

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: P1061924

Luminaire Tested: S125RDR-H1270D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1061924  
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-H1270D830-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, 80 CRI LEDS  
Ballast/Driver: -

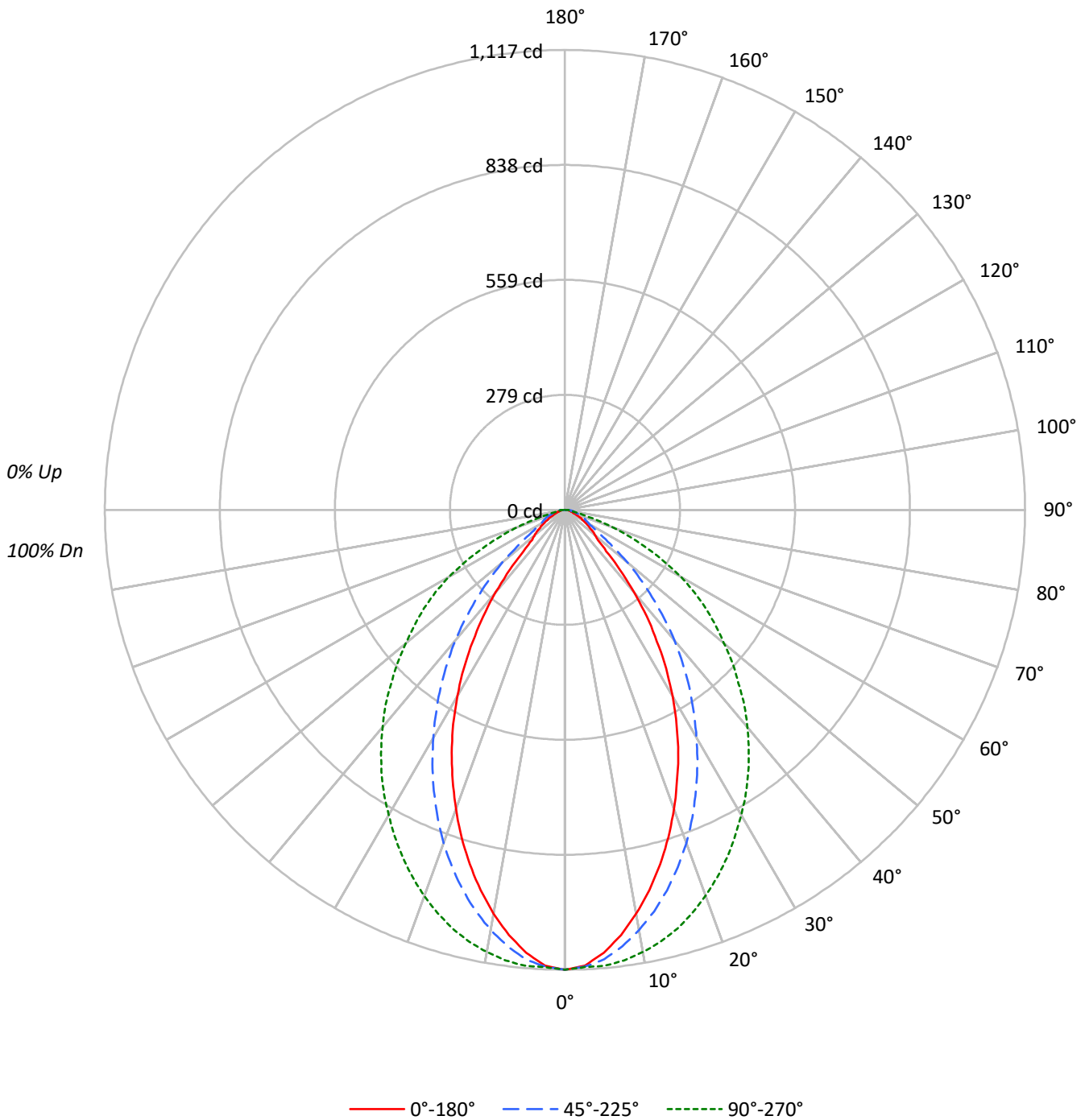
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1612.7 lumens  
Efficiency: N/A  
Efficacy: 44.2 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): 36.5  
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°	7690	7690	7690
5°	7463	7573	7683
10°	6966	7244	7623
15°	6356	6819	7508
20°	5670	6310	7310
25°	4943	5718	7076
30°	4150	5077	6805
35°	3274	4421	6526
40°	2346	3716	6193
45°	1381	2915	5805
50°	1022	2101	5393
55°	858	1272	5010
60°	693	931	4470
65°	539	885	3583
70°	453	827	2428
75°	423	740	1056
80°	420	734	682
85°	521	940	735

