

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: P1059116

Luminaire Tested: S123RDRP-S1165D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059116
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: S123RDRP-S1165D850-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

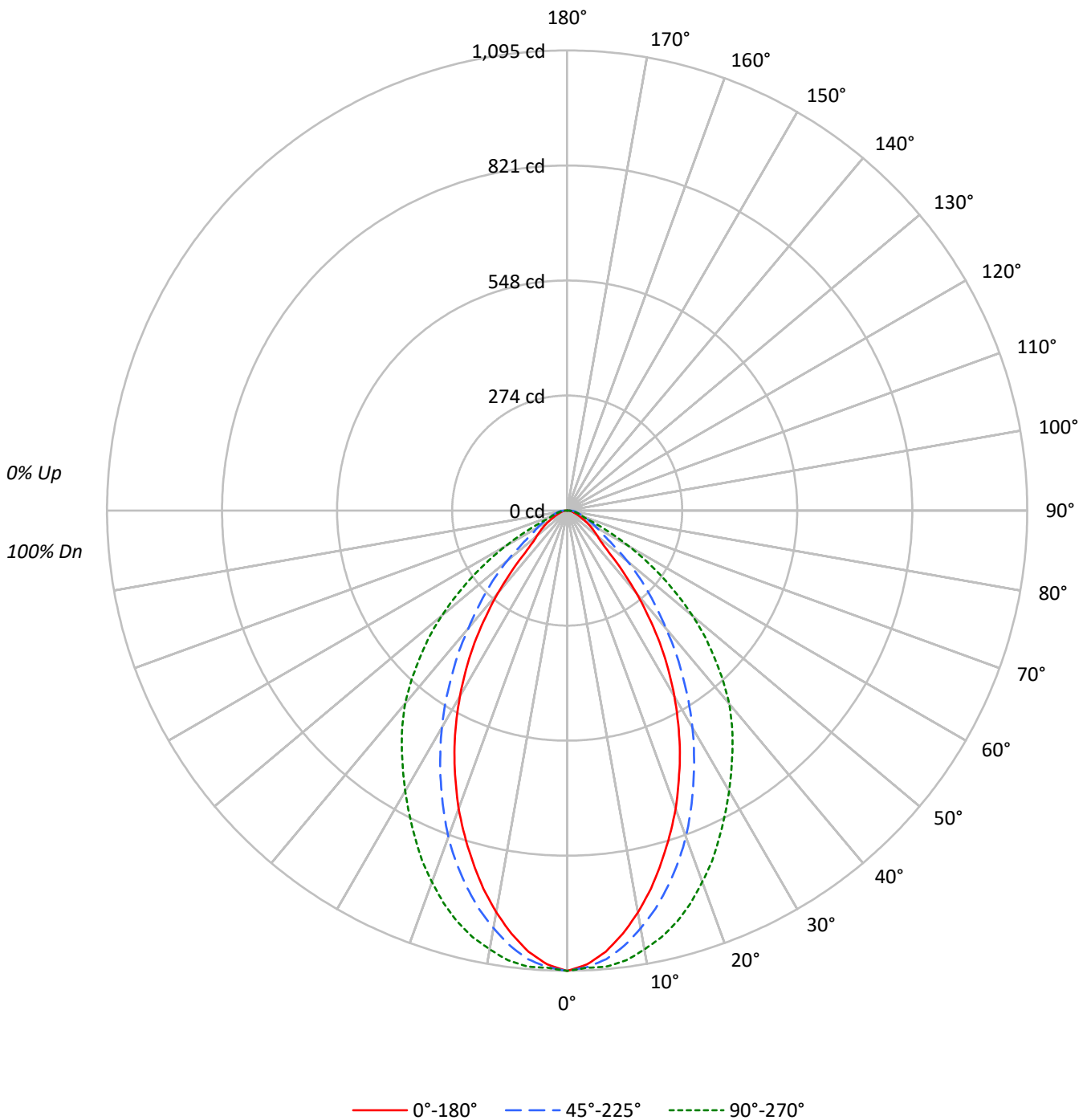
Lumens per Lamp: N/A
Luminaire Lumens: 1467.0 lumens
Efficiency: N/A
Efficacy: 35.1 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12863	12863	12863
5°	12421	12629	12836
10°	11574	12031	12641
15°	10536	11256	12305
20°	9432	10330	11750
25°	8225	9220	11105
30°	6916	8088	10451
35°	5502	6853	9834
40°	3923	5589	9193
45°	2337	4487	8232
50°	1723	3418	7128
55°	1441	2324	5663
60°	1165	1916	3981
65°	934	1645	2134
70°	769	1428	1318
75°	726	1379	1234
80°	757	1515	1190
85°	1078	2156	1509

