

Scaled data based on original data using  
LM-79-2019 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: S122RDR-S865D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
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: S122RDR-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: -

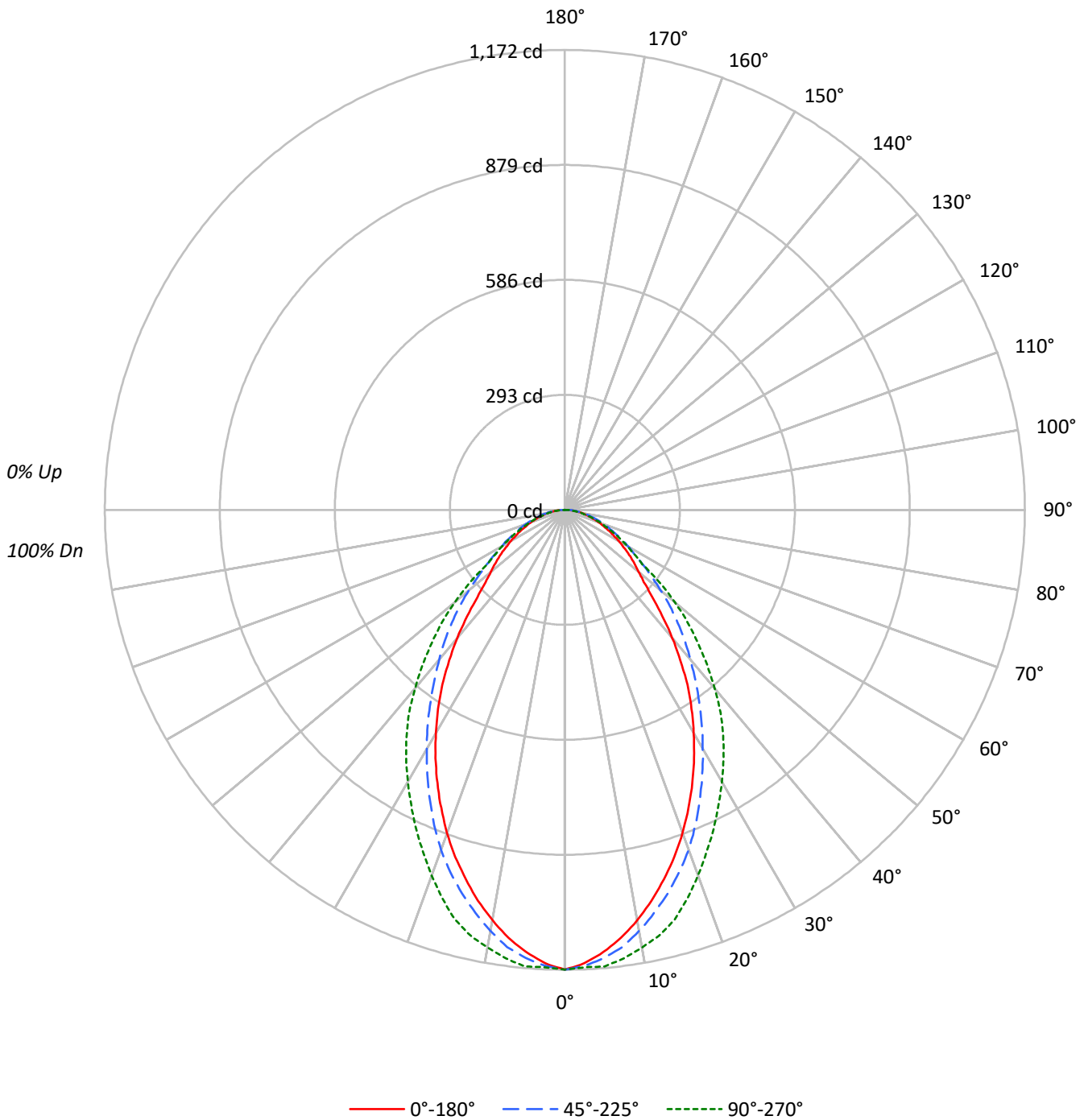
**Summary**

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 (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	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

(END OF REPORT)