

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: P1057821

Luminaire Tested: S122RDR-S1005D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057821  
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: S122RDR-S1005D850-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: -

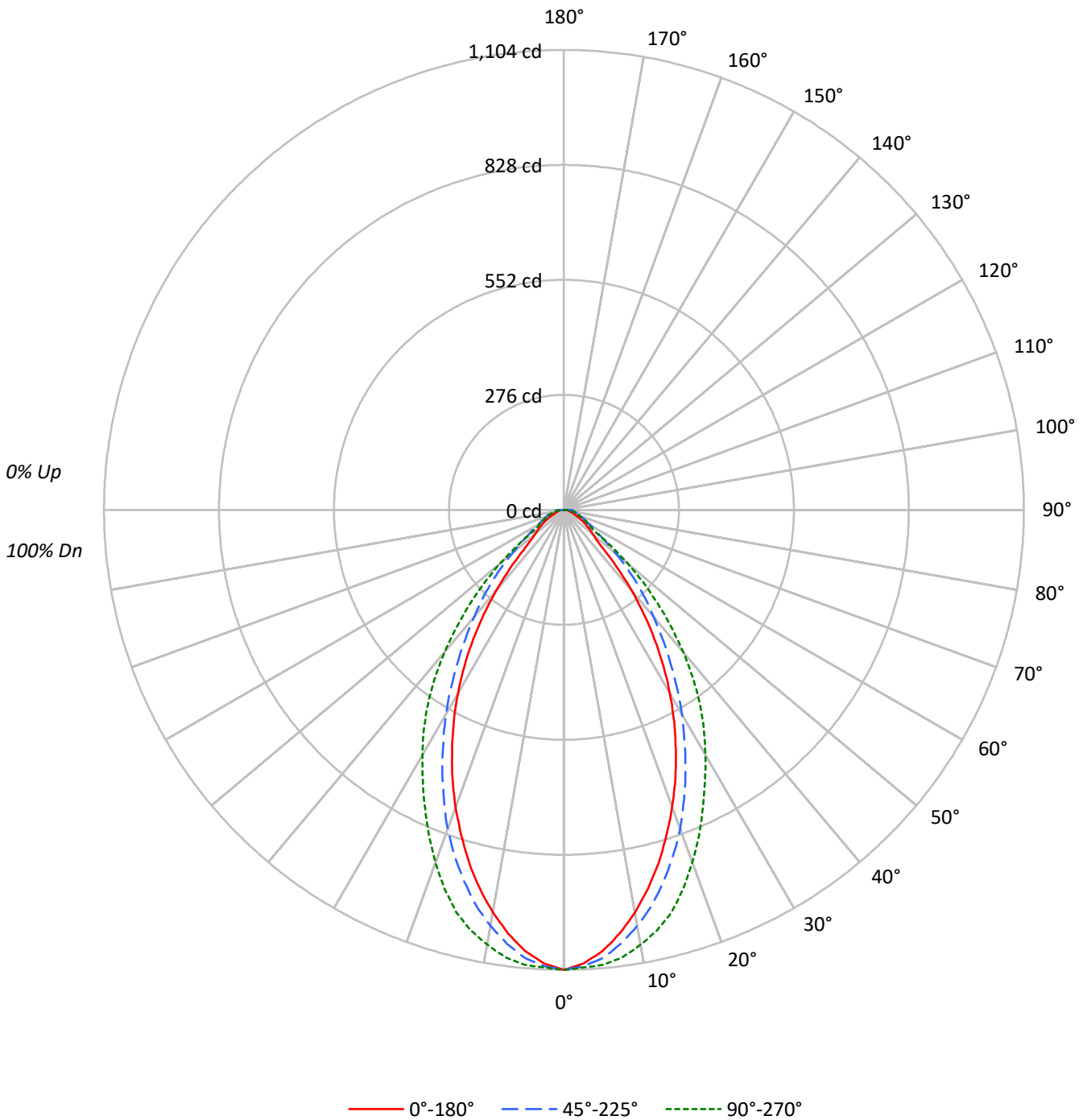
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1339.4 lumens  
Efficiency: N/A  
Efficacy: 32.0 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): 41.8  
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

