

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: P1060295

Luminaire Tested: S124RDRP-S1020D950-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060295  
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-S1020D950-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: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

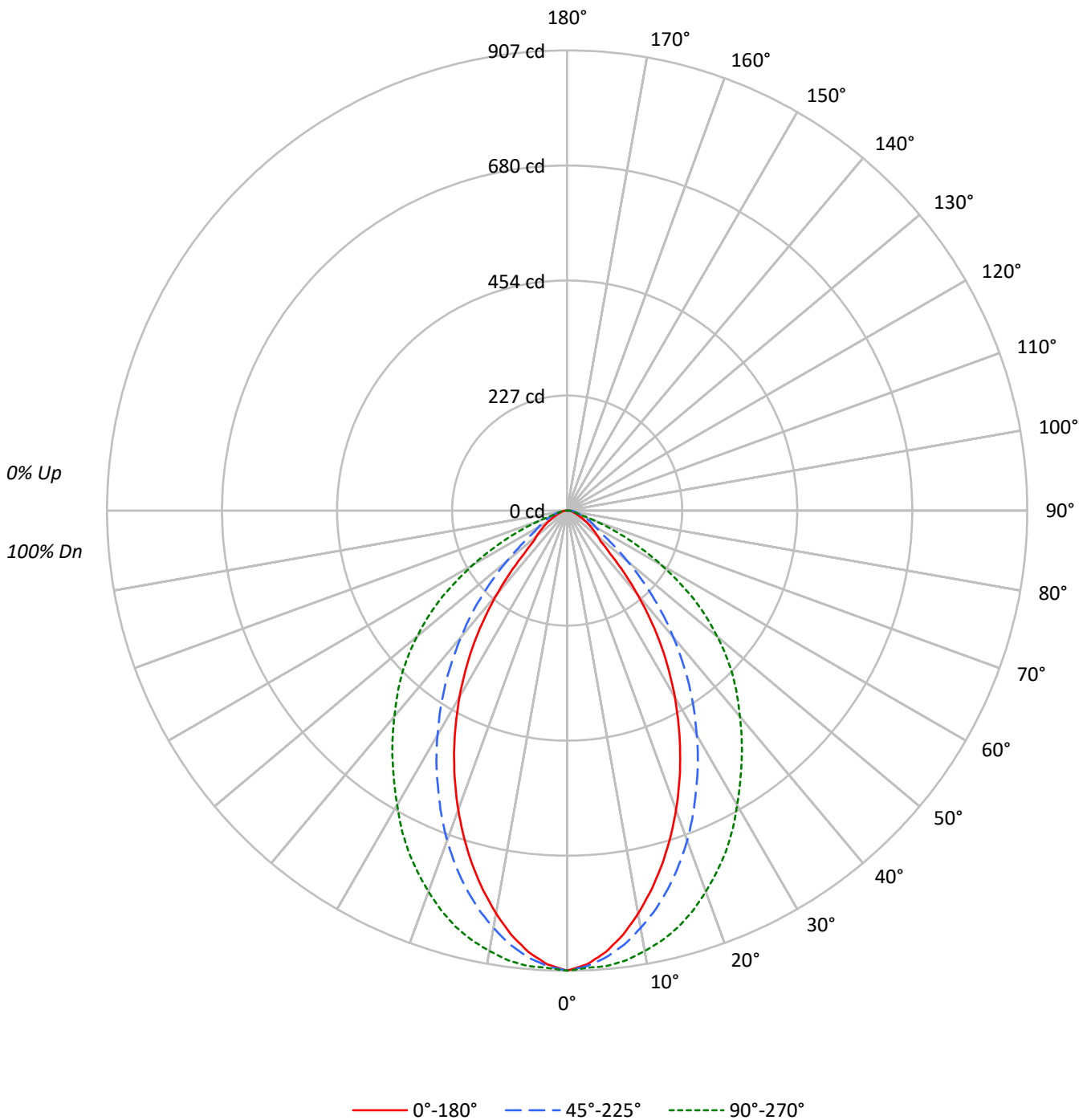
Lumens per Lamp: N/A  
Luminaire Lumens: 1275.0 lumens  
Efficiency: N/A  
Efficacy: 36.4 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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

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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°	7808	7808	7808
5°	7549	7639	7788
10°	7051	7303	7707
15°	6438	6870	7570
20°	5751	6343	7326
25°	5009	5722	7037
30°	4221	5081	6664
35°	3371	4403	6306
40°	2425	3657	5952
45°	1461	2880	5634
50°	1050	2086	5178
55°	883	1402	4589
60°	715	1113	3696
65°	564	1011	2657
70°	493	843	1423
75°	459	769	692
80°	456	803	630
85°	682	1136	800

