

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: P1060464

Luminaire Tested: S124RDR-S575D830-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060464  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDR-S575D830-X4F0-XX-UDD-BVL-W  
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

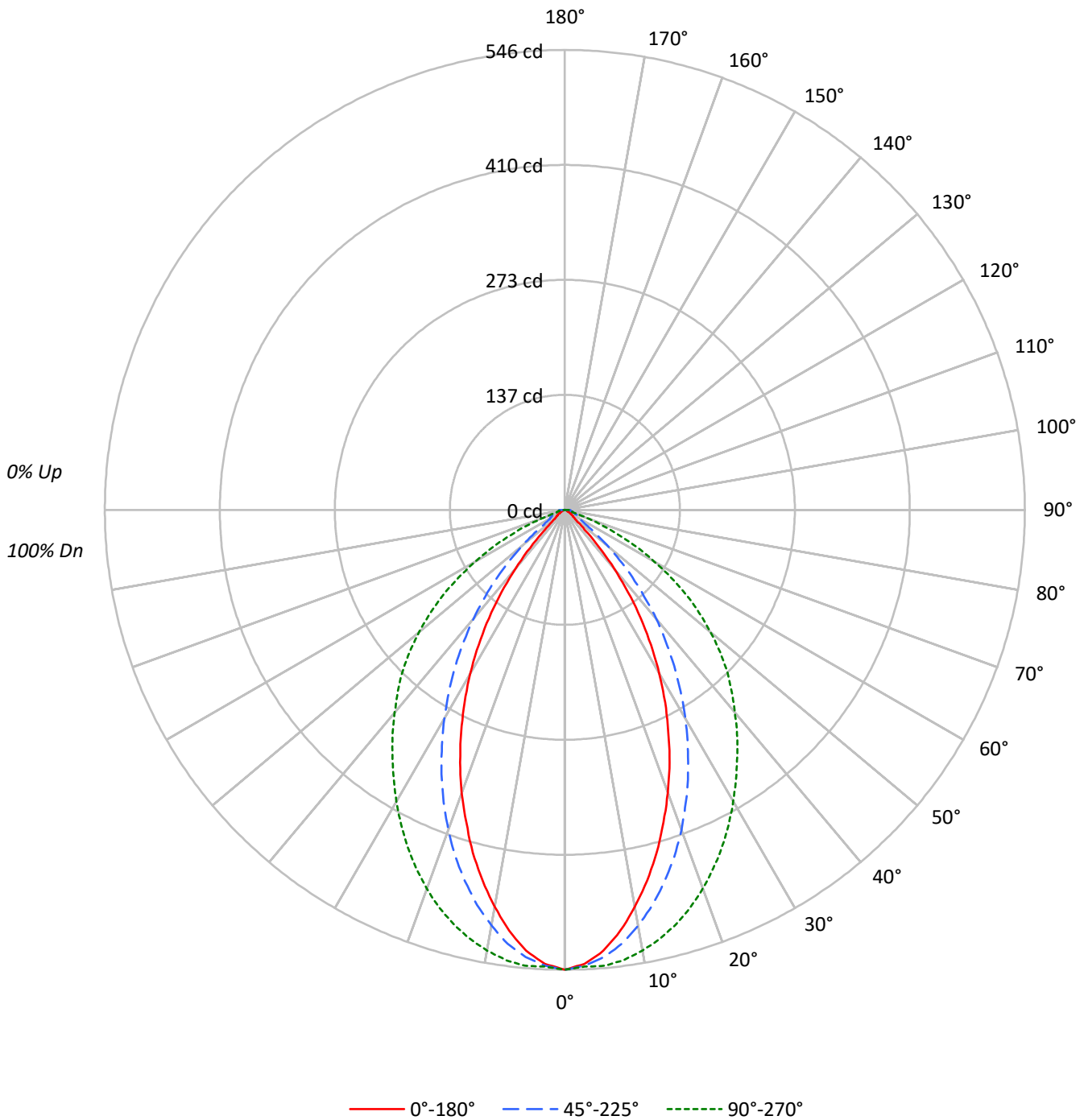
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 688.0 lumens  
Efficiency: N/A  
Efficacy: 35.1 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	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72				
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65				
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59				
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54				
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49				
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45				
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42				
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39				

