

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: P1058113

Luminaire Tested: S122RDR-S865D830-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058113  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-21)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S865D830-X4F0-XX-UDD-BVL-B  
Description: DEFINE 2 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

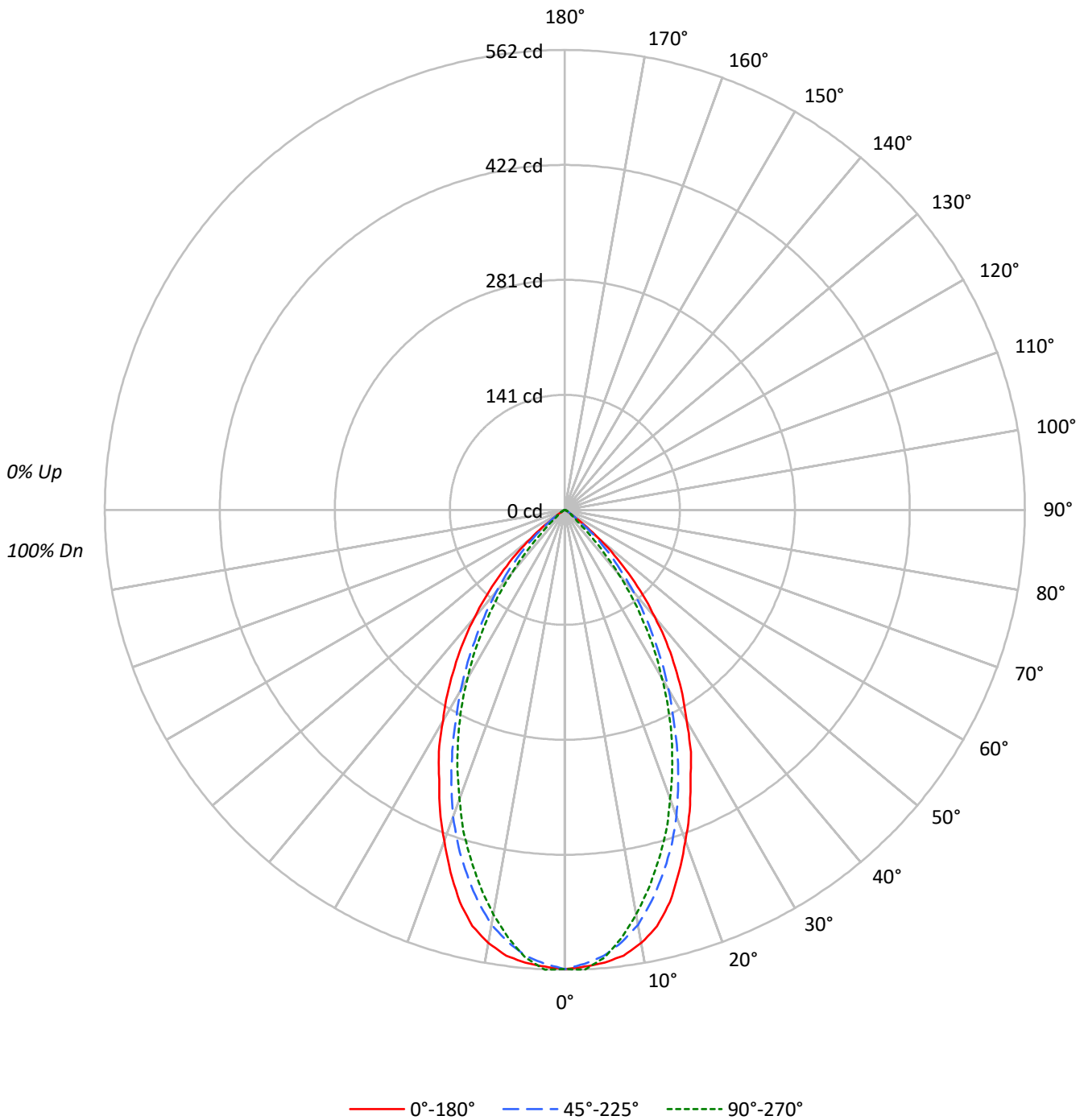
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 527.8 lumens  
Efficiency: N/A  
Efficacy: 15.1 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 0.8 / 0.88  
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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93				
2	107	102	98	94	105	100	97	93	97	94	91	94	92	89	91	89	87	86				
3	101	95	90	85	99	93	89	85	91	87	83	88	85	82	86	83	81	79				
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73				
5	91	82	76	71	89	81	75	71	79	74	70	77	73	70	76	72	69	67				
6	86	76	70	66	84	76	70	65	74	69	65	73	68	64	71	67	64	62				
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58				
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	56	54				
9	73	63	57	53	72	62	57	52	61	56	52	61	56	52	60	55	52	51				
10	69	59	53	49	68	59	53	49	58	53	49	57	52	49	56	52	49	47				