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5805 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.9	6.4
10°-20°	270.4	16.8
20°-30°	353.3	21.9
30°-40°	343.9	21.3
40°-50°	257.0	15.9
50°-60°	159.4	9.9
60°-70°	83.7	5.2
70°-80°	30.5	1.9
80°-90°	11.5	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°	726.6	45.1
0°-40°	1070.5	66.4
0°-60°	1487.0	92.2
0°-90°	1612.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1612.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1117	1117	1117	1117	1117	
5°	1080	1094	1096	1102	1112	100
15°	892	918	957	1015	1053	249
25°	651	684	753	855	931	297
35°	390	432	526	666	776	242
45°	142	186	299	468	596	119
55°	72	76	106	276	417	64
65°	33	36	54	117	220	34
75°	16	18	28	30	40	17
85°	7	12	12	12	9	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1116.9	1116.9	1116.9	1116.9	1116.9
2.5°	1107.7	1116.9	1110.3	1110.3	1111.6
5°	1079.8	1094.4	1095.7	1102.4	1111.6
7.5°	1041.4	1058.6	1069.2	1089.1	1103.7
10°	996.4	1016.2	1036.1	1069.2	1090.4
12.5°	946.0	969.9	999.0	1044.1	1074.5
15°	891.7	918.2	956.6	1014.9	1053.3
17.5°	834.7	862.5	910.2	980.5	1026.8
20°	773.8	804.2	861.2	940.7	997.7
22.5°	711.5	746.0	808.2	898.3	965.9
25°	650.6	683.7	752.6	854.6	931.4
27.5°	587.0	621.4	696.9	809.5	894.3
30°	522.0	559.1	638.6	763.2	855.9
32.5°	457.1	495.5	581.7	715.5	817.5
35°	389.5	431.9	526.0	666.5	776.4
37.5°	325.9	371.0	469.0	616.1	732.7
40°	261.0	307.4	413.4	567.1	689.0
42.5°	197.4	245.1	356.4	516.7	645.3
45°	141.8	185.5	299.4	467.7	596.2
47.5°	108.6	133.8	246.4	417.4	552.5
50°	95.4	103.3	196.1	368.3	503.5
52.5°	83.5	88.8	145.7	320.6	461.1
55°	71.5	75.5	106.0	275.6	417.4
57.5°	60.9	64.9	80.8	234.5	372.3
60°	50.3	54.3	67.6	193.4	324.6
62.5°	42.4	43.7	60.9	155.0	271.6
65°	33.1	35.8	54.3	116.6	219.9
67.5°	27.8	29.1	47.7	83.5	169.6
70°	22.5	23.8	41.1	58.3	120.6
72.5°	19.9	19.9	34.4	42.4	76.8
75°	15.9	18.5	27.8	30.5	39.7
77.5°	13.2	18.5	23.8	22.5	21.2
80°	10.6	17.2	18.5	18.5	17.2
82.5°	9.3	14.6	15.9	14.6	13.2
85°	6.6	11.9	11.9	11.9	9.3
87.5°	5.3	10.6	9.3	9.3	6.6
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	6.87	8.22	7.24	8.53	8.85	16.58	17.93	16.94	18.24	18.56
	3H	7.71	8.91	8.09	9.24	9.60	17.49	18.69	17.87	19.02	19.38
	4H	8.07	9.19	8.47	9.54	9.92	17.59	18.71	17.99	19.06	19.44
	6H	8.44	9.47	8.86	9.84	10.23	17.57	18.60	17.99	18.97	19.36
	8H	8.62	9.60	9.05	9.99	10.39	17.56	18.53	17.99	18.93	19.33
	12H	8.78	9.72	9.22	10.10	10.53	17.55	18.48	17.98	18.86	19.29
4H	2H	7.70	8.82	8.10	9.17	9.55	16.43	17.55	16.83	17.90	18.28
	3H	8.76	9.67	9.17	10.08	10.48	17.42	18.33	17.83	18.74	19.14
	4H	9.21	10.03	9.65	10.45	10.89	17.55	18.36	17.98	18.78	19.23
	6H	9.77	10.47	10.23	10.92	11.39	17.58	18.29	18.04	18.73	19.20
	8H	10.03	10.69	10.50	11.14	11.61	17.58	18.24	18.05	18.69	19.16
	12H	10.27	10.85	10.76	11.34	11.81	17.59	18.17	18.07	18.65	19.13
8H	4H	9.77	10.43	10.23	10.87	11.34	17.47	18.13	17.94	18.58	19.05
	6H	10.54	11.08	11.04	11.58	12.06	17.53	18.07	18.03	18.57	19.05
	8H	10.96	11.45	11.48	11.96	12.45	17.56	18.04	18.08	18.56	19.05
	12H	11.38	11.81	11.89	12.30	12.87	17.61	18.04	18.13	18.54	19.11
12H	4H	9.83	10.41	10.31	10.89	11.37	17.44	18.02	17.92	18.50	18.98
	6H	10.69	11.17	11.21	11.69	12.18	17.50	17.98	18.02	18.50	18.99
	8H	11.22	11.64	11.73	12.14	12.71	17.56	17.99	18.08	18.48	19.06