

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: P1061869

Luminaire Tested: S125RDRP-H1090D850-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061869
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-H1090D850-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

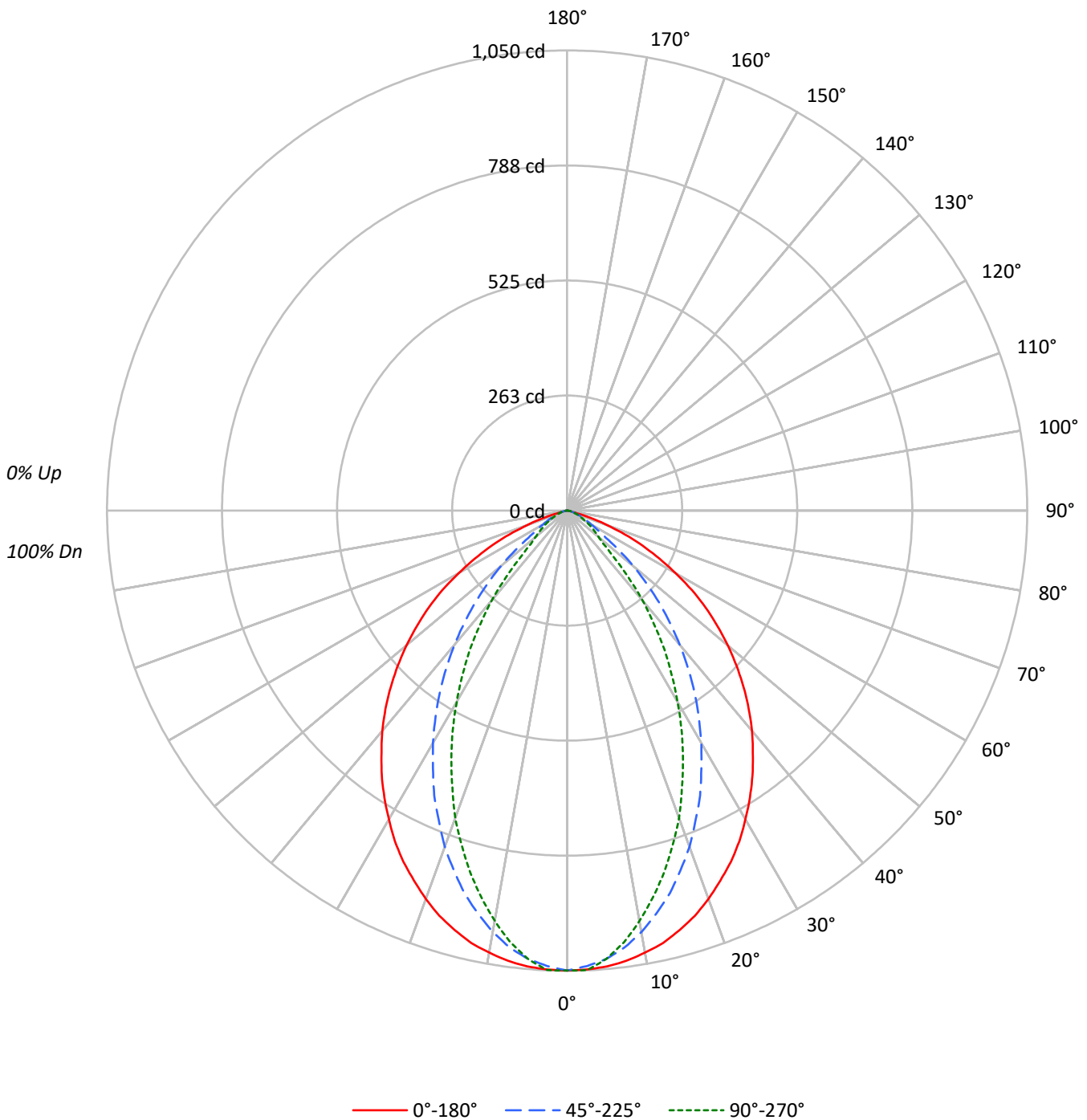
Lumens per Lamp: N/A
Luminaire Lumens: 1517.8 lumens
Efficiency: N/A
Efficacy: 48.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (A_{in}): 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

TEST NUMBER: P1061869

CATALOG NUMBER: S125RDRP-H1090D850-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1061869

CATALOG NUMBER: S125RDRP-H1090D850-X4F0-XX-UDD-SVL-B

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	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90					90			
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80					80			
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71					71			
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63					63			
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57					57			
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52					52			
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47					47			
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43					43			
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7226	7226	7226
5°	7217	7097	7097
10°	7161	6825	6648
15°	7063	6445	6093
20°	6909	5980	5472
25°	6717	5451	4752
30°	6468	4866	4008
35°	6199	4260	3250
40°	5897	3596	2410
45°	5544	2883	1455
50°	5129	2114	1000
55°	4626	1296	832
60°	3930	881	661
65°	3107	673	521
70°	1961	483	429
75°	638	354	354
80°	210	266	317
85°	103	213	213

