

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: P1062167

Luminaire Tested: S125RDR-H850D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062167
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-H850D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

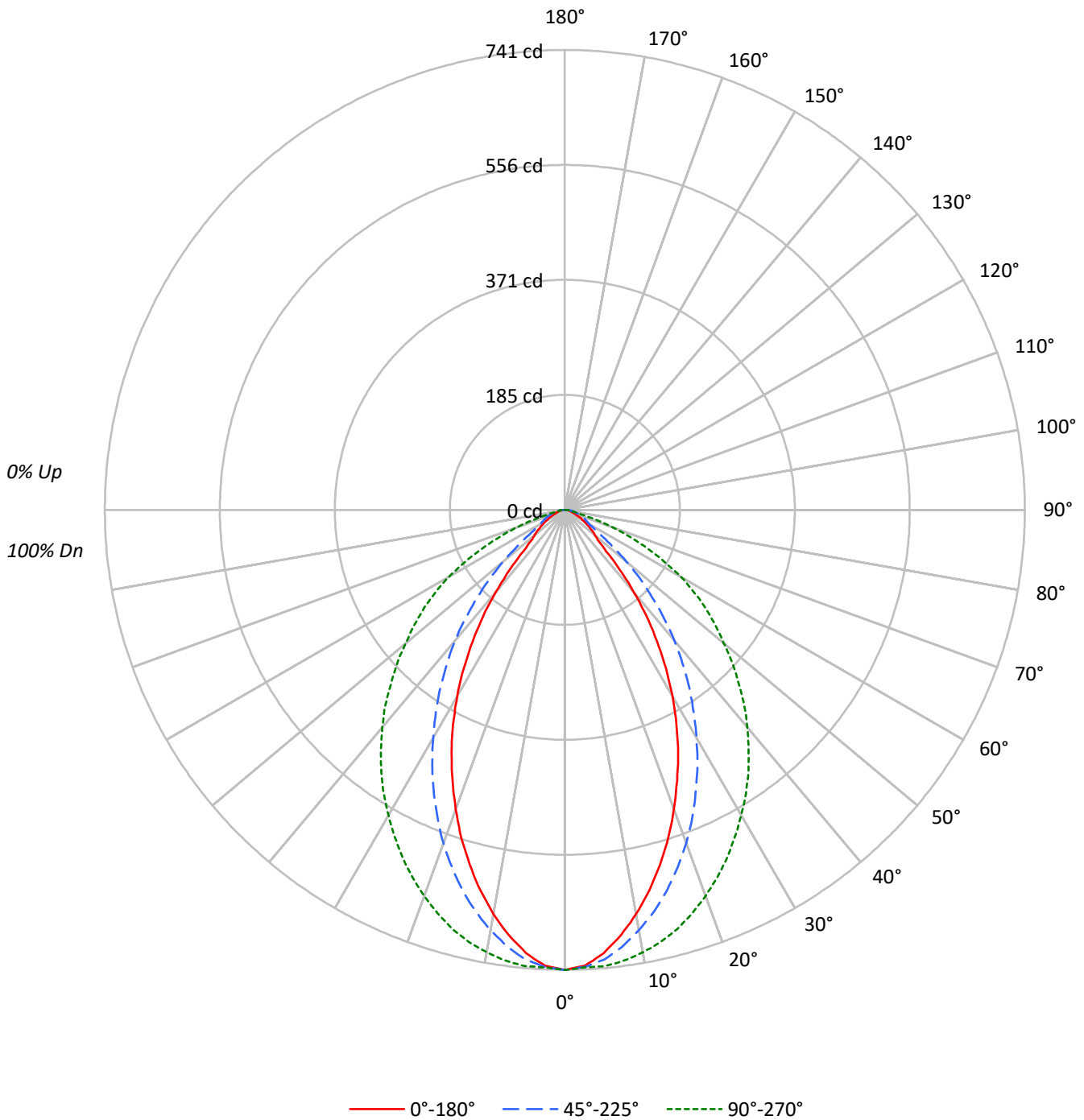
Lumens per Lamp: N/A
Luminaire Lumens: 1070.5 lumens
Efficiency: N/A
Efficacy: 45.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	5105	5105	5105
5°	4954	5027	5100
10°	4624	4808	5060
15°	4219	4526	4984
20°	3763	4189	4852
25°	3280	3795	4697
30°	2755	3370	4517
35°	2174	2935	4332
40°	1558	2466	4110
45°	916	1936	3854
50°	678	1395	3580
55°	570	845	3325
60°	460	618	2968
65°	358	588	2379
70°	302	550	1610
75°	282	492	702
80°	278	488	452
85°	348	624	490

