

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: P1060433

Luminaire Tested: S124RDR-S350D930-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060433  
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-S350D930-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, 90 CRI LEDS  
Ballast/Driver: -

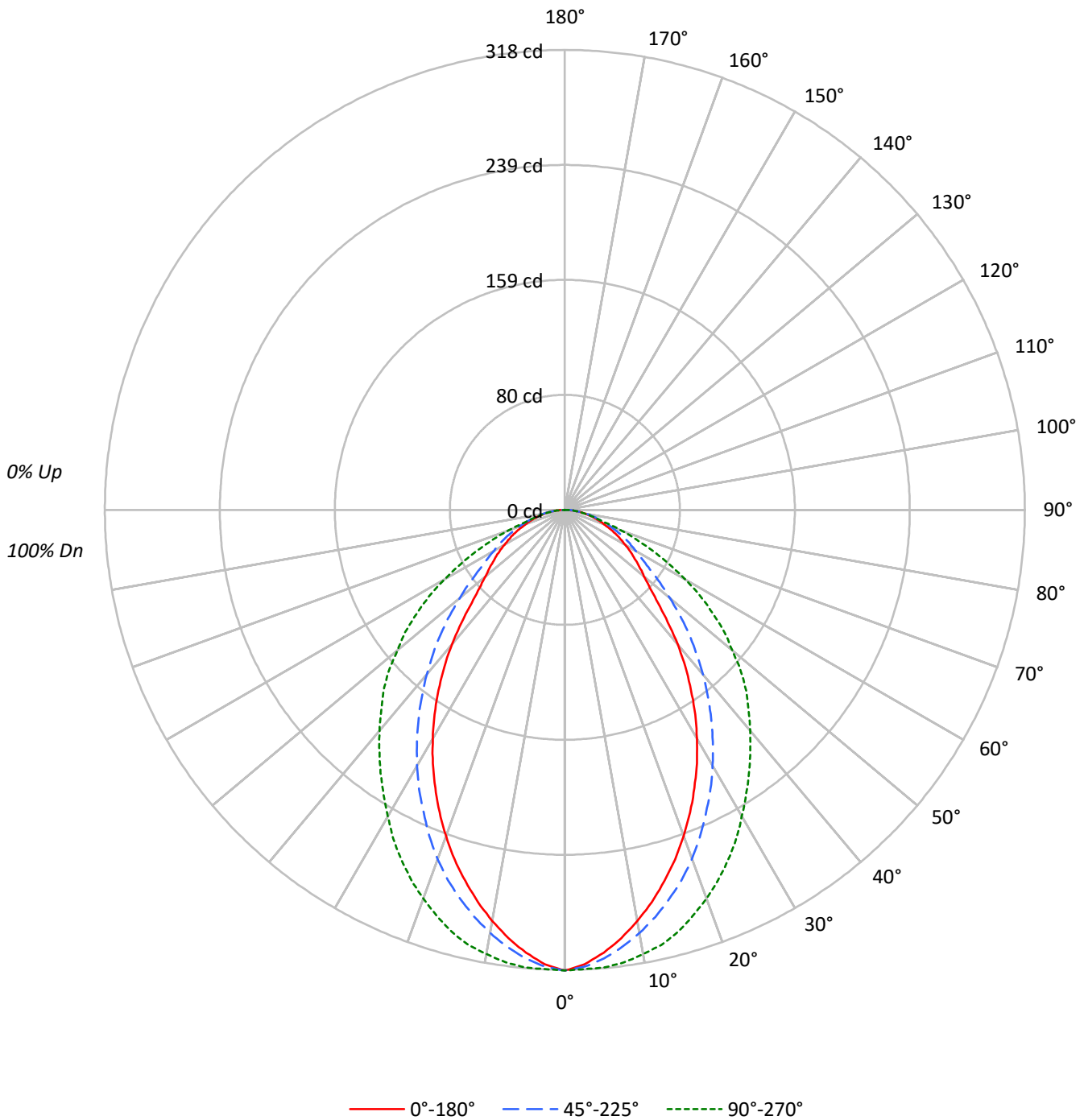
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 579.8 lumens  
Efficiency: N/A  
Efficacy: 46.4 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	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°	2743	2743	2743
5°	2657	2692	2744
10°	2524	2598	2726
15°	2369	2485	2693
20°	2199	2355	2622
25°	2014	2195	2538
30°	1816	2031	2433
35°	1600	1853	2334
40°	1362	1669	2240
45°	1106	1476	2159
50°	957	1270	2022
55°	887	1078	1874
60°	828	971	1645
65°	776	911	1367
70°	723	841	1035
75°	689	779	745
80°	645	714	630
85°	593	662	494

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2159 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.4	5.1
10°-20°	79.0	13.6
20°-30°	107.9	18.6
30°-40°	113.1	19.5
40°-50°	97.9	16.9
50°-60°	73.5	12.7
60°-70°	47.4	8.2
70°-80°	24.3	4.2
80°-90°	7.3	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°	216.3	37.3
0°-40°	329.4	56.8
0°-60°	500.8	86.4
0°-90°	579.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	579.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	318	318	318	318	318	
5°	307	312	311	314	318	29
15°	266	272	279	291	302	74
25°	212	220	231	249	267	97
35°	152	161	176	200	222	95
45°	91	100	121	151	177	72
55°	59	61	72	102	125	53
65°	38	39	45	54	67	38
75°	21	23	23	23	22	22
85°	6	7	7	6	5	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	318.5	318.5	318.5	318.5	318.5
2.5°	314.5	318.5	316.1	316.8	317.8
5°	307.4	312.1	311.4	313.8	317.5
7.5°	298.8	303.8	304.8	310.1	315.5
10°	288.7	294.4	297.1	305.1	311.8
12.5°	277.7	283.7	288.4	298.4	308.1
15°	265.7	272.4	278.7	291.4	302.1
17.5°	253.4	260.0	268.4	282.4	294.4
20°	240.0	247.4	257.0	271.7	286.1
22.5°	226.3	234.0	244.4	260.4	277.1
25°	212.0	220.0	231.0	249.0	267.1
27.5°	197.6	205.6	218.0	237.0	256.7
30°	182.6	190.9	204.3	225.0	244.7
32.5°	167.6	176.6	190.3	212.3	233.3
35°	152.2	160.9	176.3	199.6	222.0
37.5°	136.9	145.9	162.2	187.3	210.6
40°	121.2	130.5	148.5	174.9	199.3
42.5°	105.5	115.5	134.5	162.2	187.9
45°	90.8	100.1	121.2	150.9	177.3
47.5°	79.8	86.1	107.8	139.9	165.2
50°	71.4	74.8	94.8	127.9	150.9
52.5°	65.1	67.4	82.8	114.8	139.2
55°	59.1	61.1	71.8	102.5	124.8
57.5°	53.7	54.7	63.4	90.5	111.2
60°	48.1	49.1	56.4	77.4	95.5
62.5°	43.1	43.7	50.7	65.1	81.1
65°	38.1	38.7	44.7	54.1	67.1
67.5°	33.4	34.4	39.1	44.1	53.4
70°	28.7	30.7	33.4	35.7	41.1
72.5°	24.7	26.7	28.0	28.7	29.0
75°	20.7	23.0	23.4	23.0	22.4
77.5°	16.7	18.7	18.7	18.0	17.4
80°	13.0	14.7	14.4	13.7	12.7
82.5°	9.7	10.7	10.3	9.7	8.7
85°	6.0	7.0	6.7	6.3	5.0
87.5°	3.0	4.0	3.7	3.3	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)