

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: P1058097

Luminaire Tested: S122RDR-S675D940-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058097  
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-S675D940-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: -

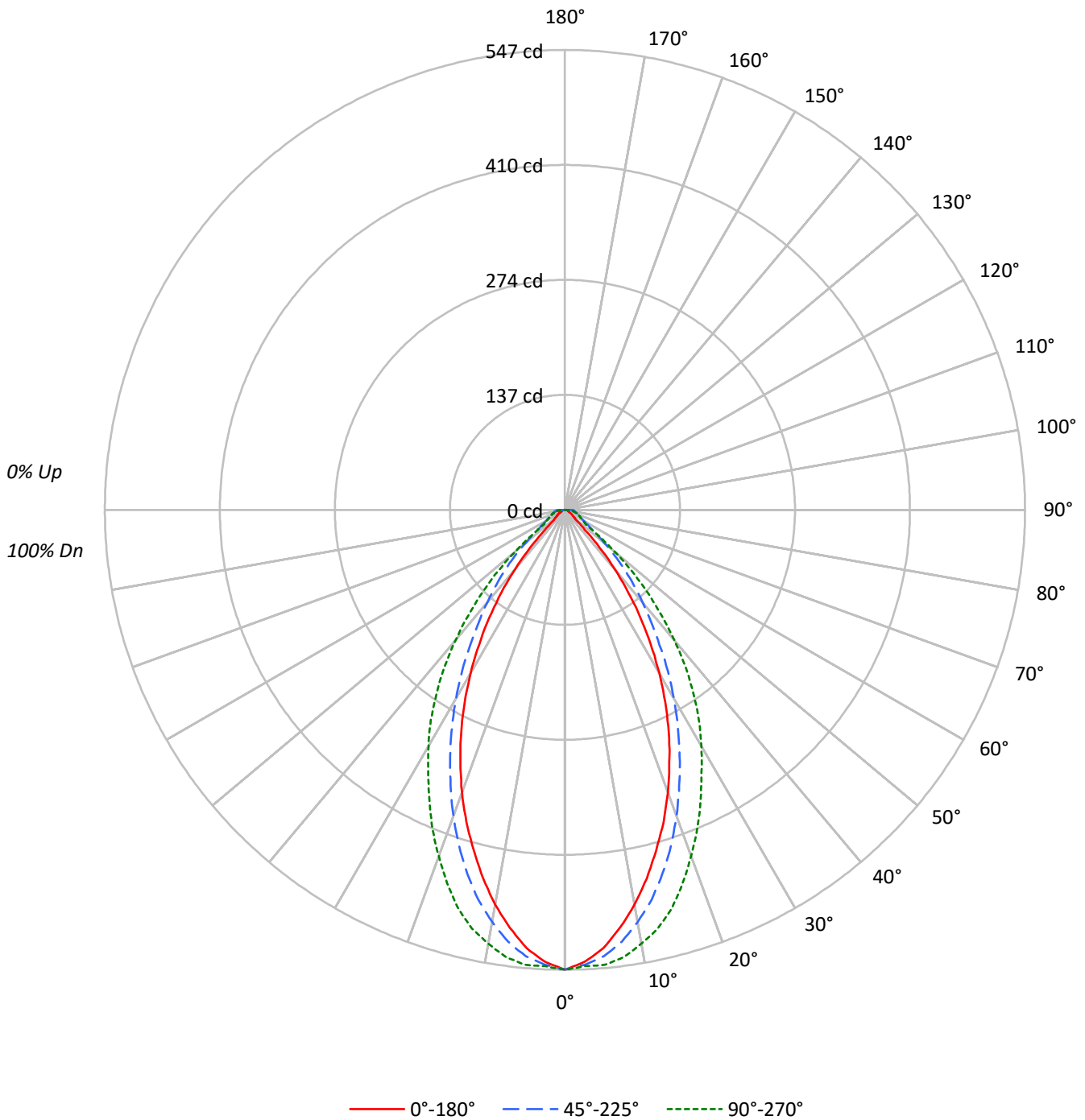
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 595.1 lumens  
Efficiency: N/A  
Efficacy: 23.1 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): 25.8  
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: P1058097

