

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: P1061805

Luminaire Tested: S125RDRP-S850D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1061805
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-S850D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

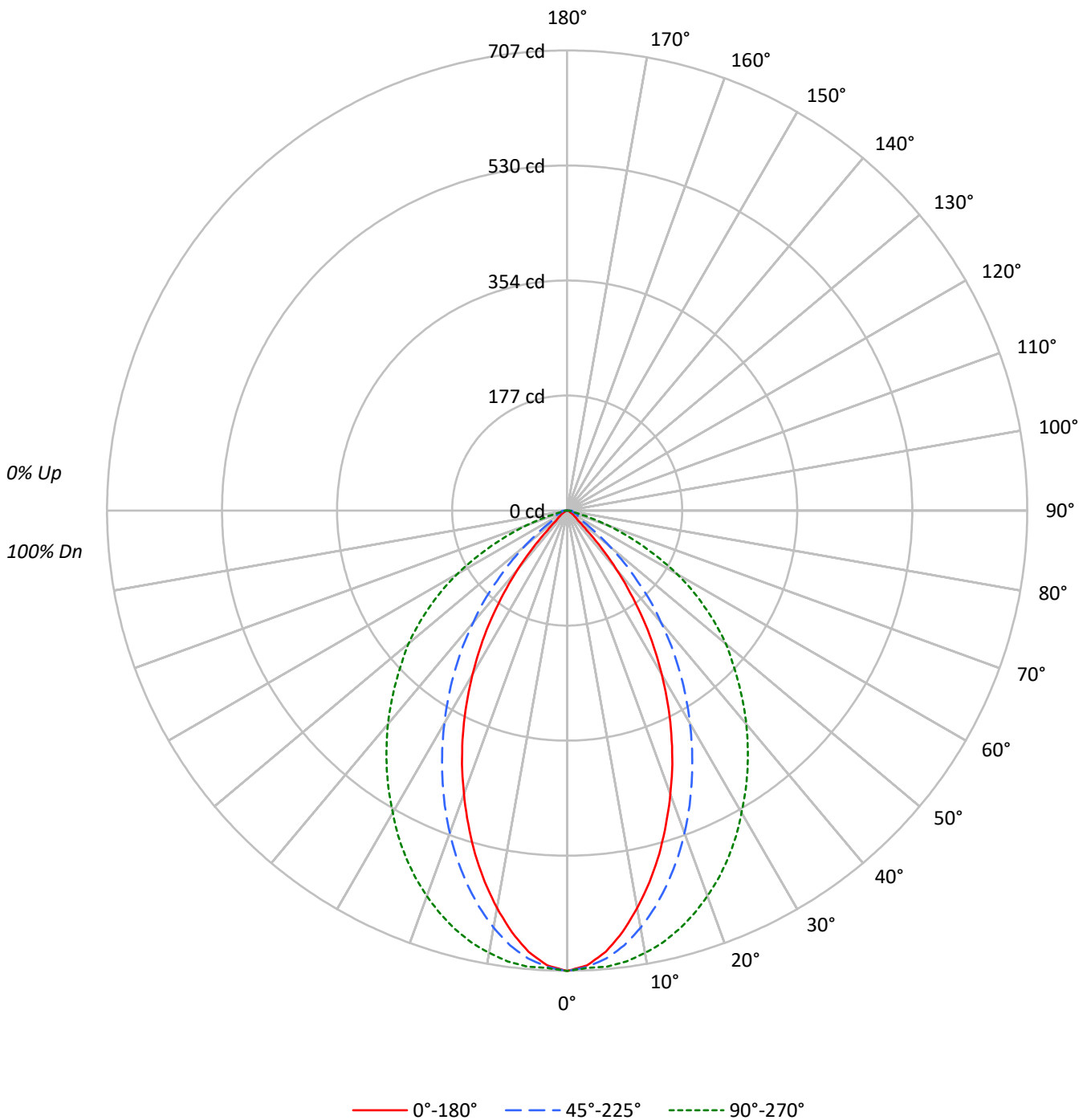
Lumens per Lamp: N/A
Luminaire Lumens: 915.1 lumens
Efficiency: N/A
Efficacy: 35.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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	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	98	98	96	95	95	93	92	90													90															
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80													80															
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72													72															
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65													65															
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59													59															
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53													53															
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49													49															
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45													45															
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41													41															
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38													38															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4870	4870	4870
5°	4703	4774	4861
10°	4335	4549	4824
15°	3893	4235	4744
20°	3397	3864	4618
25°	2878	3444	4459
30°	2312	2999	4261
35°	1710	2530	4062
40°	1060	2020	3850
45°	413	1477	3619
50°	194	925	3409
55°	142	396	3095
60°	98	281	2684
65°	64	295	2087
70°	62	270	1313
75°	82	271	418
80°	123	313	282
85°	190	624	434

