

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: P1060494

Luminaire Tested: S124RDR-S575D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060494  
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-S575D850-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: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

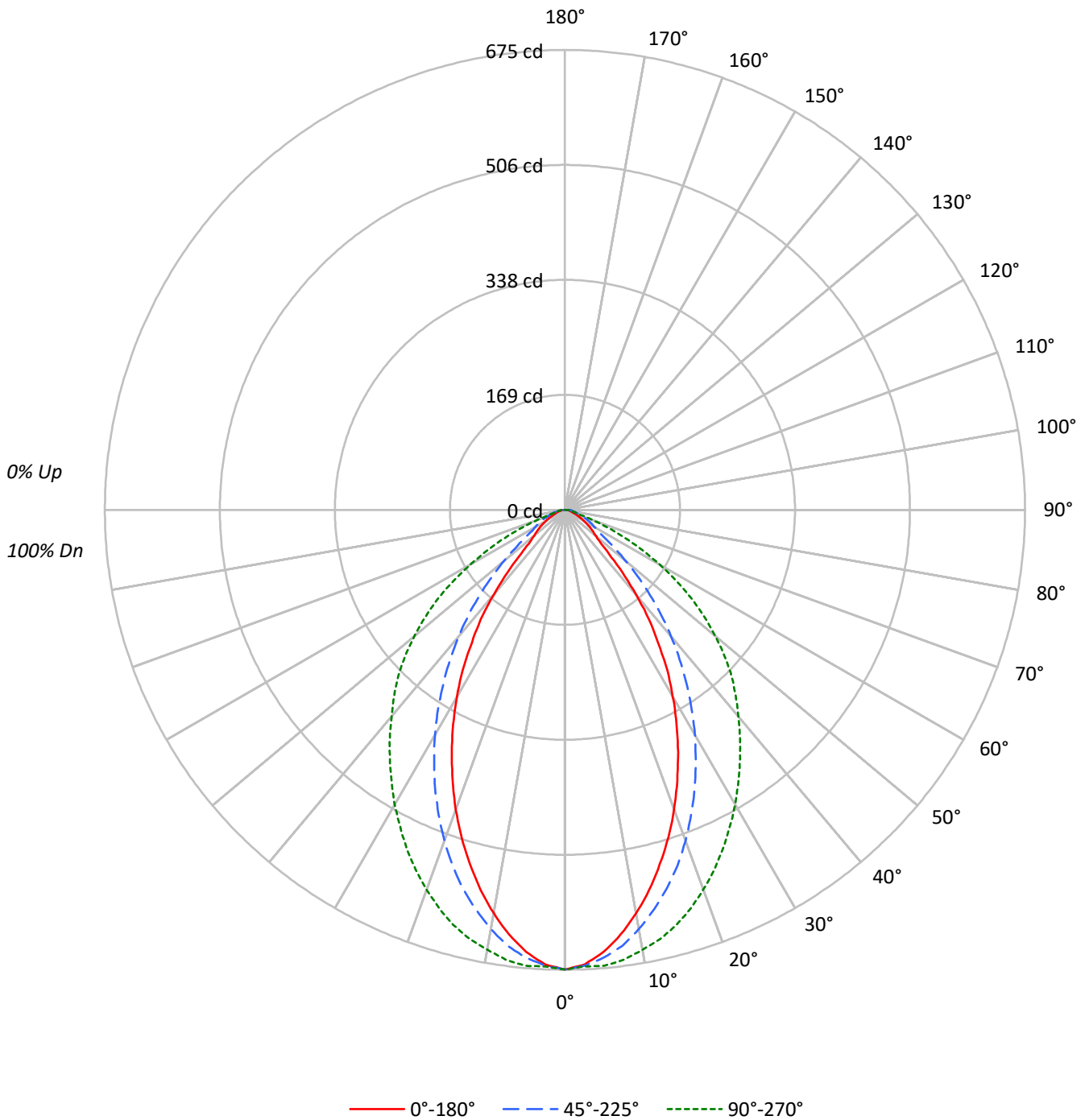
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 954.8 lumens  
Efficiency: N/A  
Efficacy: 48.7 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): 19.6  
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	77	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°	5809	5809	5809
5°	5629	5701	5805
10°	5259	5463	5734
15°	4798	5134	5624
20°	4290	4739	5436
25°	3731	4282	5213
30°	3148	3792	4969
35°	2504	3264	4706
40°	1822	2719	4448
45°	1101	2148	4214
50°	788	1555	3857
55°	668	1052	3406
60°	546	856	2752
65°	430	768	1981
70°	360	645	1045
75°	326	602	526
80°	337	600	526
85°	445	889	593

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4214 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.1	6.5
10°-20°	162.8	17.0
20°-30°	211.1	22.1
30°-40°	203.2	21.3
40°-50°	151.2	15.8
50°-60°	93.0	9.7
60°-70°	45.7	4.8
70°-80°	17.8	1.9
80°-90°	8.1	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°	435.9	45.7
0°-40°	639.1	66.9
0°-60°	883.2	92.5
0°-90°	954.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	954.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	675	675	675	675	675	
5°	651	661	660	666	672	61
15°	538	556	576	610	631	150
25°	393	414	451	507	549	180
35°	238	261	310	388	448	149
45°	90	112	176	272	346	75
55°	44	46	70	160	227	40
65°	21	23	38	60	97	22
75°	10	17	18	17	16	11
85°	4	8	9	9	6	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	674.6	674.6	674.6	674.6	674.6
2.5°	667.8	675.3	669.3	670.1	670.8
5°	651.2	661.0	659.5	665.6	671.6
7.5°	628.6	639.9	645.2	657.3	665.6
10°	601.5	614.3	624.8	644.4	655.8
12.5°	571.3	586.4	601.5	627.9	645.2
15°	538.2	555.5	575.9	610.5	630.9
17.5°	504.3	521.6	548.0	587.9	613.5
20°	468.1	486.9	517.1	561.5	593.2
22.5°	430.4	450.7	483.9	534.4	572.1
25°	392.7	413.8	450.7	507.3	548.7
27.5°	355.0	375.4	415.3	478.6	523.8
30°	316.6	337.7	381.4	447.7	499.7
32.5°	279.6	299.2	346.0	418.3	473.3
35°	238.2	260.8	310.5	388.2	447.7
37.5°	202.8	223.1	276.6	358.0	422.1
40°	162.1	184.7	241.9	328.6	395.7
42.5°	124.4	147.0	208.8	299.2	370.8
45°	90.4	112.3	176.4	272.1	346.0
47.5°	68.6	81.4	144.7	245.7	318.1
50°	58.8	62.6	116.1	217.1	287.9
52.5°	52.0	53.5	90.4	188.4	257.8
55°	44.5	46.0	70.1	159.8	226.9
57.5°	37.7	38.4	56.5	132.7	193.7
60°	31.7	32.4	49.7	106.3	159.8
62.5°	26.4	27.1	44.5	82.2	127.4
65°	21.1	22.6	37.7	60.3	97.2
67.5°	17.3	20.4	31.7	42.2	67.8
70°	14.3	19.6	25.6	29.4	41.5
72.5°	12.1	18.1	21.9	21.1	20.4
75°	9.8	17.3	18.1	16.6	15.8
77.5°	8.3	15.1	15.1	13.6	12.8
80°	6.8	12.1	12.1	12.1	10.6
82.5°	6.0	9.8	10.6	10.6	8.3
85°	4.5	8.3	9.0	9.0	6.0
87.5°	3.0	7.5	8.3	7.5	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)