

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: P1061546

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061546  
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: S125RDRP-S1270D850-X4F0-XX-UDD-SVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

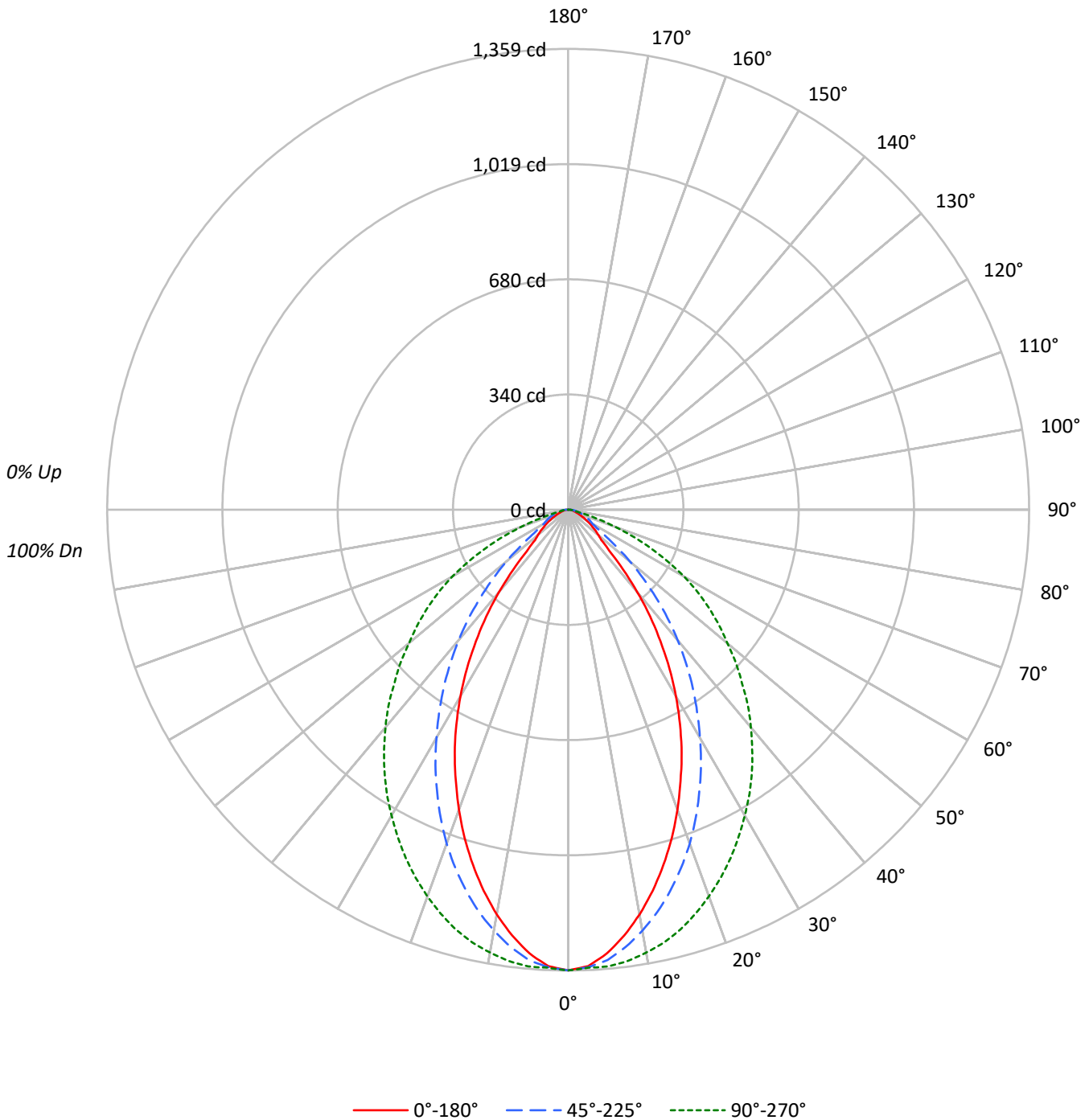
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1961.7 lumens  
Efficiency: N/A  
Efficacy: 46.9 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): 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	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°	9354	9354	9354
5°	9078	9212	9345
10°	8473	8811	9273
15°	7731	8294	9133
20°	6896	7675	8891
25°	6012	6954	8607
30°	5048	6176	8277
35°	3982	5378	7938
40°	2854	4519	7532
45°	1679	3546	7061
50°	1243	2555	6560
55°	1044	1547	6094
60°	843	1132	5437
65°	657	1077	4358
70°	552	1007	2953
75°	513	899	1285
80°	511	896	833
85°	640	1145	893

