

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1058161

Luminaire Tested: S122RDRP-S865D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058161  
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: S122RDRP-S865D930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

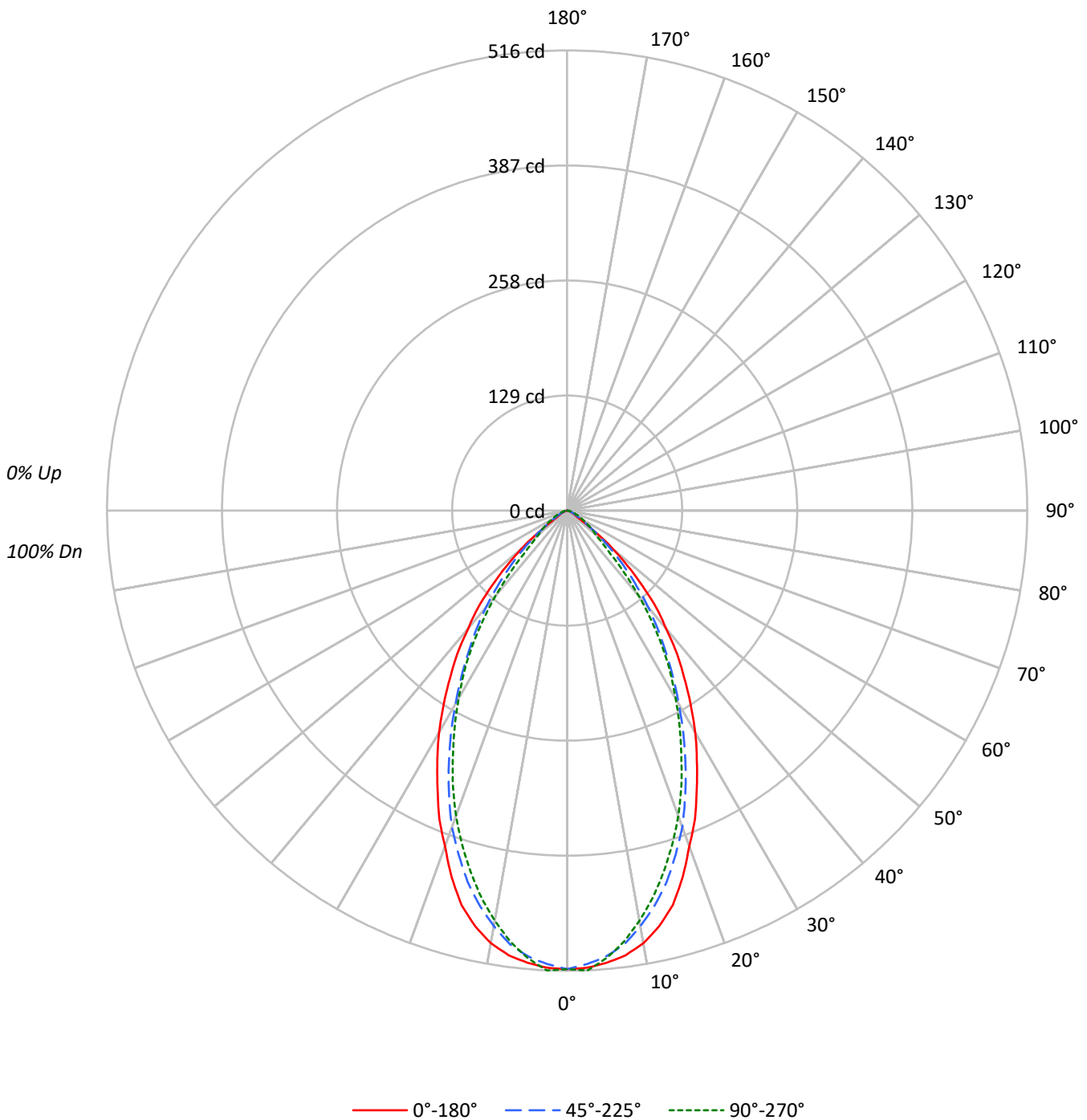
Lumens per Lamp: N/A  
Luminaire Lumens: 553.0 lumens  
Efficiency: N/A  
Efficacy: 15.8 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92					92			
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84					84			
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76					76			
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70					70			
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64					64			
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59					59			
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54					54			
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50					50			
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47					47			
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44					44			

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

	0°	45°	90°
0°	9488	9488	9488
5°	9428	9297	9334
10°	9230	8865	8750
15°	8744	8234	7999
20°	7861	7417	7154
25°	7000	6393	6165
30°	6124	5335	5182
35°	5156	4323	4185
40°	4153	3411	3016
45°	3105	2463	1795
50°	1943	1590	1180
55°	660	859	959
60°	380	531	757
65°	271	358	581
70°	221	275	442
75°	150	221	364
80°	106	223	329
85°	0	0	212

