

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: P1057819

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1057819
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-20)
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-B
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

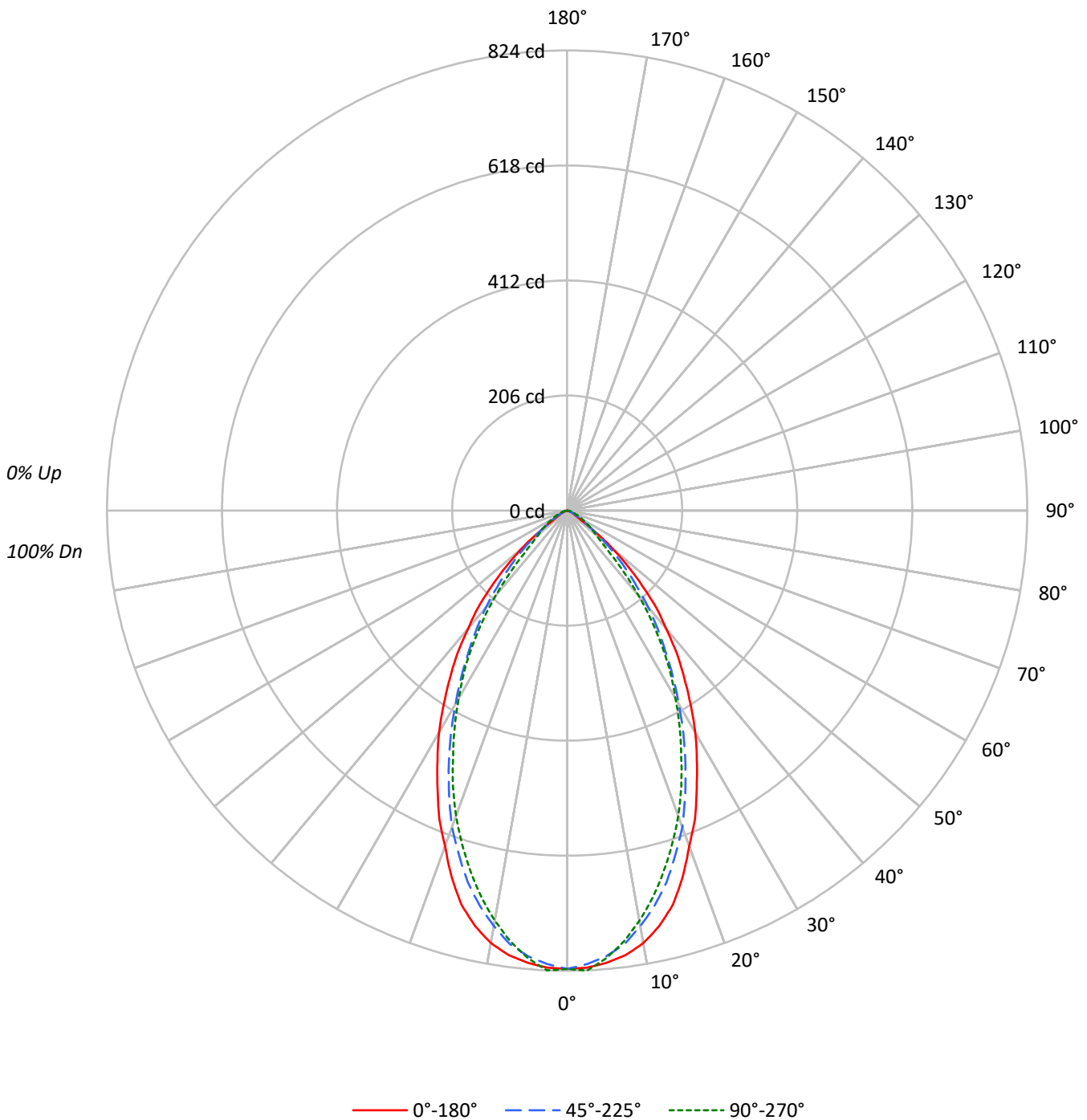
Lumens per Lamp: N/A
Luminaire Lumens: 882.8 lumens
Efficiency: N/A
Efficacy: 21.1 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.85 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1057819

CATALOG NUMBER: S122RDRP-S1005D850-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1057819

CATALOG NUMBER: S122RDRP-S1005D850-X4F0-XX-UDD-SVL-B

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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	93	87	82	98	91	86	82	88	84	80	86	82	79	84	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	76	72	78	74	71	70
5	88	79	72	68	87	78	72	67	76	71	67	74	70	66	73	69	65	64
6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
7	79	68	62	57	77	68	61	57	66	60	56	65	60	56	64	59	56	54
8	74	64	57	53	73	63	57	52	62	56	52	61	56	52	60	55	52	50
9	70	60	53	49	69	59	53	49	58	52	48	57	52	48	56	52	48	47
10	67	56	50	45	66	56	49	45	55	49	45	54	49	45	53	48	45	44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15146	15146	15146
5°	15052	14839	14900
10°	14735	14152	13967
15°	13959	13145	12769
20°	12548	11839	11421
25°	11174	10206	9840
30°	9774	8519	8274
35°	8229	6902	6679
40°	6629	5446	4815
45°	4958	3933	2865
50°	3103	2541	1880
55°	1055	1370	1528
60°	605	845	1210
65°	428	572	930
70°	356	442	707
75°	235	349	585
80°	170	351	521
85°	0	0	339

