

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: P1061831

Luminaire Tested: S125RDRP-S850D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061831
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D950-X4F0-XX-UDD-BVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

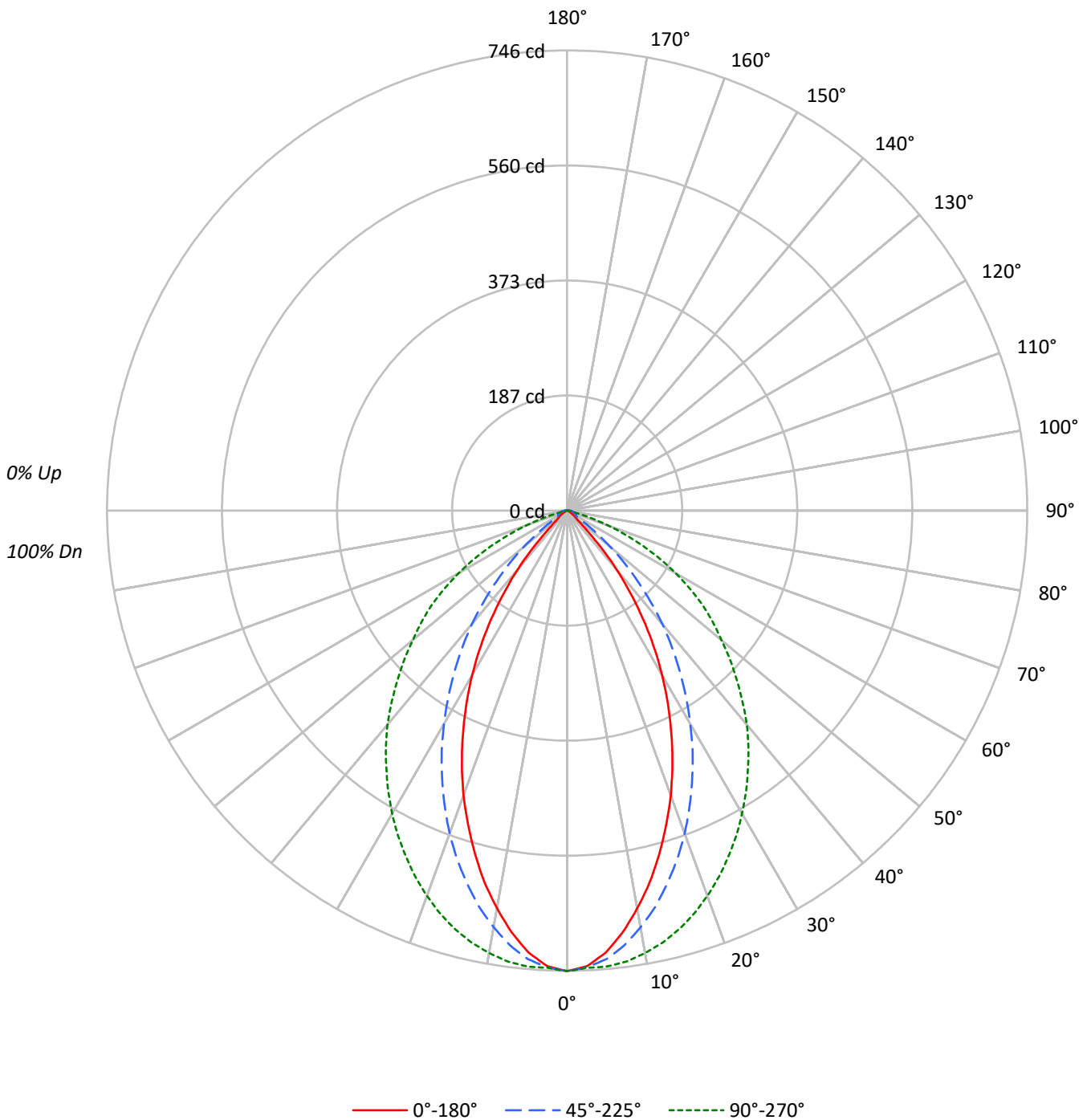
Lumens per Lamp: N/A
Luminaire Lumens: 960.2 lumens
Efficiency: N/A
Efficacy: 37.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5140	5140	5140
5°	4969	5045	5128
10°	4577	4795	5091
15°	4109	4463	5007
20°	3598	4082	4870
25°	3038	3646	4700
30°	2449	3172	4510
35°	1800	2674	4297
40°	1124	2157	4074
45°	421	1575	3787
50°	197	984	3496
55°	144	408	3234
60°	102	215	2798
65°	60	254	2217
70°	56	296	1407
75°	74	293	439
80°	111	365	329
85°	221	585	434

