

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: P1058060

Luminaire Tested: S122RDRP-S675D850-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058060
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D850-X4F0-XX-UDD-BVL-S
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

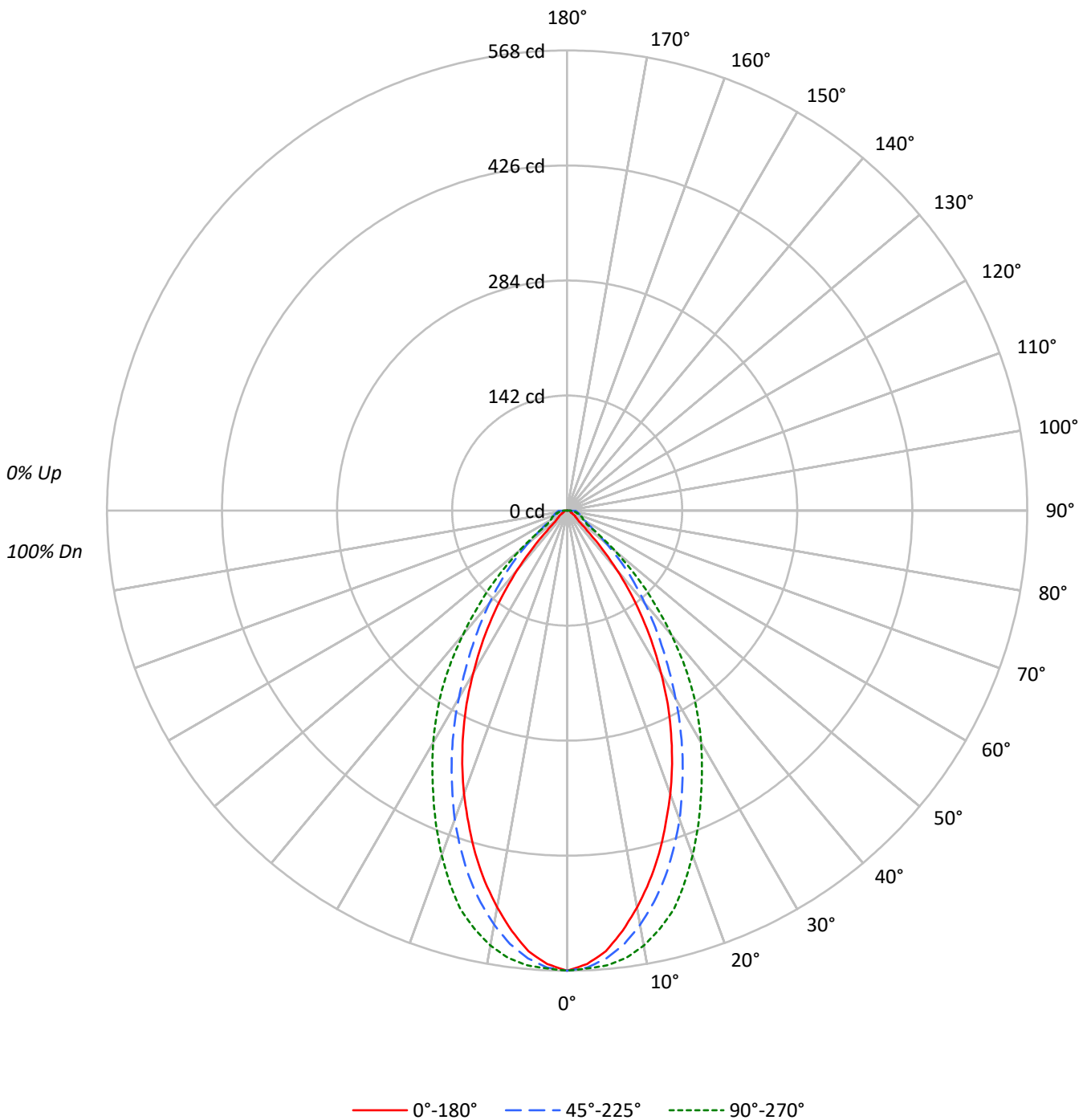
Lumens per Lamp: N/A
Luminaire Lumens: 612.2 lumens
Efficiency: N/A
Efficacy: 23.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	97	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	67	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10479	10479	10479
5°	10115	10277	10438
10°	9316	9723	10214
15°	8375	8937	9727
20°	7307	7969	8888
25°	6179	6867	7953
30°	4937	5702	7046
35°	3652	4582	6053
40°	2305	3589	4822
45°	908	2698	3549
50°	468	1811	2187
55°	386	1190	981
60°	280	963	882
65°	236	904	904
70°	237	939	879
75°	314	1084	934
80°	468	1392	1041
85°	699	2308	1376

