

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: P1061813

Luminaire Tested: S125RDRP-S850D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061813
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-S850D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

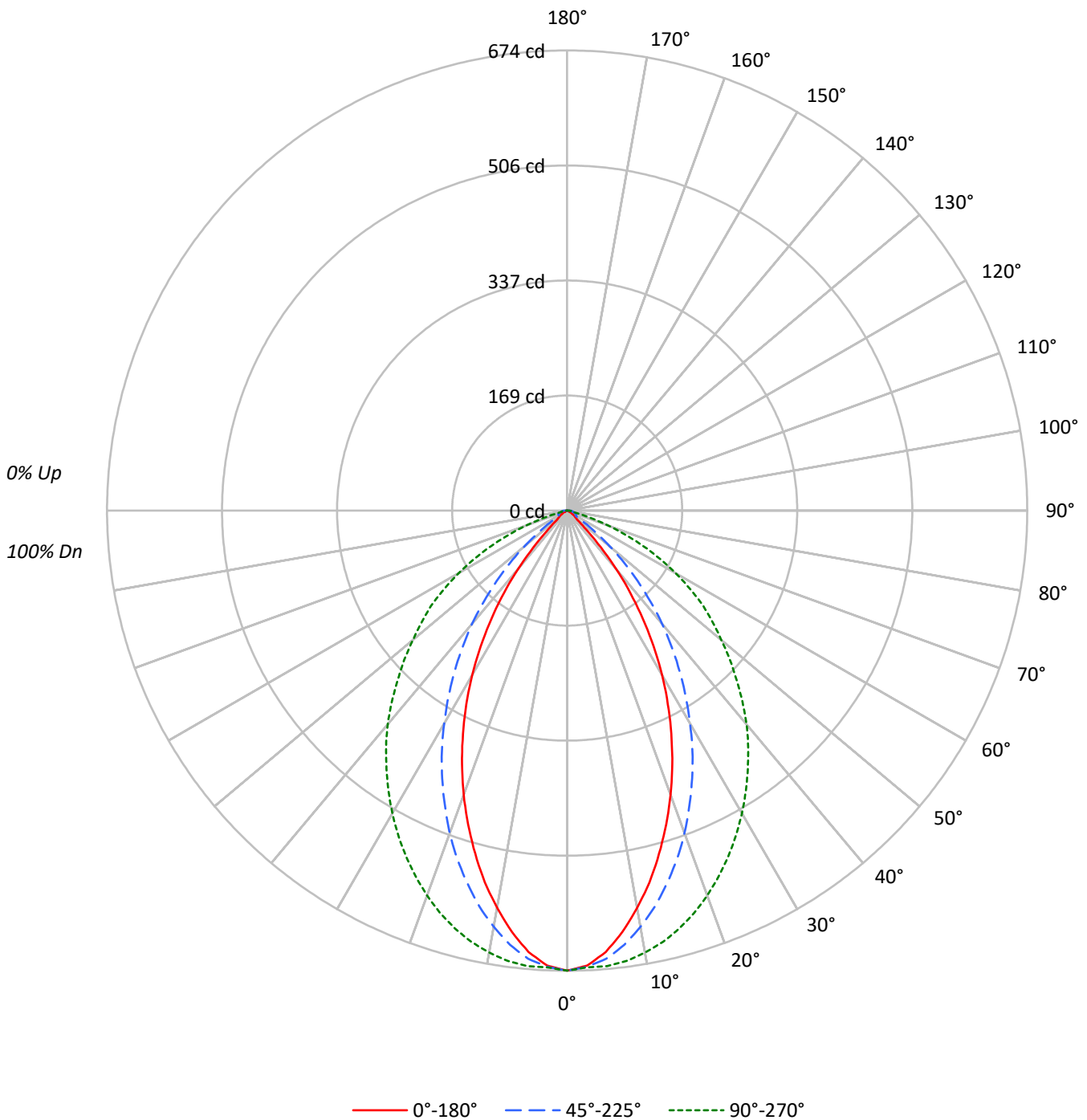
Lumens per Lamp: N/A
Luminaire Lumens: 866.6 lumens
Efficiency: N/A
Efficacy: 33.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	4639	4639	4639
5°	4485	4553	4628
10°	4131	4328	4595
15°	3709	4028	4519
20°	3247	3684	4396
25°	2742	3290	4242
30°	2210	2863	4071
35°	1625	2413	3877
40°	1014	1947	3677
45°	380	1422	3418
50°	178	889	3156
55°	130	369	2918
60°	91	194	2526
65°	54	230	2001
70°	50	268	1270
75°	67	266	396
80°	99	329	297
85°	197	521	395

