

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



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: P1060781

Luminaire Tested: S124RDR-H1195D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1060781  
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: S124RDR-H1195D950-X4F0-XX-UDD-SVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
HIGH PERFORMANCE LIGHT ENGINE  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

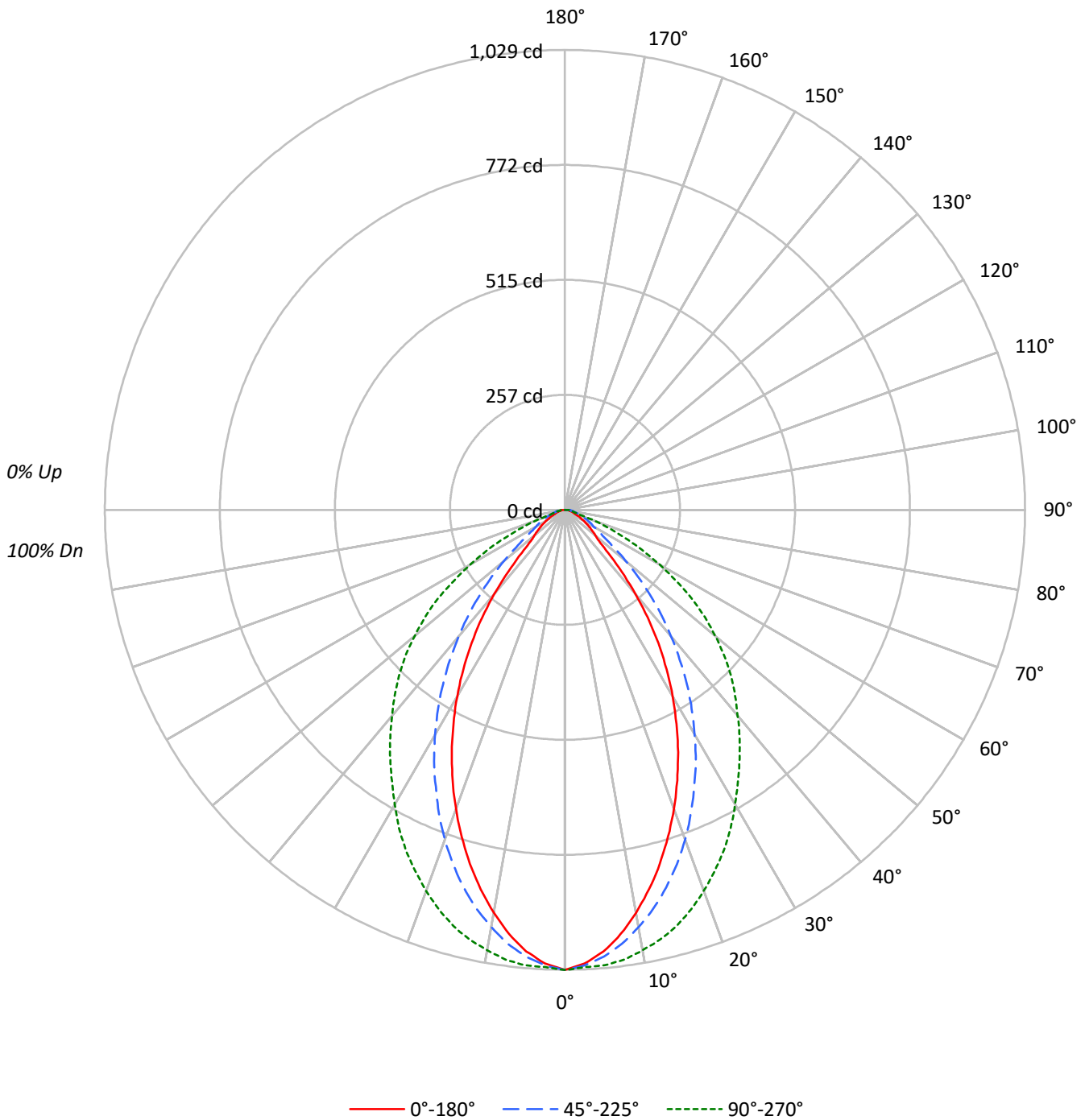
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1447.5 lumens  
Efficiency: N/A  
Efficacy: 39.7 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): 36.5  
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

TEST NUMBER: P1060781

CATALOG NUMBER: S124RDR-H1195D950-X4F0-XX-UDD-SVL-S

### Luminous Intensity Polar Plot





TEST NUMBER: P1060781

CATALOG NUMBER: S124RDR-H1195D950-X4F0-XX-UDD-SVL-S

**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°	8864	8864	8864
5°	8570	8672	8841
10°	8004	8291	8749
15°	7308	7799	8593
20°	6528	7201	8317
25°	5687	6495	7989
30°	4792	5769	7566
35°	3828	4998	7159
40°	2753	4151	6757
45°	1659	3270	6396
50°	1194	2369	5877
55°	1003	1593	5211
60°	811	1262	4195
65°	640	1147	3016
70°	561	957	1616
75°	522	872	785
80°	521	907	714
85°	781	1294	909

