

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: P1061447

Luminaire Tested: S125RDRP-S1090D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061447  
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-S1090D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

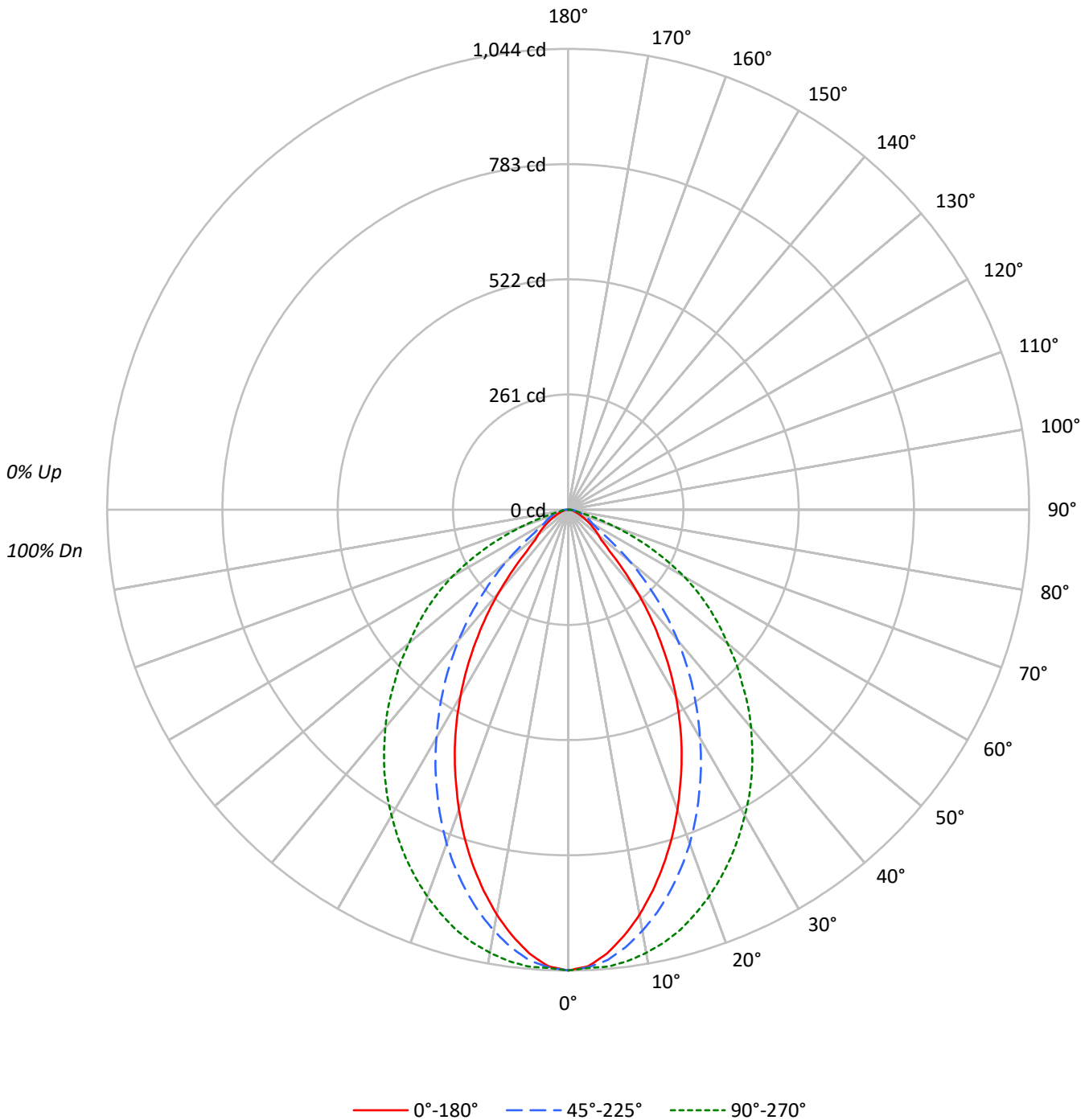
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1507.3 lumens  
Efficiency: N/A  
Efficacy: 43.1 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	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°	7187	7187	7187
5°	6975	7077	7180
10°	6510	6770	7125
15°	5940	6373	7017
20°	5298	5898	6832
25°	4619	5343	6613
30°	3879	4745	6360
35°	3060	4132	6099
40°	2192	3472	5787
45°	1290	2724	5426
50°	955	1963	5040
55°	803	1190	4682
60°	649	870	4178
65°	505	828	3348
70°	425	773	2269
75°	396	692	987
80°	393	686	638
85°	490	877	687

