

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: P1061772

Luminaire Tested: S125RDRP-S850D835-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061772
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-S850D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

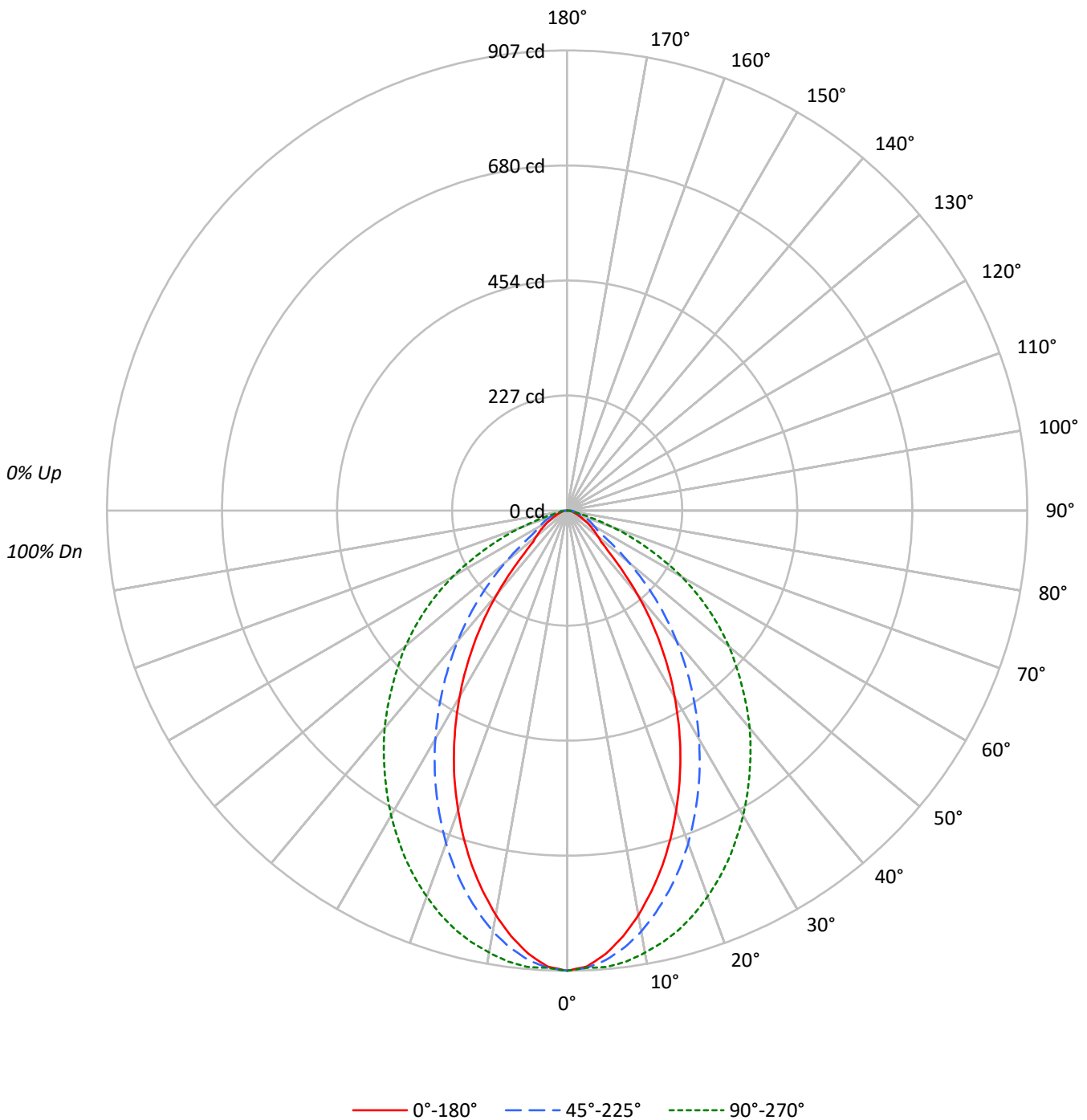
Lumens per Lamp: N/A
Luminaire Lumens: 1313.6 lumens
Efficiency: N/A
Efficacy: 50.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.15 / 1.02
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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: P1061772

CATALOG NUMBER: S125RDRP-S850D835-X4F0-XX-UDD-SVL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1061772

CATALOG NUMBER: S125RDRP-S850D835-X4F0-XX-UDD-SVL-W

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	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	66	62	58	56
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6244	6244	6244
5°	6061	6142	6241
10°	5660	5889	6185
15°	5166	5530	6093
20°	4604	5112	5931
25°	4012	4642	5740
30°	3371	4129	5517
35°	2681	3588	5274
40°	1932	3015	5032
45°	1145	2392	4739
50°	846	1703	4459
55°	718	1053	4084
60°	584	850	3597
65°	455	785	2841
70°	389	678	1900
75°	359	591	769
80°	381	611	535
85°	458	916	608

