

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: P1058033

Luminaire Tested: S122RDR-S675D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058033  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-60)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDR-S675D830-X4F0-XX-UDD-BVL-S  
Description: DEFINE 2 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

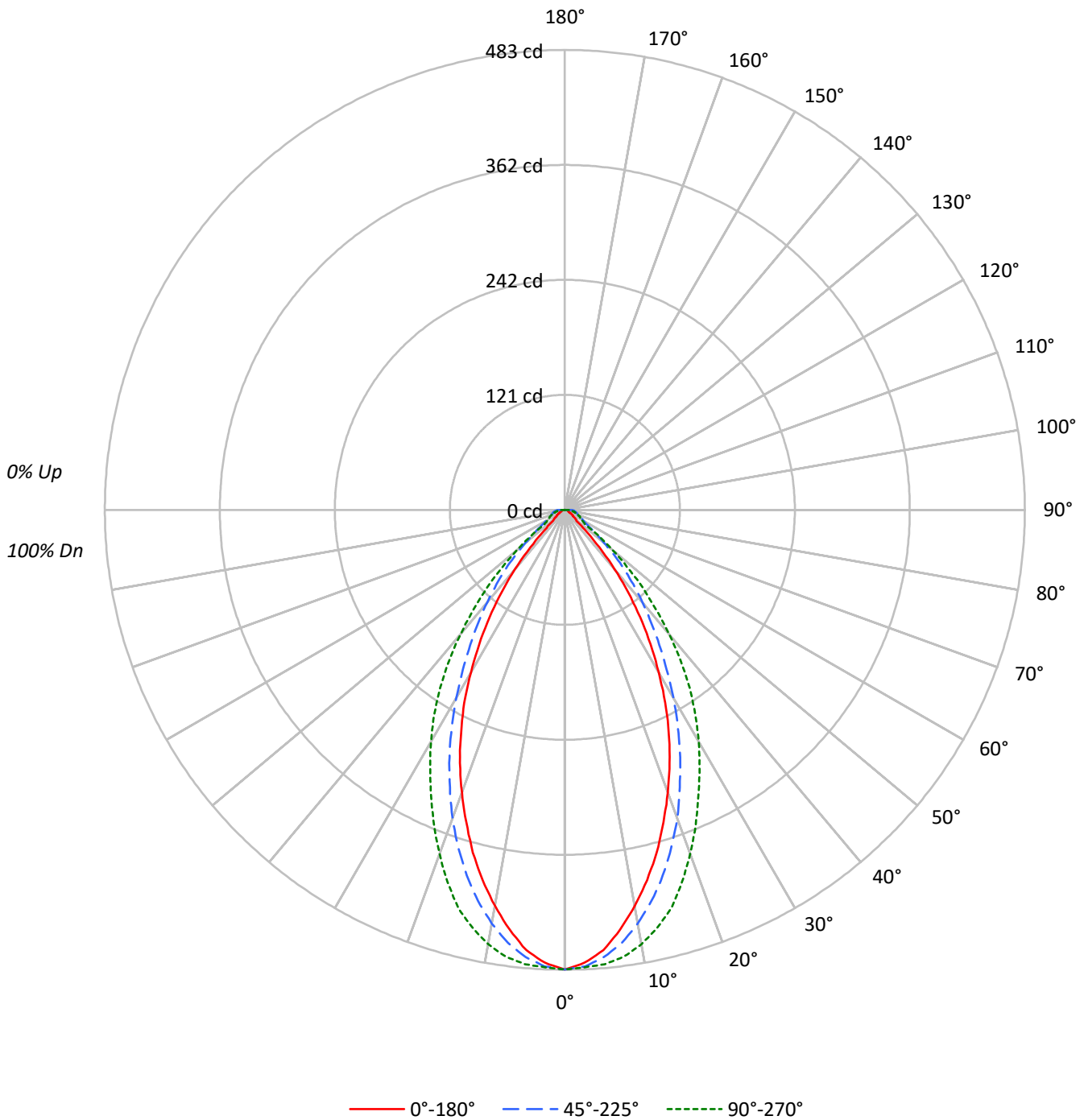
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 520.3 lumens  
Efficiency: N/A  
Efficacy: 20.2 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 0.95 / 0.9  
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

