

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: P1060337

Luminaire Tested: S124RDRP-S1195D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060337  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S1195D927-X4F0-XX-UDD-BVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

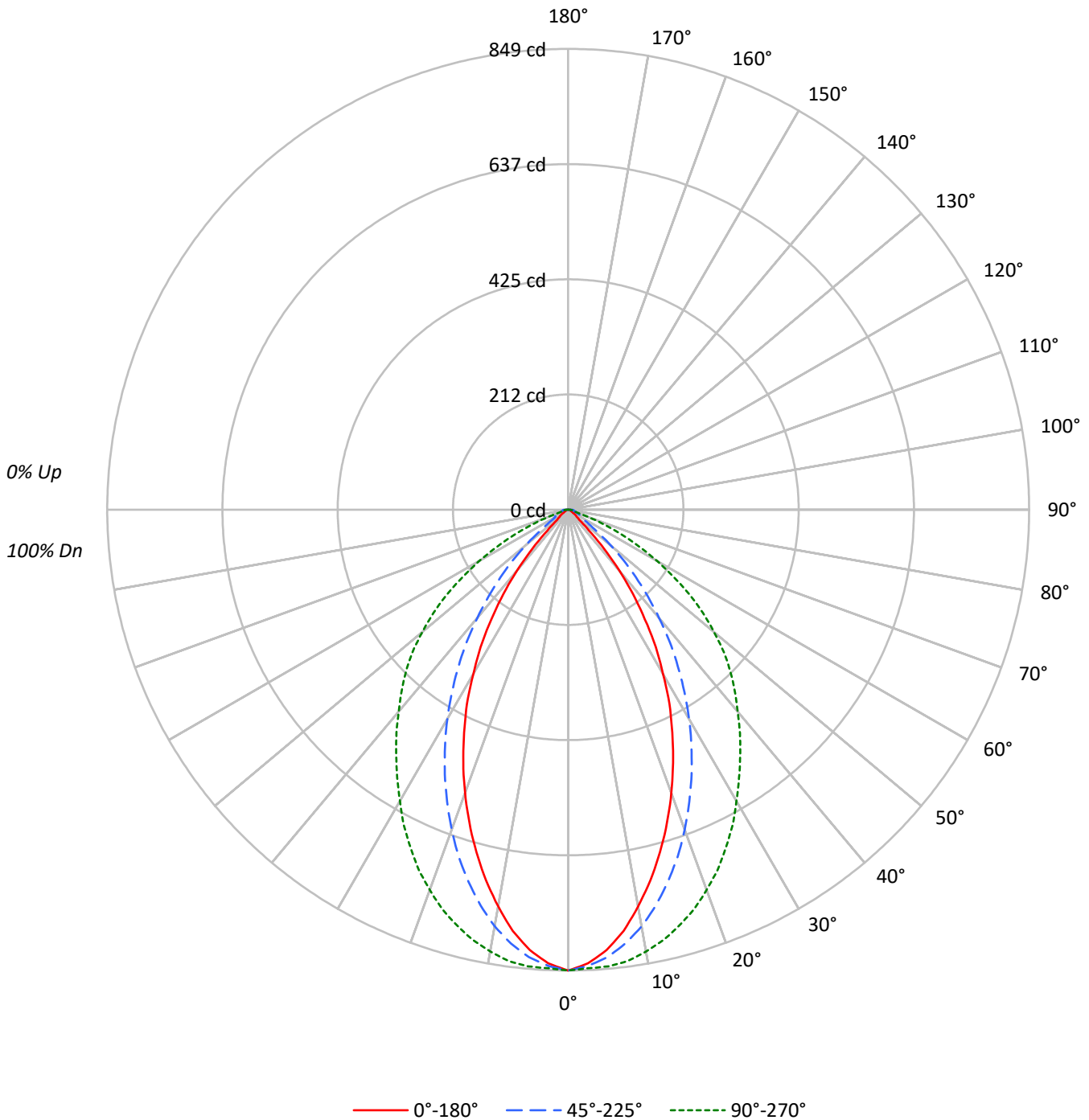
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1065.5 lumens  
Efficiency: N/A  
Efficacy: 25.5 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

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

	0°	45°	90°
0°	7311	7311	7311
5°	7037	7154	7300
10°	6489	6814	7227
15°	5824	6325	7067
20°	5090	5750	6832
25°	4306	5107	6527
30°	3477	4428	6161
35°	2589	3700	5804
40°	1643	2933	5461
45°	658	2149	5149
50°	287	1370	4700
55°	219	709	4102
60°	155	484	3253
65°	114	481	2223
70°	113	425	1020
75°	150	449	413
80°	223	501	446
85°	445	889	662

