

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061543

Luminaire Tested: S125RDRP-S1270D850-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061543  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S1270D850-X4F0-XX-UDD-BVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

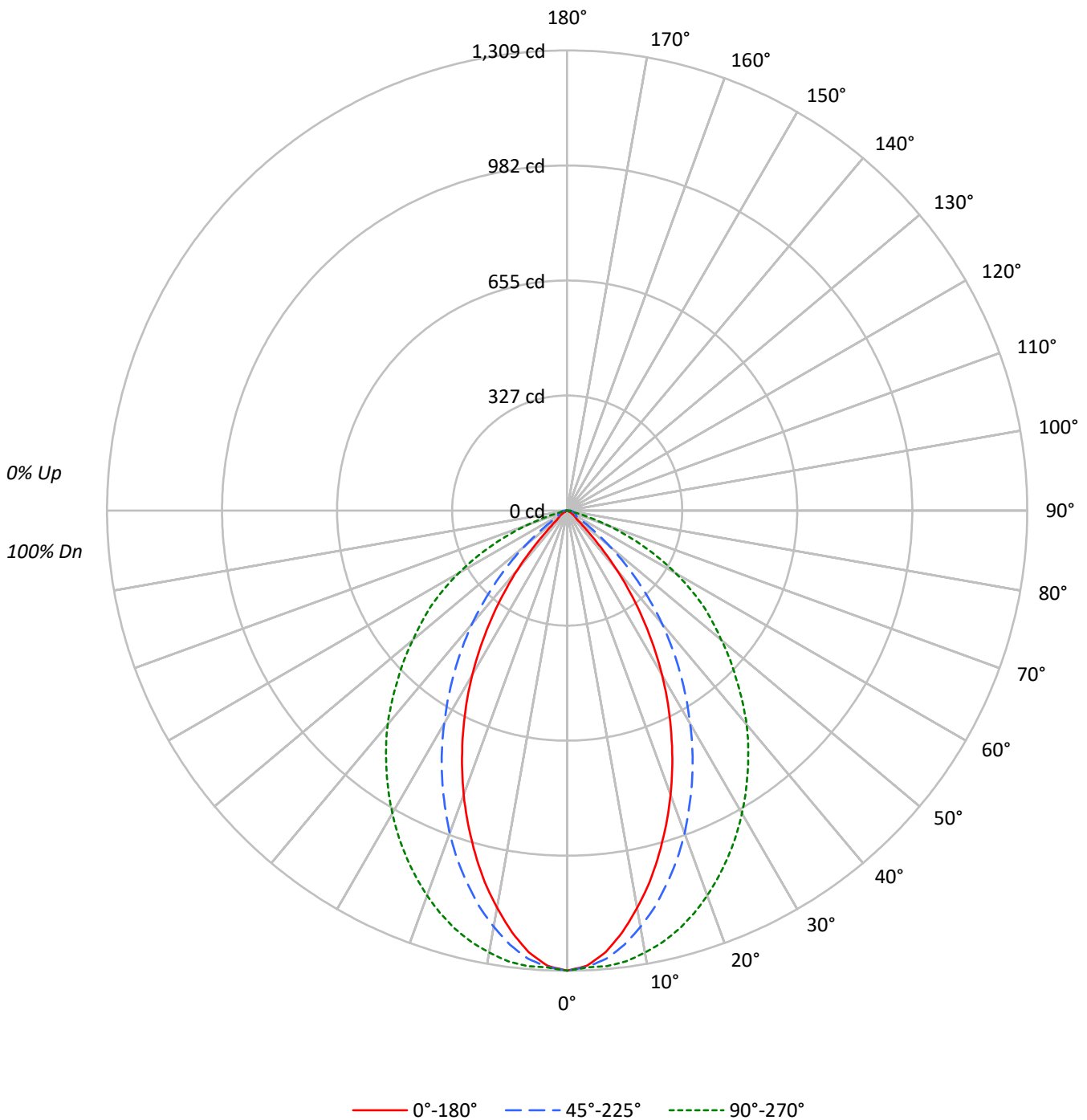
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1683.4 lumens  
Efficiency: N/A  
Efficacy: 40.3 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 41.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9011	9011	9011
5°	8712	8845	8991
10°	8023	8407	8925
15°	7204	7825	8778
20°	6306	7157	8539
25°	5327	6392	8241
30°	4293	5561	7907
35°	3157	4688	7533
40°	1970	3781	7142
45°	738	2762	6639
50°	345	1727	6129
55°	252	715	5670
60°	178	377	4905
65°	104	446	3887
70°	97	519	2466
75°	128	513	771
80°	190	638	575
85°	379	1019	766

