

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: P1057821

Luminaire Tested: S122RDRP-S1005D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057821
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-S1005D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

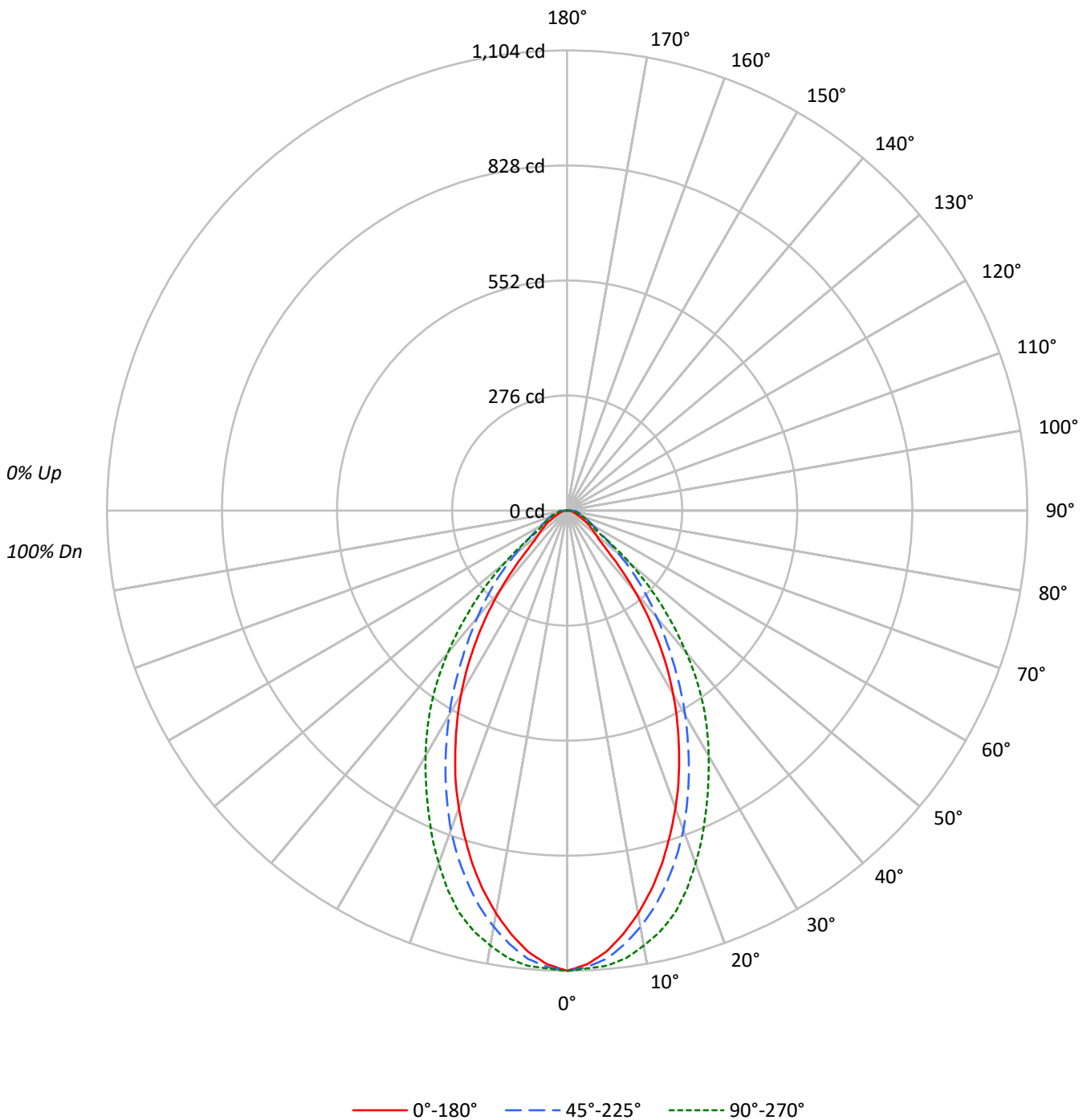
Lumens per Lamp: N/A
Luminaire Lumens: 1339.4 lumens
Efficiency: N/A
Efficacy: 32.0 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	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°	20375	20375	20375
5°	19694	19997	20301
10°	18385	18999	19859
15°	16769	17646	19088
20°	14918	16014	17689
25°	12929	14065	16068
30°	10837	12062	14474
35°	8537	9979	12824
40°	6087	8062	10710
45°	3596	6380	8306
50°	2589	4616	5652
55°	2165	3326	2850
60°	1757	2665	2421
65°	1432	2362	2222
70°	1241	2304	2126
75°	1169	2338	2103
80°	1222	2795	2263
85°	1736	4510	2774

