

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: P1061787

Luminaire Tested: S125RDRP-S850D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061787
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDRP-S850D850-X4F0-XX-UDD-BVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

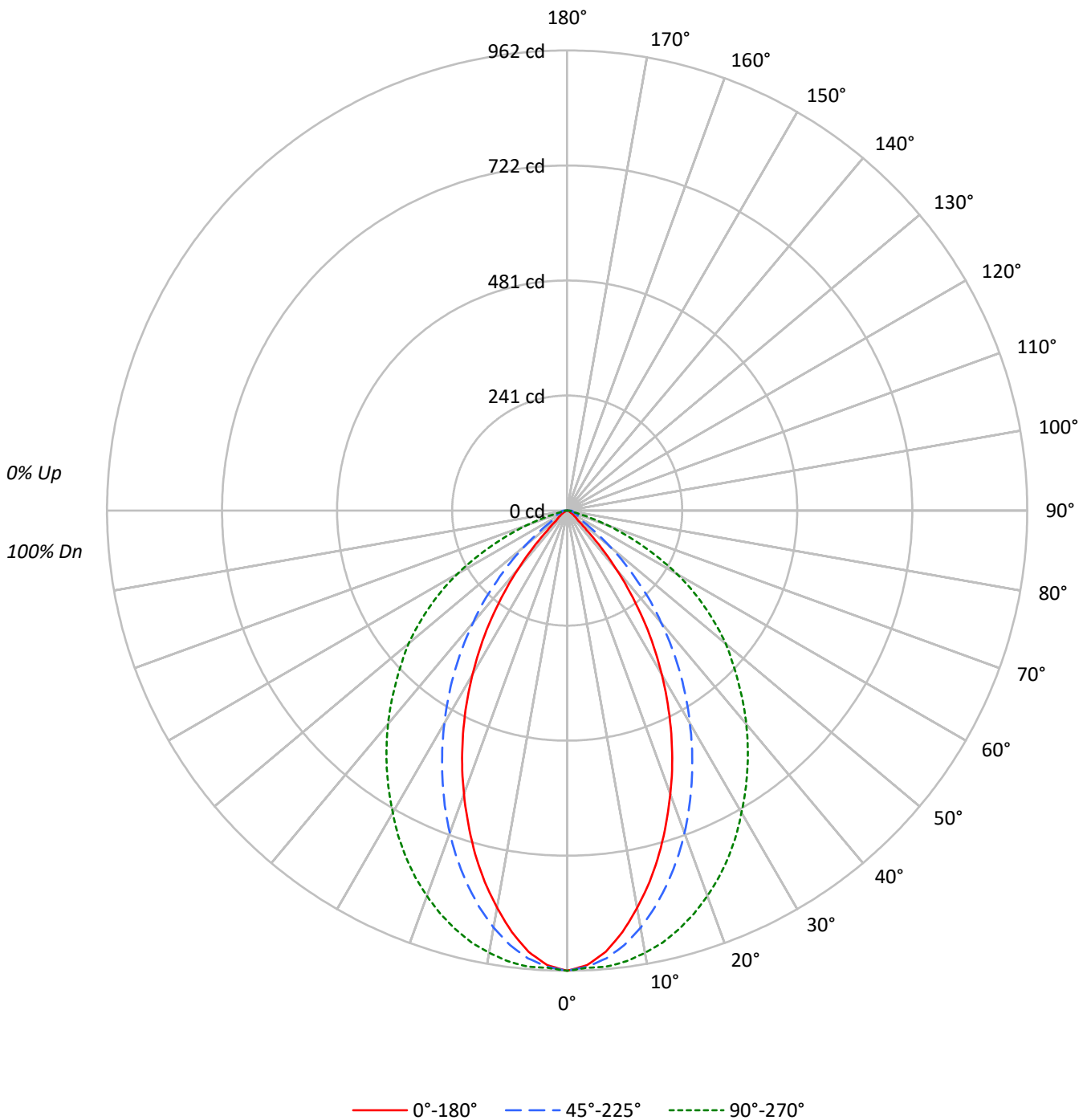
Lumens per Lamp: N/A
Luminaire Lumens: 1244.7 lumens
Efficiency: N/A
Efficacy: 48.2 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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	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	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80
3	98	89	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	67	74	70	67	65
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6624	6624	6624
5°	6398	6494	6612
10°	5897	6188	6561
15°	5295	5760	6454
20°	4621	5255	6282
25°	3914	4686	6066
30°	3144	4079	5796
35°	2327	3441	5526
40°	1441	2748	5236
45°	562	2009	4923
50°	264	1260	4637
55°	192	539	4209
60°	132	383	3651
65°	86	401	2838
70°	87	366	1786
75°	114	370	569
80°	170	424	381
85°	253	845	592

