

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: P1061815

Luminaire Tested: S125RDRP-S850D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061815
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D935-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

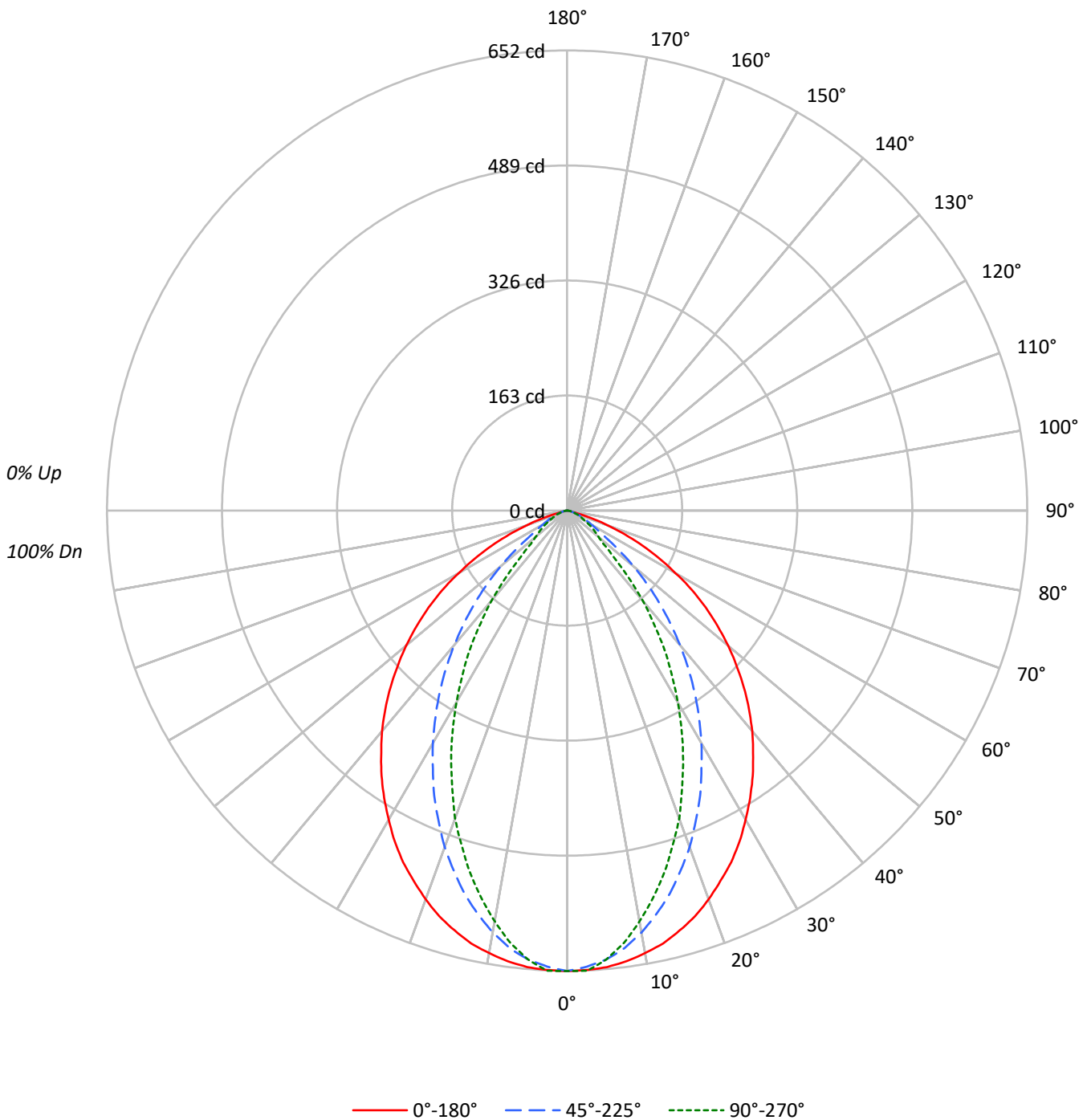
Lumens per Lamp: N/A
Luminaire Lumens: 943.6 lumens
Efficiency: N/A
Efficacy: 36.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (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	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	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4493	4493	4493
5°	4487	4412	4412
10°	4451	4243	4133
15°	4391	4007	3788
20°	4294	3718	3402
25°	4176	3388	2954
30°	4021	3025	2492
35°	3854	2648	2021
40°	3666	2235	1497
45°	3447	1793	905
50°	3188	1314	621
55°	2876	807	517
60°	2443	548	410
65°	1932	419	324
70°	1218	300	268
75°	396	221	221
80°	131	163	198
85°	63	134	134

