

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: P1058067

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058067
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-55)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D850-X4F0-XX-UDD-WVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

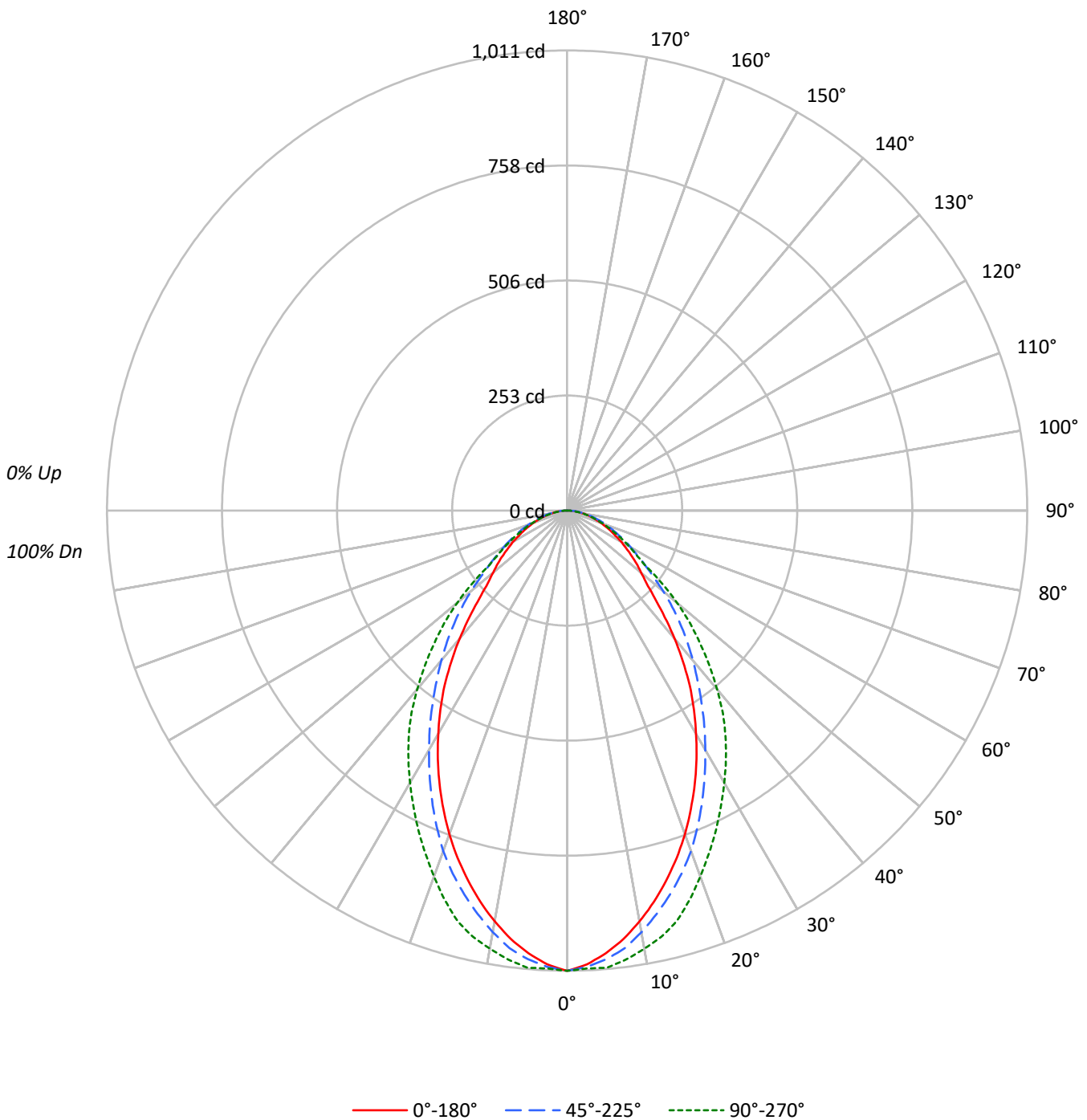
Lumens per Lamp: N/A
Luminaire Lumens: 1648.4 lumens
Efficiency: N/A
Efficacy: 63.9 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37
10	59	47	40	35	58	46	40	35	46	39	35	45	39	35	44	38	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18657	18657	18657
5°	18084	18327	18669
10°	17173	17622	18314
15°	16076	16679	17822
20°	14859	15629	16803
25°	13503	14301	15761
30°	12070	12927	14710
35°	10581	11585	13667
40°	8852	10346	12335
45°	7093	9165	10783
50°	6086	7897	9051
55°	5562	6717	6682
60°	5056	5938	5820
65°	4606	5318	5078
70°	4224	4866	4516
75°	3950	4499	3950
80°	3698	4155	3464
85°	3684	4383	2985

