

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: P1061761

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061761
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-S850D830-X4F0-XX-UDD-SVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

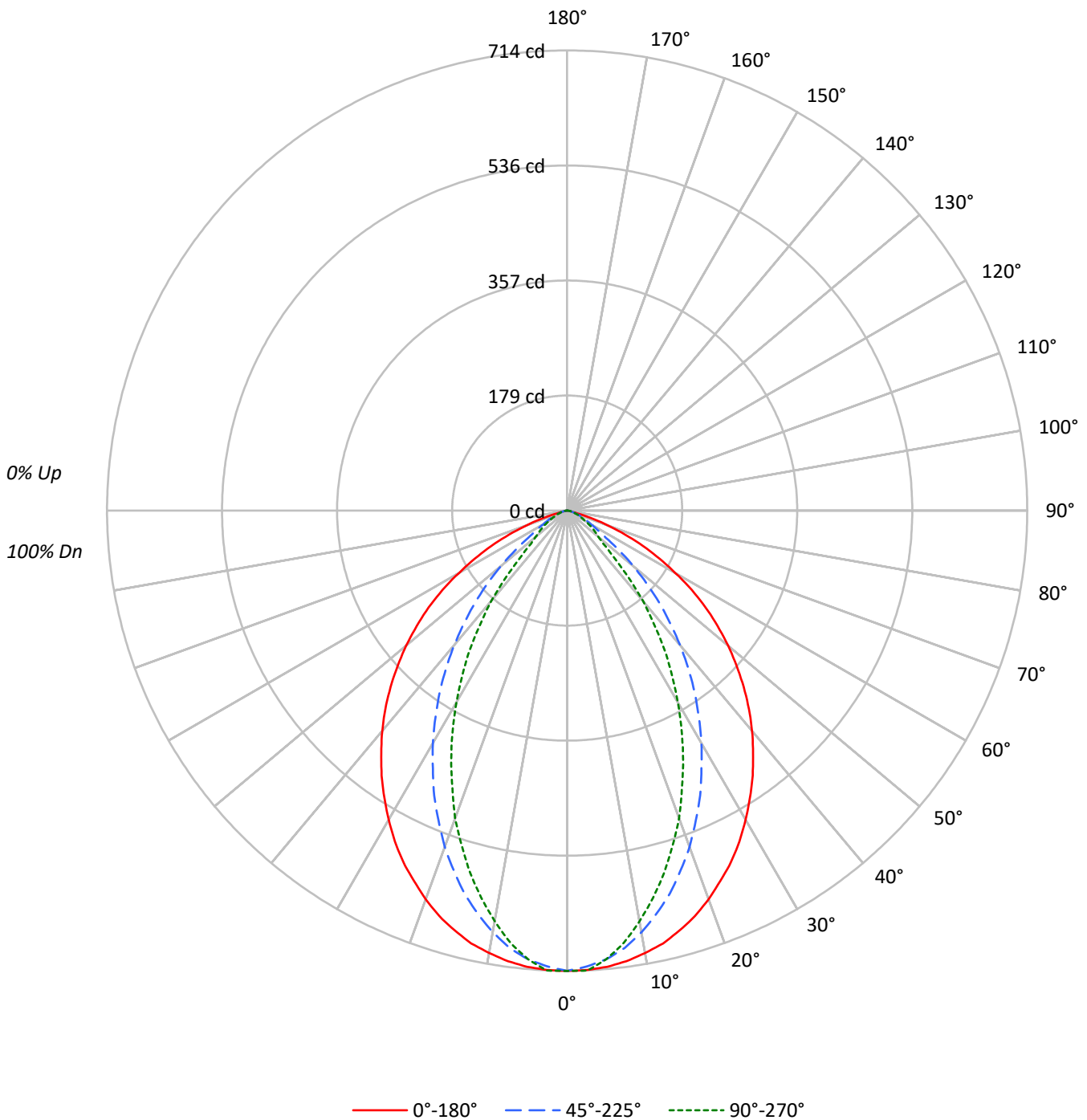
Lumens per Lamp: N/A
Luminaire Lumens: 1033.0 lumens
Efficiency: N/A
Efficacy: 40.0 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.85 / 1.01
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1061761

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

Luminous Intensity Polar Plot





TEST NUMBER: P1061761

CATALOG NUMBER: S125RDRP-S850D830-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	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	97	98	96	95	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57
6	79	68	60	55	77	67	60	55	65	59	54	64	58	54	62	57	53	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4918	4918	4918
5°	4911	4830	4830
10°	4873	4644	4524
15°	4806	4386	4147
20°	4702	4069	3724
25°	4571	3710	3234
30°	4401	3312	2728
35°	4219	2899	2212
40°	4013	2447	1639
45°	3773	1962	989
50°	3490	1439	680
55°	3149	882	567
60°	2674	600	450
65°	2115	458	355
70°	1335	328	292
75°	434	242	242
80°	143	178	214
85°	71	142	142