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3105 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.4	8.6
10°-20°	121.3	21.9
20°-30°	146.1	26.4
30°-40°	124.8	22.6
40°-50°	73.1	13.2
50°-60°	26.5	4.8
60°-70°	9.4	1.7
70°-80°	3.8	0.7
80°-90°	0.7	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°	314.8	56.9
0°-40°	439.6	79.5
0°-60°	539.2	97.5
0°-90°	553.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	553.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	514	514	514	514	514	
5°	509	510	502	504	504	48
15°	458	450	431	423	419	127
25°	344	329	314	309	303	158
35°	229	211	192	190	186	143
45°	119	107	94	79	69	92
55°	20	29	27	28	30	25
65°	6	7	8	11	13	7
75°	2	3	3	4	5	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°	514.2	514.2	514.2	514.2	514.2
2.5°	513.1	514.2	509.0	514.2	516.2
5°	509.0	510.1	501.9	503.9	503.9
7.5°	502.9	501.9	490.6	488.5	487.5
10°	492.6	489.5	473.1	470.0	467.0
12.5°	477.2	471.1	453.6	448.5	444.4
15°	457.7	450.5	431.0	422.8	418.7
17.5°	431.0	422.8	404.4	396.1	392.0
20°	400.3	392.0	377.7	368.4	364.3
22.5°	374.6	361.3	345.9	339.7	334.6
25°	343.8	329.4	314.0	308.9	302.8
27.5°	315.1	297.6	282.2	278.1	273.0
30°	287.4	268.9	250.4	250.4	243.2
32.5°	257.6	240.2	220.7	219.6	215.5
35°	228.9	211.4	191.9	189.9	185.8
37.5°	202.2	184.7	166.3	160.1	155.0
40°	172.4	157.0	141.6	131.4	125.2
42.5°	148.8	131.4	116.0	103.7	95.4
45°	119.0	106.7	94.4	79.0	68.8
47.5°	92.4	84.2	73.9	56.4	51.3
50°	67.7	63.6	55.4	42.1	41.1
52.5°	43.1	45.2	40.0	32.8	35.9
55°	20.5	28.7	26.7	27.7	29.8
57.5°	13.3	14.4	19.5	22.6	24.6
60°	10.3	10.3	14.4	18.5	20.5
62.5°	8.2	8.2	11.3	15.4	16.4
65°	6.2	7.2	8.2	11.3	13.3
67.5°	5.1	5.1	6.2	9.2	10.3
70°	4.1	4.1	5.1	7.2	8.2
72.5°	3.1	3.1	4.1	6.2	6.2
75°	2.1	3.1	3.1	4.1	5.1
77.5°	2.1	2.1	2.1	3.1	4.1
80°	1.0	1.0	2.1	2.1	3.1
82.5°	1.0	1.0	1.0	1.0	2.1
85°	0.0	0.0	0.0	1.0	1.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	3.71	4.87	4.08	5.19	5.50	7.10	8.26	7.47	8.58	8.89
	3H	4.22	5.25	4.60	5.58	5.94	7.83	8.85	8.21	9.18	9.55
	4H	4.36	5.31	4.77	5.66	6.05	8.05	8.99	8.45	9.35	9.73
	6H	4.44	5.31	4.86	5.68	6.08	8.20	9.06	8.61	9.44	9.83
	8H	4.44	5.26	4.88	5.65	6.06	8.23	9.05	8.66	9.44	9.85
	12H	4.41	5.19	4.84	5.57	6.00	8.23	9.01	8.66	9.39	9.83
4H	2H	4.02	4.96	4.42	5.32	5.70	7.07	8.01	7.47	8.37	8.75
	3H	4.67	5.44	5.08	5.84	6.25	7.94	8.71	8.36	9.12	9.52
	4H	4.92	5.60	5.35	6.02	6.47	8.22	8.91	8.66	9.33	9.77
	6H	5.04	5.63	5.51	6.08	6.55	8.45	9.04	8.92	9.49	9.96
	8H	5.05	5.60	5.52	6.05	6.52	8.50	9.04	8.97	9.49	9.97
	12H	5.02	5.49	5.51	5.98	6.46	8.52	9.00	9.01	9.48	9.96
8H	4H	5.03	5.57	5.50	6.02	6.50	8.15	8.70	8.63	9.15	9.62
	6H	5.20	5.64	5.70	6.14	6.62	8.42	8.86	8.93	9.36	9.85
	8H	5.24	5.63	5.76	6.15	6.65	8.48	8.88	9.01	9.40	9.89
	12H	5.21	5.56	5.73	6.06	6.63	8.54	8.89	9.06	9.39	9.96
12H	4H	5.01	5.49	5.50	5.98	6.45	8.11	8.58	8.60	9.07	9.55
	6H	5.20	5.59	5.72	6.11	6.61	8.37	8.77	8.90	9.28	9.78
	8H	5.26	5.61	5.78	6.11	6.68	8.46	8.80	8.98	9.30	9.88