

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: P1059359

Luminaire Tested: S123RDRP-S775D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059359
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-S775D850-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

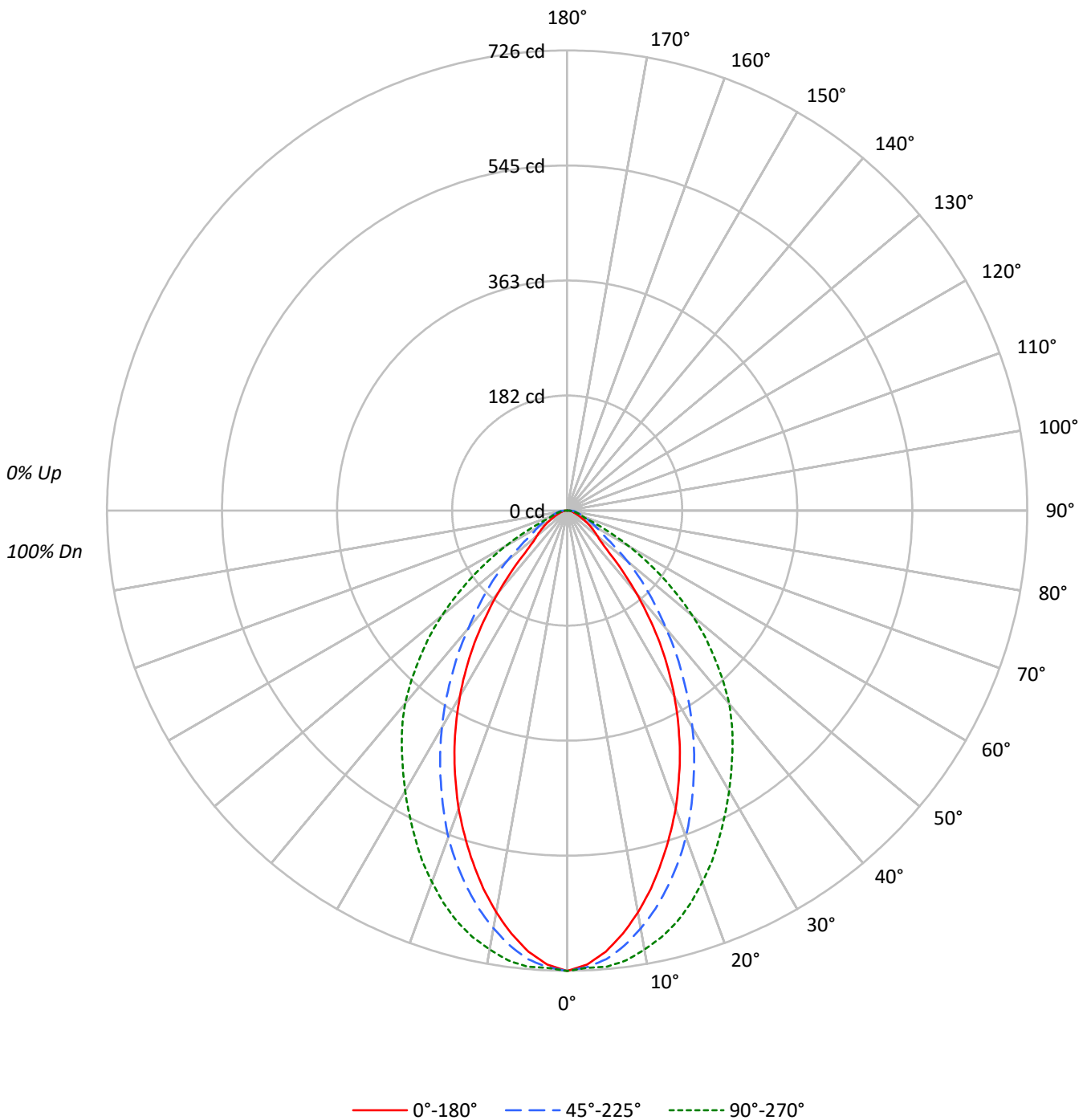
Lumens per Lamp: N/A
Luminaire Lumens: 972.7 lumens
Efficiency: N/A
Efficacy: 37.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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: P1059359

CATALOG NUMBER: S123RDRP-S775D850-X4F0-XX-UDD-SVL-S

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	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	59	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°	8529	8529	8529
5°	8236	8374	8512
10°	7674	7978	8382
15°	6986	7463	8160
20°	6254	6850	7791
25°	5453	6113	7363
30°	4586	5363	6930
35°	3648	4544	6521
40°	2600	3705	6095
45°	1549	2976	5458
50°	1144	2267	4726
55°	956	1542	3755
60°	773	1271	2640
65°	620	1089	1414
70°	508	948	872
75°	481	912	817
80°	500	1001	791
85°	714	1428	997

