

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: P1060483

Luminaire Tested: S124RDR-S575D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060483  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S575D840-X4F0-XX-UDD-SVL-B  
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: -

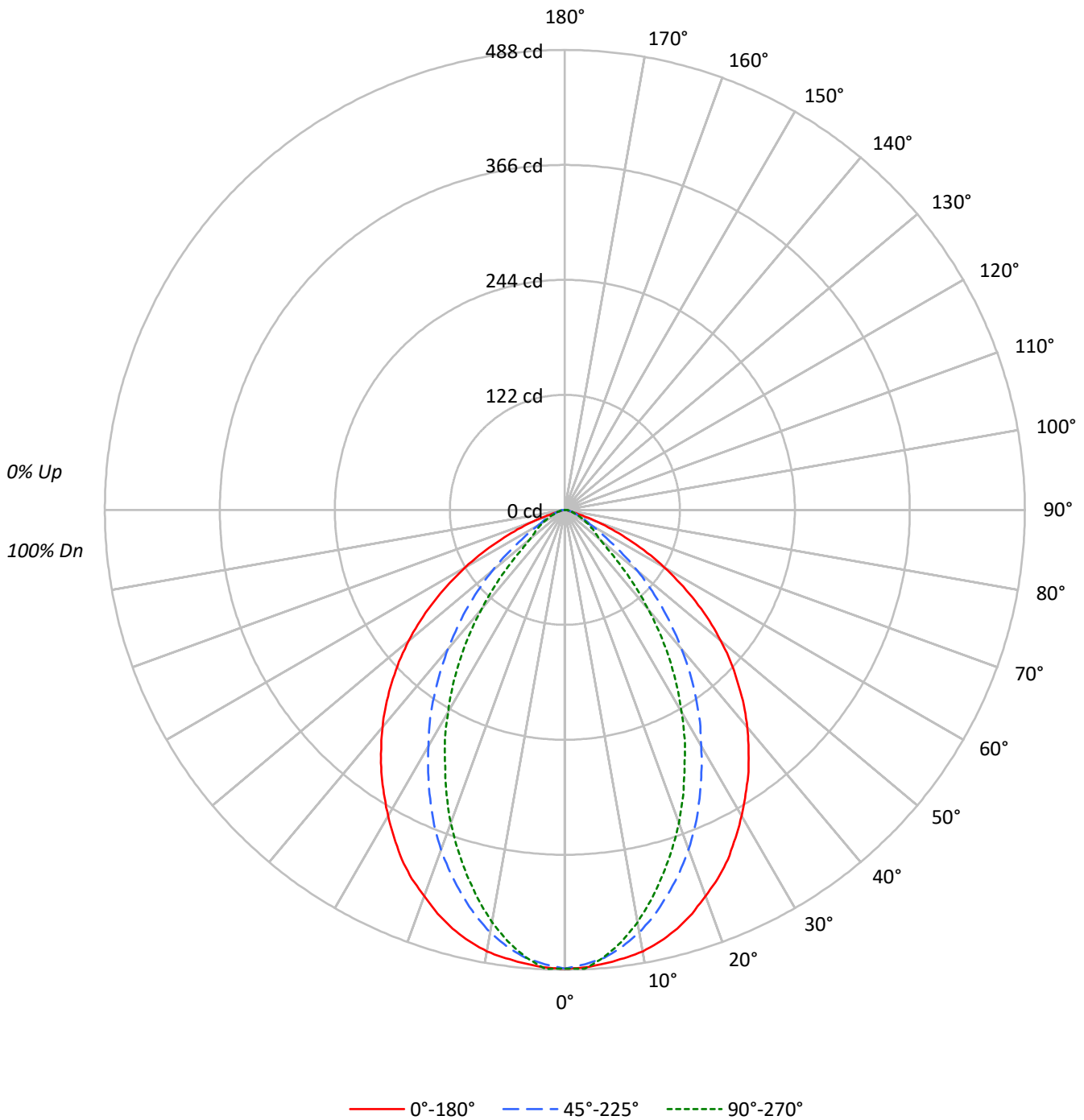
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 717.7 lumens  
Efficiency: N/A  
Efficacy: 36.6 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02  
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	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	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

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

	0°	45°	90°
0°	4192	4192	4192
5°	4179	4125	4119
10°	4160	3981	3885
15°	4101	3765	3576
20°	3996	3518	3242
25°	3889	3211	2853
30°	3729	2877	2461
35°	3568	2544	2032
40°	3384	2166	1541
45°	3164	1771	1035
50°	2894	1341	643
55°	2542	886	545
60°	2101	543	450
65°	1522	420	363
70°	828	310	277
75°	183	230	250
80°	134	169	203
85°	138	138	207

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3164 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.1	6.3
10°-20°	119.8	16.7
20°-30°	158.7	22.1
30°-40°	157.5	21.9
40°-50°	121.2	16.9
50°-60°	72.2	10.1
60°-70°	32.8	4.6
70°-80°	8.5	1.2
80°-90°	1.9	0.3
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°	323.6	45.1
0°-40°	481.1	67.0
0°-60°	674.5	94.0
0°-90°	717.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	717.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	487	487	487	487	487	
5°	483	484	477	477	476	46
15°	460	448	422	408	401	129
25°	409	380	338	310	300	188
35°	339	297	242	205	193	212
45°	260	209	145	102	85	200
55°	169	121	59	37	36	151
65°	75	45	21	18	18	75
75°	6	7	7	8	8	11
85°	1	1	1	2	2	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	486.8	486.8	486.8	486.8	486.8
2.5°	486.1	486.8	482.7	486.1	487.5
5°	483.4	484.0	477.2	477.2	476.5
7.5°	479.9	478.6	467.6	463.5	462.1
10°	475.8	471.0	455.3	447.0	444.3
12.5°	469.0	461.4	440.2	428.5	423.7
15°	460.0	448.4	422.3	407.9	401.1
17.5°	449.1	434.7	403.8	385.3	377.8
20°	436.1	416.9	383.9	360.6	353.8
22.5°	423.7	399.7	362.0	335.3	327.7
25°	409.3	379.8	338.0	309.9	300.3
27.5°	392.2	360.6	314.0	285.2	275.6
30°	375.0	340.1	289.3	259.2	247.5
32.5°	357.2	318.8	266.7	232.4	221.5
35°	339.4	296.9	242.0	205.0	193.3
37.5°	320.2	274.9	217.3	178.9	165.9
40°	301.0	253.7	192.7	153.6	137.1
42.5°	281.1	231.7	168.7	127.5	111.1
45°	259.8	209.1	145.4	101.5	85.0
47.5°	238.6	187.9	122.0	76.1	61.0
50°	216.0	165.2	100.1	55.5	48.0
52.5°	193.3	143.3	78.2	43.2	41.1
55°	169.3	120.7	59.0	37.0	36.3
57.5°	144.7	100.1	42.5	32.2	30.9
60°	122.0	80.9	31.5	27.4	26.1
62.5°	98.7	61.0	26.1	22.6	21.3
65°	74.7	44.6	20.6	17.8	17.8
67.5°	54.2	30.2	16.5	14.4	13.7
70°	32.9	18.5	12.3	11.7	11.0
72.5°	16.5	11.0	9.6	8.9	8.9
75°	5.5	6.9	6.9	7.5	7.5
77.5°	4.1	4.8	4.8	5.5	5.5
80°	2.7	3.4	3.4	4.1	4.1
82.5°	2.1	2.1	2.7	2.7	3.4
85°	1.4	1.4	1.4	2.1	2.1
87.5°	0.7	0.7	0.7	1.4	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)