

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: P1058061

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058061
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)
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-W
Description: DEFINE 2 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

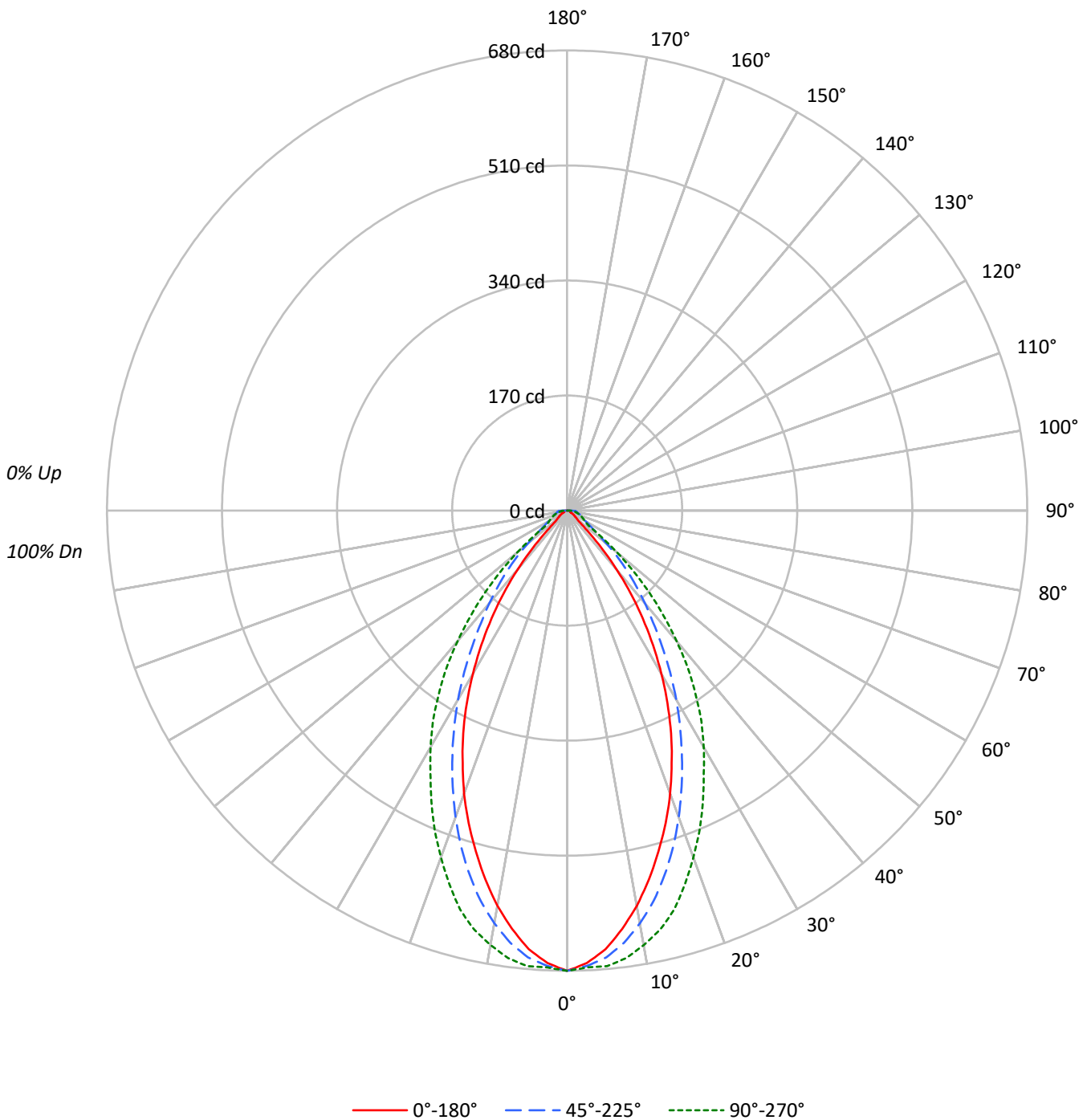
Lumens per Lamp: N/A
Luminaire Lumens: 740.3 lumens
Efficiency: N/A
Efficacy: 28.7 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	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	97	98	96	95	95	93	92	90					90			
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81					81			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74					74			
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67					67			
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61					61			
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56					56			
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52					52			
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48					48			
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45					45			
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42					42			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12550	12550	12550
5°	12053	12275	12516
10°	11111	11602	12213
15°	9957	10643	11663
20°	8740	9467	10706
25°	7399	8175	9659
30°	5936	6863	8602
35°	4388	5490	7452
40°	2753	4300	6056
45°	1080	3238	4486
50°	531	2187	2750
55°	421	1435	1226
60°	321	1166	1126
65°	236	1092	1092
70°	291	1117	1117
75°	314	1241	1162
80°	468	1615	1275
85°	932	2774	1842

