

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: P1061500

Luminaire Tested: S125RDRP-S1090D940-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061500  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-47)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S1090D940-X4F0-XX-UDD-SVL-B  
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

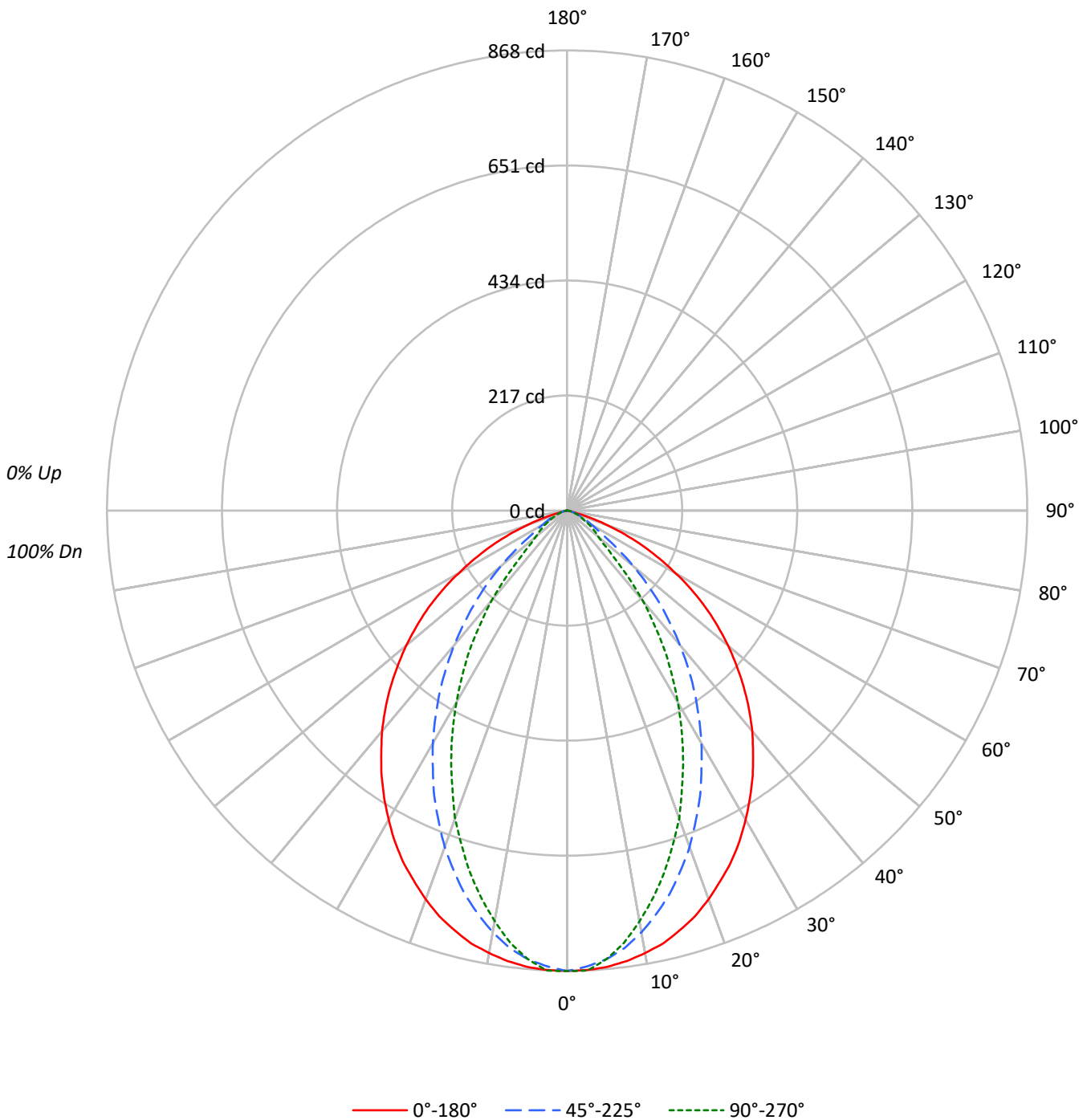
Lumens per Lamp: N/A  
Luminaire Lumens: 1255.9 lumens  
Efficiency: N/A  
Efficacy: 35.9 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35  
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	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

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

	0°	45°	90°
0°	5979	5979	5979
5°	5972	5872	5872
10°	5925	5647	5500
15°	5844	5333	5042
20°	5716	4948	4527
25°	5558	4510	3931
30°	5351	4027	3316
35°	5129	3524	2690
40°	4880	2975	1994
45°	4588	2386	1204
50°	4243	1749	827
55°	3828	1073	689
60°	3251	730	547
65°	2571	557	432
70°	1621	401	356
75°	529	293	293
80°	174	218	262
85°	87	174	174

