

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: P1061542

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061542  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)  
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-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

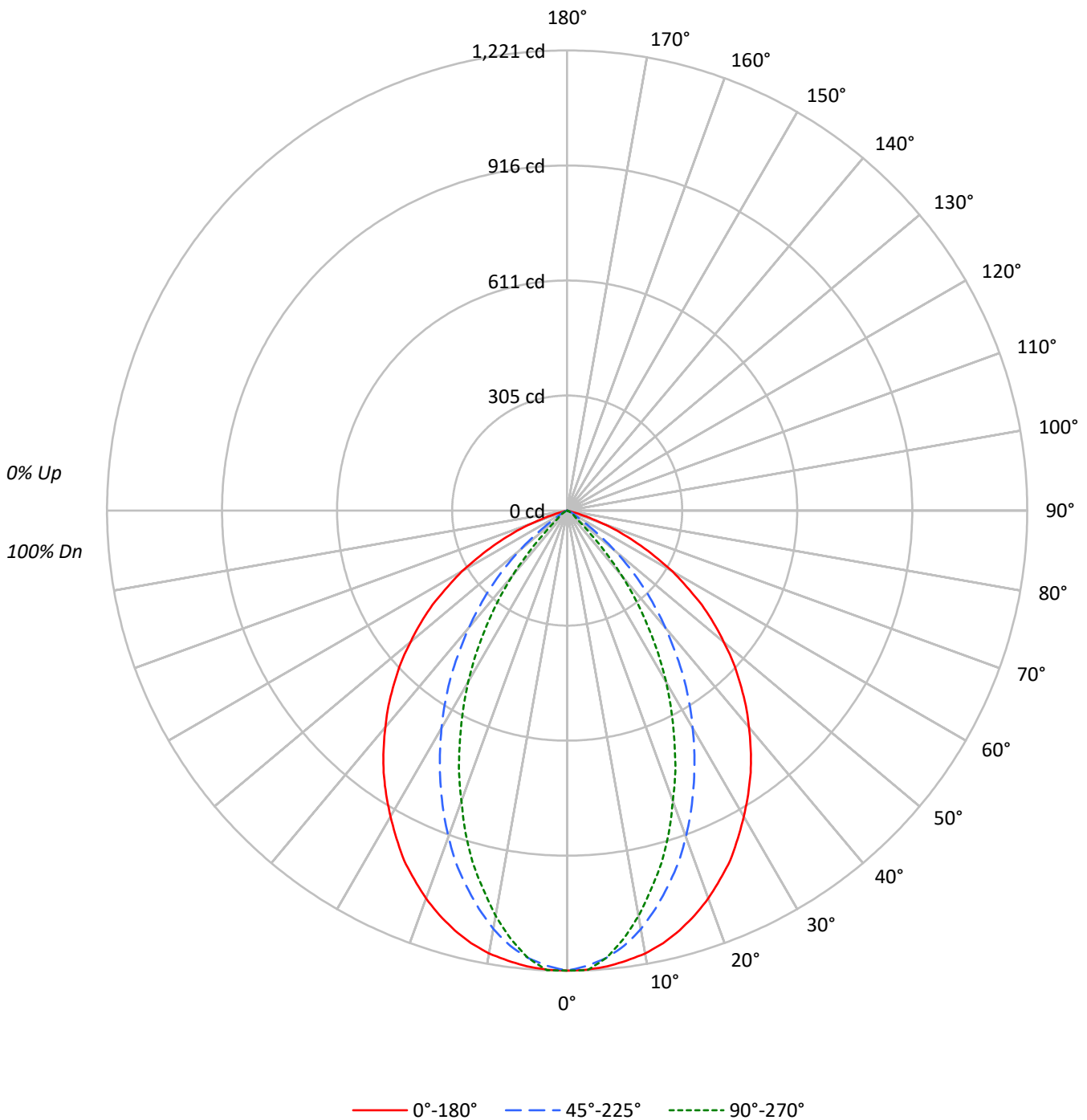
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1577.0 lumens  
Efficiency: N/A  
Efficacy: 37.7 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97  
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	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54					54			
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50					50			
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42					42			
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39					39			

