

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: P1060435

Luminaire Tested: S124RDR-S350D935-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060435  
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-S350D935-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, 90 CRI LEDS  
Ballast/Driver: -

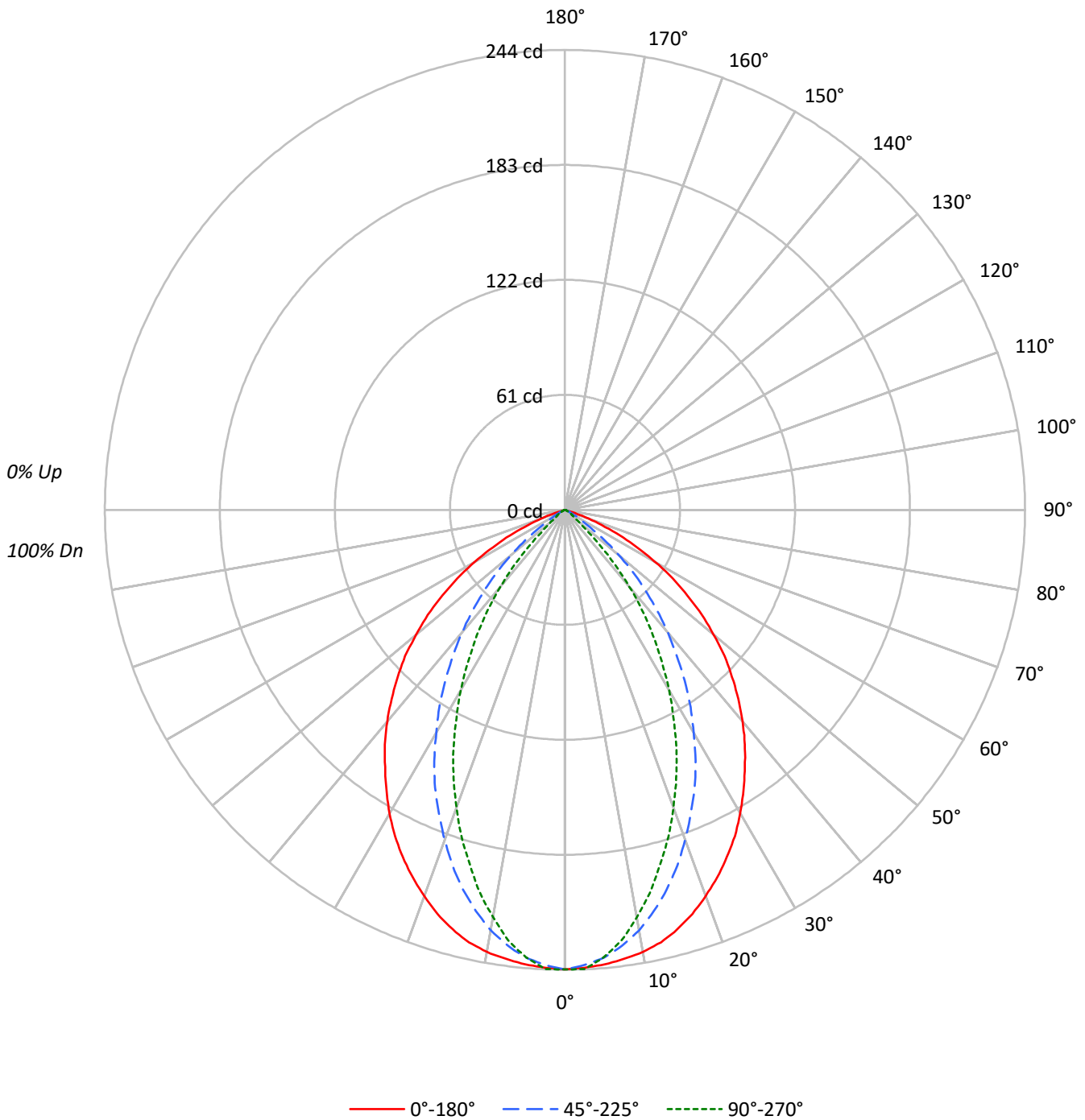
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 318.4 lumens  
Efficiency: N/A  
Efficacy: 25.5 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	44	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°	2099	2099	2099
5°	2093	2062	2059
10°	2083	1981	1919
15°	2054	1860	1737
20°	1999	1708	1540
25°	1932	1547	1329
30°	1849	1356	1100
35°	1748	1163	856
40°	1648	954	598
45°	1527	733	296
50°	1379	496	99
55°	1191	254	69
60°	952	91	48
65°	654	51	22
70°	292	28	18
75°	0	13	13
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1527 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	22.5	7.1
10°-20°	59.0	18.5
20°-30°	76.4	24.0
30°-40°	72.6	22.8
40°-50°	51.4	16.1
50°-60°	26.4	8.3
60°-70°	9.2	2.9
70°-80°	0.8	0.3
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°	157.9	49.6
0°-40°	230.5	72.4
0°-60°	308.3	96.8
0°-90°	318.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	318.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	244	244	244	244	244	
5°	242	242	238	238	238	23
15°	230	223	209	199	195	65
25°	203	187	163	146	140	93
35°	166	142	111	89	81	104
45°	125	96	60	34	24	97
55°	79	52	17	5	5	71
65°	32	16	2	1	1	32
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°	243.8	243.8	243.8	243.8	243.8
2.5°	243.1	243.8	241.7	243.5	243.8
5°	242.1	242.4	238.5	238.5	238.2
7.5°	240.3	239.6	233.2	230.8	230.4
10°	238.2	235.7	226.5	221.3	219.5
12.5°	235.0	230.4	218.1	210.3	208.2
15°	230.4	223.4	208.6	198.7	194.8
17.5°	224.8	215.6	198.0	186.0	182.2
20°	218.1	206.5	186.4	173.0	168.1
22.5°	211.0	197.7	174.4	159.3	154.3
25°	203.3	187.4	162.8	145.5	139.9
27.5°	195.2	176.5	150.1	132.1	124.7
30°	186.0	165.6	136.4	117.7	110.6
32.5°	176.2	153.6	124.0	103.9	95.5
35°	166.3	142.0	110.6	89.1	81.4
37.5°	156.8	131.1	97.2	74.7	67.3
40°	146.6	119.1	84.9	61.7	53.2
42.5°	136.0	107.5	72.2	48.3	39.1
45°	125.4	96.5	60.2	34.5	24.3
47.5°	114.9	84.9	48.6	21.8	13.0
50°	102.9	73.6	37.0	11.6	7.4
52.5°	91.6	63.1	26.4	6.7	5.6
55°	79.3	52.1	16.9	4.9	4.6
57.5°	67.6	41.6	9.5	3.9	3.5
60°	55.3	32.1	5.3	3.2	2.8
62.5°	43.0	23.3	3.5	2.1	1.8
65°	32.1	15.5	2.5	1.4	1.1
67.5°	21.1	8.8	1.8	0.7	0.7
70°	11.6	4.2	1.1	0.7	0.7
72.5°	4.2	1.4	0.7	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)