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

	0°	45°	90°
0°	10356	10356	10356
5°	10286	10132	10177
10°	10071	9648	9404
15°	9475	8818	8455
20°	8458	7829	7385
25°	7393	6619	6281
30°	6345	5410	5056
35°	5291	4224	3796
40°	4117	3115	2430
45°	2878	2075	1052
50°	1567	1091	376
55°	228	383	267
60°	44	89	173
65°	0	52	105
70°	0	0	65
75°	0	0	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2878 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.5	9.8
10°-20°	130.0	24.6
20°-30°	151.5	28.7
30°-40°	121.4	23.0
40°-50°	60.3	11.4
50°-60°	11.9	2.3
60°-70°	1.1	0.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	333.0	63.1
0°-40°	454.4	86.1
0°-60°	526.6	99.8
0°-90°	527.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	527.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	561	561	561	561	561	
5°	555	555	547	548	549	52
15°	496	486	462	450	443	138
25°	363	345	325	318	308	167
35°	235	211	188	179	168	146
45°	110	97	80	53	40	85
55°	7	14	12	7	8	14
65°	0	0	1	1	2	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	561.2	561.2	561.2	561.2	561.2
2.5°	558.8	561.2	555.3	561.2	562.4
5°	555.3	555.3	547.0	548.2	549.4
7.5°	549.4	547.0	532.7	530.4	528.0
10°	537.5	532.7	514.9	505.5	501.9
12.5°	520.9	513.8	490.0	479.3	473.4
15°	496.0	486.5	461.6	449.7	442.6
17.5°	463.9	455.6	431.9	418.8	411.7
20°	430.7	418.8	398.7	385.6	376.1
22.5°	398.7	383.2	361.9	352.4	342.9
25°	363.1	345.3	325.1	318.0	308.5
27.5°	333.4	310.9	287.1	282.4	274.1
30°	297.8	276.5	253.9	246.8	237.3
32.5°	267.0	243.2	220.7	212.4	204.1
35°	234.9	211.2	187.5	179.2	168.5
37.5°	204.1	181.5	157.8	144.8	135.3
40°	170.9	151.9	129.3	112.7	100.9
42.5°	141.2	124.6	103.2	81.9	70.0
45°	110.3	97.3	79.5	53.4	40.3
47.5°	81.9	72.4	58.1	30.8	21.4
50°	54.6	51.0	38.0	15.4	13.1
52.5°	29.7	32.0	22.5	9.5	10.7
55°	7.1	14.2	11.9	7.1	8.3
57.5°	1.2	2.4	5.9	5.9	5.9
60°	1.2	1.2	2.4	3.6	4.7
62.5°	1.2	0.0	1.2	2.4	3.6
65°	0.0	0.0	1.2	1.2	2.4
67.5°	0.0	0.0	0.0	1.2	1.2
70°	0.0	0.0	0.0	1.2	1.2
72.5°	0.0	0.0	0.0	0.0	1.2
75°	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)