

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: P1062221

Luminaire Tested: S125RDR-H850D935-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062221
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-86)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H850D935-X4F0-XX-UDD-SVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

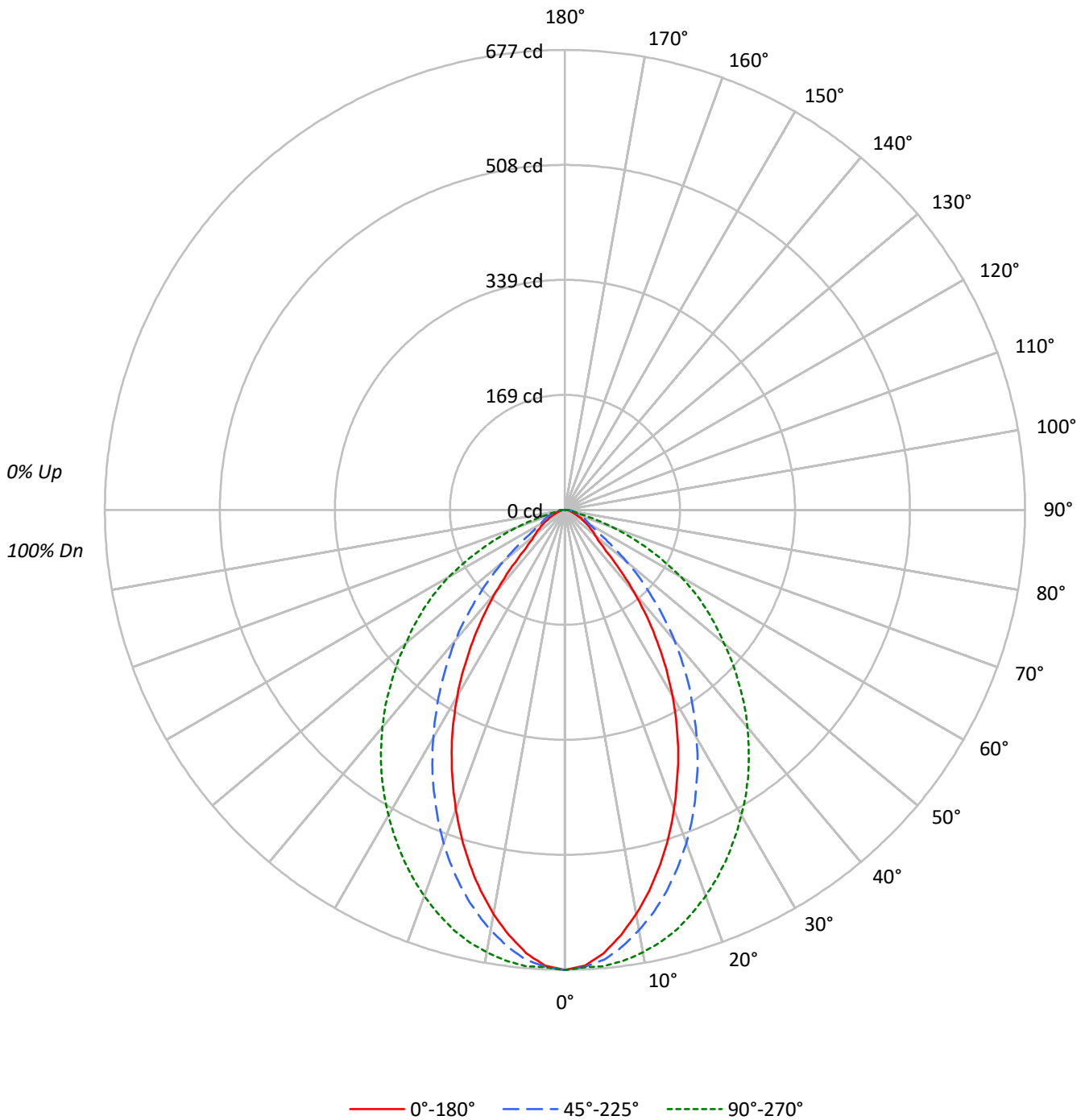
Lumens per Lamp: N/A
Luminaire Lumens: 977.9 lumens
Efficiency: N/A
Efficacy: 41.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79				79
3	96	88	81	76	94	87	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	63				63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56				56
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	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	41	39				39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	47	41	38	36				36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4663	4663	4663
5°	4526	4592	4658
10°	4224	4392	4623
15°	3854	4134	4553
20°	3438	3826	4432
25°	2997	3467	4291
30°	2516	3078	4126
35°	1985	2680	3957
40°	1423	2253	3755
45°	837	1768	3520
50°	619	1274	3270
55°	521	772	3038
60°	420	565	2710
65°	327	536	2173
70°	276	501	1472
75°	255	450	641
80°	254	444	412
85°	316	569	442