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4739 cd/sqm



TEST NUMBER: P1061772

CATALOG NUMBER: S125RDRP-S850D835-X4F0-XX-UDD-SVL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.6	6.4
10°-20°	219.5	16.7
20°-30°	286.9	21.8
30°-40°	279.5	21.3
40°-50°	209.6	16.0
50°-60°	131.4	10.0
60°-70°	68.4	5.2
70°-80°	24.8	1.9
80°-90°	9.8	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°	590.0	44.9
0°-40°	869.5	66.2
0°-60°	1210.6	92.2
0°-90°	1313.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1313.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	907	907	907	907	907	
5°	877	889	889	895	903	82
15°	725	746	776	824	855	202
25°	528	557	611	694	756	241
35°	319	353	427	541	627	198
45°	118	152	246	380	487	99
55°	60	63	88	229	340	53
65°	28	30	48	92	174	29
75°	14	18	22	23	29	15
85°	6	10	12	11	8	6
90°	0	0	0	0	0	



TEST NUMBER: P1061772

CATALOG NUMBER: S125RDRP-S850D835-X4F0-XX-UDD-SVL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	906.9	906.9	906.9	906.9	906.9
2.5°	899.2	907.8	902.0	902.0	902.0
5°	877.0	888.6	888.6	895.3	903.0
7.5°	846.1	859.6	868.3	884.7	896.3
10°	809.5	825.9	842.3	869.3	884.7
12.5°	768.1	787.4	810.5	848.1	871.2
15°	724.7	745.9	775.8	824.0	854.8
17.5°	677.5	702.6	738.2	796.0	833.6
20°	628.3	653.4	697.7	763.3	809.5
22.5°	579.2	606.2	654.4	728.6	783.5
25°	528.1	557.0	611.0	693.9	755.6
27.5°	476.1	506.0	565.7	658.2	724.7
30°	424.0	454.9	519.4	619.7	693.9
32.5°	372.0	404.8	473.2	580.2	661.1
35°	319.0	352.7	426.9	540.6	627.4
37.5°	267.9	301.6	380.7	500.2	593.7
40°	214.9	251.5	335.4	459.7	559.9
42.5°	162.9	200.5	290.1	419.2	523.3
45°	117.6	152.3	245.7	379.7	486.7
47.5°	90.6	109.9	200.5	339.2	451.0
50°	79.0	84.8	159.0	301.6	416.3
52.5°	68.4	72.3	119.5	267.0	378.7
55°	59.8	62.6	87.7	229.4	340.2
57.5°	50.1	54.0	69.4	192.7	300.7
60°	42.4	44.3	61.7	159.0	261.2
62.5°	34.7	36.6	54.9	125.3	216.8
65°	27.9	29.9	48.2	92.5	174.4
67.5°	23.1	24.1	40.5	65.5	134.0
70°	19.3	20.2	33.7	45.3	94.4
72.5°	16.4	19.3	27.0	32.8	59.8
75°	13.5	18.3	22.2	23.1	28.9
77.5°	11.6	17.3	18.3	18.3	16.4
80°	9.6	14.5	15.4	14.5	13.5
82.5°	7.7	11.6	12.5	12.5	10.6
85°	5.8	9.6	11.6	10.6	7.7
87.5°	3.9	8.7	9.6	8.7	5.8
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061772
 CATALOG NUMBER: S125RDRP-S850D835-X4F0-XX-UDD-SVL-W

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	6.28	7.64	6.65	7.95	8.26	15.89	17.24	16.26	17.56	17.87
	3H	7.14	8.34	7.52	8.67	9.03	16.73	17.93	17.11	18.26	18.63
	4H	7.56	8.68	7.97	9.03	9.42	16.81	17.93	17.21	18.28	18.66
	6H	7.99	9.02	8.41	9.39	9.78	16.79	17.82	17.21	18.19	18.58
	8H	8.17	9.15	8.60	9.54	9.94	16.78	17.75	17.21	18.15	18.55
	12H	8.33	9.27	8.77	9.65	10.08	16.77	17.70	17.20	18.08	18.51
4H	2H	7.25	8.37	7.65	8.72	9.10	15.76	16.88	16.16	17.23	17.61
	3H	8.30	9.21	8.71	9.62	10.02	16.67	17.58	17.08	17.99	18.39
	4H	8.86	9.68	9.29	10.10	10.54	16.77	17.59	17.20	18.01	18.45
	6H	9.46	10.17	9.92	10.61	11.08	16.80	17.50	17.26	17.95	18.42
	8H	9.70	10.36	10.17	10.81	11.28	16.80	17.46	17.27	17.91	18.38
	12H	9.92	10.51	10.41	10.99	11.46	16.81	17.39	17.30	17.88	18.35
8H	4H	9.33	9.99	9.80	10.44	10.91	16.69	17.35	17.16	17.80	18.27
	6H	10.14	10.69	10.65	11.18	11.66	16.75	17.29	17.25	17.79	18.27
	8H	10.53	11.01	11.05	11.53	12.02	16.78	17.27	17.30	17.78	18.27
	12H	10.92	11.35	11.43	11.84	12.41	16.85	17.27	17.36	17.77	18.34
12H	4H	9.38	9.97	9.87	10.45	10.92	16.66	17.25	17.15	17.73	18.20
	6H	10.27	10.75	10.79	11.27	11.76	16.71	17.20	17.24	17.72	18.21
	8H	10.76	11.19	11.27	11.68	12.25	16.79	17.22	17.30	17.71	18.28