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5149 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.7	7.3
10°-20°	200.5	18.8
20°-30°	253.2	23.8
30°-40°	232.5	21.8
40°-50°	158.6	14.9
50°-60°	86.0	8.1
60°-70°	36.5	3.4
70°-80°	12.6	1.2
80°-90°	8.0	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°	531.3	49.9
0°-40°	763.9	71.7
0°-60°	1008.4	94.6
0°-90°	1065.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1065.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	849	849	849	849	849	
5°	814	826	828	834	844	75
15°	653	675	710	760	793	182
25°	453	482	538	621	687	207
35°	246	279	352	462	552	153
45°	54	87	176	313	423	50
55°	15	16	47	172	273	13
65°	6	7	24	54	109	6
75°	4	12	14	12	12	5
85°	4	9	9	9	7	4
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	849.0	849.0	849.0	849.0	849.0
2.5°	836.6	846.7	841.1	843.3	845.6
5°	814.1	826.5	827.6	834.4	844.5
7.5°	782.6	797.2	806.2	823.1	838.8
10°	742.1	760.1	779.3	806.2	826.5
12.5°	699.4	718.5	746.6	784.9	811.9
15°	653.3	674.7	709.5	760.1	792.7
17.5°	605.0	628.6	670.2	729.8	771.4
20°	555.5	581.3	627.5	694.9	745.5
22.5°	504.9	531.9	582.5	658.9	718.5
25°	453.2	482.4	537.5	620.7	687.0
27.5°	403.7	430.7	491.4	582.5	655.6
30°	349.7	380.1	445.3	543.1	619.6
32.5°	300.2	329.5	398.1	502.6	585.8
35°	246.3	278.9	352.0	462.2	552.1
37.5°	195.7	227.1	307.0	423.9	519.5
40°	146.2	178.8	260.9	385.7	485.8
42.5°	97.8	132.7	217.0	346.3	454.3
45°	54.0	86.6	176.5	312.6	422.8
47.5°	28.1	47.2	138.3	278.9	389.1
50°	21.4	25.9	102.3	241.8	350.8
52.5°	18.0	19.1	69.7	204.7	312.6
55°	14.6	15.7	47.2	172.0	273.2
57.5°	11.2	12.4	33.7	140.6	229.4
60°	9.0	10.1	28.1	107.9	188.9
62.5°	6.7	7.9	27.0	79.8	148.4
65°	5.6	6.7	23.6	54.0	109.1
67.5°	4.5	6.7	20.2	34.9	73.1
70°	4.5	9.0	16.9	22.5	40.5
72.5°	4.5	10.1	14.6	14.6	14.6
75°	4.5	12.4	13.5	12.4	12.4
77.5°	4.5	11.2	11.2	11.2	11.2
80°	4.5	10.1	10.1	10.1	9.0
82.5°	4.5	9.0	10.1	10.1	7.9
85°	4.5	9.0	9.0	9.0	6.7
87.5°	3.4	9.0	9.0	9.0	4.5
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	0.00	0.00	0.00	0.00	0.00	15.36	16.63	15.72	16.94	17.26
	3H	0.00	0.00	0.00	0.33	0.69	15.71	16.84	16.09	17.17	17.53
	4H	0.26	1.30	0.66	1.66	2.04	15.68	16.73	16.08	17.08	17.46
	6H	1.62	2.58	2.03	2.95	3.35	15.65	16.61	16.07	16.99	17.38
	8H	2.30	3.21	2.73	3.60	4.01	15.64	16.55	16.07	16.94	17.35
	12H	3.10	3.97	3.54	4.36	4.79	15.64	16.51	16.07	16.89	17.32
4H	2H	1.05	2.10	1.46	2.45	2.84	15.16	16.21	15.56	16.56	16.94
	3H	2.47	3.33	2.89	3.73	4.14	15.55	16.41	15.97	16.81	17.22
	4H	3.93	4.69	4.36	5.11	5.55	15.53	16.30	15.97	16.72	17.16
	6H	5.17	5.83	5.63	6.27	6.74	15.55	16.21	16.02	16.66	17.12
	8H	5.74	6.35	6.21	6.80	7.27	15.56	16.18	16.03	16.62	17.10
	12H	6.41	6.95	6.90	7.44	7.91	15.60	16.14	16.08	16.62	17.10
8H	4H	5.00	5.61	5.47	6.06	6.53	15.43	16.05	15.90	16.50	16.97
	6H	6.60	7.11	7.11	7.60	8.09	15.48	15.98	15.99	16.48	16.96
	8H	7.44	7.89	7.96	8.41	8.90	15.54	15.99	16.06	16.51	17.00
	12H	8.41	8.81	8.92	9.30	9.87	15.66	16.06	16.17	16.55	17.12
12H	4H	5.19	5.73	5.67	6.21	6.69	15.40	15.94	15.88	16.42	16.90
	6H	6.95	7.40	7.47	7.92	8.41	15.45	15.90	15.97	16.42	16.91
	8H	7.97	8.37	8.49	8.87	9.44	15.55	15.95	16.07	16.45	17.02