

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: P1058567

Luminaire Tested: S122RDRP-H865D930-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058567  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-59)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-H865D930-X4F0-XX-UDD-SVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

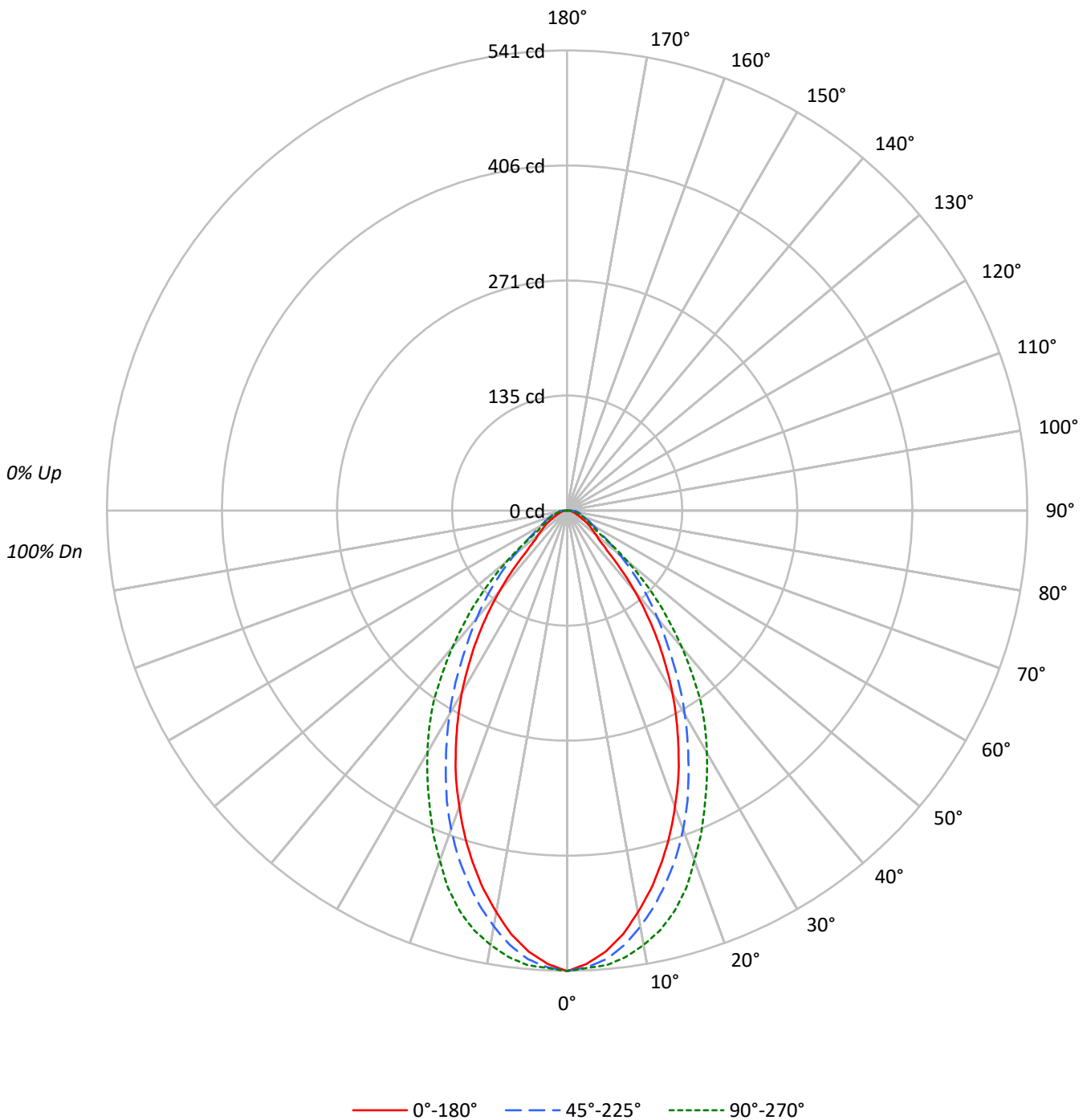
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 653.1 lumens  
Efficiency: N/A  
Efficacy: 20.9 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 31.2  
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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	44	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

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

	0°	45°	90°
0°	9988	9988	9988
5°	9637	9804	9934
10°	8983	9299	9711
15°	8184	8623	9311
20°	7275	7825	8589
25°	6303	6874	7788
30°	5278	5894	7002
35°	4163	4881	6163
40°	2982	3994	5051
45°	1746	3152	3909
50°	1260	2294	2638
55°	1062	1637	1380
60°	849	1329	1181
65°	699	1179	1092
70°	593	1133	1025
75°	570	1212	998
80°	638	1488	1063
85°	1059	2329	1482

