

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: P1060390

Luminaire Tested: S124RDR-S350D835-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060390  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S350D835-X4F0-XX-UDD-BVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

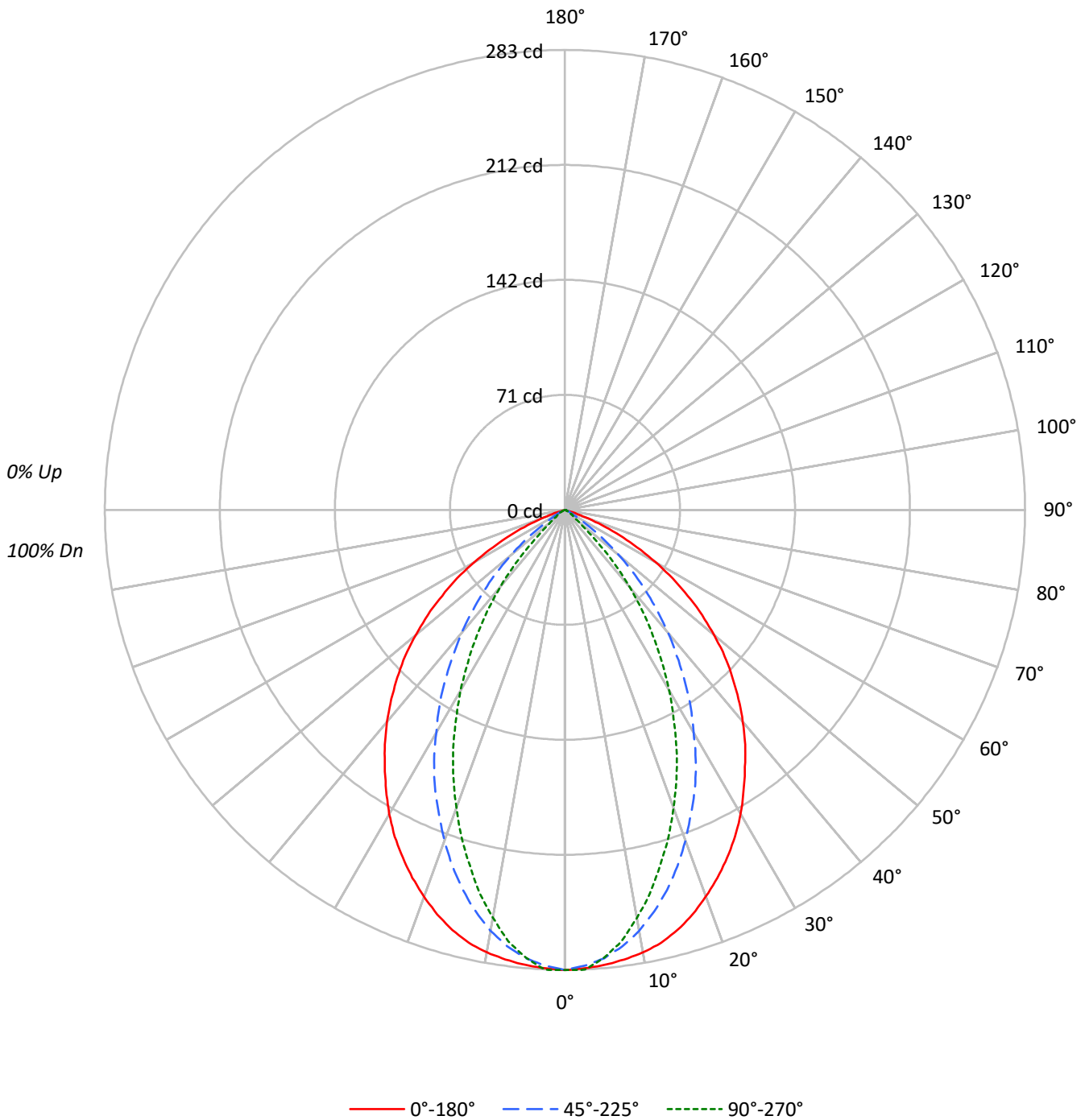
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 369.7 lumens  
Efficiency: N/A  
Efficacy: 29.6 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98  
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				
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91				
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82				
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66				
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55				
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50				
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46				
9	67	56	49	45	66	56	49	44	54	48	44	54	48	44	53	48	44	42				
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39				

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

	0°	45°	90°
0°	2439	2439	2439
5°	2430	2394	2391
10°	2419	2301	2229
15°	2386	2160	2017
20°	2321	1984	1789
25°	2243	1797	1544
30°	2149	1575	1278
35°	2030	1351	993
40°	1913	1108	695
45°	1774	852	343
50°	1601	576	115
55°	1383	294	80
60°	1106	105	57
65°	758	59	24
70°	340	30	20
75°	0	13	13
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1774 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	26.2	7.1
10°-20°	68.5	18.5
20°-30°	88.7	24.0
30°-40°	84.3	22.8
40°-50°	59.7	16.1
50°-60°	30.6	8.3
60°-70°	10.7	2.9
70°-80°	0.9	0.2
80°-90°	0.0	0.0
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°	183.4	49.6
0°-40°	267.8	72.4
0°-60°	358.1	96.9
0°-90°	369.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	369.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	283	283	283	283	283	
5°	281	282	277	277	277	27
15°	268	259	242	231	226	75
25°	236	218	189	169	162	109
35°	193	165	128	104	94	121
45°	146	112	70	40	28	112
55°	92	61	20	6	5	82
65°	37	18	3	2	1	37
75°	0	0	0	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	283.2	283.2	283.2	283.2	283.2
2.5°	282.4	283.2	280.7	282.8	283.2
5°	281.1	281.5	277.0	277.0	276.6
7.5°	279.1	278.3	270.9	268.0	267.6
10°	276.6	273.8	263.1	257.0	254.9
12.5°	272.9	267.6	253.3	244.3	241.8
15°	267.6	259.4	242.3	230.8	226.3
17.5°	261.1	250.4	230.0	216.1	211.6
20°	253.3	239.8	216.5	200.9	195.2
22.5°	245.1	229.6	202.6	185.0	179.2
25°	236.1	217.7	189.1	169.0	162.5
27.5°	226.7	205.0	174.3	153.5	144.9
30°	216.1	192.3	158.4	136.7	128.5
32.5°	204.6	178.4	144.0	120.7	110.9
35°	193.1	164.9	128.5	103.5	94.5
37.5°	182.1	152.2	112.9	86.8	78.2
40°	170.2	138.3	98.6	71.6	61.8
42.5°	158.0	124.8	83.9	56.1	45.4
45°	145.7	112.1	70.0	40.1	28.2
47.5°	133.4	98.6	56.5	25.4	15.1
50°	119.5	85.5	43.0	13.5	8.6
52.5°	106.4	73.2	30.7	7.8	6.5
55°	92.1	60.6	19.6	5.7	5.3
57.5°	78.6	48.3	11.0	4.5	4.1
60°	64.2	37.2	6.1	3.7	3.3
62.5°	49.9	27.0	4.1	2.5	2.0
65°	37.2	18.0	2.9	1.6	1.2
67.5°	24.6	10.2	2.0	0.8	0.8
70°	13.5	4.9	1.2	0.8	0.8
72.5°	4.9	1.6	0.8	0.4	0.4
75°	0.0	0.4	0.4	0.4	0.4
77.5°	0.0	0.0	0.0	0.0	0.4
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)