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5426 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.2	6.4
10°-20°	252.7	16.8
20°-30°	330.2	21.9
30°-40°	321.4	21.3
40°-50°	240.2	15.9
50°-60°	149.0	9.9
60°-70°	78.3	5.2
70°-80°	28.5	1.9
80°-90°	10.8	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°	679.1	45.1
0°-40°	1000.5	66.4
0°-60°	1389.7	92.2
0°-90°	1507.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1507.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1044	1044	1044	1044	1044	
5°	1009	1023	1024	1030	1039	94
15°	833	858	894	948	984	233
25°	608	639	703	799	870	278
35°	364	404	492	623	726	227
45°	132	173	280	437	557	112
55°	67	71	99	258	390	60
65°	31	33	51	109	206	32
75°	15	17	26	28	37	16
85°	6	11	11	11	9	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1043.8	1043.8	1043.8	1043.8	1043.8
2.5°	1035.2	1043.8	1037.6	1037.6	1038.9
5°	1009.2	1022.8	1024.0	1030.2	1038.9
7.5°	973.3	989.4	999.3	1017.8	1031.5
10°	931.2	949.7	968.3	999.3	1019.1
12.5°	884.1	906.4	933.6	975.7	1004.2
15°	833.3	858.1	894.0	948.5	984.4
17.5°	780.1	806.1	850.7	916.3	959.6
20°	723.1	751.6	804.9	879.2	932.4
22.5°	664.9	697.1	755.3	839.5	902.7
25°	608.0	638.9	703.3	798.7	870.5
27.5°	548.5	580.7	651.3	756.6	835.8
30°	487.9	522.5	596.8	713.2	799.9
32.5°	427.2	463.1	543.6	668.7	764.0
35°	364.0	403.7	491.6	622.8	725.6
37.5°	304.6	346.7	438.3	575.8	684.7
40°	243.9	287.3	386.3	530.0	643.9
42.5°	184.5	229.1	333.1	482.9	603.0
45°	132.5	173.4	279.8	437.1	557.2
47.5°	101.5	125.1	230.3	390.0	516.3
50°	89.2	96.6	183.3	344.2	470.5
52.5°	78.0	83.0	136.2	299.7	430.9
55°	66.9	70.6	99.1	257.6	390.0
57.5°	57.0	60.7	75.5	219.2	347.9
60°	47.1	50.8	63.2	180.8	303.4
62.5°	39.6	40.9	57.0	144.9	253.8
65°	31.0	33.4	50.8	109.0	205.5
67.5°	26.0	27.2	44.6	78.0	158.5
70°	21.1	22.3	38.4	54.5	112.7
72.5°	18.6	18.6	32.2	39.6	71.8
75°	14.9	17.3	26.0	28.5	37.1
77.5°	12.4	17.3	22.3	21.1	19.8
80°	9.9	16.1	17.3	17.3	16.1
82.5°	8.7	13.6	14.9	13.6	12.4
85°	6.2	11.1	11.1	11.1	8.7
87.5°	5.0	9.9	8.7	8.7	6.2
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	6.64	7.99	7.01	8.30	8.62	16.34	17.69	16.71	18.01	18.32
	3H	7.48	8.68	7.86	9.01	9.37	17.26	18.45	17.64	18.78	19.15
	4H	7.84	8.96	8.24	9.31	9.69	17.35	18.47	17.76	18.82	19.20
	6H	8.21	9.24	8.63	9.61	10.00	17.34	18.37	17.75	18.74	19.13
	8H	8.39	9.37	8.82	9.76	10.16	17.33	18.30	17.76	18.69	19.10
	12H	8.56	9.49	8.99	9.87	10.30	17.31	18.24	17.75	18.63	19.06
4H	2H	7.47	8.59	7.87	8.94	9.32	16.19	17.31	16.60	17.66	18.04
	3H	8.53	9.44	8.94	9.85	10.25	17.18	18.10	17.60	18.50	18.90
	4H	8.98	9.80	9.42	10.22	10.66	17.31	18.13	17.75	18.55	18.99
	6H	9.54	10.25	10.00	10.69	11.16	17.34	18.05	17.81	18.50	18.96
	8H	9.80	10.46	10.27	10.91	11.38	17.35	18.00	17.81	18.45	18.92
	12H	10.04	10.63	10.53	11.11	11.58	17.35	17.94	17.84	18.42	18.89
8H	4H	9.54	10.20	10.01	10.64	11.11	17.24	17.90	17.71	18.34	18.81
	6H	10.32	10.85	10.82	11.35	11.83	17.30	17.84	17.80	18.33	18.81
	8H	10.73	11.22	11.25	11.73	12.22	17.33	17.81	17.85	18.33	18.82
	12H	11.15	11.58	11.66	12.07	12.64	17.38	17.81	17.89	18.30	18.87
12H	4H	9.60	10.18	10.08	10.66	11.14	17.20	17.79	17.69	18.27	18.74
	6H	10.46	10.94	10.98	11.46	11.95	17.26	17.75	17.78	18.26	18.75
	8H	10.99	11.41	11.50	11.91	12.48	17.33	17.76	17.84	18.25	18.82