

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: P1058121

Luminaire Tested: S122RDRP-S865D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1058121  
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-S865D830-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

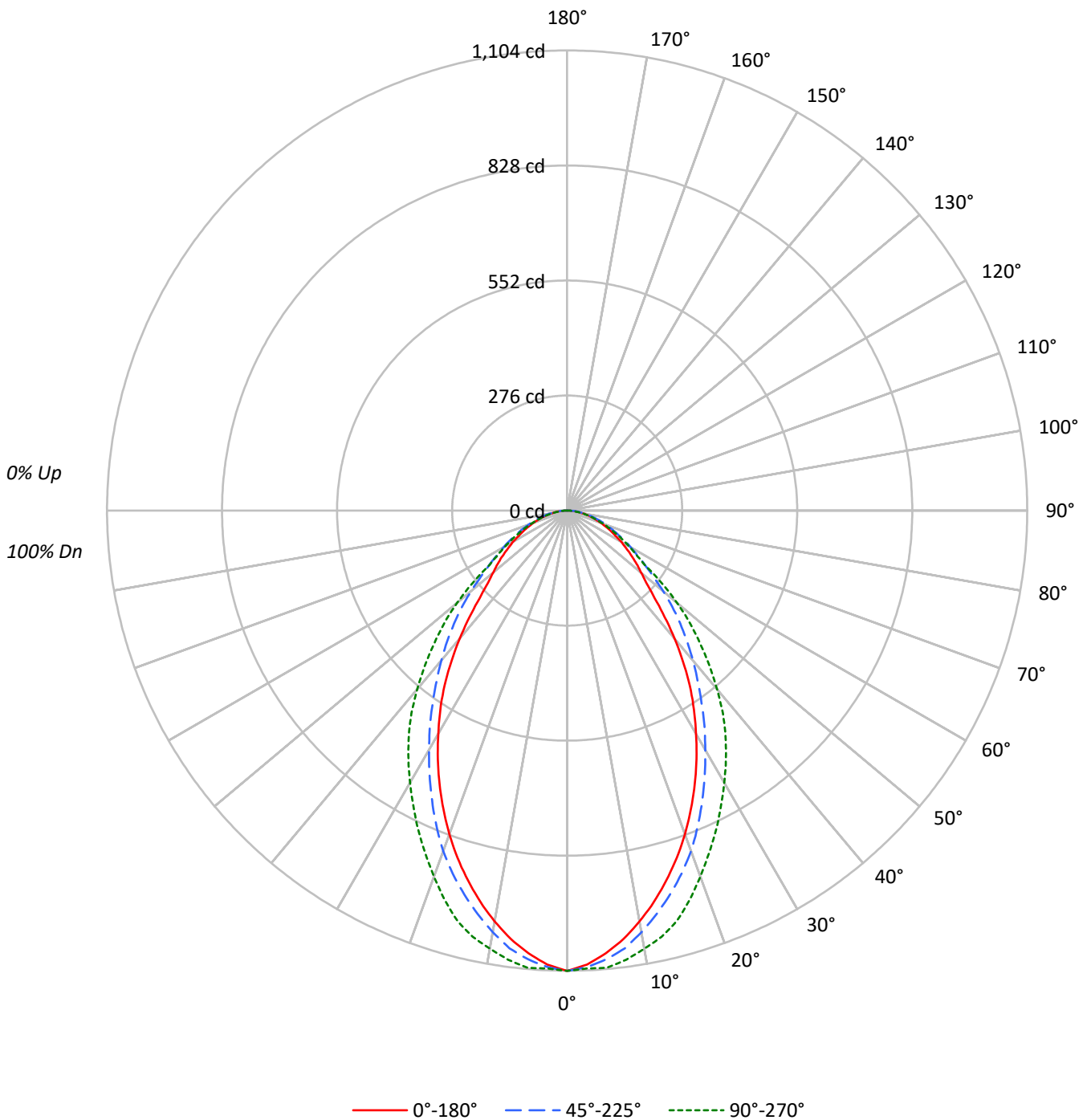
Lumens per Lamp: N/A  
Luminaire Lumens: 1800.4 lumens  
Efficiency: N/A  
Efficacy: 51.4 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 1.05 / 1.05  
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 35  
Input Voltage (V): 120  
Input Current (Ain): 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	100	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	39	35	46	39	35	45	39	35	44	38	34	33

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	20377	20377	20377
5°	19751	20016	20390
10°	18756	19247	20002
15°	17558	18215	19463
20°	16230	17068	18351
25°	14749	15618	17214
30°	13183	14118	16066
35°	11556	12653	14926
40°	9669	11297	13472
45°	7748	10010	11774
50°	6649	8624	9887
55°	6074	7335	7296
60°	5521	6484	6355
65°	5030	5807	5549
70°	4613	5320	4931
75°	4320	4912	4320
80°	4038	4537	3783
85°	4023	4785	3260

