

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: P1059007

Luminaire Tested: S123RDR-S1000D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059007  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S1000D830-X4F0-XX-UDD-SVL-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

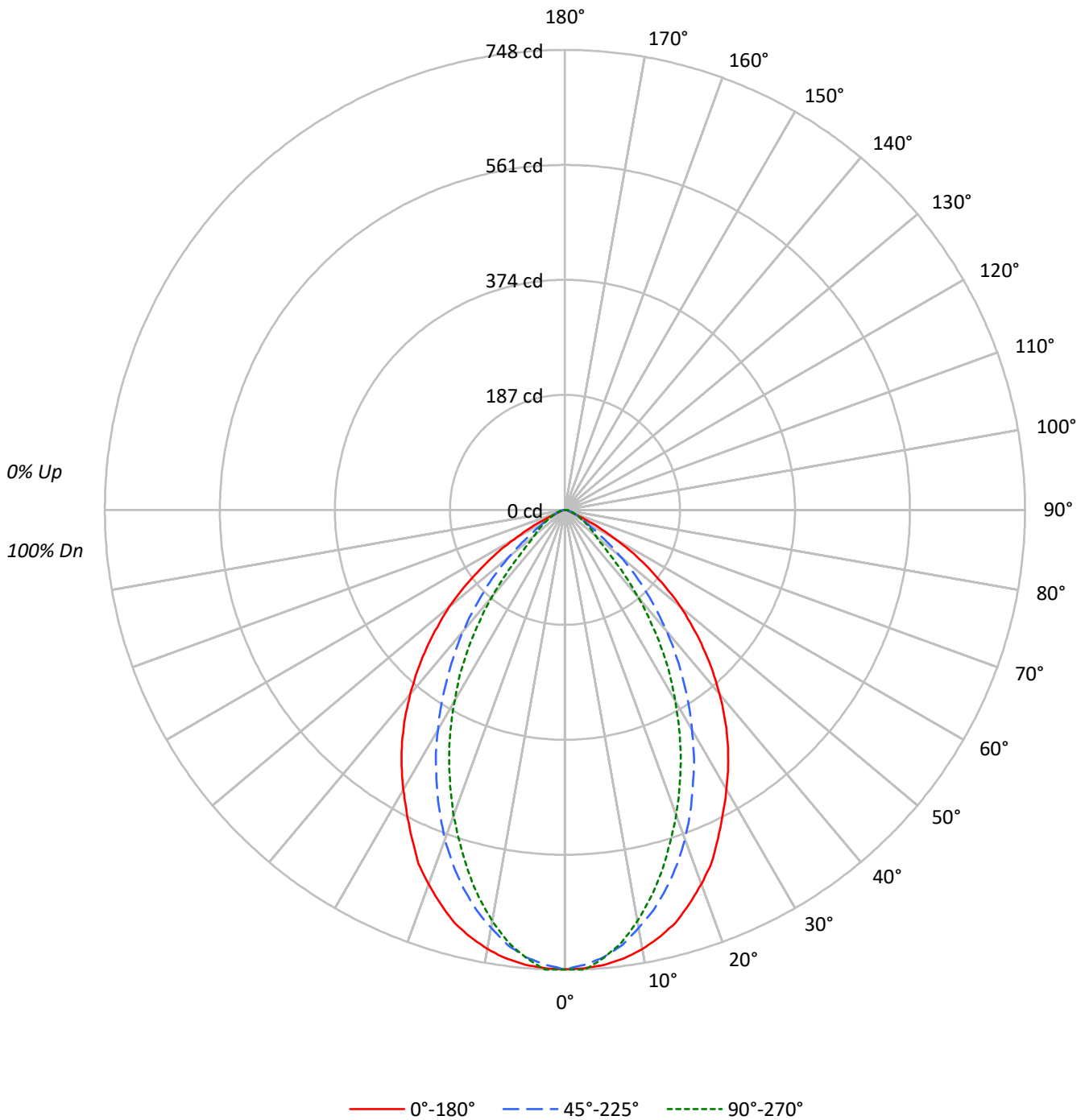
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 964.8 lumens  
Efficiency: N/A  
Efficacy: 27.6 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 35  
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	100	98	99	97	95	95	94	93	91				
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82				
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73				
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66				
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60				
6	81	70	63	58	79	69	62	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	48	46				
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42				
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39				