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8232 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.6	6.9
10°-20°	261.4	17.8
20°-30°	333.4	22.7
30°-40°	313.7	21.4
40°-50°	225.4	15.4
50°-60°	129.2	8.8
60°-70°	59.1	4.0
70°-80°	29.7	2.0
80°-90°	14.5	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°	695.4	47.4
0°-40°	1009.1	68.8
0°-60°	1363.7	93.0
0°-90°	1467.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1467.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1095	1095	1095	1095	1095	
5°	1054	1075	1071	1079	1089	98
15°	867	897	926	976	1012	242
25°	635	664	712	788	857	290
35°	384	411	478	587	686	238
45°	141	171	270	398	496	118
55°	70	72	114	210	277	63
65°	34	46	59	66	77	34
75°	16	32	30	27	27	18
85°	8	16	16	14	11	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1095.4	1095.4	1095.4	1095.4	1095.4
2.5°	1081.0	1097.0	1087.4	1087.4	1089.0
5°	1053.8	1074.6	1071.4	1079.4	1089.0
7.5°	1015.4	1037.8	1044.2	1063.4	1079.4
10°	970.7	996.2	1009.0	1039.4	1060.2
12.5°	921.1	949.9	970.7	1009.0	1039.4
15°	866.7	897.1	925.9	975.5	1012.2
17.5°	810.7	841.1	877.9	935.5	978.7
20°	754.8	785.2	826.7	887.5	940.3
22.5°	694.0	724.4	769.2	837.9	901.9
25°	634.8	663.6	711.6	788.4	857.1
27.5°	572.5	601.3	654.0	737.2	813.9
30°	510.1	538.9	596.5	686.0	770.8
32.5°	447.7	474.9	537.3	636.4	727.6
35°	383.8	411.0	478.1	586.9	686.0
37.5°	318.2	345.4	423.8	542.1	644.4
40°	255.9	286.2	364.6	497.3	599.7
42.5°	195.1	227.1	316.6	449.3	548.5
45°	140.7	171.1	270.2	398.2	495.7
47.5°	107.1	123.1	228.7	347.0	444.6
50°	94.3	95.9	187.1	300.6	390.2
52.5°	81.6	83.2	145.5	255.9	332.6
55°	70.4	72.0	113.5	209.5	276.6
57.5°	59.2	62.4	92.7	166.3	222.3
60°	49.6	56.0	81.6	126.3	169.5
62.5°	40.0	51.2	70.4	92.7	121.5
65°	33.6	46.4	59.2	65.6	76.8
67.5°	27.2	43.2	49.6	46.4	46.4
70°	22.4	38.4	41.6	38.4	38.4
72.5°	19.2	36.8	35.2	32.0	32.0
75°	16.0	32.0	30.4	27.2	27.2
77.5°	14.4	27.2	25.6	24.0	22.4
80°	11.2	22.4	22.4	20.8	17.6
82.5°	9.6	19.2	19.2	17.6	14.4
85°	8.0	16.0	16.0	14.4	11.2
87.5°	6.4	14.4	14.4	12.8	8.0
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	8.86	10.18	9.23	10.49	10.81	16.08	17.40	16.45	17.71	18.03
	3H	10.26	11.43	10.64	11.76	12.13	16.32	17.49	16.70	17.82	18.18
	4H	10.82	11.91	11.23	12.26	12.65	16.43	17.52	16.83	17.87	18.25
	6H	11.28	12.29	11.70	12.66	13.05	16.53	17.53	16.95	17.90	18.30
	8H	11.47	12.42	11.90	12.81	13.22	16.58	17.53	17.01	17.92	18.33
	12H	11.66	12.57	12.09	12.95	13.38	16.63	17.54	17.06	17.92	18.35
4H	2H	9.94	11.03	10.34	11.38	11.76	16.04	17.13	16.45	17.48	17.87
	3H	11.63	12.52	12.04	12.92	13.33	16.41	17.31	16.83	17.71	18.11
	4H	12.46	13.26	12.89	13.68	14.12	16.60	17.39	17.03	17.81	18.26
	6H	13.12	13.81	13.58	14.26	14.72	16.82	17.51	17.28	17.96	18.42
	8H	13.37	14.02	13.84	14.47	14.94	16.92	17.57	17.39	18.01	18.48
	12H	13.63	14.20	14.11	14.68	15.16	17.04	17.61	17.52	18.09	18.56
8H	4H	12.90	13.54	13.36	13.99	14.46	16.64	17.29	17.11	17.73	18.20
	6H	13.85	14.38	14.35	14.87	15.35	16.97	17.50	17.48	18.00	18.48
	8H	14.31	14.79	14.83	15.30	15.80	17.16	17.64	17.69	18.16	18.65
	12H	14.79	15.21	15.30	15.71	16.28	17.40	17.82	17.91	18.31	18.89
12H	4H	12.95	13.53	13.44	14.01	14.48	16.63	17.21	17.12	17.69	18.16
	6H	13.99	14.47	14.52	14.99	15.48	17.00	17.48	17.52	17.99	18.48
	8H	14.59	15.01	15.10	15.50	16.07	17.26	17.68	17.78	18.18	18.75