

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: P1062203

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062203
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-H850D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

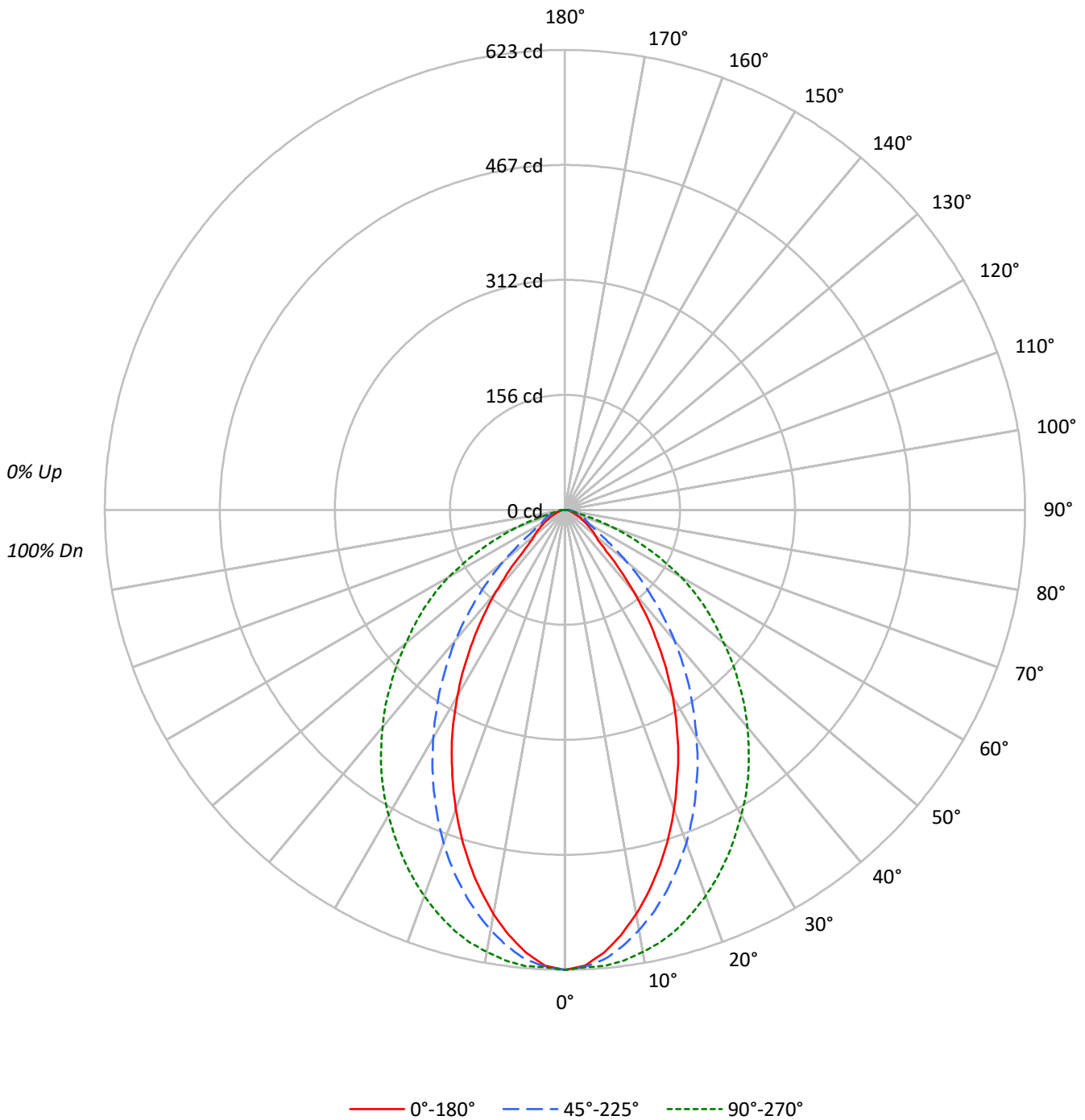
Lumens per Lamp: N/A
Luminaire Lumens: 899.8 lumens
Efficiency: N/A
Efficacy: 38.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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°	4290	4290	4290
5°	4164	4225	4287
10°	3887	4041	4253
15°	3546	3804	4188
20°	3163	3521	4078
25°	2757	3190	3947
30°	2315	2833	3796
35°	1826	2467	3641
40°	1309	2073	3455
45°	770	1627	3239
50°	570	1172	3009
55°	479	709	2795
60°	387	519	2494
65°	301	494	1999
70°	254	461	1355
75°	237	412	591
80°	234	408	381
85°	292	529	411

