

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



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: P1058568

Luminaire Tested: S122RDR-H865D930-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058568  
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-H865D930-X4F0-XX-UDD-SVL-W  
Description: DEFINE 2 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

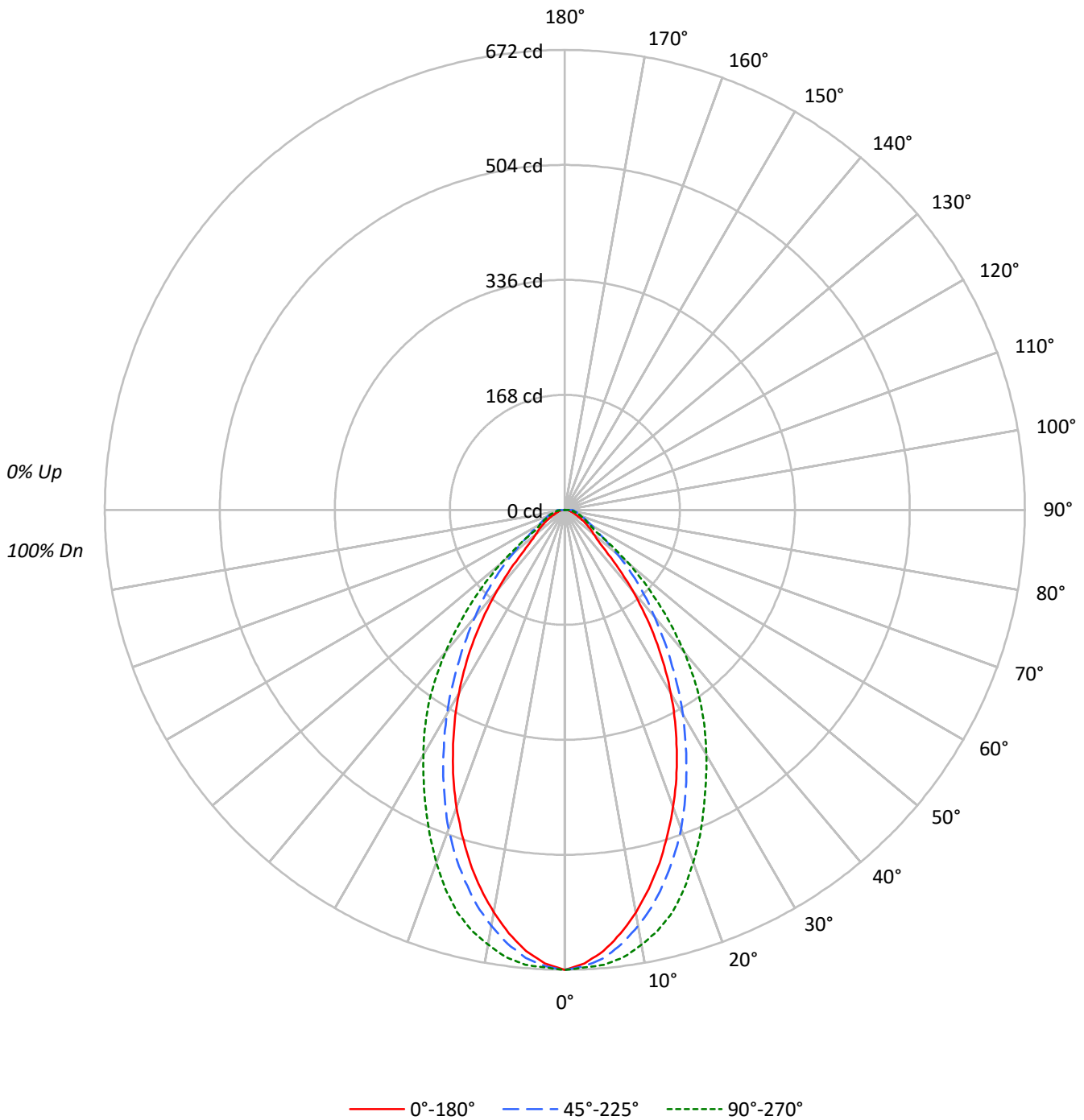
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 815.4 lumens  
Efficiency: N/A  
Efficacy: 26.1 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): 31.2  
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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80				
3	97	89	83	78	95	88	82	77	85	80	76	83	78	75	80	77	74	72				
4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65				
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59				
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				
7	76	65	57	52	74	64	57	52	62	56	52	61	56	52	60	55	51	50				
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				
9	67	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	42				
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				

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

	0°	45°	90°
0°	12404	12404	12404
5°	11988	12173	12359
10°	11192	11566	12089
15°	10209	10742	11621
20°	9082	9748	10769
25°	7869	8561	9781
30°	6597	7342	8810
35°	5197	6075	7808
40°	3705	4909	6521
45°	2189	3883	5057
50°	1576	2810	3442
55°	1319	2024	1734
60°	1070	1620	1476
65°	873	1441	1354
70°	755	1403	1295
75°	713	1426	1283
80°	744	1700	1381
85°	1059	2752	1694