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3418 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.8	7.1
10°-20°	159.9	18.5
20°-30°	203.8	23.5
30°-40°	189.6	21.9
40°-50°	129.9	15.0
50°-60°	71.5	8.3
60°-70°	33.9	3.9
70°-80°	10.6	1.2
80°-90°	5.4	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°	425.5	49.1
0°-40°	615.1	71.0
0°-60°	816.6	94.2
0°-90°	866.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	866.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	674	674	674	674	674	
5°	649	657	659	664	670	60
15°	520	537	565	607	634	145
25°	361	383	433	503	558	165
35°	193	221	287	382	461	120
45°	39	66	146	259	351	37
55°	11	12	31	144	243	10
65°	3	4	14	53	123	4
75°	2	4	10	11	15	3
85°	2	6	7	6	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	673.8	673.8	673.8	673.8	673.8
2.5°	667.1	673.8	668.8	668.8	669.6
5°	648.9	657.2	658.8	663.8	669.6
7.5°	622.3	633.1	641.4	655.5	665.5
10°	590.8	604.1	619.0	642.2	657.2
12.5°	557.6	571.7	594.1	626.5	647.2
15°	520.3	536.9	565.1	607.4	633.9
17.5°	482.1	500.3	535.2	585.0	618.2
20°	443.1	462.2	502.8	558.4	599.9
22.5°	402.4	423.2	468.0	531.0	580.0
25°	360.9	383.3	433.1	502.8	558.4
27.5°	319.5	342.7	397.5	473.8	536.0
30°	278.0	302.0	360.1	443.9	512.0
32.5°	235.7	262.2	323.6	414.1	487.1
35°	193.3	220.7	287.1	381.7	461.3
37.5°	151.8	180.1	251.4	351.0	435.6
40°	112.8	141.1	216.6	320.3	409.1
42.5°	73.0	102.9	180.1	288.8	380.0
45°	39.0	65.6	146.0	258.9	351.0
47.5°	20.7	34.8	113.7	229.0	323.6
50°	16.6	19.1	83.0	199.1	294.6
52.5°	13.3	14.9	53.1	168.4	268.8
55°	10.8	12.4	30.7	144.4	243.1
57.5°	8.3	10.0	17.4	120.3	213.2
60°	6.6	7.5	14.1	96.3	183.4
62.5°	4.1	5.8	14.1	74.7	153.5
65°	3.3	4.1	14.1	53.1	122.8
67.5°	3.3	3.3	14.1	34.8	92.1
70°	2.5	2.5	13.3	22.4	63.1
72.5°	2.5	2.5	11.6	14.9	36.5
75°	2.5	4.1	10.0	10.8	14.9
77.5°	2.5	6.6	9.1	9.1	8.3
80°	2.5	6.6	8.3	7.5	7.5
82.5°	2.5	6.6	6.6	6.6	5.8
85°	2.5	5.8	6.6	5.8	5.0
87.5°	2.5	5.8	5.8	5.8	3.3
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	0.00	0.00	0.00	0.00	0.00	14.38	15.66	14.74	15.97	16.29
	3H	0.00	0.00	0.00	0.00	0.00	15.16	16.30	15.54	16.63	17.00
	4H	0.00	0.00	0.00	0.00	0.00	15.19	16.25	15.59	16.60	16.98
	6H	0.00	0.00	0.00	0.00	0.00	15.15	16.12	15.56	16.49	16.88
	8H	0.00	0.00	0.00	0.06	0.47	15.12	16.04	15.55	16.43	16.84
	12H	0.00	0.38	0.00	0.76	1.19	15.10	15.98	15.54	16.36	16.79
4H	2H	0.00	0.00	0.00	0.00	0.00	14.16	15.22	14.56	15.57	15.95
	3H	0.00	0.00	0.00	0.31	0.71	14.99	15.85	15.40	16.25	16.66
	4H	0.00	0.40	0.06	0.82	1.26	15.02	15.79	15.46	16.21	16.66
	6H	1.12	1.78	1.58	2.23	2.69	15.01	15.67	15.47	16.12	16.59
	8H	1.85	2.47	2.33	2.92	3.39	14.99	15.61	15.46	16.06	16.53
	12H	2.60	3.15	3.09	3.63	4.11	14.99	15.54	15.48	16.02	16.50
8H	4H	1.67	2.28	2.14	2.73	3.20	14.91	15.53	15.38	15.97	16.45
	6H	3.40	3.91	3.91	4.40	4.89	14.91	15.41	15.41	15.91	16.39
	8H	4.35	4.80	4.87	5.32	5.81	14.91	15.37	15.44	15.88	16.38
	12H	5.29	5.69	5.80	6.18	6.75	14.96	15.36	15.48	15.86	16.43
12H	4H	1.97	2.51	2.45	3.00	3.47	14.86	15.41	15.35	15.90	16.37
	6H	3.86	4.31	4.38	4.83	5.32	14.86	15.32	15.39	15.83	16.33
	8H	4.99	5.39	5.50	5.88	6.45	14.90	15.30	15.42	15.80	16.37