

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: P1061502

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061502  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-83)  
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-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

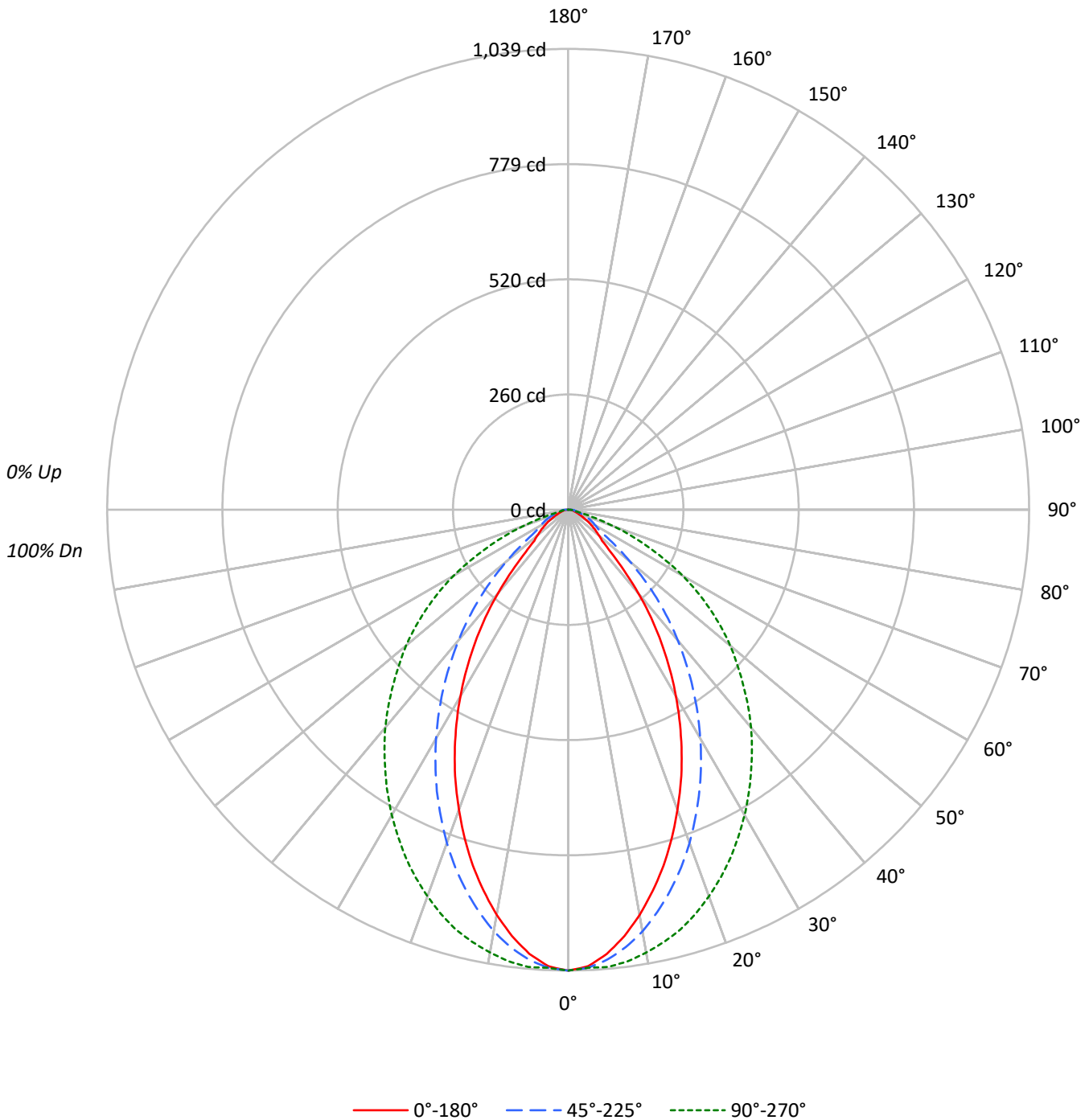
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1505.2 lumens  
Efficiency: N/A  
Efficacy: 43.0 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): 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	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	105	103	100	101	99	97	98	96	94	94	92	91	89					89			
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79					79			
3	96	88	81	76	94	86	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	62					62			
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56					56			
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	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	40	39					39			
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36					36			

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

	0°	45°	90°
0°	7155	7155	7155
5°	6945	7037	7152
10°	6485	6748	7088
15°	5920	6337	6982
20°	5276	5858	6797
25°	4598	5319	6578
30°	3863	4732	6321
35°	3072	4112	6043
40°	2214	3454	5767
45°	1312	2742	5430
50°	970	1952	5110
55°	822	1206	4679
60°	669	974	4122
65°	521	899	3257
70°	445	779	2178
75°	412	676	881
80°	436	702	615
85°	521	1051	695

