

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: P1061835

Luminaire Tested: S125RDRP-S850D950-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061835
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D950-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

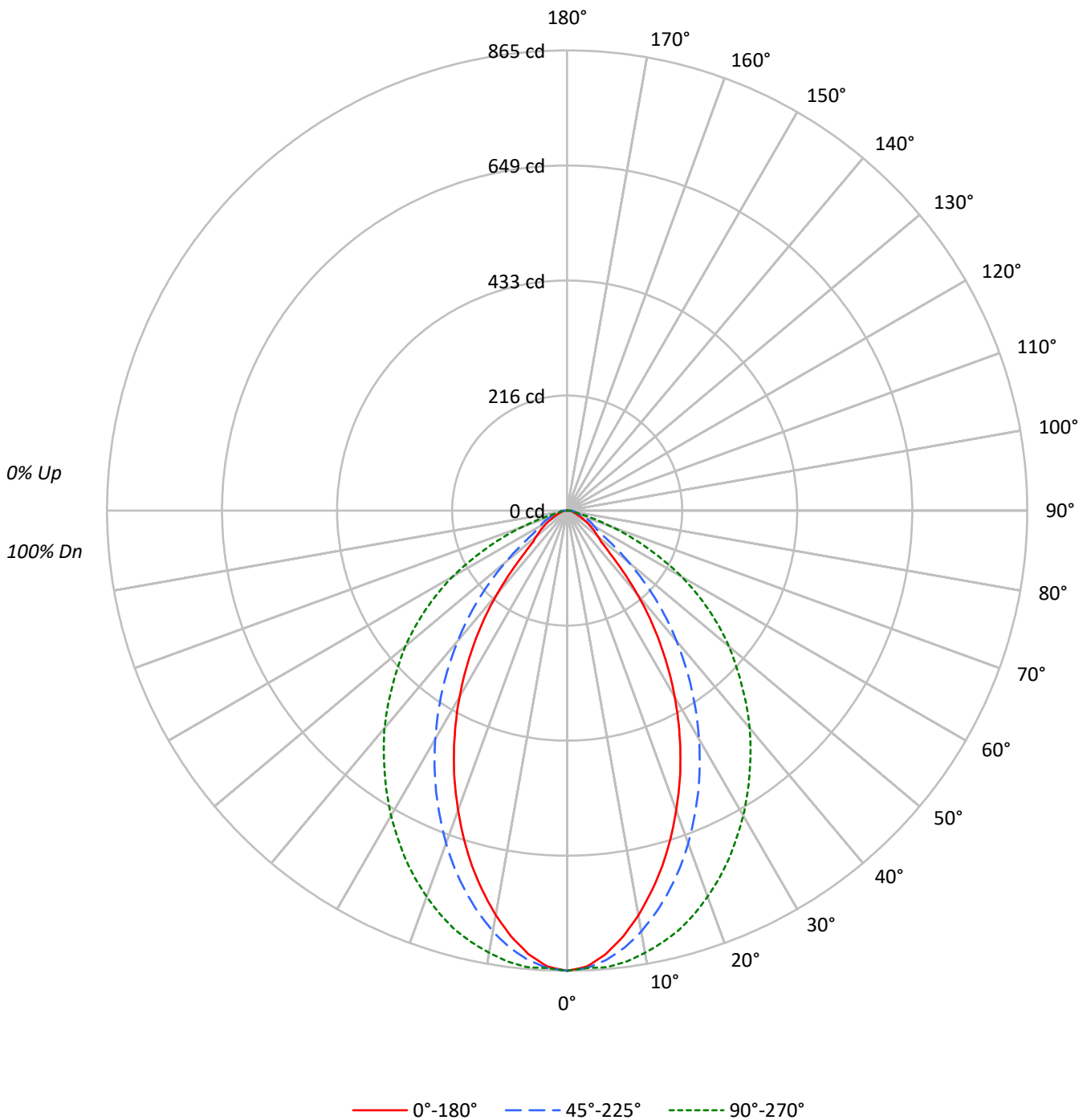
Lumens per Lamp: N/A
Luminaire Lumens: 1253.2 lumens
Efficiency: N/A
Efficacy: 48.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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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	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89					89			
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79					79			
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62					62			
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56					56			
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51					51			
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46					46			
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42					42			
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39					39			
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5956	5956	5956
5°	5782	5859	5954
10°	5400	5618	5901
15°	4928	5276	5813
20°	4392	4877	5659
25°	3827	4428	5476
30°	3216	3940	5263
35°	2558	3423	5031
40°	1843	2875	4801
45°	1093	2282	4521
50°	808	1625	4255
55°	684	1005	3895
60°	558	810	3432
65°	435	749	2711
70°	370	648	1814
75°	343	561	734
80°	365	583	511
85°	434	869	585

