

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: P1060466

Luminaire Tested: S124RDRP-S575D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060466  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S575D830-X4F0-XX-UDD-SVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

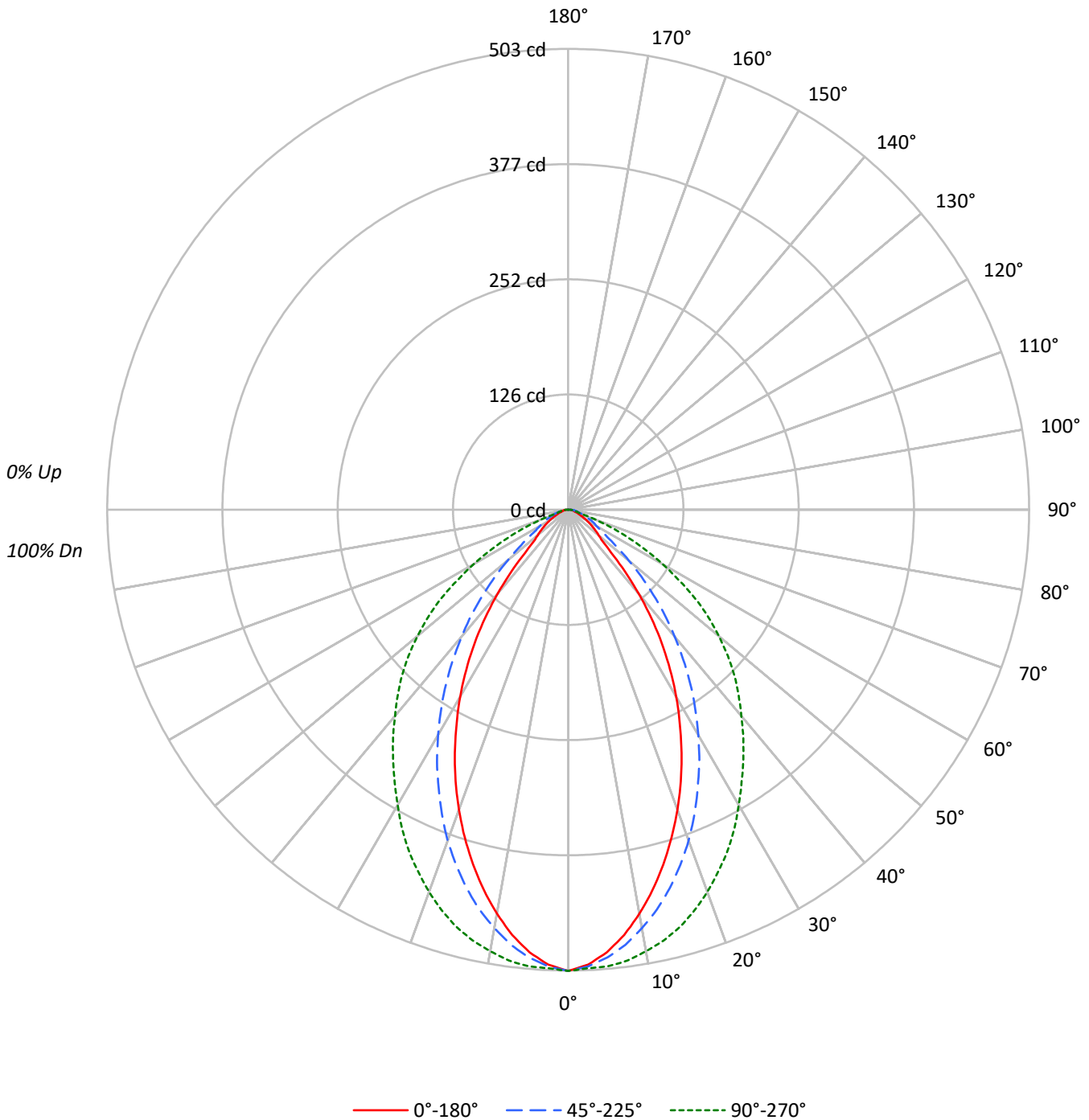
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 707.9 lumens  
Efficiency: N/A  
Efficacy: 36.1 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01  
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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63
5	84	73	66	61	82	72	65	60	70	64	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	49	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43
9	65	54	46	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36

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

	0°	45°	90°
0°	4335	4335	4335
5°	4191	4241	4324
10°	3915	4055	4278
15°	3574	3814	4202
20°	3193	3522	4068
25°	2781	3176	3907
30°	2344	2821	3700
35°	1872	2444	3502
40°	1347	2030	3305
45°	811	1599	3127
50°	584	1159	2875
55°	491	779	2548
60°	398	618	2051
65°	314	560	1475
70°	274	468	791
75°	256	426	383
80°	253	446	347
85°	375	632	445