CATALOG NUMBER: S122RDR-S675D940-X4F0-XX-UDD-BVL-W

### Luminous Intensity Polar Plot





TEST NUMBER: P1058097

CATALOG NUMBER: S122RDR-S675D940-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°	10090	10090	10090
5°	9691	9869	10064
10°	8936	9327	9820
15°	8006	8558	9376
20°	7028	7611	8609
25°	5949	6574	7767
30°	4773	5519	6916
35°	3528	4415	5992
40°	2214	3457	4868
45°	866	2602	3606
50°	428	1757	2210
55°	338	1155	984
60°	258	937	904
65°	192	878	878
70°	237	896	896
75°	250	998	934
80°	372	1296	1020
85°	741	2223	1482

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 87.5°  
 Luminance: 4061 cd/sqm



TEST NUMBER: P1058097

CATALOG NUMBER: S122RDR-S675D940-X4F0-XX-UDD-BVL-W

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.9	8.4
10°-20°	126.3	21.2
20°-30°	151.1	25.4
30°-40°	127.1	21.4
40°-50°	72.4	12.2
50°-60°	28.5	4.8
60°-70°	18.0	3.0
70°-80°	13.3	2.2
80°-90°	8.5	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°	327.3	55.0
0°-40°	454.4	76.4
0°-60°	555.3	93.3
0°-90°	595.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	595.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	547	547	547	547	547	
5°	523	535	533	539	543	48
15°	419	434	448	474	491	117
25°	292	305	323	356	382	133
35°	157	171	196	238	266	97
45°	33	59	100	125	138	31
55°	10	23	36	37	31	9
65°	4	20	20	19	20	5
75°	4	14	14	13	13	4
85°	4	10	10	10	7	3
90°	0	0	0	0	0	



TEST NUMBER: P1058097

CATALOG NUMBER: S122RDR-S675D940-X4F0-XX-UDD-BVL-W

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	546.8	546.8	546.8	546.8	546.8
2.5°	538.1	547.7	541.6	542.5	543.3
5°	523.2	534.6	532.8	539.0	543.3
7.5°	501.3	513.6	518.0	528.5	536.3
10°	476.9	490.8	497.8	514.5	524.1
12.5°	448.9	464.6	475.1	496.1	510.1
15°	419.1	434.0	448.0	474.2	490.8
17.5°	389.4	404.2	419.1	448.0	465.5
20°	357.9	371.9	387.6	418.2	438.4
22.5°	324.6	339.5	355.2	386.7	411.2
25°	292.2	305.4	322.9	356.1	381.5
27.5°	258.1	271.2	290.5	324.6	351.7
30°	224.0	237.1	259.0	294.0	324.6
32.5°	189.9	203.9	227.5	266.0	296.6
35°	156.6	170.6	196.0	238.0	266.0
37.5°	124.2	140.0	168.0	209.1	235.4
40°	91.9	110.2	143.5	180.2	202.1
42.5°	61.2	84.0	120.7	151.4	169.7
45°	33.2	58.6	99.7	125.1	138.2
47.5°	18.4	37.6	79.6	99.7	107.6
50°	14.9	26.2	61.2	76.1	77.0
52.5°	12.2	23.6	45.5	54.2	49.9
55°	10.5	22.7	35.9	36.7	30.6
57.5°	8.7	21.9	29.7	26.2	26.2
60°	7.0	21.9	25.4	23.6	24.5
62.5°	5.2	21.9	22.7	21.0	21.9
65°	4.4	20.1	20.1	19.2	20.1
67.5°	4.4	18.4	18.4	17.5	18.4
70°	4.4	17.5	16.6	16.6	16.6
72.5°	3.5	15.7	15.7	14.9	14.9
75°	3.5	14.0	14.0	13.1	13.1
77.5°	3.5	13.1	13.1	12.2	11.4
80°	3.5	11.4	12.2	11.4	9.6
82.5°	3.5	10.5	11.4	10.5	7.9
85°	3.5	9.6	10.5	9.6	7.0
87.5°	2.6	9.6	9.6	7.9	5.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)