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4588 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.3	6.4
10°-20°	212.1	16.9
20°-30°	279.0	22.2
30°-40°	274.1	21.8
40°-50°	207.4	16.5
50°-60°	125.8	10.0
60°-70°	59.4	4.7
70°-80°	15.5	1.2
80°-90°	2.3	0.2
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°	571.4	45.5
0°-40°	845.6	67.3
0°-60°	1178.7	93.9
0°-90°	1255.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1255.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	868	868	868	868	868	
5°	864	862	850	851	850	82
15°	820	798	748	719	707	231
25°	732	676	594	538	518	336
35°	610	528	419	345	320	381
45°	471	371	245	156	124	363
55°	319	218	89	61	57	284
65°	158	80	34	29	26	156
75°	20	13	11	11	11	31
85°	1	1	2	2	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	868.4	868.4	868.4	868.4	868.4
2.5°	867.3	867.3	860.7	868.4	868.4
5°	864.0	861.8	849.6	850.7	849.6
7.5°	857.3	852.9	832.0	826.4	822.0
10°	847.4	838.6	807.7	794.4	786.7
12.5°	836.4	820.9	779.0	760.2	748.1
15°	819.8	797.8	748.1	719.4	707.3
17.5°	802.2	770.2	711.7	677.5	662.0
20°	780.1	742.6	675.3	633.4	617.9
22.5°	755.8	711.7	633.4	587.0	566.0
25°	731.6	676.4	593.6	538.5	517.5
27.5°	704.0	641.1	548.4	491.0	467.8
30°	673.1	605.8	506.5	446.9	417.1
32.5°	642.2	569.4	462.3	397.2	367.4
35°	610.2	528.5	419.3	345.4	320.0
37.5°	576.0	489.9	375.2	297.9	268.1
40°	542.9	451.3	331.0	249.4	221.8
42.5°	507.6	412.7	286.9	201.9	171.0
45°	471.2	370.7	245.0	155.6	123.6
47.5°	433.6	333.2	203.0	114.8	92.7
50°	396.1	293.5	163.3	85.0	77.2
52.5°	357.5	254.9	123.6	70.6	67.3
55°	318.9	218.5	89.4	60.7	57.4
57.5°	279.2	178.8	67.3	51.9	48.5
60°	236.1	143.4	53.0	43.0	39.7
62.5°	196.4	112.5	43.0	35.3	33.1
65°	157.8	80.5	34.2	28.7	26.5
67.5°	118.1	54.1	26.5	22.1	22.1
70°	80.5	35.3	19.9	17.7	17.7
72.5°	48.5	21.0	14.3	14.3	14.3
75°	19.9	13.2	11.0	11.0	11.0
77.5°	6.6	7.7	7.7	8.8	8.8
80°	4.4	4.4	5.5	6.6	6.6
82.5°	2.2	3.3	3.3	4.4	4.4
85°	1.1	1.1	2.2	2.2	2.2
87.5°	0.0	0.0	0.0	1.1	1.1
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	15.54	16.88	15.91	17.19	17.50	6.20	7.53	6.57	7.84	8.16
	3H	16.25	17.43	16.63	17.76	18.12	6.98	8.16	7.36	8.49	8.86
	4H	16.27	17.36	16.67	17.71	18.10	7.23	8.33	7.63	8.68	9.06
	6H	16.20	17.20	16.61	17.57	17.97	7.41	8.41	7.82	8.78	9.18
	8H	16.16	17.11	16.59	17.50	17.90	7.45	8.40	7.88	8.79	9.20
	12H	16.11	17.02	16.55	17.41	17.84	7.46	8.37	7.89	8.75	9.18
4H	2H	15.37	16.47	15.78	16.82	17.20	6.69	7.78	7.09	8.13	8.52
	3H	16.12	17.01	16.53	17.42	17.82	7.60	8.49	8.01	8.89	9.30
	4H	16.14	16.93	16.57	17.35	17.80	7.91	8.70	8.34	9.12	9.56
	6H	16.08	16.76	16.54	17.21	17.67	8.16	8.85	8.63	9.30	9.76
	8H	16.03	16.66	16.50	17.11	17.58	8.23	8.87	8.70	9.31	9.79
	12H	15.98	16.54	16.47	17.03	17.50	8.25	8.82	8.74	9.30	9.77
8H	4H	16.02	16.66	16.49	17.11	17.58	8.02	8.66	8.49	9.10	9.57
	6H	15.95	16.47	16.45	16.96	17.44	8.33	8.85	8.84	9.35	9.83
	8H	15.89	16.36	16.41	16.87	17.37	8.44	8.90	8.96	9.42	9.91
	12H	15.85	16.26	16.37	16.76	17.33	8.50	8.91	9.02	9.41	9.98
12H	4H	15.98	16.54	16.46	17.02	17.50	7.99	8.55	8.48	9.04	9.51
	6H	15.89	16.35	16.41	16.87	17.36	8.30	8.77	8.83	9.29	9.78
	8H	15.85	16.26	16.37	16.76	17.33	8.44	8.85	8.96	9.35	9.92