

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: P1062213

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1062213  
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-H850D930-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: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

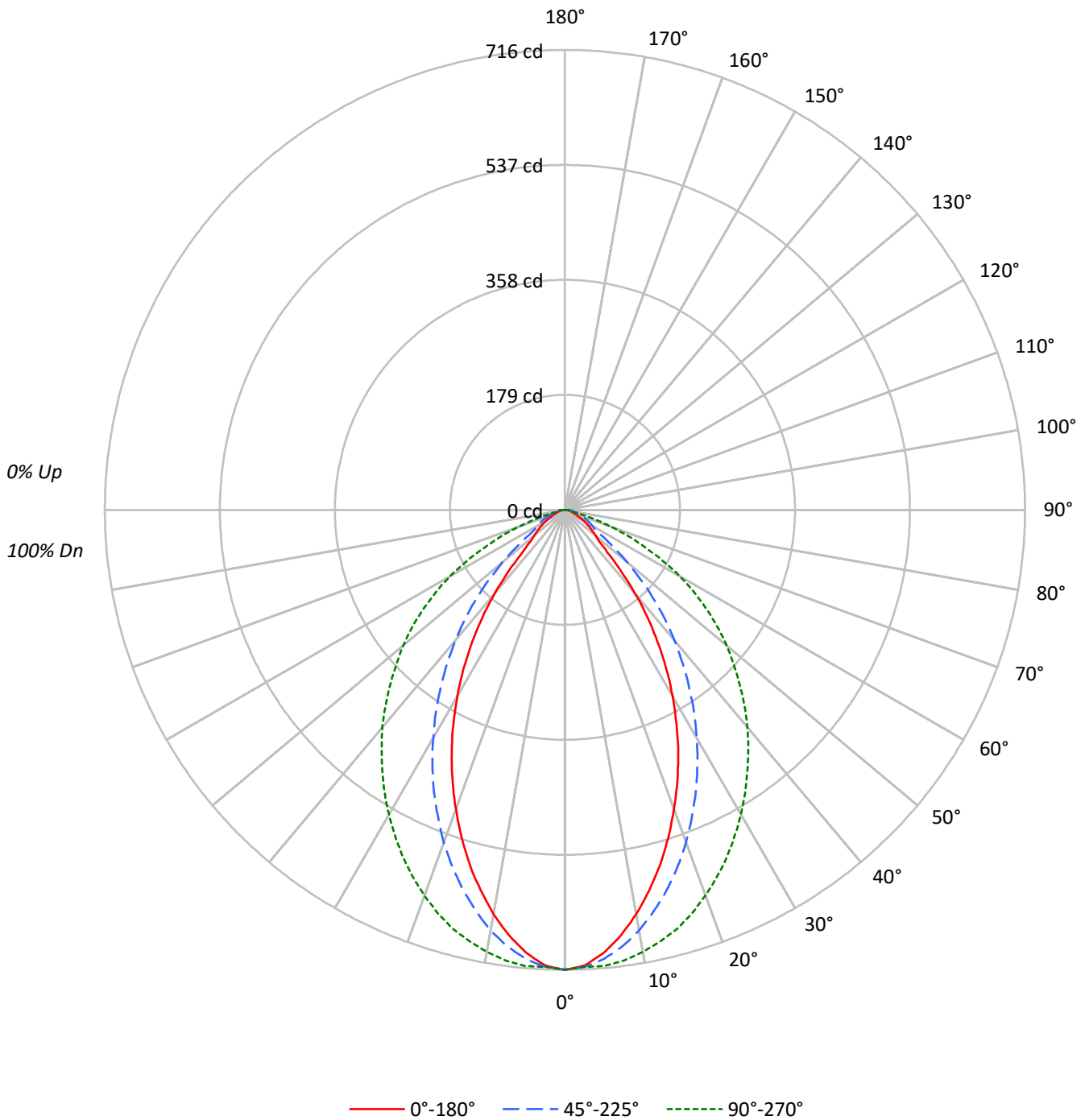
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1037.1 lumens  
Efficiency: N/A  
Efficacy: 44.1 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	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°	4930	4930	4930
5°	4786	4848	4927
10°	4468	4649	4884
15°	4079	4366	4811
20°	3635	4037	4683
25°	3168	3665	4532
30°	2662	3260	4355
35°	2116	2833	4163
40°	1525	2380	3974
45°	904	1889	3741
50°	668	1344	3521
55°	567	831	3224
60°	461	671	2839
65°	360	619	2243
70°	306	535	1502
75°	285	466	607
80°	301	484	424
85°	363	719	482

