

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: P1059055

Luminaire Tested: S123RDR-S1000D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059055  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-28)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S123RDR-S1000D930-X4F0-XX-UDD-WVL-B  
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

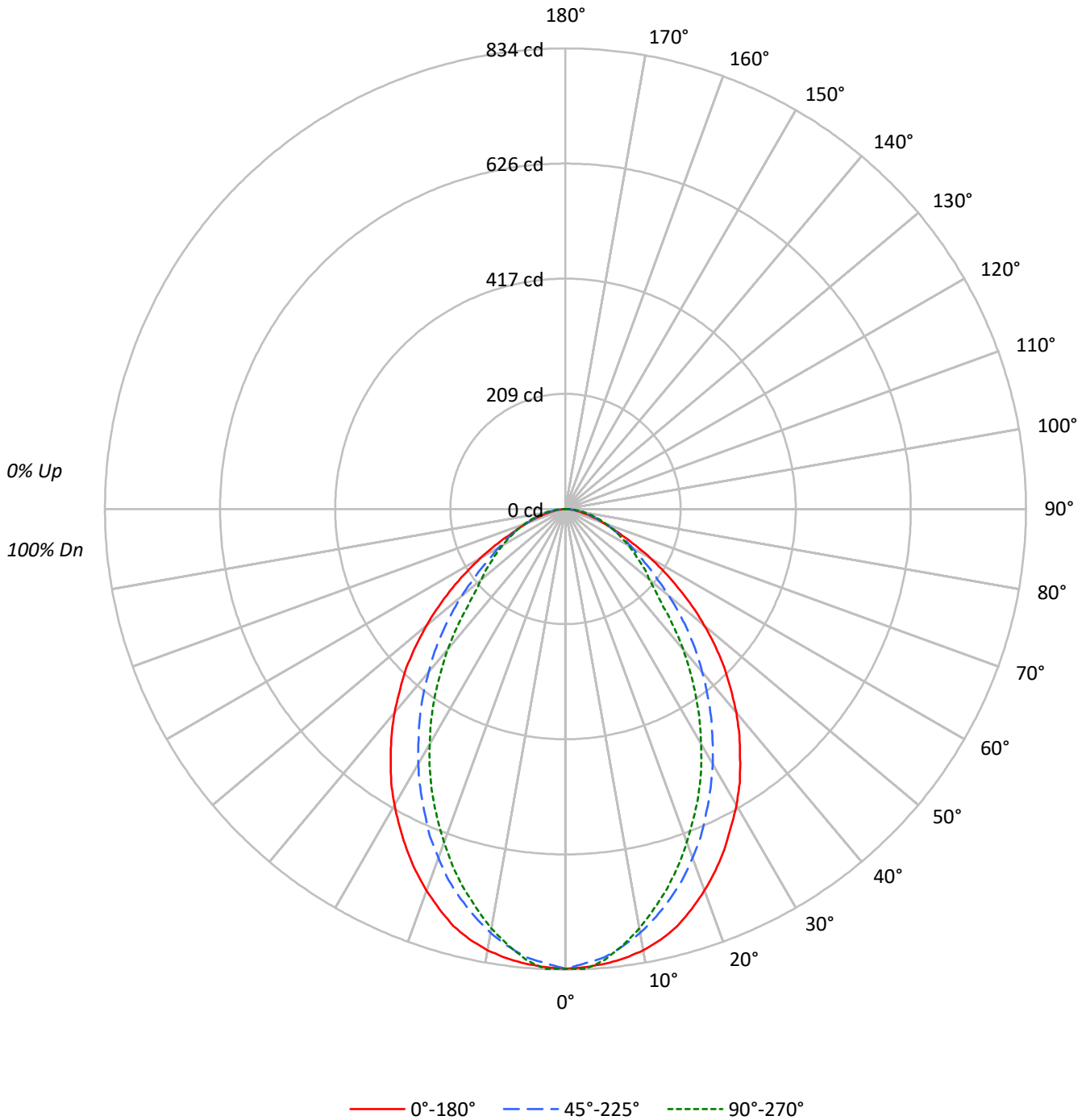
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1456.1 lumens  
Efficiency: N/A  
Efficacy: 41.6 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 0.95 / 1.09  
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									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	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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88																												
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76																												
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66																												
4	87	77	69	63	85	76	68	63	73	67	62	71	66	61	69	64	60	58																												
5	81	70	62	56	79	69	61	56	67	60	55	65	59	54	63	58	54	52																												
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	47																												
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42																												
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38																												
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	41	37	35																												
10	58	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32																												