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

	0°	45°	90°
0°	4701	4701	4701
5°	4542	4608	4697
10°	4185	4382	4645
15°	3759	4073	4541
20°	3276	3705	4386
25°	2764	3287	4195
30°	2230	2842	3975
35°	1650	2378	3752
40°	1023	1894	3530
45°	406	1381	3325
50°	181	867	3021
55°	144	452	2645
60°	100	343	2108
65°	65	340	1449
70°	65	307	677
75°	87	299	299
80°	129	347	347
85°	257	692	504

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3325 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.1	7.3
10°-20°	129.2	18.8
20°-30°	163.1	23.7
30°-40°	149.7	21.8
40°-50°	101.9	14.8
50°-60°	55.5	8.1
60°-70°	24.0	3.5
70°-80°	8.8	1.3
80°-90°	5.6	0.8
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°	342.5	49.8
0°-40°	492.1	71.5
0°-60°	649.6	94.4
0°-90°	688.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	688.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	546	546	546	546	546	
5°	525	532	533	539	543	49
15°	422	436	457	490	509	117
25°	291	311	346	401	442	133
35°	157	180	226	298	357	97
45°	33	56	113	201	273	31
55°	10	10	30	111	176	9
65°	3	4	17	35	71	4
75°	3	8	9	9	9	3
85°	3	6	7	7	5	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	545.9	545.9	545.9	545.9	545.9
2.5°	539.5	545.9	541.4	542.7	542.7
5°	525.4	532.5	533.1	538.9	543.4
7.5°	504.3	514.5	519.6	531.2	538.9
10°	478.6	490.8	501.1	520.9	531.2
12.5°	451.1	465.2	480.6	506.8	521.6
15°	421.6	436.4	456.9	489.5	509.4
17.5°	388.9	406.9	431.9	471.0	495.3
20°	357.5	375.5	404.3	448.5	478.6
22.5°	324.9	343.4	375.5	424.8	460.7
25°	290.9	311.4	346.0	401.1	441.5
27.5°	257.6	279.4	315.9	376.1	421.0
30°	224.3	246.0	285.8	350.5	399.8
32.5°	190.3	212.7	255.7	323.6	378.0
35°	157.0	180.1	226.2	297.9	356.9
37.5°	123.0	147.4	196.7	273.0	335.8
40°	91.0	115.3	168.5	248.0	314.0
42.5°	60.9	85.2	139.7	223.6	293.5
45°	33.3	55.7	113.4	201.2	273.0
47.5°	17.9	30.8	87.8	179.4	249.9
50°	13.5	16.7	64.7	156.3	225.5
52.5°	11.5	12.8	44.9	132.0	201.2
55°	9.6	10.3	30.1	110.8	176.2
57.5°	7.7	8.3	22.4	89.7	149.3
60°	5.8	7.0	19.9	69.2	122.4
62.5°	4.5	5.8	18.6	50.6	96.8
65°	3.2	4.5	16.7	34.6	71.1
67.5°	3.2	5.1	14.1	22.4	48.1
70°	2.6	7.0	12.2	14.7	26.9
72.5°	2.6	7.7	10.3	10.3	10.3
75°	2.6	8.3	9.0	9.0	9.0
77.5°	2.6	7.7	8.3	7.7	7.7
80°	2.6	7.0	7.0	7.0	7.0
82.5°	2.6	6.4	7.0	7.0	5.8
85°	2.6	5.8	7.0	7.0	5.1
87.5°	1.9	5.8	6.4	6.4	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)