

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: P1058169

Luminaire Tested: S122RDRP-S865D935-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058169
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S865D935-X4F0-XX-UDD-BVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

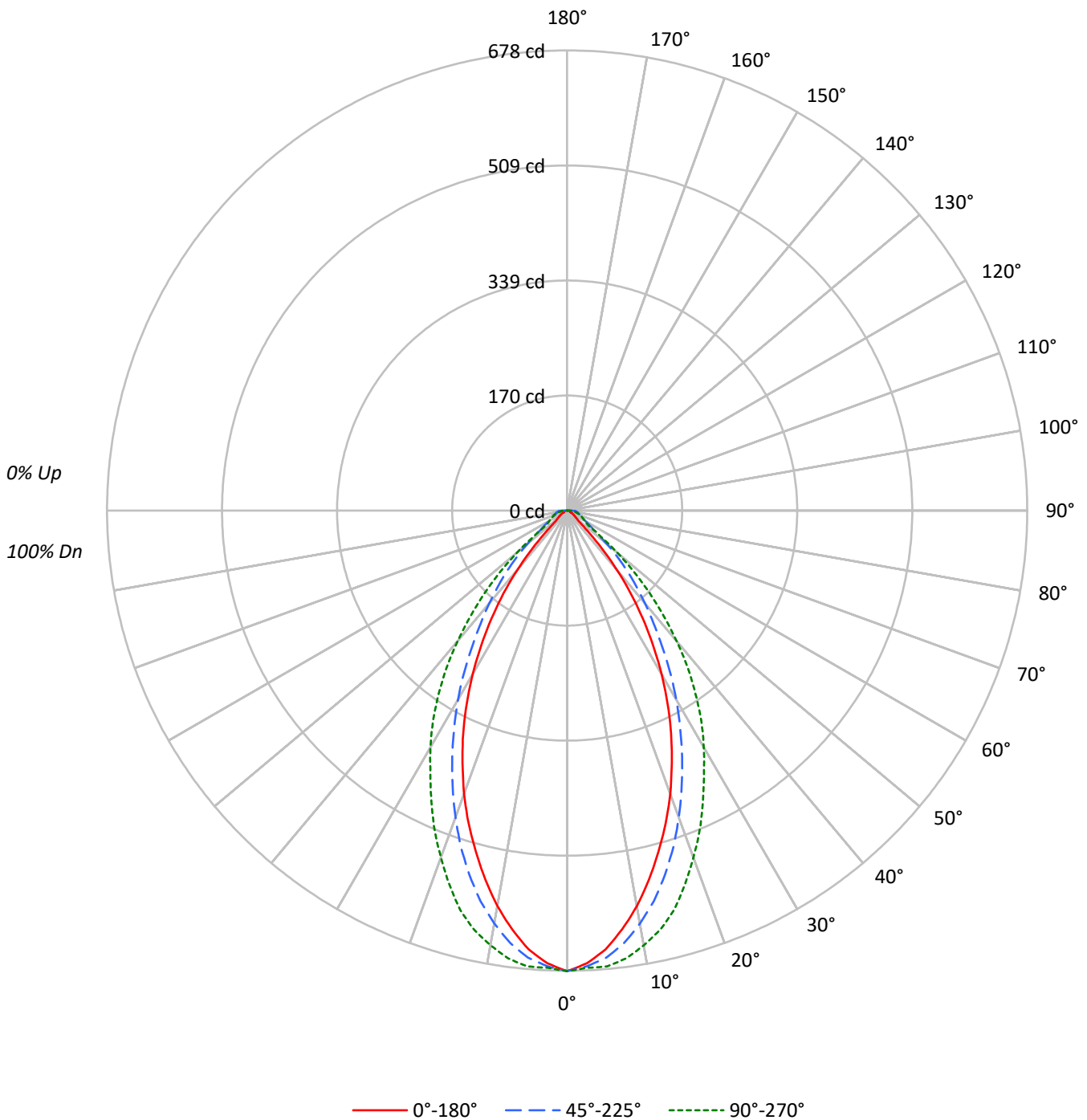
Lumens per Lamp: N/A
Luminaire Lumens: 738.5 lumens
Efficiency: N/A
Efficacy: 21.1 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): 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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90					90			
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81					81			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74					74			
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67					67			
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61					61			
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56					56			
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52					52			
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48					48			
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45					45			
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42					42			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12520	12520	12520
5°	12025	12247	12488
10°	11087	11574	12185
15°	9934	10620	11634
20°	8719	9443	10680
25°	7383	8156	9636
30°	5921	6848	8582
35°	4377	5478	7434
40°	2746	4288	6041
45°	1078	3231	4475
50°	531	2182	2742
55°	418	1432	1222
60°	321	1163	1122
65°	236	1092	1092
70°	291	1111	1111
75°	307	1241	1162
80°	457	1615	1265
85°	910	2752	1842