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5430 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.8	6.4
10°-20°	251.5	16.7
20°-30°	328.8	21.8
30°-40°	320.3	21.3
40°-50°	240.2	16.0
50°-60°	150.6	10.0
60°-70°	78.4	5.2
70°-80°	28.4	1.9
80°-90°	11.2	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°	676.1	44.9
0°-40°	996.4	66.2
0°-60°	1387.2	92.2
0°-90°	1505.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1505.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1039	1039	1039	1039	1039	
5°	1005	1018	1018	1026	1035	93
15°	830	855	889	944	980	232
25°	605	638	700	795	866	277
35°	366	404	489	620	719	227
45°	135	174	282	435	558	113
55°	68	72	100	263	390	61
65°	32	34	55	106	200	33
75°	16	21	25	26	33	17
85°	7	11	13	12	9	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1039.2	1039.2	1039.2	1039.2	1039.2
2.5°	1030.3	1040.3	1033.7	1033.7	1033.7
5°	1004.9	1018.2	1018.2	1025.9	1034.8
7.5°	969.6	985.1	995.0	1013.8	1027.0
10°	927.6	946.4	965.2	996.1	1013.8
12.5°	880.2	902.2	928.7	971.8	998.3
15°	830.5	854.8	889.0	944.2	979.5
17.5°	776.3	805.1	845.9	912.2	955.2
20°	720.0	748.7	799.5	874.6	927.6
22.5°	663.7	694.6	749.8	834.9	897.8
25°	605.2	638.3	700.1	795.1	865.8
27.5°	545.5	579.8	648.2	754.3	830.5
30°	485.9	521.2	595.2	710.1	795.1
32.5°	426.3	463.8	542.2	664.8	757.6
35°	365.5	404.2	489.2	619.5	718.9
37.5°	307.0	345.7	436.2	573.1	680.3
40°	246.3	288.2	384.3	526.8	641.6
42.5°	186.6	229.7	332.4	480.4	599.7
45°	134.7	174.5	281.6	435.1	557.7
47.5°	103.8	125.9	229.7	388.7	516.8
50°	90.6	97.2	182.2	345.7	477.1
52.5°	78.4	82.8	136.9	305.9	434.0
55°	68.5	71.8	100.5	262.8	389.8
57.5°	57.4	61.8	79.5	220.9	344.6
60°	48.6	50.8	70.7	182.2	299.3
62.5°	39.8	42.0	62.9	143.6	248.5
65°	32.0	34.2	55.2	106.0	199.9
67.5°	26.5	27.6	46.4	75.1	153.5
70°	22.1	23.2	38.7	51.9	108.2
72.5°	18.8	22.1	30.9	37.5	68.5
75°	15.5	21.0	25.4	26.5	33.1
77.5°	13.3	19.9	21.0	21.0	18.8
80°	11.0	16.6	17.7	16.6	15.5
82.5°	8.8	13.3	14.4	14.4	12.1
85°	6.6	11.0	13.3	12.1	8.8
87.5°	4.4	9.9	11.0	9.9	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	6.75	8.10	7.12	8.42	8.73	16.37	17.72	16.73	18.03	18.35
	3H	7.61	8.81	7.99	9.14	9.50	17.21	18.41	17.59	18.74	19.10
	4H	8.03	9.15	8.44	9.50	9.89	17.28	18.40	17.69	18.75	19.14
	6H	8.46	9.49	8.88	9.86	10.26	17.27	18.30	17.68	18.66	19.06
	8H	8.64	9.62	9.07	10.01	10.41	17.25	18.23	17.68	18.62	19.02
	12H	8.80	9.74	9.24	10.12	10.55	17.24	18.17	17.67	18.56	18.99
4H	2H	7.71	8.83	8.12	9.18	9.57	16.23	17.35	16.63	17.70	18.08
	3H	8.77	9.68	9.18	10.09	10.49	17.14	18.06	17.55	18.46	18.86
	4H	9.33	10.15	9.77	10.57	11.01	17.24	18.06	17.68	18.48	18.92
	6H	9.93	10.64	10.40	11.09	11.55	17.27	17.98	17.73	18.42	18.89
	8H	10.17	10.83	10.64	11.28	11.75	17.27	17.93	17.74	18.38	18.85
	12H	10.40	10.98	10.88	11.46	11.94	17.28	17.87	17.77	18.35	18.83
8H	4H	9.80	10.46	10.27	10.91	11.38	17.17	17.83	17.64	18.28	18.75
	6H	10.62	11.16	11.12	11.66	12.14	17.22	17.76	17.72	18.26	18.74
	8H	11.00	11.49	11.52	12.00	12.49	17.26	17.74	17.78	18.26	18.75
	12H	11.39	11.82	11.90	12.31	12.88	17.32	17.75	17.83	18.24	18.81
12H	4H	9.86	10.44	10.34	10.92	11.40	17.13	17.72	17.62	18.20	18.68
	6H	10.74	11.23	11.26	11.74	12.23	17.19	17.68	17.71	18.19	18.68
	8H	11.23	11.66	11.75	12.16	12.73	17.26	17.69	17.78	18.19	18.76