

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: P1059009

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1059009  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)  
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-W  
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

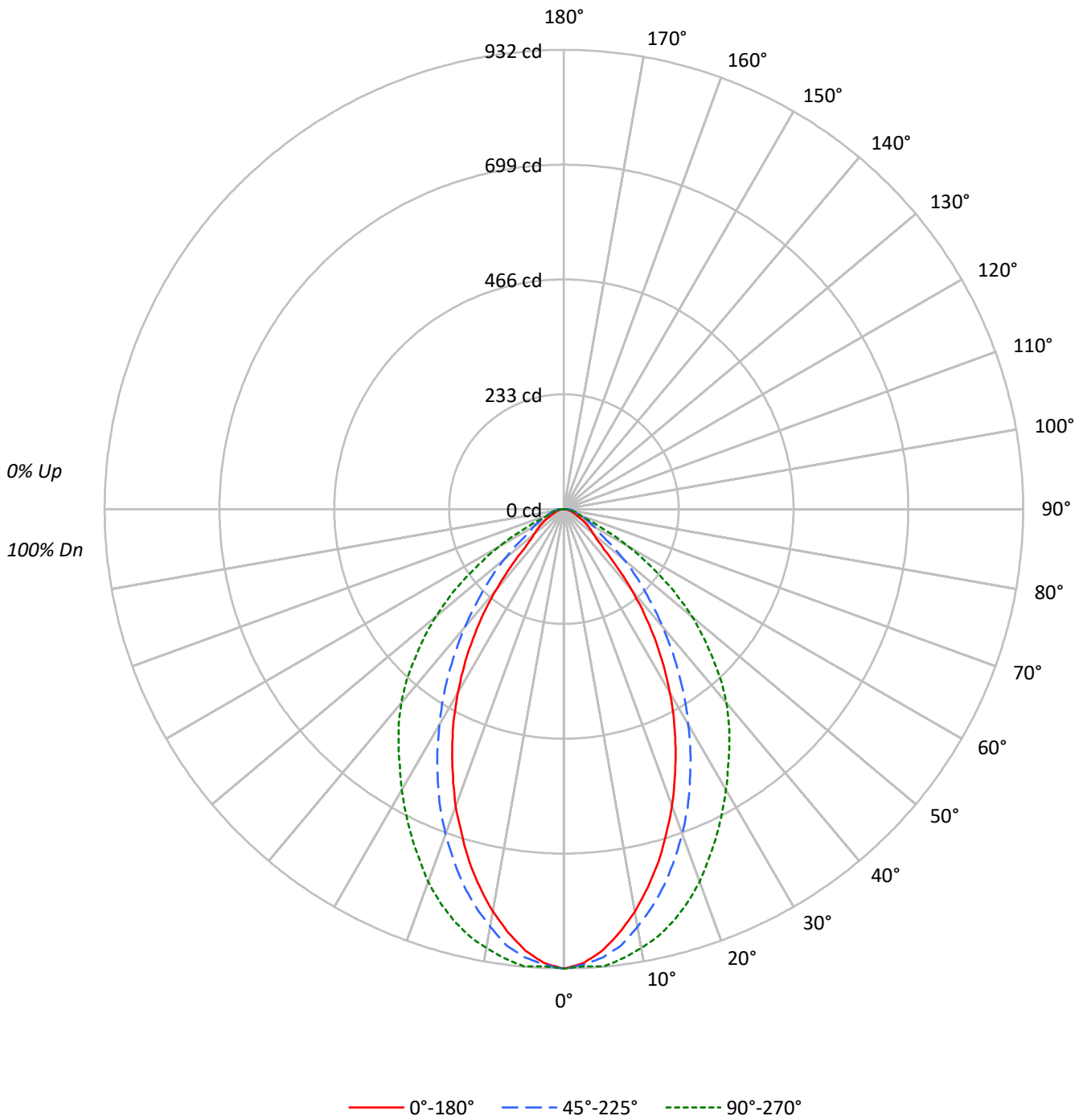
Lumens per Lamp: N/A  
Luminaire Lumens: 1251.7 lumens  
Efficiency: N/A  
Efficacy: 35.8 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 1.08 / 0.98  
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')  
CIE Type: Direct

