

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: P1060367

Luminaire Tested: S124RDRP-S1195D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060367  
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-S1195D940-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

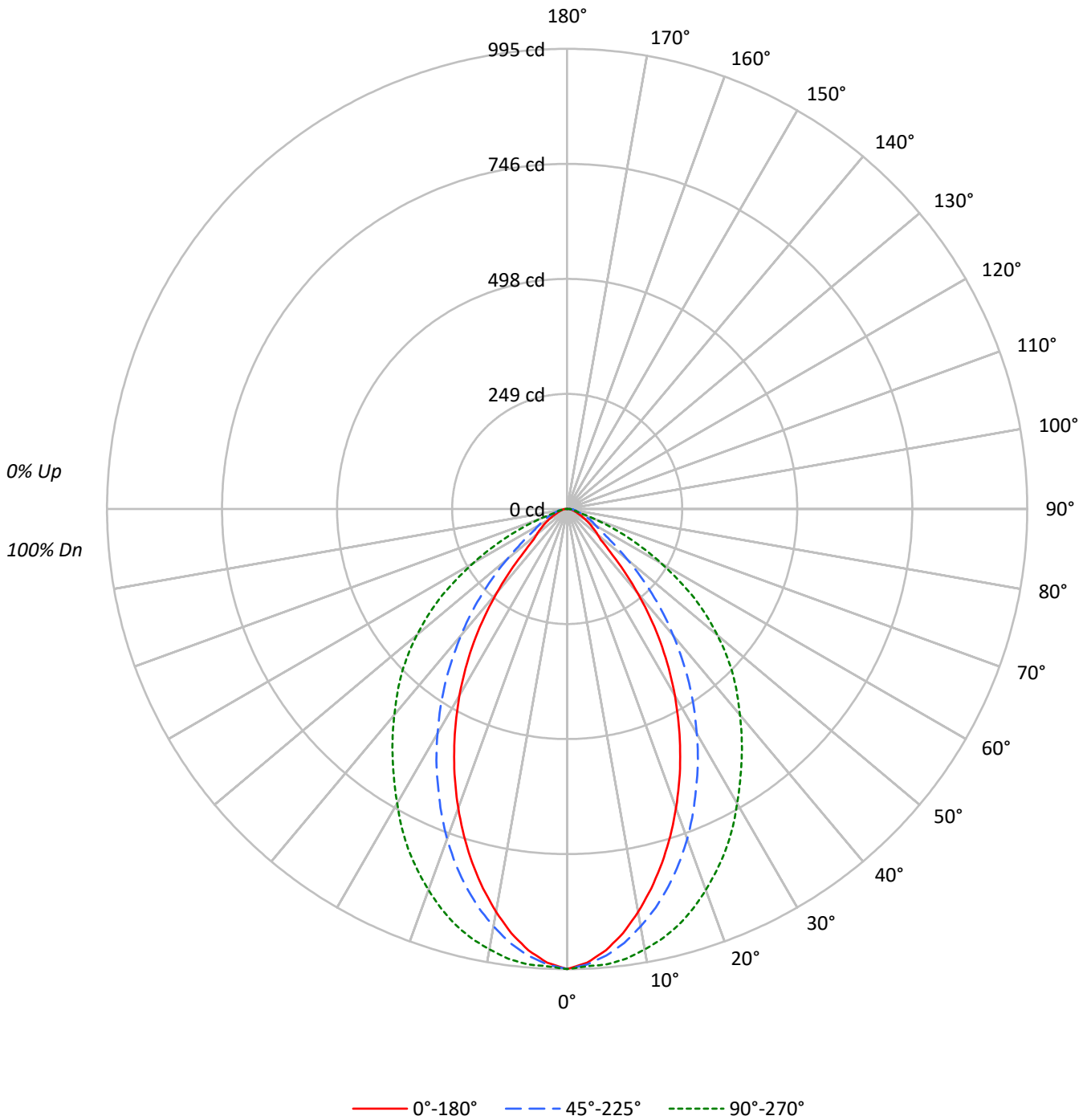
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1398.6 lumens  
Efficiency: N/A  
Efficacy: 33.5 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): 41.8  
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	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°	8565	8565	8565
5°	8281	8380	8543
10°	7735	8011	8454
15°	7062	7536	8303
20°	6308	6958	8037
25°	5495	6277	7719
30°	4631	5574	7310
35°	3698	4829	6917
40°	2660	4012	6530
45°	1603	3159	6180
50°	1153	2288	5679
55°	968	1539	5035
60°	785	1221	4054
65°	619	1108	2914
70°	541	924	1561
75°	506	842	759
80°	501	878	689
85°	751	1255	879