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6639 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.0	7.1
10°-20°	310.7	18.5
20°-30°	395.8	23.5
30°-40°	368.4	21.9
40°-50°	252.4	15.0
50°-60°	139.0	8.3
60°-70°	65.8	3.9
70°-80°	20.7	1.2
80°-90°	10.6	0.6
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°	826.5	49.1
0°-40°	1194.9	71.0
0°-60°	1586.3	94.2
0°-90°	1683.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1683.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1309	1309	1309	1309	1309	
5°	1260	1277	1280	1290	1301	117
15°	1011	1043	1098	1180	1232	282
25°	701	745	841	977	1085	320
35°	376	429	558	742	896	233
45°	76	127	284	503	682	72
55°	21	24	60	280	472	19
65°	6	8	27	103	239	7
75°	5	8	19	21	29	5
85°	5	11	13	11	10	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1308.8	1308.8	1308.8	1308.8	1308.8
2.5°	1295.9	1308.8	1299.2	1299.2	1300.8
5°	1260.5	1276.6	1279.8	1289.5	1300.8
7.5°	1208.9	1229.8	1246.0	1273.4	1292.7
10°	1147.6	1173.4	1202.4	1247.6	1276.6
12.5°	1083.2	1110.6	1154.1	1217.0	1257.3
15°	1010.6	1042.9	1097.7	1179.9	1231.5
17.5°	936.5	972.0	1039.7	1136.4	1200.8
20°	860.7	897.8	976.8	1084.8	1165.4
22.5°	781.8	822.0	909.1	1031.6	1126.7
25°	701.2	744.7	841.4	976.8	1084.8
27.5°	620.6	665.7	772.1	920.4	1041.3
30°	540.0	586.7	699.5	862.3	994.5
32.5°	457.8	509.3	628.6	804.3	946.2
35°	375.6	428.8	557.7	741.5	896.2
37.5°	295.0	349.8	488.4	681.8	846.2
40°	219.2	274.0	420.7	622.2	794.6
42.5°	141.8	199.9	349.8	560.9	738.2
45°	75.8	127.3	283.7	502.9	681.8
47.5°	40.3	67.7	220.8	444.9	628.6
50°	32.2	37.1	161.2	386.8	572.2
52.5°	25.8	29.0	103.2	327.2	522.2
55°	21.0	24.2	59.6	280.5	472.3
57.5°	16.1	19.3	33.8	233.7	414.2
60°	12.9	14.5	27.4	187.0	356.2
62.5°	8.1	11.3	27.4	145.1	298.2
65°	6.4	8.1	27.4	103.2	238.6
67.5°	6.4	6.4	27.4	67.7	178.9
70°	4.8	4.8	25.8	43.5	122.5
72.5°	4.8	4.8	22.6	29.0	70.9
75°	4.8	8.1	19.3	21.0	29.0
77.5°	4.8	12.9	17.7	17.7	16.1
80°	4.8	12.9	16.1	14.5	14.5
82.5°	4.8	12.9	12.9	12.9	11.3
85°	4.8	11.3	12.9	11.3	9.7
87.5°	4.8	11.3	11.3	11.3	6.4
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	0.00	0.00	0.00	0.00	0.12	16.68	17.97	17.05	18.28	18.60
	3H	0.00	0.00	0.00	0.11	0.47	17.47	18.61	17.85	18.94	19.30
	4H	0.00	0.18	0.00	0.54	0.92	17.50	18.55	17.90	18.91	19.29
	6H	0.35	1.32	0.77	1.69	2.09	17.45	18.42	17.87	18.79	19.19
	8H	1.03	1.95	1.46	2.34	2.74	17.43	18.35	17.86	18.74	19.14
	12H	1.77	2.65	2.21	3.03	3.46	17.41	18.29	17.84	18.67	19.10
4H	2H	0.46	1.52	0.86	1.87	2.25	16.47	17.52	16.87	17.87	18.26
	3H	1.33	2.19	1.74	2.59	3.00	17.29	18.16	17.71	18.56	18.97
	4H	1.93	2.70	2.36	3.12	3.56	17.33	18.10	17.76	18.52	18.96
	6H	3.42	4.09	3.89	4.53	5.00	17.32	17.98	17.78	18.43	18.89
	8H	4.16	4.78	4.63	5.23	5.70	17.30	17.92	17.77	18.37	18.84
	12H	4.90	5.45	5.39	5.93	6.41	17.30	17.85	17.79	18.33	18.81
8H	4H	3.97	4.59	4.44	5.04	5.51	17.21	17.83	17.68	18.28	18.75
	6H	5.72	6.22	6.22	6.72	7.20	17.22	17.72	17.72	18.22	18.70
	8H	6.67	7.12	7.19	7.64	8.13	17.22	17.68	17.75	18.19	18.68
	12H	7.60	8.00	8.12	8.50	9.07	17.27	17.67	17.78	18.16	18.74
12H	4H	4.27	4.82	4.76	5.30	5.78	17.17	17.72	17.66	18.20	18.68
	6H	6.17	6.63	6.70	7.14	7.64	17.17	17.62	17.69	18.14	18.63
	8H	7.31	7.71	7.82	8.20	8.77	17.21	17.61	17.73	18.11	18.68