

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1060509

Luminaire Tested: S124RDRP-S575D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060509  
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: S124RDRP-S575D930-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, 90 CRI LEDS  
Ballast/Driver: -

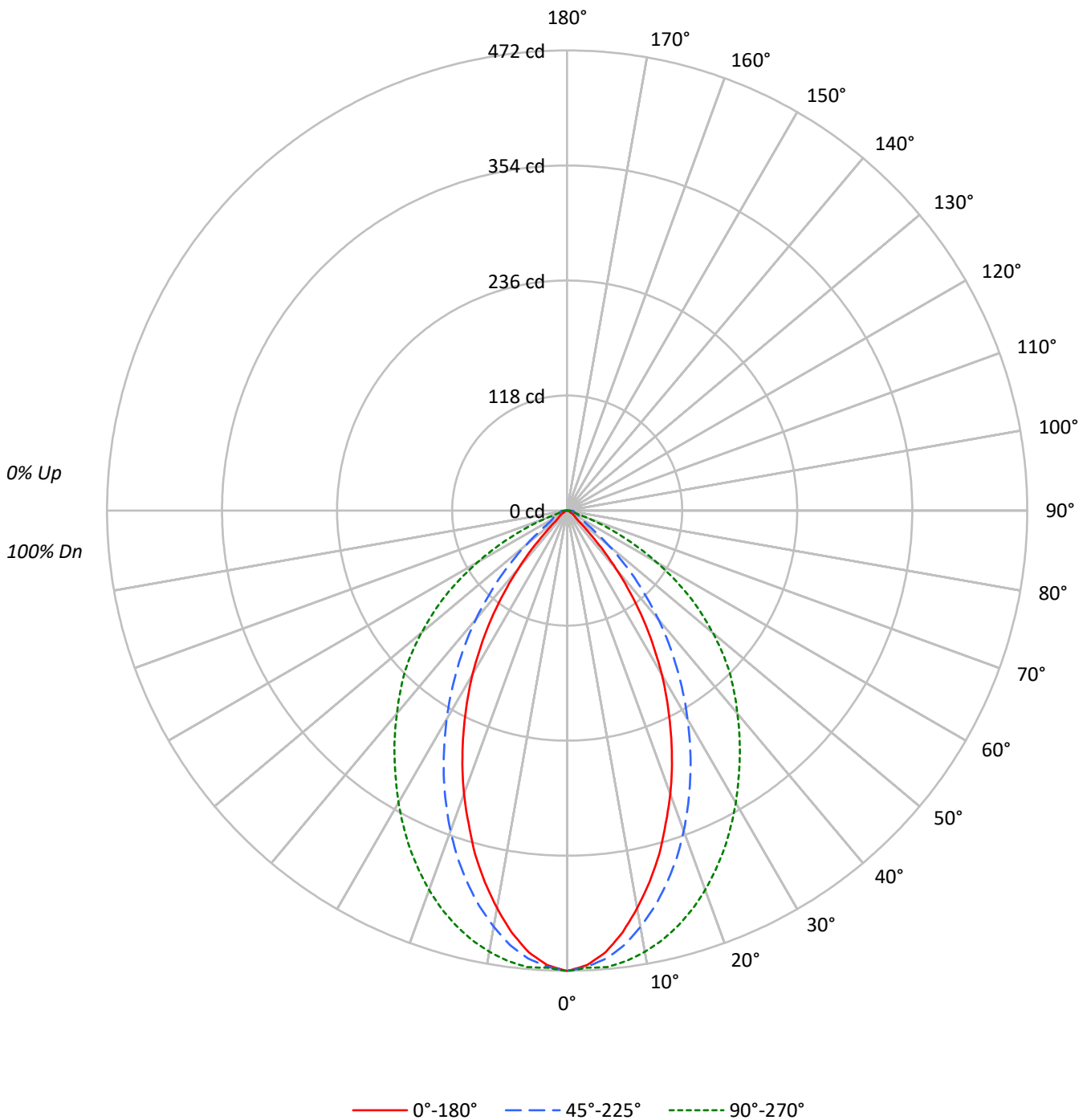
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 595.2 lumens  
Efficiency: N/A  
Efficacy: 30.4 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 (A<sub>in</sub>): 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	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°	4066	4066	4066
5°	3929	3986	4063
10°	3620	3790	4018
15°	3251	3523	3928
20°	2834	3205	3794
25°	2391	2844	3629
30°	1929	2458	3439
35°	1428	2057	3245
40°	885	1639	3053
45°	351	1195	2875
50°	155	750	2614
55°	125	390	2288
60°	86	296	1824
65°	57	293	1253
70°	55	264	587
75°	73	260	260
80°	109	302	302
85°	217	603	435