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3773 cd/sqm

TEST NUMBER: P1061761

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.1	6.4
10°-20°	174.5	16.9
20°-30°	229.5	22.2
30°-40°	225.5	21.8
40°-50°	170.6	16.5
50°-60°	103.4	10.0
60°-70°	48.8	4.7
70°-80°	12.7	1.2
80°-90°	1.9	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°	470.0	45.5
0°-40°	695.5	67.3
0°-60°	969.5	93.9
0°-90°	1033.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1033.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	714	714	714	714	714	
5°	711	709	699	700	699	67
15°	674	656	615	592	582	190
25°	602	556	488	443	426	277
35°	502	435	345	284	263	313
45°	388	305	202	128	102	298
55°	262	180	74	50	47	233
65°	130	66	28	24	22	128
75°	16	11	9	9	9	25
85°	1	1	2	2	2	1
90°	0	0	0	0	0	



TEST NUMBER: P1061761

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	714.3	714.3	714.3	714.3	714.3
2.5°	713.4	713.4	707.9	714.3	714.3
5°	710.6	708.8	698.8	699.7	698.8
7.5°	705.2	701.6	684.3	679.8	676.1
10°	697.0	689.8	664.3	653.5	647.1
12.5°	687.9	675.2	640.8	625.3	615.3
15°	674.3	656.2	615.3	591.7	581.8
17.5°	659.8	633.5	585.4	557.3	544.5
20°	641.7	610.8	555.4	521.0	508.2
22.5°	621.7	585.4	521.0	482.8	465.6
25°	601.7	556.3	488.3	442.9	425.7
27.5°	579.0	527.3	451.1	403.9	384.8
30°	553.6	498.3	416.6	367.6	343.1
32.5°	528.2	468.3	380.3	326.7	302.2
35°	501.9	434.7	344.9	284.1	263.2
37.5°	473.8	403.0	308.6	245.0	220.5
40°	446.5	371.2	272.3	205.1	182.4
42.5°	417.5	339.4	236.0	166.1	140.7
45°	387.5	304.9	201.5	128.0	101.6
47.5°	356.7	274.1	167.0	94.4	76.2
50°	325.8	241.4	134.3	69.9	63.5
52.5°	294.1	209.7	101.6	58.1	55.4
55°	262.3	179.7	73.5	49.9	47.2
57.5°	229.6	147.0	55.4	42.7	39.9
60°	194.2	118.0	43.6	35.4	32.7
62.5°	161.5	92.6	35.4	29.0	27.2
65°	129.8	66.3	28.1	23.6	21.8
67.5°	97.1	44.5	21.8	18.2	18.2
70°	66.3	29.0	16.3	14.5	14.5
72.5°	39.9	17.2	11.8	11.8	11.8
75°	16.3	10.9	9.1	9.1	9.1
77.5°	5.4	6.4	6.4	7.3	7.3
80°	3.6	3.6	4.5	5.4	5.4
82.5°	1.8	2.7	2.7	3.6	3.6
85°	0.9	0.9	1.8	1.8	1.8
87.5°	0.0	0.0	0.0	0.9	0.9
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1061761

CATALOG NUMBER: S125RDRP-S850D830-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	14.86	16.19	15.23	16.51	16.82	5.52	6.86	5.89	7.17	7.48
	3H	15.57	16.75	15.95	17.08	17.44	6.31	7.48	6.68	7.81	8.18
	4H	15.59	16.68	15.99	17.03	17.41	6.56	7.65	6.96	8.00	8.38
	6H	15.52	16.52	15.93	16.89	17.29	6.73	7.74	7.15	8.11	8.50
	8H	15.47	16.43	15.90	16.82	17.22	6.78	7.73	7.21	8.12	8.52
	12H	15.43	16.34	15.87	16.73	17.16	6.78	7.69	7.22	8.08	8.51
4H	2H	14.69	15.79	15.10	16.14	16.52	6.01	7.10	6.41	7.46	7.84
	3H	15.44	16.33	15.85	16.74	17.14	6.92	7.81	7.33	8.21	8.62
	4H	15.46	16.25	15.89	16.67	17.11	7.23	8.03	7.67	8.44	8.89
	6H	15.40	16.08	15.86	16.53	16.99	7.49	8.17	7.95	8.62	9.09
	8H	15.34	15.98	15.81	16.43	16.90	7.55	8.19	8.02	8.64	9.11
	12H	15.30	15.86	15.79	16.35	16.82	7.58	8.14	8.06	8.62	9.10
8H	4H	15.34	15.98	15.81	16.43	16.90	7.34	7.98	7.81	8.43	8.90
	6H	15.27	15.78	15.77	16.28	16.76	7.66	8.18	8.16	8.68	9.16
	8H	15.21	15.68	15.73	16.19	16.68	7.76	8.23	8.28	8.74	9.24
	12H	15.17	15.58	15.69	16.08	16.65	7.82	8.23	8.34	8.73	9.30
12H	4H	15.30	15.86	15.78	16.34	16.82	7.31	7.88	7.80	8.36	8.83
	6H	15.21	15.67	15.73	16.19	16.68	7.63	8.10	8.15	8.61	9.10
	8H	15.17	15.58	15.69	16.08	16.65	7.77	8.18	8.28	8.67	9.24