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5458 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	6.9
10°-20°	173.3	17.8
20°-30°	221.1	22.7
30°-40°	208.0	21.4
40°-50°	149.4	15.4
50°-60°	85.7	8.8
60°-70°	39.2	4.0
70°-80°	19.7	2.0
80°-90°	9.6	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°	461.1	47.4
0°-40°	669.1	68.8
0°-60°	904.2	93.0
0°-90°	972.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	972.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	726	726	726	726	726	
5°	699	712	710	716	722	65
15°	575	595	614	647	671	161
25°	421	440	472	523	568	192
35°	254	272	317	389	455	158
45°	93	114	179	264	329	78
55°	47	48	75	139	183	42
65°	22	31	39	44	51	22
75°	11	21	20	18	18	12
85°	5	11	11	10	7	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	726.3	726.3	726.3	726.3	726.3
2.5°	716.8	727.4	721.0	721.0	722.1
5°	698.7	712.5	710.4	715.7	722.1
7.5°	673.3	688.1	692.4	705.1	715.7
10°	643.6	660.6	669.1	689.2	703.0
12.5°	610.7	629.8	643.6	669.1	689.2
15°	574.7	594.8	613.9	646.8	671.2
17.5°	537.6	557.7	582.1	620.3	648.9
20°	500.5	520.6	548.2	588.5	623.5
22.5°	460.2	480.3	510.0	555.6	598.0
25°	420.9	440.0	471.8	522.7	568.3
27.5°	379.6	398.7	433.7	488.8	539.7
30°	338.2	357.3	395.5	454.9	511.1
32.5°	296.9	314.9	356.3	422.0	482.4
35°	254.5	272.5	317.0	389.1	454.9
37.5°	211.0	229.0	281.0	359.4	427.3
40°	169.6	189.8	241.7	329.8	397.6
42.5°	129.4	150.6	209.9	297.9	363.7
45°	93.3	113.5	179.2	264.0	328.7
47.5°	71.0	81.6	151.6	230.1	294.8
50°	62.6	63.6	124.1	199.3	258.7
52.5°	54.1	55.1	96.5	169.6	220.5
55°	46.7	47.7	75.3	138.9	183.4
57.5°	39.2	41.4	61.5	110.3	147.4
60°	32.9	37.1	54.1	83.8	112.4
62.5°	26.5	33.9	46.7	61.5	80.6
65°	22.3	30.7	39.2	43.5	50.9
67.5°	18.0	28.6	32.9	30.7	30.7
70°	14.8	25.4	27.6	25.4	25.4
72.5°	12.7	24.4	23.3	21.2	21.2
75°	10.6	21.2	20.1	18.0	18.0
77.5°	9.5	18.0	17.0	15.9	14.8
80°	7.4	14.8	14.8	13.8	11.7
82.5°	6.4	12.7	12.7	11.7	9.5
85°	5.3	10.6	10.6	9.5	7.4
87.5°	4.2	9.5	9.5	8.5	5.3
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	7.44	8.76	7.80	9.07	9.38	14.66	15.97	15.02	16.29	16.60
	3H	8.83	10.00	9.21	10.33	10.69	14.89	16.06	15.27	16.39	16.75
	4H	9.39	10.48	9.79	10.83	11.22	15.00	16.09	15.40	16.44	16.82
	6H	9.85	10.85	10.26	11.22	11.62	15.10	16.11	15.52	16.48	16.87
	8H	10.04	10.99	10.47	11.38	11.78	15.15	16.10	15.58	16.49	16.90
	12H	10.23	11.14	10.66	11.52	11.95	15.20	16.11	15.64	16.49	16.92
4H	2H	8.51	9.60	8.91	9.95	10.33	14.62	15.71	15.02	16.06	16.44
	3H	10.19	11.09	10.61	11.49	11.89	14.98	15.88	15.40	16.28	16.68
	4H	11.03	11.83	11.46	12.24	12.69	15.17	15.97	15.60	16.39	16.83
	6H	11.68	12.37	12.14	12.82	13.29	15.39	16.08	15.85	16.53	16.99
	8H	11.94	12.58	12.41	13.03	13.50	15.49	16.14	15.96	16.58	17.05
	12H	12.19	12.77	12.68	13.25	13.72	15.61	16.18	16.09	16.66	17.13
8H	4H	11.46	12.11	11.93	12.55	13.03	15.21	15.86	15.68	16.30	16.78
	6H	12.41	12.94	12.91	13.44	13.92	15.54	16.07	16.05	16.57	17.05
	8H	12.87	13.35	13.40	13.87	14.36	15.73	16.21	16.26	16.73	17.22
	12H	13.35	13.78	13.87	14.27	14.84	15.97	16.39	16.48	16.88	17.45
12H	4H	11.52	12.09	12.01	12.58	13.05	15.20	15.78	15.69	16.26	16.73
	6H	12.56	13.03	13.08	13.55	14.04	15.57	16.05	16.09	16.56	17.05
	8H	13.15	13.57	13.66	14.07	14.64	15.83	16.25	16.35	16.75	17.32