

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: P1060404

Luminaire Tested: S124RDR-S350D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060404  
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: S124RDR-S350D840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

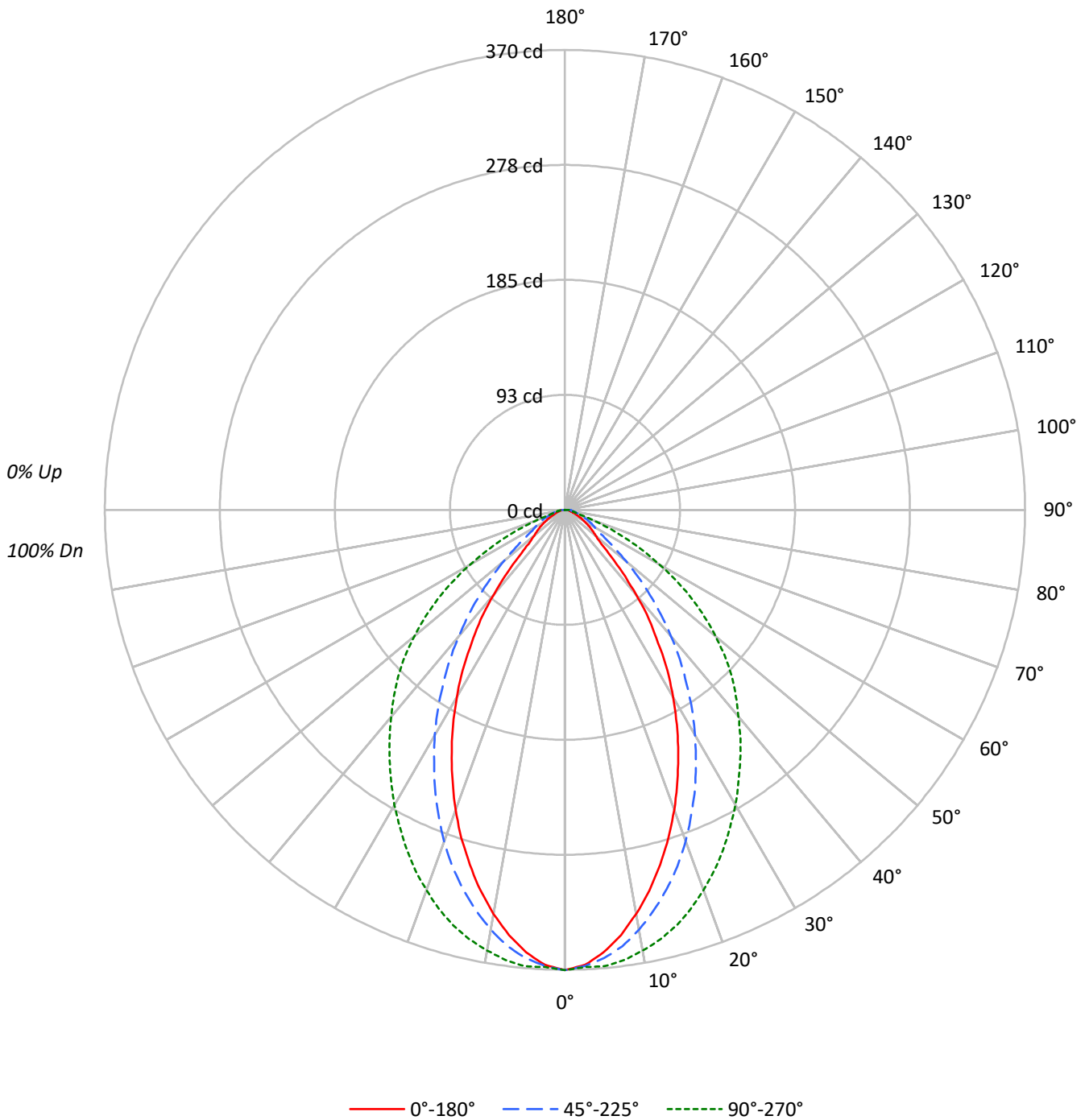
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 524.0 lumens  
Efficiency: N/A  
Efficacy: 41.9 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	104	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	76	94	87	81	76	84	79	75	81	77	73	79	75	72	70			70	
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63			63	
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57			57	
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51			51	
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47			47	
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43			43	
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39			39	
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36			36	