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

	0°	45°	90°
0°	9776	9776	9776
5°	9742	9601	9660
10°	9676	9294	9199
15°	9513	8893	8648
20°	9191	8402	8027
25°	8815	7831	7390
30°	8398	7231	6662
35°	7903	6584	5896
40°	7378	5905	5077
45°	6764	5218	4172
50°	5996	4479	3619
55°	5102	3748	3319
60°	4159	3267	3079
65°	3170	2892	2865
70°	2472	2575	2678
75°	1996	2314	2495
80°	1488	1893	2299
85°	808	1213	2021

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6764 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.3	5.3
10°-20°	207.9	14.3
20°-30°	282.7	19.4
30°-40°	293.0	20.1
40°-50°	247.1	17.0
50°-60°	175.4	12.0
60°-70°	107.2	7.4
70°-80°	53.3	3.7
80°-90°	12.1	0.8
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°	567.9	39.0
0°-40°	860.9	59.1
0°-60°	1283.4	88.1
0°-90°	1456.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1456.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	832	832	832	832	832	
5°	826	826	814	820	820	78
15°	782	768	732	718	711	220
25°	680	650	604	582	570	313
35°	551	509	459	427	411	345
45°	407	364	314	271	251	313
55°	249	223	183	167	162	224
65°	114	110	104	104	103	116
75°	44	47	51	53	55	47
85°	6	7	9	13	15	8
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	832.5	832.5	832.5	832.5	832.5
2.5°	830.5	831.5	823.5	832.5	833.5
5°	826.5	826.5	814.5	819.5	819.5
7.5°	820.5	818.5	798.5	798.5	796.5
10°	811.5	805.5	779.5	774.5	771.5
12.5°	798.5	788.5	756.5	747.5	741.5
15°	782.5	767.5	731.5	718.5	711.4
17.5°	759.5	744.5	704.4	686.4	678.4
20°	735.5	713.4	672.4	654.4	642.4
22.5°	709.4	681.4	641.4	619.4	606.4
25°	680.4	650.4	604.4	582.4	570.4
27.5°	649.4	616.4	569.4	544.3	532.3
30°	619.4	581.4	533.3	505.3	491.3
32.5°	587.4	544.3	495.3	466.3	452.3
35°	551.3	509.3	459.3	427.3	411.3
37.5°	517.3	474.3	422.3	388.2	370.2
40°	481.3	438.3	385.2	350.2	331.2
42.5°	443.3	402.3	350.2	309.2	291.2
45°	407.3	364.2	314.2	271.2	251.2
47.5°	368.2	328.2	279.2	235.1	221.1
50°	328.2	291.2	245.2	205.1	198.1
52.5°	289.2	258.2	211.1	185.1	182.1
55°	249.2	223.1	183.1	167.1	162.1
57.5°	212.1	193.1	157.1	149.1	147.1
60°	177.1	161.1	139.1	134.1	131.1
62.5°	143.1	134.1	121.1	119.1	117.1
65°	114.1	110.1	104.1	104.1	103.1
67.5°	90.1	90.1	89.1	91.1	90.1
70°	72.0	73.0	75.0	77.0	78.0
72.5°	57.0	60.0	62.0	65.0	66.0
75°	44.0	47.0	51.0	53.0	55.0
77.5°	32.0	35.0	39.0	42.0	44.0
80°	22.0	24.0	28.0	32.0	34.0
82.5°	14.0	15.0	18.0	22.0	24.0
85°	6.0	7.0	9.0	13.0	15.0
87.5°	0.0	0.0	1.0	4.0	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)