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6396 cd/sqm



TEST NUMBER: P1060781

CATALOG NUMBER: S124RDR-H1195D950-X4F0-XX-UDD-SVL-S

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.5	6.5
10°-20°	247.6	17.1
20°-30°	321.3	22.2
30°-40°	308.8	21.3
40°-50°	229.1	15.8
50°-60°	140.4	9.7
60°-70°	68.2	4.7
70°-80°	26.0	1.8
80°-90°	11.7	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°	663.4	45.8
0°-40°	972.2	67.2
0°-60°	1341.6	92.7
0°-90°	1447.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1447.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1029	1029	1029	1029	1029	
5°	991	1006	1003	1012	1023	92
15°	820	843	875	927	964	229
25°	598	629	684	771	841	274
35°	364	397	475	588	681	225
45°	136	170	268	410	525	113
55°	67	69	106	240	347	60
65°	31	34	56	89	148	32
75°	16	25	26	24	24	17
85°	8	13	13	12	9	8
90°	0	0	0	0	0	



TEST NUMBER: P1060781

CATALOG NUMBER: S124RDR-H1195D950-X4F0-XX-UDD-SVL-S

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1029.4	1029.4	1029.4	1029.4	1029.4
2.5°	1016.3	1028.1	1020.2	1022.8	1024.1
5°	991.4	1005.8	1003.2	1012.4	1022.8
7.5°	957.3	974.4	979.6	997.9	1015.0
10°	915.4	936.4	948.2	978.3	1000.6
12.5°	869.6	891.9	914.1	954.7	984.9
15°	819.8	843.4	874.8	927.2	963.9
17.5°	767.4	793.6	831.6	894.5	937.7
20°	712.4	739.9	785.8	855.2	907.6
22.5°	656.1	684.9	736.0	813.3	874.8
25°	598.5	628.6	683.6	771.4	840.8
27.5°	539.6	571.0	633.9	726.9	802.8
30°	481.9	512.1	580.2	681.0	760.9
32.5°	423.0	454.4	527.8	633.9	720.3
35°	364.1	396.8	475.4	588.0	681.0
37.5°	303.8	339.2	421.7	543.5	641.7
40°	244.9	279.0	369.3	497.7	601.1
42.5°	187.3	223.9	319.6	451.8	563.1
45°	136.2	170.3	268.5	409.9	525.2
47.5°	102.2	123.1	221.3	370.6	483.3
50°	89.1	93.0	176.8	327.4	438.7
52.5°	77.3	79.9	137.5	280.3	394.2
55°	66.8	69.4	106.1	239.7	347.1
57.5°	56.3	58.9	85.1	200.4	293.4
60°	47.1	49.8	73.3	159.8	243.6
62.5°	39.3	40.6	65.5	121.8	195.1
65°	31.4	34.1	56.3	89.1	148.0
67.5°	26.2	28.8	45.8	61.6	103.5
70°	22.3	28.8	38.0	43.2	64.2
72.5°	18.3	26.2	31.4	30.1	30.1
75°	15.7	24.9	26.2	23.6	23.6
77.5°	13.1	22.3	21.0	19.6	18.3
80°	10.5	18.3	18.3	15.7	14.4
82.5°	9.2	14.4	14.4	14.4	11.8
85°	7.9	13.1	13.1	11.8	9.2
87.5°	5.2	10.5	11.8	10.5	6.5
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060781  
 CATALOG NUMBER: S124RDR-H1195D950-X4F0-XX-UDD-SVL-S

**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	7.39	8.73	7.76	9.04	9.36	16.49	17.83	16.86	18.15	18.46
	3H	8.44	9.62	8.82	9.95	10.32	17.00	18.18	17.38	18.51	18.88
	4H	8.95	10.06	9.35	10.41	10.79	17.01	18.12	17.41	18.47	18.85
	6H	9.40	10.42	9.82	10.79	11.18	17.01	18.03	17.42	18.40	18.79
	8H	9.59	10.56	10.02	10.95	11.35	17.00	17.97	17.43	18.36	18.76
	12H	9.81	10.73	10.24	11.11	11.54	17.00	17.93	17.44	18.31	18.74
4H	2H	8.49	9.59	8.89	9.94	10.33	16.38	17.49	16.79	17.84	18.22
	3H	9.76	10.66	10.17	11.07	11.47	16.96	17.87	17.37	18.27	18.67
	4H	10.46	11.27	10.90	11.69	12.13	17.01	17.82	17.44	18.24	18.68
	6H	11.10	11.79	11.56	12.24	12.71	17.06	17.76	17.52	18.21	18.67
	8H	11.34	11.99	11.81	12.44	12.91	17.08	17.73	17.55	18.18	18.65
	12H	11.62	12.20	12.10	12.68	13.15	17.11	17.69	17.60	18.17	18.65
8H	4H	10.89	11.54	11.36	11.99	12.46	16.96	17.61	17.43	18.06	18.53
	6H	11.77	12.30	12.27	12.80	13.28	17.05	17.59	17.55	18.08	18.56
	8H	12.17	12.66	12.70	13.17	13.66	17.11	17.59	17.63	18.11	18.60
	12H	12.65	13.08	13.17	13.57	14.15	17.21	17.64	17.73	18.13	18.70
12H	4H	10.93	11.51	11.42	11.99	12.47	16.93	17.51	17.42	17.99	18.46
	6H	11.88	12.36	12.40	12.88	13.37	17.03	17.51	17.55	18.03	18.52
	8H	12.40	12.82	12.91	13.32	13.89	17.14	17.56	17.65	18.06	18.63