

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: P1060490

Luminaire Tested: S124RDR-S575D850-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060490  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S575D850-X4F0-XX-UDD-BVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: -

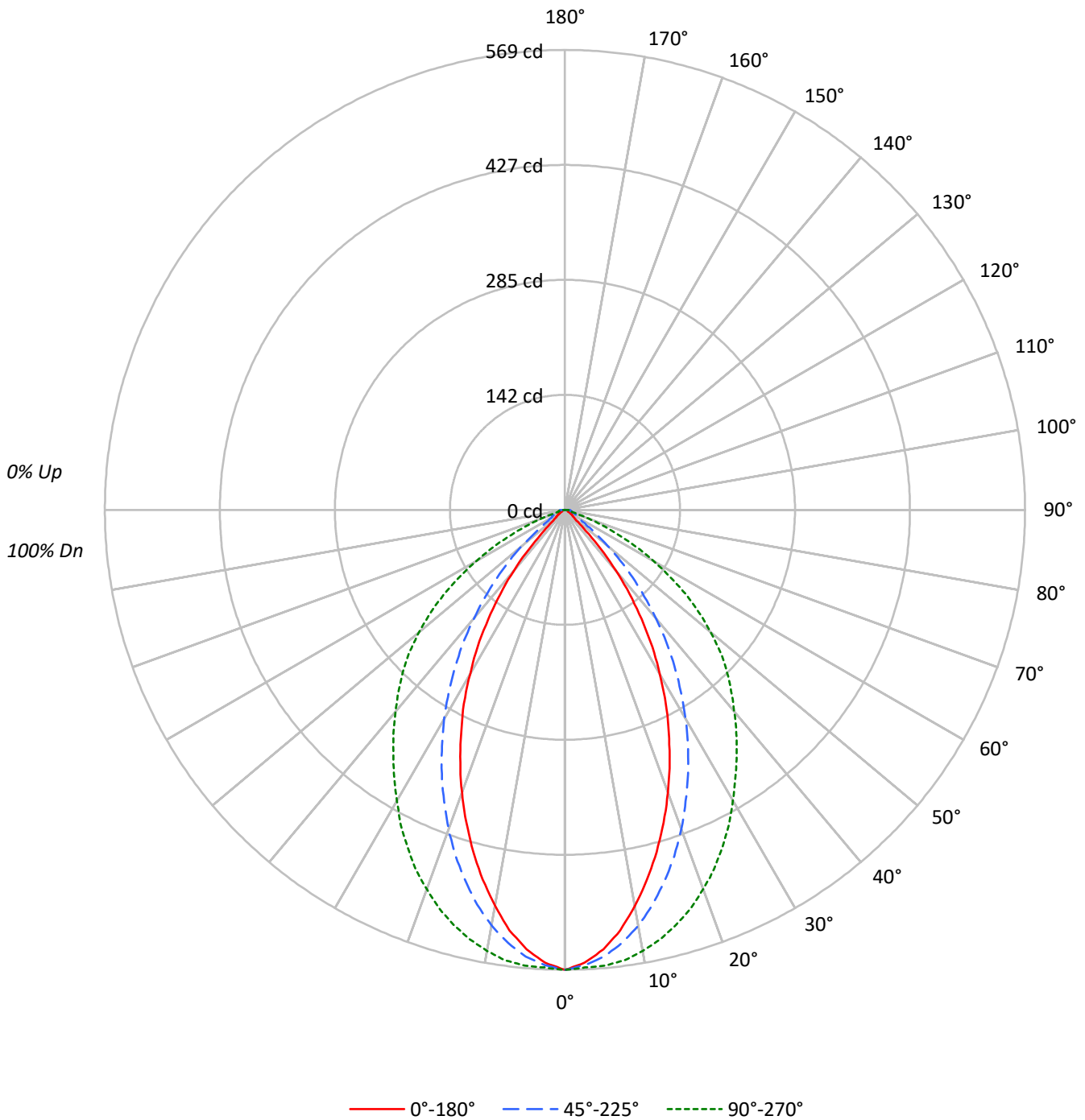
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 714.2 lumens  
Efficiency: N/A  
Efficacy: 36.4 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 19.6  
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	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	88	85	83	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73				
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65				
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59				
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54				
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50				
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39				

