

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: P1057823

Luminaire Tested: S122RDRP-S1005D850-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057823
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-58)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D850-X4F0-XX-UDD-WVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

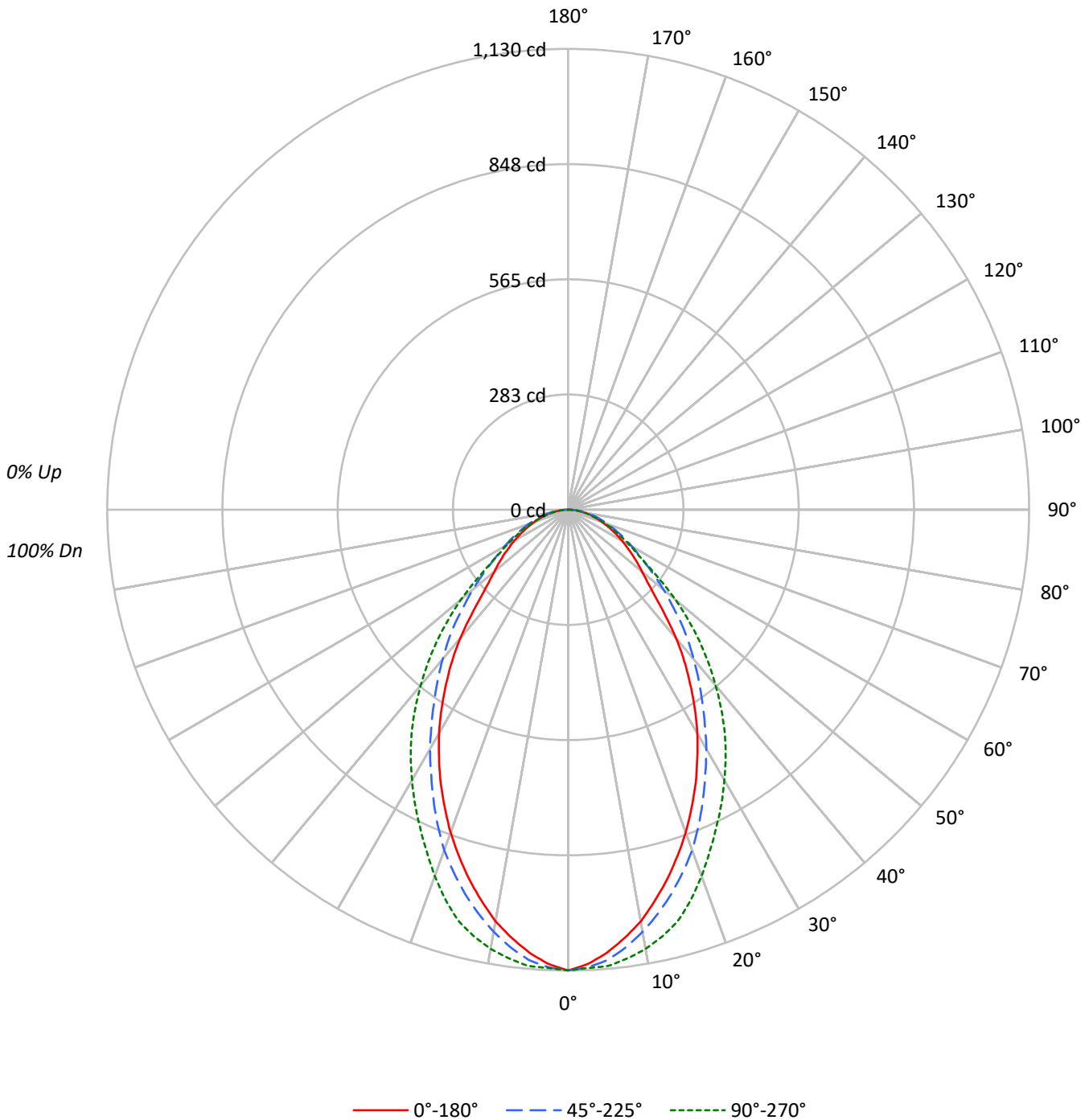
Lumens per Lamp: N/A
Luminaire Lumens: 1839.6 lumens
Efficiency: N/A
Efficacy: 44.0 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87												87																
2	102	95	89	84	100	93	88	83	90	85	81	87	83	79	84	80	78	76												76																
3	94	85	78	73	92	84	77	72	81	75	71	78	73	69	76	72	68	66												66																
4	88	77	69	63	85	76	69	63	73	67	62	71	66	61	69	64	61	59												59																
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52												52																
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47												47																
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	49	44	43												43																
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39												39																
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36												36																
10	59	47	40	35	58	46	39	35	45	39	35	45	39	34	44	38	34	33												33																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20846	20846	20846
5°	20197	20531	20803
10°	19202	19693	20491
15°	17917	18637	19921
20°	16550	17451	18771
25°	15056	15924	17493
30°	13485	14429	16315
35°	11745	12890	15070
40°	9912	11533	13547
45°	7873	10183	11853
50°	6778	8756	9838
55°	6170	7489	7544
60°	5628	6658	6414
65°	5157	6012	5654
70°	4775	5573	5044
75°	4442	5262	4442
80°	4187	5048	4006
85°	4171	5208	3472

