

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: P1060465

Luminaire Tested: S124RDR-S575D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060465  
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-S575D830-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

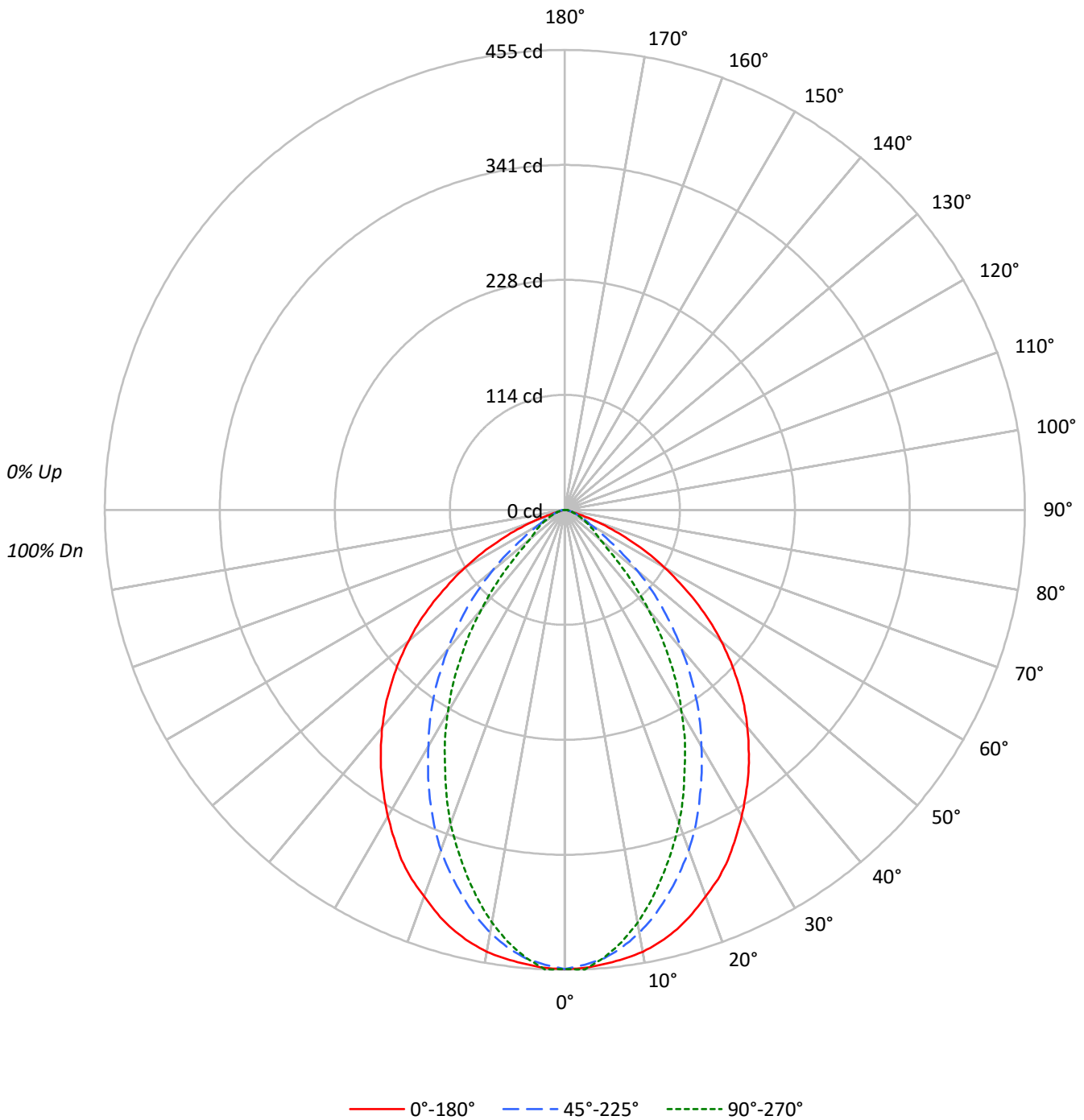
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 669.8 lumens  
Efficiency: N/A  
Efficacy: 34.2 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°	3912	3912	3912
5°	3899	3850	3844
10°	3883	3715	3626
15°	3828	3514	3337
20°	3730	3284	3026
25°	3630	2998	2663
30°	3480	2685	2297
35°	3330	2375	1897
40°	3158	2021	1439
45°	2953	1653	966
50°	2701	1251	600
55°	2374	826	509
60°	1962	506	419
65°	1422	391	338
70°	773	290	257
75°	170	213	233
80°	129	159	188
85°	128	128	188

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2953 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.1	6.3
10°-20°	111.8	16.7
20°-30°	148.1	22.1
30°-40°	147.0	21.9
40°-50°	113.1	16.9
50°-60°	67.4	10.1
60°-70°	30.6	4.6
70°-80°	7.9	1.2
80°-90°	1.8	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°	302.0	45.1
0°-40°	449.0	67.0
0°-60°	629.5	94.0
0°-90°	669.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	669.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	454	454	454	454	454	
5°	451	452	445	445	445	43
15°	429	418	394	381	374	121
25°	382	354	316	289	280	175
35°	317	277	226	191	180	198
45°	242	195	136	95	79	187
55°	158	113	55	35	34	141
65°	70	42	19	17	17	70
75°	5	6	6	7	7	11
85°	1	1	1	2	2	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	454.3	454.3	454.3	454.3	454.3
2.5°	453.7	454.3	450.5	453.7	455.0
5°	451.1	451.8	445.4	445.4	444.7
7.5°	447.9	446.7	436.4	432.6	431.3
10°	444.1	439.6	424.9	417.2	414.7
12.5°	437.7	430.7	410.8	399.9	395.5
15°	429.4	418.5	394.2	380.7	374.3
17.5°	419.1	405.7	376.9	359.6	352.6
20°	407.0	389.1	358.4	336.6	330.2
22.5°	395.5	373.1	337.9	312.9	305.9
25°	382.0	354.5	315.5	289.2	280.3
27.5°	366.0	336.6	293.1	266.2	257.2
30°	350.0	317.4	270.0	241.9	231.0
32.5°	333.4	297.6	248.9	216.9	206.7
35°	316.8	277.1	225.9	191.3	180.5
37.5°	298.8	256.6	202.9	167.0	154.9
40°	280.9	236.8	179.8	143.3	128.0
42.5°	262.4	216.3	157.4	119.0	103.7
45°	242.5	195.2	135.7	94.7	79.3
47.5°	222.7	175.3	113.9	71.0	57.0
50°	201.6	154.2	93.4	51.8	44.8
52.5°	180.5	133.7	72.9	40.3	38.4
55°	158.1	112.6	55.0	34.6	33.9
57.5°	135.0	93.4	39.7	30.1	28.8
60°	113.9	75.5	29.4	25.6	24.3
62.5°	92.1	57.0	24.3	21.1	19.8
65°	69.8	41.6	19.2	16.6	16.6
67.5°	50.6	28.2	15.4	13.4	12.8
70°	30.7	17.3	11.5	10.9	10.2
72.5°	15.4	10.2	9.0	8.3	8.3
75°	5.1	6.4	6.4	7.0	7.0
77.5°	3.8	4.5	4.5	5.1	5.1
80°	2.6	3.2	3.2	3.8	3.8
82.5°	1.9	1.9	2.6	2.6	3.2
85°	1.3	1.3	1.3	1.9	1.9
87.5°	0.6	0.6	0.6	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)