

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: P1058116

Luminaire Tested: S122RDR-S865D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058116  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S865D830-X4F0-XX-UDD-SVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

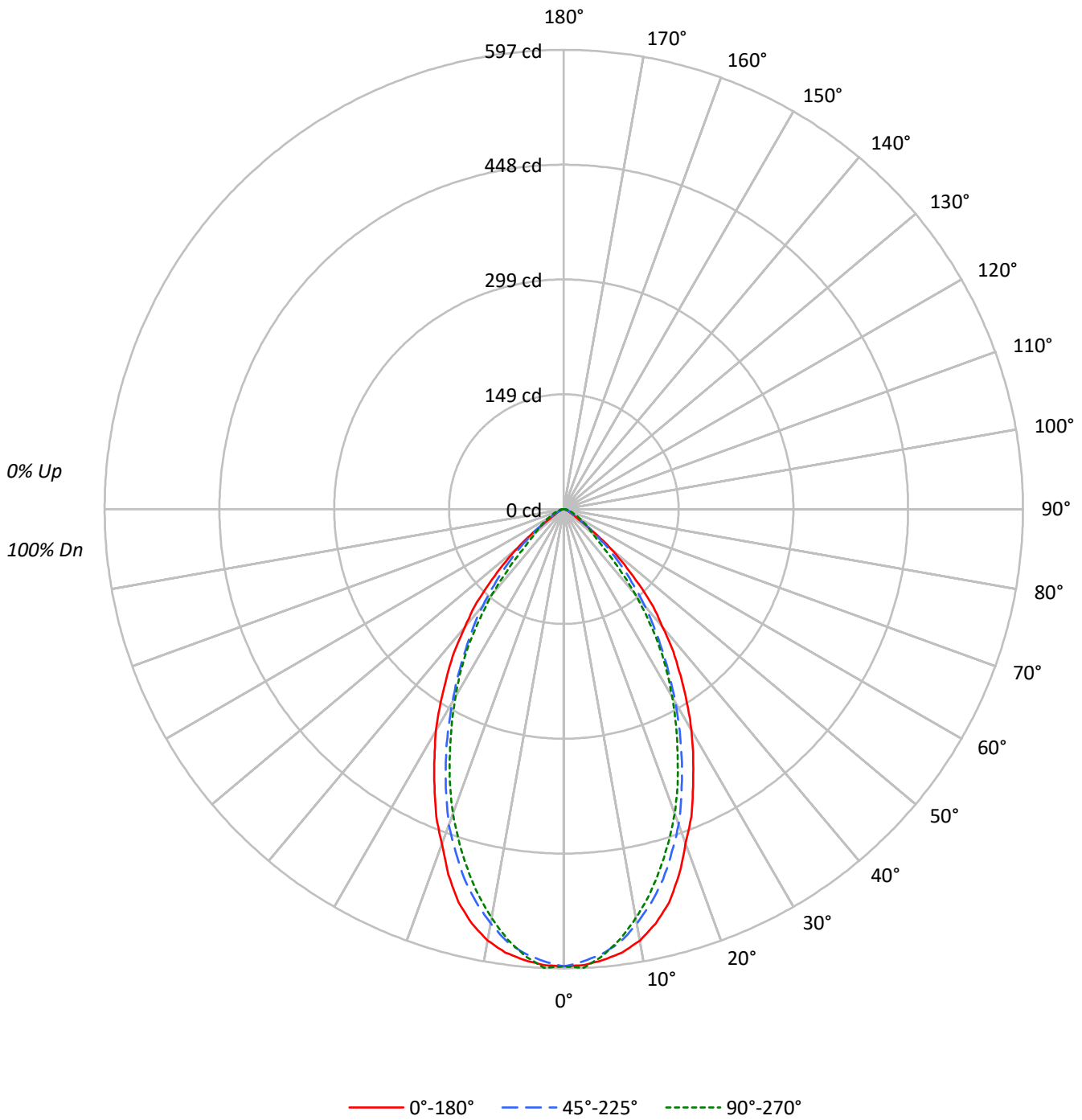
Lumens per Lamp: N/A  
Luminaire Lumens: 639.3 lumens  
Efficiency: N/A  
Efficacy: 18.3 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

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	99	100	98	96	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	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

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

	0°	45°	90°
0°	10968	10968	10968
5°	10901	10747	10791
10°	10671	10249	10114
15°	10110	9519	9248
20°	9086	8573	8271
25°	8093	7393	7126
30°	7078	6168	5992
35°	5960	4999	4836
40°	4801	3943	3486
45°	3591	2850	2075
50°	2248	1840	1364
55°	762	991	1107
60°	439	613	875
65°	310	415	672
70°	254	318	513
75°	171	257	421
80°	128	255	383
85°	0	0	254

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3591 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.8	8.6
10°-20°	140.3	21.9
20°-30°	168.9	26.4
30°-40°	144.3	22.6
40°-50°	84.5	13.2
50°-60°	30.6	4.8
60°-70°	10.9	1.7
70°-80°	4.3	0.7
80°-90°	0.8	0.1
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°	363.9	56.9
0°-40°	508.2	79.5
0°-60°	623.3	97.5
0°-90°	639.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	639.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	594	594	594	594	594	
5°	588	590	580	583	583	56
15°	529	521	498	489	484	147
25°	398	381	363	357	350	182
35°	265	244	222	220	215	165
45°	138	123	109	91	80	106
55°	24	33	31	32	34	29
65°	7	8	10	13	15	8
75°	2	4	4	5	6	3
85°	0	0	0	1	1	0
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	594.4	594.4	594.4	594.4	594.4
2.5°	593.2	594.4	588.5	594.4	596.8
5°	588.5	589.7	580.2	582.6	582.6
7.5°	581.4	580.2	567.1	564.8	563.6
10°	569.5	565.9	547.0	543.4	539.8
12.5°	551.7	544.6	524.4	518.5	513.7
15°	529.2	520.9	498.3	488.8	484.1
17.5°	498.3	488.8	467.5	458.0	453.2
20°	462.7	453.2	436.6	425.9	421.2
22.5°	433.1	417.6	399.8	392.7	386.8
25°	397.5	380.9	363.1	357.1	350.0
27.5°	364.2	344.1	326.3	321.5	315.6
30°	332.2	310.9	289.5	289.5	281.2
32.5°	297.8	277.6	255.1	253.9	249.2
35°	264.6	244.4	221.9	219.5	214.7
37.5°	233.7	213.6	192.2	185.1	179.2
40°	199.3	181.5	163.7	151.9	144.7
42.5°	172.0	151.9	134.1	119.8	110.3
45°	137.6	123.4	109.2	91.4	79.5
47.5°	106.8	97.3	85.4	65.3	59.3
50°	78.3	73.6	64.1	48.6	47.5
52.5°	49.8	52.2	46.3	38.0	41.5
55°	23.7	33.2	30.8	32.0	34.4
57.5°	15.4	16.6	22.5	26.1	28.5
60°	11.9	11.9	16.6	21.4	23.7
62.5°	9.5	9.5	13.1	17.8	19.0
65°	7.1	8.3	9.5	13.1	15.4
67.5°	5.9	5.9	7.1	10.7	11.9
70°	4.7	4.7	5.9	8.3	9.5
72.5°	3.6	3.6	4.7	7.1	7.1
75°	2.4	3.6	3.6	4.7	5.9
77.5°	2.4	2.4	2.4	3.6	4.7
80°	1.2	1.2	2.4	2.4	3.6
82.5°	1.2	1.2	1.2	1.2	2.4
85°	0.0	0.0	0.0	1.2	1.2
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)