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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	77	82	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	68	64	71	67	63	61				
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	57				
7	77	67	60	55	76	66	59	55	65	59	54	63	58	54	62	57	54	52				
8	73	62	55	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48				
9	69	58	52	47	68	58	51	47	57	51	47	56	51	47	55	50	47	45				
10	66	55	48	44	65	54	48	44	54	48	44	53	47	44	52	47	44	42				

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

	0°	45°	90°
0°	8907	8907	8907
5°	8598	8735	8872
10°	7918	8265	8679
15°	7118	7596	8266
20°	6209	6773	7552
25°	5253	5835	6757
30°	4195	4847	5989
35°	3104	3895	5145
40°	1961	3052	4097
45°	772	2291	3017
50°	399	1539	1857
55°	328	1010	833
60°	240	819	749
65°	201	768	768
70°	200	798	750
75°	264	920	791
80°	393	1180	882
85°	593	1948	1164

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 3892 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.2	8.5
10°-20°	111.5	21.4
20°-30°	132.5	25.5
30°-40°	110.2	21.2
40°-50°	61.6	11.8
50°-60°	24.9	4.8
60°-70°	15.9	3.1
70°-80°	11.9	2.3
80°-90°	7.6	1.5
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°	288.2	55.4
0°-40°	398.4	76.6
0°-60°	484.8	93.2
0°-90°	520.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	520.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	483	483	483	483	483	
5°	464	472	472	475	479	43
15°	373	384	398	418	433	104
25°	258	268	287	309	332	118
35°	138	151	173	202	228	85
45°	30	50	88	103	116	28
55°	10	21	31	30	26	9
65°	5	18	18	17	18	5
75°	4	13	13	12	11	4
85°	3	8	9	8	6	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	482.7	482.7	482.7	482.7	482.7
2.5°	476.2	483.6	479.9	479.9	480.8
5°	464.2	472.5	471.6	475.3	479.0
7.5°	444.7	454.0	458.6	466.9	473.4
10°	422.6	432.7	441.1	454.0	463.2
12.5°	398.5	408.7	420.7	437.4	449.4
15°	372.6	383.7	397.6	417.9	432.7
17.5°	344.0	356.0	371.7	393.9	409.6
20°	316.2	328.2	344.9	367.1	384.6
22.5°	287.6	297.7	315.3	337.5	358.8
25°	258.0	268.1	286.6	308.8	331.9
27.5°	228.4	238.6	257.0	280.2	306.1
30°	196.9	208.0	227.5	253.3	281.1
32.5°	167.4	178.5	198.8	227.5	255.2
35°	137.8	150.7	172.9	201.6	228.4
37.5°	109.1	123.9	148.9	175.7	199.7
40°	81.4	97.1	126.7	149.8	170.1
42.5°	53.6	72.1	106.3	125.8	141.5
45°	29.6	49.9	87.8	102.6	115.6
47.5°	16.6	32.4	69.3	81.4	88.8
50°	13.9	24.0	53.6	62.0	64.7
52.5°	11.1	22.2	40.7	45.3	43.5
55°	10.2	21.3	31.4	30.5	25.9
57.5°	8.3	21.3	25.0	22.2	22.2
60°	6.5	20.3	22.2	19.4	20.3
62.5°	5.5	19.4	20.3	18.5	18.5
65°	4.6	18.5	17.6	16.6	17.6
67.5°	3.7	16.6	16.6	15.7	15.7
70°	3.7	15.7	14.8	13.9	13.9
72.5°	3.7	13.9	13.9	12.9	12.9
75°	3.7	12.9	12.9	12.0	11.1
77.5°	3.7	11.1	12.0	11.1	10.2
80°	3.7	10.2	11.1	10.2	8.3
82.5°	3.7	9.2	10.2	9.2	7.4
85°	2.8	8.3	9.2	8.3	5.5
87.5°	2.8	8.3	9.2	7.4	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)