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4521 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.7	6.4
10°-20°	209.4	16.7
20°-30°	273.7	21.8
30°-40°	266.6	21.3
40°-50°	200.0	16.0
50°-60°	125.4	10.0
60°-70°	65.3	5.2
70°-80°	23.6	1.9
80°-90°	9.4	0.7
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°	562.9	44.9
0°-40°	829.5	66.2
0°-60°	1154.9	92.2
0°-90°	1253.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1253.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	865	865	865	865	865	
5°	837	848	848	854	862	78
15°	691	712	740	786	816	193
25°	504	531	583	662	721	230
35°	304	336	407	516	598	189
45°	112	145	234	362	464	94
55°	57	60	84	219	324	51
65°	27	28	46	88	166	27
75°	13	18	21	22	28	14
85°	6	9	11	10	7	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	865.1	865.1	865.1	865.1	865.1
2.5°	857.8	866.1	860.5	860.5	860.5
5°	836.6	847.7	847.7	854.1	861.5
7.5°	807.2	820.1	828.4	844.0	855.0
10°	772.3	787.9	803.5	829.3	844.0
12.5°	732.8	751.1	773.2	809.1	831.1
15°	691.4	711.6	740.1	786.1	815.5
17.5°	646.3	670.2	704.3	759.4	795.3
20°	599.4	623.3	665.6	728.2	772.3
22.5°	552.6	578.3	624.3	695.1	747.5
25°	503.8	531.4	582.9	662.0	720.8
27.5°	454.2	482.7	539.7	627.9	691.4
30°	404.5	434.0	495.6	591.2	662.0
32.5°	354.9	386.1	451.4	553.5	630.7
35°	304.3	336.5	407.3	515.8	598.5
37.5°	255.6	287.8	363.2	477.2	566.3
40°	205.0	240.0	319.9	438.5	534.2
42.5°	155.4	191.2	276.7	399.9	499.2
45°	112.2	145.3	234.4	362.2	464.3
47.5°	86.4	104.8	191.2	323.6	430.3
50°	75.4	80.9	151.7	287.8	397.2
52.5°	65.3	69.0	114.0	254.7	361.3
55°	57.0	59.8	83.7	218.8	324.5
57.5°	47.8	51.5	66.2	183.9	286.8
60°	40.5	42.3	58.8	151.7	249.2
62.5°	33.1	34.9	52.4	119.5	206.9
65°	26.7	28.5	46.0	88.3	166.4
67.5°	22.1	23.0	38.6	62.5	127.8
70°	18.4	19.3	32.2	43.2	90.1
72.5°	15.6	18.4	25.7	31.3	57.0
75°	12.9	17.5	21.1	22.1	27.6
77.5°	11.0	16.5	17.5	17.5	15.6
80°	9.2	13.8	14.7	13.8	12.9
82.5°	7.4	11.0	12.0	12.0	10.1
85°	5.5	9.2	11.0	10.1	7.4
87.5°	3.7	8.3	9.2	8.3	5.5
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	6.12	7.47	6.48	7.78	8.10	15.73	17.08	16.10	17.40	17.71
	3H	6.98	8.18	7.36	8.51	8.87	16.57	17.77	16.95	18.10	18.47
	4H	7.40	8.52	7.80	8.87	9.25	16.65	17.77	17.05	18.12	18.50
	6H	7.83	8.86	8.24	9.23	9.62	16.63	17.66	17.04	18.03	18.42
	8H	8.01	8.98	8.44	9.37	9.78	16.62	17.59	17.05	17.98	18.39
	12H	8.17	9.10	8.60	9.49	9.92	16.60	17.54	17.04	17.92	18.35
4H	2H	7.08	8.20	7.48	8.55	8.93	15.59	16.71	16.00	17.06	17.45
	3H	8.14	9.05	8.55	9.46	9.86	16.50	17.42	16.92	17.82	18.23
	4H	8.70	9.52	9.13	9.94	10.38	16.61	17.43	17.04	17.84	18.29
	6H	9.30	10.00	9.76	10.45	10.92	16.63	17.34	17.10	17.79	18.25
	8H	9.54	10.20	10.00	10.64	11.11	16.64	17.30	17.10	17.74	18.21
	12H	9.76	10.35	10.25	10.83	11.30	16.65	17.23	17.13	17.72	18.19
8H	4H	9.17	9.83	9.64	10.28	10.75	16.53	17.19	17.00	17.64	18.11
	6H	9.98	10.52	10.48	11.02	11.50	16.59	17.13	17.09	17.62	18.10
	8H	10.36	10.85	10.88	11.36	11.85	16.62	17.11	17.14	17.62	18.11
	12H	10.75	11.18	11.27	11.68	12.25	16.68	17.11	17.20	17.61	18.18
12H	4H	9.22	9.81	9.71	10.29	10.76	16.50	17.08	16.98	17.57	18.04
	6H	10.10	10.59	10.62	11.10	11.60	16.55	17.04	17.07	17.55	18.04
	8H	10.59	11.02	11.11	11.52	12.09	16.62	17.05	17.14	17.55	18.12