

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: P1061758

Luminaire Tested: S125RDRP-S850D830-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061758
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D830-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

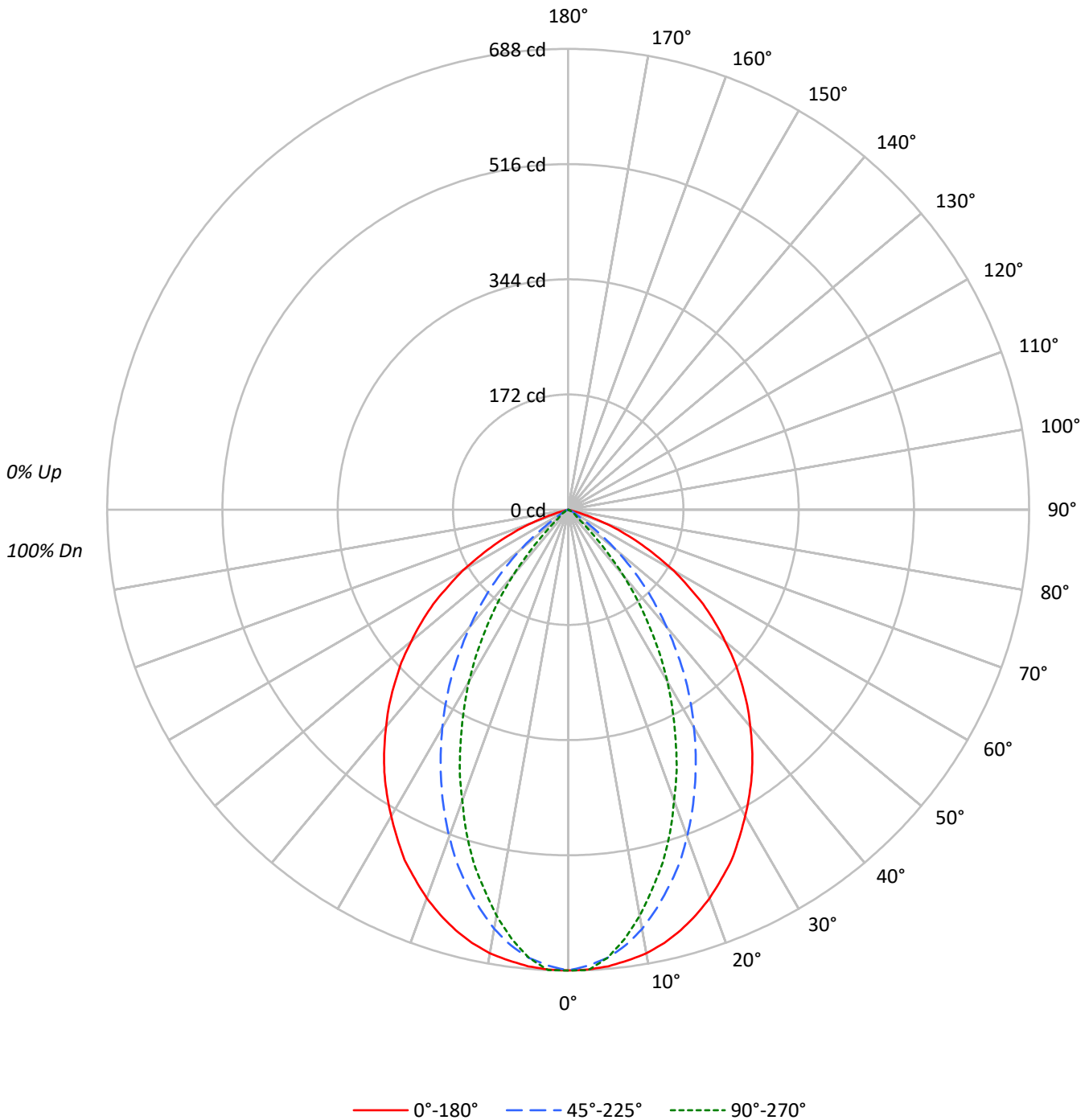
Lumens per Lamp: N/A
Luminaire Lumens: 888.7 lumens
Efficiency: N/A
Efficacy: 34.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (Ain): 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: P1061758

CATALOG NUMBER: S125RDRP-S850D830-X4F0-XX-UDD-BVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1061758

CATALOG NUMBER: S125RDRP-S850D830-X4F0-XX-UDD-BVL-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	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	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91																												
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82																												
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73																												
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66																												
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60																												
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54																												
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50																												
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46																												
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42																												
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4736	4736	4736
5°	4730	4642	4642
10°	4702	4442	4302
15°	4632	4146	3888
20°	4522	3804	3384
25°	4385	3406	2882
30°	4199	2987	2353
35°	4020	2548	1762
40°	3801	2056	1142
45°	3561	1555	495
50°	3276	992	184
55°	2952	436	131
60°	2499	187	88
65°	1893	119	44
70°	1151	54	18
75°	242	24	24
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3561 cd/sqm



