

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: P1058064

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058064
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-56)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122RDRP-S675D850-X4F0-XX-UDD-SVL-W
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

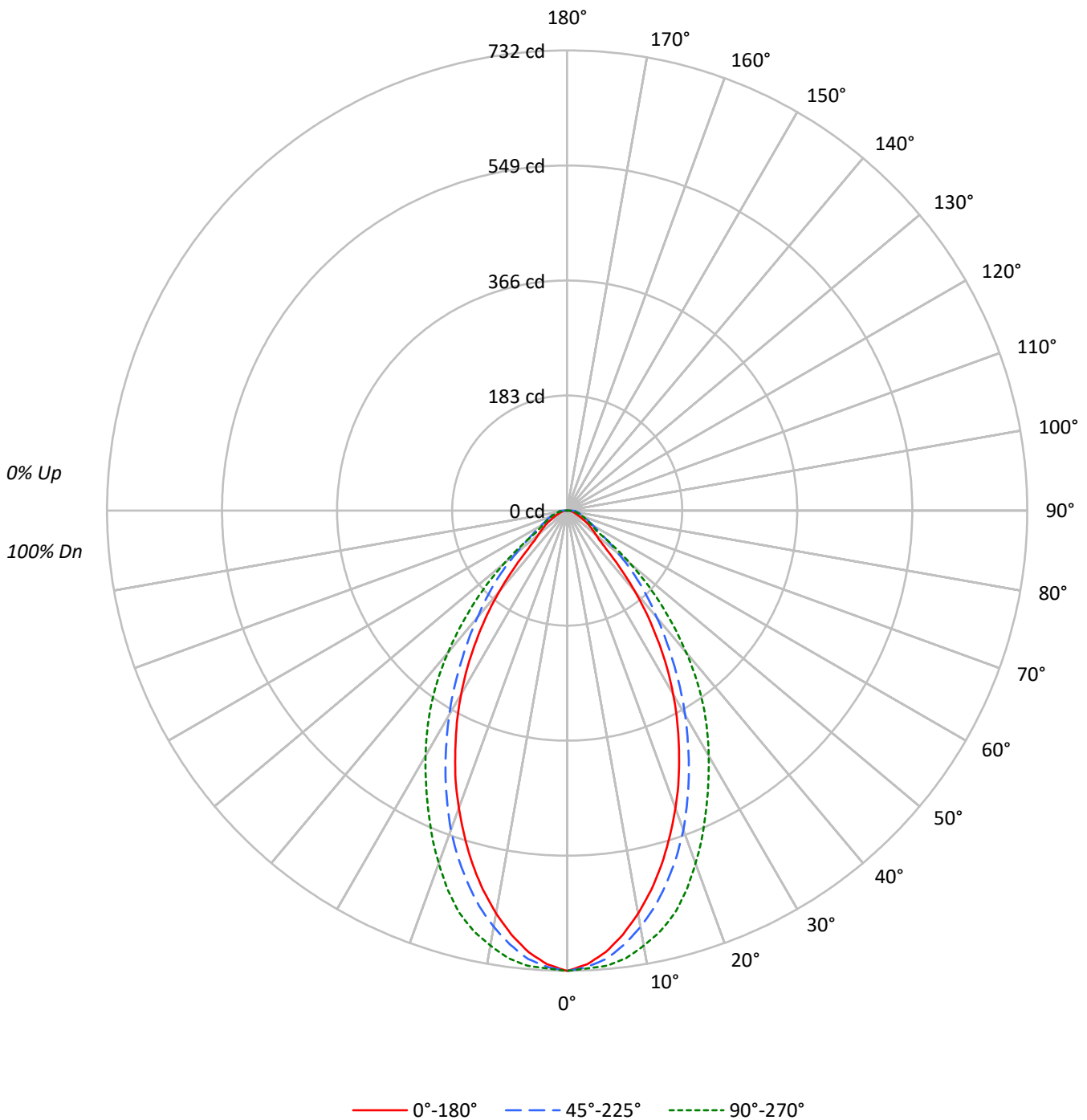
Lumens per Lamp: N/A
Luminaire Lumens: 888.1 lumens
Efficiency: N/A
Efficacy: 34.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 0.98 / 0.95
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13511	13511	13511
5°	13059	13261	13461
10°	12190	12597	13168
15°	11118	11701	12656
20°	9891	10618	11729
25°	8572	9325	10654
30°	7187	7997	9597
35°	5661	6616	8504
40°	4035	5345	7101
45°	2385	4230	5509
50°	1717	3060	3749
55°	1435	2204	1888
60°	1163	1768	1605
65°	952	1567	1471
70°	820	1527	1408
75°	777	1554	1397
80°	808	1849	1498
85°	1143	2985	1842