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3619 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.9	7.1
10°-20°	168.0	18.4
20°-30°	214.0	23.4
30°-40°	199.2	21.8
40°-50°	137.1	15.0
50°-60°	77.6	8.5
60°-70°	36.7	4.0
70°-80°	11.5	1.3
80°-90°	6.0	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°	446.9	48.8
0°-40°	646.2	70.6
0°-60°	860.9	94.1
0°-90°	915.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	915.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	707	707	707	707	707	
5°	680	690	691	697	703	63
15°	546	564	594	639	666	152
25°	379	403	453	530	587	173
35°	204	232	301	404	483	126
45°	42	68	152	274	372	40
55°	12	13	33	158	258	11
65°	4	5	18	57	128	4
75°	3	7	10	11	16	3
85°	2	6	8	7	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	707.3	707.3	707.3	707.3	707.3
2.5°	699.4	706.5	701.8	702.5	703.3
5°	680.5	690.0	690.8	697.0	703.3
7.5°	653.0	664.8	673.5	688.4	698.6
10°	620.0	634.2	650.7	675.0	690.0
12.5°	584.7	601.2	624.0	658.5	679.7
15°	546.2	564.2	594.1	638.9	665.6
17.5°	505.3	525.7	561.9	615.3	649.1
20°	463.6	485.6	527.3	588.6	630.2
22.5°	422.0	444.8	491.1	559.5	609.8
25°	378.8	403.1	453.4	529.7	587.0
27.5°	334.8	359.9	415.7	499.0	562.7
30°	290.8	317.5	377.2	467.6	535.9
32.5°	247.5	274.3	339.5	436.1	510.0
35°	203.5	231.8	301.0	403.9	483.3
37.5°	159.5	190.2	263.3	370.9	455.8
40°	117.9	147.0	224.7	338.7	428.3
42.5°	78.6	106.9	190.2	306.5	400.0
45°	42.4	67.6	151.7	274.3	371.7
47.5°	22.8	36.1	118.7	242.8	344.2
50°	18.1	20.4	86.4	213.7	318.3
52.5°	14.9	16.5	56.6	186.2	288.4
55°	11.8	13.4	33.0	158.0	257.8
57.5°	9.4	11.0	21.2	131.2	227.9
60°	7.1	8.6	20.4	105.3	194.9
62.5°	5.5	6.3	18.9	80.9	160.3
65°	3.9	4.7	18.1	56.6	128.1
67.5°	3.1	3.9	16.5	36.1	95.9
70°	3.1	3.1	13.4	23.6	65.2
72.5°	3.1	5.5	11.8	15.7	39.3
75°	3.1	7.1	10.2	11.0	15.7
77.5°	3.1	7.9	8.6	8.6	8.6
80°	3.1	7.1	7.9	7.9	7.1
82.5°	3.1	6.3	7.1	7.9	6.3
85°	2.4	6.3	7.9	7.1	5.5
87.5°	2.4	6.3	7.1	6.3	3.9
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	14.74	16.03	15.11	16.35	16.66
	3H	0.00	0.00	0.00	0.00	0.00	15.46	16.61	15.84	16.94	17.30
	4H	0.00	0.00	0.00	0.00	0.00	15.49	16.55	15.89	16.90	17.28
	6H	0.00	0.03	0.00	0.40	0.79	15.44	16.41	15.85	16.78	17.18
	8H	0.00	0.61	0.12	1.00	1.41	15.41	16.34	15.85	16.73	17.13
	12H	0.29	1.17	0.72	1.56	1.99	15.40	16.28	15.83	16.66	17.09
4H	2H	0.00	0.32	0.00	0.67	1.06	14.53	15.60	14.94	15.95	16.33
	3H	0.06	0.93	0.48	1.34	1.74	15.29	16.16	15.70	16.56	16.97
	4H	1.08	1.85	1.51	2.27	2.71	15.32	16.10	15.76	16.52	16.96
	6H	2.35	3.02	2.82	3.47	3.93	15.30	15.97	15.76	16.41	16.88
	8H	2.93	3.55	3.40	4.00	4.47	15.28	15.91	15.75	16.35	16.83
	12H	3.50	4.05	3.98	4.53	5.00	15.29	15.84	15.78	16.32	16.80
8H	4H	2.49	3.11	2.96	3.56	4.03	15.20	15.83	15.67	16.27	16.75
	6H	4.06	4.56	4.56	5.06	5.54	15.19	15.70	15.70	16.20	16.68
	8H	4.85	5.30	5.37	5.82	6.31	15.21	15.66	15.73	16.18	16.67
	12H	5.69	6.09	6.21	6.59	7.16	15.27	15.67	15.78	16.17	16.74
12H	4H	2.71	3.26	3.20	3.74	4.22	15.16	15.71	15.65	16.19	16.67
	6H	4.43	4.89	4.95	5.40	5.89	15.15	15.60	15.67	16.12	16.61
	8H	5.42	5.82	5.93	6.32	6.89	15.20	15.60	15.71	16.09	16.67