

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: P1059008

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059008  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)  
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-S  
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

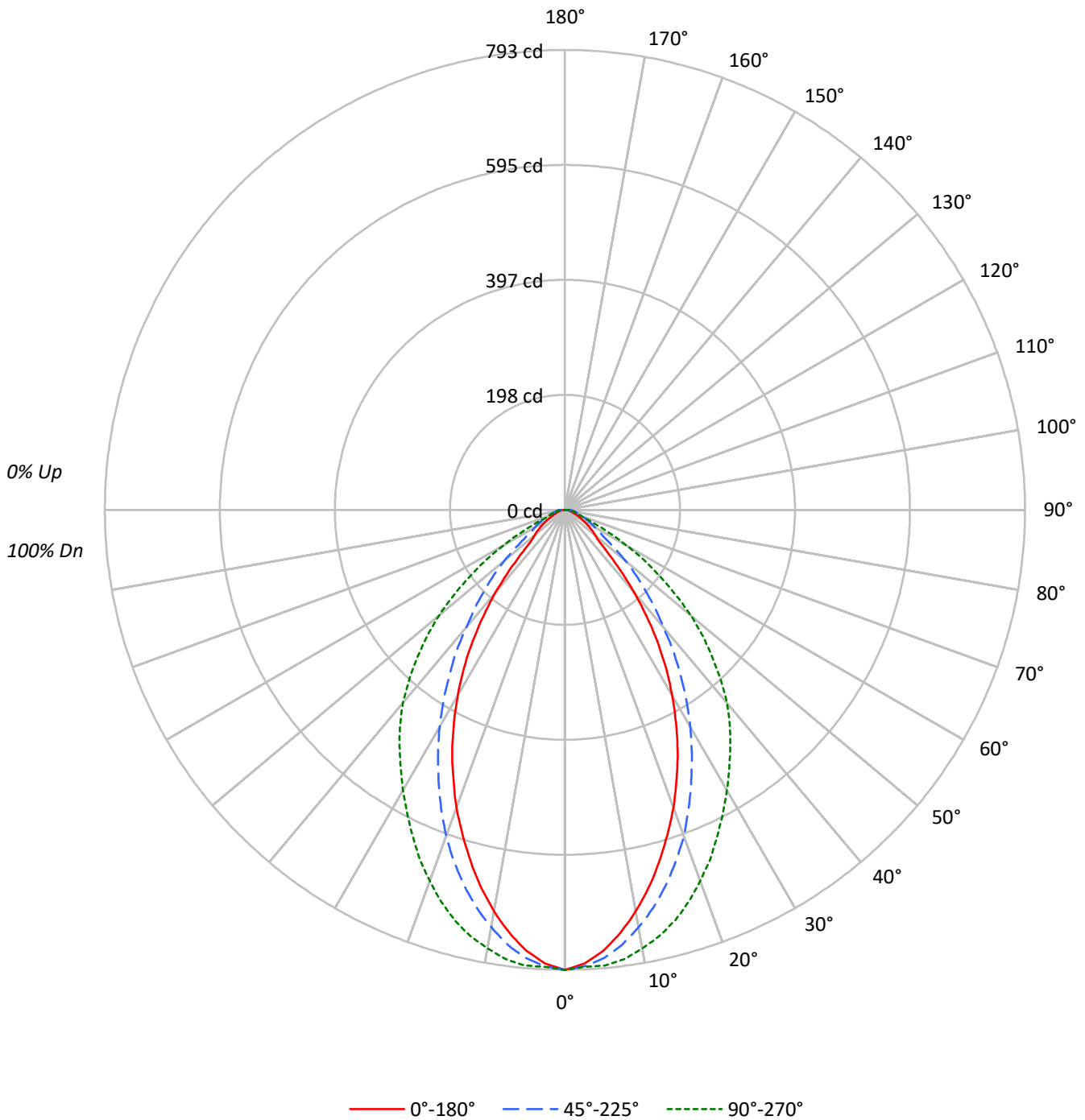
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1062.4 lumens  
Efficiency: N/A  
Efficacy: 30.4 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.07 / 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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37

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

	0°	45°	90°
0°	9315	9315	9315
5°	8996	9146	9295
10°	8381	8713	9155
15°	7631	8151	8911
20°	6830	7481	8509
25°	5956	6676	8042
30°	5009	5857	7569
35°	3984	4964	7122
40°	2840	4047	6657
45°	1692	3250	5962
50°	1248	2475	5163
55°	1044	1683	4101
60°	843	1388	2884
65°	675	1189	1545
70°	556	1033	954
75°	526	998	894
80°	548	1095	859
85°	781	1563	1091

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5962 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.9	6.9
10°-20°	189.3	17.8
20°-30°	241.5	22.7
30°-40°	227.2	21.4
40°-50°	163.2	15.4
50°-60°	93.6	8.8
60°-70°	42.8	4.0
70°-80°	21.5	2.0
80°-90°	10.5	1.0
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°	503.6	47.4
0°-40°	730.8	68.8
0°-60°	987.6	93.0
0°-90°	1062.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1062.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	793	793	793	793	793	
5°	763	778	776	782	789	71
15°	628	650	670	706	733	175
25°	460	481	515	571	621	210
35°	278	298	346	425	497	172
45°	102	124	196	288	359	85
55°	51	52	82	152	200	46
65°	24	34	43	48	56	24
75°	12	23	22	20	20	13
85°	6	12	12	10	8	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	793.3	793.3	793.3	793.3	793.3
2.5°	782.8	794.4	787.5	787.5	788.6
5°	763.2	778.2	775.9	781.7	788.6
7.5°	735.4	751.6	756.2	770.1	781.7
10°	702.9	721.5	730.7	752.7	767.8
12.5°	667.0	687.9	702.9	730.7	752.7
15°	627.7	649.7	670.5	706.4	733.0
17.5°	587.1	609.1	635.8	677.5	708.7
20°	546.6	568.6	598.7	642.7	680.9
22.5°	502.6	524.6	557.0	606.8	653.1
25°	459.7	480.6	515.3	570.9	620.7
27.5°	414.6	435.4	473.6	533.9	589.4
30°	369.4	390.3	432.0	496.8	558.2
32.5°	324.3	343.9	389.1	460.9	526.9
35°	277.9	297.6	346.3	425.0	496.8
37.5°	230.5	250.1	306.9	392.6	466.7
40°	185.3	207.3	264.0	360.2	434.3
42.5°	141.3	164.4	229.3	325.4	397.2
45°	101.9	123.9	195.7	288.4	359.0
47.5°	77.6	89.2	165.6	251.3	321.9
50°	68.3	69.5	135.5	217.7	282.6
52.5°	59.1	60.2	105.4	185.3	240.9
55°	51.0	52.1	82.2	151.7	200.3
57.5°	42.8	45.2	67.2	120.4	161.0
60°	35.9	40.5	59.1	91.5	122.8
62.5°	29.0	37.1	51.0	67.2	88.0
65°	24.3	33.6	42.8	47.5	55.6
67.5°	19.7	31.3	35.9	33.6	33.6
70°	16.2	27.8	30.1	27.8	27.8
72.5°	13.9	26.6	25.5	23.2	23.2
75°	11.6	23.2	22.0	19.7	19.7
77.5°	10.4	19.7	18.5	17.4	16.2
80°	8.1	16.2	16.2	15.1	12.7
82.5°	6.9	13.9	13.9	12.7	10.4
85°	5.8	11.6	11.6	10.4	8.1
87.5°	4.6	10.4	10.4	9.3	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)