

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: P1058148

Luminaire Tested: S122RDRP-S865D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1058148
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-S865D850-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

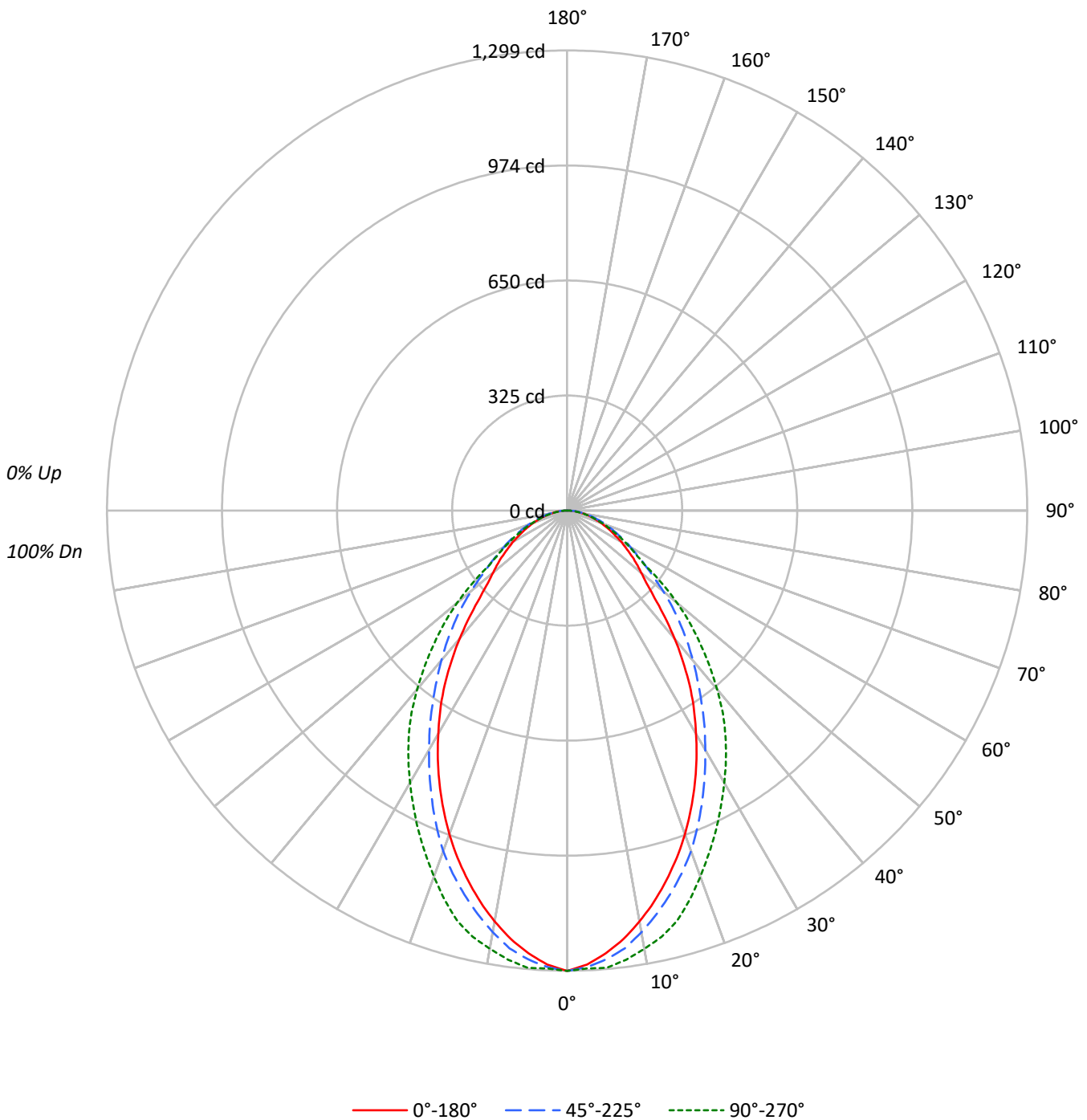
Lumens per Lamp: N/A
Luminaire Lumens: 2118.3 lumens
Efficiency: N/A
Efficacy: 60.5 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	73	92	84	77	72	81	75	71	78	74	70	76	72	68	67
4	88	77	69	64	85	76	69	63	73	67	62	71	66	62	69	65	61	59
5	81	70	62	56	80	69	62	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	40	35	58	46	40	35	46	39	35	45	39	35	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23977	23977	23977
5°	23241	23550	23991
10°	22069	22646	23536
15°	20658	21432	22901
20°	19095	20082	21593
25°	17353	18377	20254
30°	15509	16611	18904
35°	13597	14888	17562
40°	11374	13294	15852
45°	9115	11777	13854
50°	7820	10148	11632
55°	7148	8631	8586
60°	6495	7632	7477
65°	5916	6833	6528
70°	5428	6258	5805
75°	5083	5775	5083
80°	4750	5345	4452
85°	4742	5611	3853

