

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059061

Luminaire Tested: S123RDRP-S1000D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1059061  
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: S123RDRP-S1000D935-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, 90 CRI LEDS  
Ballast/Driver: -

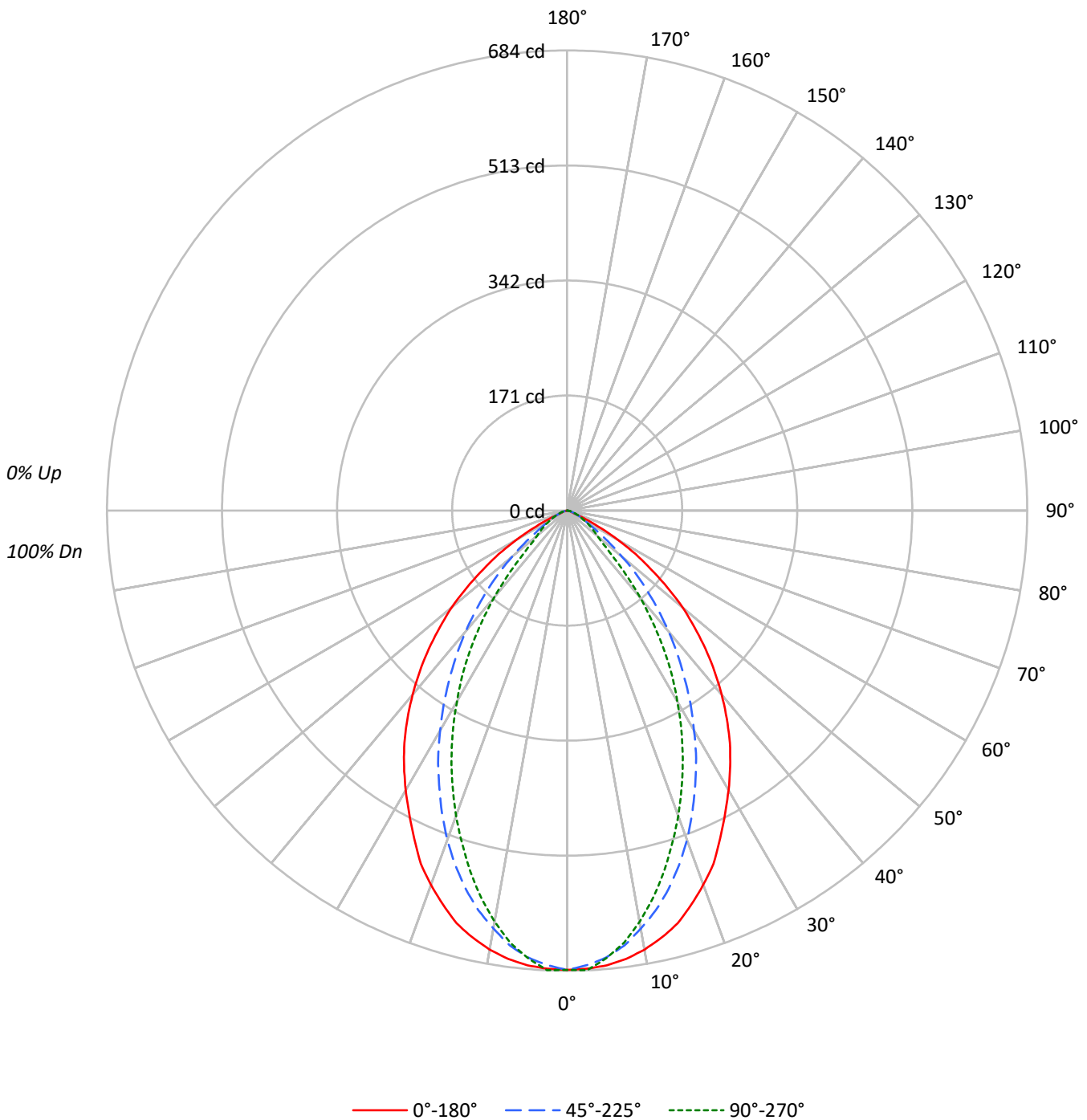
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 881.3 lumens  
Efficiency: N/A  
Efficacy: 25.2 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 (A<sub>in</sub>): 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	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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50					50			
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	48	46					46			
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42					42			
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39					39			

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

	0°	45°	90°
0°	8017	8017	8017
5°	7996	7860	7873
10°	7901	7523	7396
15°	7721	7079	6757
20°	7395	6510	6034
25°	6969	5833	5271
30°	6506	5116	4442
35°	6044	4362	3575
40°	5475	3596	2592
45°	4826	2790	1561
50°	4092	1949	1061
55°	3116	1169	886
60°	2036	744	695
65°	850	558	558
70°	292	398	436
75°	240	286	336
80°	142	216	284
85°	148	148	283

