

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: P1058130

Luminaire Tested: S122RDRP-S865D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058130  
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-S865D835-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: -

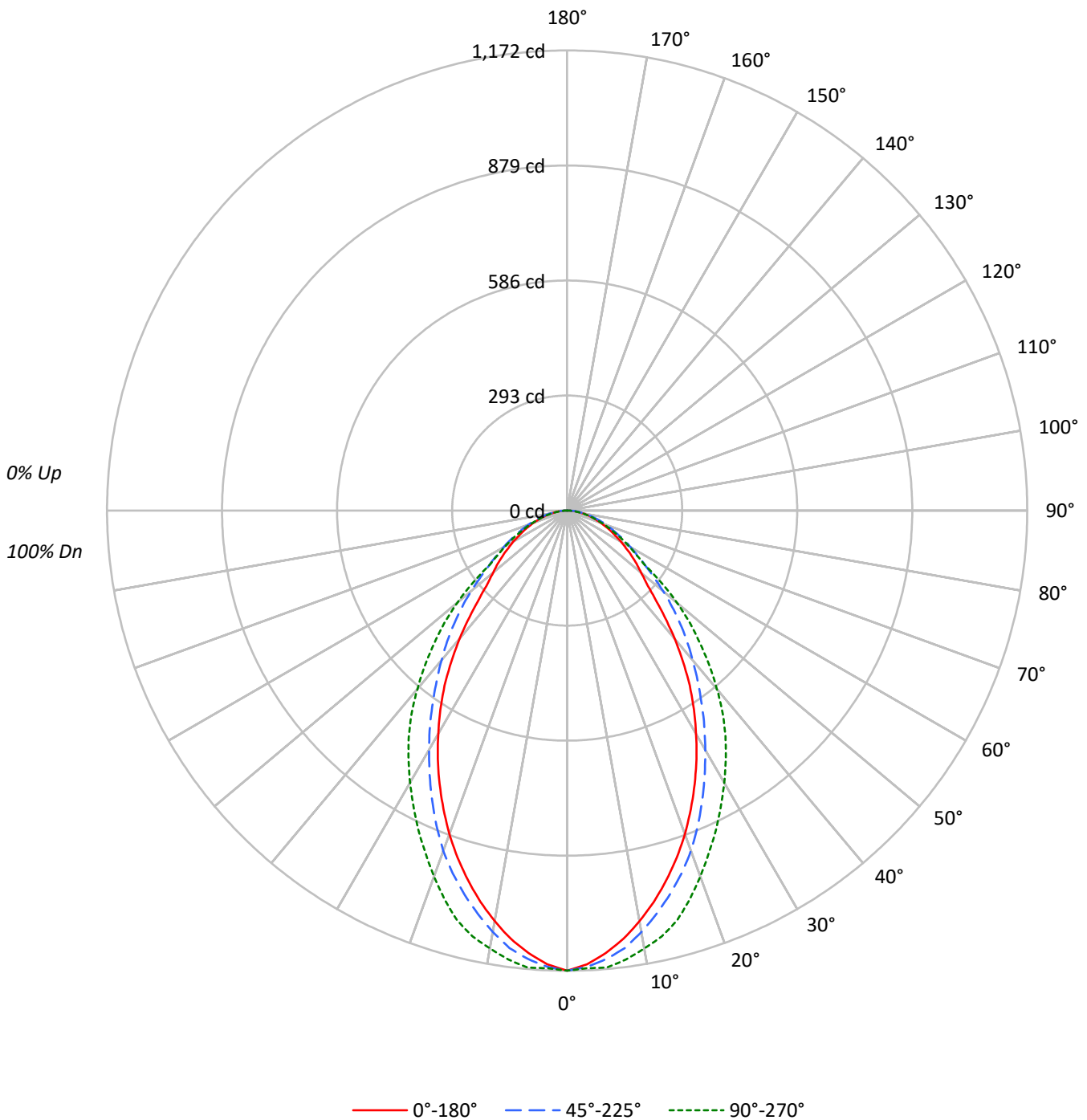
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1910.1 lumens  
Efficiency: N/A  
Efficacy: 54.6 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<sub>in</sub>): 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°	21621	21621	21621
5°	20955	21237	21633
10°	19901	20420	21222
15°	18628	19327	20651
20°	17219	18109	19470
25°	15647	16571	18263
30°	13986	14979	17046
35°	12261	13423	15836
40°	10257	11986	14294
45°	8220	10618	12492
50°	7053	9149	10490
55°	6444	7782	7740
60°	5857	6883	6743
65°	5336	6161	5886
70°	4893	5643	5233
75°	4584	5212	4584
80°	4282	4824	4017
85°	4277	5060	3472

