

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: P1058164

Luminaire Tested: S122RDR-S865D930-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058164  
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-S865D930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

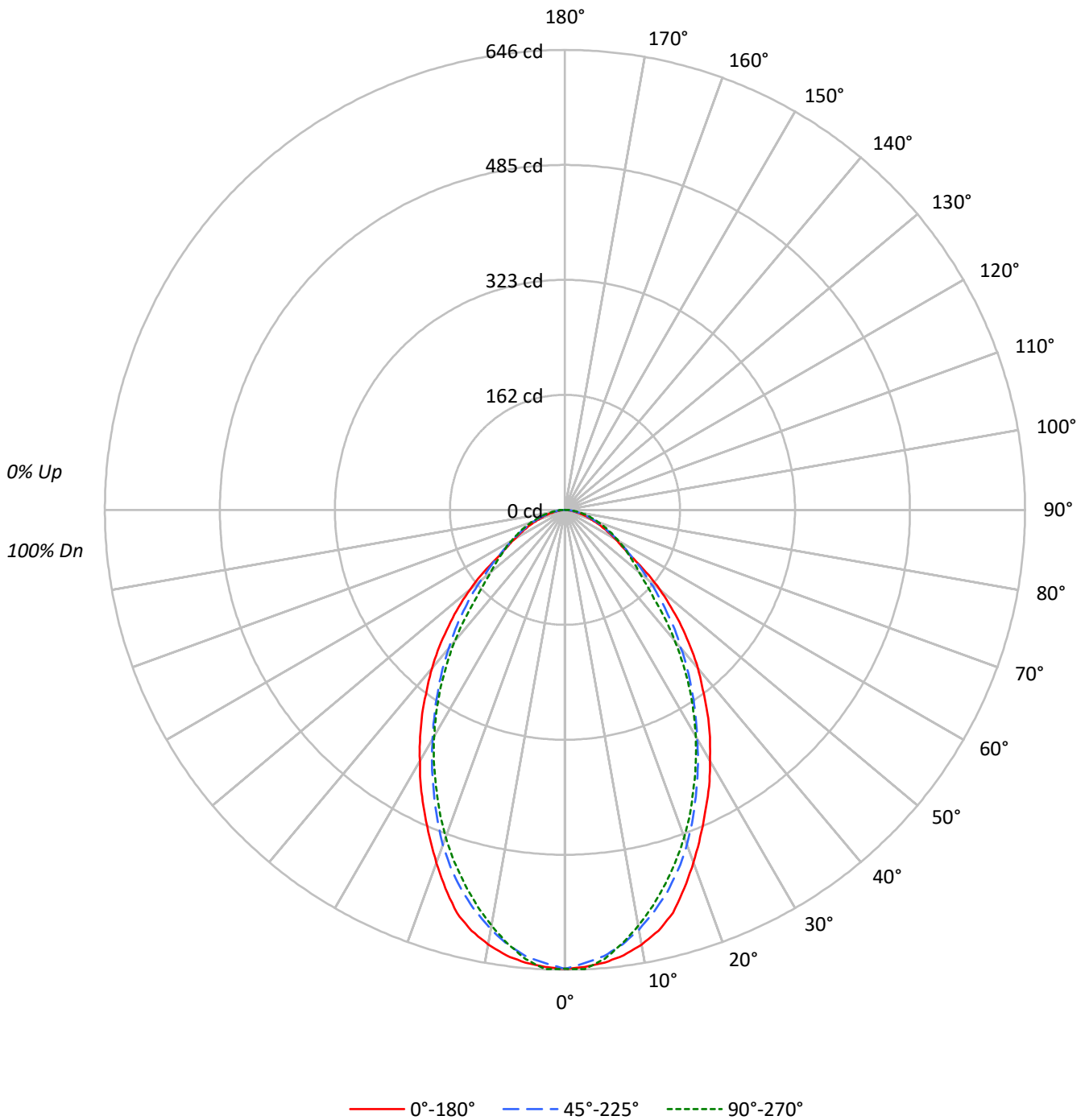
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 978.9 lumens  
Efficiency: N/A  
Efficacy: 28.0 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	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°	11894	11894	11894
5°	11825	11655	11731
10°	11615	11212	11115
15°	11197	10608	10392
20°	10360	9836	9614
25°	9508	8881	8714
30°	8683	7916	7828
35°	7862	7006	6843
40°	6998	6106	5786
45°	6026	5250	4635
50°	4981	4421	3890
55°	3600	3664	3500
60°	2993	3144	3181
65°	2554	2733	2912
70°	2104	2439	2660
75°	1754	2046	2417
80°	1307	1636	2178
85°	445	868	1948

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6026 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.6	6.1
10°-20°	156.9	16.0
20°-30°	203.1	20.7
30°-40°	199.2	20.3
40°-50°	156.8	16.0
50°-60°	102.8	10.5
60°-70°	62.6	6.4
70°-80°	31.3	3.2
80°-90°	6.7	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°	419.5	42.9
0°-40°	618.7	63.2
0°-60°	878.3	89.7
0°-90°	978.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	978.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	645	645	645	645	645	
5°	638	638	629	633	633	60
15°	586	578	555	548	544	163
25°	467	452	436	434	428	215
35°	349	330	311	310	304	218
45°	231	217	201	187	178	178
55°	112	118	114	110	109	106
65°	58	60	63	66	67	58
75°	25	26	29	33	34	26
85°	2	3	4	7	9	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	644.6	644.6	644.6	644.6	644.6
2.5°	642.5	643.5	637.4	643.5	645.6
5°	638.4	638.4	629.2	633.3	633.3
7.5°	631.2	630.2	615.8	615.8	614.8
10°	619.9	615.8	598.4	595.3	593.2
12.5°	605.6	598.4	577.8	572.7	569.6
15°	586.1	577.8	555.3	548.1	544.0
17.5°	557.3	549.1	529.6	521.4	517.3
20°	527.6	515.2	500.9	493.7	489.6
22.5°	496.8	482.4	469.0	463.9	459.8
25°	467.0	451.6	436.2	434.2	428.0
27.5°	438.3	419.8	404.4	403.4	398.2
30°	407.5	388.0	371.5	372.6	367.4
32.5°	378.7	360.3	340.8	341.8	335.6
35°	349.0	329.5	311.0	310.0	303.8
37.5°	318.2	299.7	282.3	278.1	272.0
40°	290.5	272.0	253.5	246.3	240.2
42.5°	260.7	244.3	227.9	216.6	208.4
45°	230.9	216.6	201.2	186.8	177.6
47.5°	202.2	190.9	177.6	160.1	154.0
50°	173.5	165.2	154.0	138.6	135.5
52.5°	143.7	140.6	133.4	123.2	122.1
55°	111.9	118.0	113.9	109.8	108.8
57.5°	94.4	95.5	98.5	97.5	97.5
60°	81.1	81.1	85.2	86.2	86.2
62.5°	68.8	69.8	73.9	76.0	76.0
65°	58.5	59.5	62.6	65.7	66.7
67.5°	48.2	50.3	53.4	56.5	57.5
70°	39.0	41.1	45.2	48.2	49.3
72.5°	31.8	32.8	36.9	40.0	41.1
75°	24.6	25.7	28.7	32.8	33.9
77.5°	17.4	19.5	22.6	25.7	27.7
80°	12.3	13.3	15.4	19.5	20.5
82.5°	7.2	8.2	10.3	13.3	14.4
85°	2.1	3.1	4.1	7.2	9.2
87.5°	0.0	0.0	0.0	2.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)