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	102	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	90	81	74	68	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	60	69	64	60	68	63	59	58
6	79	68	61	55	78	67	60	55	66	59	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	55	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	49	43	39	49	43	39	48	43	39	37

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

	0°	45°	90°
0°	10950	10950	10950
5°	10596	10759	10978
10°	9889	10261	10787
15°	9012	9589	10505
20°	8019	8771	10059
25°	6948	7849	9485
30°	5826	6847	8920
35°	4616	5829	8386
40°	3267	4793	7865
45°	1923	3790	7079
50°	1440	2877	6200
55°	1210	1945	4979
60°	979	1660	3537
65°	772	1417	1867
70°	676	1233	1154
75°	631	1157	1102
80°	629	1251	1095
85°	781	1873	1401

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7079 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.8	6.9
10°-20°	223.0	17.8
20°-30°	284.0	22.7
30°-40°	267.2	21.3
40°-50°	192.4	15.4
50°-60°	111.1	8.9
60°-70°	50.8	4.1
70°-80°	25.4	2.0
80°-90°	12.0	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°	592.9	47.4
0°-40°	860.0	68.7
0°-60°	1163.6	93.0
0°-90°	1251.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1251.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	932	932	932	932	932	
5°	899	914	913	922	931	84
15°	741	768	789	833	864	207
25°	536	564	606	673	732	245
35°	322	350	407	500	585	200
45°	116	145	228	343	426	98
55°	59	61	95	181	243	53
65°	28	39	51	57	67	28
75°	14	27	26	24	24	15
85°	6	13	14	13	10	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	932.5	932.5	932.5	932.5	932.5
2.5°	922.0	933.6	925.5	926.7	929.0
5°	898.9	913.9	912.8	922.0	931.3
7.5°	866.4	883.8	893.1	907.0	919.7
10°	829.4	849.1	860.6	886.1	904.7
12.5°	786.5	812.0	827.0	860.6	887.3
15°	741.3	768.0	788.8	832.8	864.1
17.5°	690.4	719.3	746.0	798.1	836.3
20°	641.7	669.5	701.9	758.7	805.0
22.5°	588.4	618.5	655.6	715.8	768.0
25°	536.3	564.1	605.8	673.0	732.1
27.5°	484.2	512.0	556.0	630.1	695.0
30°	429.7	458.7	505.0	587.3	657.9
32.5°	376.5	404.3	456.4	545.6	619.7
35°	322.0	349.8	406.6	500.4	585.0
37.5°	268.7	297.7	357.9	463.3	550.2
40°	213.1	244.4	312.7	425.1	513.1
42.5°	161.0	194.6	267.6	385.7	472.6
45°	115.8	144.8	228.2	342.9	426.3
47.5°	90.3	105.4	192.3	298.8	383.4
50°	78.8	81.1	157.5	258.3	339.4
52.5°	68.3	70.7	123.9	220.1	293.1
55°	59.1	61.4	95.0	180.7	243.2
57.5°	49.8	53.3	78.8	143.6	195.8
60°	41.7	46.3	70.7	110.0	150.6
62.5°	33.6	41.7	60.2	81.1	107.7
65°	27.8	39.4	51.0	56.8	67.2
67.5°	23.2	35.9	42.9	40.5	39.4
70°	19.7	32.4	35.9	32.4	33.6
72.5°	16.2	30.1	30.1	27.8	27.8
75°	13.9	26.6	25.5	24.3	24.3
77.5°	11.6	23.2	22.0	20.8	19.7
80°	9.3	18.5	18.5	17.4	16.2
82.5°	8.1	15.1	15.1	15.1	12.7
85°	5.8	12.7	13.9	12.7	10.4
87.5°	4.6	11.6	11.6	10.4	6.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)