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3741 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.0	6.4
10°-20°	173.3	16.7
20°-30°	226.5	21.8
30°-40°	220.7	21.3
40°-50°	165.5	16.0
50°-60°	103.8	10.0
60°-70°	54.0	5.2
70°-80°	19.6	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°	465.8	44.9
0°-40°	686.5	66.2
0°-60°	955.8	92.2
0°-90°	1037.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1037.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	716	716	716	716	716	
5°	692	702	702	707	713	64
15°	572	589	612	650	675	160
25°	417	440	482	548	596	191
35°	252	278	337	427	495	156
45°	93	120	194	300	384	78
55°	47	50	69	181	269	42
65°	22	24	38	73	138	23
75°	11	14	18	18	23	12
85°	5	8	9	8	6	5
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	716.0	716.0	716.0	716.0	716.0
2.5°	709.9	716.7	712.2	712.2	712.2
5°	692.4	701.5	701.5	706.8	712.9
7.5°	668.0	678.7	685.5	698.5	707.6
10°	639.1	652.1	665.0	686.3	698.5
12.5°	606.4	621.6	639.9	669.6	687.8
15°	572.2	588.9	612.5	650.5	674.9
17.5°	534.9	554.7	582.8	628.5	658.2
20°	496.1	515.9	550.9	602.6	639.1
22.5°	457.3	478.6	516.6	575.2	618.6
25°	417.0	439.8	482.4	547.8	596.5
27.5°	375.9	399.5	446.6	519.7	572.2
30°	334.8	359.1	410.1	489.2	547.8
32.5°	293.7	319.6	373.6	458.0	522.0
35°	251.8	278.5	337.1	426.8	495.3
37.5°	211.5	238.2	300.5	394.9	468.7
40°	169.7	198.6	264.8	362.9	442.1
42.5°	128.6	158.3	229.0	331.0	413.2
45°	92.8	120.2	194.0	299.8	384.2
47.5°	71.5	86.7	158.3	267.8	356.1
50°	62.4	67.0	125.5	238.2	328.7
52.5°	54.0	57.1	94.3	210.8	299.0
55°	47.2	49.5	69.2	181.1	268.6
57.5°	39.6	42.6	54.8	152.2	237.4
60°	33.5	35.0	48.7	125.5	206.2
62.5°	27.4	28.9	43.4	98.9	171.2
65°	22.1	23.6	38.0	73.0	137.7
67.5°	18.3	19.0	32.0	51.7	105.8
70°	15.2	16.0	26.6	35.8	74.6
72.5°	12.9	15.2	21.3	25.9	47.2
75°	10.7	14.5	17.5	18.3	22.8
77.5°	9.1	13.7	14.5	14.5	12.9
80°	7.6	11.4	12.2	11.4	10.7
82.5°	6.1	9.1	9.9	9.9	8.4
85°	4.6	7.6	9.1	8.4	6.1
87.5°	3.0	6.8	7.6	6.8	4.6
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	5.46	6.81	5.83	7.13	7.44	15.07	16.43	15.44	16.74	17.05
	3H	6.32	7.52	6.70	7.85	8.21	15.91	17.11	16.29	17.44	17.81
	4H	6.74	7.86	7.15	8.21	8.60	15.99	17.11	16.39	17.46	17.84
	6H	7.17	8.20	7.58	8.57	8.96	15.97	17.00	16.39	17.37	17.76
	8H	7.35	8.32	7.78	8.71	9.12	15.96	16.94	16.39	17.33	17.73
	12H	7.51	8.45	7.94	8.83	9.26	15.95	16.88	16.38	17.26	17.69
4H	2H	6.42	7.54	6.82	7.89	8.27	14.94	16.06	15.34	16.41	16.79
	3H	7.47	8.39	7.89	8.79	9.20	15.85	16.76	16.26	17.17	17.57
	4H	8.04	8.86	8.47	9.28	9.72	15.95	16.77	16.38	17.19	17.63
	6H	8.64	9.35	9.10	9.79	10.26	15.98	16.69	16.44	17.13	17.60
	8H	8.88	9.54	9.34	9.98	10.45	15.98	16.64	16.45	17.09	17.56
	12H	9.10	9.69	9.59	10.17	10.64	15.99	16.58	16.48	17.06	17.53
8H	4H	8.51	9.17	8.98	9.62	10.09	15.87	16.54	16.34	16.98	17.45
	6H	9.32	9.86	9.82	10.36	10.84	15.93	16.47	16.43	16.97	17.45
	8H	9.70	10.19	10.22	10.70	11.19	15.96	16.45	16.48	16.96	17.45
	12H	10.10	10.52	10.61	11.02	11.59	16.03	16.46	16.54	16.95	17.52
12H	4H	8.56	9.15	9.05	9.63	10.10	15.84	16.43	16.33	16.91	17.38
	6H	9.45	9.93	9.97	10.45	10.94	15.90	16.38	16.42	16.90	17.39
	8H	9.93	10.36	10.45	10.86	11.43	15.97	16.40	16.48	16.89	17.46