TEST NUMBER: P1061758

CATALOG NUMBER: S125RDRP-S850D830-X4F0-XX-UDD-BVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.4	7.1
10°-20°	165.3	18.6
20°-30°	212.2	23.9
30°-40°	199.8	22.5
40°-50°	139.7	15.7
50°-60°	74.6	8.4
60°-70°	29.8	3.3
70°-80°	3.8	0.4
80°-90°	0.0	0.0
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°	441.0	49.6
0°-40°	640.8	72.1
0°-60°	855.1	96.2
0°-90°	888.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	888.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	684	682	672	673	672	65
15°	650	629	582	554	545	183
25°	577	526	448	399	379	265
35°	478	402	303	234	210	298
45°	366	274	160	77	51	282
55°	246	151	36	13	11	218
65°	116	46	7	4	3	116
75°	9	3	1	1	1	18
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P1061758

CATALOG NUMBER: S125RDRP-S850D830-X4F0-XX-UDD-BVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	687.9	687.9	687.9	687.9	687.9
2.5°	687.0	687.9	681.5	687.0	687.9
5°	684.3	682.5	671.6	673.4	671.6
7.5°	678.8	674.3	656.1	649.8	646.2
10°	672.5	662.5	635.3	621.7	615.3
12.5°	662.5	648.0	609.9	589.0	579.9
15°	649.8	628.9	581.7	554.5	545.4
17.5°	634.4	607.1	552.7	519.1	505.5
20°	617.1	580.8	519.1	479.2	461.9
22.5°	597.1	555.4	484.6	440.1	422.9
25°	577.2	526.4	448.3	399.3	379.3
27.5°	552.7	496.4	412.0	359.4	337.6
30°	528.2	466.5	375.7	318.5	295.9
32.5°	503.7	434.7	339.4	275.9	253.2
35°	478.3	402.0	303.1	234.1	209.6
37.5°	451.0	369.4	264.1	194.2	168.8
40°	422.9	337.6	228.7	155.2	127.1
42.5°	395.7	305.8	193.3	117.1	86.2
45°	365.7	274.1	159.7	77.1	50.8
47.5°	337.6	243.2	125.2	44.5	26.3
50°	305.8	211.5	92.6	23.6	17.2
52.5°	275.9	180.6	61.7	15.4	13.6
55°	245.9	150.6	36.3	12.7	10.9
57.5°	211.5	121.6	20.0	10.0	8.2
60°	181.5	95.3	13.6	7.3	6.4
62.5°	147.0	69.9	10.0	5.4	4.5
65°	116.2	46.3	7.3	3.6	2.7
67.5°	86.2	27.2	4.5	1.8	1.8
70°	57.2	14.5	2.7	0.9	0.9
72.5°	29.9	6.4	1.8	0.9	0.9
75°	9.1	2.7	0.9	0.9	0.9
77.5°	0.0	0.9	0.0	0.0	0.9
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061758
 CATALOG NUMBER: S125RDRP-S850D830-X4F0-XX-UDD-BVL-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	14.35	15.61	14.71	15.92	16.24	0.00	0.00	0.00	0.00	0.00
	3H	14.93	16.04	15.31	16.37	16.74	0.00	0.00	0.00	0.00	0.00
	4H	14.90	15.93	15.30	16.28	16.66	0.00	0.00	0.00	0.00	0.00
	6H	14.81	15.75	15.23	16.13	16.52	0.00	0.00	0.00	0.00	0.00
	8H	14.76	15.66	15.20	16.05	16.45	0.00	0.00	0.00	0.00	0.00
	12H	14.72	15.57	15.15	15.95	16.38	0.00	0.00	0.00	0.00	0.00
4H	2H	14.12	15.15	14.52	15.50	15.89	0.00	0.00	0.00	0.00	0.00
	3H	14.71	15.55	15.13	15.95	16.36	0.00	0.00	0.00	0.00	0.00
	4H	14.66	15.40	15.10	15.82	16.27	0.00	0.00	0.00	0.00	0.00
	6H	14.57	15.21	15.04	15.66	16.13	0.00	0.00	0.00	0.00	0.00
	8H	14.51	15.11	14.99	15.56	16.03	0.00	0.00	0.00	0.00	0.00
	12H	14.46	14.99	14.95	15.47	15.95	0.00	0.00	0.00	0.00	0.00
8H	4H	14.51	15.11	14.99	15.56	16.03	0.00	0.00	0.00	0.00	0.00
	6H	14.41	14.89	14.91	15.39	15.87	0.00	0.00	0.00	0.00	0.00
	8H	14.34	14.77	14.87	15.29	15.78	0.00	0.00	0.00	0.00	0.00
	12H	14.29	14.67	14.81	15.17	15.74	0.00	0.00	0.00	0.00	0.00
12H	4H	14.46	14.99	14.95	15.47	15.95	0.00	0.00	0.00	0.00	0.00
	6H	14.34	14.77	14.87	15.29	15.78	0.00	0.00	0.00	0.00	0.00
	8H	14.29	14.67	14.81	15.17	15.74	0.00	0.00	0.00	0.00	0.00