

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: P1060574

Luminaire Tested: S124RDRP-S795D850-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P1060574  
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-S795D850-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, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

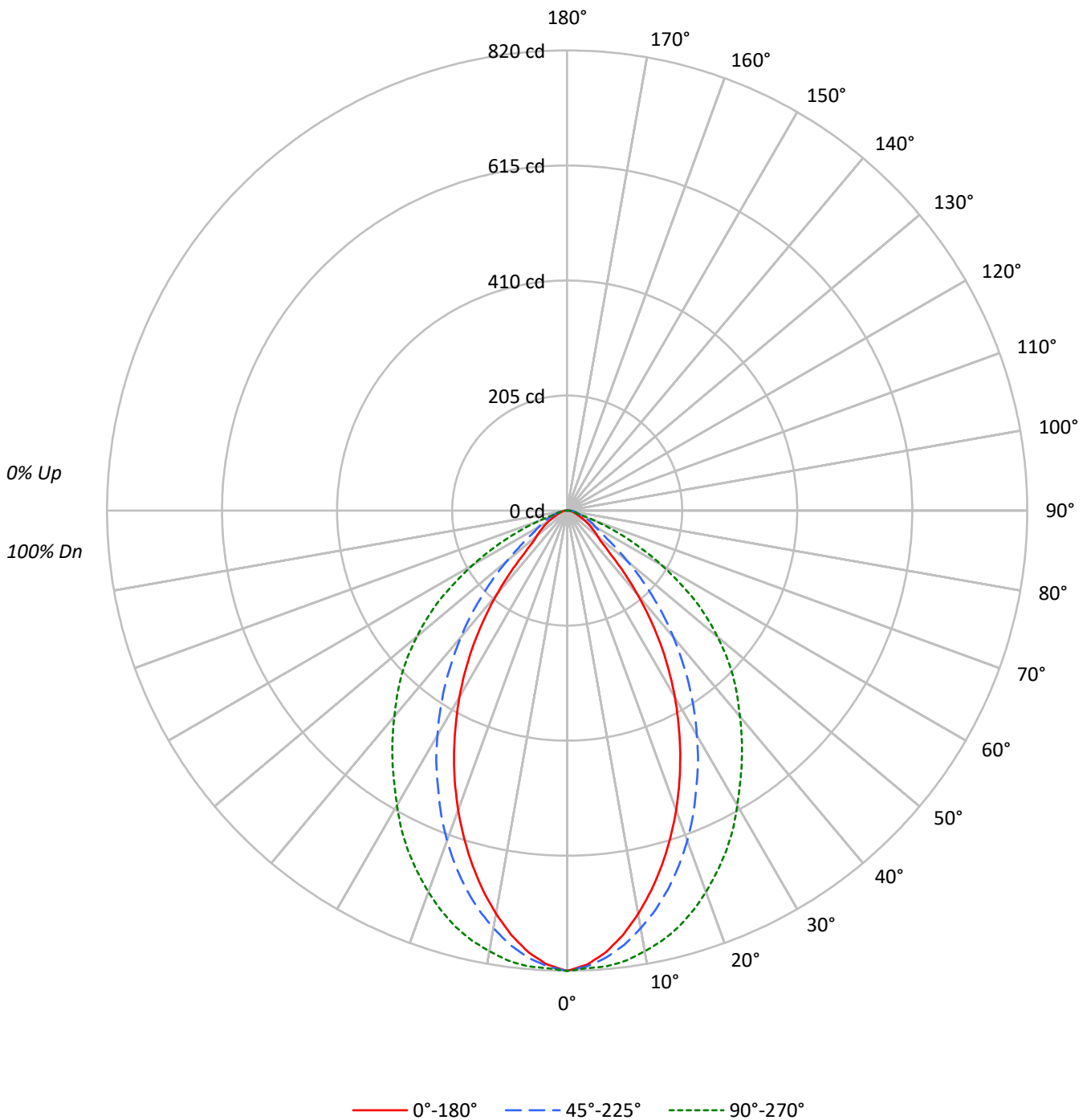
Lumens per Lamp: N/A  
Luminaire Lumens: 1153.4 lumens  
Efficiency: N/A  
Efficacy: 44.7 lumens/watt  
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01  
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 25.8  
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	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	47	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°	7063	7063	7063
5°	6829	6910	7045
10°	6378	6606	6972
15°	5824	6215	6848
20°	5202	5737	6627
25°	4531	5175	6366
30°	3818	4597	6029
35°	3050	3982	5704
40°	2193	3308	5384
45°	1321	2605	5096
50°	951	1888	4683
55°	799	1269	4151
60°	648	1006	3343
65°	509	915	2402
70°	446	763	1287
75°	416	695	625
80°	412	724	570
85°	622	1028	721