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8306 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.3	7.6
10°-20°	260.2	19.4
20°-30°	321.0	24.0
30°-40°	285.5	21.3
40°-50°	182.2	13.6
50°-60°	87.5	6.5
60°-70°	51.4	3.8
70°-80°	32.8	2.5
80°-90°	17.5	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°	682.5	51.0
0°-40°	968.0	72.3
0°-60°	1237.7	92.4
0°-90°	1339.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1339.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1104	1104	1104	1104	1104	
5°	1063	1083	1080	1086	1096	99
15°	878	899	924	966	999	245
25°	635	660	691	740	789	291
35°	379	408	443	510	569	235
45°	138	179	244	284	318	116
55°	67	87	103	100	89	61
65°	33	59	54	49	51	33
75°	16	36	33	31	30	18
85°	8	20	21	18	13	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1104.2	1104.2	1104.2	1104.2	1104.2
2.5°	1089.5	1107.5	1096.0	1096.0	1099.3
5°	1063.2	1082.9	1079.6	1086.2	1096.0
7.5°	1025.5	1046.8	1050.1	1068.1	1082.9
10°	981.2	1004.1	1014.0	1040.2	1059.9
12.5°	931.9	954.9	973.0	1005.8	1033.7
15°	877.8	899.1	923.7	966.4	999.2
17.5°	818.7	846.6	871.2	915.5	953.3
20°	759.7	785.9	815.5	858.1	900.8
22.5°	699.0	723.6	753.1	797.4	846.6
25°	635.0	659.6	690.8	740.0	789.2
27.5°	572.6	597.2	626.8	680.9	733.4
30°	508.6	533.2	566.1	621.8	679.3
32.5°	444.6	470.9	503.7	564.4	625.1
35°	379.0	408.5	443.0	510.3	569.3
37.5°	315.0	344.6	387.2	452.8	508.6
40°	252.7	287.1	334.7	393.8	444.6
42.5°	192.0	229.7	288.8	336.4	380.7
45°	137.8	178.8	244.5	283.9	318.3
47.5°	105.0	134.5	201.8	233.0	257.6
50°	90.2	108.3	160.8	183.8	196.9
52.5°	78.8	95.2	128.0	139.5	139.5
55°	67.3	87.0	103.4	100.1	88.6
57.5°	57.4	78.8	85.3	72.2	75.5
60°	47.6	72.2	72.2	64.0	65.6
62.5°	39.4	67.3	62.3	55.8	57.4
65°	32.8	59.1	54.1	49.2	50.9
67.5°	26.3	52.5	47.6	44.3	44.3
70°	23.0	47.6	42.7	39.4	39.4
72.5°	19.7	41.0	37.7	34.5	34.5
75°	16.4	36.1	32.8	31.2	29.5
77.5°	14.8	31.2	29.5	26.3	24.6
80°	11.5	26.3	26.3	24.6	21.3
82.5°	9.8	23.0	23.0	21.3	18.0
85°	8.2	19.7	21.3	18.0	13.1
87.5°	6.6	18.0	18.0	14.8	9.8
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	12.15	13.42	12.51	13.74	14.05	11.94	13.21	12.30	13.52	13.84
	3H	13.38	14.51	13.76	14.84	15.21	13.53	14.66	13.91	14.99	15.36
	4H	13.83	14.89	14.23	15.24	15.62	14.24	15.30	14.65	15.65	16.04
	6H	14.21	15.19	14.63	15.56	15.95	14.90	15.87	15.31	16.24	16.63
	8H	14.37	15.29	14.80	15.68	16.08	15.22	16.15	15.65	16.54	16.94
	12H	14.52	15.41	14.96	15.79	16.22	15.52	16.40	15.95	16.79	17.22
4H	2H	12.69	13.75	13.10	14.10	14.49	12.53	13.59	12.93	13.94	14.32
	3H	14.39	15.26	14.80	15.67	16.07	14.36	15.24	14.78	15.64	16.04
	4H	15.18	15.97	15.62	16.39	16.83	15.24	16.02	15.67	16.44	16.88
	6H	15.83	16.51	16.29	16.95	17.42	16.08	16.76	16.55	17.21	17.67
	8H	16.08	16.71	16.55	17.16	17.63	16.51	17.14	16.98	17.59	18.06
	12H	16.32	16.88	16.81	17.37	17.84	16.91	17.47	17.39	17.95	18.42
8H	4H	15.60	16.24	16.07	16.68	17.15	15.66	16.29	16.13	16.74	17.21
	6H	16.58	17.10	17.09	17.60	18.08	16.74	17.26	17.24	17.76	18.24
	8H	17.07	17.54	17.60	18.06	18.55	17.33	17.80	17.85	18.31	18.81
	12H	17.58	17.99	18.09	18.48	19.06	17.93	18.34	18.45	18.84	19.41
12H	4H	15.67	16.23	16.16	16.71	17.19	15.73	16.29	16.22	16.78	17.25
	6H	16.75	17.22	17.27	17.73	18.23	16.91	17.37	17.43	17.89	18.38
	8H	17.39	17.80	17.90	18.30	18.87	17.62	18.03	18.13	18.52	19.10