

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: P1057817

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057817
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S1005D850-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

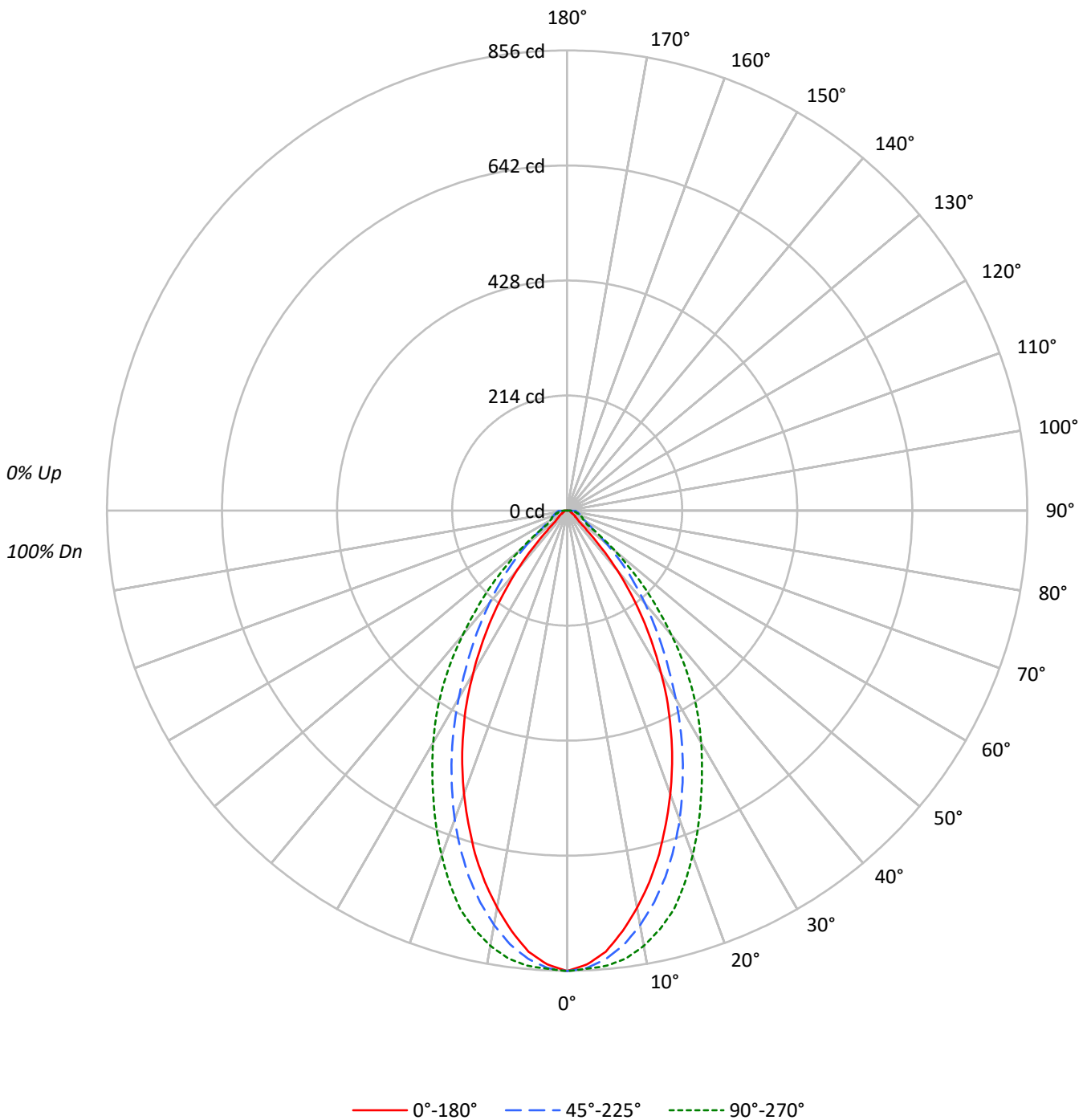
Lumens per Lamp: N/A
Luminaire Lumens: 923.2 lumens
Efficiency: N/A
Efficacy: 22.1 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	0																			
RCR																																														
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																												
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90																												
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81																												
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74																												
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67																												
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61																												
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57																												
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52																												
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48																												
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45																												
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15805	15805	15805
5°	15257	15500	15743
10°	14049	14664	15402
15°	12631	13477	14670
20°	11018	12018	13404
25°	9321	10355	11992
30°	7447	8600	10628
35°	5508	6911	9130
40°	3478	5415	7272
45°	1370	4068	5352
50°	706	2733	3298
55°	579	1795	1477
60°	424	1454	1332
65°	358	1362	1362
70°	356	1419	1327
75°	471	1640	1405
80°	701	2093	1573
85°	1037	3472	2075