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3787 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.5	7.1
10°-20°	177.2	18.5
20°-30°	225.8	23.5
30°-40°	210.1	21.9
40°-50°	144.0	15.0
50°-60°	79.3	8.3
60°-70°	37.5	3.9
70°-80°	11.8	1.2
80°-90°	6.1	0.6
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°	471.4	49.1
0°-40°	681.6	71.0
0°-60°	904.8	94.2
0°-90°	960.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	960.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	746	746	746	746	746	
5°	719	728	730	736	742	67
15°	576	595	626	673	702	161
25°	400	425	480	557	619	183
35°	214	245	318	423	511	133
45°	43	73	162	287	389	41
55°	12	14	34	160	269	11
65°	4	5	16	59	136	4
75°	3	5	11	12	16	3
85°	3	6	7	6	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	746.5	746.5	746.5	746.5	746.5
2.5°	739.2	746.5	741.0	741.0	741.9
5°	719.0	728.2	730.0	735.5	741.9
7.5°	689.5	701.5	710.7	726.3	737.3
10°	654.6	669.3	685.9	711.6	728.2
12.5°	617.8	633.5	658.3	694.1	717.1
15°	576.5	594.8	626.1	673.0	702.4
17.5°	534.2	554.4	593.0	648.2	684.9
20°	491.0	512.1	557.1	618.7	664.7
22.5°	445.9	468.9	518.5	588.4	642.7
25°	399.9	424.8	479.9	557.1	618.7
27.5°	354.0	379.7	440.4	525.0	593.9
30°	308.0	334.7	399.0	491.9	567.3
32.5°	261.1	290.5	358.6	458.8	539.7
35°	214.2	244.6	318.1	422.9	511.2
37.5°	168.2	199.5	278.6	388.9	482.7
40°	125.0	156.3	240.0	354.9	453.3
42.5°	80.9	114.0	199.5	319.9	421.1
45°	43.2	72.6	161.8	286.8	388.9
47.5°	23.0	38.6	126.0	253.8	358.6
50°	18.4	21.1	91.9	220.7	326.4
52.5°	14.7	16.5	58.8	186.6	297.9
55°	12.0	13.8	34.0	160.0	269.4
57.5°	9.2	11.0	19.3	133.3	236.3
60°	7.4	8.3	15.6	106.6	203.2
62.5°	4.6	6.4	15.6	82.7	170.1
65°	3.7	4.6	15.6	58.8	136.1
67.5°	3.7	3.7	15.6	38.6	102.1
70°	2.8	2.8	14.7	24.8	69.9
72.5°	2.8	2.8	12.9	16.5	40.5
75°	2.8	4.6	11.0	12.0	16.5
77.5°	2.8	7.4	10.1	10.1	9.2
80°	2.8	7.4	9.2	8.3	8.3
82.5°	2.8	7.4	7.4	7.4	6.4
85°	2.8	6.4	7.4	6.4	5.5
87.5°	2.8	6.4	6.4	6.4	3.7
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	0.00	0.00	0.00	0.00	0.00	14.73	16.02	15.10	16.33	16.65
	3H	0.00	0.00	0.00	0.00	0.00	15.52	16.66	15.90	16.99	17.35
	4H	0.00	0.00	0.00	0.00	0.00	15.55	16.60	15.95	16.95	17.34
	6H	0.00	0.00	0.00	0.00	0.19	15.50	16.47	15.92	16.84	17.24
	8H	0.00	0.06	0.00	0.45	0.85	15.48	16.40	15.91	16.79	17.19
	12H	0.00	0.77	0.33	1.16	1.59	15.46	16.34	15.89	16.72	17.15
4H	2H	0.00	0.00	0.00	0.00	0.29	14.52	15.57	14.92	15.92	16.31
	3H	0.00	0.25	0.00	0.65	1.06	15.34	16.21	15.76	16.61	17.01
	4H	0.00	0.76	0.42	1.18	1.62	15.38	16.15	15.81	16.57	17.01
	6H	1.50	2.17	1.97	2.62	3.08	15.37	16.03	15.83	16.48	16.94
	8H	2.25	2.87	2.72	3.32	3.79	15.35	15.97	15.82	16.42	16.89
	12H	3.00	3.55	3.49	4.03	4.51	15.35	15.90	15.84	16.38	16.86
8H	4H	2.03	2.65	2.50	3.09	3.56	15.26	15.88	15.73	16.33	16.80
	6H	3.79	4.29	4.29	4.79	5.27	15.27	15.77	15.77	16.27	16.75
	8H	4.75	5.20	5.27	5.72	6.21	15.27	15.73	15.80	16.24	16.74
	12H	5.68	6.08	6.20	6.58	7.15	15.32	15.72	15.83	16.21	16.79
12H	4H	2.33	2.88	2.82	3.36	3.83	15.22	15.77	15.71	16.25	16.73
	6H	4.25	4.70	4.77	5.22	5.71	15.22	15.67	15.74	16.19	16.68
	8H	5.39	5.79	5.90	6.28	6.85	15.26	15.66	15.78	16.16	16.73