

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: P1058242

Luminaire Tested: S122RDRP-H1005D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058242  
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-H1005D930-X4F0-XX-UDD-SVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

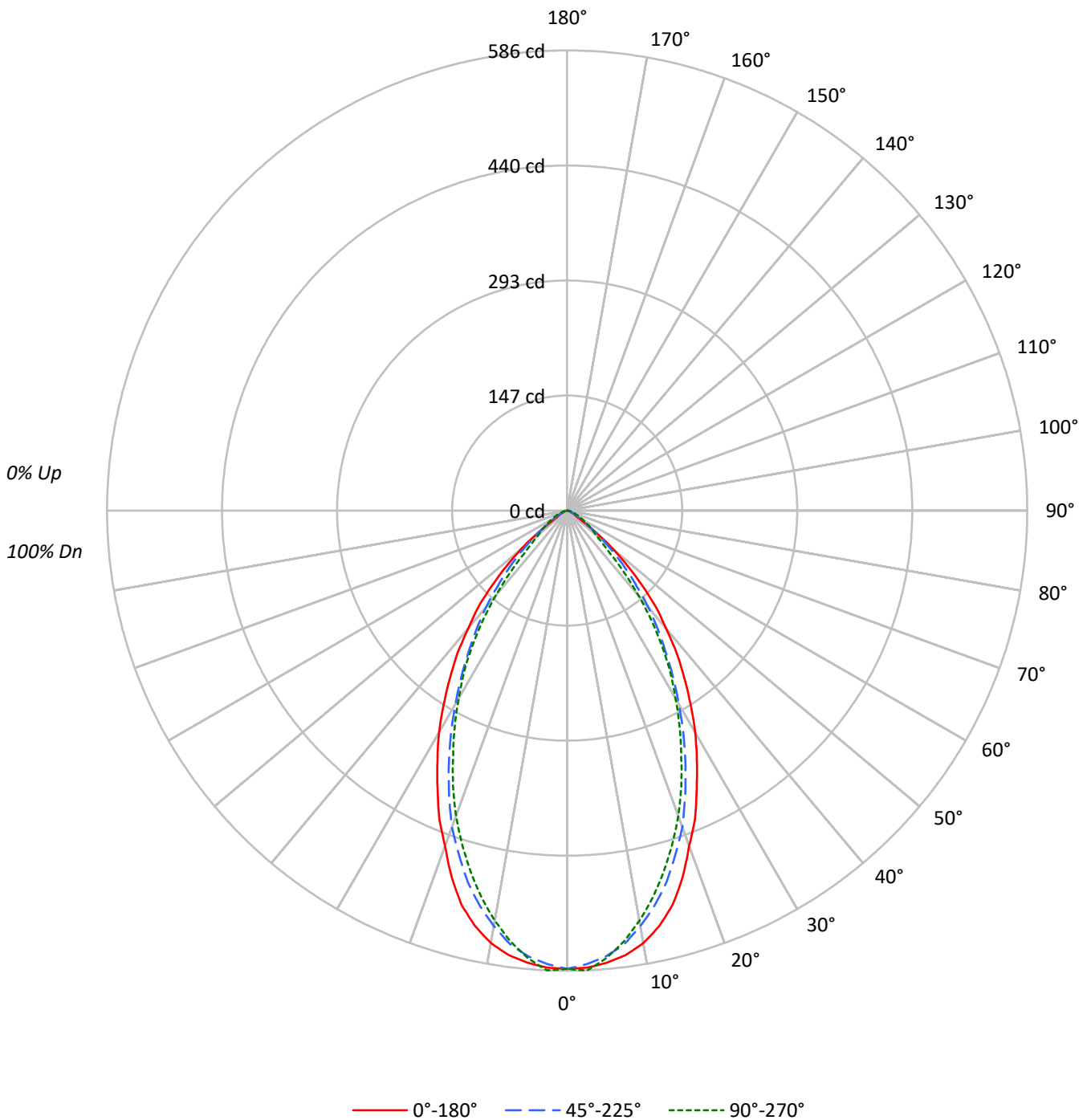
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 627.8 lumens  
Efficiency: N/A  
Efficacy: 17.2 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): 36.5  
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	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°	10771	10771	10771
5°	10704	10553	10597
10°	10478	10064	9933
15°	9926	9347	9082
20°	8923	8420	8122
25°	7947	7258	6998
30°	6950	6058	5883
35°	5852	4908	4751
40°	4714	3873	3423
45°	3528	2797	2038
50°	2208	1806	1338
55°	750	975	1087
60°	432	602	860
65°	306	406	659
70°	254	313	502
75°	164	250	414
80°	128	244	372
85°	0	0	254

