

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: P1058117

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058117  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)  
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-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

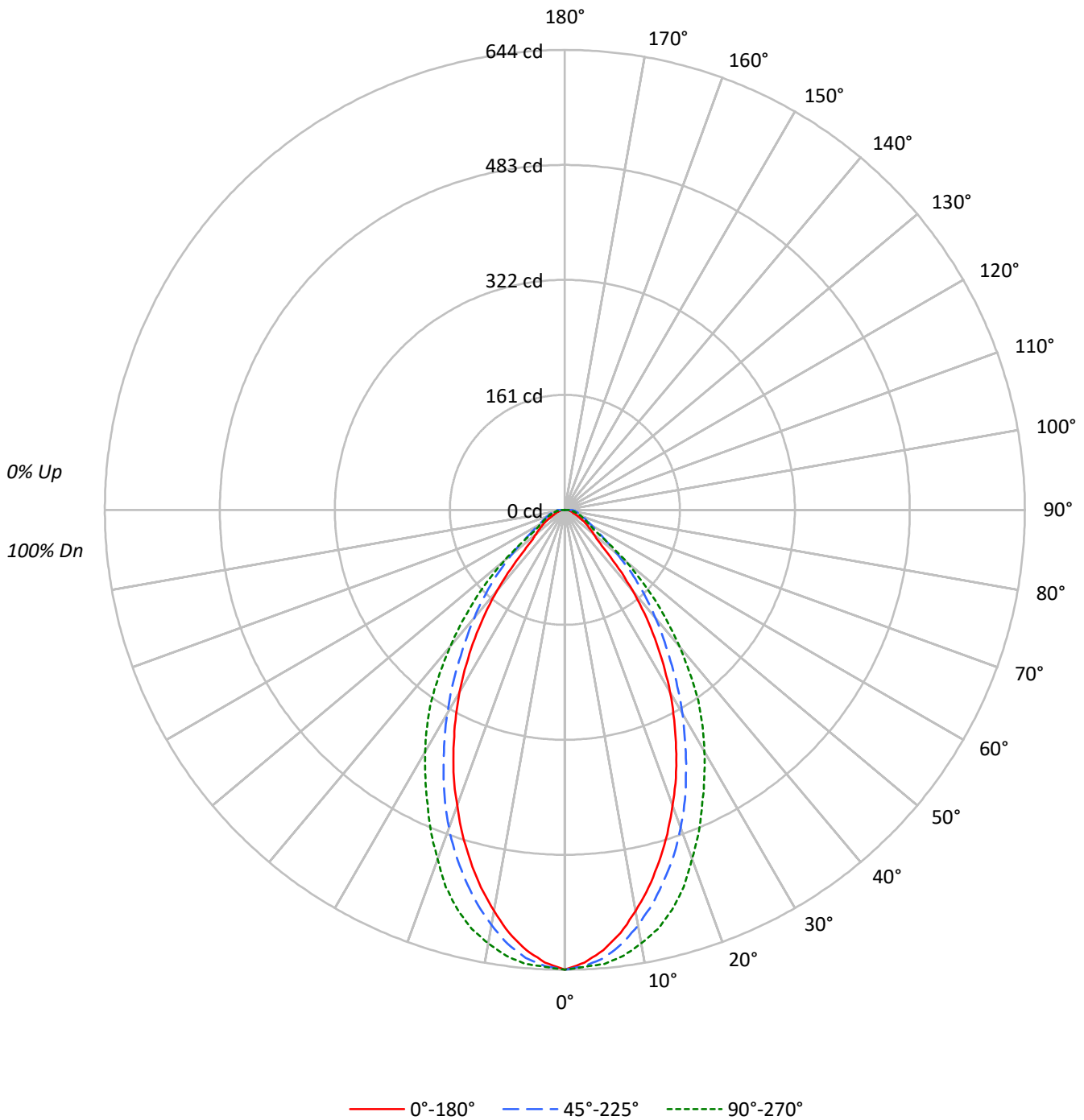
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 776.8 lumens  
Efficiency: N/A  
Efficacy: 22.2 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94  
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	50	30	10
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	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80		
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72		
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65		
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59		
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54		
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50		
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46		
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42		
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39		