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3854 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.3	6.4
10°-20°	179.5	16.8
20°-30°	234.5	21.9
30°-40°	228.3	21.3
40°-50°	170.6	15.9
50°-60°	105.8	9.9
60°-70°	55.6	5.2
70°-80°	20.3	1.9
80°-90°	7.7	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°	482.3	45.1
0°-40°	710.6	66.4
0°-60°	987.0	92.2
0°-90°	1070.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1070.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	741	741	741	741	741	
5°	717	726	727	732	738	67
15°	592	610	635	674	699	165
25°	432	454	500	567	618	197
35°	259	287	349	442	515	161
45°	94	123	199	310	396	79
55°	48	50	70	183	277	43
65°	22	24	36	77	146	23
75°	11	12	18	20	26	11
85°	4	8	8	8	6	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	741.4	741.4	741.4	741.4	741.4
2.5°	735.2	741.4	737.0	737.0	737.9
5°	716.8	726.4	727.3	731.7	737.9
7.5°	691.3	702.7	709.7	722.9	732.6
10°	661.4	674.6	687.7	709.7	723.8
12.5°	627.9	643.8	663.1	693.0	713.3
15°	591.9	609.5	635.0	673.7	699.2
17.5°	554.1	572.5	604.2	650.8	681.6
20°	513.6	533.8	571.7	624.4	662.2
22.5°	472.3	495.1	536.5	596.3	641.1
25°	431.8	453.8	499.5	567.3	618.3
27.5°	389.6	412.5	462.6	537.4	593.6
30°	346.5	371.1	423.9	506.6	568.1
32.5°	303.4	328.9	386.1	474.9	542.6
35°	258.6	286.7	349.2	442.4	515.4
37.5°	216.4	246.3	311.3	409.0	486.3
40°	173.3	204.0	274.4	376.4	457.3
42.5°	131.0	162.7	236.6	343.0	428.3
45°	94.1	123.1	198.8	310.5	395.8
47.5°	72.1	88.8	163.6	277.0	366.7
50°	63.3	68.6	130.2	244.5	334.2
52.5°	55.4	58.9	96.7	212.8	306.1
55°	47.5	50.1	70.4	182.9	277.0
57.5°	40.5	43.1	53.6	155.7	247.1
60°	33.4	36.1	44.9	128.4	215.5
62.5°	28.1	29.0	40.5	102.9	180.3
65°	22.0	23.7	36.1	77.4	146.0
67.5°	18.5	19.3	31.7	55.4	112.6
70°	15.0	15.8	27.3	38.7	80.0
72.5°	13.2	13.2	22.9	28.1	51.0
75°	10.6	12.3	18.5	20.2	26.4
77.5°	8.8	12.3	15.8	15.0	14.1
80°	7.0	11.4	12.3	12.3	11.4
82.5°	6.2	9.7	10.6	9.7	8.8
85°	4.4	7.9	7.9	7.9	6.2
87.5°	3.5	7.0	6.2	6.2	4.4
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	5.45	6.80	5.82	7.11	7.43	15.16	16.51	15.52	16.82	17.13
	3H	6.29	7.49	6.67	7.82	8.18	16.07	17.27	16.45	17.60	17.96
	4H	6.65	7.77	7.05	8.12	8.50	16.17	17.28	16.57	17.63	18.02
	6H	7.02	8.05	7.44	8.42	8.81	16.15	17.18	16.57	17.55	17.94
	8H	7.20	8.18	7.63	8.57	8.97	16.14	17.11	16.57	17.50	17.91
	12H	7.37	8.30	7.80	8.68	9.11	16.13	17.06	16.56	17.44	17.87
4H	2H	6.28	7.40	6.69	7.75	8.13	15.01	16.12	15.41	16.47	16.86
	3H	7.34	8.25	7.75	8.66	9.06	16.00	16.91	16.41	17.31	17.72
	4H	7.80	8.61	8.23	9.03	9.47	16.12	16.94	16.56	17.36	17.80
	6H	8.35	9.06	8.81	9.50	9.97	16.16	16.86	16.62	17.31	17.77
	8H	8.61	9.27	9.08	9.72	10.19	16.16	16.82	16.63	17.26	17.73
	12H	8.85	9.44	9.34	9.92	10.39	16.17	16.75	16.65	17.23	17.71
8H	4H	8.35	9.01	8.82	9.46	9.93	16.05	16.71	16.52	17.15	17.63
	6H	9.13	9.66	9.63	10.16	10.64	16.11	16.65	16.61	17.14	17.62
	8H	9.54	10.03	10.06	10.54	11.03	16.14	16.62	16.66	17.14	17.63
	12H	9.96	10.39	10.48	10.88	11.45	16.19	16.62	16.71	17.11	17.68
12H	4H	8.41	8.99	8.90	9.48	9.95	16.01	16.60	16.50	17.08	17.55
	6H	9.27	9.75	9.79	10.27	10.76	16.07	16.56	16.60	17.07	17.57
	8H	9.80	10.23	10.31	10.72	11.29	16.14	16.57	16.65	17.06	17.63