

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: P1062212

Luminaire Tested: S125RDR-H850D930-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1062212
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-H850D930-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, 90 CRI LEDS
Ballast/Driver: -

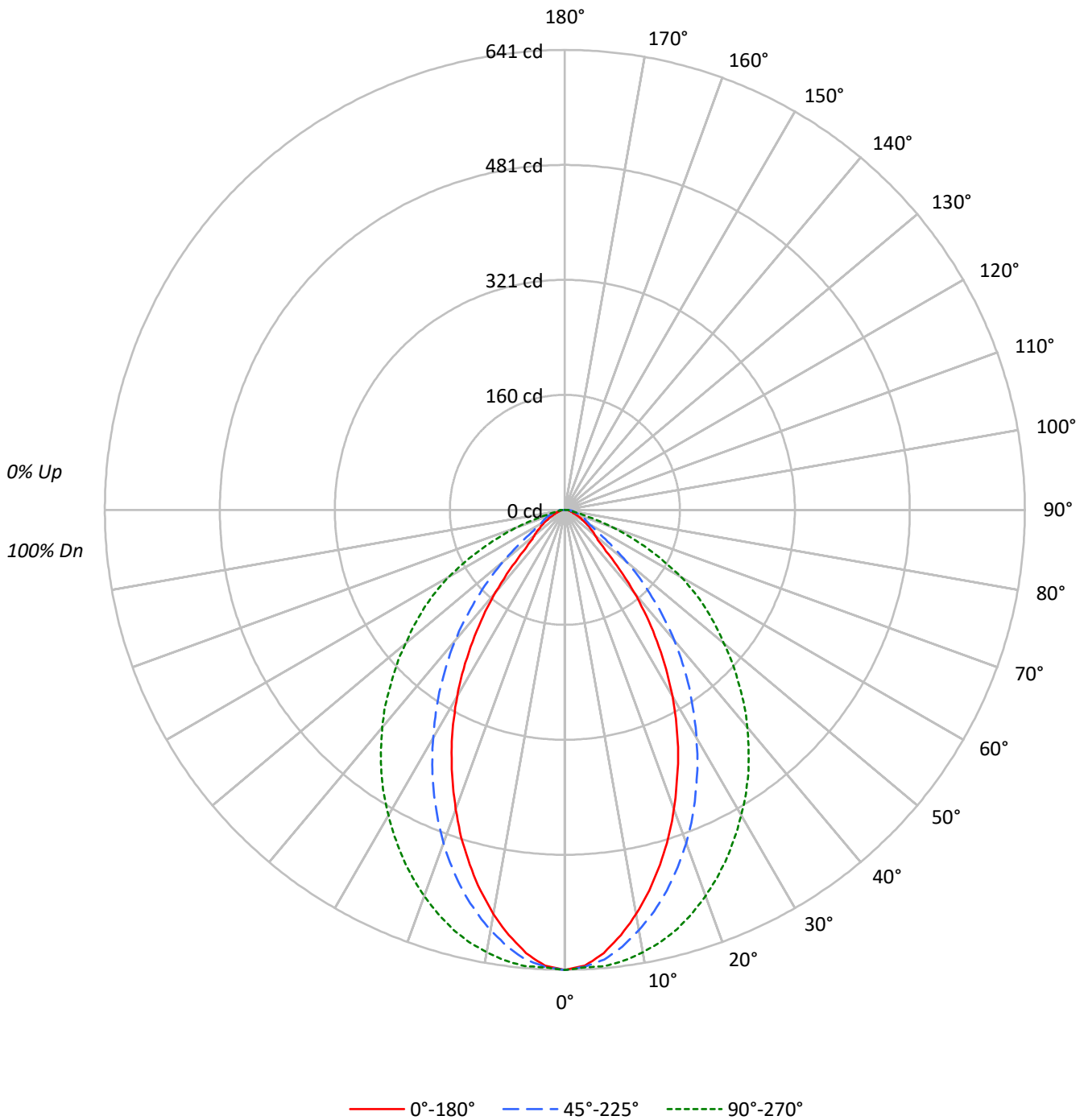
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 926.0 lumens
Efficiency: N/A
Efficacy: 39.4 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°	4416	4416	4416
5°	4285	4348	4412
10°	4000	4159	4377
15°	3650	3915	4311
20°	3255	3623	4197
25°	2837	3283	4063
30°	2383	2915	3907
35°	1880	2538	3747
40°	1347	2134	3556
45°	793	1674	3333
50°	587	1206	3097
55°	493	731	2876
60°	398	534	2567
65°	310	508	2058
70°	260	475	1393
75°	242	426	607
80°	242	424	393
85°	300	537	419