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

	0°	45°	90°
0°	11882	11882	11882
5°	11466	11664	11818
10°	10686	11064	11553
15°	9737	10259	11076
20°	8656	9308	10219
25°	7499	8177	9264
30°	6277	7012	8329
35°	4951	5807	7332
40°	3548	4750	6010
45°	2077	3753	4650
50°	1501	2727	3138
55°	1261	1950	1644
60°	1008	1580	1402
65°	830	1402	1297
70°	707	1343	1219
75°	677	1440	1183
80°	754	1764	1265
85°	1249	2774	1757

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 4650 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.0	7.6
10°-20°	151.2	19.5
20°-30°	185.8	23.9
30°-40°	164.2	21.1
40°-50°	104.8	13.5
50°-60°	51.1	6.6
60°-70°	30.5	3.9
70°-80°	19.4	2.5
80°-90°	10.7	1.4
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°	395.9	51.0
0°-40°	560.2	72.1
0°-60°	716.2	92.2
0°-90°	776.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	776.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	644	644	644	644	644	
5°	619	632	630	632	638	58
15°	510	524	537	561	580	142
25°	368	381	402	426	455	169
35°	220	232	258	293	326	136
45°	80	102	144	162	178	67
55°	39	52	61	57	51	35
65°	19	36	32	30	30	19
75°	10	21	20	18	17	11
85°	6	12	13	12	8	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	643.9	643.9	643.9	643.9	643.9
2.5°	634.4	646.3	639.2	639.2	640.4
5°	619.0	632.0	629.7	632.0	638.0
7.5°	597.6	610.7	613.0	622.5	629.7
10°	570.3	583.3	590.5	605.9	616.6
12.5°	541.7	554.8	565.5	585.7	601.1
15°	509.7	523.9	537.0	560.8	579.8
17.5°	476.4	490.7	507.3	531.1	553.6
20°	440.8	453.8	474.0	496.6	520.4
22.5°	406.3	418.2	439.6	461.0	489.5
25°	368.3	381.4	401.6	426.5	455.0
27.5°	331.5	344.5	364.7	393.2	422.9
30°	294.6	306.5	329.1	358.8	390.9
32.5°	256.6	268.5	293.4	325.5	358.8
35°	219.8	231.7	257.8	293.4	325.5
37.5°	183.0	196.0	225.7	259.0	286.3
40°	147.3	162.8	197.2	225.7	249.5
42.5°	111.7	133.1	169.9	193.7	212.7
45°	79.6	102.2	143.8	161.6	178.2
47.5°	60.6	78.4	118.8	131.9	142.6
50°	52.3	64.2	95.0	104.5	109.3
52.5°	45.1	57.0	76.0	79.6	77.2
55°	39.2	52.3	60.6	57.0	51.1
57.5°	33.3	48.7	49.9	42.8	44.0
60°	27.3	44.0	42.8	36.8	38.0
62.5°	22.6	40.4	36.8	33.3	33.3
65°	19.0	35.6	32.1	29.7	29.7
67.5°	15.4	32.1	28.5	26.1	26.1
70°	13.1	28.5	24.9	22.6	22.6
72.5°	11.9	24.9	22.6	20.2	20.2
75°	9.5	21.4	20.2	17.8	16.6
77.5°	8.3	17.8	17.8	16.6	14.3
80°	7.1	15.4	16.6	14.3	11.9
82.5°	7.1	14.3	14.3	13.1	9.5
85°	5.9	11.9	13.1	11.9	8.3
87.5°	3.6	10.7	10.7	9.5	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)