

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: P1058182

Luminaire Tested: S122RDR-S865D940-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058182  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S865D940-X4F0-XX-UDD-WVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

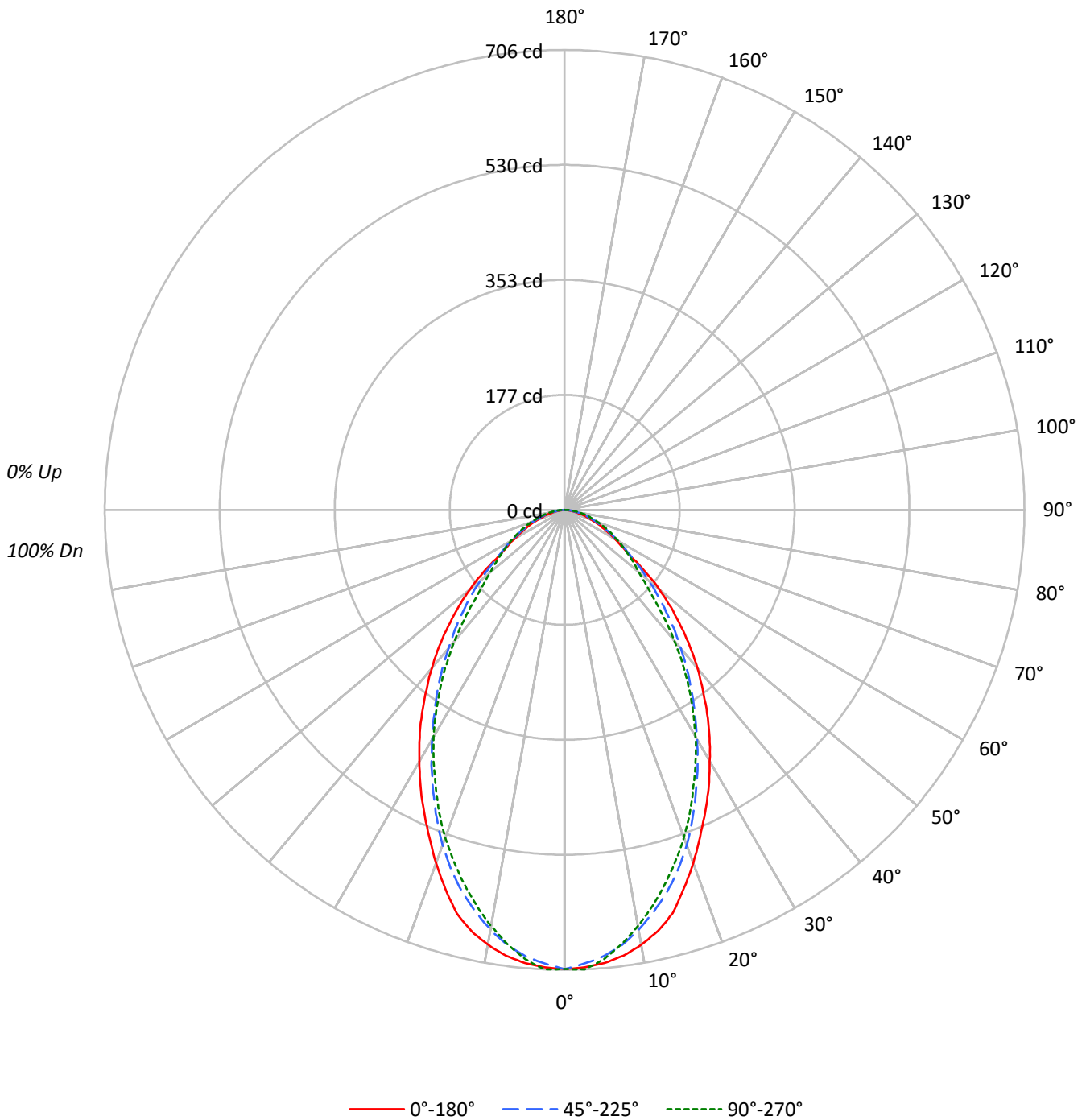
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1070.7 lumens  
Efficiency: N/A  
Efficacy: 30.6 lumens/watt  
Spacing Criteria (0/90/45): 1 / 0.92 / 1.02  
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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77				
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68				
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61				
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54				
6	77	66	58	52	75	65	57	52	63	56	52	61	56	51	60	55	51	49				
7	72	60	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	44				
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41				
9	64	52	45	40	63	51	44	39	50	44	39	49	43	39	48	43	39	37				
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34				