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3528 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.8	8.6
10°-20°	137.7	21.9
20°-30°	165.8	26.4
30°-40°	141.7	22.6
40°-50°	83.0	13.2
50°-60°	30.1	4.8
60°-70°	10.7	1.7
70°-80°	4.3	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°	357.4	56.9
0°-40°	499.0	79.5
0°-60°	612.1	97.5
0°-90°	627.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	627.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	578	579	570	572	572	55
15°	520	512	489	480	475	144
25°	390	374	356	351	344	179
35°	260	240	218	216	211	162
45°	135	121	107	90	78	104
55°	23	33	30	32	34	29
65°	7	8	9	13	15	7
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°	583.7	583.7	583.7	583.7	583.7
2.5°	582.6	583.7	577.9	583.7	586.0
5°	577.9	579.1	569.7	572.1	572.1
7.5°	570.9	569.7	556.9	554.6	553.4
10°	559.2	555.8	537.1	533.6	530.1
12.5°	541.8	534.8	515.0	509.1	504.5
15°	519.6	511.5	489.3	480.0	475.4
17.5°	489.3	480.0	459.0	449.7	445.1
20°	454.4	445.1	428.8	418.3	413.6
22.5°	425.3	410.1	392.6	385.6	379.8
25°	390.3	374.0	356.5	350.7	343.7
27.5°	357.7	337.9	320.4	315.7	309.9
30°	326.2	305.3	284.3	284.3	276.1
32.5°	292.4	272.6	250.5	249.3	244.7
35°	259.8	240.0	217.9	215.5	210.9
37.5°	229.5	209.7	188.7	181.8	175.9
40°	195.7	178.3	160.8	149.1	142.1
42.5°	168.9	149.1	131.7	117.7	108.4
45°	135.2	121.2	107.2	89.7	78.1
47.5°	104.9	95.5	83.9	64.1	58.3
50°	76.9	72.2	62.9	47.8	46.6
52.5°	48.9	51.3	45.4	37.3	40.8
55°	23.3	32.6	30.3	31.5	33.8
57.5°	15.1	16.3	22.1	25.6	28.0
60°	11.7	11.7	16.3	21.0	23.3
62.5°	9.3	9.3	12.8	17.5	18.6
65°	7.0	8.2	9.3	12.8	15.1
67.5°	5.8	5.8	7.0	10.5	11.7
70°	4.7	4.7	5.8	8.2	9.3
72.5°	3.5	3.5	4.7	7.0	7.0
75°	2.3	3.5	3.5	4.7	5.8
77.5°	2.3	2.3	2.3	3.5	4.7
80°	1.2	1.2	2.3	2.3	3.5
82.5°	1.2	1.2	1.2	1.2	2.3
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



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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	4.14	5.30	4.50	5.61	5.93	7.53	8.70	7.90	9.01	9.32
	3H	4.66	5.68	5.04	6.01	6.38	8.27	9.29	8.65	9.62	9.99
	4H	4.79	5.74	5.20	6.09	6.48	8.48	9.43	8.89	9.78	10.17
	6H	4.86	5.73	5.28	6.10	6.50	8.64	9.50	9.05	9.88	10.27
	8H	4.87	5.69	5.30	6.08	6.49	8.67	9.48	9.10	9.88	10.28
	12H	4.84	5.62	5.27	6.00	6.43	8.67	9.45	9.10	9.83	10.26
4H	2H	4.44	5.39	4.85	5.74	6.13	7.50	8.45	7.90	8.80	9.19
	3H	5.11	5.87	5.52	6.28	6.69	8.38	9.15	8.80	9.56	9.96
	4H	5.35	6.03	5.78	6.45	6.90	8.66	9.35	9.10	9.77	10.22
	6H	5.46	6.05	5.93	6.50	6.97	8.89	9.48	9.36	9.92	10.40
	8H	5.48	6.03	5.96	6.48	6.95	8.93	9.48	9.41	9.93	10.40
	12H	5.45	5.93	5.94	6.42	6.89	8.96	9.43	9.45	9.92	10.40
8H	4H	5.45	6.00	5.93	6.45	6.92	8.59	9.14	9.07	9.59	10.06
	6H	5.62	6.06	6.13	6.56	7.05	8.85	9.29	9.36	9.80	10.28
	8H	5.67	6.07	6.20	6.59	7.08	8.92	9.31	9.44	9.83	10.32
	12H	5.65	6.00	6.17	6.50	7.07	8.98	9.33	9.50	9.82	10.40
12H	4H	5.44	5.92	5.93	6.40	6.88	8.55	9.02	9.04	9.51	9.99
	6H	5.62	6.01	6.15	6.53	7.03	8.80	9.20	9.33	9.72	10.21
	8H	5.70	6.05	6.22	6.54	7.12	8.89	9.24	9.41	9.73	10.31