

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: P1057854

Luminaire Tested: S122RDR-S1005D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057854  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-57)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S1005D940-X4F0-XX-UDD-BVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

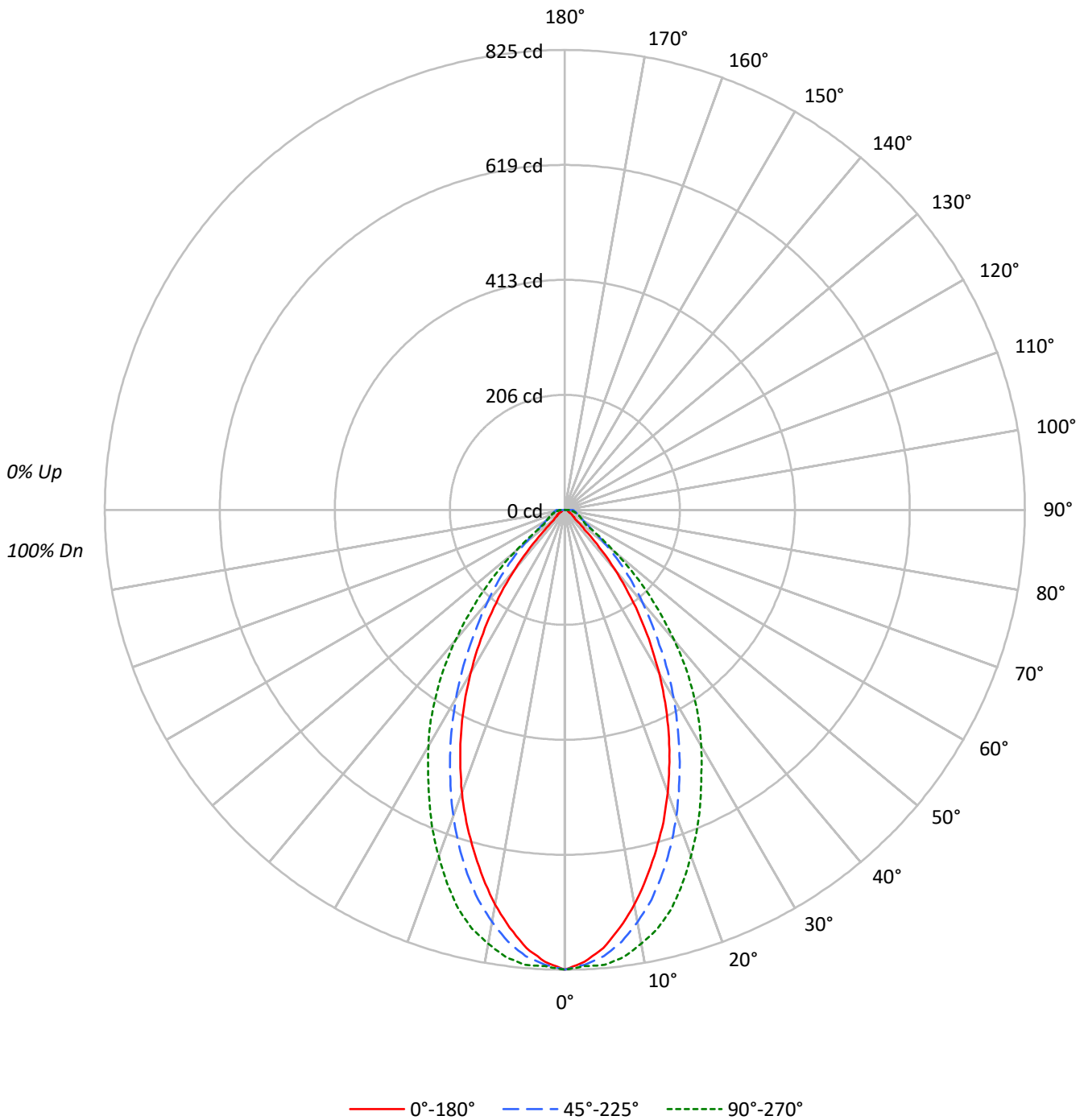
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 897.7 lumens  
Efficiency: N/A  
Efficacy: 21.5 lumens/watt  
Spacing Criteria (0/90/45): 0.78 / 0.96 / 0.91  
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: P1057854

CATALOG NUMBER: S122RDR-S1005D940-X4F0-XX-UDD-BVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1057854