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 10783 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.3	5.7
10°-20°	247.1	15.0
20°-30°	325.9	19.8
30°-40°	328.2	19.9
40°-50°	267.1	16.2
50°-60°	182.1	11.0
60°-70°	118.2	7.2
70°-80°	65.1	3.9
80°-90°	21.2	1.3
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°	666.4	40.4
0°-40°	994.6	60.3
0°-60°	1443.9	87.6
0°-90°	1648.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1648.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1011	1011	1011	1011	1011	
5°	976	995	989	998	1008	91
15°	842	863	873	909	933	236
25°	663	685	702	734	774	304
35°	470	494	514	559	607	292
45°	272	306	351	382	413	214
55°	173	190	209	210	208	155
65°	106	125	122	115	116	105
75°	55	68	63	56	55	59
85°	17	23	21	16	14	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1011.1	1011.1	1011.1	1011.1	1011.1
2.5°	998.1	1014.4	1003.5	1004.6	1006.8
5°	976.3	994.8	989.4	998.1	1007.9
7.5°	949.2	967.6	969.8	982.9	994.8
10°	916.5	937.2	940.5	960.0	977.4
12.5°	880.7	903.5	907.8	936.1	958.9
15°	841.5	863.3	873.1	908.9	932.9
17.5°	800.2	820.9	836.1	868.7	895.9
20°	756.7	776.3	795.9	825.2	855.7
22.5°	710.0	731.7	750.2	779.6	814.3
25°	663.2	685.0	702.4	733.9	774.1
27.5°	615.4	637.1	654.5	688.2	731.7
30°	566.5	589.3	606.7	644.7	690.4
32.5°	518.6	541.4	561.0	601.2	649.1
35°	469.7	493.6	514.3	558.8	606.7
37.5°	417.5	444.7	470.8	515.4	562.1
40°	367.5	397.9	429.5	470.8	512.1
42.5°	317.5	351.2	390.3	425.1	463.2
45°	271.8	305.5	351.2	381.6	413.2
47.5°	235.9	264.2	313.1	338.1	366.4
50°	212.0	231.6	275.1	294.6	315.3
52.5°	192.4	208.8	239.2	252.2	263.1
55°	172.9	190.3	208.8	209.8	207.7
57.5°	153.3	172.9	182.7	175.0	179.4
60°	137.0	156.6	160.9	153.3	157.7
62.5°	119.6	141.3	141.3	133.7	135.9
65°	105.5	125.0	121.8	115.2	116.3
67.5°	91.3	110.9	105.5	98.9	98.9
70°	78.3	96.8	90.2	83.7	83.7
72.5°	66.3	81.5	77.2	69.6	68.5
75°	55.4	68.5	63.1	56.5	55.4
77.5°	44.6	55.4	51.1	45.7	43.5
80°	34.8	44.6	39.1	34.8	32.6
82.5°	26.1	33.7	29.4	25.0	22.8
85°	17.4	22.8	20.7	16.3	14.1
87.5°	8.7	15.2	13.0	10.9	8.7
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	16.89	18.33	17.25	18.64	18.95	17.13	18.57	17.50	18.88	19.20
	3H	18.41	19.70	18.79	20.03	20.39	18.49	19.78	18.87	20.11	20.47
	4H	18.98	20.18	19.38	20.53	20.91	18.97	20.18	19.37	20.53	20.91
	6H	19.40	20.51	19.81	20.88	21.27	19.32	20.43	19.73	20.80	21.19
	8H	19.55	20.61	19.98	21.00	21.40	19.43	20.48	19.85	20.87	21.28
	12H	19.67	20.68	20.10	21.06	21.49	19.50	20.51	19.93	20.89	21.32
4H	2H	17.46	18.66	17.86	19.01	19.39	17.66	18.86	18.06	19.21	19.59
	3H	19.26	20.26	19.67	20.66	21.06	19.23	20.23	19.64	20.63	21.03
	4H	20.00	20.90	20.44	21.32	21.76	19.82	20.72	20.26	21.14	21.58
	6H	20.59	21.37	21.05	21.81	22.28	20.29	21.07	20.75	21.52	21.98
	8H	20.80	21.53	21.27	21.97	22.44	20.44	21.17	20.91	21.62	22.09
	12H	20.97	21.61	21.45	22.09	22.57	20.55	21.20	21.04	21.68	22.15
8H	4H	20.27	21.00	20.73	21.44	21.91	20.11	20.84	20.58	21.29	21.76
	6H	21.02	21.63	21.52	22.12	22.60	20.71	21.31	21.20	21.80	22.28
	8H	21.35	21.89	21.87	22.40	22.89	20.93	21.47	21.44	21.98	22.47
	12H	21.63	22.11	22.14	22.60	23.17	21.11	21.59	21.62	22.08	22.65
12H	4H	20.28	20.93	20.77	21.41	21.88	20.15	20.80	20.63	21.28	21.75
	6H	21.07	21.61	21.59	22.12	22.61	20.77	21.31	21.29	21.83	22.31
	8H	21.47	21.94	21.98	22.44	23.00	21.06	21.54	21.57	22.03	22.60