

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: P1061790

Luminaire Tested: S125RDRP-S850D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061790
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-S850D850-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, 80 CRI LEDS
Ballast/Driver: -

Summary

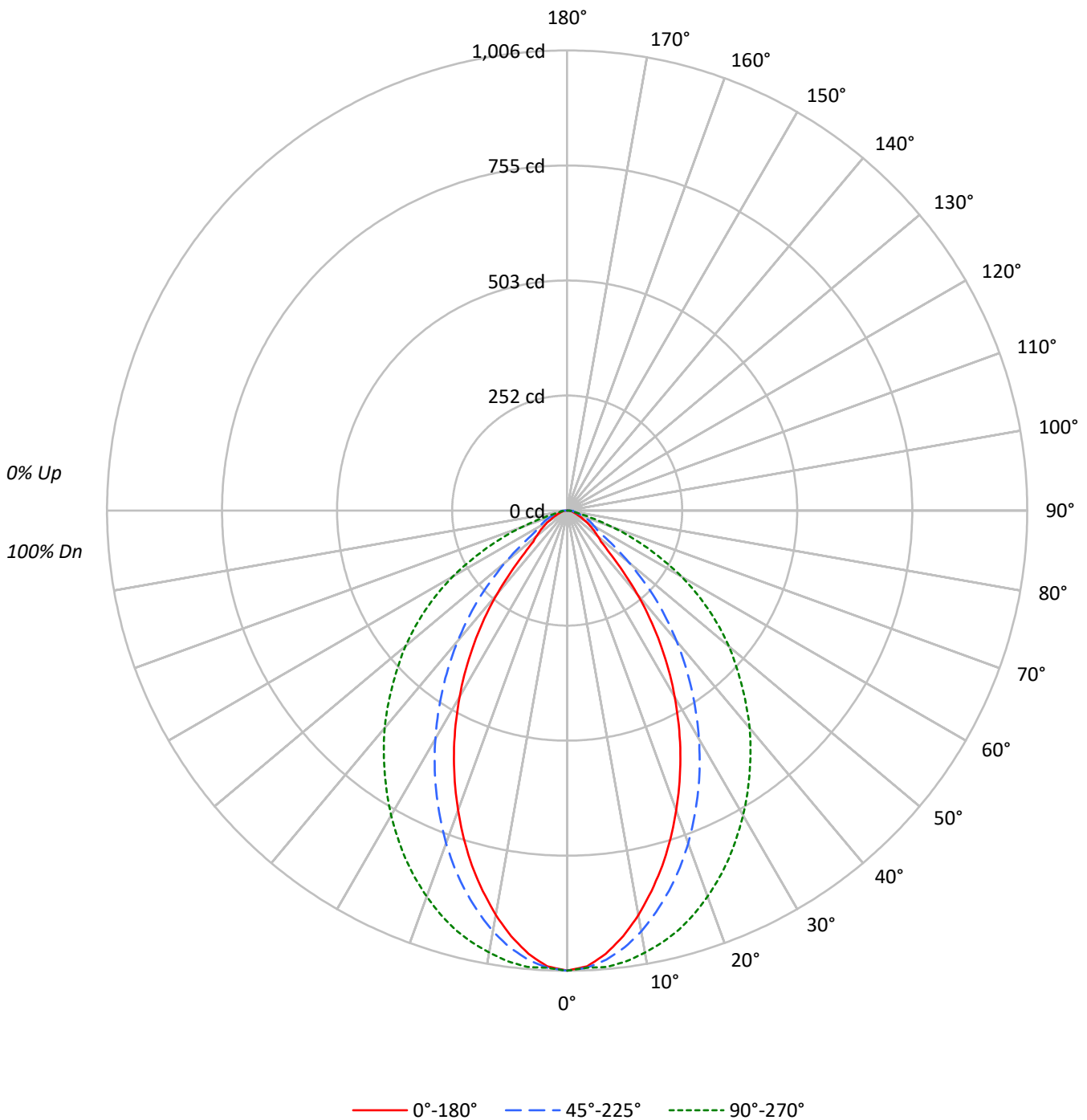
Lumens per Lamp: N/A
Luminaire Lumens: 1456.8 lumens
Efficiency: N/A
Efficacy: 56.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	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°	6924	6924	6924
5°	6722	6811	6921
10°	6277	6531	6859
15°	5729	6133	6757
20°	5106	5670	6578
25°	4450	5148	6366
30°	3739	4580	6118
35°	2974	3980	5848
40°	2142	3343	5582
45°	1270	2653	5255
50°	938	1888	4946
55°	796	1168	4529
60°	647	942	3988
65°	505	870	3151
70°	431	753	2108
75°	399	654	854
80°	424	678	595
85°	506	1011	679