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6180 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.3	6.5
10°-20°	239.2	17.1
20°-30°	310.4	22.2
30°-40°	298.4	21.3
40°-50°	221.4	15.8
50°-60°	135.6	9.7
60°-70°	65.9	4.7
70°-80°	25.1	1.8
80°-90°	11.3	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°	641.0	45.8
0°-40°	939.4	67.2
0°-60°	1296.4	92.7
0°-90°	1398.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1398.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	995	995	995	995	995	
5°	958	972	969	978	988	89
15°	792	815	845	896	931	221
25°	578	607	661	745	812	264
35°	352	383	459	568	658	218
45°	132	164	259	396	508	109
55°	64	67	102	232	335	58
65°	30	33	54	86	143	31
75°	15	24	25	23	23	16
85°	8	13	13	11	9	7
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	994.7	994.7	994.7	994.7	994.7
2.5°	982.0	993.4	985.8	988.3	989.6
5°	958.0	971.9	969.4	978.2	988.3
7.5°	925.1	941.5	946.6	964.3	980.7
10°	884.6	904.8	916.2	945.3	966.8
12.5°	840.3	861.8	883.3	922.5	951.6
15°	792.2	815.0	845.3	896.0	931.4
17.5°	741.6	766.9	803.6	864.3	906.1
20°	688.4	715.0	759.3	826.4	877.0
22.5°	634.0	661.8	711.2	785.9	845.3
25°	578.3	607.4	660.6	745.4	812.4
27.5°	521.4	551.7	612.5	702.3	775.7
30°	465.7	494.8	560.6	658.0	735.2
32.5°	408.7	439.1	510.0	612.5	696.0
35°	351.8	383.4	459.4	568.2	658.0
37.5°	293.6	327.8	407.5	525.2	620.1
40°	236.6	269.5	356.9	480.9	580.9
42.5°	181.0	216.4	308.8	436.6	544.2
45°	131.6	164.5	259.4	396.1	507.5
47.5°	98.7	119.0	213.9	358.1	467.0
50°	86.1	89.8	170.8	316.4	423.9
52.5°	74.7	77.2	132.9	270.8	380.9
55°	64.5	67.1	102.5	231.6	335.4
57.5°	54.4	56.9	82.3	193.6	283.5
60°	45.6	48.1	70.9	154.4	235.4
62.5°	38.0	39.2	63.3	117.7	188.6
65°	30.4	32.9	54.4	86.1	143.0
67.5°	25.3	27.8	44.3	59.5	100.0
70°	21.5	27.8	36.7	41.8	62.0
72.5°	17.7	25.3	30.4	29.1	29.1
75°	15.2	24.0	25.3	22.8	22.8
77.5°	12.7	21.5	20.2	19.0	17.7
80°	10.1	17.7	17.7	15.2	13.9
82.5°	8.9	13.9	13.9	13.9	11.4
85°	7.6	12.7	12.7	11.4	8.9
87.5°	5.1	10.1	11.4	10.1	6.3
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	7.27	8.61	7.64	8.92	9.24	16.37	17.71	16.74	18.03	18.34
	3H	8.31	9.50	8.69	9.83	10.20	16.88	18.06	17.26	18.39	18.76
	4H	8.83	9.94	9.23	10.29	10.67	16.89	18.00	17.29	18.35	18.73
	6H	9.28	10.30	9.70	10.67	11.06	16.89	17.91	17.30	18.28	18.67
	8H	9.47	10.44	9.90	10.83	11.23	16.88	17.85	17.31	18.24	18.64
	12H	9.69	10.61	10.12	10.99	11.42	16.88	17.81	17.32	18.19	18.62
4H	2H	8.37	9.47	8.77	9.82	10.21	16.26	17.37	16.67	17.72	18.10
	3H	9.64	10.54	10.05	10.95	11.35	16.84	17.75	17.25	18.15	18.55
	4H	10.34	11.15	10.78	11.57	12.01	16.89	17.70	17.32	18.12	18.56
	6H	10.97	11.67	11.43	12.12	12.58	16.94	17.64	17.40	18.09	18.55
	8H	11.22	11.87	11.69	12.32	12.79	16.96	17.61	17.43	18.06	18.53
	12H	11.50	12.07	11.98	12.56	13.03	16.99	17.57	17.48	18.05	18.53
8H	4H	10.77	11.42	11.24	11.87	12.34	16.84	17.49	17.31	17.94	18.41
	6H	11.64	12.18	12.15	12.68	13.16	16.93	17.47	17.43	17.96	18.44
	8H	12.05	12.53	12.57	13.05	13.54	16.99	17.47	17.51	17.99	18.48
	12H	12.53	12.96	13.05	13.45	14.02	17.09	17.52	17.61	18.01	18.58
12H	4H	10.81	11.39	11.30	11.87	12.35	16.81	17.39	17.30	17.87	18.34
	6H	11.76	12.24	12.28	12.75	13.24	16.91	17.39	17.43	17.91	18.40
	8H	12.27	12.70	12.79	13.19	13.77	17.02	17.44	17.53	17.94	18.51