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 2875 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.3	7.3
10°-20°	111.8	18.8
20°-30°	141.1	23.7
30°-40°	129.5	21.8
40°-50°	88.2	14.8
50°-60°	48.0	8.1
60°-70°	20.8	3.5
70°-80°	7.6	1.3
80°-90°	4.9	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°	296.2	49.8
0°-40°	425.7	71.5
0°-60°	561.9	94.4
0°-90°	595.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	595.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	472	472	472	472	472	
5°	454	461	461	466	470	42
15°	365	377	395	423	441	101
25°	252	269	299	347	382	115
35°	136	156	196	258	309	84
45°	29	48	98	174	236	27
55°	8	9	26	96	152	7
65°	3	4	14	30	62	3
75°	2	7	8	8	8	2
85°	2	5	6	6	4	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	472.2	472.2	472.2	472.2	472.2
2.5°	466.7	472.2	468.3	469.4	469.4
5°	454.5	460.6	461.1	466.1	470.0
7.5°	436.2	445.1	449.5	459.5	466.1
10°	414.0	424.6	433.4	450.6	459.5
12.5°	390.2	402.4	415.7	438.4	451.2
15°	364.7	377.4	395.2	423.4	440.6
17.5°	336.4	351.9	373.6	407.4	428.4
20°	309.3	324.8	349.7	388.0	414.0
22.5°	281.0	297.1	324.8	367.5	398.5
25°	251.6	269.4	299.3	347.0	381.9
27.5°	222.8	241.7	273.2	325.3	364.1
30°	194.0	212.8	247.2	303.2	345.9
32.5°	164.6	184.0	221.1	279.9	327.0
35°	135.8	155.7	195.7	257.7	308.7
37.5°	106.4	127.5	170.2	236.1	290.4
40°	78.7	99.8	145.8	214.5	271.6
42.5°	52.7	73.7	120.8	193.4	253.8
45°	28.8	48.2	98.1	174.0	236.1
47.5°	15.5	26.6	75.9	155.2	216.2
50°	11.6	14.4	56.0	135.2	195.1
52.5°	10.0	11.1	38.8	114.2	174.0
55°	8.3	8.9	26.0	95.9	152.4
57.5°	6.7	7.2	19.4	77.6	129.1
60°	5.0	6.1	17.2	59.9	105.9
62.5°	3.9	5.0	16.1	43.8	83.7
65°	2.8	3.9	14.4	29.9	61.5
67.5°	2.8	4.4	12.2	19.4	41.6
70°	2.2	6.1	10.5	12.7	23.3
72.5°	2.2	6.7	8.9	8.9	8.9
75°	2.2	7.2	7.8	7.8	7.8
77.5°	2.2	6.7	7.2	6.7	6.7
80°	2.2	6.1	6.1	6.1	6.1
82.5°	2.2	5.5	6.1	6.1	5.0
85°	2.2	5.0	6.1	6.1	4.4
87.5°	1.7	5.0	5.5	5.5	3.3
90°	0.0	0.0	0.0	0.0	0.0



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**CIE UGR TABLE:**

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.00	0.00	0.00	0.00	0.00	13.28	14.56	13.65	14.87	15.19
	3H	0.00	0.00	0.00	0.00	0.00	13.66	14.79	14.04	15.12	15.48
	4H	0.00	0.00	0.00	0.00	0.34	13.64	14.69	14.04	15.04	15.42
	6H	0.00	0.70	0.15	1.07	1.47	13.63	14.59	14.04	14.96	15.36
	8H	0.32	1.23	0.75	1.62	2.03	13.63	14.54	14.06	14.93	15.34
	12H	0.98	1.86	1.42	2.24	2.67	13.64	14.51	14.07	14.90	15.33
4H	2H	0.00	0.58	0.00	0.93	1.31	13.09	14.15	13.50	14.50	14.88
	3H	1.11	1.97	1.53	2.38	2.78	13.51	14.37	13.93	14.78	15.18
	4H	2.41	3.17	2.84	3.59	4.04	13.51	14.28	13.95	14.70	15.14
	6H	3.54	4.20	4.00	4.65	5.11	13.55	14.21	14.02	14.66	15.13
	8H	4.04	4.66	4.51	5.10	5.58	13.58	14.20	14.05	14.65	15.12
	12H	4.59	5.13	5.07	5.61	6.09	13.65	14.19	14.13	14.67	15.15
8H	4H	3.50	4.11	3.97	4.56	5.03	13.42	14.04	13.89	14.49	14.96
	6H	5.04	5.54	5.54	6.04	6.52	13.50	14.01	14.01	14.50	14.99
	8H	5.84	6.29	6.36	6.81	7.30	13.59	14.04	14.11	14.56	15.05
	12H	6.67	7.07	7.18	7.56	8.13	13.75	14.16	14.27	14.65	15.22
12H	4H	3.68	4.23	4.17	4.71	5.19	13.39	13.93	13.87	14.41	14.89
	6H	5.39	5.85	5.92	6.36	6.86	13.48	13.93	14.00	14.45	14.94
	8H	6.40	6.80	6.91	7.29	7.87	13.61	14.01	14.13	14.51	15.08