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3447 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.3	6.4
10°-20°	159.4	16.9
20°-30°	209.6	22.2
30°-40°	206.0	21.8
40°-50°	155.8	16.5
50°-60°	94.5	10.0
60°-70°	44.6	4.7
70°-80°	11.6	1.2
80°-90°	1.7	0.2
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°	429.3	45.5
0°-40°	635.3	67.3
0°-60°	885.6	93.9
0°-90°	943.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	943.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	652	652	652	652	652	
5°	649	648	638	639	638	62
15°	616	599	562	540	531	173
25°	550	508	446	405	389	253
35°	458	397	315	260	240	286
45°	354	279	184	117	93	273
55°	240	164	67	46	43	213
65°	119	60	26	22	20	117
75°	15	10	8	8	8	23
85°	1	1	2	2	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	652.5	652.5	652.5	652.5	652.5
2.5°	651.6	651.6	646.7	652.5	652.5
5°	649.2	647.5	638.4	639.2	638.4
7.5°	644.2	640.9	625.1	621.0	617.6
10°	636.7	630.1	606.9	596.9	591.1
12.5°	628.4	616.8	585.3	571.2	562.1
15°	616.0	599.4	562.1	540.5	531.4
17.5°	602.7	578.7	534.7	509.0	497.4
20°	586.1	558.0	507.4	475.9	464.3
22.5°	567.9	534.7	475.9	441.1	425.3
25°	549.7	508.2	446.0	404.6	388.8
27.5°	528.9	481.7	412.0	368.9	351.5
30°	505.7	455.2	380.5	335.8	313.4
32.5°	482.5	427.8	347.4	298.5	276.1
35°	458.5	397.1	315.0	259.5	240.4
37.5°	432.8	368.1	281.9	223.8	201.5
40°	407.9	339.1	248.7	187.4	166.6
42.5°	381.4	310.1	215.6	151.7	128.5
45°	354.0	278.6	184.1	116.9	92.9
47.5°	325.8	250.4	152.5	86.2	69.6
50°	297.6	220.5	122.7	63.8	58.0
52.5°	268.6	191.5	92.9	53.1	50.6
55°	239.6	164.2	67.2	45.6	43.1
57.5°	209.8	134.3	50.6	39.0	36.5
60°	177.4	107.8	39.8	32.3	29.8
62.5°	147.6	84.6	32.3	26.5	24.9
65°	118.6	60.5	25.7	21.6	19.9
67.5°	88.7	40.6	19.9	16.6	16.6
70°	60.5	26.5	14.9	13.3	13.3
72.5°	36.5	15.8	10.8	10.8	10.8
75°	14.9	9.9	8.3	8.3	8.3
77.5°	5.0	5.8	5.8	6.6	6.6
80°	3.3	3.3	4.1	5.0	5.0
82.5°	1.7	2.5	2.5	3.3	3.3
85°	0.8	0.8	1.7	1.7	1.7
87.5°	0.0	0.0	0.0	0.8	0.8
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	14.55	15.88	14.91	16.19	16.51	5.21	6.54	5.57	6.85	7.17
	3H	15.25	16.43	15.63	16.76	17.13	5.99	7.17	6.37	7.50	7.86
	4H	15.27	16.37	15.67	16.72	17.10	6.24	7.34	6.64	7.69	8.07
	6H	15.20	16.21	15.62	16.58	16.97	6.42	7.42	6.83	7.79	8.19
	8H	15.16	16.11	15.59	16.50	16.91	6.46	7.42	6.89	7.81	8.21
	12H	15.12	16.03	15.55	16.41	16.84	6.47	7.38	6.90	7.76	8.19
4H	2H	14.38	15.48	14.78	15.83	16.21	5.70	6.79	6.10	7.14	7.53
	3H	15.13	16.02	15.54	16.42	16.82	6.60	7.50	7.02	7.90	8.30
	4H	15.14	15.94	15.58	16.36	16.80	6.92	7.71	7.35	8.13	8.58
	6H	15.08	15.77	15.55	16.21	16.68	7.18	7.86	7.64	8.31	8.77
	8H	15.03	15.67	15.50	16.12	16.59	7.24	7.88	7.71	8.33	8.80
	12H	14.99	15.55	15.47	16.03	16.51	7.27	7.83	7.75	8.31	8.79
8H	4H	15.03	15.66	15.50	16.11	16.58	7.03	7.67	7.50	8.12	8.59
	6H	14.95	15.47	15.45	15.97	16.45	7.35	7.87	7.85	8.36	8.84
	8H	14.90	15.36	15.42	15.88	16.37	7.45	7.92	7.97	8.43	8.93
	12H	14.86	15.27	15.37	15.76	16.33	7.52	7.93	8.03	8.42	8.99
12H	4H	14.98	15.54	15.47	16.03	16.50	7.00	7.56	7.49	8.05	8.52
	6H	14.89	15.36	15.42	15.87	16.37	7.32	7.78	7.84	8.30	8.79
	8H	14.86	15.27	15.37	15.76	16.34	7.46	7.87	7.97	8.36	8.93