

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: P1061786

Luminaire Tested: S125RDRP-S850D850-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061786
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-S850D850-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, 80 CRI LEDS
Ballast/Driver: -

Summary

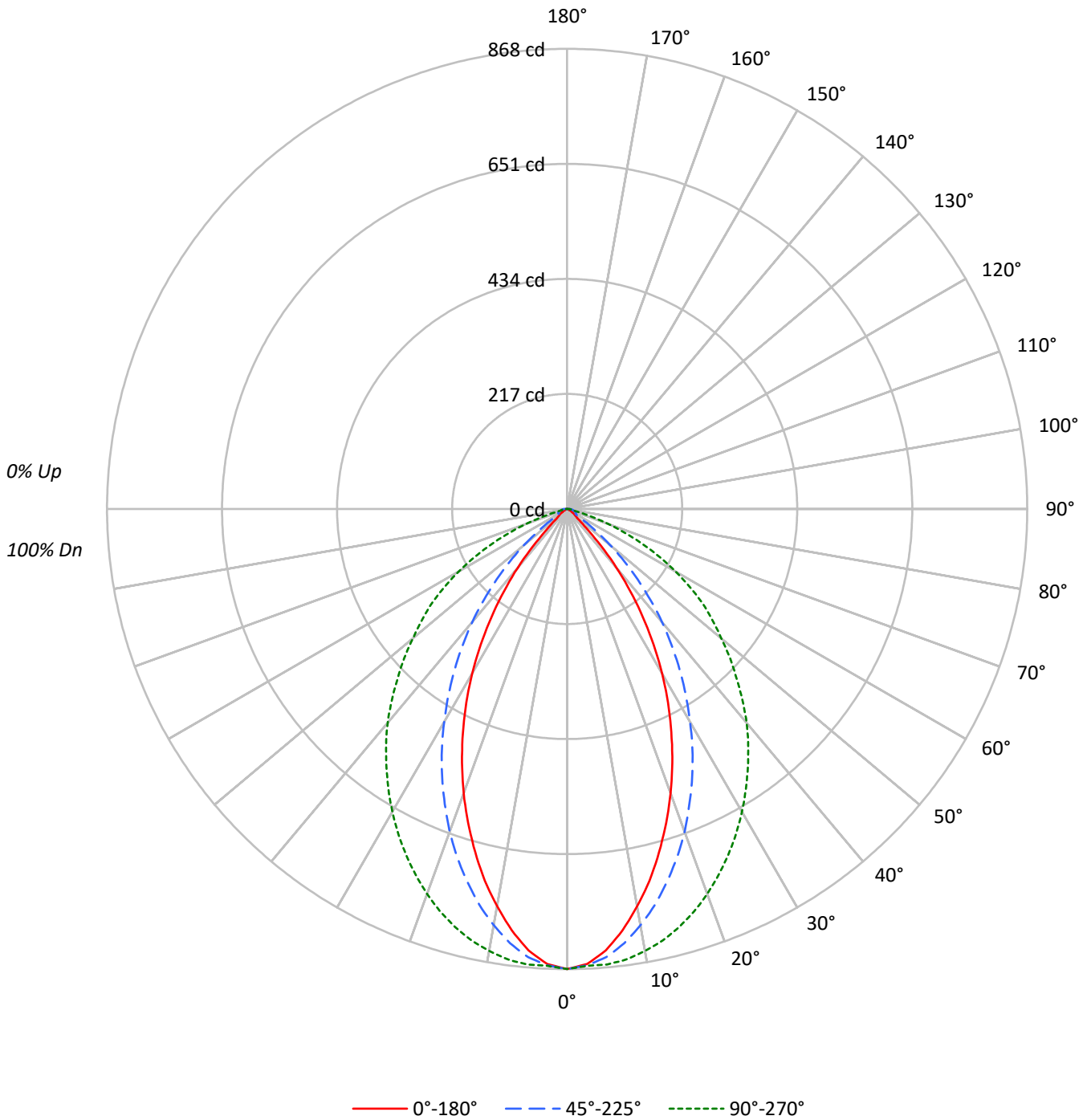
Lumens per Lamp: N/A
Luminaire Lumens: 1116.2 lumens
Efficiency: N/A
Efficacy: 43.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5975	5975	5975
5°	5777	5865	5961
10°	5320	5574	5918
15°	4777	5188	5820
20°	4182	4746	5662
25°	3532	4238	5465
30°	2846	3687	5242
35°	2093	3108	4994
40°	1307	2507	4736
45°	489	1832	4402
50°	229	1145	4064
55°	167	474	3758
60°	118	251	3253
65°	70	297	2577
70°	64	344	1635
75°	85	341	511
80°	127	424	381
85°	253	679	506

