

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: P1059016

Luminaire Tested: S123RDR-S1000D835-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059016  
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-S1000D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

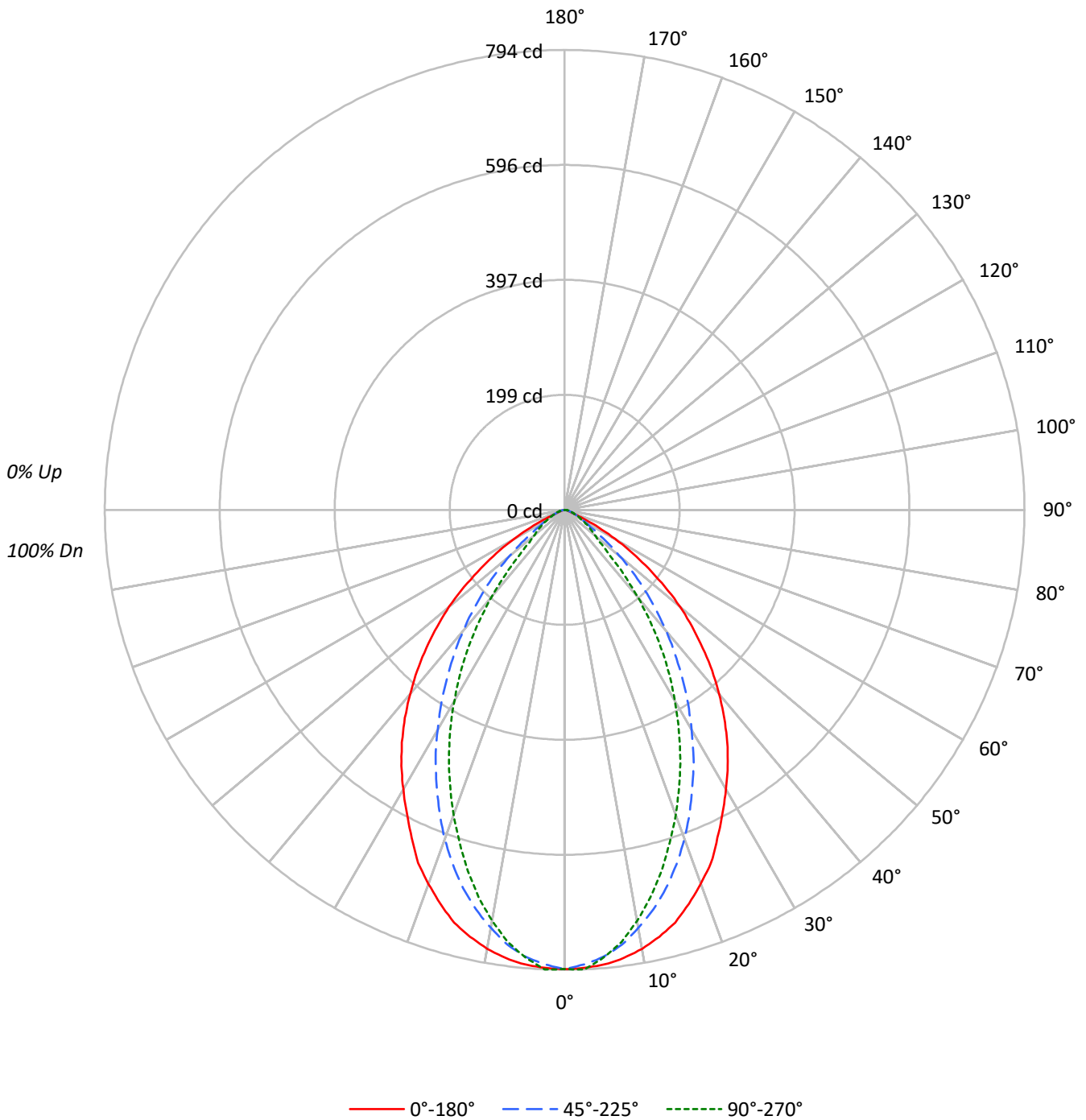
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1023.5 lumens  
Efficiency: N/A  
Efficacy: 29.2 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	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°	9311	9311	9311
5°	9288	9128	9143
10°	9175	8736	8590
15°	8967	8222	7848
20°	8589	7561	7009
25°	8094	6774	6122
30°	7555	5942	5159
35°	7020	5067	4153
40°	6358	4177	3011
45°	5605	3240	1813
50°	4753	2265	1233
55°	3617	1357	1030
60°	2363	864	808
65°	989	647	647
70°	336	463	505
75°	277	336	390
80°	169	250	331
85°	162	162	337

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5605 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.2	7.2
10°-20°	191.6	18.7
20°-30°	245.7	24.0
30°-40°	230.6	22.5
40°-50°	160.9	15.7
50°-60°	83.2	8.1
60°-70°	28.4	2.8
70°-80°	8.1	0.8
80°-90°	1.7	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°	510.6	49.9
0°-40°	741.2	72.4
0°-60°	985.3	96.3
0°-90°	1023.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1023.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	793	793	793	793	793	
5°	788	787	774	778	776	75
15°	738	719	676	654	646	207
25°	625	585	523	487	472	287
35°	490	430	354	308	290	305
45°	338	276	195	135	109	260
55°	177	133	66	52	50	159
65°	36	31	23	22	23	42
75°	6	6	7	9	9	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°	792.9	792.9	792.9	792.9	792.9
2.5°	791.6	792.9	785.5	792.9	794.1
5°	788.0	786.7	774.4	778.1	775.7
7.5°	780.6	776.9	757.3	752.4	752.4
10°	769.5	762.2	732.7	724.1	720.4
12.5°	754.8	745.0	706.9	691.0	684.9
15°	737.6	719.2	676.3	654.2	645.6
17.5°	713.1	688.5	641.9	616.1	602.6
20°	687.3	656.6	605.1	574.4	560.9
22.5°	660.3	623.5	564.6	531.4	516.7
25°	624.7	585.4	522.8	487.3	472.5
27.5°	590.3	548.6	482.3	441.8	427.1
30°	557.2	508.1	438.2	398.9	380.5
32.5°	524.1	468.8	396.4	353.5	336.3
35°	489.7	429.6	353.5	308.1	289.7
37.5°	452.9	391.5	313.0	263.9	241.8
40°	414.8	351.0	272.5	217.2	196.4
42.5°	376.8	314.2	232.0	175.5	151.0
45°	337.5	276.2	195.1	135.0	109.2
47.5°	298.2	238.1	159.6	98.2	82.2
50°	260.2	202.5	124.0	72.4	67.5
52.5°	218.5	168.1	93.3	60.1	58.9
55°	176.7	132.6	66.3	51.5	50.3
57.5°	139.9	103.1	47.9	43.0	41.7
60°	100.6	73.6	36.8	35.6	34.4
62.5°	66.3	50.3	29.5	28.2	28.2
65°	35.6	30.7	23.3	22.1	23.3
67.5°	14.7	17.2	17.2	18.4	18.4
70°	9.8	11.0	13.5	14.7	14.7
72.5°	7.4	8.6	9.8	11.0	11.0
75°	6.1	6.1	7.4	8.6	8.6
77.5°	3.7	4.9	4.9	6.1	7.4
80°	2.5	3.7	3.7	4.9	4.9
82.5°	1.2	2.5	2.5	3.7	3.7
85°	1.2	1.2	1.2	1.2	2.5
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)