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 11853 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.3	5.7
10°-20°	275.7	15.0
20°-30°	362.8	19.7
30°-40°	364.8	19.8
40°-50°	295.7	16.1
50°-60°	203.7	11.1
60°-70°	133.3	7.2
70°-80°	74.3	4.0
80°-90°	25.1	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°	742.8	40.4
0°-40°	1107.6	60.2
0°-60°	1606.9	87.4
0°-90°	1839.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1839.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1130	1130	1130	1130	1130	
5°	1090	1112	1108	1113	1123	102
15°	938	961	976	1012	1043	263
25°	740	759	782	816	859	339
35°	521	546	572	623	669	325
45°	302	336	390	425	454	239
55°	192	213	233	238	234	172
65°	118	141	138	131	130	118
75°	62	77	74	66	62	67
85°	20	26	25	21	16	21
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1129.7	1129.7	1129.7	1129.7	1129.7
2.5°	1114.9	1134.6	1123.1	1123.1	1124.8
5°	1090.4	1111.7	1108.4	1113.3	1123.1
7.5°	1059.2	1082.2	1082.2	1096.9	1110.0
10°	1024.8	1047.7	1051.0	1074.0	1093.6
12.5°	982.1	1005.1	1014.9	1044.4	1070.7
15°	937.9	960.8	975.6	1011.7	1042.8
17.5°	890.3	913.3	932.9	970.7	1001.8
20°	842.8	864.1	888.7	921.5	955.9
22.5°	790.3	813.3	836.2	867.4	906.7
25°	739.5	759.1	782.1	816.5	859.2
27.5°	685.4	706.7	728.0	769.0	813.3
30°	632.9	654.2	677.2	719.8	765.7
32.5°	577.1	600.1	623.1	670.6	718.2
35°	521.4	546.0	572.2	623.1	669.0
37.5°	467.3	493.5	524.7	577.1	616.5
40°	411.5	439.4	478.8	524.7	562.4
42.5°	352.5	387.0	434.5	473.9	508.3
45°	301.7	336.1	390.2	424.7	454.2
47.5°	264.0	291.9	344.3	373.8	398.4
50°	236.1	257.4	305.0	326.3	342.7
52.5°	213.2	234.5	267.3	282.0	286.9
55°	191.8	213.2	232.8	237.7	234.5
57.5°	170.5	193.5	205.0	200.0	200.0
60°	152.5	177.1	180.4	173.8	173.8
62.5°	134.4	159.0	159.0	150.8	150.8
65°	118.1	141.0	137.7	131.2	129.5
67.5°	103.3	124.6	119.7	113.1	111.5
70°	88.5	108.2	103.3	95.1	93.5
72.5°	75.4	93.5	86.9	80.3	77.1
75°	62.3	77.1	73.8	65.6	62.3
77.5°	50.8	62.3	59.0	52.5	49.2
80°	39.4	49.2	47.5	41.0	37.7
82.5°	29.5	37.7	36.1	31.2	26.2
85°	19.7	26.2	24.6	21.3	16.4
87.5°	9.8	18.0	16.4	14.8	8.2
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	17.28	18.72	17.65	19.04	19.35	17.64	19.08	18.00	19.39	19.71
	3H	18.83	20.12	19.20	20.44	20.81	18.99	20.28	19.37	20.60	20.97
	4H	19.40	20.60	19.80	20.95	21.33	19.47	20.68	19.87	21.03	21.41
	6H	19.83	20.94	20.24	21.31	21.70	19.82	20.94	20.24	21.31	21.70
	8H	19.98	21.04	20.41	21.43	21.83	19.94	21.00	20.37	21.39	21.79
	12H	20.10	21.11	20.53	21.49	21.92	20.01	21.03	20.45	21.41	21.84
4H	2H	17.87	19.08	18.27	19.43	19.81	18.15	19.36	18.56	19.71	20.09
	3H	19.69	20.69	20.10	21.09	21.49	19.73	20.73	20.14	21.13	21.53
	4H	20.44	21.34	20.87	21.75	22.20	20.33	21.23	20.77	21.65	22.09
	6H	21.02	21.81	21.48	22.25	22.71	20.81	21.60	21.27	22.04	22.50
	8H	21.23	21.97	21.70	22.41	22.88	20.98	21.71	21.44	22.16	22.62
	12H	21.40	22.05	21.89	22.53	23.01	21.10	21.75	21.58	22.23	22.70
8H	4H	20.72	21.45	21.19	21.90	22.37	20.63	21.37	21.10	21.81	22.28
	6H	21.48	22.08	21.98	22.57	23.05	21.25	21.86	21.75	22.35	22.83
	8H	21.80	22.34	22.32	22.86	23.34	21.50	22.04	22.02	22.55	23.04
	12H	22.09	22.57	22.60	23.06	23.63	21.71	22.19	22.22	22.68	23.25
12H	4H	20.74	21.39	21.22	21.87	22.34	20.67	21.32	21.15	21.80	22.27
	6H	21.54	22.08	22.05	22.59	23.08	21.33	21.87	21.84	22.38	22.87
	8H	21.94	22.42	22.45	22.91	23.48	21.65	22.13	22.16	22.62	23.19