

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: P1060258

Luminaire Tested: S124RDRP-S1020D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060258  
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: S124RDRP-S1020D927-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: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

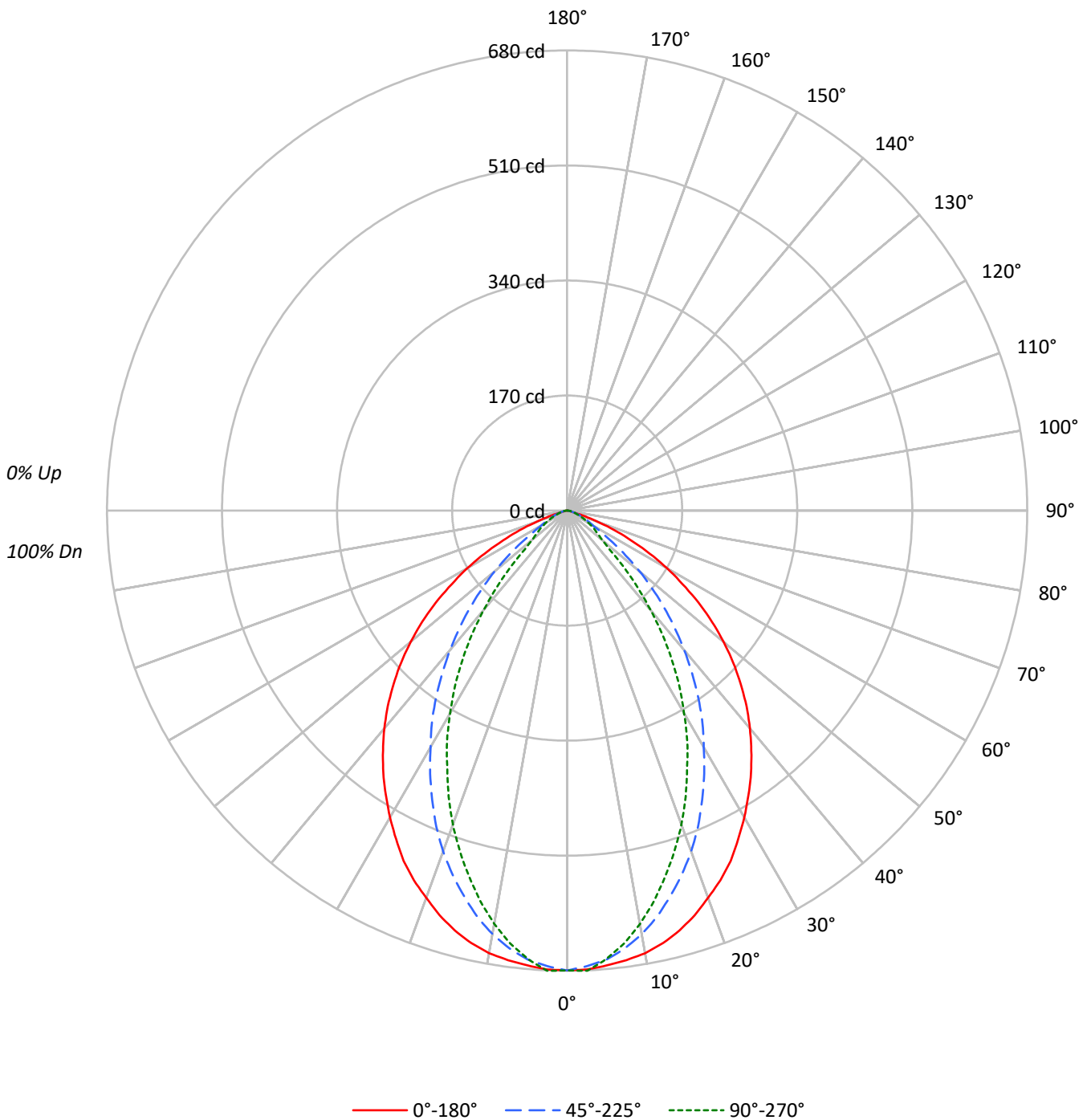
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1001.9 lumens  
Efficiency: N/A  
Efficacy: 28.6 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): 35  
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

TEST NUMBER: P1060258

CATALOG NUMBER: S124RDRP-S1020D927-X4F0-XX-UDD-SVL-B

### Luminous Intensity Polar Plot





TEST NUMBER: P1060258

CATALOG NUMBER: S124RDRP-S1020D927-X4F0-XX-UDD-SVL-B

**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	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90					90			
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80					80			
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71					71			
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63					63			
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57					57			
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51					51			
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47					47			
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43					43			
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36					36			

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

	0°	45°	90°
0°	5851	5851	5851
5°	5832	5758	5750
10°	5808	5557	5423
15°	5725	5256	4991
20°	5578	4912	4525
25°	5429	4483	3983
30°	5205	4016	3435
35°	4981	3551	2837
40°	4723	3023	2152
45°	4417	2471	1446
50°	4039	1871	898
55°	3549	1236	761
60°	2935	758	627
65°	2125	585	507
70°	1156	433	385
75°	256	319	349
80°	188	238	283
85°	188	188	287

