

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: P1059013

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059013  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S1000D835-X4F0-XX-UDD-BVL-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

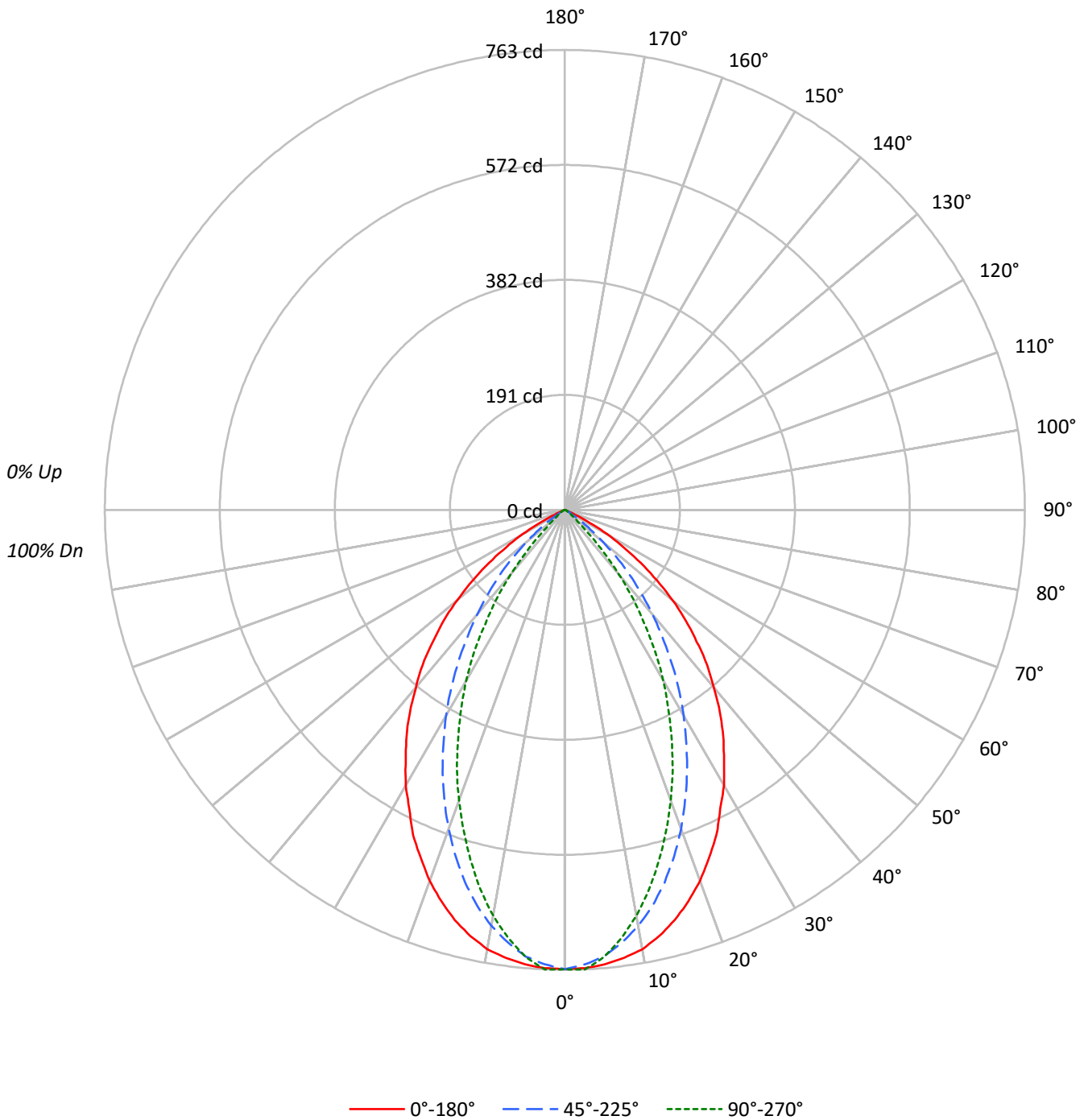
Lumens per Lamp: N/A  
Luminaire Lumens: 869.7 lumens  
Efficiency: N/A  
Efficacy: 24.8 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct

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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

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

	0°	45°	90°
0°	8949	8949	8949
5°	8925	8766	8780
10°	8823	8356	8151
15°	8563	7773	7326
20°	8189	7039	6410
25°	7712	6218	5422
30°	7155	5341	4426
35°	6563	4415	3290
40°	5888	3461	2108
45°	5136	2527	877
50°	4260	1502	336
55°	3140	628	252
60°	1902	230	143
65°	511	136	69
70°	0	41	41
75°	0	0	54
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5136 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.2	8.1
10°-20°	181.1	20.8
20°-30°	225.7	25.9
30°-40°	201.8	23.2
40°-50°	127.3	14.6
50°-60°	53.3	6.1
60°-70°	10.0	1.2
70°-80°	0.3	0.0
80°-90°	0.0	0.0
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°	476.9	54.8
0°-40°	678.7	78.0
0°-60°	859.3	98.8
0°-90°	869.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	869.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	762	762	762	762	762	
5°	757	756	744	746	745	72
15°	704	687	639	612	603	198
25°	595	547	480	438	418	272
35°	458	392	308	253	230	285
45°	309	240	152	81	53	238
55°	153	106	31	12	12	137
65°	18	14	5	2	2	26
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	762.1	762.1	762.1	762.1	762.1
2.5°	760.9	762.1	754.8	762.1	763.3
5°	757.2	756.0	743.7	746.2	744.9
7.5°	749.8	746.2	724.1	719.2	716.7
10°	740.0	730.2	700.8	688.5	683.6
12.5°	724.1	710.6	672.5	652.9	645.5
15°	704.4	687.3	639.4	612.4	602.6
17.5°	681.1	656.6	602.6	573.1	558.4
20°	655.3	621.0	563.3	527.7	513.0
22.5°	624.7	586.6	521.6	483.5	467.6
25°	595.2	547.4	479.9	438.1	418.5
27.5°	558.4	508.1	435.7	392.7	371.9
30°	527.7	470.0	393.9	346.1	326.4
32.5°	490.9	430.8	351.0	298.2	279.8
35°	457.8	391.5	308.0	252.8	229.5
37.5°	422.2	353.4	265.1	207.4	185.3
40°	384.1	315.4	225.8	162.0	137.5
42.5°	349.8	277.4	186.5	120.3	95.7
45°	309.3	240.5	152.2	81.0	52.8
47.5°	272.4	206.2	115.4	45.4	28.2
50°	233.2	170.6	82.2	23.3	18.4
52.5°	192.7	136.2	54.0	16.0	14.7
55°	153.4	105.5	30.7	12.3	12.3
57.5°	115.4	76.1	16.0	9.8	8.6
60°	81.0	50.3	9.8	7.4	6.1
62.5°	46.6	29.5	7.4	4.9	4.9
65°	18.4	13.5	4.9	2.5	2.5
67.5°	1.2	3.7	2.5	1.2	1.2
70°	0.0	0.0	1.2	1.2	1.2
72.5°	0.0	0.0	1.2	1.2	1.2
75°	0.0	0.0	0.0	0.0	1.2
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)