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

	0°	45°	90°
0°	3189	3189	3189
5°	3089	3129	3186
10°	2886	2999	3147
15°	2633	2818	3087
20°	2354	2601	2984
25°	2048	2351	2862
30°	1728	2081	2727
35°	1374	1791	2583
40°	999	1493	2442
45°	604	1179	2313
50°	433	853	2117
55°	366	578	1869
60°	300	470	1510
65°	236	422	1088
70°	199	355	574
75°	180	329	289
80°	183	327	288
85°	247	494	326

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2313 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.1	6.5
10°-20°	89.3	17.0
20°-30°	115.8	22.1
30°-40°	111.5	21.3
40°-50°	83.0	15.8
50°-60°	51.0	9.7
60°-70°	25.1	4.8
70°-80°	9.8	1.9
80°-90°	4.5	0.9
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°	239.3	45.7
0°-40°	350.8	66.9
0°-60°	484.7	92.5
0°-90°	524.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	524.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	370	370	370	370	370	
5°	357	363	362	365	369	33
15°	295	305	316	335	346	83
25°	216	227	247	278	301	99
35°	131	143	170	213	246	82
45°	50	62	97	149	190	41
55°	24	25	38	88	124	22
65°	12	12	21	33	53	12
75°	5	10	10	9	9	6
85°	2	5	5	5	3	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	370.3	370.3	370.3	370.3	370.3
2.5°	366.5	370.7	367.4	367.8	368.2
5°	357.4	362.8	362.0	365.3	368.6
7.5°	345.0	351.2	354.1	360.7	365.3
10°	330.1	337.2	343.0	353.7	359.9
12.5°	313.6	321.9	330.1	344.6	354.1
15°	295.4	304.9	316.1	335.1	346.3
17.5°	276.8	286.3	300.8	322.7	336.7
20°	256.9	267.2	283.8	308.2	325.6
22.5°	236.2	247.4	265.6	293.3	314.0
25°	215.5	227.1	247.4	278.4	301.2
27.5°	194.8	206.0	227.9	262.7	287.5
30°	173.8	185.3	209.3	245.7	274.3
32.5°	153.5	164.2	189.9	229.6	259.8
35°	130.7	143.1	170.4	213.1	245.7
37.5°	111.3	122.5	151.8	196.5	231.7
40°	88.9	101.4	132.8	180.4	217.2
42.5°	68.3	80.7	114.6	164.2	203.5
45°	49.6	61.6	96.8	149.3	189.9
47.5°	37.6	44.7	79.4	134.9	174.6
50°	32.3	34.3	63.7	119.1	158.0
52.5°	28.5	29.4	49.6	103.4	141.5
55°	24.4	25.2	38.5	87.7	124.5
57.5°	20.7	21.1	31.0	72.8	106.3
60°	17.4	17.8	27.3	58.3	87.7
62.5°	14.5	14.9	24.4	45.1	69.9
65°	11.6	12.4	20.7	33.1	53.4
67.5°	9.5	11.2	17.4	23.2	37.2
70°	7.9	10.8	14.1	16.1	22.8
72.5°	6.6	9.9	12.0	11.6	11.2
75°	5.4	9.5	9.9	9.1	8.7
77.5°	4.6	8.3	8.3	7.4	7.0
80°	3.7	6.6	6.6	6.6	5.8
82.5°	3.3	5.4	5.8	5.8	4.6
85°	2.5	4.6	5.0	5.0	3.3
87.5°	1.7	4.1	4.6	4.1	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)