

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: P1059035

Luminaire Tested: S123RDRP-S1000D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059035
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-S1000D850-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

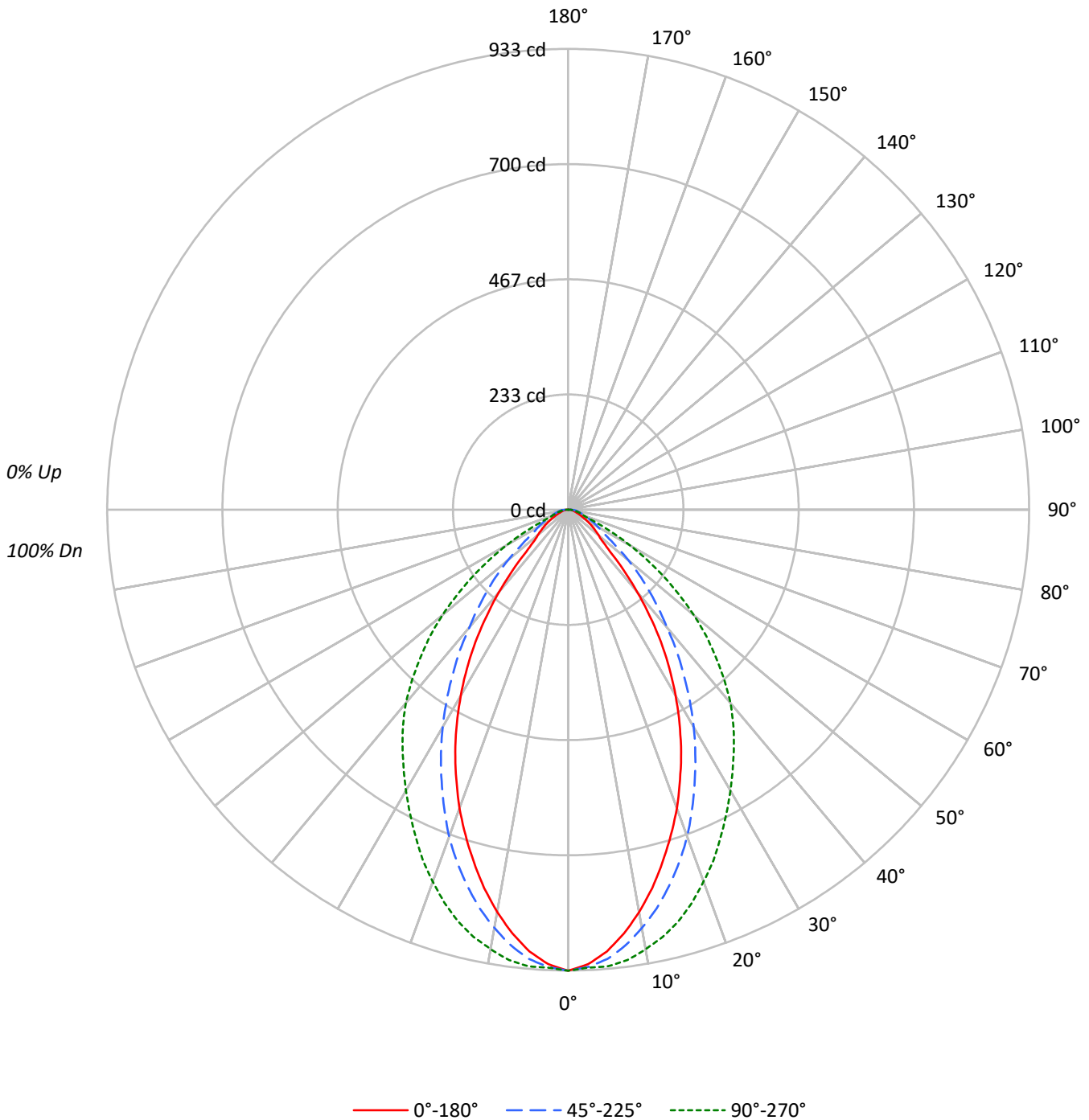
Lumens per Lamp: N/A
Luminaire Lumens: 1250.0 lumens
Efficiency: N/A
Efficacy: 35.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	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°	10960	10960	10960
5°	10584	10761	10937
10°	9862	10252	10772
15°	8978	9590	10485
20°	8036	8802	10012
25°	7008	7855	9462
30°	5894	6891	8906
35°	4688	5840	8379
40°	3342	4763	7833
45°	1991	3824	7015
50°	1469	2912	6074
55°	1228	1980	4825
60°	991	1632	3391
65°	795	1400	1817
70°	656	1215	1123
75°	617	1175	1053
80°	642	1292	1014
85°	916	1832	1280

