

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: P1058134

Luminaire Tested: S122RDR-S865D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058134  
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-S865D840-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

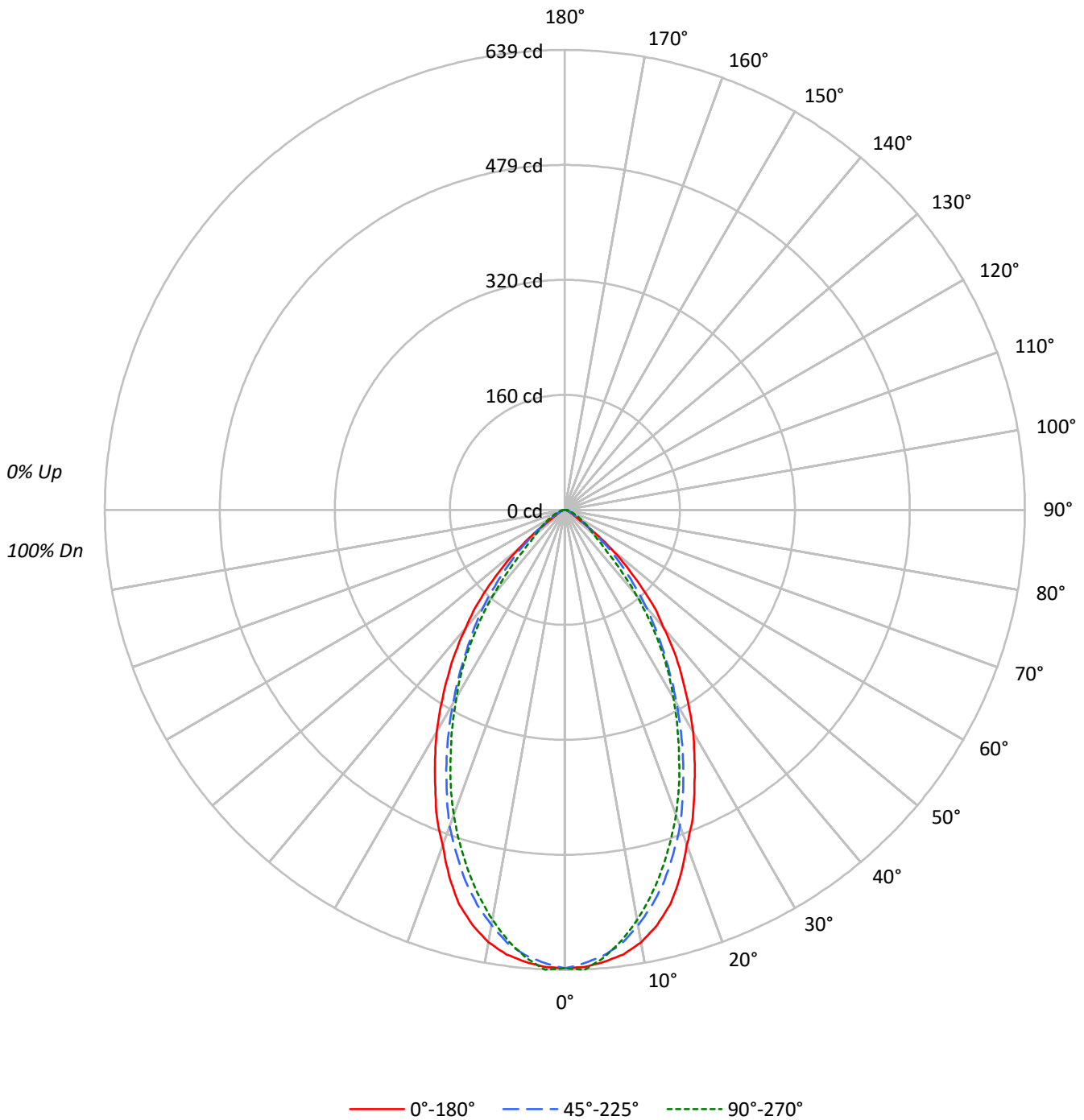
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 685.0 lumens  
Efficiency: N/A  
Efficacy: 19.6 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°	11752	11752	11752
5°	11679	11514	11562
10°	11433	10980	10838
15°	10832	10199	9909
20°	9736	9186	8862
25°	8671	7920	7635
30°	7583	6609	6420
35°	6386	5355	5183
40°	5145	4225	3736
45°	3849	3053	2223
50°	2409	1969	1458
55°	817	1065	1187
60°	469	657	937
65°	332	445	720
70°	275	345	550
75°	178	271	456
80°	138	266	404
85°	0	0	275

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3849 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.7	8.6
10°-20°	150.3	21.9
20°-30°	180.9	26.4
30°-40°	154.6	22.6
40°-50°	90.6	13.2
50°-60°	32.8	4.8
60°-70°	11.6	1.7
70°-80°	4.6	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°	389.9	56.9
0°-40°	544.5	79.5
0°-60°	667.8	97.5
0°-90°	685.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	685.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	637	637	637	637	637	
5°	630	632	622	624	624	60
15°	567	558	534	524	519	157
25°	426	408	389	383	375	195
35°	284	262	238	235	230	177
45°	148	132	117	98	85	114
55°	25	36	33	34	37	32
65°	8	9	10	14	16	8
75°	2	4	4	5	6	3
85°	0	0	0	1	1	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	636.9	636.9	636.9	636.9	636.9
2.5°	635.6	636.9	630.5	636.9	639.4
5°	630.5	631.8	621.6	624.2	624.2
7.5°	622.9	621.6	607.6	605.1	603.8
10°	610.2	606.4	586.0	582.2	578.4
12.5°	591.1	583.5	561.9	555.5	550.4
15°	567.0	558.1	533.9	523.7	518.7
17.5°	533.9	523.7	500.9	490.7	485.6
20°	495.8	485.6	467.8	456.4	451.3
22.5°	464.0	447.5	428.4	420.8	414.4
25°	425.9	408.1	389.0	382.6	375.0
27.5°	390.3	368.6	349.6	344.5	338.1
30°	355.9	333.1	310.2	310.2	301.3
32.5°	319.1	297.5	273.3	272.0	267.0
35°	283.5	261.9	237.7	235.2	230.1
37.5°	250.4	228.8	205.9	198.3	192.0
40°	213.6	194.5	175.4	162.7	155.1
42.5°	184.3	162.7	143.6	128.4	118.2
45°	147.5	132.2	117.0	97.9	85.2
47.5°	114.4	104.2	91.5	69.9	63.6
50°	83.9	78.8	68.6	52.1	50.8
52.5°	53.4	55.9	49.6	40.7	44.5
55°	25.4	35.6	33.1	34.3	36.9
57.5°	16.5	17.8	24.2	28.0	30.5
60°	12.7	12.7	17.8	22.9	25.4
62.5°	10.2	10.2	14.0	19.1	20.3
65°	7.6	8.9	10.2	14.0	16.5
67.5°	6.4	6.4	7.6	11.4	12.7
70°	5.1	5.1	6.4	8.9	10.2
72.5°	3.8	3.8	5.1	7.6	7.6
75°	2.5	3.8	3.8	5.1	6.4
77.5°	2.5	2.5	2.5	3.8	5.1
80°	1.3	1.3	2.5	2.5	3.8
82.5°	1.3	1.3	1.3	1.3	2.5
85°	0.0	0.0	0.0	1.3	1.3
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)