

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059485

Luminaire Tested: S123RDR-H1000D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059485
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-H1000D950-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

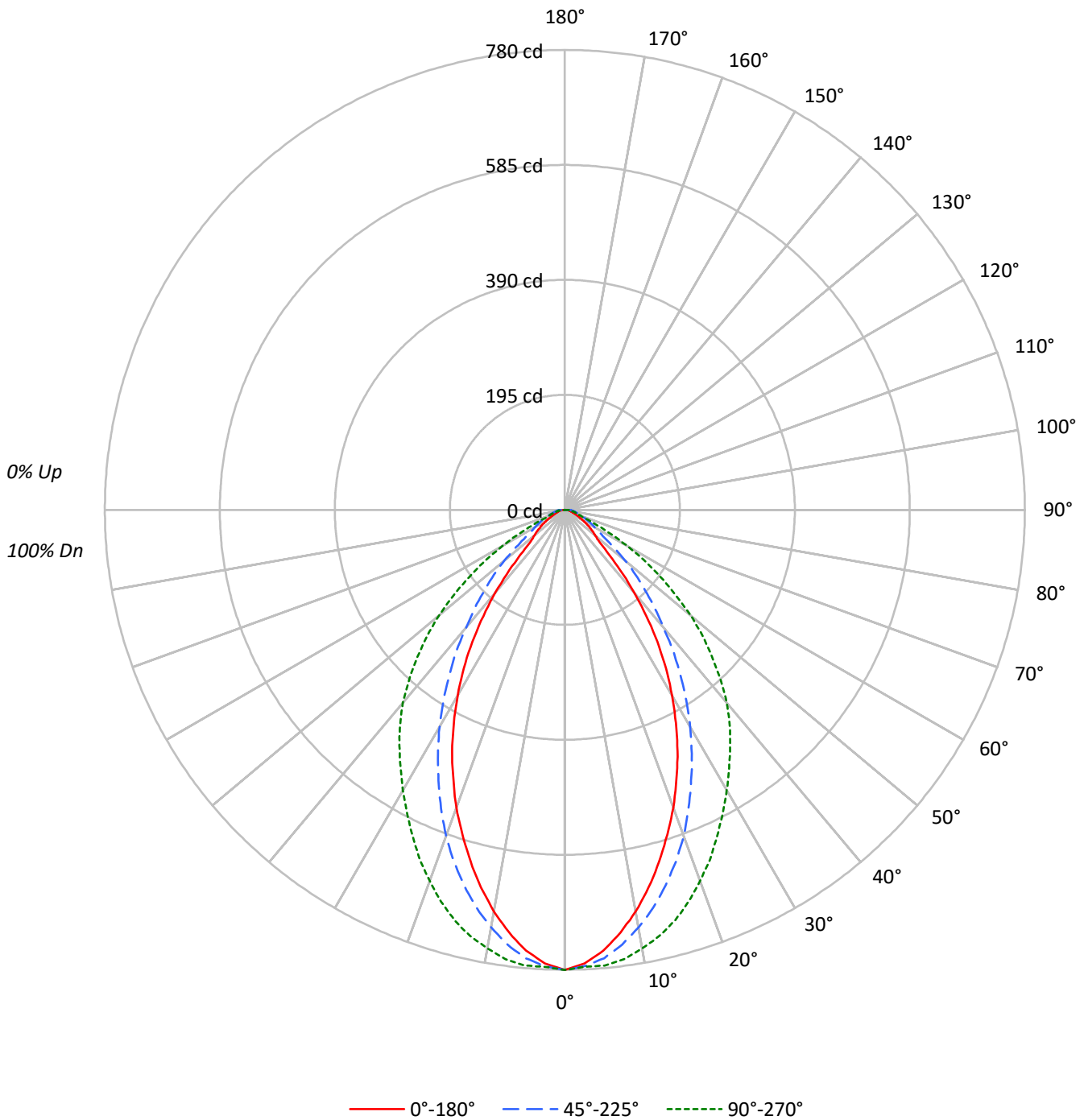
Lumens per Lamp: N/A
Luminaire Lumens: 1045.0 lumens
Efficiency: N/A
Efficacy: 33.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (Ain): 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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79				79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				71
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64				64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58				58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52				52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48				48
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44				44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40				40
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37				37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9163	9163	9163
5°	8849	8996	9143
10°	8244	8571	9005
15°	7506	8017	8765
20°	6718	7359	8370
25°	5859	6568	7911
30°	4927	5761	7444
35°	3919	4882	7005
40°	2794	3981	6548
45°	1664	3197	5864
50°	1228	2435	5077
55°	1026	1656	4035
60°	829	1364	2835
65°	664	1170	1520
70°	546	1016	937
75°	517	980	880
80°	541	1075	845
85°	768	1536	1078

