

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: P1058144

Luminaire Tested: S122RDRP-S865D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058144  
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-S865D850-X4F0-XX-UDD-SVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

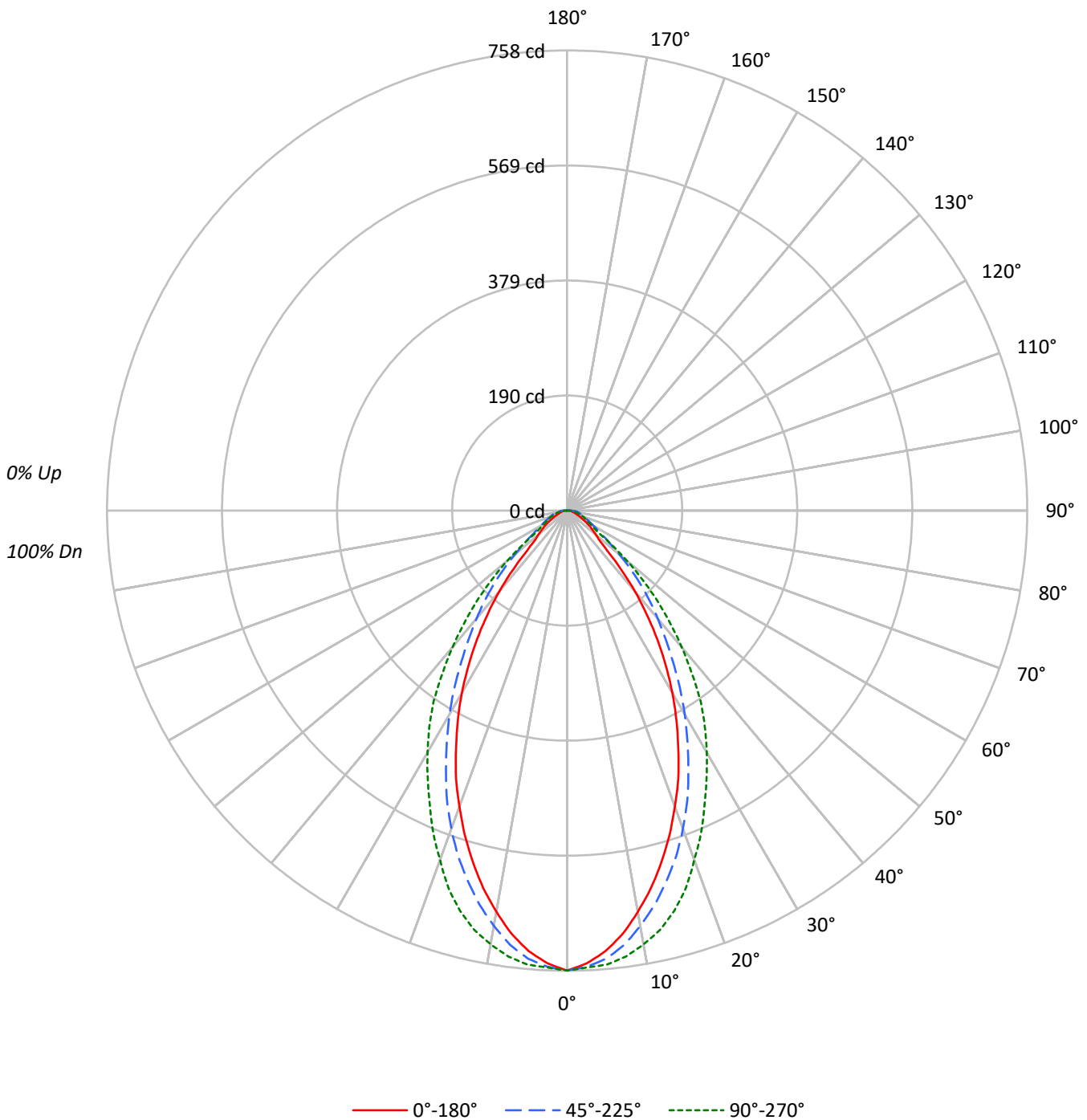
Lumens per Lamp: N/A  
Luminaire Lumens: 914.0 lumens  
Efficiency: N/A  
Efficacy: 26.1 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.97 / 0.94  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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	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°	13980	13980	13980
5°	13490	13724	13903
10°	12573	13017	13594
15°	11456	12070	13032
20°	10184	10951	12024
25°	8822	9620	10901
30°	7387	8250	9799
35°	5825	6832	8628
40°	4174	5588	7070
45°	2445	4413	5472
50°	1765	3209	3692
55°	1483	2294	1933
60°	1188	1856	1650
65°	978	1646	1524
70°	831	1586	1435
75°	799	1697	1397
80°	893	2083	1488
85°	1482	3260	2075

