

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: P1060604

Luminaire Tested: S124RDRP-S795D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060604  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/7/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S124RDRP-S795D935-X4F0-XX-UDD-WVL-S  
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

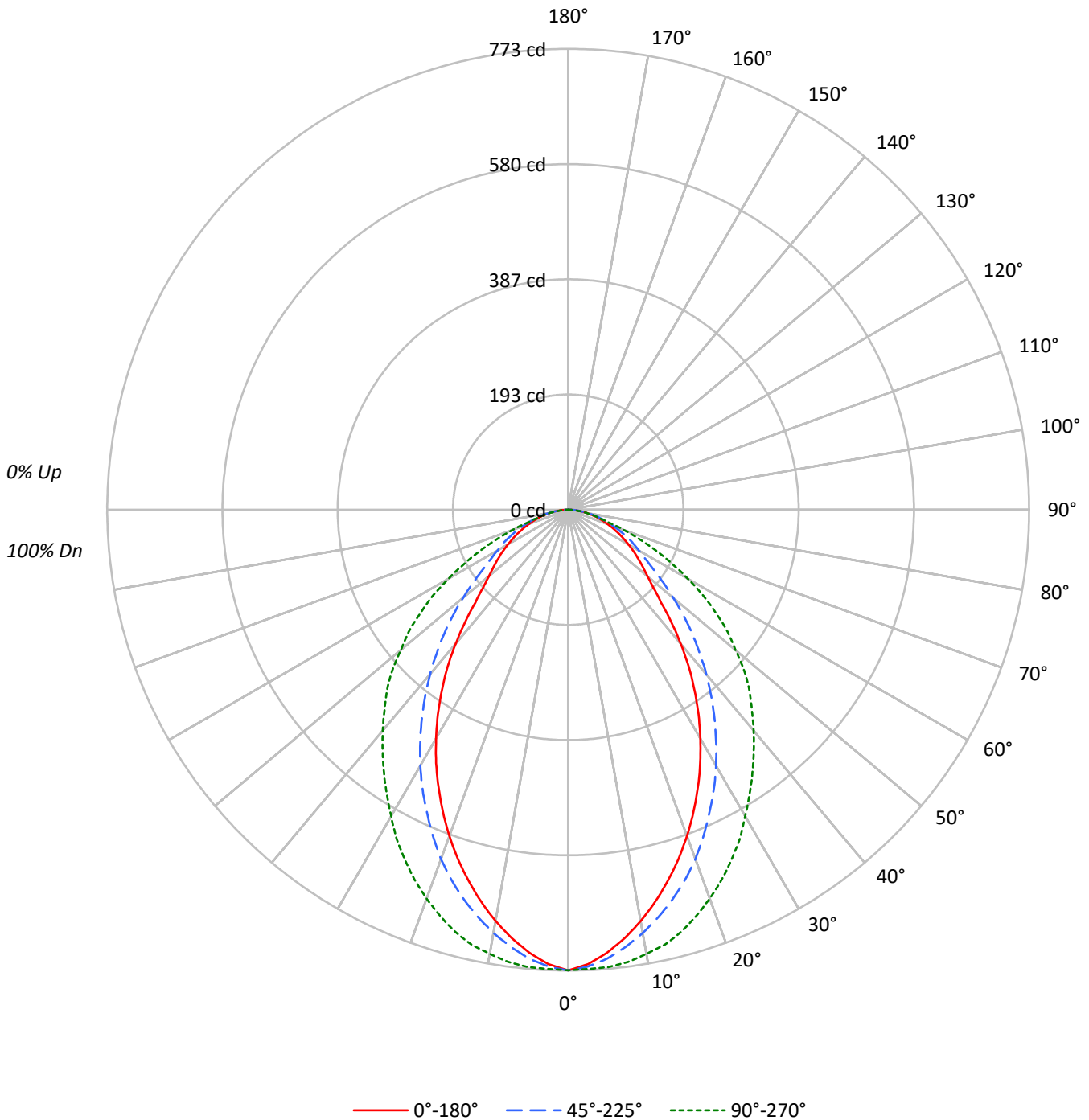
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1406.7 lumens  
Efficiency: N/A  
Efficacy: 54.5 lumens/watt  
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 25.8  
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

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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89					87				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77					75				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67					65				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59					57				
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52					50				
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47					45				
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42					41				
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39					37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35					34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32					31				

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

	0°	45°	90°
0°	6654	6654	6654
5°	6448	6532	6658
10°	6126	6303	6615
15°	5747	6029	6535
20°	5336	5715	6361
25°	4887	5325	6156
30°	4405	4929	5903
35°	3882	4495	5662
40°	3305	4051	5435
45°	2683	3580	5238
50°	2322	3081	4904
55°	2153	2614	4547
60°	2008	2358	3989
65°	1881	2211	3317
70°	1755	2039	2508
75°	1670	1886	1807
80°	1567	1726	1527
85°	1443	1601	1196