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7015 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.7	6.9
10°-20°	222.7	17.8
20°-30°	284.1	22.7
30°-40°	267.3	21.4
40°-50°	192.1	15.4
50°-60°	110.1	8.8
60°-70°	50.3	4.0
70°-80°	25.3	2.0
80°-90°	12.4	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°	592.6	47.4
0°-40°	859.9	68.8
0°-60°	1162.0	93.0
0°-90°	1250.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1250.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	933	933	933	933	933	
5°	898	916	913	920	928	83
15°	738	764	789	831	862	206
25°	541	566	606	672	730	247
35°	327	350	407	500	584	202
45°	120	146	230	339	422	100
55°	60	61	97	178	236	54
65°	29	40	50	56	65	29
75°	14	27	26	23	23	15
85°	7	14	14	12	10	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	933.4	933.4	933.4	933.4	933.4
2.5°	921.1	934.7	926.5	926.5	927.9
5°	897.9	915.6	912.9	919.7	927.9
7.5°	865.2	884.3	889.8	906.1	919.7
10°	827.1	848.9	859.8	885.7	903.4
12.5°	784.8	809.4	827.1	859.8	885.7
15°	738.5	764.4	788.9	831.2	862.5
17.5°	690.8	716.7	748.0	797.1	833.9
20°	643.1	669.0	704.4	756.2	801.2
22.5°	591.4	617.2	655.4	714.0	768.5
25°	540.9	565.5	606.3	671.7	730.3
27.5°	487.8	512.3	557.3	628.1	693.5
30°	434.7	459.2	508.2	584.5	656.8
32.5°	381.5	404.7	457.8	542.3	620.0
35°	327.0	350.2	407.4	500.1	584.5
37.5°	271.1	294.3	361.1	461.9	549.1
40°	218.0	243.9	310.7	423.8	511.0
42.5°	166.2	193.5	269.8	382.9	467.4
45°	119.9	145.8	230.3	339.3	422.4
47.5°	91.3	104.9	194.8	295.7	378.8
50°	80.4	81.8	159.4	256.2	332.5
52.5°	69.5	70.9	124.0	218.0	283.4
55°	60.0	61.3	96.7	178.5	235.7
57.5°	50.4	53.1	79.0	141.7	189.4
60°	42.2	47.7	69.5	107.6	144.4
62.5°	34.1	43.6	60.0	79.0	103.6
65°	28.6	39.5	50.4	55.9	65.4
67.5°	23.2	36.8	42.2	39.5	39.5
70°	19.1	32.7	35.4	32.7	32.7
72.5°	16.4	31.3	30.0	27.3	27.3
75°	13.6	27.3	25.9	23.2	23.2
77.5°	12.3	23.2	21.8	20.4	19.1
80°	9.5	19.1	19.1	17.7	15.0
82.5°	8.2	16.4	16.4	15.0	12.3
85°	6.8	13.6	13.6	12.3	9.5
87.5°	5.5	12.3	12.3	10.9	6.8
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	8.30	9.62	8.66	9.93	10.24	15.53	16.84	15.89	17.16	17.47
	3H	9.70	10.87	10.08	11.20	11.57	15.76	16.93	16.14	17.26	17.63
	4H	10.26	11.35	10.67	11.70	12.09	15.87	16.96	16.27	17.31	17.69
	6H	10.72	11.73	11.14	12.10	12.49	15.98	16.98	16.39	17.35	17.74
	8H	10.91	11.86	11.34	12.25	12.66	16.02	16.97	16.45	17.36	17.77
	12H	11.10	12.01	11.53	12.39	12.82	16.08	16.98	16.51	17.37	17.80
4H	2H	9.37	10.46	9.78	10.81	11.20	15.49	16.58	15.89	16.93	17.31
	3H	11.06	11.96	11.48	12.36	12.76	15.86	16.75	16.27	17.15	17.56
	4H	11.90	12.70	12.33	13.12	13.56	16.04	16.84	16.47	17.26	17.70
	6H	12.56	13.25	13.02	13.70	14.16	16.26	16.95	16.72	17.40	17.87
	8H	12.82	13.46	13.28	13.91	14.38	16.36	17.01	16.83	17.46	17.93
	12H	13.07	13.64	13.56	14.13	14.60	16.48	17.05	16.97	17.53	18.01
8H	4H	12.34	12.98	12.81	13.43	13.90	16.08	16.73	16.55	17.18	17.65
	6H	13.29	13.82	13.79	14.32	14.80	16.42	16.95	16.92	17.44	17.92
	8H	13.76	14.23	14.28	14.75	15.24	16.61	17.08	17.13	17.60	18.09
	12H	14.23	14.66	14.75	15.15	15.72	16.84	17.26	17.35	17.76	18.33
12H	4H	12.40	12.97	12.88	13.45	13.92	16.08	16.65	16.56	17.13	17.61
	6H	13.44	13.92	13.96	14.43	14.92	16.44	16.92	16.97	17.44	17.93
	8H	14.03	14.45	14.55	14.95	15.52	16.70	17.13	17.22	17.62	18.19