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 12492 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.1	5.7
10°-20°	286.4	15.0
20°-30°	377.7	19.8
30°-40°	380.3	19.9
40°-50°	309.5	16.2
50°-60°	211.1	11.0
60°-70°	137.0	7.2
70°-80°	75.4	3.9
80°-90°	24.6	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°	772.2	40.4
0°-40°	1152.5	60.3
0°-60°	1673.1	87.6
0°-90°	1910.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1910.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1172	1172	1172	1172	1172	
5°	1131	1153	1146	1156	1168	106
15°	975	1000	1012	1053	1081	273
25°	768	794	814	850	897	352
35°	544	572	596	648	703	338
45°	315	354	407	442	479	248
55°	200	220	242	243	241	179
65°	122	145	141	134	135	121
75°	64	79	73	66	64	68
85°	20	26	24	19	16	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1171.7	1171.7	1171.7	1171.7	1171.7
2.5°	1156.5	1175.4	1162.8	1164.1	1166.6
5°	1131.3	1152.8	1146.5	1156.5	1167.9
7.5°	1099.9	1121.3	1123.8	1138.9	1152.8
10°	1062.1	1086.0	1089.8	1112.5	1132.6
12.5°	1020.5	1046.9	1052.0	1084.7	1111.2
15°	975.1	1000.3	1011.7	1053.2	1081.0
17.5°	927.3	951.2	968.8	1006.6	1038.1
20°	876.9	899.5	922.2	956.2	991.5
22.5°	822.7	847.9	869.3	903.3	943.6
25°	768.5	793.7	813.9	850.4	897.0
27.5°	713.1	738.3	758.4	797.5	847.9
30°	656.4	682.8	703.0	747.1	800.0
32.5°	600.9	627.4	650.1	696.7	752.1
35°	544.3	572.0	595.9	647.6	703.0
37.5°	483.8	515.3	545.5	597.2	651.3
40°	425.8	461.1	497.6	545.5	593.4
42.5°	367.9	406.9	452.3	492.6	536.7
45°	315.0	354.0	406.9	442.2	478.7
47.5°	273.4	306.1	362.8	391.8	424.6
50°	245.7	268.3	318.7	341.4	365.4
52.5°	223.0	241.9	277.2	292.3	304.9
55°	200.3	220.5	241.9	243.2	240.6
57.5°	177.6	200.3	211.7	202.8	207.9
60°	158.7	181.4	186.5	177.6	182.7
62.5°	138.6	163.8	163.8	155.0	157.5
65°	122.2	144.9	141.1	133.5	134.8
67.5°	105.8	128.5	122.2	114.6	114.6
70°	90.7	112.1	104.6	97.0	97.0
72.5°	76.9	94.5	89.4	80.6	79.4
75°	64.3	79.4	73.1	65.5	64.3
77.5°	51.7	64.3	59.2	52.9	50.4
80°	40.3	51.7	45.4	40.3	37.8
82.5°	30.2	39.1	34.0	29.0	26.5
85°	20.2	26.5	23.9	18.9	16.4
87.5°	10.1	17.6	15.1	12.6	10.1
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	17.40	18.84	17.76	19.15	19.46	17.64	19.08	18.01	19.40	19.71
	3H	18.93	20.21	19.30	20.54	20.90	19.00	20.29	19.38	20.62	20.98
	4H	19.49	20.69	19.89	21.04	21.42	19.48	20.69	19.88	21.04	21.42
	6H	19.91	21.02	20.33	21.39	21.78	19.83	20.94	20.24	21.31	21.70
	8H	20.06	21.12	20.49	21.51	21.91	19.94	21.00	20.37	21.39	21.79
	12H	20.18	21.19	20.61	21.57	22.00	20.01	21.02	20.44	21.40	21.83
4H	2H	17.97	19.17	18.37	19.52	19.90	18.17	19.37	18.57	19.72	20.10
	3H	19.77	20.77	20.18	21.17	21.57	19.74	20.74	20.15	21.14	21.54
	4H	20.52	21.41	20.95	21.83	22.27	20.34	21.23	20.77	21.65	22.09
	6H	21.10	21.88	21.56	22.33	22.79	20.81	21.59	21.26	22.03	22.49
	8H	21.31	22.04	21.78	22.49	22.96	20.96	21.68	21.42	22.13	22.60
	12H	21.48	22.13	21.96	22.61	23.08	21.07	21.71	21.55	22.19	22.67
8H	4H	20.78	21.51	21.25	21.96	22.42	20.63	21.36	21.09	21.80	22.27
	6H	21.54	22.14	22.04	22.63	23.11	21.22	21.82	21.72	22.31	22.79
	8H	21.86	22.40	22.38	22.91	23.40	21.44	21.98	21.96	22.49	22.98
	12H	22.14	22.62	22.66	23.12	23.68	21.62	22.10	22.13	22.59	23.16
12H	4H	20.79	21.44	21.28	21.92	22.40	20.66	21.31	21.14	21.79	22.26
	6H	21.58	22.12	22.10	22.64	23.12	21.29	21.83	21.80	22.34	22.83
	8H	21.98	22.46	22.49	22.95	23.52	21.57	22.05	22.08	22.54	23.11