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5509 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.2	7.6
10°-20°	172.5	19.4
20°-30°	212.8	24.0
30°-40°	189.3	21.3
40°-50°	120.8	13.6
50°-60°	58.0	6.5
60°-70°	34.1	3.8
70°-80°	21.7	2.4
80°-90°	11.6	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°	452.5	51.0
0°-40°	641.8	72.3
0°-60°	820.7	92.4
0°-90°	888.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	888.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	732	732	732	732	732	
5°	705	718	716	720	727	66
15°	582	596	612	641	662	162
25°	421	437	458	491	523	193
35°	251	271	294	338	378	156
45°	91	119	162	188	211	77
55°	45	58	68	66	59	40
65°	22	39	36	33	34	22
75°	11	24	22	21	20	12
85°	5	13	14	12	9	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	732.2	732.2	732.2	732.2	732.2
2.5°	722.4	734.3	726.7	726.7	728.9
5°	705.0	718.0	715.9	720.2	726.7
7.5°	680.0	694.1	696.3	708.2	718.0
10°	650.6	665.8	672.3	689.7	702.8
12.5°	617.9	633.2	645.1	666.9	685.4
15°	582.0	596.2	612.5	640.8	662.5
17.5°	542.9	561.4	577.7	607.1	632.1
20°	503.7	521.1	540.7	569.0	597.3
22.5°	463.5	479.8	499.4	528.7	561.4
25°	421.0	437.3	458.0	490.7	523.3
27.5°	379.7	396.0	415.6	451.5	486.3
30°	337.3	353.6	375.3	412.3	450.4
32.5°	294.8	312.2	334.0	374.2	414.5
35°	251.3	270.9	293.7	338.3	377.5
37.5°	208.9	228.5	256.7	300.3	337.3
40°	167.5	190.4	221.9	261.1	294.8
42.5°	127.3	152.3	191.5	223.0	252.4
45°	91.4	118.6	162.1	188.2	211.1
47.5°	69.6	89.2	133.8	154.5	170.8
50°	59.8	71.8	106.6	121.8	130.6
52.5°	52.2	63.1	84.9	92.5	92.5
55°	44.6	57.7	68.5	66.4	58.7
57.5°	38.1	52.2	56.6	47.9	50.0
60°	31.5	47.9	47.9	42.4	43.5
62.5°	26.1	44.6	41.3	37.0	38.1
65°	21.8	39.2	35.9	32.6	33.7
67.5°	17.4	34.8	31.5	29.4	29.4
70°	15.2	31.5	28.3	26.1	26.1
72.5°	13.1	27.2	25.0	22.8	22.8
75°	10.9	23.9	21.8	20.7	19.6
77.5°	9.8	20.7	19.6	17.4	16.3
80°	7.6	17.4	17.4	16.3	14.1
82.5°	6.5	15.2	15.2	14.1	12.0
85°	5.4	13.1	14.1	12.0	8.7
87.5°	4.4	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	10.72	11.99	11.08	12.30	12.62	10.51	11.79	10.87	12.10	12.41
	3H	11.95	13.08	12.33	13.41	13.78	12.10	13.24	12.48	13.57	13.93
	4H	12.40	13.46	12.80	13.81	14.19	12.82	13.88	13.22	14.23	14.61
	6H	12.78	13.75	13.19	14.12	14.52	13.47	14.44	13.88	14.81	15.21
	8H	12.93	13.86	13.36	14.25	14.65	13.80	14.72	14.23	15.11	15.52
	12H	13.09	13.97	13.52	14.35	14.78	14.10	14.98	14.53	15.36	15.79
4H	2H	11.26	12.32	11.67	12.67	13.06	11.10	12.16	11.50	12.51	12.90
	3H	12.96	13.83	13.37	14.23	14.64	12.94	13.81	13.35	14.21	14.62
	4H	13.75	14.53	14.19	14.95	15.40	13.81	14.59	14.25	15.01	15.46
	6H	14.40	15.07	14.86	15.52	15.99	14.65	15.33	15.12	15.78	16.24
	8H	14.65	15.28	15.12	15.73	16.20	15.08	15.71	15.55	16.16	16.63
	12H	14.89	15.45	15.38	15.93	16.41	15.48	16.04	15.97	16.52	17.00
8H	4H	14.17	14.81	14.64	15.25	15.72	14.23	14.86	14.70	15.31	15.78
	6H	15.15	15.67	15.65	16.17	16.65	15.31	15.83	15.81	16.33	16.81
	8H	15.64	16.11	16.16	16.62	17.11	15.90	16.37	16.43	16.89	17.38
	12H	16.14	16.55	16.66	17.05	17.62	16.51	16.92	17.02	17.41	17.99
12H	4H	14.24	14.80	14.73	15.28	15.76	14.31	14.87	14.79	15.35	15.82
	6H	15.32	15.79	15.84	16.30	16.79	15.48	15.94	16.00	16.46	16.95
	8H	15.95	16.37	16.47	16.86	17.43	16.19	16.60	16.70	17.09	17.67