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3239 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.4	6.4
10°-20°	150.8	16.8
20°-30°	197.1	21.9
30°-40°	191.9	21.3
40°-50°	143.4	15.9
50°-60°	88.9	9.9
60°-70°	46.7	5.2
70°-80°	17.0	1.9
80°-90°	6.4	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°	405.4	45.1
0°-40°	597.3	66.4
0°-60°	829.6	92.2
0°-90°	899.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	899.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	623	623	623	623	623	
5°	602	611	611	615	620	56
15°	498	512	534	566	588	139
25°	363	381	420	477	520	166
35°	217	241	294	372	433	135
45°	79	104	167	261	333	67
55°	40	42	59	154	233	36
65°	18	20	30	65	123	19
75°	9	10	16	17	22	10
85°	4	7	7	7	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	623.1	623.1	623.1	623.1	623.1
2.5°	617.9	623.1	619.4	619.4	620.2
5°	602.4	610.6	611.3	615.0	620.2
7.5°	581.0	590.6	596.5	607.6	615.7
10°	555.9	566.9	578.0	596.5	608.3
12.5°	527.8	541.1	557.3	582.5	599.5
15°	497.5	512.2	533.7	566.2	587.6
17.5°	465.7	481.2	507.8	547.0	572.9
20°	431.7	448.7	480.5	524.8	556.6
22.5°	396.9	416.2	450.9	501.2	538.9
25°	362.9	381.4	419.9	476.8	519.6
27.5°	327.5	346.7	388.8	451.6	498.9
30°	291.2	311.9	356.3	425.8	477.5
32.5°	255.0	276.5	324.5	399.2	456.1
35°	217.3	241.0	293.5	371.8	433.2
37.5°	181.8	207.0	261.7	343.7	408.8
40°	145.6	171.5	230.6	316.4	384.4
42.5°	110.1	136.7	198.8	288.3	360.0
45°	79.1	103.5	167.1	260.9	332.6
47.5°	60.6	74.7	137.5	232.8	308.2
50°	53.2	57.7	109.4	205.5	280.9
52.5°	46.6	49.5	81.3	178.9	257.2
55°	39.9	42.1	59.1	153.7	232.8
57.5°	34.0	36.2	45.1	130.8	207.7
60°	28.1	30.3	37.7	107.9	181.1
62.5°	23.7	24.4	34.0	86.5	151.5
65°	18.5	20.0	30.3	65.0	122.7
67.5°	15.5	16.3	26.6	46.6	94.6
70°	12.6	13.3	22.9	32.5	67.3
72.5°	11.1	11.1	19.2	23.7	42.9
75°	8.9	10.3	15.5	17.0	22.2
77.5°	7.4	10.3	13.3	12.6	11.8
80°	5.9	9.6	10.3	10.3	9.6
82.5°	5.2	8.1	8.9	8.1	7.4
85°	3.7	6.7	6.7	6.7	5.2
87.5°	3.0	5.9	5.2	5.2	3.7
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	4.84	6.19	5.21	6.51	6.82	14.55	15.90	14.91	16.21	16.53
	3H	5.68	6.88	6.06	7.21	7.58	15.46	16.66	15.84	16.99	17.35
	4H	6.04	7.16	6.45	7.51	7.89	15.56	16.68	15.96	17.03	17.41
	6H	6.42	7.44	6.83	7.81	8.21	15.55	16.57	15.96	16.94	17.34
	8H	6.60	7.57	7.03	7.96	8.37	15.53	16.51	15.96	16.90	17.30
	12H	6.76	7.69	7.19	8.07	8.51	15.52	16.45	15.95	16.83	17.26
4H	2H	5.67	6.79	6.08	7.14	7.52	14.40	15.52	14.80	15.87	16.25
	3H	6.73	7.65	7.14	8.05	8.45	15.39	16.30	15.80	16.71	17.11
	4H	7.19	8.00	7.62	8.42	8.87	15.52	16.34	15.95	16.76	17.20
	6H	7.74	8.45	8.20	8.89	9.36	15.55	16.26	16.01	16.70	17.17
	8H	8.00	8.66	8.47	9.11	9.58	15.55	16.21	16.02	16.66	17.13
	12H	8.25	8.83	8.73	9.31	9.79	15.56	16.14	16.05	16.63	17.10
8H	4H	7.74	8.40	8.21	8.85	9.32	15.44	16.10	15.91	16.55	17.02
	6H	8.52	9.06	9.02	9.55	10.03	15.50	16.04	16.00	16.54	17.02
	8H	8.93	9.42	9.45	9.93	10.42	15.53	16.02	16.05	16.53	17.02
	12H	9.35	9.78	9.87	10.28	10.85	15.59	16.01	16.10	16.51	17.08
12H	4H	7.80	8.38	8.29	8.87	9.34	15.41	15.99	15.90	16.48	16.95
	6H	8.66	9.14	9.18	9.66	10.15	15.47	15.95	15.99	16.47	16.96
	8H	9.19	9.62	9.70	10.11	10.68	15.53	15.96	16.05	16.46	17.03