

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: P1061444

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

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1061444  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-87)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDRP-S1090D835-X4F0-XX-UDD-BVL-S  
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

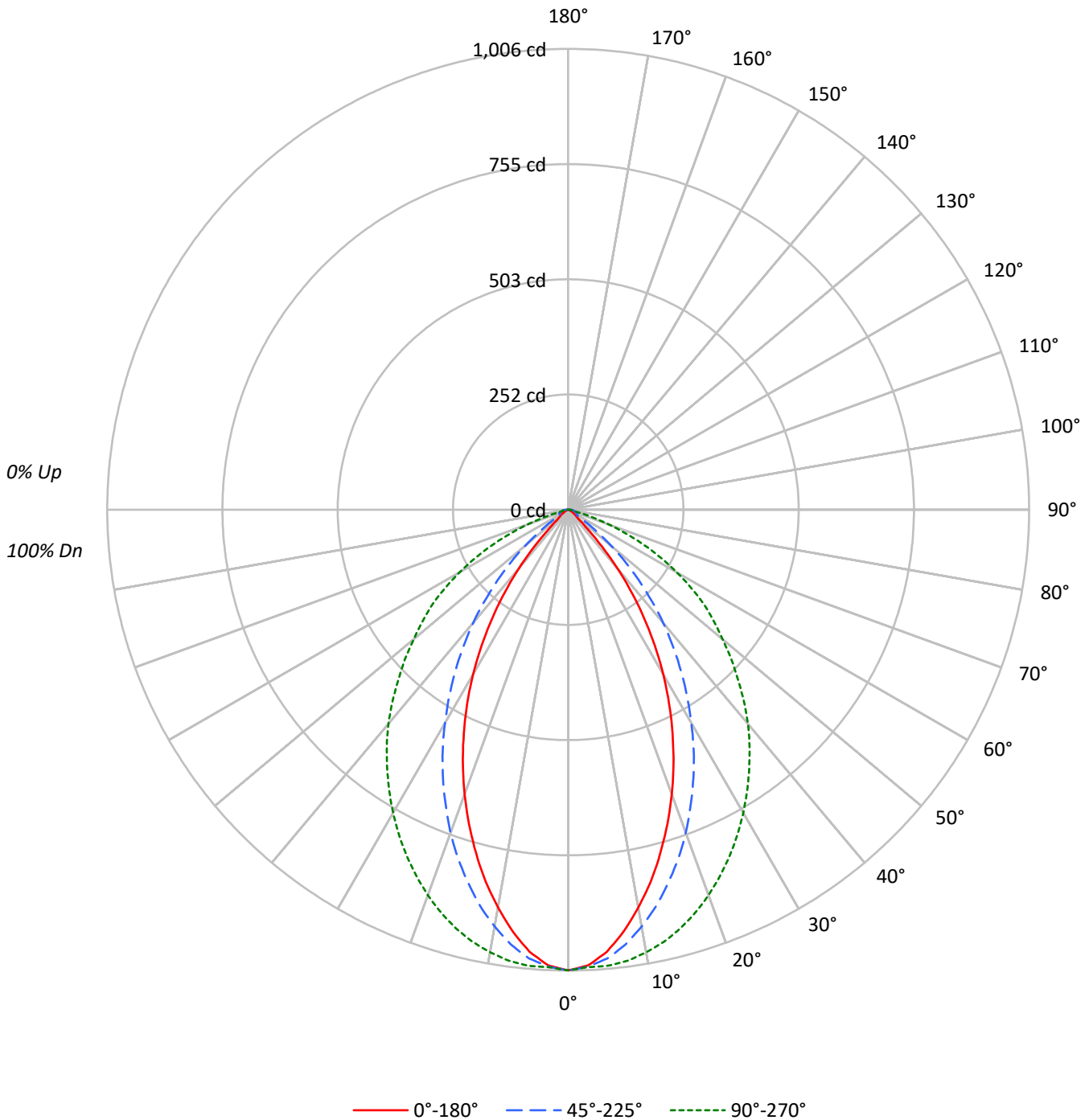
Lumens per Lamp: N/A  
Luminaire Lumens: 1293.5 lumens  
Efficiency: N/A  
Efficacy: 37.0 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98  
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')  
CIE Type: Direct

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	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	98	98	96	95	95	93	92	90																												
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81																												
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72																												
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65																												
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59																												
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54																												
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49																												
8	71	60	52	47	69	59	52	47	58	52	47	57	51	47	55	50	47	45																												
9	67	55	48	44	66	55	48	44	54	48	44	53	47	43	52	47	43	42																												
10	63	52	45	41	62	51	45	40	50	44	40	50	44	40	49	44	40	39																												

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

	0°	45°	90°
0°	6924	6924	6924
5°	6694	6796	6907
10°	6165	6459	6857
15°	5535	6012	6745
20°	4845	5499	6561
25°	4093	4911	6332
30°	3299	4273	6075
35°	2426	3602	5788
40°	1514	2905	5488
45°	567	2123	5101
50°	266	1326	4709
55°	193	550	4356
60°	136	291	3769
65°	81	344	2986
70°	74	399	1894
75°	98	396	593
80°	147	492	440
85°	292	782	585