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3520 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.4	6.4
10°-20°	163.9	16.8
20°-30°	214.2	21.9
30°-40°	208.5	21.3
40°-50°	155.9	15.9
50°-60°	96.7	9.9
60°-70°	50.8	5.2
70°-80°	18.5	1.9
80°-90°	7.0	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°	440.6	45.1
0°-40°	649.1	66.4
0°-60°	901.6	92.2
0°-90°	977.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	977.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	677	677	677	677	677	
5°	655	664	664	668	674	61
15°	541	557	580	615	639	151
25°	394	414	456	518	565	180
35°	236	262	319	404	471	147
45°	86	112	182	284	362	72
55°	43	46	64	167	253	39
65°	20	22	33	71	133	21
75°	10	11	17	18	24	10
85°	4	7	7	7	6	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	677.3	677.3	677.3	677.3	677.3
2.5°	671.6	677.3	673.2	673.2	674.0
5°	654.8	663.6	664.4	668.4	674.0
7.5°	631.5	641.9	648.3	660.4	669.2
10°	604.1	616.2	628.2	648.3	661.2
12.5°	573.6	588.1	605.8	633.1	651.5
15°	540.7	556.7	580.0	615.4	638.7
17.5°	506.1	523.0	551.9	594.5	622.6
20°	469.2	487.7	522.2	570.4	604.9
22.5°	431.4	452.3	490.1	544.7	585.7
25°	394.5	414.5	456.3	518.2	564.8
27.5°	355.9	376.8	422.6	490.9	542.3
30°	316.5	339.0	387.2	462.7	519.0
32.5°	277.2	300.5	352.7	433.8	495.7
35°	236.2	261.9	318.9	404.1	470.8
37.5°	197.6	224.9	284.4	373.6	444.3
40°	158.3	186.4	250.7	343.8	417.8
42.5°	119.7	148.6	216.1	313.3	391.2
45°	86.0	112.5	181.6	283.6	361.5
47.5°	65.9	81.1	149.4	253.1	335.0
50°	57.8	62.7	118.9	223.3	305.3
52.5°	50.6	53.8	88.4	194.4	279.6
55°	43.4	45.8	64.3	167.1	253.1
57.5°	37.0	39.4	49.0	142.2	225.8
60°	30.5	32.9	41.0	117.3	196.8
62.5°	25.7	26.5	37.0	94.0	164.7
65°	20.1	21.7	32.9	70.7	133.4
67.5°	16.9	17.7	28.9	50.6	102.8
70°	13.7	14.5	24.9	35.3	73.1
72.5°	12.1	12.1	20.9	25.7	46.6
75°	9.6	11.2	16.9	18.5	24.1
77.5°	8.0	11.2	14.5	13.7	12.9
80°	6.4	10.4	11.2	11.2	10.4
82.5°	5.6	8.8	9.6	8.8	8.0
85°	4.0	7.2	7.2	7.2	5.6
87.5°	3.2	6.4	5.6	5.6	4.0
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	5.14	6.49	5.51	6.80	7.12	14.84	16.19	15.21	16.50	16.82
	3H	5.98	7.18	6.36	7.51	7.88	15.75	16.95	16.13	17.28	17.64
	4H	6.34	7.46	6.74	7.81	8.19	15.85	16.97	16.25	17.32	17.70
	6H	6.71	7.74	7.12	8.11	8.50	15.84	16.86	16.25	17.23	17.63
	8H	6.89	7.86	7.32	8.25	8.66	15.82	16.80	16.25	17.19	17.59
	12H	7.05	7.98	7.48	8.36	8.79	15.81	16.74	16.24	17.12	17.55
4H	2H	5.97	7.08	6.37	7.44	7.82	14.69	15.81	15.09	16.16	16.54
	3H	7.03	7.94	7.44	8.35	8.75	15.68	16.59	16.09	17.00	17.40
	4H	7.48	8.30	7.92	8.72	9.16	15.81	16.63	16.24	17.05	17.49
	6H	8.03	8.74	8.49	9.18	9.65	15.84	16.55	16.30	16.99	17.46
	8H	8.29	8.95	8.76	9.40	9.87	15.84	16.50	16.31	16.95	17.42
	12H	8.53	9.11	9.02	9.60	10.07	15.85	16.43	16.34	16.92	17.39
8H	4H	8.04	8.70	8.50	9.14	9.61	15.73	16.39	16.20	16.84	17.31
	6H	8.81	9.35	9.31	9.84	10.32	15.79	16.33	16.30	16.83	17.31
	8H	9.22	9.70	9.74	10.22	10.71	15.82	16.31	16.34	16.82	17.31
	12H	9.63	10.06	10.15	10.56	11.13	15.87	16.30	16.39	16.80	17.37
12H	4H	8.10	8.68	8.58	9.16	9.64	15.70	16.28	16.19	16.77	17.24
	6H	8.95	9.43	9.47	9.95	10.44	15.76	16.24	16.28	16.76	17.25
	8H	9.47	9.90	9.99	10.40	10.97	15.82	16.25	16.34	16.75	17.32