

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: P1058060

Luminaire Tested: S122RDR-S675D850-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1058060  
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-S675D850-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: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

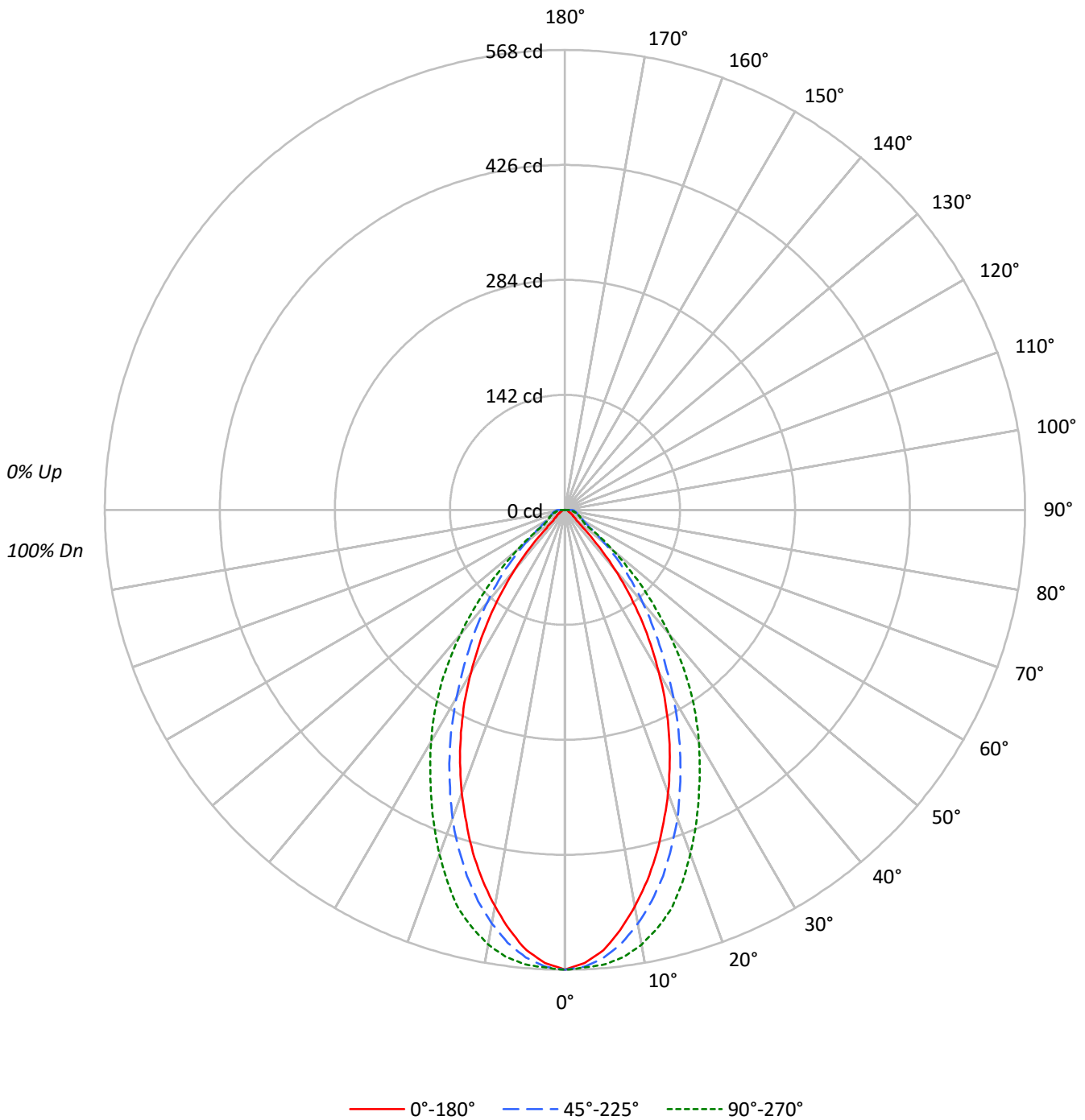
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 612.2 lumens  
Efficiency: N/A  
Efficacy: 23.7 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	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°	10479	10479	10479
5°	10115	10277	10438
10°	9316	9723	10214
15°	8375	8937	9727
20°	7307	7969	8888
25°	6179	6867	7953
30°	4937	5702	7046
35°	3652	4582	6053
40°	2305	3589	4822
45°	908	2698	3549
50°	468	1811	2187
55°	386	1190	981
60°	280	963	882
65°	236	904	904
70°	237	939	879
75°	314	1084	934
80°	468	1392	1041
85°	699	2308	1376

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 45°  
 Vertical Angle: 87.5°  
 Luminance: 4611 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.9	8.5
10°-20°	131.2	21.4
20°-30°	155.9	25.5
30°-40°	129.7	21.2
40°-50°	72.4	11.8
50°-60°	29.3	4.8
60°-70°	18.7	3.1
70°-80°	14.0	2.3
80°-90°	9.0	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°	339.1	55.4
0°-40°	468.7	76.6
0°-60°	570.4	93.2
0°-90°	612.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	612.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	568	568	568	568	568	
5°	546	556	555	559	564	51
15°	438	452	468	492	509	122
25°	304	316	337	363	391	138
35°	162	177	203	237	269	101
45°	35	59	103	121	136	33
55°	12	25	37	36	30	10
65°	5	22	21	20	21	6
75°	4	15	15	14	13	5
85°	3	10	11	10	6	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	567.9	567.9	567.9	567.9	567.9
2.5°	560.3	569.0	564.6	564.6	565.7
5°	546.1	555.9	554.8	559.2	563.5
7.5°	523.3	534.2	539.6	549.4	557.0
10°	497.2	509.2	518.9	534.2	545.1
12.5°	468.9	480.9	495.0	514.6	528.7
15°	438.4	451.5	467.8	491.7	509.2
17.5°	404.7	418.9	437.3	463.5	482.0
20°	372.1	386.2	405.8	431.9	452.6
22.5°	338.3	350.3	371.0	397.1	422.1
25°	303.5	315.5	337.3	363.4	390.6
27.5°	268.7	280.7	302.4	329.6	360.1
30°	231.7	244.8	267.6	298.1	330.7
32.5°	196.9	210.0	233.9	267.6	300.3
35°	162.1	177.3	203.4	237.2	268.7
37.5°	128.4	145.8	175.2	206.7	235.0
40°	95.7	114.2	149.0	176.2	200.2
42.5°	63.1	84.9	125.1	148.0	166.5
45°	34.8	58.7	103.4	120.8	136.0
47.5°	19.6	38.1	81.6	95.7	104.4
50°	16.3	28.3	63.1	72.9	76.2
52.5°	13.1	26.1	47.9	53.3	51.1
55°	12.0	25.0	37.0	35.9	30.5
57.5°	9.8	25.0	29.4	26.1	26.1
60°	7.6	23.9	26.1	22.8	23.9
62.5°	6.5	22.8	23.9	21.8	21.8
65°	5.4	21.8	20.7	19.6	20.7
67.5°	4.4	19.6	19.6	18.5	18.5
70°	4.4	18.5	17.4	16.3	16.3
72.5°	4.4	16.3	16.3	15.2	15.2
75°	4.4	15.2	15.2	14.1	13.1
77.5°	4.4	13.1	14.1	13.1	12.0
80°	4.4	12.0	13.1	12.0	9.8
82.5°	4.4	10.9	12.0	10.9	8.7
85°	3.3	9.8	10.9	9.8	6.5
87.5°	3.3	9.8	10.9	8.7	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)