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5544 cd/sqm



TEST NUMBER: P1061869

CATALOG NUMBER: S125RDRP-H1090D850-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.1	6.4
10°-20°	256.4	16.9
20°-30°	337.2	22.2
30°-40°	331.3	21.8
40°-50°	250.7	16.5
50°-60°	152.0	10.0
60°-70°	71.8	4.7
70°-80°	18.7	1.2
80°-90°	2.8	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°	690.6	45.5
0°-40°	1021.9	67.3
0°-60°	1424.6	93.9
0°-90°	1517.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1517.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1050	1050	1050	1050	1050	
5°	1044	1042	1027	1028	1027	99
15°	991	964	904	870	855	279
25°	884	818	718	651	626	406
35°	738	639	507	417	387	461
45°	569	448	296	188	149	438
55°	385	264	108	73	69	343
65°	191	97	41	35	32	188
75°	24	16	13	13	13	37
85°	1	1	3	3	3	2
90°	0	0	0	0	0	



TEST NUMBER: P1061869

CATALOG NUMBER: S125RDRP-H1090D850-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1049.5	1049.5	1049.5	1049.5	1049.5
2.5°	1048.2	1048.2	1040.2	1049.5	1049.5
5°	1044.2	1041.5	1026.9	1028.2	1026.9
7.5°	1036.2	1030.9	1005.5	998.9	993.5
10°	1024.2	1013.5	976.2	960.2	950.9
12.5°	1010.9	992.2	941.5	918.8	904.2
15°	990.9	964.2	904.2	869.5	854.8
17.5°	969.5	930.8	860.2	818.8	800.2
20°	942.9	897.5	816.2	765.5	746.8
22.5°	913.5	860.2	765.5	709.5	684.1
25°	884.2	817.5	717.5	650.8	625.5
27.5°	850.8	774.8	662.8	593.4	565.4
30°	813.5	732.1	612.1	540.1	504.1
32.5°	776.2	688.1	558.8	480.1	444.1
35°	737.5	638.8	506.8	417.4	386.7
37.5°	696.1	592.1	453.4	360.1	324.1
40°	656.1	545.4	400.1	301.4	268.1
42.5°	613.5	498.8	346.7	244.0	206.7
45°	569.4	448.1	296.1	188.0	149.4
47.5°	524.1	402.7	245.4	138.7	112.0
50°	478.8	354.7	197.4	102.7	93.4
52.5°	432.1	308.1	149.4	85.4	81.3
55°	385.4	264.1	108.0	73.3	69.3
57.5°	337.4	216.0	81.3	62.7	58.7
60°	285.4	173.4	64.0	52.0	48.0
62.5°	237.4	136.0	52.0	42.7	40.0
65°	190.7	97.4	41.3	34.7	32.0
67.5°	142.7	65.3	32.0	26.7	26.7
70°	97.4	42.7	24.0	21.3	21.3
72.5°	58.7	25.3	17.3	17.3	17.3
75°	24.0	16.0	13.3	13.3	13.3
77.5°	8.0	9.3	9.3	10.7	10.7
80°	5.3	5.3	6.7	8.0	8.0
82.5°	2.7	4.0	4.0	5.3	5.3
85°	1.3	1.3	2.7	2.7	2.7
87.5°	0.0	0.0	0.0	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061869
 CATALOG NUMBER: S125RDRP-H1090D850-X4F0-XX-UDD-SVL-B

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	16.20	17.53	16.56	17.84	18.16	6.86	8.19	7.22	8.50	8.82
	3H	16.91	18.08	17.29	18.41	18.78	7.64	8.82	8.02	9.15	9.51
	4H	16.92	18.02	17.33	18.37	18.75	7.89	8.98	8.29	9.33	9.72
	6H	16.85	17.86	17.27	18.23	18.62	8.07	9.07	8.48	9.44	9.84
	8H	16.81	17.76	17.24	18.15	18.56	8.11	9.06	8.54	9.45	9.86
	12H	16.77	17.68	17.20	18.06	18.49	8.12	9.03	8.55	9.41	9.84
4H	2H	16.03	17.13	16.43	17.48	17.86	7.34	8.44	7.75	8.79	9.17
	3H	16.78	17.67	17.19	18.07	18.48	8.25	9.14	8.66	9.55	9.95
	4H	16.79	17.59	17.23	18.01	18.45	8.56	9.36	9.00	9.78	10.22
	6H	16.73	17.42	17.20	17.86	18.33	8.82	9.51	9.29	9.95	10.42
	8H	16.68	17.32	17.15	17.77	18.24	8.89	9.53	9.36	9.97	10.44
	12H	16.64	17.20	17.12	17.68	18.16	8.91	9.48	9.40	9.96	10.43
8H	4H	16.68	17.32	17.15	17.76	18.23	8.67	9.31	9.14	9.76	10.23
	6H	16.60	17.12	17.10	17.62	18.10	8.99	9.51	9.50	10.01	10.49
	8H	16.55	17.01	17.07	17.53	18.02	9.10	9.56	9.62	10.08	10.57
	12H	16.51	16.92	17.02	17.41	17.99	9.16	9.57	9.68	10.07	10.64
12H	4H	16.63	17.20	17.12	17.68	18.15	8.65	9.21	9.13	9.69	10.17
	6H	16.54	17.01	17.07	17.53	18.02	8.96	9.43	9.49	9.95	10.44
	8H	16.51	16.92	17.02	17.42	17.99	9.10	9.51	9.62	10.01	10.58