

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: P1057791

Luminaire Tested: S122RDR-S1005D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1057791  
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-S1005D830-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

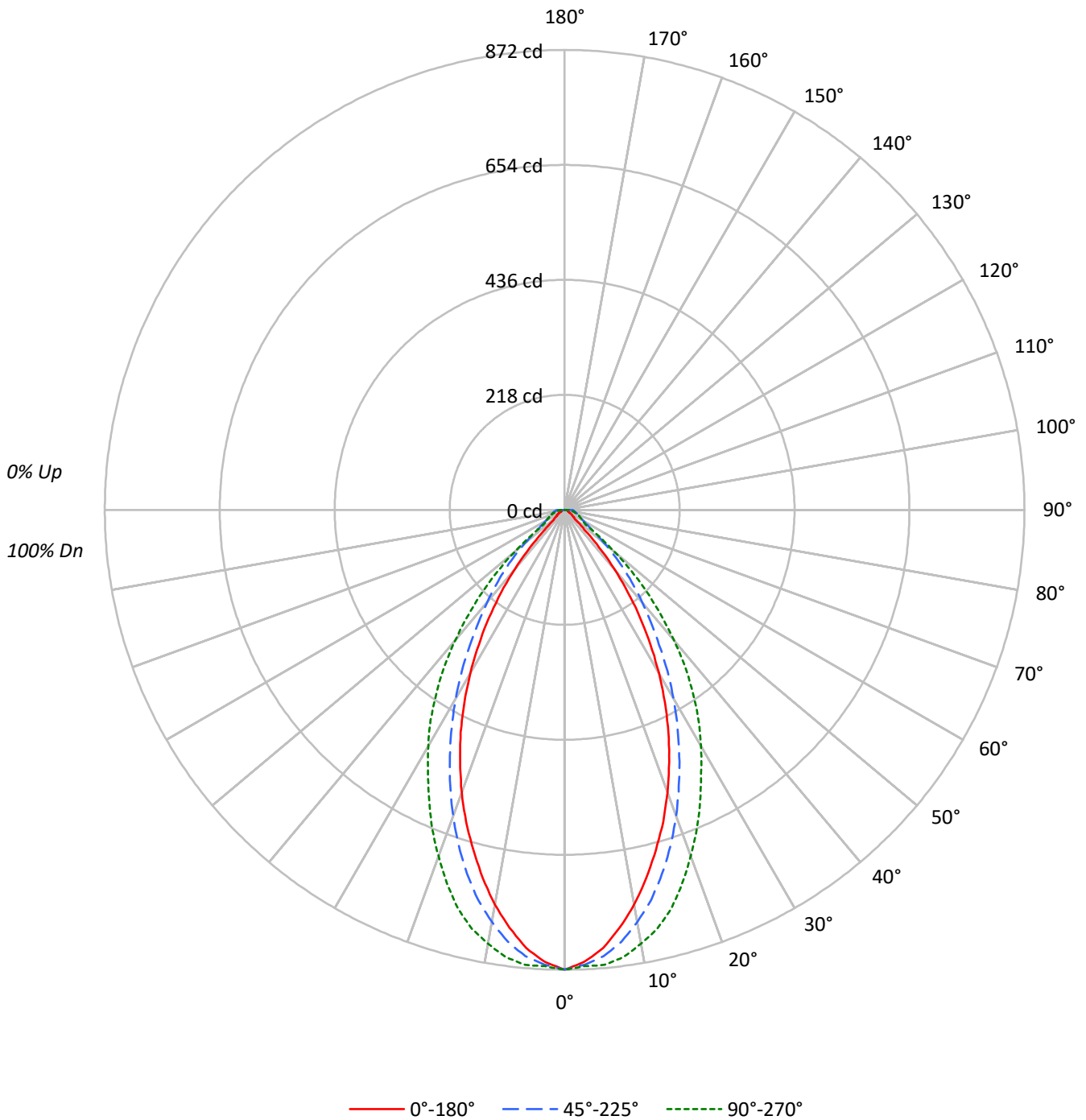
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 948.8 lumens  
Efficiency: N/A  
Efficacy: 22.7 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

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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	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°	16085	16085	16085
5°	15450	15733	16045
10°	14244	14870	15655
15°	12763	13642	14948
20°	11203	12134	13722
25°	9486	10479	12381
30°	7609	8798	11026
35°	5625	7037	9551
40°	3529	5509	7761
45°	1383	4149	5751
50°	680	2802	3522
55°	537	1840	1570
60°	413	1491	1443
65°	306	1402	1402
70°	378	1430	1430
75°	399	1590	1490
80°	595	2072	1626
85°	1186	3536	2371

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 87.5°  
 Luminance: 6472 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.6	8.4
10°-20°	201.3	21.2
20°-30°	240.8	25.4
30°-40°	202.7	21.4
40°-50°	115.4	12.2
50°-60°	45.5	4.8
60°-70°	28.7	3.0
70°-80°	21.3	2.2
80°-90°	13.5	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°	521.7	55.0
0°-40°	724.4	76.3
0°-60°	885.3	93.3
0°-90°	948.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	948.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	872	872	872	872	872	
5°	834	852	849	859	866	77
15°	668	692	714	756	782	186
25°	466	487	515	568	608	212
35°	250	272	312	379	424	155
45°	53	94	159	200	220	50
55°	17	36	57	59	49	15
65°	7	32	32	31	32	8
75°	6	22	22	21	21	6
85°	6	15	17	15	11	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	871.7	871.7	871.7	871.7	871.7
2.5°	857.8	873.1	863.4	864.8	866.2
5°	834.1	852.2	849.4	859.2	866.2
7.5°	799.2	818.7	825.7	842.5	855.0
10°	760.2	782.5	793.6	820.1	835.5
12.5°	715.5	740.6	757.4	790.8	813.2
15°	668.1	691.8	714.1	756.0	782.5
17.5°	620.7	644.4	668.1	714.1	742.0
20°	570.5	592.8	617.9	666.7	698.8
22.5°	517.5	541.2	566.3	616.5	655.5
25°	465.9	486.8	514.7	567.7	608.1
27.5°	411.5	432.4	463.1	517.5	560.7
30°	357.1	378.0	412.9	468.6	517.5
32.5°	302.7	325.0	362.6	424.0	472.8
35°	249.7	272.0	312.4	379.4	424.0
37.5°	198.1	223.2	267.8	333.4	375.2
40°	146.5	175.7	228.7	287.3	322.2
42.5°	97.6	133.9	192.5	241.3	270.6
45°	53.0	93.5	159.0	199.5	220.4
47.5°	29.3	60.0	126.9	159.0	171.6
50°	23.7	41.8	97.6	121.3	122.7
52.5°	19.5	37.7	72.5	86.5	79.5
55°	16.7	36.3	57.2	58.6	48.8
57.5°	13.9	34.9	47.4	41.8	41.8
60°	11.2	34.9	40.4	37.7	39.1
62.5°	8.4	34.9	36.3	33.5	34.9
65°	7.0	32.1	32.1	30.7	32.1
67.5°	7.0	29.3	29.3	27.9	29.3
70°	7.0	27.9	26.5	26.5	26.5
72.5°	5.6	25.1	25.1	23.7	23.7
75°	5.6	22.3	22.3	20.9	20.9
77.5°	5.6	20.9	20.9	19.5	18.1
80°	5.6	18.1	19.5	18.1	15.3
82.5°	5.6	16.7	18.1	16.7	12.6
85°	5.6	15.3	16.7	15.3	11.2
87.5°	4.2	15.3	15.3	12.6	8.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)