

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: P1062204

Luminaire Tested: S125RDR-H850D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062204
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: S125RDR-H850D927-X4F0-XX-UDD-SVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

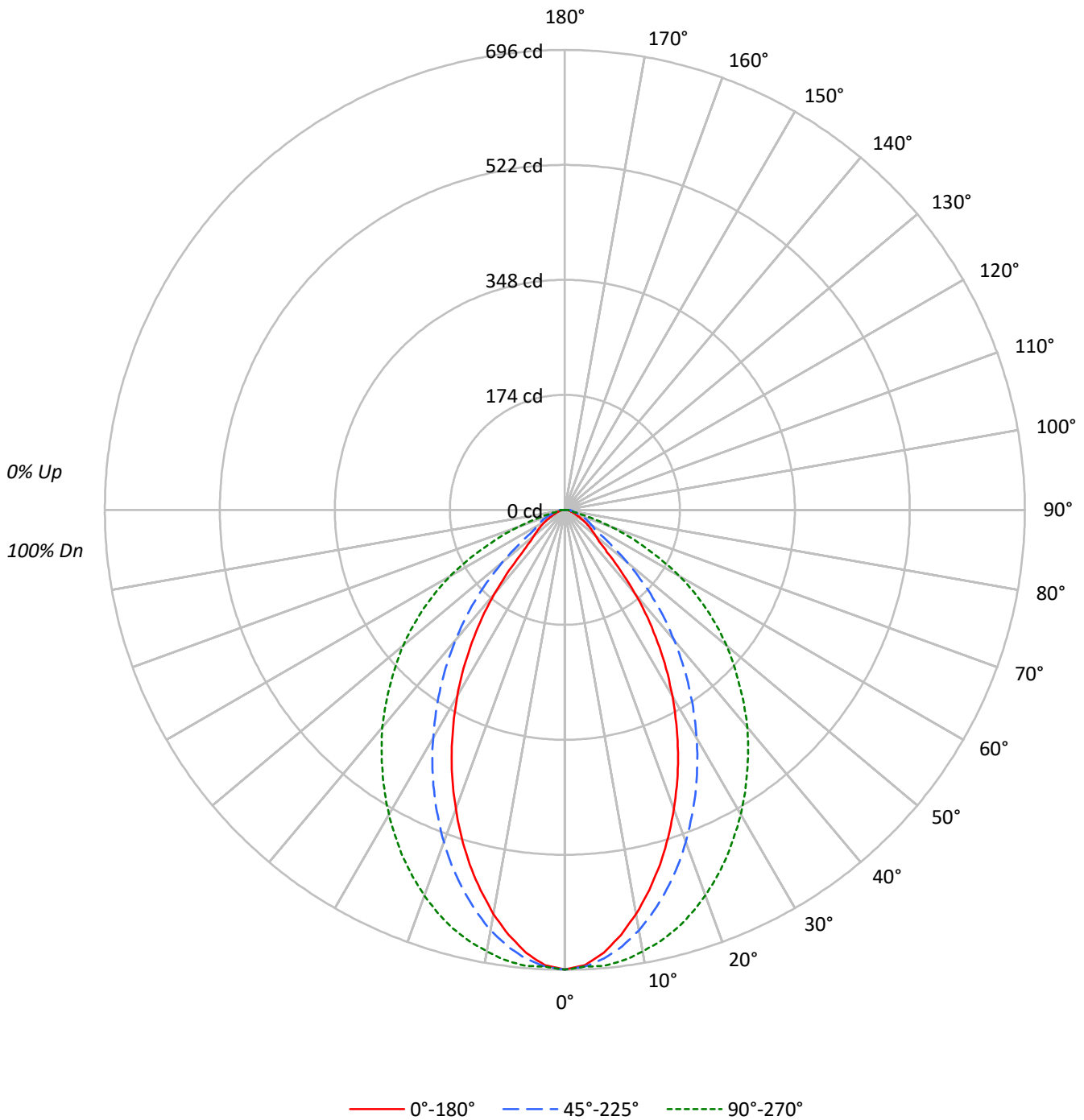
Lumens per Lamp: N/A
Luminaire Lumens: 1007.7 lumens
Efficiency: N/A
Efficacy: 42.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1062204

CATALOG NUMBER: S125RDR-H850D927-X4F0-XX-UDD-SVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1062204

CATALOG NUMBER: S125RDR-H850D927-X4F0-XX-UDD-SVL-W

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°	4790	4790	4790
5°	4650	4711	4788
10°	4342	4517	4745
15°	3963	4242	4675
20°	3532	3921	4550
25°	3078	3561	4403
30°	2586	3168	4232
35°	2057	2753	4045
40°	1482	2313	3860
45°	878	1835	3635
50°	649	1307	3421
55°	550	808	3133
60°	448	651	2758
65°	349	603	2180
70°	298	521	1460
75°	277	452	591
80°	293	468	412
85°	348	703	466