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 5096 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.3	6.5
10°-20°	197.3	17.1
20°-30°	256.0	22.2
30°-40°	246.1	21.3
40°-50°	182.6	15.8
50°-60°	111.8	9.7
60°-70°	54.3	4.7
70°-80°	20.7	1.8
80°-90°	9.3	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°	528.6	45.8
0°-40°	774.7	67.2
0°-60°	1069.1	92.7
0°-90°	1153.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1153.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	790	802	799	807	815	74
15°	653	672	697	739	768	182
25°	477	501	545	615	670	218
35°	290	316	379	469	543	180
45°	108	136	214	327	418	90
55°	53	55	84	191	276	48
65°	25	27	45	71	118	26
75°	12	20	21	19	19	13
85°	6	10	10	9	7	6
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	820.2	820.2	820.2	820.2	820.2
2.5°	809.8	819.2	812.9	815.0	816.1
5°	790.0	801.5	799.4	806.7	815.0
7.5°	762.8	776.4	780.6	795.2	808.8
10°	729.4	746.1	755.5	779.5	797.3
12.5°	692.9	710.7	728.4	760.8	784.8
15°	653.3	672.0	697.1	738.8	768.1
17.5°	611.5	632.4	662.7	712.7	747.2
20°	567.7	589.6	626.1	681.4	723.2
22.5°	522.8	545.8	586.5	648.0	697.1
25°	476.9	500.9	544.7	614.7	670.0
27.5°	429.9	455.0	505.1	579.2	639.7
30°	384.0	408.0	462.3	542.6	606.3
32.5°	337.1	362.1	420.6	505.1	574.0
35°	290.1	316.2	378.8	468.6	542.6
37.5°	242.1	270.3	336.0	433.1	511.3
40°	195.1	222.3	294.3	396.6	479.0
42.5°	149.2	178.4	254.6	360.0	448.7
45°	108.5	135.7	213.9	326.6	418.5
47.5°	81.4	98.1	176.4	295.3	385.1
50°	71.0	74.1	140.9	260.9	349.6
52.5°	61.6	63.7	109.6	223.3	314.1
55°	53.2	55.3	84.5	191.0	276.5
57.5°	44.9	47.0	67.8	159.7	233.8
60°	37.6	39.7	58.4	127.3	194.1
62.5°	31.3	32.4	52.2	97.1	155.5
65°	25.0	27.1	44.9	71.0	117.9
67.5°	20.9	23.0	36.5	49.0	82.4
70°	17.7	23.0	30.3	34.4	51.1
72.5°	14.6	20.9	25.0	24.0	24.0
75°	12.5	19.8	20.9	18.8	18.8
77.5°	10.4	17.7	16.7	15.7	14.6
80°	8.3	14.6	14.6	12.5	11.5
82.5°	7.3	11.5	11.5	11.5	9.4
85°	6.3	10.4	10.4	9.4	7.3
87.5°	4.2	8.3	9.4	8.3	5.2
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	6.61	7.95	6.98	8.26	8.58	15.71	17.04	16.07	17.36	17.67
	3H	7.66	8.84	8.04	9.17	9.54	16.21	17.39	16.59	17.72	18.09
	4H	8.17	9.28	8.57	9.63	10.01	16.22	17.33	16.62	17.68	18.06
	6H	8.62	9.63	9.03	10.00	10.40	16.22	17.24	16.63	17.61	18.00
	8H	8.81	9.77	9.24	10.16	10.56	16.22	17.18	16.65	17.57	17.97
	12H	9.02	9.94	9.45	10.32	10.75	16.22	17.14	16.65	17.52	17.95
4H	2H	7.70	8.81	8.11	9.16	9.54	15.60	16.70	16.00	17.05	17.44
	3H	8.98	9.88	9.39	10.29	10.69	16.17	17.08	16.58	17.48	17.88
	4H	9.68	10.49	10.11	10.91	11.35	16.22	17.03	16.65	17.45	17.89
	6H	10.31	11.00	10.77	11.45	11.92	16.27	16.97	16.73	17.42	17.88
	8H	10.55	11.20	11.02	11.65	12.12	16.29	16.94	16.76	17.39	17.86
	12H	10.83	11.41	11.31	11.89	12.36	16.32	16.90	16.81	17.38	17.86
8H	4H	10.10	10.76	10.57	11.20	11.68	16.17	16.82	16.64	17.27	17.74
	6H	10.98	11.51	11.48	12.01	12.49	16.26	16.80	16.76	17.29	17.77
	8H	11.38	11.87	11.91	12.38	12.87	16.32	16.80	16.84	17.32	17.81
	12H	11.86	12.29	12.38	12.78	13.35	16.42	16.85	16.94	17.34	17.91
12H	4H	10.15	10.73	10.63	11.21	11.68	16.14	16.72	16.63	17.20	17.68
	6H	11.09	11.57	11.61	12.09	12.58	16.24	16.72	16.76	17.24	17.73
	8H	11.61	12.03	12.12	12.53	13.10	16.35	16.77	16.86	17.27	17.84