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5101 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.2	7.1
10°-20°	238.7	18.5
20°-30°	304.1	23.5
30°-40°	283.0	21.9
40°-50°	193.9	15.0
50°-60°	106.8	8.3
60°-70°	50.6	3.9
70°-80°	15.9	1.2
80°-90°	8.1	0.6
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°	635.1	49.1
0°-40°	918.1	71.0
0°-60°	1218.8	94.2
0°-90°	1293.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1293.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	968	981	983	991	999	90
15°	776	801	843	906	946	216
25°	539	572	646	750	834	246
35°	289	329	428	570	689	179
45°	58	98	218	386	524	55
55°	16	19	46	216	363	15
65°	5	6	21	79	183	6
75°	4	6	15	16	22	4
85°	4	9	10	9	7	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1005.6	1005.6	1005.6	1005.6	1005.6
2.5°	995.7	1005.6	998.2	998.2	999.4
5°	968.5	980.8	983.3	990.8	999.4
7.5°	928.8	944.9	957.3	978.4	993.2
10°	881.8	901.6	923.9	958.6	980.8
12.5°	832.2	853.3	886.7	935.0	966.0
15°	776.5	801.3	843.4	906.5	946.2
17.5°	719.5	746.8	798.8	873.1	922.6
20°	661.3	689.8	750.5	833.5	895.4
22.5°	600.6	631.6	698.5	792.6	865.7
25°	538.7	572.2	646.5	750.5	833.5
27.5°	476.8	511.5	593.2	707.2	800.0
30°	414.9	450.8	537.5	662.6	764.1
32.5°	351.7	391.3	483.0	618.0	727.0
35°	288.6	329.4	428.5	569.7	688.6
37.5°	226.6	268.7	375.2	523.9	650.2
40°	168.4	210.5	323.2	478.0	610.6
42.5°	109.0	153.6	268.7	431.0	567.2
45°	58.2	97.8	218.0	386.4	523.9
47.5°	31.0	52.0	169.7	341.8	483.0
50°	24.8	28.5	123.8	297.2	439.6
52.5°	19.8	22.3	79.3	251.4	401.3
55°	16.1	18.6	45.8	215.5	362.9
57.5°	12.4	14.9	26.0	179.6	318.3
60°	9.9	11.1	21.1	143.7	273.7
62.5°	6.2	8.7	21.1	111.5	229.1
65°	5.0	6.2	21.1	79.3	183.3
67.5°	5.0	5.0	21.1	52.0	137.5
70°	3.7	3.7	19.8	33.4	94.1
72.5°	3.7	3.7	17.3	22.3	54.5
75°	3.7	6.2	14.9	16.1	22.3
77.5°	3.7	9.9	13.6	13.6	12.4
80°	3.7	9.9	12.4	11.1	11.1
82.5°	3.7	9.9	9.9	9.9	8.7
85°	3.7	8.7	9.9	8.7	7.4
87.5°	3.7	8.7	8.7	8.7	5.0
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	0.00	0.00	0.00	0.00	0.00	15.77	17.05	16.13	17.37	17.68
	3H	0.00	0.00	0.00	0.00	0.00	16.56	17.69	16.94	18.02	18.39
	4H	0.00	0.00	0.00	0.00	0.03	16.58	17.64	16.98	17.99	18.37
	6H	0.00	0.43	0.00	0.80	1.20	16.54	17.51	16.95	17.88	18.27
	8H	0.13	1.05	0.56	1.44	1.85	16.51	17.43	16.95	17.82	18.23
	12H	0.88	1.76	1.31	2.14	2.57	16.50	17.37	16.93	17.76	18.19
4H	2H	0.00	0.62	0.00	0.97	1.36	15.55	16.61	15.95	16.96	17.34
	3H	0.43	1.29	0.84	1.70	2.10	16.38	17.24	16.79	17.65	18.05
	4H	1.03	1.80	1.46	2.22	2.66	16.41	17.18	16.85	17.60	18.05
	6H	2.52	3.18	2.98	3.63	4.10	16.40	17.07	16.86	17.51	17.98
	8H	3.25	3.87	3.72	4.32	4.79	16.38	17.00	16.85	17.45	17.92
	12H	4.00	4.54	4.48	5.03	5.50	16.39	16.93	16.87	17.42	17.89
8H	4H	3.06	3.68	3.53	4.13	4.60	16.30	16.92	16.77	17.37	17.84
	6H	4.80	5.31	5.31	5.81	6.29	16.30	16.81	16.80	17.30	17.79
	8H	5.75	6.21	6.28	6.72	7.22	16.31	16.76	16.83	17.28	17.77
	12H	6.69	7.09	7.21	7.59	8.16	16.35	16.75	16.87	17.25	17.82
12H	4H	3.36	3.91	3.85	4.39	4.87	16.26	16.80	16.74	17.29	17.76
	6H	5.26	5.72	5.78	6.23	6.72	16.26	16.71	16.78	17.23	17.72
	8H	6.39	6.79	6.91	7.29	7.86	16.30	16.70	16.81	17.19	17.76