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4402 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.6	7.1
10°-20°	206.0	18.5
20°-30°	262.5	23.5
30°-40°	244.3	21.9
40°-50°	167.4	15.0
50°-60°	92.2	8.3
60°-70°	43.6	3.9
70°-80°	13.7	1.2
80°-90°	7.0	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°	548.0	49.1
0°-40°	792.3	71.0
0°-60°	1051.8	94.2
0°-90°	1116.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1116.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	868	868	868	868	868	
5°	836	846	849	855	862	77
15°	670	692	728	782	816	187
25°	465	494	558	648	719	212
35°	249	284	370	492	594	154
45°	50	84	188	334	452	48
55°	14	16	40	186	313	13
65°	4	5	18	68	158	5
75°	3	5	13	14	19	3
85°	3	8	9	8	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	867.8	867.8	867.8	867.8	867.8
2.5°	859.3	867.8	861.4	861.4	862.5
5°	835.8	846.5	848.6	855.0	862.5
7.5°	801.6	815.5	826.2	844.3	857.1
10°	761.0	778.1	797.3	827.2	846.5
12.5°	718.2	736.4	765.2	806.9	833.6
15°	670.1	691.5	727.8	782.3	816.5
17.5°	621.0	644.5	689.4	753.5	796.2
20°	570.7	595.3	647.7	719.3	772.7
22.5°	518.4	545.1	602.8	684.0	747.1
25°	464.9	493.8	557.9	647.7	719.3
27.5°	411.5	441.4	511.9	610.3	690.4
30°	358.0	389.0	463.8	571.8	659.4
32.5°	303.5	337.7	416.8	533.3	627.4
35°	249.0	284.3	369.8	491.6	594.2
37.5°	195.6	231.9	323.8	452.1	561.1
40°	145.4	181.7	278.9	412.5	526.9
42.5°	94.1	132.5	231.9	371.9	489.5
45°	50.2	84.4	188.1	333.5	452.1
47.5°	26.7	44.9	146.4	295.0	416.8
50°	21.4	24.6	106.9	256.5	379.4
52.5°	17.1	19.2	68.4	217.0	346.3
55°	13.9	16.0	39.5	186.0	313.1
57.5°	10.7	12.8	22.4	155.0	274.7
60°	8.6	9.6	18.2	124.0	236.2
62.5°	5.3	7.5	18.2	96.2	197.7
65°	4.3	5.3	18.2	68.4	158.2
67.5°	4.3	4.3	18.2	44.9	118.6
70°	3.2	3.2	17.1	28.9	81.2
72.5°	3.2	3.2	15.0	19.2	47.0
75°	3.2	5.3	12.8	13.9	19.2
77.5°	3.2	8.6	11.8	11.8	10.7
80°	3.2	8.6	10.7	9.6	9.6
82.5°	3.2	8.6	8.6	8.6	7.5
85°	3.2	7.5	8.6	7.5	6.4
87.5°	3.2	7.5	7.5	7.5	4.3
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	15.26	16.54	15.62	16.85	17.17
	3H	0.00	0.00	0.00	0.00	0.00	16.04	17.18	16.42	17.51	17.88
	4H	0.00	0.00	0.00	0.00	0.00	16.07	17.13	16.47	17.48	17.86
	6H	0.00	0.00	0.00	0.29	0.68	16.03	17.00	16.44	17.37	17.76
	8H	0.00	0.54	0.05	0.93	1.34	16.00	16.92	16.43	17.31	17.72
	12H	0.37	1.25	0.80	1.63	2.06	15.98	16.86	16.42	17.24	17.68
4H	2H	0.00	0.10	0.00	0.45	0.83	15.04	16.10	15.44	16.45	16.83
	3H	0.00	0.77	0.32	1.18	1.58	15.87	16.73	16.28	17.14	17.54
	4H	0.50	1.27	0.94	1.69	2.14	15.90	16.67	16.34	17.09	17.54
	6H	2.01	2.67	2.47	3.12	3.59	15.89	16.55	16.35	17.00	17.47
	8H	2.75	3.37	3.22	3.82	4.29	15.87	16.49	16.34	16.94	17.41
	12H	3.50	4.04	3.98	4.53	5.00	15.88	16.42	16.36	16.91	17.38
8H	4H	2.55	3.17	3.02	3.62	4.09	15.79	16.41	16.26	16.86	17.33
	6H	4.31	4.81	4.81	5.31	5.79	15.79	16.29	16.29	16.79	17.27
	8H	5.26	5.72	5.79	6.23	6.73	15.80	16.25	16.32	16.77	17.26
	12H	6.20	6.60	6.71	7.09	7.66	15.84	16.24	16.36	16.74	17.31
12H	4H	2.85	3.40	3.34	3.88	4.36	15.75	16.29	16.23	16.78	17.25
	6H	4.76	5.22	5.29	5.74	6.23	15.74	16.20	16.27	16.71	17.21
	8H	5.90	6.30	6.42	6.80	7.37	15.78	16.19	16.30	16.68	17.25