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5057 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.7	7.6
10°-20°	158.4	19.4
20°-30°	195.4	24.0
30°-40°	173.8	21.3
40°-50°	110.9	13.6
50°-60°	53.3	6.5
60°-70°	31.3	3.8
70°-80°	20.0	2.5
80°-90°	10.7	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°	415.5	51.0
0°-40°	589.3	72.3
0°-60°	753.5	92.4
0°-90°	815.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	815.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	672	672	672	672	672	
5°	647	659	657	661	667	60
15°	534	547	562	588	608	149
25°	386	402	420	450	480	177
35°	231	249	270	311	347	143
45°	84	109	149	173	194	70
55°	41	53	63	61	54	37
65°	20	36	33	30	31	20
75°	10	22	20	19	18	11
85°	5	12	13	11	8	5
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	672.2	672.2	672.2	672.2	672.2
2.5°	663.2	674.2	667.2	667.2	669.2
5°	647.2	659.2	657.2	661.2	667.2
7.5°	624.3	637.3	639.3	650.2	659.2
10°	597.3	611.3	617.3	633.3	645.2
12.5°	567.3	581.3	592.3	612.3	629.3
15°	534.4	547.4	562.3	588.3	608.3
17.5°	498.4	515.4	530.4	557.3	580.3
20°	462.5	478.4	496.4	522.4	548.4
22.5°	425.5	440.5	458.5	485.4	515.4
25°	386.5	401.5	420.5	450.5	480.4
27.5°	348.6	363.6	381.6	414.5	446.5
30°	309.6	324.6	344.6	378.6	413.5
32.5°	270.7	286.7	306.6	343.6	380.6
35°	230.7	248.7	269.7	310.6	346.6
37.5°	191.8	209.8	235.7	275.7	309.6
40°	153.8	174.8	203.8	239.7	270.7
42.5°	116.9	139.8	175.8	204.8	231.7
45°	83.9	108.9	148.8	172.8	193.8
47.5°	63.9	81.9	122.9	141.8	156.8
50°	54.9	65.9	97.9	111.9	119.9
52.5°	47.9	57.9	77.9	84.9	84.9
55°	41.0	52.9	62.9	60.9	53.9
57.5°	35.0	47.9	51.9	43.9	45.9
60°	29.0	43.9	43.9	39.0	40.0
62.5°	24.0	41.0	38.0	34.0	35.0
65°	20.0	36.0	33.0	30.0	31.0
67.5°	16.0	32.0	29.0	27.0	27.0
70°	14.0	29.0	26.0	24.0	24.0
72.5°	12.0	25.0	23.0	21.0	21.0
75°	10.0	22.0	20.0	19.0	18.0
77.5°	9.0	19.0	18.0	16.0	15.0
80°	7.0	16.0	16.0	15.0	13.0
82.5°	6.0	14.0	14.0	13.0	11.0
85°	5.0	12.0	13.0	11.0	8.0
87.5°	4.0	11.0	11.0	9.0	6.0
90°	0.0	0.0	0.0	0.0	0.0



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	10.42	11.69	10.78	12.00	12.32	10.20	11.48	10.57	11.79	12.11
	3H	11.65	12.79	12.03	13.12	13.48	11.80	12.94	12.18	13.27	13.63
	4H	12.10	13.16	12.51	13.51	13.90	12.52	13.58	12.92	13.93	14.31
	6H	12.49	13.46	12.90	13.83	14.22	13.17	14.15	13.59	14.52	14.91
	8H	12.64	13.56	13.07	13.95	14.36	13.50	14.43	13.93	14.82	15.22
	12H	12.80	13.68	13.23	14.06	14.49	13.80	14.68	14.23	15.07	15.50
4H	2H	10.97	12.03	11.37	12.38	12.76	10.80	11.86	11.20	12.21	12.59
	3H	12.67	13.54	13.08	13.94	14.35	12.64	13.51	13.05	13.92	14.32
	4H	13.46	14.24	13.90	14.66	15.11	13.52	14.30	13.95	14.72	15.16
	6H	14.11	14.78	14.57	15.23	15.70	14.36	15.04	14.83	15.49	15.95
	8H	14.36	14.99	14.83	15.44	15.91	14.79	15.42	15.26	15.87	16.34
	12H	14.60	15.16	15.09	15.65	16.12	15.19	15.75	15.68	16.23	16.71
8H	4H	13.88	14.51	14.35	14.96	15.43	13.93	14.57	14.40	15.02	15.49
	6H	14.86	15.38	15.36	15.88	16.36	15.02	15.54	15.52	16.04	16.52
	8H	15.35	15.82	15.87	16.33	16.83	15.61	16.08	16.14	16.60	17.09
	12H	15.85	16.27	16.37	16.76	17.33	16.22	16.63	16.73	17.12	17.70
12H	4H	13.95	14.51	14.43	14.99	15.47	14.01	14.57	14.50	15.05	15.53
	6H	15.03	15.50	15.55	16.01	16.50	15.19	15.65	15.71	16.17	16.66
	8H	15.67	16.08	16.18	16.57	17.14	15.90	16.31	16.41	16.81	17.38