

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: P1058188

Luminaire Tested: S122RDR-S865D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058188  
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-S865D950-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: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

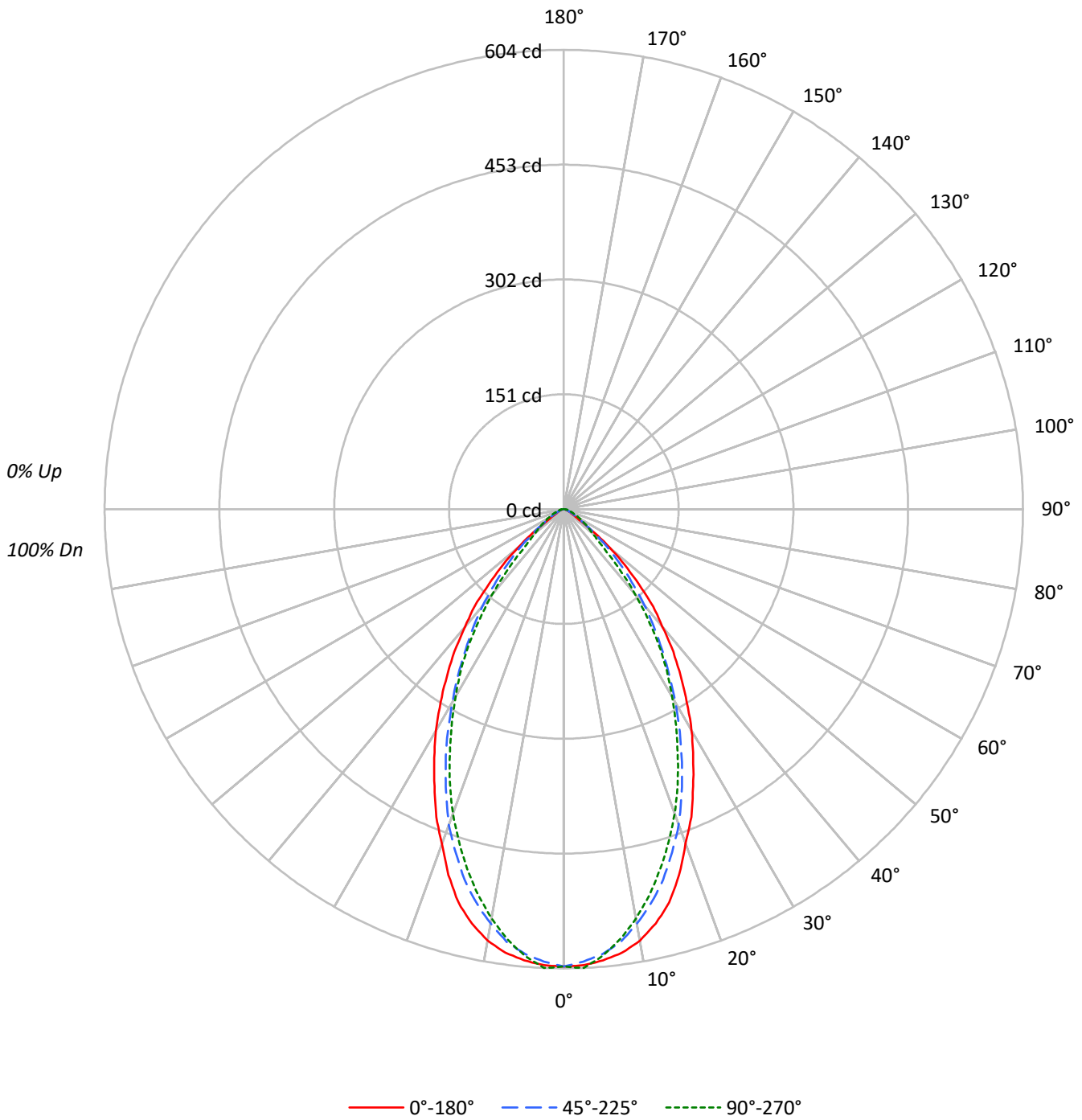
Lumens per Lamp: N/A  
Luminaire Lumens: 647.0 lumens  
Efficiency: N/A  
Efficacy: 18.5 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

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°	11101	11101	11101
5°	11032	10877	10921
10°	10800	10373	10238
15°	10232	9636	9361
20°	9196	8677	8371
25°	8191	7482	7214
30°	7163	6243	6064
35°	6033	5059	4897
40°	4859	3991	3529
45°	3635	2884	2101
50°	2276	1860	1378
55°	772	1004	1120
60°	443	620	886
65°	314	419	681
70°	259	324	518
75°	171	257	428
80°	128	255	383
85°	0	0	254

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3635 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	55.4	8.6
10°-20°	142.0	21.9
20°-30°	170.9	26.4
30°-40°	146.0	22.6
40°-50°	85.6	13.2
50°-60°	31.0	4.8
60°-70°	11.0	1.7
70°-80°	4.4	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°	368.3	56.9
0°-40°	514.4	79.5
0°-60°	630.9	97.5
0°-90°	647.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	647.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	602	602	602	602	602	
5°	596	597	587	590	590	56
15°	536	527	504	495	490	149
25°	402	386	368	362	354	185
35°	268	247	225	222	217	167
45°	139	125	110	92	80	107
55°	24	34	31	32	35	30
65°	7	8	10	13	16	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°	601.6	601.6	601.6	601.6	601.6
2.5°	600.4	601.6	595.6	601.6	604.0
5°	595.6	596.8	587.2	589.6	589.6
7.5°	588.4	587.2	574.0	571.6	570.4
10°	576.4	572.8	553.6	550.0	546.4
12.5°	558.4	551.2	530.8	524.8	520.0
15°	535.6	527.2	504.4	494.8	490.0
17.5°	504.4	494.8	473.1	463.5	458.7
20°	468.3	458.7	441.9	431.1	426.3
22.5°	438.3	422.7	404.7	397.5	391.5
25°	402.3	385.5	367.5	361.5	354.3
27.5°	368.7	348.3	330.2	325.4	319.4
30°	336.2	314.6	293.0	293.0	284.6
32.5°	301.4	281.0	258.2	257.0	252.2
35°	267.8	247.4	224.6	222.2	217.4
37.5°	236.6	216.2	194.5	187.3	181.3
40°	201.7	183.7	165.7	153.7	146.5
42.5°	174.1	153.7	135.7	121.3	111.7
45°	139.3	124.9	110.5	92.5	80.5
47.5°	108.1	98.5	86.5	66.0	60.0
50°	79.3	74.5	64.8	49.2	48.0
52.5°	50.4	52.8	46.8	38.4	42.0
55°	24.0	33.6	31.2	32.4	34.8
57.5°	15.6	16.8	22.8	26.4	28.8
60°	12.0	12.0	16.8	21.6	24.0
62.5°	9.6	9.6	13.2	18.0	19.2
65°	7.2	8.4	9.6	13.2	15.6
67.5°	6.0	6.0	7.2	10.8	12.0
70°	4.8	4.8	6.0	8.4	9.6
72.5°	3.6	3.6	4.8	7.2	7.2
75°	2.4	3.6	3.6	4.8	6.0
77.5°	2.4	2.4	2.4	3.6	4.8
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)