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

	0°	45°	90°
0°	8405	8405	8405
5°	8392	8236	8236
10°	8343	7881	7633
15°	8219	7358	6899
20°	8024	6749	6006
25°	7781	6043	5114
30°	7451	5301	4174
35°	7134	4521	3127
40°	6745	3647	2027
45°	6319	2760	878
50°	5813	1760	328
55°	5239	773	232
60°	4435	333	156
65°	3358	210	78
70°	2043	97	32
75°	428	43	43
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6319 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.5	7.1
10°-20°	293.3	18.6
20°-30°	376.6	23.9
30°-40°	354.5	22.5
40°-50°	247.9	15.7
50°-60°	132.4	8.4
60°-70°	52.8	3.3
70°-80°	6.8	0.4
80°-90°	0.0	0.0
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°	782.5	49.6
0°-40°	1137.0	72.1
0°-60°	1517.3	96.2
0°-90°	1577.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1577.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1221	1221	1221	1221	1221	
5°	1214	1211	1192	1195	1192	115
15°	1153	1116	1032	984	968	324
25°	1024	934	796	709	673	470
35°	849	713	538	416	372	530
45°	649	486	283	137	90	501
55°	436	267	64	22	19	387
65°	206	82	13	6	5	205
75°	16	5	2	2	2	31
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1220.7	1220.7	1220.7	1220.7	1220.7
2.5°	1219.1	1220.7	1209.4	1219.1	1220.7
5°	1214.2	1211.0	1191.7	1194.9	1191.7
7.5°	1204.6	1196.5	1164.3	1153.0	1146.6
10°	1193.3	1175.6	1127.3	1103.1	1091.8
12.5°	1175.6	1149.8	1082.2	1045.1	1029.0
15°	1153.0	1116.0	1032.3	983.9	967.8
17.5°	1125.7	1077.4	980.7	921.1	897.0
20°	1095.1	1030.7	921.1	850.3	819.7
22.5°	1059.6	985.6	859.9	781.0	750.4
25°	1024.2	934.0	795.5	708.6	673.1
27.5°	980.7	880.9	731.1	637.7	599.1
30°	937.2	827.7	666.7	565.2	525.0
32.5°	893.8	771.4	602.3	489.6	449.3
35°	848.7	713.4	537.9	415.5	372.0
37.5°	800.4	655.4	468.6	344.6	299.5
40°	750.4	599.1	405.8	275.4	225.5
42.5°	702.1	542.7	343.0	207.7	153.0
45°	649.0	486.3	283.4	136.9	90.2
47.5°	599.1	431.6	222.2	78.9	46.7
50°	542.7	375.2	164.3	41.9	30.6
52.5°	489.6	320.5	109.5	27.4	24.2
55°	436.4	267.3	64.4	22.5	19.3
57.5°	375.2	215.8	35.4	17.7	14.5
60°	322.1	169.1	24.2	12.9	11.3
62.5°	260.9	124.0	17.7	9.7	8.1
65°	206.1	82.1	12.9	6.4	4.8
67.5°	153.0	48.3	8.1	3.2	3.2
70°	101.5	25.8	4.8	1.6	1.6
72.5°	53.1	11.3	3.2	1.6	1.6
75°	16.1	4.8	1.6	1.6	1.6
77.5°	0.0	1.6	0.0	0.0	1.6
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
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	16.34	17.60	16.71	17.92	18.23	0.00	0.00	0.00	0.00	0.00
	3H	16.92	18.04	17.30	18.37	18.73	0.00	0.00	0.00	0.00	0.00
	4H	16.89	17.92	17.29	18.27	18.66	0.00	0.00	0.00	0.00	0.00
	6H	16.80	17.75	17.22	18.12	18.51	0.00	0.00	0.00	0.00	0.00
	8H	16.76	17.65	17.19	18.04	18.45	0.00	0.00	0.00	0.00	0.00
	12H	16.71	17.56	17.14	17.95	18.38	0.00	0.00	0.00	0.00	0.00
4H	2H	16.11	17.15	16.52	17.50	17.88	0.00	0.00	0.00	0.00	0.27
	3H	16.71	17.54	17.12	17.95	18.35	0.00	0.00	0.00	0.00	0.17
	4H	16.65	17.40	17.09	17.82	18.26	0.00	0.00	0.00	0.00	0.12
	6H	16.57	17.20	17.03	17.65	18.12	0.00	0.00	0.00	0.00	0.01
	8H	16.51	17.10	16.98	17.55	18.02	0.00	0.00	0.00	0.00	0.00
	12H	16.46	16.98	16.94	17.46	17.94	0.00	0.00	0.00	0.00	0.00
8H	4H	16.51	17.10	16.98	17.55	18.02	0.00	0.00	0.00	0.00	0.26
	6H	16.40	16.88	16.91	17.38	17.86	0.00	0.00	0.00	0.00	0.13
	8H	16.33	16.77	16.86	17.28	17.78	0.00	0.00	0.00	0.00	0.04
	12H	16.29	16.67	16.80	17.16	17.74	0.00	0.00	0.00	0.00	0.00
12H	4H	16.46	16.98	16.94	17.46	17.94	0.00	0.00	0.00	0.00	0.18
	6H	16.33	16.77	16.86	17.28	17.78	0.00	0.00	0.00	0.00	0.04
	8H	16.29	16.67	16.80	17.16	17.74	0.00	0.00	0.00	0.00	0.00