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5472 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.4	7.6
10°-20°	177.8	19.5
20°-30°	218.6	23.9
30°-40°	193.3	21.1
40°-50°	123.3	13.5
50°-60°	60.2	6.6
60°-70°	35.8	3.9
70°-80°	22.9	2.5
80°-90°	12.6	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°	465.9	51.0
0°-40°	659.1	72.1
0°-60°	842.6	92.2
0°-90°	914.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	914.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	728	744	741	744	751	68
15°	600	616	632	660	682	167
25°	433	449	472	502	535	198
35°	259	273	303	345	383	161
45°	94	120	169	190	210	79
55°	46	62	71	67	60	41
65°	22	42	38	35	35	22
75°	11	25	24	21	20	12
85°	7	14	15	14	10	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	757.6	757.6	757.6	757.6	757.6
2.5°	746.5	760.4	752.0	752.0	753.4
5°	728.3	743.7	740.9	743.7	750.6
7.5°	703.1	718.5	721.3	732.5	740.9
10°	671.0	686.3	694.7	712.9	725.5
12.5°	637.4	652.8	665.4	689.1	707.3
15°	599.7	616.5	631.8	659.8	682.2
17.5°	560.5	577.3	596.9	624.8	651.4
20°	518.6	534.0	557.7	584.3	612.3
22.5°	478.1	492.0	517.2	542.4	575.9
25°	433.3	448.7	472.5	501.8	535.4
27.5°	390.0	405.4	429.1	462.7	497.6
30°	346.7	360.6	387.2	422.2	459.9
32.5°	301.9	315.9	345.3	383.0	422.2
35°	258.6	272.6	303.3	345.3	383.0
37.5°	215.3	230.6	265.6	304.7	336.9
40°	173.3	191.5	232.0	265.6	293.5
42.5°	131.4	156.6	199.9	227.8	250.2
45°	93.7	120.2	169.1	190.1	209.7
47.5°	71.3	92.3	139.8	155.2	167.7
50°	61.5	75.5	111.8	123.0	128.6
52.5°	53.1	67.1	89.5	93.7	90.9
55°	46.1	61.5	71.3	67.1	60.1
57.5°	39.1	57.3	58.7	50.3	51.7
60°	32.2	51.7	50.3	43.3	44.7
62.5°	26.6	47.5	43.3	39.1	39.1
65°	22.4	41.9	37.7	34.9	34.9
67.5°	18.2	37.7	33.5	30.8	30.8
70°	15.4	33.5	29.4	26.6	26.6
72.5°	14.0	29.4	26.6	23.8	23.8
75°	11.2	25.2	23.8	21.0	19.6
77.5°	9.8	21.0	21.0	19.6	16.8
80°	8.4	18.2	19.6	16.8	14.0
82.5°	8.4	16.8	16.8	15.4	11.2
85°	7.0	14.0	15.4	14.0	9.8
87.5°	4.2	12.6	12.6	11.2	7.0
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	11.19	12.47	11.55	12.78	13.10	10.71	11.99	11.08	12.31	12.62
	3H	12.37	13.50	12.75	13.83	14.20	12.28	13.42	12.66	13.75	14.12
	4H	12.80	13.86	13.20	14.21	14.59	12.97	14.03	13.37	14.38	14.76
	6H	13.14	14.12	13.56	14.49	14.89	13.62	14.59	14.03	14.96	15.36
	8H	13.34	14.27	13.77	14.66	15.06	13.90	14.83	14.34	15.22	15.63
	12H	13.56	14.45	13.99	14.83	15.26	14.22	15.11	14.66	15.49	15.92
4H	2H	11.69	12.75	12.09	13.10	13.49	11.31	12.37	11.72	12.73	13.11
	3H	13.34	14.21	13.75	14.62	15.02	13.12	13.99	13.53	14.40	14.80
	4H	14.10	14.89	14.54	15.31	15.75	13.96	14.75	14.40	15.17	15.61
	6H	14.71	15.39	15.17	15.83	16.30	14.82	15.50	15.28	15.95	16.41
	8H	15.01	15.64	15.48	16.09	16.56	15.21	15.85	15.68	16.29	16.77
	12H	15.32	15.89	15.81	16.37	16.84	15.65	16.21	16.13	16.69	17.17
8H	4H	14.52	15.16	14.99	15.61	16.08	14.42	15.06	14.89	15.50	15.98
	6H	15.47	16.00	15.98	16.49	16.97	15.53	16.05	16.03	16.55	17.03
	8H	16.02	16.49	16.54	17.01	17.50	16.11	16.58	16.63	17.10	17.59
	12H	16.59	17.00	17.10	17.50	18.07	16.78	17.20	17.30	17.69	18.26
12H	4H	14.59	15.16	15.08	15.64	16.11	14.50	15.07	14.99	15.55	16.02
	6H	15.66	16.13	16.18	16.64	17.14	15.72	16.19	16.24	16.70	17.19
	8H	16.35	16.77	16.87	17.26	17.83	16.43	16.84	16.94	17.34	17.91