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 3127 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.2	6.5
10°-20°	121.1	17.1
20°-30°	157.1	22.2
30°-40°	151.0	21.3
40°-50°	112.1	15.8
50°-60°	68.6	9.7
60°-70°	33.3	4.7
70°-80°	12.7	1.8
80°-90°	5.7	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°	324.4	45.8
0°-40°	475.4	67.2
0°-60°	656.1	92.7
0°-90°	707.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	707.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	503	503	503	503	503	
5°	485	492	491	495	500	45
15°	401	412	428	454	471	112
25°	293	307	334	377	411	134
35°	178	194	232	288	333	110
45°	67	83	131	200	257	55
55°	33	34	52	117	170	29
65°	15	17	28	44	72	16
75°	8	12	13	12	12	8
85°	4	6	6	6	4	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	503.4	503.4	503.4	503.4	503.4
2.5°	497.0	502.8	498.9	500.2	500.9
5°	484.8	491.9	490.6	495.1	500.2
7.5°	468.2	476.5	479.1	488.0	496.4
10°	447.7	457.9	463.7	478.4	489.3
12.5°	425.3	436.2	447.1	466.9	481.6
15°	400.9	412.5	427.8	453.5	471.4
17.5°	375.3	388.1	406.7	437.5	458.6
20°	348.4	361.9	384.3	418.2	443.9
22.5°	320.9	335.0	360.0	397.7	427.8
25°	292.7	307.4	334.3	377.2	411.2
27.5°	263.9	279.3	310.0	355.5	392.6
30°	235.7	250.4	283.7	333.1	372.1
32.5°	206.9	222.2	258.1	310.0	352.3
35°	178.1	194.1	232.5	287.6	333.1
37.5°	148.6	165.9	206.2	265.8	313.8
40°	119.8	136.4	180.6	243.4	294.0
42.5°	91.6	109.5	156.3	221.0	275.4
45°	66.6	83.3	131.3	200.5	256.8
47.5°	50.0	60.2	108.2	181.3	236.3
50°	43.6	45.5	86.5	160.1	214.6
52.5°	37.8	39.1	67.3	137.1	192.8
55°	32.7	33.9	51.9	117.2	169.7
57.5°	27.5	28.8	41.6	98.0	143.5
60°	23.1	24.3	35.9	78.1	119.1
62.5°	19.2	19.9	32.0	59.6	95.4
65°	15.4	16.7	27.5	43.6	72.4
67.5°	12.8	14.1	22.4	30.1	50.6
70°	10.9	14.1	18.6	21.1	31.4
72.5°	9.0	12.8	15.4	14.7	14.7
75°	7.7	12.2	12.8	11.5	11.5
77.5°	6.4	10.9	10.2	9.6	9.0
80°	5.1	9.0	9.0	7.7	7.0
82.5°	4.5	7.0	7.0	7.0	5.8
85°	3.8	6.4	6.4	5.8	4.5
87.5°	2.6	5.1	5.8	5.1	3.2
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	4.90	6.24	5.27	6.55	6.87	14.01	15.35	14.37	15.66	15.98
	3H	5.95	7.14	6.33	7.47	7.83	14.51	15.70	14.89	16.03	16.39
	4H	6.47	7.57	6.87	7.93	8.31	14.52	15.63	14.93	15.98	16.36
	6H	6.92	7.93	7.33	8.30	8.70	14.52	15.54	14.94	15.91	16.30
	8H	7.11	8.07	7.54	8.46	8.87	14.52	15.48	14.95	15.87	16.28
	12H	7.32	8.24	7.75	8.62	9.05	14.52	15.44	14.95	15.82	16.25
4H	2H	6.00	7.10	6.40	7.45	7.84	13.90	15.00	14.30	15.36	15.74
	3H	7.27	8.18	7.68	8.58	8.98	14.48	15.38	14.89	15.78	16.19
	4H	7.98	8.79	8.41	9.21	9.65	14.52	15.33	14.96	15.75	16.19
	6H	8.61	9.31	9.07	9.76	10.22	14.57	15.27	15.04	15.72	16.19
	8H	8.86	9.51	9.32	9.96	10.43	14.59	15.24	15.06	15.69	16.16
	12H	9.13	9.71	9.61	10.19	10.66	14.63	15.20	15.11	15.69	16.16
8H	4H	8.41	9.06	8.87	9.51	9.98	14.47	15.12	14.94	15.57	16.04
	6H	9.28	9.82	9.79	10.32	10.80	14.56	15.10	15.07	15.60	16.08
	8H	9.69	10.17	10.21	10.68	11.18	14.62	15.11	15.15	15.62	16.11
	12H	10.16	10.59	10.68	11.08	11.65	14.73	15.15	15.24	15.65	16.22
12H	4H	8.45	9.03	8.93	9.51	9.98	14.44	15.02	14.93	15.50	15.98
	6H	9.40	9.88	9.92	10.39	10.88	14.54	15.02	15.06	15.54	16.03
	8H	9.91	10.34	10.42	10.83	11.40	14.65	15.07	15.16	15.57	16.14