

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: P1058136

Luminaire Tested: S122RDRP-S865D840-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058136  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S865D840-X4F0-XX-UDD-SVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

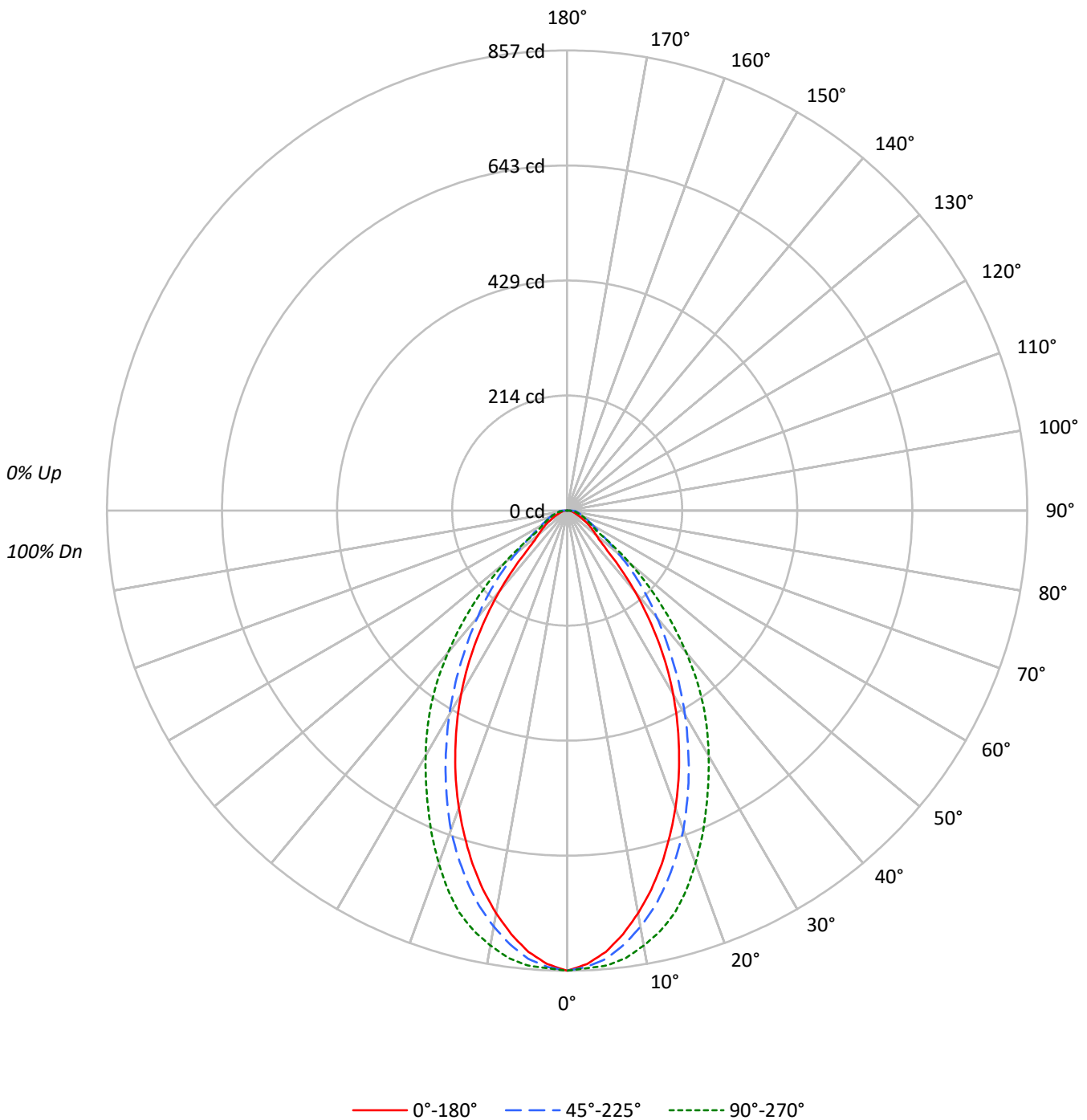
Lumens per Lamp: N/A  
Luminaire Lumens: 1039.3 lumens  
Efficiency: N/A  
Efficacy: 29.7 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

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	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	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	67	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	45	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°	15810	15810	15810
5°	15281	15517	15752
10°	14265	14742	15409
15°	13011	13691	14811
20°	11574	12424	13724
25°	10031	10913	12468
30°	8410	9358	11231
35°	6625	7742	9952
40°	4724	6256	8310
45°	2790	4950	6446
50°	2009	3583	4386
55°	1679	2580	2210
60°	1362	2067	1878
65°	1113	1834	1725
70°	960	1786	1651
75°	905	1818	1633
80°	946	2168	1764
85°	1355	3515	2160