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

	0°	45°	90°
0°	4901	4901	4901
5°	4717	4796	4893
10°	4350	4568	4844
15°	3904	4240	4737
20°	3413	3854	4579
25°	2887	3423	4375
30°	2331	2968	4129
35°	1736	2480	3891
40°	1102	1966	3660
45°	441	1441	3451
50°	192	919	3151
55°	147	476	2750
60°	103	324	2180
65°	77	322	1489
70°	76	285	682
75°	100	299	276
80°	149	337	298
85°	296	593	445

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3451 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.1	7.3
10°-20°	134.4	18.8
20°-30°	169.7	23.8
30°-40°	155.9	21.8
40°-50°	106.3	14.9
50°-60°	57.6	8.1
60°-70°	24.5	3.4
70°-80°	8.4	1.2
80°-90°	5.4	0.7
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°	356.2	49.9
0°-40°	512.0	71.7
0°-60°	675.9	94.6
0°-90°	714.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	714.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	569	569	569	569	569	
5°	546	554	555	559	566	51
15°	438	452	476	510	531	122
25°	304	323	360	416	460	139
35°	165	187	236	310	370	103
45°	36	58	118	210	283	33
55°	10	11	32	115	183	9
65°	4	4	16	36	73	4
75°	3	8	9	8	8	3
85°	3	6	6	6	4	3
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	569.1	569.1	569.1	569.1	569.1
2.5°	560.8	567.6	563.8	565.3	566.8
5°	545.7	554.0	554.8	559.3	566.1
7.5°	524.6	534.4	540.4	551.7	562.3
10°	497.5	509.5	522.4	540.4	554.0
12.5°	468.8	481.6	500.5	526.1	544.2
15°	437.9	452.3	475.6	509.5	531.4
17.5°	405.5	421.3	449.2	489.2	517.1
20°	372.4	389.7	420.6	465.8	499.7
22.5°	338.4	356.5	390.4	441.7	481.6
25°	303.8	323.4	360.3	416.1	460.5
27.5°	270.6	288.7	329.4	390.4	439.4
30°	234.4	254.8	298.5	364.1	415.3
32.5°	201.3	220.9	266.8	336.9	392.7
35°	165.1	186.9	235.9	309.8	370.1
37.5°	131.2	152.3	205.8	284.2	348.2
40°	98.0	119.8	174.9	258.5	325.6
42.5°	65.6	88.9	145.5	232.2	304.5
45°	36.2	58.0	118.3	209.5	283.4
47.5°	18.8	31.7	92.7	186.9	260.8
50°	14.3	17.3	68.6	162.1	235.2
52.5°	12.1	12.8	46.7	137.2	209.5
55°	9.8	10.6	31.7	115.3	183.2
57.5°	7.5	8.3	22.6	94.2	153.8
60°	6.0	6.8	18.8	72.4	126.6
62.5°	4.5	5.3	18.1	53.5	99.5
65°	3.8	4.5	15.8	36.2	73.1
67.5°	3.0	4.5	13.6	23.4	49.0
70°	3.0	6.0	11.3	15.1	27.1
72.5°	3.0	6.8	9.8	9.8	9.8
75°	3.0	8.3	9.0	8.3	8.3
77.5°	3.0	7.5	7.5	7.5	7.5
80°	3.0	6.8	6.8	6.8	6.0
82.5°	3.0	6.0	6.8	6.8	5.3
85°	3.0	6.0	6.0	6.0	4.5
87.5°	2.3	6.0	6.0	6.0	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)