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5238 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.3	5.1
10°-20°	191.7	13.6
20°-30°	261.8	18.6
30°-40°	274.3	19.5
40°-50°	237.4	16.9
50°-60°	178.4	12.7
60°-70°	115.0	8.2
70°-80°	59.0	4.2
80°-90°	17.6	1.3
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°	524.9	37.3
0°-40°	799.2	56.8
0°-60°	1215.0	86.4
0°-90°	1406.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1406.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	773	773	773	773	773	
5°	746	757	756	761	770	70
15°	645	661	676	707	733	181
25°	514	534	560	604	648	236
35°	369	390	428	484	539	230
45°	220	243	294	366	430	174
55°	143	148	174	249	303	129
65°	92	94	108	131	163	92
75°	50	56	57	56	54	53
85°	15	17	16	15	12	17
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	772.7	772.7	772.7	772.7	772.7
2.5°	762.9	772.7	767.0	768.6	771.0
5°	745.9	757.3	755.7	761.3	770.2
7.5°	724.9	737.0	739.5	752.4	765.4
10°	700.6	714.4	720.8	740.3	756.5
12.5°	673.9	688.4	699.8	724.1	747.6
15°	644.7	660.9	676.3	707.1	733.0
17.5°	614.7	630.9	651.2	685.2	714.4
20°	582.3	600.2	623.6	659.3	694.1
22.5°	549.1	567.8	592.9	631.7	672.2
25°	514.3	533.7	560.5	604.2	647.9
27.5°	479.5	498.9	528.9	575.0	622.8
30°	443.0	463.3	495.7	545.9	593.7
32.5°	406.6	428.4	461.7	515.1	566.1
35°	369.3	390.4	427.6	484.3	538.6
37.5°	332.1	353.9	393.6	454.4	511.1
40°	294.0	316.7	360.4	424.4	483.5
42.5°	255.9	280.2	326.4	393.6	456.0
45°	220.3	243.0	294.0	366.1	430.1
47.5°	193.6	209.0	261.6	339.4	400.9
50°	173.3	181.4	230.0	310.2	366.1
52.5°	157.9	163.6	200.9	278.6	337.7
55°	143.4	148.2	174.1	248.6	302.9
57.5°	130.4	132.8	153.9	219.5	269.7
60°	116.6	119.1	136.9	187.9	231.6
62.5°	104.5	106.1	123.1	157.9	196.8
65°	92.3	94.0	108.5	131.2	162.8
67.5°	81.0	83.4	94.8	106.9	129.6
70°	69.7	74.5	81.0	86.7	99.6
72.5°	59.9	64.8	68.0	69.7	70.5
75°	50.2	55.9	56.7	55.9	54.3
77.5°	40.5	45.4	45.4	43.7	42.1
80°	31.6	35.6	34.8	33.2	30.8
82.5°	23.5	25.9	25.1	23.5	21.1
85°	14.6	17.0	16.2	15.4	12.1
87.5°	7.3	9.7	8.9	8.1	4.9
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	13.02	14.50	13.38	14.81	15.13	16.79	18.27	17.16	18.59	18.90
	3H	14.67	16.00	15.05	16.33	16.69	17.90	19.23	18.28	19.56	19.92
	4H	15.34	16.59	15.74	16.94	17.32	18.19	19.44	18.59	19.79	20.17
	6H	15.85	17.00	16.27	17.37	17.76	18.39	19.54	18.80	19.91	20.30
	8H	16.04	17.13	16.46	17.52	17.92	18.45	19.54	18.87	19.93	20.33
	12H	16.16	17.21	16.59	17.59	18.02	18.47	19.52	18.90	19.90	20.33
4H	2H	13.80	15.04	14.20	15.39	15.77	16.95	18.19	17.35	18.54	18.92
	3H	15.66	16.69	16.07	17.09	17.50	18.26	19.29	18.67	19.69	20.10
	4H	16.47	17.40	16.90	17.81	18.25	18.67	19.60	19.10	20.01	20.45
	6H	17.12	17.92	17.57	18.37	18.83	18.99	19.79	19.44	20.24	20.70
	8H	17.35	18.10	17.81	18.54	19.01	19.08	19.83	19.54	20.28	20.74
	12H	17.52	18.19	18.00	18.67	19.14	19.14	19.81	19.62	20.29	20.76
8H	4H	16.82	17.57	17.28	18.02	18.49	18.80	19.56	19.27	20.00	20.47
	6H	17.61	18.23	18.11	18.73	19.21	19.21	19.84	19.71	20.33	20.81
	8H	17.93	18.49	18.45	19.00	19.49	19.37	19.92	19.88	20.44	20.92
	12H	18.20	18.69	18.71	19.18	19.75	19.49	19.98	20.00	20.48	21.04
12H	4H	16.85	17.52	17.33	18.00	18.47	18.81	19.48	19.29	19.96	20.43
	6H	17.67	18.23	18.19	18.74	19.23	19.24	19.80	19.75	20.31	20.80
	8H	18.06	18.55	18.57	19.05	19.61	19.44	19.93	19.95	20.43	20.99