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6446 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.6	7.6
10°-20°	201.9	19.4
20°-30°	249.1	24.0
30°-40°	221.5	21.3
40°-50°	141.4	13.6
50°-60°	67.9	6.5
60°-70°	39.9	3.8
70°-80°	25.5	2.4
80°-90°	13.6	1.3
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°	529.5	51.0
0°-40°	751.1	72.3
0°-60°	960.4	92.4
0°-90°	1039.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1039.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	857	857	857	857	857	
5°	825	840	838	843	850	77
15°	681	698	717	750	775	190
25°	493	512	536	574	612	225
35°	294	317	344	396	442	183
45°	107	139	190	220	247	90
55°	52	68	80	78	69	47
65°	26	46	42	38	40	26
75°	13	28	26	24	23	14
85°	6	15	17	14	10	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	856.8	856.8	856.8	856.8	856.8
2.5°	845.3	859.3	850.4	850.4	853.0
5°	825.0	840.2	837.7	842.8	850.4
7.5°	795.7	812.2	814.8	828.8	840.2
10°	761.3	779.1	786.8	807.1	822.4
12.5°	723.1	740.9	754.9	780.4	802.0
15°	681.1	697.6	716.7	749.8	775.3
17.5°	635.3	656.9	676.0	710.4	739.7
20°	589.4	609.8	632.7	665.8	698.9
22.5°	542.3	561.4	584.3	618.7	656.9
25°	492.7	511.8	536.0	574.2	612.4
27.5°	444.3	463.4	486.3	528.3	569.1
30°	394.7	413.8	439.2	482.5	527.1
32.5°	345.0	365.4	390.8	437.9	485.0
35°	294.1	317.0	343.7	395.9	441.8
37.5°	244.4	267.3	300.4	351.4	394.7
40°	196.1	222.8	259.7	305.5	345.0
42.5°	149.0	178.2	224.1	261.0	295.4
45°	106.9	138.8	189.7	220.2	247.0
47.5°	81.5	104.4	156.6	180.8	199.9
50°	70.0	84.0	124.8	142.6	152.8
52.5°	61.1	73.8	99.3	108.2	108.2
55°	52.2	67.5	80.2	77.7	68.7
57.5°	44.6	61.1	66.2	56.0	58.6
60°	36.9	56.0	56.0	49.7	50.9
62.5°	30.6	52.2	48.4	43.3	44.6
65°	25.5	45.8	42.0	38.2	39.5
67.5°	20.4	40.7	36.9	34.4	34.4
70°	17.8	36.9	33.1	30.6	30.6
72.5°	15.3	31.8	29.3	26.7	26.7
75°	12.7	28.0	25.5	24.2	22.9
77.5°	11.5	24.2	22.9	20.4	19.1
80°	8.9	20.4	20.4	19.1	16.6
82.5°	7.6	17.8	17.8	16.6	14.0
85°	6.4	15.3	16.6	14.0	10.2
87.5°	5.1	14.0	14.0	11.5	7.6
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	11.26	12.54	11.63	12.85	13.17	11.05	12.33	11.42	12.64	12.96
	3H	12.49	13.63	12.87	13.96	14.32	12.65	13.78	13.03	14.11	14.48
	4H	12.95	14.00	13.35	14.36	14.74	13.36	14.42	13.77	14.77	15.16
	6H	13.33	14.30	13.74	14.67	15.07	14.02	14.99	14.43	15.36	15.76
	8H	13.48	14.40	13.91	14.79	15.20	14.35	15.27	14.78	15.66	16.07
	12H	13.64	14.52	14.07	14.90	15.33	14.64	15.53	15.08	15.91	16.34
4H	2H	11.81	12.87	12.21	13.22	13.61	11.65	12.70	12.05	13.06	13.44
	3H	13.51	14.38	13.92	14.78	15.18	13.48	14.36	13.90	14.76	15.16
	4H	14.30	15.08	14.74	15.50	15.95	14.36	15.14	14.79	15.56	16.00
	6H	14.95	15.62	15.41	16.07	16.54	15.20	15.88	15.67	16.33	16.79
	8H	15.19	15.83	15.66	16.27	16.75	15.63	16.26	16.10	16.71	17.18
	12H	15.44	16.00	15.93	16.48	16.96	16.03	16.59	16.52	17.07	17.55
8H	4H	14.72	15.35	15.19	15.80	16.27	14.78	15.41	15.25	15.86	16.33
	6H	15.70	16.22	16.20	16.72	17.20	15.86	16.38	16.37	16.88	17.36
	8H	16.19	16.66	16.71	17.17	17.66	16.46	16.92	16.98	17.44	17.93
	12H	16.69	17.10	17.21	17.60	18.17	17.06	17.47	17.57	17.97	18.54
12H	4H	14.79	15.35	15.27	15.83	16.30	14.85	15.41	15.34	15.89	16.37
	6H	15.87	16.33	16.39	16.85	17.34	16.03	16.49	16.55	17.01	17.50
	8H	16.50	16.91	17.02	17.41	17.98	16.74	17.15	17.26	17.65	18.22