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3333 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.1	6.4
10°-20°	155.2	16.8
20°-30°	202.9	21.9
30°-40°	197.5	21.3
40°-50°	147.6	15.9
50°-60°	91.5	9.9
60°-70°	48.1	5.2
70°-80°	17.5	1.9
80°-90°	6.6	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°	417.2	45.1
0°-40°	614.7	66.4
0°-60°	853.8	92.2
0°-90°	926.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	926.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	641	641	641	641	641	
5°	620	628	629	633	638	58
15°	512	527	549	583	605	143
25°	374	392	432	491	535	171
35°	224	248	302	383	446	139
45°	81	106	172	268	342	69
55°	41	43	61	158	240	37
65°	19	20	31	67	126	20
75°	9	11	16	18	23	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°	641.3	641.3	641.3	641.3	641.3
2.5°	636.0	641.3	637.5	637.5	638.3
5°	620.0	628.4	629.1	632.9	638.3
7.5°	597.9	607.8	613.9	625.3	633.7
10°	572.1	583.5	594.9	613.9	626.1
12.5°	543.2	556.9	573.6	599.5	617.0
15°	512.0	527.2	549.3	582.7	604.8
17.5°	479.3	495.2	522.6	563.0	589.6
20°	444.3	461.8	494.5	540.1	572.8
22.5°	408.5	428.3	464.1	515.8	554.6
25°	373.5	392.5	432.1	490.7	534.8
27.5°	337.0	356.8	400.2	464.8	513.5
30°	299.7	321.0	366.7	438.2	491.4
32.5°	262.5	284.5	334.0	410.8	469.4
35°	223.7	248.0	302.0	382.7	445.8
37.5°	187.1	213.0	269.3	353.7	420.7
40°	149.9	176.5	237.4	325.6	395.6
42.5°	113.4	140.7	204.6	296.7	370.5
45°	81.4	106.5	171.9	268.5	342.3
47.5°	62.4	76.8	141.5	239.6	317.2
50°	54.8	59.3	112.6	211.5	289.1
52.5°	47.9	51.0	83.7	184.1	264.7
55°	41.1	43.4	60.9	158.2	239.6
57.5°	35.0	37.3	46.4	134.7	213.8
60°	28.9	31.2	38.8	111.1	186.4
62.5°	24.3	25.1	35.0	89.0	156.0
65°	19.0	20.5	31.2	66.9	126.3
67.5°	16.0	16.7	27.4	47.9	97.4
70°	12.9	13.7	23.6	33.5	69.2
72.5°	11.4	11.4	19.8	24.3	44.1
75°	9.1	10.7	16.0	17.5	22.8
77.5°	7.6	10.7	13.7	12.9	12.2
80°	6.1	9.9	10.7	10.7	9.9
82.5°	5.3	8.4	9.1	8.4	7.6
85°	3.8	6.8	6.8	6.8	5.3
87.5°	3.0	6.1	5.3	5.3	3.8
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	4.95	6.30	5.32	6.61	6.93	14.65	16.00	15.02	16.32	16.63
	3H	5.79	6.99	6.17	7.32	7.68	15.56	16.76	15.94	17.09	17.46
	4H	6.15	7.26	6.55	7.61	8.00	15.66	16.78	16.06	17.13	17.51
	6H	6.52	7.55	6.94	7.92	8.31	15.65	16.67	16.06	17.04	17.44
	8H	6.70	7.67	7.13	8.06	8.47	15.64	16.61	16.07	17.00	17.40
	12H	6.86	7.79	7.29	8.18	8.61	15.62	16.55	16.05	16.94	17.37
4H	2H	5.78	6.90	6.18	7.25	7.63	14.50	15.62	14.91	15.97	16.35
	3H	6.84	7.75	7.25	8.15	8.56	15.49	16.41	15.90	16.81	17.21
	4H	7.29	8.11	7.73	8.53	8.97	15.62	16.44	16.06	16.86	17.30
	6H	7.85	8.56	8.31	9.00	9.47	15.65	16.36	16.12	16.81	17.27
	8H	8.11	8.77	8.58	9.22	9.69	15.65	16.31	16.12	16.76	17.23
	12H	8.35	8.93	8.84	9.42	9.89	15.66	16.25	16.15	16.73	17.20
8H	4H	7.85	8.51	8.32	8.95	9.42	15.55	16.20	16.01	16.65	17.12
	6H	8.63	9.17	9.13	9.66	10.14	15.61	16.15	16.11	16.64	17.12
	8H	9.04	9.53	9.57	10.04	10.54	15.64	16.12	16.16	16.63	17.13
	12H	9.46	9.89	9.97	10.38	10.95	15.69	16.12	16.20	16.61	17.18
12H	4H	7.91	8.49	8.40	8.98	9.45	15.51	16.09	16.00	16.58	17.05
	6H	8.77	9.26	9.29	9.77	10.26	15.57	16.06	16.09	16.57	17.06
	8H	9.30	9.73	9.81	10.22	10.79	15.64	16.07	16.15	16.56	17.13