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4417 cd/sqm



TEST NUMBER: P1060258

CATALOG NUMBER: S124RDRP-S1020D927-X4F0-XX-UDD-SVL-B

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.9	6.3
10°-20°	167.2	16.7
20°-30°	221.5	22.1
30°-40°	219.9	21.9
40°-50°	169.2	16.9
50°-60°	100.8	10.1
60°-70°	45.8	4.6
70°-80°	11.9	1.2
80°-90°	2.6	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°	451.7	45.1
0°-40°	671.5	67.0
0°-60°	941.5	94.0
0°-90°	1001.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1001.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	680	680	680	680	680	
5°	675	676	666	666	665	64
15°	642	626	590	570	560	181
25°	571	530	472	433	419	262
35°	474	414	338	286	270	296
45°	363	292	203	142	119	279
55°	236	168	82	52	51	211
65°	104	62	29	25	25	105
75°	8	10	10	10	10	16
85°	2	2	2	3	3	2
90°	0	0	0	0	0	



TEST NUMBER: P1060258

CATALOG NUMBER: S124RDRP-S1020D927-X4F0-XX-UDD-SVL-B

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	679.5	679.5	679.5	679.5	679.5
2.5°	678.6	679.5	673.8	678.6	680.5
5°	674.7	675.7	666.1	666.1	665.2
7.5°	670.0	668.0	652.7	647.0	645.1
10°	664.2	657.5	635.5	624.0	620.2
12.5°	654.6	644.1	614.4	598.2	591.5
15°	642.2	625.9	589.6	569.5	559.9
17.5°	626.9	606.8	563.7	537.9	527.3
20°	608.7	581.9	536.0	503.4	493.8
22.5°	591.5	558.0	505.3	468.0	457.5
25°	571.4	530.2	471.8	432.6	419.2
27.5°	547.4	503.4	438.3	398.1	384.7
30°	523.5	474.7	403.9	361.8	345.5
32.5°	498.6	445.0	372.3	324.4	309.1
35°	473.8	414.4	337.8	286.2	269.9
37.5°	447.0	383.8	303.4	249.8	231.6
40°	420.2	354.1	268.9	214.4	191.4
42.5°	392.4	323.5	235.4	178.0	155.0
45°	362.7	291.9	202.9	141.6	118.7
47.5°	333.1	262.2	170.4	106.2	85.2
50°	301.5	230.7	139.7	77.5	67.0
52.5°	269.9	200.0	109.1	60.3	57.4
55°	236.4	168.4	82.3	51.7	50.7
57.5°	201.9	139.7	59.3	45.0	43.1
60°	170.4	112.9	44.0	38.3	36.4
62.5°	137.8	85.2	36.4	31.6	29.7
65°	104.3	62.2	28.7	24.9	24.9
67.5°	75.6	42.1	23.0	20.1	19.1
70°	45.9	25.8	17.2	16.3	15.3
72.5°	23.0	15.3	13.4	12.4	12.4
75°	7.7	9.6	9.6	10.5	10.5
77.5°	5.7	6.7	6.7	7.7	7.7
80°	3.8	4.8	4.8	5.7	5.7
82.5°	2.9	2.9	3.8	3.8	4.8
85°	1.9	1.9	1.9	2.9	2.9
87.5°	1.0	1.0	1.0	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1060258  
 CATALOG NUMBER: S124RDRP-S1020D927-X4F0-XX-UDD-SVL-B

**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	15.26	16.59	15.62	16.90	17.22	6.81	8.14	7.17	8.46	8.77
	3H	15.76	16.94	16.14	17.27	17.64	7.63	8.81	8.00	9.14	9.50
	4H	15.73	16.83	16.13	17.18	17.56	7.91	9.00	8.31	9.35	9.74
	6H	15.67	16.67	16.08	17.04	17.44	8.08	9.08	8.49	9.46	9.85
	8H	15.63	16.58	16.06	16.97	17.38	8.14	9.10	8.57	9.49	9.89
	12H	15.59	16.50	16.02	16.88	17.31	8.19	9.10	8.62	9.48	9.91
4H	2H	15.10	16.20	15.50	16.55	16.93	7.25	8.35	7.65	8.70	9.08
	3H	15.65	16.54	16.06	16.95	17.35	8.21	9.11	8.63	9.51	9.91
	4H	15.62	16.42	16.05	16.84	17.28	8.57	9.37	9.01	9.79	10.23
	6H	15.57	16.25	16.03	16.70	17.17	8.83	9.51	9.29	9.96	10.42
	8H	15.52	16.16	15.99	16.61	17.08	8.91	9.55	9.38	10.00	10.47
	12H	15.48	16.05	15.97	16.53	17.00	8.99	9.56	9.48	10.04	10.51
8H	4H	15.51	16.15	15.98	16.60	17.07	8.66	9.30	9.13	9.75	10.22
	6H	15.45	15.97	15.95	16.47	16.95	8.97	9.50	9.48	9.99	10.47
	8H	15.40	15.87	15.92	16.39	16.88	9.10	9.57	9.63	10.09	10.58
	12H	15.37	15.78	15.88	16.28	16.85	9.24	9.66	9.76	10.15	10.72
12H	4H	15.47	16.03	15.95	16.52	16.99	8.64	9.20	9.12	9.68	10.16
	6H	15.39	15.86	15.91	16.38	16.87	8.95	9.42	9.48	9.94	10.43
	8H	15.37	15.78	15.88	16.28	16.85	9.12	9.54	9.64	10.03	10.60