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 11774 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.9	5.7
10°-20°	269.9	15.0
20°-30°	356.0	19.8
30°-40°	358.5	19.9
40°-50°	291.8	16.2
50°-60°	198.9	11.0
60°-70°	129.1	7.2
70°-80°	71.1	3.9
80°-90°	23.2	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°	727.8	40.4
0°-40°	1086.3	60.3
0°-60°	1577.0	87.6
0°-90°	1800.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1800.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1104	1104	1104	1104	1104	
5°	1066	1086	1081	1090	1101	100
15°	919	943	954	993	1019	257
25°	724	748	767	802	846	332
35°	513	539	562	610	663	319
45°	297	334	384	417	451	234
55°	189	208	228	229	227	169
65°	115	137	133	126	127	115
75°	61	75	69	62	61	64
85°	19	25	23	18	15	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1104.3	1104.3	1104.3	1104.3	1104.3
2.5°	1090.1	1107.9	1096.0	1097.2	1099.6
5°	1066.3	1086.5	1080.6	1090.1	1100.8
7.5°	1036.7	1056.8	1059.2	1073.5	1086.5
10°	1001.0	1023.6	1027.2	1048.5	1067.5
12.5°	961.8	986.8	991.5	1022.4	1047.3
15°	919.1	942.8	953.5	992.7	1018.8
17.5°	874.0	896.5	913.2	948.8	978.5
20°	826.5	847.8	869.2	901.3	934.5
22.5°	775.4	799.2	819.4	851.4	889.4
25°	724.4	748.1	767.1	801.5	845.5
27.5°	672.1	695.9	714.9	751.7	799.2
30°	618.7	643.6	662.6	704.2	754.0
32.5°	566.4	591.4	612.7	656.7	708.9
35°	513.0	539.1	561.7	610.4	662.6
37.5°	456.0	485.7	514.2	562.9	613.9
40°	401.4	434.6	469.0	514.2	559.3
42.5°	346.7	383.6	426.3	464.3	505.9
45°	296.9	333.7	383.6	416.8	451.2
47.5°	257.7	288.6	342.0	369.3	400.2
50°	231.6	252.9	300.4	321.8	344.4
52.5°	210.2	228.0	261.2	275.5	287.4
55°	188.8	207.8	228.0	229.2	226.8
57.5°	167.4	188.8	199.5	191.2	195.9
60°	149.6	171.0	175.7	167.4	172.2
62.5°	130.6	154.4	154.4	146.1	148.4
65°	115.2	136.6	133.0	125.9	127.1
67.5°	99.7	121.1	115.2	108.1	108.1
70°	85.5	105.7	98.6	91.4	91.4
72.5°	72.4	89.1	84.3	76.0	74.8
75°	60.6	74.8	68.9	61.7	60.6
77.5°	48.7	60.6	55.8	49.9	47.5
80°	38.0	48.7	42.7	38.0	35.6
82.5°	28.5	36.8	32.1	27.3	24.9
85°	19.0	24.9	22.6	17.8	15.4
87.5°	9.5	16.6	14.2	11.9	9.5
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	17.19	18.63	17.56	18.94	19.26	17.44	18.88	17.80	19.19	19.51
	3H	18.72	20.01	19.10	20.34	20.70	18.80	20.08	19.18	20.41	20.78
	4H	19.28	20.49	19.68	20.84	21.22	19.28	20.48	19.68	20.83	21.21
	6H	19.71	20.82	20.12	21.19	21.58	19.63	20.74	20.04	21.11	21.50
	8H	19.86	20.92	20.29	21.31	21.71	19.74	20.79	20.16	21.18	21.58
	12H	19.97	20.98	20.40	21.37	21.80	19.80	20.81	20.23	21.20	21.63
4H	2H	17.76	18.97	18.16	19.32	19.70	17.96	19.17	18.36	19.52	19.90
	3H	19.57	20.57	19.98	20.97	21.37	19.54	20.54	19.95	20.94	21.34
	4H	20.31	21.21	20.74	21.62	22.06	20.13	21.03	20.56	21.45	21.89
	6H	20.90	21.68	21.36	22.12	22.58	20.60	21.38	21.06	21.82	22.29
	8H	21.11	21.84	21.57	22.28	22.75	20.75	21.48	21.22	21.92	22.39
	12H	21.27	21.92	21.76	22.40	22.87	20.86	21.51	21.34	21.99	22.46
8H	4H	20.58	21.30	21.04	21.75	22.22	20.42	21.15	20.89	21.60	22.06
	6H	21.33	21.93	21.83	22.43	22.90	21.01	21.61	21.51	22.11	22.59
	8H	21.66	22.20	22.17	22.71	23.20	21.23	21.77	21.75	22.29	22.77
	12H	21.94	22.41	22.45	22.91	23.47	21.42	21.89	21.93	22.39	22.95
12H	4H	20.59	21.24	21.07	21.72	22.19	20.46	21.11	20.94	21.59	22.06
	6H	21.38	21.92	21.89	22.43	22.92	21.08	21.62	21.60	22.13	22.62
	8H	21.77	22.25	22.28	22.74	23.31	21.37	21.84	21.88	22.34	22.90