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

	0°	45°	90°
0°	8775	8775	8775
5°	8754	8605	8618
10°	8648	8234	8097
15°	8451	7749	7397
20°	8095	7126	6607
25°	7629	6385	5771
30°	7121	5600	4862
35°	6617	4776	3913
40°	5994	3936	2837
45°	5282	3054	1710
50°	4479	2134	1162
55°	3411	1280	970
60°	2229	815	761
65°	931	611	611
70°	319	436	477
75°	263	313	367
80°	156	237	311
85°	162	162	310

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5282 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.0	7.2
10°-20°	180.6	18.7
20°-30°	231.6	24.0
30°-40°	217.4	22.5
40°-50°	151.6	15.7
50°-60°	78.4	8.1
60°-70°	26.8	2.8
70°-80°	7.7	0.8
80°-90°	1.6	0.2
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°	481.3	49.9
0°-40°	698.6	72.4
0°-60°	928.7	96.3
0°-90°	964.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	964.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	747	747	747	747	747	
5°	743	742	730	733	731	70
15°	695	678	637	617	608	195
25°	589	552	493	459	445	271
35°	462	405	333	290	273	287
45°	318	260	184	127	103	245
55°	167	125	62	49	47	150
65°	34	29	22	21	22	40
75°	6	6	7	8	8	6
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	747.3	747.3	747.3	747.3	747.3
2.5°	746.1	747.3	740.4	747.3	748.5
5°	742.7	741.5	730.0	733.4	731.1
7.5°	735.7	732.3	713.8	709.1	709.1
10°	725.3	718.4	690.6	682.5	679.1
12.5°	711.4	702.2	666.3	651.3	645.5
15°	695.2	677.9	637.4	616.6	608.5
17.5°	672.1	649.0	605.0	580.7	568.0
20°	647.8	618.9	570.3	541.4	528.7
22.5°	622.4	587.7	532.1	500.9	487.0
25°	588.8	551.8	492.8	459.3	445.4
27.5°	556.4	517.1	454.6	416.5	402.6
30°	525.2	478.9	413.0	376.0	358.6
32.5°	494.0	441.9	373.7	333.2	317.0
35°	461.6	404.9	333.2	290.4	273.0
37.5°	426.9	369.0	295.0	248.7	227.9
40°	391.0	330.8	256.8	204.8	185.1
42.5°	355.1	296.1	218.6	165.4	142.3
45°	318.1	260.3	183.9	127.2	103.0
47.5°	281.1	224.4	150.4	92.5	77.5
50°	245.2	190.9	116.8	68.3	63.6
52.5°	205.9	158.5	87.9	56.7	55.5
55°	166.6	124.9	62.5	48.6	47.4
57.5°	131.9	97.2	45.1	40.5	39.3
60°	94.9	69.4	34.7	33.5	32.4
62.5°	62.5	47.4	27.8	26.6	26.6
65°	33.5	28.9	22.0	20.8	22.0
67.5°	13.9	16.2	16.2	17.4	17.4
70°	9.3	10.4	12.7	13.9	13.9
72.5°	6.9	8.1	9.3	10.4	10.4
75°	5.8	5.8	6.9	8.1	8.1
77.5°	3.5	4.6	4.6	5.8	6.9
80°	2.3	3.5	3.5	4.6	4.6
82.5°	1.2	2.3	2.3	3.5	3.5
85°	1.2	1.2	1.2	1.2	2.3
87.5°	0.0	0.0	0.0	0.0	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)