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 5034 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.0	8.4
10°-20°	156.7	21.2
20°-30°	187.4	25.4
30°-40°	157.8	21.4
40°-50°	89.8	12.2
50°-60°	35.4	4.8
60°-70°	22.3	3.0
70°-80°	16.6	2.2
80°-90°	10.5	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°	406.1	55.0
0°-40°	563.8	76.3
0°-60°	689.1	93.3
0°-90°	738.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	738.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	678	678	678	678	678	
5°	649	663	661	669	674	60
15°	520	538	556	588	609	145
25°	363	379	401	442	473	165
35°	194	212	243	295	330	121
45°	41	73	124	155	172	39
55°	13	28	44	46	38	12
65°	5	25	25	24	25	6
75°	4	17	17	16	16	5
85°	4	12	13	12	9	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	678.5	678.5	678.5	678.5	678.5
2.5°	667.7	679.6	672.0	673.1	674.2
5°	649.2	663.3	661.2	668.8	674.2
7.5°	622.1	637.3	642.7	655.7	665.5
10°	591.7	609.0	617.7	638.4	650.3
12.5°	556.9	576.5	589.5	615.6	632.9
15°	520.0	538.5	555.9	588.4	609.0
17.5°	483.1	501.6	520.0	555.9	577.6
20°	444.0	461.4	480.9	518.9	543.9
22.5°	402.8	421.2	440.8	479.9	510.3
25°	362.6	378.9	400.6	441.9	473.3
27.5°	320.3	336.6	360.4	402.8	436.4
30°	277.9	294.2	321.4	364.8	402.8
32.5°	235.6	253.0	282.3	330.0	368.0
35°	194.3	211.7	243.2	295.3	330.0
37.5°	154.2	173.7	208.4	259.5	292.0
40°	114.0	136.8	178.0	223.6	250.8
42.5°	76.0	104.2	149.8	187.8	210.6
45°	41.3	72.7	123.8	155.2	171.5
47.5°	22.8	46.7	98.8	123.8	133.5
50°	18.5	32.6	76.0	94.5	95.5
52.5°	15.2	29.3	56.5	67.3	61.9
55°	13.0	28.2	44.5	45.6	38.0
57.5°	10.9	27.1	36.9	32.6	32.6
60°	8.7	27.1	31.5	29.3	30.4
62.5°	6.5	27.1	28.2	26.1	27.1
65°	5.4	25.0	25.0	23.9	25.0
67.5°	5.4	22.8	22.8	21.7	22.8
70°	5.4	21.7	20.6	20.6	20.6
72.5°	4.3	19.5	19.5	18.5	18.5
75°	4.3	17.4	17.4	16.3	16.3
77.5°	4.3	16.3	16.3	15.2	14.1
80°	4.3	14.1	15.2	14.1	11.9
82.5°	4.3	13.0	14.1	13.0	9.8
85°	4.3	11.9	13.0	11.9	8.7
87.5°	3.3	11.9	11.9	9.8	6.5
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	6.46	7.69	6.83	8.00	8.31	8.50	9.72	8.87	10.04	10.35
	3H	8.01	9.09	8.39	9.42	9.79	10.47	11.56	10.85	11.89	12.25
	4H	8.56	9.57	8.97	9.93	10.31	11.39	12.40	11.79	12.75	13.14
	6H	9.12	10.05	9.53	10.42	10.81	12.27	13.20	12.68	13.57	13.96
	8H	9.41	10.29	9.84	10.68	11.08	12.67	13.55	13.10	13.94	14.35
	12H	9.76	10.60	10.20	10.99	11.42	13.12	13.96	13.55	14.34	14.77
4H	2H	7.66	8.67	8.06	9.02	9.40	9.12	10.13	9.53	10.49	10.87
	3H	9.85	10.69	10.27	11.09	11.50	11.36	12.20	11.78	12.60	13.01
	4H	10.91	11.66	11.34	12.08	12.52	12.44	13.18	12.87	13.60	14.05
	6H	11.80	12.45	12.27	12.90	13.36	13.54	14.19	14.01	14.64	15.11
	8H	12.18	12.79	12.66	13.24	13.71	14.07	14.67	14.54	15.12	15.59
	12H	12.60	13.14	13.09	13.62	14.09	14.64	15.18	15.13	15.66	16.14
8H	4H	11.71	12.32	12.18	12.77	13.24	12.93	13.53	13.40	13.98	14.45
	6H	13.09	13.59	13.60	14.09	14.57	14.32	14.82	14.83	15.32	15.80
	8H	13.81	14.25	14.33	14.77	15.26	15.06	15.51	15.58	16.02	16.52
	12H	14.55	14.95	15.07	15.44	16.02	15.89	16.28	16.41	16.78	17.35
12H	4H	11.88	12.41	12.36	12.89	13.37	13.03	13.56	13.52	14.05	14.52
	6H	13.42	13.87	13.95	14.39	14.88	14.54	14.99	15.06	15.50	15.99
	8H	14.34	14.73	14.85	15.22	15.80	15.42	15.82	15.94	16.31	16.89