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13854 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.9	5.7
10°-20°	317.6	15.0
20°-30°	418.9	19.8
30°-40°	421.8	19.9
40°-50°	343.3	16.2
50°-60°	234.1	11.0
60°-70°	151.9	7.2
70°-80°	83.7	3.9
80°-90°	27.3	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°	856.4	40.4
0°-40°	1278.1	60.3
0°-60°	1855.5	87.6
0°-90°	2118.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2118.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1299	1299	1299	1299	1299	
5°	1255	1278	1271	1283	1295	117
15°	1081	1109	1122	1168	1199	303
25°	852	880	903	943	995	391
35°	604	634	661	718	780	375
45°	349	393	451	490	531	275
55°	222	244	268	270	267	199
65°	136	161	156	148	150	135
75°	71	88	81	73	71	76
85°	22	29	26	21	18	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1299.4	1299.4	1299.4	1299.4	1299.4
2.5°	1282.6	1303.6	1289.6	1291.0	1293.8
5°	1254.7	1278.4	1271.4	1282.6	1295.2
7.5°	1219.7	1243.5	1246.3	1263.0	1278.4
10°	1177.8	1204.4	1208.6	1233.7	1256.1
12.5°	1131.7	1161.1	1166.6	1203.0	1232.3
15°	1081.4	1109.4	1121.9	1168.0	1198.8
17.5°	1028.3	1054.9	1074.4	1116.3	1151.3
20°	972.4	997.6	1022.7	1060.5	1099.6
22.5°	912.4	940.3	964.1	1001.8	1046.5
25°	852.3	880.2	902.6	943.1	994.8
27.5°	790.8	818.7	841.1	884.4	940.3
30°	727.9	757.3	779.6	828.5	887.2
32.5°	666.5	695.8	720.9	772.6	834.1
35°	603.6	634.3	660.9	718.1	779.6
37.5°	536.5	571.4	605.0	662.3	722.3
40°	472.2	511.4	551.9	605.0	658.1
42.5°	408.0	451.3	501.6	546.3	595.2
45°	349.3	392.6	451.3	490.4	530.9
47.5°	303.2	339.5	402.4	434.5	470.8
50°	272.4	297.6	353.5	378.6	405.2
52.5°	247.3	268.3	307.4	324.1	338.1
55°	222.2	244.5	268.3	269.7	266.9
57.5°	197.0	222.2	234.7	224.9	230.5
60°	176.0	201.2	206.8	197.0	202.6
62.5°	153.7	181.6	181.6	171.9	174.6
65°	135.5	160.7	156.5	148.1	149.5
67.5°	117.4	142.5	135.5	127.1	127.1
70°	100.6	124.3	116.0	107.6	107.6
72.5°	85.2	104.8	99.2	89.4	88.0
75°	71.3	88.0	81.0	72.7	71.3
77.5°	57.3	71.3	65.7	58.7	55.9
80°	44.7	57.3	50.3	44.7	41.9
82.5°	33.5	43.3	37.7	32.1	29.3
85°	22.4	29.3	26.5	21.0	18.2
87.5°	11.2	19.6	16.8	14.0	11.2
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	17.76	19.20	18.12	19.51	19.82	18.00	19.44	18.37	19.75	20.07
	3H	19.29	20.57	19.66	20.90	21.26	19.36	20.65	19.74	20.98	21.34
	4H	19.85	21.05	20.25	21.40	21.78	19.84	21.05	20.24	21.40	21.78
	6H	20.27	21.38	20.69	21.75	22.14	20.19	21.30	20.60	21.67	22.06
	8H	20.42	21.48	20.85	21.87	22.27	20.30	21.36	20.73	21.75	22.15
	12H	20.54	21.55	20.97	21.93	22.36	20.37	21.38	20.80	21.76	22.19
4H	2H	18.33	19.54	18.73	19.88	20.27	18.53	19.73	18.93	20.08	20.46
	3H	20.13	21.13	20.55	21.53	21.94	20.10	21.10	20.51	21.50	21.90
	4H	20.88	21.77	21.31	22.19	22.63	20.70	21.59	21.13	22.01	22.45
	6H	21.46	22.24	21.92	22.69	23.15	21.17	21.95	21.62	22.39	22.85
	8H	21.67	22.40	22.14	22.85	23.31	21.32	22.04	21.78	22.49	22.96
	12H	21.84	22.49	22.32	22.97	23.44	21.42	22.07	21.91	22.55	23.03
8H	4H	21.14	21.87	21.61	22.31	22.78	20.99	21.72	21.45	22.16	22.63
	6H	21.90	22.50	22.40	22.99	23.47	21.58	22.18	22.08	22.67	23.15
	8H	22.22	22.76	22.74	23.27	23.76	21.80	22.34	22.32	22.85	23.34
	12H	22.50	22.98	23.01	23.47	24.04	21.98	22.46	22.49	22.95	23.52
12H	4H	21.15	21.80	21.64	22.28	22.76	21.02	21.67	21.50	22.15	22.62
	6H	21.94	22.48	22.46	22.99	23.48	21.65	22.19	22.16	22.70	23.19
	8H	22.34	22.82	22.85	23.31	23.88	21.93	22.41	22.44	22.90	23.47