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5864 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	6.9
10°-20°	186.2	17.8
20°-30°	237.5	22.7
30°-40°	223.5	21.4
40°-50°	160.6	15.4
50°-60°	92.0	8.8
60°-70°	42.1	4.0
70°-80°	21.2	2.0
80°-90°	10.3	1.0
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°	495.4	47.4
0°-40°	718.8	68.8
0°-60°	971.4	93.0
0°-90°	1045.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1045.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	780	780	780	780	780	
5°	751	766	763	769	776	70
15°	617	639	660	695	721	172
25°	452	473	507	562	611	207
35°	273	293	341	418	489	169
45°	100	122	192	284	353	84
55°	50	51	81	149	197	45
65°	24	33	42	47	55	24
75°	11	23	22	19	19	12
85°	6	11	11	10	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	780.3	780.3	780.3	780.3	780.3
2.5°	770.0	781.4	774.6	774.6	775.7
5°	750.7	765.5	763.2	768.9	775.7
7.5°	723.3	739.3	743.8	757.5	768.9
10°	691.4	709.7	718.8	740.4	755.2
12.5°	656.1	676.6	691.4	718.8	740.4
15°	617.4	639.0	659.5	694.8	721.0
17.5°	577.5	599.2	625.4	666.4	697.1
20°	537.6	559.3	588.9	632.2	669.8
22.5°	494.4	516.0	547.9	596.9	642.4
25°	452.2	472.7	506.9	561.6	610.6
27.5°	407.8	428.3	465.9	525.1	579.8
30°	363.4	383.9	424.9	488.7	549.0
32.5°	318.9	338.3	382.7	453.4	518.3
35°	273.4	292.7	340.6	418.0	488.7
37.5°	226.7	246.0	301.9	386.2	459.1
40°	182.3	203.9	259.7	354.3	427.2
42.5°	139.0	161.8	225.5	320.1	390.7
45°	100.2	121.9	192.5	283.6	353.1
47.5°	76.3	87.7	162.9	247.2	316.7
50°	67.2	68.3	133.3	214.1	277.9
52.5°	58.1	59.2	103.7	182.3	236.9
55°	50.1	51.3	80.9	149.2	197.1
57.5°	42.1	44.4	66.1	118.5	158.3
60°	35.3	39.9	58.1	90.0	120.7
62.5°	28.5	36.5	50.1	66.1	86.6
65°	23.9	33.0	42.1	46.7	54.7
67.5°	19.4	30.8	35.3	33.0	33.0
70°	15.9	27.3	29.6	27.3	27.3
72.5°	13.7	26.2	25.1	22.8	22.8
75°	11.4	22.8	21.6	19.4	19.4
77.5°	10.3	19.4	18.2	17.1	15.9
80°	8.0	15.9	15.9	14.8	12.5
82.5°	6.8	13.7	13.7	12.5	10.3
85°	5.7	11.4	11.4	10.3	8.0
87.5°	4.6	10.3	10.3	9.1	5.7
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	7.68	8.99	8.04	9.31	9.62	14.90	16.22	15.27	16.54	16.85
	3H	9.08	10.25	9.46	10.58	10.94	15.14	16.31	15.52	16.64	17.00
	4H	9.64	10.73	10.04	11.08	11.46	15.25	16.34	15.65	16.69	17.07
	6H	10.10	11.11	10.52	11.48	11.87	15.35	16.36	15.77	16.73	17.12
	8H	10.29	11.24	10.72	11.63	12.03	15.40	16.35	15.83	16.74	17.15
	12H	10.48	11.39	10.91	11.77	12.20	15.45	16.36	15.89	16.74	17.17
4H	2H	8.75	9.84	9.15	10.19	10.57	14.87	15.95	15.27	16.31	16.69
	3H	10.44	11.33	10.85	11.74	12.14	15.23	16.13	15.65	16.53	16.93
	4H	11.28	12.07	11.71	12.49	12.94	15.42	16.22	15.85	16.64	17.08
	6H	11.94	12.63	12.40	13.07	13.54	15.64	16.33	16.10	16.78	17.24
	8H	12.19	12.84	12.66	13.28	13.75	15.74	16.39	16.21	16.83	17.30
	12H	12.45	13.02	12.93	13.50	13.97	15.86	16.43	16.34	16.91	17.39
8H	4H	11.71	12.36	12.18	12.80	13.27	15.46	16.11	15.93	16.55	17.03
	6H	12.66	13.19	13.17	13.69	14.17	15.79	16.32	16.30	16.82	17.30
	8H	13.13	13.61	13.65	14.12	14.61	15.98	16.46	16.50	16.98	17.47
	12H	13.61	14.03	14.12	14.53	15.10	16.22	16.64	16.73	17.14	17.71
12H	4H	11.77	12.34	12.26	12.83	13.30	15.45	16.03	15.94	16.51	16.98
	6H	12.81	13.29	13.33	13.80	14.30	15.82	16.30	16.34	16.81	17.30
	8H	13.40	13.83	13.92	14.32	14.89	16.08	16.50	16.59	17.00	17.57