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 6938 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.3	8.5
10°-20°	197.9	21.4
20°-30°	235.1	25.5
30°-40°	195.6	21.2
40°-50°	109.2	11.8
50°-60°	44.1	4.8
60°-70°	28.2	3.1
70°-80°	21.2	2.3
80°-90°	13.5	1.5
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°	511.4	55.4
0°-40°	706.9	76.6
0°-60°	860.3	93.2
0°-90°	923.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	923.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	856	856	856	856	856	
5°	824	838	837	843	850	76
15°	661	681	706	742	768	184
25°	458	476	509	548	589	209
35°	244	267	307	358	405	152
45°	52	89	156	182	205	49
55°	18	38	56	54	46	16
65°	8	33	31	30	31	8
75°	7	23	23	21	20	7
85°	5	15	16	15	10	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	856.5	856.5	856.5	856.5	856.5
2.5°	845.0	858.1	851.6	851.6	853.2
5°	823.7	838.4	836.8	843.4	849.9
7.5°	789.2	805.6	813.8	828.6	840.1
10°	749.8	767.9	782.6	805.6	822.0
12.5°	707.2	725.2	746.5	776.1	797.4
15°	661.2	680.9	705.5	741.6	767.9
17.5°	610.4	631.7	659.6	699.0	726.9
20°	561.1	582.5	612.0	651.4	682.6
22.5°	510.3	528.3	559.5	598.9	636.6
25°	457.8	475.8	508.6	548.0	589.0
27.5°	405.3	423.3	456.1	497.2	543.1
30°	349.5	369.2	403.6	449.6	498.8
32.5°	297.0	316.7	352.8	403.6	452.9
35°	244.5	267.4	306.8	357.7	405.3
37.5°	193.6	219.9	264.2	311.7	354.4
40°	144.4	172.3	224.8	265.8	301.9
42.5°	95.2	128.0	188.7	223.1	251.0
45°	52.5	88.6	155.9	182.1	205.1
47.5°	29.5	57.4	123.1	144.4	157.5
50°	24.6	42.7	95.2	109.9	114.9
52.5°	19.7	39.4	72.2	80.4	77.1
55°	18.0	37.7	55.8	54.1	45.9
57.5°	14.8	37.7	44.3	39.4	39.4
60°	11.5	36.1	39.4	34.5	36.1
62.5°	9.8	34.5	36.1	32.8	32.8
65°	8.2	32.8	31.2	29.5	31.2
67.5°	6.6	29.5	29.5	27.9	27.9
70°	6.6	27.9	26.3	24.6	24.6
72.5°	6.6	24.6	24.6	23.0	23.0
75°	6.6	23.0	23.0	21.3	19.7
77.5°	6.6	19.7	21.3	19.7	18.0
80°	6.6	18.0	19.7	18.0	14.8
82.5°	6.6	16.4	18.0	16.4	13.1
85°	4.9	14.8	16.4	14.8	9.8
87.5°	4.9	14.8	16.4	13.1	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	7.95	9.17	8.32	9.48	9.80	9.03	10.25	9.40	10.57	10.88
	3H	9.29	10.37	9.67	10.70	11.07	11.06	12.15	11.44	12.48	12.84
	4H	9.86	10.87	10.27	11.23	11.61	12.02	13.03	12.42	13.38	13.76
	6H	10.43	11.36	10.85	11.73	12.13	12.96	13.89	13.38	14.26	14.66
	8H	10.76	11.64	11.19	12.03	12.44	13.41	14.29	13.84	14.68	15.09
	12H	11.07	11.91	11.50	12.29	12.72	13.83	14.67	14.26	15.06	15.49
4H	2H	8.92	9.93	9.32	10.28	10.66	9.71	10.72	10.12	11.07	11.46
	3H	10.95	11.78	11.36	12.19	12.59	11.99	12.83	12.41	13.23	13.64
	4H	12.03	12.78	12.47	13.20	13.64	13.14	13.89	13.58	14.31	14.75
	6H	12.90	13.55	13.37	14.00	14.46	14.31	14.96	14.77	15.40	15.87
	8H	13.31	13.92	13.78	14.37	14.84	14.87	15.47	15.34	15.92	16.39
	12H	13.69	14.23	14.18	14.71	15.19	15.41	15.95	15.90	16.43	16.90
8H	4H	12.80	13.41	13.27	13.85	14.33	13.69	14.30	14.16	14.74	15.22
	6H	14.14	14.64	14.64	15.13	15.61	15.14	15.64	15.65	16.14	16.62
	8H	14.85	15.30	15.38	15.82	16.31	15.91	16.35	16.43	16.87	17.36
	12H	15.55	15.94	16.06	16.44	17.01	16.69	17.09	17.21	17.58	18.15
12H	4H	12.96	13.49	13.44	13.97	14.45	13.80	14.33	14.28	14.82	15.29
	6H	14.46	14.91	14.98	15.42	15.92	15.37	15.81	15.89	16.33	16.82
	8H	15.36	15.75	15.88	16.25	16.82	16.27	16.67	16.79	17.16	17.74