CATALOG NUMBER: S122RDR-S1005D940-X4F0-XX-UDD-BVL-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	91	85	80	96	89	84	79	86	82	78	84	80	76	81	78	75	74
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61
6	82	72	65	60	80	71	64	59	69	63	59	68	62	58	66	62	58	56
7	77	67	60	55	76	66	59	55	64	59	54	63	58	54	62	57	54	52
8	73	62	55	51	72	62	55	51	60	54	50	59	54	50	58	53	50	48
9	69	58	52	47	68	58	51	47	57	51	47	56	50	47	55	50	46	45
10	66	55	48	44	64	54	48	44	53	48	44	53	47	43	52	47	43	42

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

	0°	45°	90°
0°	15218	15218	15218
5°	14616	14885	15180
10°	13476	14068	14810
15°	12075	12906	14142
20°	10598	11480	12982
25°	8973	9913	11713
30°	7198	8323	10432
35°	5321	6659	9035
40°	3339	5213	7342
45°	1307	3925	5441
50°	643	2653	3333
55°	508	1740	1486
60°	391	1413	1362
65°	288	1327	1327
70°	356	1354	1354
75°	378	1504	1412
80°	563	1966	1541
85°	1122	3345	2244

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 87.5°  
 Luminance: 6134 cd/sqm



TEST NUMBER: P1057854

CATALOG NUMBER: S122RDR-S1005D940-X4F0-XX-UDD-BVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.3	8.4
10°-20°	190.4	21.2
20°-30°	227.8	25.4
30°-40°	191.7	21.4
40°-50°	109.2	12.2
50°-60°	43.1	4.8
60°-70°	27.1	3.0
70°-80°	20.2	2.2
80°-90°	12.8	1.4
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°	493.6	55.0
0°-40°	685.3	76.3
0°-60°	837.6	93.3
0°-90°	897.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	897.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	825	825	825	825	825	
5°	789	806	804	813	820	73
15°	632	654	676	715	740	176
25°	441	460	487	537	575	201
35°	236	257	296	359	401	146
45°	50	88	150	189	208	47
55°	16	34	54	55	46	14
65°	7	30	30	29	30	7
75°	5	21	21	20	20	6
85°	5	14	16	14	11	5
90°	0	0	0	0	0	



TEST NUMBER: P1057854

CATALOG NUMBER: S122RDR-S1005D940-X4F0-XX-UDD-BVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	824.7	824.7	824.7	824.7	824.7
2.5°	811.5	826.0	816.8	818.1	819.5
5°	789.1	806.3	803.6	812.9	819.5
7.5°	756.1	774.6	781.2	797.0	808.9
10°	719.2	740.3	750.8	775.9	790.4
12.5°	676.9	700.7	716.5	748.2	769.3
15°	632.1	654.5	675.6	715.2	740.3
17.5°	587.2	609.6	632.1	675.6	702.0
20°	539.7	560.8	584.6	630.8	661.1
22.5°	489.6	512.0	535.7	583.2	620.2
25°	440.7	460.5	486.9	537.1	575.3
27.5°	389.3	409.1	438.1	489.6	530.5
30°	337.8	357.6	390.6	443.4	489.6
32.5°	286.3	307.5	343.1	401.1	447.3
35°	236.2	257.3	295.6	358.9	401.1
37.5°	187.4	211.1	253.4	315.4	355.0
40°	138.6	166.3	216.4	271.8	304.8
42.5°	92.4	126.7	182.1	228.3	256.0
45°	50.1	88.4	150.4	188.7	208.5
47.5°	27.7	56.7	120.1	150.4	162.3
50°	22.4	39.6	92.4	114.8	116.1
52.5°	18.5	35.6	68.6	81.8	75.2
55°	15.8	34.3	54.1	55.4	46.2
57.5°	13.2	33.0	44.9	39.6	39.6
60°	10.6	33.0	38.3	35.6	36.9
62.5°	7.9	33.0	34.3	31.7	33.0
65°	6.6	30.4	30.4	29.0	30.4
67.5°	6.6	27.7	27.7	26.4	27.7
70°	6.6	26.4	25.1	25.1	25.1
72.5°	5.3	23.8	23.8	22.4	22.4
75°	5.3	21.1	21.1	19.8	19.8
77.5°	5.3	19.8	19.8	18.5	17.2
80°	5.3	17.2	18.5	17.2	14.5
82.5°	5.3	15.8	17.2	15.8	11.9
85°	5.3	14.5	15.8	14.5	10.6
87.5°	4.0	14.5	14.5	11.9	7.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)