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 87.5°
 Luminance: 4611 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.9	8.5
10°-20°	131.2	21.4
20°-30°	155.9	25.5
30°-40°	129.7	21.2
40°-50°	72.4	11.8
50°-60°	29.3	4.8
60°-70°	18.7	3.1
70°-80°	14.0	2.3
80°-90°	9.0	1.5
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°	339.1	55.4
0°-40°	468.7	76.6
0°-60°	570.4	93.2
0°-90°	612.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	612.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	568	568	568	568	568	
5°	546	556	555	559	564	51
15°	438	452	468	492	509	122
25°	304	316	337	363	391	138
35°	162	177	203	237	269	101
45°	35	59	103	121	136	33
55°	12	25	37	36	30	10
65°	5	22	21	20	21	6
75°	4	15	15	14	13	5
85°	3	10	11	10	6	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	567.9	567.9	567.9	567.9	567.9
2.5°	560.3	569.0	564.6	564.6	565.7
5°	546.1	555.9	554.8	559.2	563.5
7.5°	523.3	534.2	539.6	549.4	557.0
10°	497.2	509.2	518.9	534.2	545.1
12.5°	468.9	480.9	495.0	514.6	528.7
15°	438.4	451.5	467.8	491.7	509.2
17.5°	404.7	418.9	437.3	463.5	482.0
20°	372.1	386.2	405.8	431.9	452.6
22.5°	338.3	350.3	371.0	397.1	422.1
25°	303.5	315.5	337.3	363.4	390.6
27.5°	268.7	280.7	302.4	329.6	360.1
30°	231.7	244.8	267.6	298.1	330.7
32.5°	196.9	210.0	233.9	267.6	300.3
35°	162.1	177.3	203.4	237.2	268.7
37.5°	128.4	145.8	175.2	206.7	235.0
40°	95.7	114.2	149.0	176.2	200.2
42.5°	63.1	84.9	125.1	148.0	166.5
45°	34.8	58.7	103.4	120.8	136.0
47.5°	19.6	38.1	81.6	95.7	104.4
50°	16.3	28.3	63.1	72.9	76.2
52.5°	13.1	26.1	47.9	53.3	51.1
55°	12.0	25.0	37.0	35.9	30.5
57.5°	9.8	25.0	29.4	26.1	26.1
60°	7.6	23.9	26.1	22.8	23.9
62.5°	6.5	22.8	23.9	21.8	21.8
65°	5.4	21.8	20.7	19.6	20.7
67.5°	4.4	19.6	19.6	18.5	18.5
70°	4.4	18.5	17.4	16.3	16.3
72.5°	4.4	16.3	16.3	15.2	15.2
75°	4.4	15.2	15.2	14.1	13.1
77.5°	4.4	13.1	14.1	13.1	12.0
80°	4.4	12.0	13.1	12.0	9.8
82.5°	4.4	10.9	12.0	10.9	8.7
85°	3.3	9.8	10.9	9.8	6.5
87.5°	3.3	9.8	10.9	8.7	5.4
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	6.52	7.74	6.89	8.05	8.37	7.60	8.82	7.96	9.13	9.45
	3H	7.86	8.95	8.24	9.28	9.64	9.63	10.71	10.01	11.04	11.41
	4H	8.44	9.45	8.84	9.80	10.19	10.59	11.60	10.99	11.95	12.33
	6H	9.01	9.94	9.43	10.31	10.71	11.54	12.47	11.95	12.84	13.23
	8H	9.34	10.22	9.78	10.61	11.02	11.99	12.87	12.42	13.26	13.66
	12H	9.65	10.50	10.09	10.88	11.31	12.41	13.25	12.84	13.63	14.06
4H	2H	7.49	8.50	7.89	8.85	9.24	8.28	9.29	8.68	9.64	10.03
	3H	9.52	10.35	9.93	10.76	11.16	10.56	11.39	10.97	11.80	12.20
	4H	10.60	11.35	11.04	11.77	12.21	11.71	12.46	12.14	12.88	13.32
	6H	11.48	12.13	11.94	12.57	13.04	12.88	13.53	13.35	13.98	14.45
	8H	11.89	12.50	12.37	12.95	13.42	13.45	14.05	13.92	14.50	14.97
	12H	12.28	12.81	12.77	13.30	13.77	13.99	14.52	14.48	15.01	15.48
8H	4H	11.37	11.97	11.84	12.42	12.89	12.26	12.86	12.73	13.31	13.78
	6H	12.72	13.21	13.22	13.71	14.19	13.72	14.22	14.22	14.71	15.20
	8H	13.44	13.88	13.96	14.40	14.89	14.48	14.93	15.01	15.45	15.94
	12H	14.13	14.53	14.65	15.02	15.59	15.27	15.66	15.79	16.16	16.73
12H	4H	11.53	12.06	12.01	12.54	13.02	12.37	12.90	12.85	13.38	13.86
	6H	13.04	13.49	13.57	14.00	14.50	13.95	14.39	14.47	14.91	15.40
	8H	13.95	14.34	14.46	14.84	15.41	14.86	15.25	15.37	15.75	16.32