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3635 cd/sqm



TEST NUMBER: P1062204

CATALOG NUMBER: S125RDR-H850D927-X4F0-XX-UDD-SVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.1	6.4
10°-20°	168.4	16.7
20°-30°	220.1	21.8
30°-40°	214.4	21.3
40°-50°	160.8	16.0
50°-60°	100.8	10.0
60°-70°	52.5	5.2
70°-80°	19.0	1.9
80°-90°	7.5	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°	452.6	44.9
0°-40°	667.0	66.2
0°-60°	928.7	92.2
0°-90°	1007.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1007.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	696	696	696	696	696	
5°	673	682	682	687	693	63
15°	556	572	595	632	656	155
25°	405	427	469	532	580	185
35°	245	271	328	415	481	152
45°	90	117	188	291	373	76
55°	46	48	67	176	261	41
65°	21	23	37	71	134	22
75°	10	14	17	18	22	11
85°	4	7	9	8	6	5
90°	0	0	0	0	0	

TEST NUMBER: P1062204

CATALOG NUMBER: S125RDR-H850D927-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	695.7	695.7	695.7	695.7	695.7
2.5°	689.8	696.4	692.0	692.0	692.0
5°	672.8	681.6	681.6	686.8	692.7
7.5°	649.1	659.5	666.1	678.7	687.5
10°	621.0	633.6	646.1	666.8	678.7
12.5°	589.2	604.0	621.7	650.6	668.3
15°	555.9	572.2	595.1	632.1	655.8
17.5°	519.7	538.9	566.3	610.7	639.5
20°	482.0	501.2	535.2	585.5	621.0
22.5°	444.3	465.0	502.0	558.9	601.0
25°	405.1	427.3	468.7	532.3	579.6
27.5°	365.2	388.1	434.0	504.9	555.9
30°	325.3	348.9	398.5	475.4	532.3
32.5°	285.4	310.5	363.0	445.1	507.2
35°	244.7	270.6	327.5	414.7	481.3
37.5°	205.5	231.4	292.0	383.7	455.4
40°	164.9	193.0	257.3	352.6	429.5
42.5°	124.9	153.8	222.5	321.6	401.4
45°	90.2	116.8	188.5	291.3	373.3
47.5°	69.5	84.3	153.8	260.2	346.0
50°	60.6	65.1	122.0	231.4	319.4
52.5°	52.5	55.4	91.7	204.8	290.5
55°	45.8	48.1	67.3	176.0	261.0
57.5°	38.4	41.4	53.2	147.9	230.7
60°	32.5	34.0	47.3	122.0	200.3
62.5°	26.6	28.1	42.1	96.1	166.3
65°	21.4	22.9	37.0	71.0	133.8
67.5°	17.7	18.5	31.1	50.3	102.8
70°	14.8	15.5	25.9	34.7	72.5
72.5°	12.6	14.8	20.7	25.1	45.8
75°	10.4	14.0	17.0	17.7	22.2
77.5°	8.9	13.3	14.0	14.0	12.6
80°	7.4	11.1	11.8	11.1	10.4
82.5°	5.9	8.9	9.6	9.6	8.1
85°	4.4	7.4	8.9	8.1	5.9
87.5°	3.0	6.7	7.4	6.7	4.4
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1062204
 CATALOG NUMBER: S125RDR-H850D927-X4F0-XX-UDD-SVL-W

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	5.36	6.71	5.72	7.02	7.34	14.97	16.33	15.34	16.64	16.95
	3H	6.22	7.42	6.60	7.75	8.11	15.82	17.02	16.19	17.35	17.71
	4H	6.64	7.76	7.04	8.11	8.49	15.89	17.01	16.29	17.36	17.74
	6H	7.07	8.10	7.49	8.47	8.86	15.87	16.90	16.29	17.27	17.67
	8H	7.25	8.22	7.68	8.62	9.02	15.86	16.84	16.29	17.23	17.63
	12H	7.41	8.34	7.84	8.73	9.16	15.85	16.78	16.28	17.16	17.59
4H	2H	6.32	7.44	6.73	7.79	8.18	14.84	15.96	15.24	16.31	16.69
	3H	7.38	8.29	7.79	8.70	9.10	15.75	16.66	16.16	17.07	17.47
	4H	7.94	8.76	8.37	9.18	9.62	15.85	16.67	16.28	17.09	17.53
	6H	8.54	9.25	9.00	9.69	10.16	15.88	16.59	16.34	17.03	17.50
	8H	8.78	9.44	9.24	9.88	10.35	15.88	16.54	16.35	16.99	17.46
	12H	9.00	9.59	9.49	10.07	10.54	15.89	16.48	16.38	16.96	17.43
8H	4H	8.41	9.07	8.88	9.51	9.99	15.77	16.44	16.24	16.88	17.35
	6H	9.22	9.76	9.72	10.26	10.74	15.83	16.37	16.33	16.87	17.35
	8H	9.60	10.09	10.12	10.60	11.09	15.86	16.35	16.38	16.86	17.35
	12H	9.99	10.42	10.51	10.92	11.49	15.93	16.35	16.44	16.85	17.42
12H	4H	8.46	9.04	8.94	9.53	10.00	15.74	16.33	16.23	16.81	17.28
	6H	9.34	9.83	9.86	10.34	10.84	15.80	16.28	16.32	16.80	17.29
	8H	9.83	10.26	10.35	10.76	11.33	15.87	16.30	16.38	16.79	17.36