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5634 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.2	6.5
10°-20°	218.1	17.1
20°-30°	283.0	22.2
30°-40°	272.0	21.3
40°-50°	201.8	15.8
50°-60°	123.6	9.7
60°-70°	60.1	4.7
70°-80°	22.9	1.8
80°-90°	10.3	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°	584.3	45.8
0°-40°	856.4	67.2
0°-60°	1181.8	92.7
0°-90°	1275.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1275.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	907	907	907	907	907	
5°	873	886	884	892	901	81
15°	722	743	771	817	849	202
25°	527	554	602	680	741	241
35°	321	350	419	518	600	199
45°	120	150	236	361	463	100
55°	59	61	93	211	306	53
65°	28	30	50	78	130	29
75°	14	22	23	21	21	15
85°	7	12	12	10	8	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	906.7	906.7	906.7	906.7	906.7
2.5°	895.2	905.6	898.7	901.0	902.1
5°	873.3	886.0	883.7	891.7	901.0
7.5°	843.3	858.3	862.9	879.0	894.0
10°	806.4	824.8	835.2	861.7	881.4
12.5°	766.0	785.6	805.2	841.0	867.5
15°	722.2	742.9	770.6	816.8	849.1
17.5°	676.0	699.1	732.5	787.9	826.0
20°	627.6	651.8	692.2	753.3	799.4
22.5°	578.0	603.3	648.3	716.4	770.6
25°	527.2	553.7	602.2	679.5	740.6
27.5°	475.3	503.0	558.3	640.3	707.2
30°	424.5	451.1	511.0	599.9	670.2
32.5°	372.6	400.3	464.9	558.3	634.5
35°	320.7	349.5	418.8	518.0	599.9
37.5°	267.6	298.8	371.5	478.7	565.3
40°	215.7	245.7	325.3	438.4	529.5
42.5°	165.0	197.3	281.5	398.0	496.1
45°	120.0	150.0	236.5	361.1	462.6
47.5°	90.0	108.4	195.0	326.5	425.7
50°	78.4	81.9	155.7	288.4	386.5
52.5°	68.1	70.4	121.1	246.9	347.2
55°	58.8	61.1	93.4	211.1	305.7
57.5°	49.6	51.9	75.0	176.5	258.4
60°	41.5	43.8	64.6	140.7	214.6
62.5°	34.6	35.8	57.7	107.3	171.9
65°	27.7	30.0	49.6	78.4	130.4
67.5°	23.1	25.4	40.4	54.2	91.1
70°	19.6	25.4	33.5	38.1	56.5
72.5°	16.2	23.1	27.7	26.5	26.5
75°	13.8	21.9	23.1	20.8	20.8
77.5°	11.5	19.6	18.5	17.3	16.2
80°	9.2	16.2	16.2	13.8	12.7
82.5°	8.1	12.7	12.7	12.7	10.4
85°	6.9	11.5	11.5	10.4	8.1
87.5°	4.6	9.2	10.4	9.2	5.8
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	6.95	8.29	7.32	8.60	8.92	16.05	17.39	16.42	17.70	18.02
	3H	8.00	9.19	8.38	9.52	9.88	16.55	17.74	16.93	18.07	18.44
	4H	8.51	9.62	8.92	9.97	10.35	16.57	17.67	16.97	18.03	18.41
	6H	8.96	9.98	9.38	10.35	10.74	16.57	17.58	16.98	17.95	18.35
	8H	9.15	10.12	9.58	10.51	10.91	16.56	17.53	16.99	17.92	18.32
	12H	9.37	10.29	9.80	10.67	11.10	16.56	17.48	17.00	17.87	18.30
4H	2H	8.05	9.15	8.45	9.50	9.89	15.94	17.05	16.34	17.40	17.78
	3H	9.32	10.23	9.73	10.63	11.03	16.52	17.43	16.93	17.83	18.23
	4H	10.02	10.83	10.46	11.25	11.69	16.57	17.38	17.00	17.80	18.24
	6H	10.65	11.35	11.12	11.80	12.27	16.62	17.32	17.08	17.77	18.23
	8H	10.90	11.55	11.37	12.00	12.47	16.64	17.29	17.11	17.74	18.21
	12H	11.18	11.75	11.66	12.24	12.71	16.67	17.25	17.16	17.73	18.20
8H	4H	10.45	11.10	10.92	11.55	12.02	16.52	17.17	16.98	17.62	18.09
	6H	11.33	11.86	11.83	12.36	12.84	16.61	17.15	17.11	17.64	18.12
	8H	11.74	12.22	12.26	12.73	13.22	16.67	17.15	17.19	17.67	18.16
	12H	12.21	12.64	12.73	13.13	13.70	16.77	17.20	17.29	17.69	18.26
12H	4H	10.49	11.07	10.98	11.56	12.03	16.49	17.07	16.97	17.55	18.02
	6H	11.44	11.92	11.96	12.44	12.93	16.59	17.07	17.11	17.59	18.08
	8H	11.96	12.39	12.47	12.88	13.45	16.69	17.12	17.21	17.61	18.19