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 7061 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.2	6.4
10°-20°	328.9	16.8
20°-30°	429.8	21.9
30°-40°	418.3	21.3
40°-50°	312.6	15.9
50°-60°	193.9	9.9
60°-70°	101.9	5.2
70°-80°	37.1	1.9
80°-90°	14.0	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°	883.8	45.1
0°-40°	1302.2	66.4
0°-60°	1808.7	92.2
0°-90°	1961.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1961.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1359	1359	1359	1359	1359	
5°	1314	1331	1333	1341	1352	122
15°	1085	1117	1164	1234	1281	303
25°	791	832	915	1040	1133	361
35°	474	525	640	811	944	295
45°	172	226	364	569	725	145
55°	87	92	129	335	508	78
65°	40	44	66	142	268	42
75°	19	23	34	37	48	21
85°	8	14	14	14	11	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1358.6	1358.6	1358.6	1358.6	1358.6
2.5°	1347.3	1358.6	1350.5	1350.5	1352.1
5°	1313.5	1331.2	1332.8	1340.9	1352.1
7.5°	1266.7	1287.7	1300.6	1324.7	1342.5
10°	1211.9	1236.1	1260.3	1300.6	1326.3
12.5°	1150.7	1179.7	1215.1	1269.9	1307.0
15°	1084.6	1116.8	1163.6	1234.5	1281.2
17.5°	1015.3	1049.2	1107.2	1192.6	1249.0
20°	941.2	978.2	1047.5	1144.2	1213.5
22.5°	865.4	907.3	983.1	1092.7	1174.9
25°	791.3	831.6	915.4	1039.5	1133.0
27.5°	713.9	755.8	847.7	984.7	1087.8
30°	635.0	680.1	776.8	928.3	1041.1
32.5°	556.0	602.7	707.5	870.3	994.4
35°	473.8	525.4	639.8	810.6	944.4
37.5°	396.5	451.2	570.5	749.4	891.2
40°	317.5	373.9	502.8	689.8	838.0
42.5°	240.1	298.1	433.5	628.5	784.8
45°	172.4	225.6	364.2	568.9	725.2
47.5°	132.2	162.8	299.8	507.7	672.0
50°	116.0	125.7	238.5	448.0	612.4
52.5°	101.5	108.0	177.3	390.0	560.8
55°	87.0	91.9	128.9	335.2	507.7
57.5°	74.1	79.0	98.3	285.3	452.9
60°	61.2	66.1	82.2	235.3	394.8
62.5°	51.6	53.2	74.1	188.6	330.4
65°	40.3	43.5	66.1	141.8	267.5
67.5°	33.8	35.5	58.0	101.5	206.3
70°	27.4	29.0	50.0	70.9	146.7
72.5°	24.2	24.2	41.9	51.6	93.5
75°	19.3	22.6	33.8	37.1	48.3
77.5°	16.1	22.6	29.0	27.4	25.8
80°	12.9	21.0	22.6	22.6	21.0
82.5°	11.3	17.7	19.3	17.7	16.1
85°	8.1	14.5	14.5	14.5	11.3
87.5°	6.4	12.9	11.3	11.3	8.1
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	7.56	8.91	7.92	9.22	9.53	17.26	18.61	17.63	18.92	19.24
	3H	8.40	9.59	8.77	9.92	10.29	18.17	19.37	18.55	19.70	20.06
	4H	8.75	9.87	9.16	10.22	10.60	18.27	19.39	18.67	19.74	20.12
	6H	9.13	10.15	9.54	10.52	10.92	18.26	19.28	18.67	19.65	20.05
	8H	9.31	10.28	9.74	10.67	11.08	18.24	19.22	18.67	19.61	20.01
	12H	9.47	10.40	9.90	10.79	11.22	18.23	19.16	18.66	19.54	19.97
4H	2H	8.39	9.50	8.79	9.85	10.24	17.11	18.23	17.51	18.58	18.96
	3H	9.44	10.36	9.86	10.76	11.16	18.10	19.01	18.51	19.42	19.82
	4H	9.90	10.72	10.33	11.14	11.58	18.23	19.05	18.66	19.46	19.91
	6H	10.46	11.16	10.92	11.61	12.07	18.26	18.97	18.72	19.41	19.88
	8H	10.72	11.38	11.19	11.82	12.29	18.26	18.92	18.73	19.37	19.84
	12H	10.96	11.54	11.45	12.03	12.50	18.27	18.85	18.76	19.34	19.81
8H	4H	10.45	11.11	10.92	11.56	12.03	18.15	18.81	18.62	19.26	19.73
	6H	11.23	11.77	11.73	12.27	12.75	18.21	18.75	18.72	19.25	19.73
	8H	11.65	12.13	12.17	12.65	13.14	18.24	18.73	18.76	19.24	19.73
	12H	12.07	12.49	12.58	12.99	13.56	18.30	18.72	18.81	19.22	19.79
12H	4H	10.51	11.10	11.00	11.58	12.05	18.12	18.70	18.60	19.18	19.66
	6H	11.38	11.86	11.90	12.38	12.87	18.18	18.66	18.70	19.18	19.67
	8H	11.90	12.33	12.42	12.83	13.40	18.24	18.67	18.76	19.17	19.74