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4826 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.0	7.2
10°-20°	165.0	18.7
20°-30°	211.6	24.0
30°-40°	198.6	22.5
40°-50°	138.5	15.7
50°-60°	71.6	8.1
60°-70°	24.5	2.8
70°-80°	7.0	0.8
80°-90°	1.5	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°	439.6	49.9
0°-40°	638.2	72.4
0°-60°	848.3	96.3
0°-90°	881.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	881.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	683	683	683	683	683	
5°	678	677	667	670	668	64
15°	635	619	582	563	556	178
25°	538	504	450	420	407	247
35°	422	370	304	265	249	263
45°	291	238	168	116	94	224
55°	152	114	57	44	43	137
65°	31	26	20	19	20	36
75°	5	5	6	7	7	5
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°	682.7	682.7	682.7	682.7	682.7
2.5°	681.6	682.7	676.3	682.7	683.7
5°	678.4	677.4	666.8	670.0	667.9
7.5°	672.1	668.9	652.0	647.8	647.8
10°	662.6	656.2	630.9	623.5	620.3
12.5°	649.9	641.4	608.7	594.9	589.7
15°	635.1	619.2	582.3	563.2	555.8
17.5°	614.0	592.8	552.7	530.5	518.9
20°	591.8	565.4	521.0	494.6	482.9
22.5°	568.5	536.8	486.1	457.6	444.9
25°	537.9	504.1	450.2	419.5	406.8
27.5°	508.3	472.4	415.3	380.4	367.7
30°	479.8	437.5	377.3	343.4	327.6
32.5°	451.2	403.7	341.3	304.3	289.5
35°	421.6	369.9	304.3	265.2	249.4
37.5°	389.9	337.1	269.5	227.2	208.2
40°	357.2	302.2	234.6	187.0	169.1
42.5°	324.4	270.5	199.7	151.1	130.0
45°	290.6	237.8	168.0	116.2	94.0
47.5°	256.8	205.0	137.4	84.5	70.8
50°	224.0	174.4	106.7	62.3	58.1
52.5°	188.1	144.8	80.3	51.8	50.7
55°	152.2	114.1	57.1	44.4	43.3
57.5°	120.5	88.8	41.2	37.0	35.9
60°	86.7	63.4	31.7	30.6	29.6
62.5°	57.1	43.3	25.4	24.3	24.3
65°	30.6	26.4	20.1	19.0	20.1
67.5°	12.7	14.8	14.8	15.9	15.9
70°	8.5	9.5	11.6	12.7	12.7
72.5°	6.3	7.4	8.5	9.5	9.5
75°	5.3	5.3	6.3	7.4	7.4
77.5°	3.2	4.2	4.2	5.3	6.3
80°	2.1	3.2	3.2	4.2	4.2
82.5°	1.1	2.1	2.1	3.2	3.2
85°	1.1	1.1	1.1	1.1	2.1
87.5°	0.0	0.0	0.0	0.0	1.1
90°	0.0	0.0	0.0	0.0	0.0

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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	13.57	14.83	13.93	15.14	15.45	7.07	8.33	7.44	8.64	8.96
	3H	13.52	14.63	13.90	14.96	15.32	7.85	8.96	8.23	9.29	9.65
	4H	13.47	14.50	13.87	14.85	15.23	8.05	9.08	8.45	9.43	9.82
	6H	13.40	14.34	13.81	14.71	15.11	8.19	9.14	8.61	9.51	9.90
	8H	13.35	14.25	13.79	14.64	15.04	8.23	9.12	8.66	9.51	9.92
	12H	13.31	14.16	13.74	14.55	14.98	8.25	9.10	8.68	9.48	9.91
4H	2H	13.41	14.44	13.82	14.79	15.18	7.33	8.36	7.73	8.71	9.09
	3H	13.40	14.23	13.81	14.64	15.04	8.24	9.07	8.65	9.48	9.88
	4H	13.35	14.09	13.78	14.51	14.95	8.51	9.25	8.95	9.67	10.12
	6H	13.29	13.93	13.75	14.38	14.84	8.72	9.36	9.19	9.81	10.28
	8H	13.24	13.83	13.71	14.28	14.75	8.79	9.38	9.26	9.83	10.30
	12H	13.19	13.72	13.68	14.20	14.68	8.83	9.35	9.31	9.83	10.31
8H	4H	13.23	13.83	13.70	14.28	14.75	8.49	9.09	8.96	9.54	10.01
	6H	13.17	13.65	13.68	14.15	14.64	8.76	9.24	9.26	9.74	10.23
	8H	13.12	13.56	13.64	14.07	14.57	8.87	9.30	9.39	9.82	10.32
	12H	13.08	13.47	13.60	13.96	14.54	8.94	9.33	9.46	9.83	10.40
12H	4H	13.19	13.71	13.68	14.20	14.67	8.46	8.98	8.94	9.46	9.94
	6H	13.11	13.55	13.64	14.07	14.56	8.72	9.16	9.25	9.67	10.17
	8H	13.08	13.47	13.60	13.96	14.54	8.86	9.25	9.38	9.74	10.32