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5255 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.7	6.4
10°-20°	243.4	16.7
20°-30°	318.2	21.8
30°-40°	310.0	21.3
40°-50°	232.5	16.0
50°-60°	145.8	10.0
60°-70°	75.9	5.2
70°-80°	27.5	1.9
80°-90°	10.9	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°	654.3	44.9
0°-40°	964.3	66.2
0°-60°	1342.6	92.2
0°-90°	1456.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1456.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	973	985	985	993	1001	90
15°	804	827	860	914	948	224
25°	586	618	678	770	838	268
35°	354	391	474	600	696	220
45°	130	169	272	421	540	110
55°	66	70	97	254	377	59
65°	31	33	53	103	193	32
75°	15	20	25	26	32	16
85°	6	11	13	12	9	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1005.7	1005.7	1005.7	1005.7	1005.7
2.5°	997.2	1006.8	1000.4	1000.4	1000.4
5°	972.6	985.4	985.4	992.9	1001.4
7.5°	938.4	953.3	963.0	981.1	994.0
10°	897.8	915.9	934.1	964.0	981.1
12.5°	851.8	873.2	898.8	940.5	966.2
15°	803.7	827.2	860.4	913.8	948.0
17.5°	751.3	779.1	818.7	882.8	924.5
20°	696.8	724.6	773.8	846.5	897.8
22.5°	642.3	672.3	725.7	808.0	868.9
25°	585.7	617.7	677.6	769.5	837.9
27.5°	528.0	561.1	627.4	730.0	803.7
30°	470.3	504.5	576.1	687.2	769.5
32.5°	412.5	448.9	524.8	643.4	733.2
35°	353.8	391.2	473.5	599.6	695.8
37.5°	297.1	334.5	422.2	554.7	658.4
40°	238.3	278.9	371.9	509.8	621.0
42.5°	180.6	222.3	321.7	464.9	580.3
45°	130.4	168.9	272.5	421.1	539.7
47.5°	100.5	121.8	222.3	376.2	500.2
50°	87.6	94.1	176.3	334.5	461.7
52.5°	75.9	80.2	132.5	296.0	420.0
55°	66.3	69.5	97.3	254.4	377.3
57.5°	55.6	59.9	77.0	213.8	333.5
60°	47.0	49.2	68.4	176.3	289.6
62.5°	38.5	40.6	60.9	138.9	240.5
65°	31.0	33.1	53.4	102.6	193.4
67.5°	25.7	26.7	44.9	72.7	148.6
70°	21.4	22.4	37.4	50.2	104.7
72.5°	18.2	21.4	29.9	36.3	66.3
75°	15.0	20.3	24.6	25.7	32.1
77.5°	12.8	19.2	20.3	20.3	18.2
80°	10.7	16.0	17.1	16.0	15.0
82.5°	8.6	12.8	13.9	13.9	11.8
85°	6.4	10.7	12.8	11.8	8.6
87.5°	4.3	9.6	10.7	9.6	6.4
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	6.65	8.00	7.01	8.31	8.63	16.25	17.61	16.62	17.92	18.23
	3H	7.50	8.70	7.88	9.03	9.40	17.09	18.30	17.47	18.62	18.99
	4H	7.93	9.05	8.33	9.40	9.78	17.17	18.29	17.57	18.64	19.02
	6H	8.35	9.38	8.77	9.75	10.15	17.15	18.18	17.57	18.55	18.95
	8H	8.53	9.51	8.96	9.90	10.30	17.14	18.12	17.57	18.51	18.91
	12H	8.70	9.63	9.13	10.01	10.44	17.13	18.06	17.56	18.44	18.87
4H	2H	7.61	8.73	8.01	9.08	9.46	16.12	17.24	16.52	17.59	17.97
	3H	8.66	9.57	9.07	9.98	10.38	17.03	17.94	17.44	18.35	18.75
	4H	9.22	10.04	9.65	10.46	10.90	17.13	17.95	17.56	18.37	18.81
	6H	9.82	10.53	10.28	10.97	11.44	17.16	17.87	17.62	18.31	18.78
	8H	10.06	10.72	10.53	11.16	11.64	17.16	17.82	17.63	18.27	18.74
	12H	10.28	10.87	10.77	11.35	11.82	17.17	17.76	17.66	18.24	18.71
8H	4H	9.69	10.35	10.16	10.80	11.27	17.05	17.72	17.52	18.16	18.63
	6H	10.50	11.04	11.00	11.54	12.02	17.11	17.65	17.61	18.15	18.63
	8H	10.88	11.37	11.40	11.88	12.37	17.14	17.63	17.66	18.14	18.63
	12H	11.27	11.70	11.79	12.20	12.77	17.21	17.64	17.72	18.13	18.70
12H	4H	9.74	10.33	10.23	10.81	11.28	17.02	17.61	17.51	18.09	18.56
	6H	10.62	11.11	11.15	11.63	12.12	17.08	17.56	17.60	18.08	18.57
	8H	11.11	11.54	11.63	12.04	12.61	17.15	17.58	17.66	18.07	18.64