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3909 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.6	7.6
10°-20°	127.1	19.5
20°-30°	156.2	23.9
30°-40°	138.1	21.1
40°-50°	88.1	13.5
50°-60°	43.0	6.6
60°-70°	25.6	3.9
70°-80°	16.4	2.5
80°-90°	9.0	1.4
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°	332.8	51.0
0°-40°	470.9	72.1
0°-60°	602.0	92.2
0°-90°	653.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	653.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	541	541	541	541	541	
5°	520	531	529	531	536	48
15°	428	440	451	471	487	120
25°	310	321	338	358	382	142
35°	185	195	217	247	274	115
45°	67	86	121	136	150	56
55°	33	44	51	48	43	30
65°	16	30	27	25	25	16
75°	8	18	17	15	14	9
85°	5	10	11	10	7	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	541.3	541.3	541.3	541.3	541.3
2.5°	533.3	543.3	537.3	537.3	538.3
5°	520.3	531.3	529.3	531.3	536.3
7.5°	502.3	513.3	515.3	523.3	529.3
10°	479.4	490.4	496.3	509.3	518.3
12.5°	455.4	466.4	475.4	492.4	505.3
15°	428.4	440.4	451.4	471.4	487.4
17.5°	400.5	412.5	426.4	446.4	465.4
20°	370.5	381.5	398.5	417.5	437.4
22.5°	341.6	351.5	369.5	387.5	411.5
25°	309.6	320.6	337.6	358.5	382.5
27.5°	278.6	289.6	306.6	330.6	355.5
30°	247.7	257.7	276.6	301.6	328.6
32.5°	215.7	225.7	246.7	273.6	301.6
35°	184.8	194.7	216.7	246.7	273.6
37.5°	153.8	164.8	189.8	217.7	240.7
40°	123.8	136.8	165.8	189.8	209.7
42.5°	93.9	111.9	142.8	162.8	178.8
45°	66.9	85.9	120.8	135.8	149.8
47.5°	50.9	65.9	99.9	110.9	119.8
50°	43.9	53.9	79.9	87.9	91.9
52.5°	38.0	47.9	63.9	66.9	64.9
55°	33.0	43.9	50.9	47.9	42.9
57.5°	28.0	40.9	41.9	36.0	37.0
60°	23.0	37.0	36.0	31.0	32.0
62.5°	19.0	34.0	31.0	28.0	28.0
65°	16.0	30.0	27.0	25.0	25.0
67.5°	13.0	27.0	24.0	22.0	22.0
70°	11.0	24.0	21.0	19.0	19.0
72.5°	10.0	21.0	19.0	17.0	17.0
75°	8.0	18.0	17.0	15.0	14.0
77.5°	7.0	15.0	15.0	14.0	12.0
80°	6.0	13.0	14.0	12.0	10.0
82.5°	6.0	12.0	12.0	11.0	8.0
85°	5.0	10.0	11.0	10.0	7.0
87.5°	3.0	9.0	9.0	8.0	5.0
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	10.02	11.30	10.38	11.61	11.93	9.56	10.84	9.92	11.15	11.46
	3H	11.20	12.34	11.58	12.67	13.03	11.12	12.26	11.50	12.59	12.95
	4H	11.63	12.69	12.03	13.04	13.43	11.80	12.87	12.21	13.22	13.60
	6H	11.98	12.95	12.39	13.32	13.72	12.45	13.43	12.87	13.80	14.19
	8H	12.17	13.10	12.60	13.49	13.90	12.74	13.67	13.17	14.06	14.46
	12H	12.39	13.28	12.82	13.66	14.09	13.06	13.94	13.49	14.33	14.76
4H	2H	10.52	11.59	10.93	11.94	12.32	10.16	11.22	10.56	11.57	11.95
	3H	12.17	13.05	12.59	13.45	13.86	11.96	12.83	12.37	13.24	13.64
	4H	12.94	13.72	13.37	14.14	14.59	12.80	13.58	13.23	14.00	14.45
	6H	13.54	14.22	14.00	14.67	15.14	13.65	14.33	14.12	14.78	15.25
	8H	13.84	14.48	14.31	14.92	15.40	14.04	14.68	14.51	15.13	15.60
	12H	14.16	14.72	14.64	15.20	15.68	14.48	15.05	14.97	15.53	16.00
8H	4H	13.36	13.99	13.83	14.44	14.91	13.26	13.89	13.73	14.34	14.81
	6H	14.31	14.83	14.81	15.33	15.81	14.37	14.89	14.87	15.38	15.87
	8H	14.85	15.32	15.38	15.84	16.33	14.94	15.41	15.47	15.93	16.42
	12H	15.42	15.84	15.94	16.33	16.90	15.61	16.03	16.13	16.52	17.10
12H	4H	13.43	13.99	13.91	14.47	14.95	13.34	13.90	13.83	14.39	14.86
	6H	14.49	14.96	15.01	15.48	15.97	14.55	15.02	15.07	15.54	16.03
	8H	15.18	15.60	15.70	16.09	16.67	15.26	15.68	15.78	16.17	16.74