

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: P1058160

Luminaire Tested: S122RDR-S865D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058160  
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-S865D930-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, 90 CRI LEDS  
Ballast/Driver: -

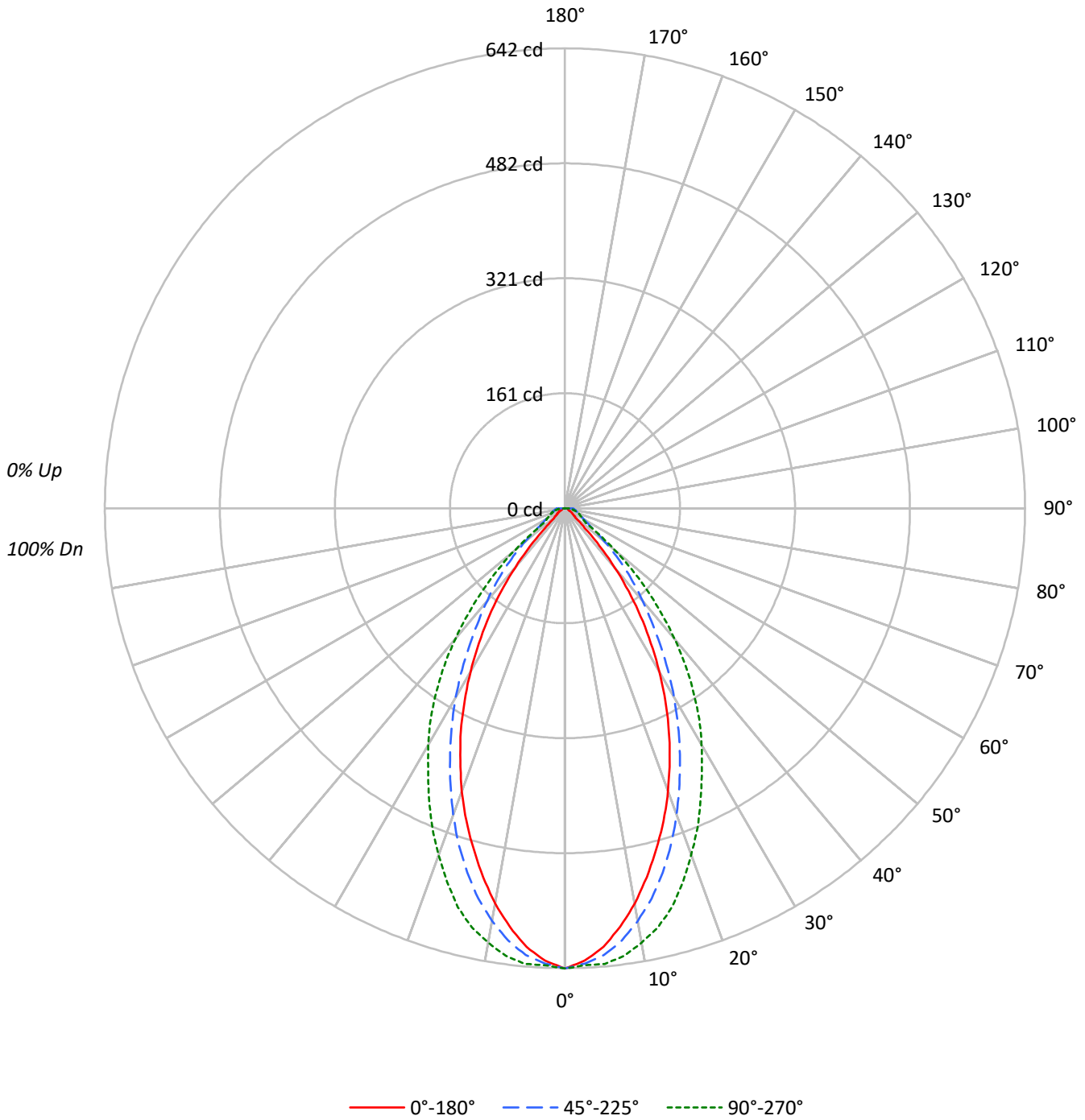
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 699.3 lumens  
Efficiency: N/A  
Efficacy: 20.0 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): 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	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°	11856	11856	11856
5°	11388	11597	11825
10°	10498	10959	11538
15°	9407	10054	11017
20°	8257	8943	10113
25°	6992	7723	9125
30°	5608	6484	8127
35°	4145	5188	7039
40°	2599	4061	5721
45°	1020	3058	4238
50°	502	2067	2598
55°	396	1354	1158
60°	303	1100	1063
65°	223	1030	1030
70°	275	1052	1052
75°	292	1169	1098
80°	436	1530	1201
85°	868	2604	1736

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 87.5°  
 Luminance: 4780 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.7	8.4
10°-20°	148.4	21.2
20°-30°	177.5	25.4
30°-40°	149.4	21.4
40°-50°	85.1	12.2
50°-60°	33.5	4.8
60°-70°	21.1	3.0
70°-80°	15.7	2.2
80°-90°	10.0	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°	384.5	55.0
0°-40°	533.9	76.3
0°-60°	652.5	93.3
0°-90°	699.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	699.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	642	642	642	642	642	
5°	615	628	626	633	638	57
15°	492	510	526	557	577	137
25°	343	359	379	418	448	156
35°	184	200	230	280	312	114
45°	39	69	117	147	162	37
55°	12	27	42	43	36	11
65°	5	24	24	23	24	6
75°	4	16	16	15	15	4
85°	4	11	12	11	8	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	642.5	642.5	642.5	642.5	642.5
2.5°	632.2	643.5	636.3	637.4	638.4
5°	614.8	628.1	626.1	633.3	638.4
7.5°	589.1	603.4	608.6	620.9	630.2
10°	560.3	576.7	584.9	604.5	615.8
12.5°	527.4	545.9	558.2	582.9	599.3
15°	492.4	509.9	526.3	557.2	576.7
17.5°	457.5	474.9	492.4	526.3	546.9
20°	420.5	436.9	455.4	491.4	515.0
22.5°	381.4	398.9	417.4	454.4	483.2
25°	343.4	358.8	379.3	418.4	448.2
27.5°	303.3	318.7	341.3	381.4	413.3
30°	263.2	278.6	304.3	345.4	381.4
32.5°	223.1	239.5	267.3	312.5	348.5
35°	184.0	200.5	230.3	279.6	312.5
37.5°	146.0	164.5	197.4	245.7	276.5
40°	107.9	129.5	168.6	211.8	237.5
42.5°	72.0	98.7	141.9	177.8	199.4
45°	39.1	68.9	117.2	147.0	162.4
47.5°	21.6	44.2	93.6	117.2	126.4
50°	17.5	30.8	72.0	89.4	90.5
52.5°	14.4	27.8	53.5	63.7	58.6
55°	12.3	26.7	42.1	43.2	36.0
57.5°	10.3	25.7	35.0	30.8	30.8
60°	8.2	25.7	29.8	27.8	28.8
62.5°	6.2	25.7	26.7	24.7	25.7
65°	5.1	23.6	23.6	22.6	23.6
67.5°	5.1	21.6	21.6	20.6	21.6
70°	5.1	20.6	19.5	19.5	19.5
72.5°	4.1	18.5	18.5	17.5	17.5
75°	4.1	16.4	16.4	15.4	15.4
77.5°	4.1	15.4	15.4	14.4	13.4
80°	4.1	13.4	14.4	13.4	11.3
82.5°	4.1	12.3	13.4	12.3	9.3
85°	4.1	11.3	12.3	11.3	8.2
87.5°	3.1	11.3	11.3	9.3	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)