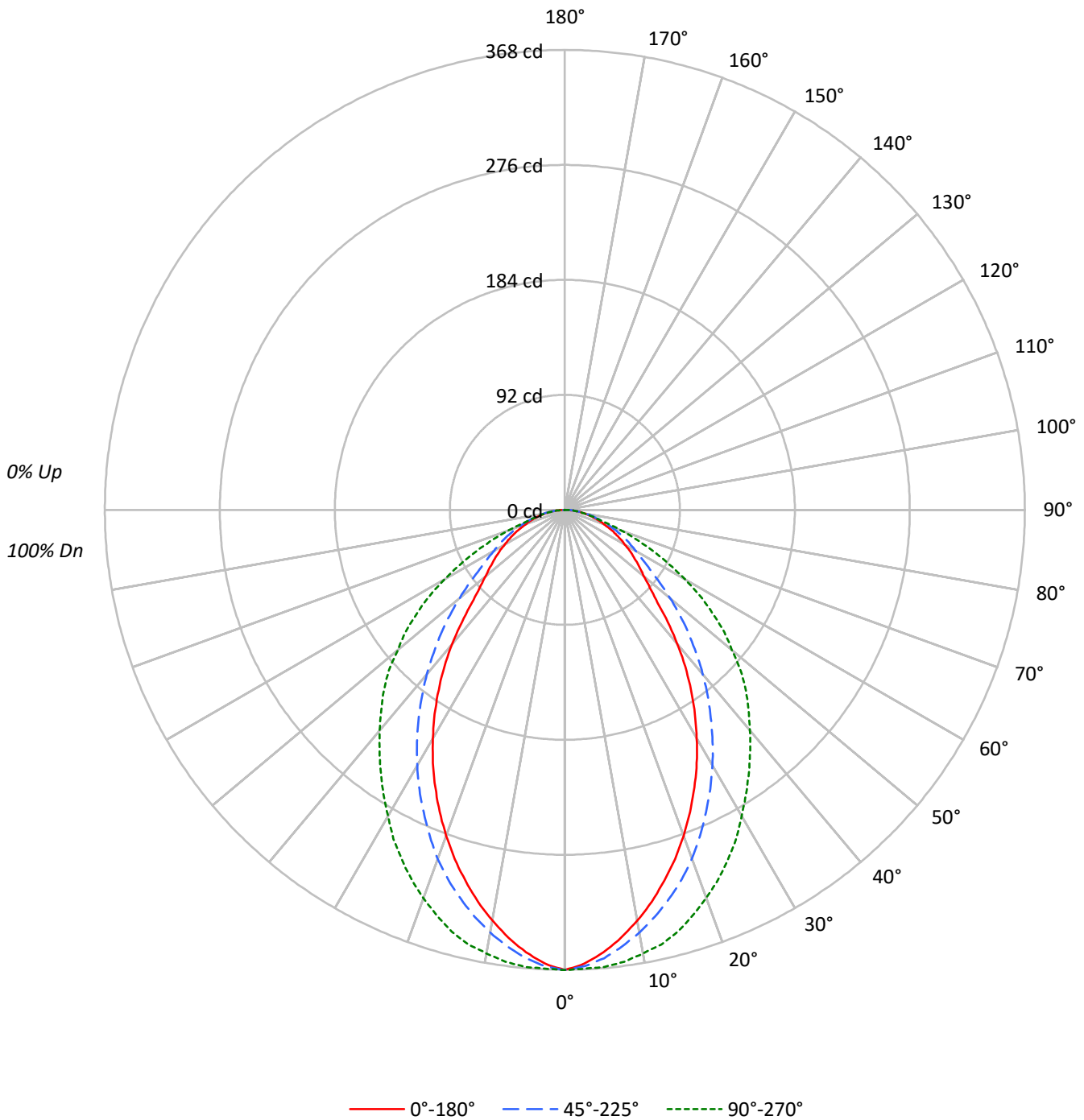
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 670.3 lumens  
Efficiency: N/A  
Efficacy: 53.6 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1  
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																		
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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87																												
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75																												
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65																												
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57																												
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50																												
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45																												
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41																												
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37																												
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34																												
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31																												

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

	0°	45°	90°
0°	3171	3171	3171
5°	3072	3113	3172
10°	2919	3004	3151
15°	2739	2872	3114
20°	2543	2723	3030
25°	2329	2538	2933
30°	2099	2349	2813
35°	1850	2142	2697
40°	1575	1930	2590
45°	1279	1706	2495
50°	1107	1468	2336
55°	1025	1246	2166
60°	958	1123	1901
65°	897	1053	1581
70°	836	972	1196
75°	795	898	862
80°	749	823	729
85°	682	761	573

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2495 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.0	5.1
10°-20°	91.4	13.6
20°-30°	124.8	18.6
30°-40°	130.7	19.5
40°-50°	113.1	16.9
50°-60°	85.0	12.7
60°-70°	54.8	8.2
70°-80°	28.1	4.2
80°-90°	8.4	1.3
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°	250.1	37.3
0°-40°	380.8	56.8
0°-60°	579.0	86.4
0°-90°	670.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	670.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	368	368	368	368	368	
5°	355	361	360	363	367	33
15°	307	315	322	337	349	86
25°	245	254	267	288	309	112
35°	176	186	204	231	257	110
45°	105	116	140	174	205	83
55°	68	71	83	118	144	61
65°	44	45	52	62	78	44
75°	24	27	27	27	26	25
85°	7	8	8	7	6	8
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	368.2	368.2	368.2	368.2	368.2
2.5°	363.5	368.2	365.5	366.2	367.4
5°	355.4	360.8	360.1	362.8	367.0
7.5°	345.4	351.2	352.3	358.5	364.7
10°	333.8	340.4	343.5	352.7	360.4
12.5°	321.1	328.0	333.4	345.0	356.2
15°	307.2	314.9	322.2	336.9	349.3
17.5°	292.9	300.6	310.3	326.5	340.4
20°	277.5	286.0	297.2	314.1	330.7
22.5°	261.6	270.5	282.5	301.0	320.3
25°	245.1	254.3	267.1	287.9	308.7
27.5°	228.5	237.7	252.0	274.0	296.8
30°	211.1	220.7	236.2	260.1	282.9
32.5°	193.7	204.1	220.0	245.4	269.8
35°	176.0	186.0	203.8	230.8	256.6
37.5°	158.2	168.6	187.6	216.5	243.5
40°	140.1	150.9	171.7	202.2	230.4
42.5°	121.9	133.5	155.5	187.6	217.3
45°	105.0	115.8	140.1	174.4	204.9
47.5°	92.2	99.6	124.7	161.7	191.0
50°	82.6	86.4	109.6	147.8	174.4
52.5°	75.3	78.0	95.7	132.8	160.9
55°	68.3	70.6	83.0	118.5	144.3
57.5°	62.1	63.3	73.3	104.6	128.5
60°	55.6	56.7	65.2	89.5	110.4
62.5°	49.8	50.6	58.7	75.3	93.8
65°	44.0	44.8	51.7	62.5	77.6
67.5°	38.6	39.7	45.2	50.9	61.7
70°	33.2	35.5	38.6	41.3	47.5
72.5°	28.6	30.9	32.4	33.2	33.6
75°	23.9	26.6	27.0	26.6	25.9
77.5°	19.3	21.6	21.6	20.8	20.1
80°	15.1	17.0	16.6	15.8	14.7
82.5°	11.2	12.3	12.0	11.2	10.0
85°	6.9	8.1	7.7	7.3	5.8
87.5°	3.5	4.6	4.2	3.9	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)