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 87.5°
 Luminance: 5076 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.1	8.4
10°-20°	157.0	21.2
20°-30°	187.9	25.4
30°-40°	158.1	21.4
40°-50°	90.0	12.2
50°-60°	35.5	4.8
60°-70°	22.4	3.0
70°-80°	16.6	2.2
80°-90°	10.6	1.4
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°	407.0	55.0
0°-40°	565.1	76.3
0°-60°	690.7	93.3
0°-90°	740.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	740.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	680	680	680	680	680	
5°	651	665	663	670	676	60
15°	521	540	557	590	610	145
25°	363	380	402	443	474	166
35°	195	212	244	296	331	121
45°	41	73	124	156	172	39
55°	13	28	45	46	38	12
65°	5	25	25	24	25	6
75°	4	17	17	16	16	5
85°	4	12	13	12	9	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	680.1	680.1	680.1	680.1	680.1
2.5°	669.2	681.2	673.6	674.7	675.7
5°	650.7	664.9	662.7	670.3	675.7
7.5°	623.5	638.8	644.2	657.2	667.0
10°	593.0	610.5	619.2	639.8	651.8
12.5°	558.2	577.8	590.9	617.0	634.4
15°	521.2	539.7	557.1	589.8	610.5
17.5°	484.2	502.7	521.2	557.1	578.9
20°	445.1	462.5	482.1	520.1	545.2
22.5°	403.7	422.2	441.8	481.0	511.4
25°	363.4	379.8	401.5	442.9	474.4
27.5°	321.0	337.3	361.3	403.7	437.4
30°	278.6	294.9	322.1	365.6	403.7
32.5°	236.1	253.5	282.9	330.8	368.9
35°	194.8	212.2	243.7	296.0	330.8
37.5°	154.5	174.1	208.9	260.1	292.7
40°	114.3	137.1	178.5	224.2	251.4
42.5°	76.2	104.5	150.2	188.3	211.1
45°	41.4	72.9	124.1	155.6	171.9
47.5°	22.9	46.8	99.0	124.1	133.8
50°	18.5	32.6	76.2	94.7	95.8
52.5°	15.2	29.4	56.6	67.5	62.0
55°	13.1	28.3	44.6	45.7	38.1
57.5°	10.9	27.2	37.0	32.6	32.6
60°	8.7	27.2	31.6	29.4	30.5
62.5°	6.5	27.2	28.3	26.1	27.2
65°	5.4	25.0	25.0	23.9	25.0
67.5°	5.4	22.9	22.9	21.8	22.9
70°	5.4	21.8	20.7	20.7	20.7
72.5°	4.4	19.6	19.6	18.5	18.5
75°	4.4	17.4	17.4	16.3	16.3
77.5°	4.4	16.3	16.3	15.2	14.1
80°	4.4	14.1	15.2	14.1	12.0
82.5°	4.4	13.1	14.1	13.1	9.8
85°	4.4	12.0	13.1	12.0	8.7
87.5°	3.3	12.0	12.0	9.8	6.5
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	6.48	7.70	6.85	8.01	8.33	8.50	9.72	8.86	10.03	10.34
	3H	8.02	9.11	8.41	9.44	9.81	10.48	11.56	10.86	11.89	12.26
	4H	8.58	9.60	8.99	9.95	10.33	11.39	12.40	11.80	12.75	13.14
	6H	9.14	10.07	9.56	10.45	10.84	12.27	13.20	12.69	13.57	13.97
	8H	9.44	10.32	9.87	10.71	11.12	12.68	13.56	13.11	13.95	14.36
	12H	9.81	10.65	10.24	11.03	11.46	13.12	13.96	13.55	14.35	14.78
4H	2H	7.66	8.68	8.07	9.03	9.41	9.12	10.13	9.52	10.48	10.86
	3H	9.87	10.70	10.28	11.11	11.51	11.37	12.20	11.78	12.61	13.01
	4H	10.92	11.67	11.36	12.09	12.53	12.44	13.19	12.87	13.61	14.05
	6H	11.82	12.46	12.28	12.91	13.38	13.55	14.19	14.01	14.64	15.11
	8H	12.21	12.81	12.68	13.26	13.73	14.07	14.68	14.54	15.13	15.60
	12H	12.63	13.17	13.12	13.65	14.13	14.65	15.18	15.14	15.67	16.14
8H	4H	11.72	12.33	12.19	12.78	13.25	12.93	13.54	13.40	13.98	14.46
	6H	13.10	13.60	13.60	14.10	14.58	14.32	14.82	14.83	15.32	15.80
	8H	13.82	14.27	14.35	14.79	15.28	15.07	15.51	15.59	16.03	16.52
	12H	14.58	14.98	15.10	15.47	16.04	15.90	16.30	16.42	16.79	17.36
12H	4H	11.88	12.42	12.37	12.90	13.38	13.03	13.56	13.52	14.05	14.52
	6H	13.43	13.88	13.95	14.39	14.89	14.54	14.99	15.06	15.50	16.00
	8H	14.35	14.74	14.87	15.24	15.81	15.43	15.82	15.95	16.32	16.89