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4923 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.2	7.1
10°-20°	228.6	18.4
20°-30°	291.1	23.4
30°-40°	271.0	21.8
40°-50°	186.5	15.0
50°-60°	105.6	8.5
60°-70°	49.9	4.0
70°-80°	15.6	1.3
80°-90°	8.1	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°	608.0	48.8
0°-40°	878.9	70.6
0°-60°	1171.1	94.1
0°-90°	1244.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1244.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	962	962	962	962	962	
5°	926	938	940	948	957	86
15°	743	768	808	869	905	207
25°	515	548	617	720	798	235
35°	277	315	409	549	657	171
45°	58	92	206	373	506	54
55°	16	18	45	215	351	15
65°	5	6	25	77	174	6
75°	4	10	14	15	21	5
85°	3	9	11	10	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	962.0	962.0	962.0	962.0	962.0
2.5°	951.3	961.0	954.5	955.6	956.7
5°	925.7	938.5	939.6	948.1	956.7
7.5°	888.3	904.3	916.1	936.4	950.3
10°	843.4	862.6	885.1	918.2	938.5
12.5°	795.3	817.7	848.7	895.8	924.6
15°	742.9	767.5	808.1	869.0	905.4
17.5°	687.3	715.1	764.3	837.0	882.9
20°	630.7	660.6	717.2	800.6	857.3
22.5°	574.0	605.0	668.1	761.1	829.5
25°	515.2	548.4	616.8	720.5	798.5
27.5°	455.4	489.6	565.5	678.8	765.4
30°	395.5	431.8	513.1	636.0	729.0
32.5°	336.7	373.1	461.8	593.3	693.7
35°	276.9	315.3	409.4	549.4	657.4
37.5°	217.0	258.7	358.1	504.5	620.0
40°	160.3	199.9	305.7	460.7	582.6
42.5°	106.9	145.4	258.7	416.9	544.1
45°	57.7	91.9	206.3	373.1	505.6
47.5°	31.0	49.2	161.4	330.3	468.2
50°	24.6	27.8	117.6	290.7	432.9
52.5°	20.3	22.4	77.0	253.3	392.3
55°	16.0	18.2	44.9	214.9	350.6
57.5°	12.8	15.0	28.9	178.5	310.0
60°	9.6	11.8	27.8	143.2	265.1
62.5°	7.5	8.6	25.7	110.1	218.1
65°	5.3	6.4	24.6	77.0	174.2
67.5°	4.3	5.3	22.4	49.2	130.4
70°	4.3	4.3	18.2	32.1	88.7
72.5°	4.3	7.5	16.0	21.4	53.4
75°	4.3	9.6	13.9	15.0	21.4
77.5°	4.3	10.7	11.8	11.8	11.8
80°	4.3	9.6	10.7	10.7	9.6
82.5°	4.3	8.6	9.6	10.7	8.6
85°	3.2	8.6	10.7	9.6	7.5
87.5°	3.2	8.6	9.6	8.6	5.3
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	15.81	17.10	16.18	17.42	17.73
	3H	0.00	0.00	0.00	0.00	0.00	16.53	17.68	16.91	18.01	18.37
	4H	0.00	0.00	0.00	0.31	0.70	16.56	17.62	16.96	17.97	18.35
	6H	0.16	1.14	0.58	1.51	1.90	16.51	17.48	16.92	17.85	18.25
	8H	0.81	1.73	1.24	2.12	2.53	16.48	17.41	16.92	17.80	18.20
	12H	1.40	2.28	1.83	2.66	3.09	16.47	17.35	16.90	17.73	18.16
4H	2H	0.33	1.39	0.73	1.75	2.13	15.60	16.67	16.01	17.02	17.40
	3H	1.14	2.01	1.56	2.42	2.82	16.36	17.23	16.77	17.63	18.04
	4H	2.15	2.92	2.58	3.34	3.79	16.39	17.17	16.83	17.59	18.03
	6H	3.43	4.10	3.89	4.54	5.01	16.37	17.04	16.83	17.48	17.95
	8H	4.01	4.64	4.48	5.08	5.56	16.35	16.98	16.82	17.42	17.90
	12H	4.58	5.13	5.07	5.61	6.09	16.36	16.91	16.85	17.39	17.87
8H	4H	3.57	4.19	4.04	4.64	5.11	16.27	16.90	16.74	17.34	17.82
	6H	5.13	5.63	5.63	6.13	6.61	16.26	16.77	16.77	17.27	17.75
	8H	5.93	6.38	6.45	6.90	7.39	16.28	16.73	16.80	17.25	17.74
	12H	6.77	7.17	7.28	7.67	8.24	16.34	16.74	16.85	17.23	17.81
12H	4H	3.79	4.34	4.27	4.82	5.29	16.23	16.78	16.72	17.26	17.74
	6H	5.50	5.95	6.02	6.47	6.96	16.22	16.67	16.74	17.19	17.68
	8H	6.49	6.89	7.01	7.39	7.96	16.27	16.67	16.78	17.16	17.74