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

	0°	45°	90°
0°	13009	13009	13009
5°	12933	12746	12829
10°	12704	12263	12157
15°	12245	11601	11367
20°	11330	10757	10515
25°	10400	9714	9531
30°	9497	8659	8563
35°	8598	7661	7485
40°	7653	6680	6328
45°	6592	5741	5068
50°	5446	4834	4254
55°	3938	4008	3828
60°	3273	3440	3480
65°	2794	2991	3187
70°	2304	2665	2908
75°	1918	2239	2638
80°	1435	1785	2391
85°	466	953	2138

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6592 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.2	6.1
10°-20°	171.6	16.0
20°-30°	222.1	20.7
30°-40°	217.8	20.3
40°-50°	171.5	16.0
50°-60°	112.4	10.5
60°-70°	68.5	6.4
70°-80°	34.2	3.2
80°-90°	7.4	0.7
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°	458.9	42.9
0°-40°	676.7	63.2
0°-60°	960.6	89.7
0°-90°	1070.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1070.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	705	705	705	705	705	
5°	698	698	688	693	693	66
15°	641	632	607	599	595	179
25°	511	494	477	475	468	235
35°	382	360	340	339	332	238
45°	253	237	220	204	194	195
55°	122	129	125	120	119	116
65°	64	65	68	72	73	64
75°	27	28	31	36	37	29
85°	2	3	4	8	10	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	705.0	705.0	705.0	705.0	705.0
2.5°	702.7	703.8	697.1	703.8	706.1
5°	698.2	698.2	688.1	692.6	692.6
7.5°	690.4	689.3	673.5	673.5	672.4
10°	678.0	673.5	654.5	651.1	648.8
12.5°	662.3	654.5	632.0	626.4	623.0
15°	641.0	632.0	607.3	599.4	595.0
17.5°	609.5	600.6	579.2	570.3	565.8
20°	577.0	563.5	547.8	540.0	535.5
22.5°	543.3	527.6	513.0	507.4	502.9
25°	510.8	493.9	477.1	474.8	468.1
27.5°	479.3	459.1	442.3	441.2	435.6
30°	445.7	424.3	406.4	407.5	401.9
32.5°	414.2	394.0	372.7	373.8	367.1
35°	381.7	360.3	340.1	339.0	332.3
37.5°	348.0	327.8	308.7	304.2	297.5
40°	317.7	297.5	277.3	269.4	262.7
42.5°	285.1	267.2	249.2	236.9	227.9
45°	252.6	236.9	220.0	204.3	194.2
47.5°	221.1	208.8	194.2	175.1	168.4
50°	189.7	180.7	168.4	151.5	148.2
52.5°	157.2	153.8	145.9	134.7	133.6
55°	122.4	129.1	124.6	120.1	119.0
57.5°	103.3	104.4	107.8	106.6	106.6
60°	88.7	88.7	93.2	94.3	94.3
62.5°	75.2	76.3	80.8	83.1	83.1
65°	64.0	65.1	68.5	71.8	73.0
67.5°	52.8	55.0	58.4	61.7	62.9
70°	42.7	44.9	49.4	52.8	53.9
72.5°	34.8	35.9	40.4	43.8	44.9
75°	26.9	28.1	31.4	35.9	37.0
77.5°	19.1	21.3	24.7	28.1	30.3
80°	13.5	14.6	16.8	21.3	22.5
82.5°	7.9	9.0	11.2	14.6	15.7
85°	2.2	3.4	4.5	7.9	10.1
87.5°	0.0	0.0	0.0	2.2	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)