TEST NUMBER: P1057821

CATALOG NUMBER: S122RDR-S1005D850-X4F0-XX-UDD-SVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1057821

CATALOG NUMBER: S122RDR-S1005D850-X4F0-XX-UDD-SVL-W

**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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				89
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72				72
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59				59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				54
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42				42
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

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

	0°	45°	90°
0°	20375	20375	20375
5°	19694	19997	20301
10°	18385	18999	19859
15°	16769	17646	19088
20°	14918	16014	17689
25°	12929	14065	16068
30°	10837	12062	14474
35°	8537	9979	12824
40°	6087	8062	10710
45°	3596	6380	8306
50°	2589	4616	5652
55°	2165	3326	2850
60°	1757	2665	2421
65°	1432	2362	2222
70°	1241	2304	2126
75°	1169	2338	2103
80°	1222	2795	2263
85°	1736	4510	2774

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 8306 cd/sqm



TEST NUMBER: P1057821

CATALOG NUMBER: S122RDR-S1005D850-X4F0-XX-UDD-SVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.3	7.6
10°-20°	260.2	19.4
20°-30°	321.0	24.0
30°-40°	285.5	21.3
40°-50°	182.2	13.6
50°-60°	87.5	6.5
60°-70°	51.4	3.8
70°-80°	32.8	2.5
80°-90°	17.5	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°	682.5	51.0
0°-40°	968.0	72.3
0°-60°	1237.7	92.4
0°-90°	1339.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1339.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1104	1104	1104	1104	1104	
5°	1063	1083	1080	1086	1096	99
15°	878	899	924	966	999	245
25°	635	660	691	740	789	291
35°	379	408	443	510	569	235
45°	138	179	244	284	318	116
55°	67	87	103	100	89	61
65°	33	59	54	49	51	33
75°	16	36	33	31	30	18
85°	8	20	21	18	13	8
90°	0	0	0	0	0	



TEST NUMBER: P1057821

CATALOG NUMBER: S122RDR-S1005D850-X4F0-XX-UDD-SVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1104.2	1104.2	1104.2	1104.2	1104.2
2.5°	1089.5	1107.5	1096.0	1096.0	1099.3
5°	1063.2	1082.9	1079.6	1086.2	1096.0
7.5°	1025.5	1046.8	1050.1	1068.1	1082.9
10°	981.2	1004.1	1014.0	1040.2	1059.9
12.5°	931.9	954.9	973.0	1005.8	1033.7
15°	877.8	899.1	923.7	966.4	999.2
17.5°	818.7	846.6	871.2	915.5	953.3
20°	759.7	785.9	815.5	858.1	900.8
22.5°	699.0	723.6	753.1	797.4	846.6
25°	635.0	659.6	690.8	740.0	789.2
27.5°	572.6	597.2	626.8	680.9	733.4
30°	508.6	533.2	566.1	621.8	679.3
32.5°	444.6	470.9	503.7	564.4	625.1
35°	379.0	408.5	443.0	510.3	569.3
37.5°	315.0	344.6	387.2	452.8	508.6
40°	252.7	287.1	334.7	393.8	444.6
42.5°	192.0	229.7	288.8	336.4	380.7
45°	137.8	178.8	244.5	283.9	318.3
47.5°	105.0	134.5	201.8	233.0	257.6
50°	90.2	108.3	160.8	183.8	196.9
52.5°	78.8	95.2	128.0	139.5	139.5
55°	67.3	87.0	103.4	100.1	88.6
57.5°	57.4	78.8	85.3	72.2	75.5
60°	47.6	72.2	72.2	64.0	65.6
62.5°	39.4	67.3	62.3	55.8	57.4
65°	32.8	59.1	54.1	49.2	50.9
67.5°	26.3	52.5	47.6	44.3	44.3
70°	23.0	47.6	42.7	39.4	39.4
72.5°	19.7	41.0	37.7	34.5	34.5
75°	16.4	36.1	32.8	31.2	29.5
77.5°	14.8	31.2	29.5	26.3	24.6
80°	11.5	26.3	26.3	24.6	21.3
82.5°	9.8	23.0	23.0	21.3	18.0
85°	8.2	19.7	21.3	18.0	13.1
87.5°	6.6	18.0	18.0	14.8	9.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)