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4958 cd/sqm

TEST NUMBER: P1057819

CATALOG NUMBER: S122RDRP-S1005D850-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.6	8.6
10°-20°	193.7	21.9
20°-30°	233.2	26.4
30°-40°	199.2	22.6
40°-50°	116.7	13.2
50°-60°	42.3	4.8
60°-70°	15.0	1.7
70°-80°	6.0	0.7
80°-90°	1.0	0.1
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°	502.5	56.9
0°-40°	701.7	79.5
0°-60°	860.7	97.5
0°-90°	882.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	882.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	821	821	821	821	821	
5°	813	814	801	804	804	77
15°	731	719	688	675	668	203
25°	549	526	501	493	483	252
35°	365	338	306	303	296	228
45°	190	170	151	126	110	147
55°	33	46	43	44	48	41
65°	10	12	13	18	21	11
75°	3	5	5	7	8	4
85°	0	0	0	2	2	1
90°	0	0	0	0	0	



TEST NUMBER: P1057819

CATALOG NUMBER: S122RDRP-S1005D850-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	820.8	820.8	820.8	820.8	820.8
2.5°	819.2	820.8	812.6	820.8	824.1
5°	812.6	814.3	801.1	804.4	804.4
7.5°	802.8	801.1	783.1	779.8	778.2
10°	786.4	781.5	755.3	750.4	745.4
12.5°	761.8	752.0	724.1	716.0	709.4
15°	730.7	719.2	688.1	675.0	668.4
17.5°	688.1	675.0	645.5	632.4	625.8
20°	639.0	625.8	602.9	588.2	581.6
22.5°	598.0	576.7	552.1	542.3	534.1
25°	548.8	525.9	501.3	493.1	483.3
27.5°	503.0	475.1	450.5	444.0	435.8
30°	458.7	429.2	399.8	399.8	388.3
32.5°	411.2	383.4	352.2	350.6	344.1
35°	365.3	337.5	306.4	303.1	296.5
37.5°	322.8	294.9	265.4	255.6	247.4
40°	275.2	250.7	226.1	209.7	199.9
42.5°	237.6	209.7	185.1	165.5	152.4
45°	190.0	170.4	150.7	126.2	109.8
47.5°	147.5	134.3	118.0	90.1	81.9
50°	108.1	101.6	88.5	67.2	65.5
52.5°	68.8	72.1	63.9	52.4	57.3
55°	32.8	45.9	42.6	44.2	47.5
57.5°	21.3	22.9	31.1	36.0	39.3
60°	16.4	16.4	22.9	29.5	32.8
62.5°	13.1	13.1	18.0	24.6	26.2
65°	9.8	11.5	13.1	18.0	21.3
67.5°	8.2	8.2	9.8	14.7	16.4
70°	6.6	6.6	8.2	11.5	13.1
72.5°	4.9	4.9	6.6	9.8	9.8
75°	3.3	4.9	4.9	6.6	8.2
77.5°	3.3	3.3	3.3	4.9	6.6
80°	1.6	1.6	3.3	3.3	4.9
82.5°	1.6	1.6	1.6	1.6	3.3
85°	0.0	0.0	0.0	1.6	1.6
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1057819
 CATALOG NUMBER: S122RDRP-S1005D850-X4F0-XX-UDD-SVL-B

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	5.32	6.48	5.68	6.79	7.11	8.72	9.88	9.08	10.19	10.51
	3H	5.84	6.87	6.22	7.20	7.56	9.45	10.47	9.83	10.80	11.17
	4H	5.98	6.93	6.38	7.28	7.66	9.66	10.61	10.07	10.96	11.35
	6H	6.05	6.92	6.47	7.29	7.69	9.82	10.68	10.23	11.06	11.45
	8H	6.06	6.87	6.49	7.26	7.67	9.85	10.66	10.28	11.06	11.46
	12H	6.02	6.80	6.45	7.18	7.61	9.85	10.63	10.28	11.01	11.44
4H	2H	5.63	6.57	6.03	6.93	7.31	8.68	9.63	9.09	9.98	10.37
	3H	6.29	7.06	6.71	7.47	7.87	9.56	10.33	9.97	10.73	11.14
	4H	6.53	7.22	6.97	7.64	8.08	9.84	10.53	10.28	10.95	11.39
	6H	6.65	7.24	7.12	7.69	8.16	10.07	10.66	10.54	11.10	11.58
	8H	6.66	7.21	7.14	7.66	8.13	10.11	10.66	10.59	11.11	11.58
	12H	6.63	7.11	7.12	7.59	8.07	10.13	10.61	10.62	11.10	11.57
8H	4H	6.64	7.19	7.11	7.64	8.11	9.77	10.32	10.25	10.77	11.24
	6H	6.81	7.25	7.31	7.75	8.23	10.04	10.48	10.54	10.98	11.46
	8H	6.85	7.24	7.37	7.76	8.26	10.10	10.49	10.62	11.01	11.51
	12H	6.82	7.17	7.34	7.67	8.24	10.15	10.50	10.67	11.00	11.57
12H	4H	6.63	7.10	7.12	7.59	8.07	9.73	10.20	10.22	10.69	11.17
	6H	6.80	7.20	7.33	7.72	8.21	9.99	10.38	10.51	10.90	11.40
	8H	6.87	7.22	7.39	7.72	8.29	10.07	10.42	10.59	10.91	11.49