

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: P1060553

Luminaire Tested: S124RDRP-S795D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060553
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-S795D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

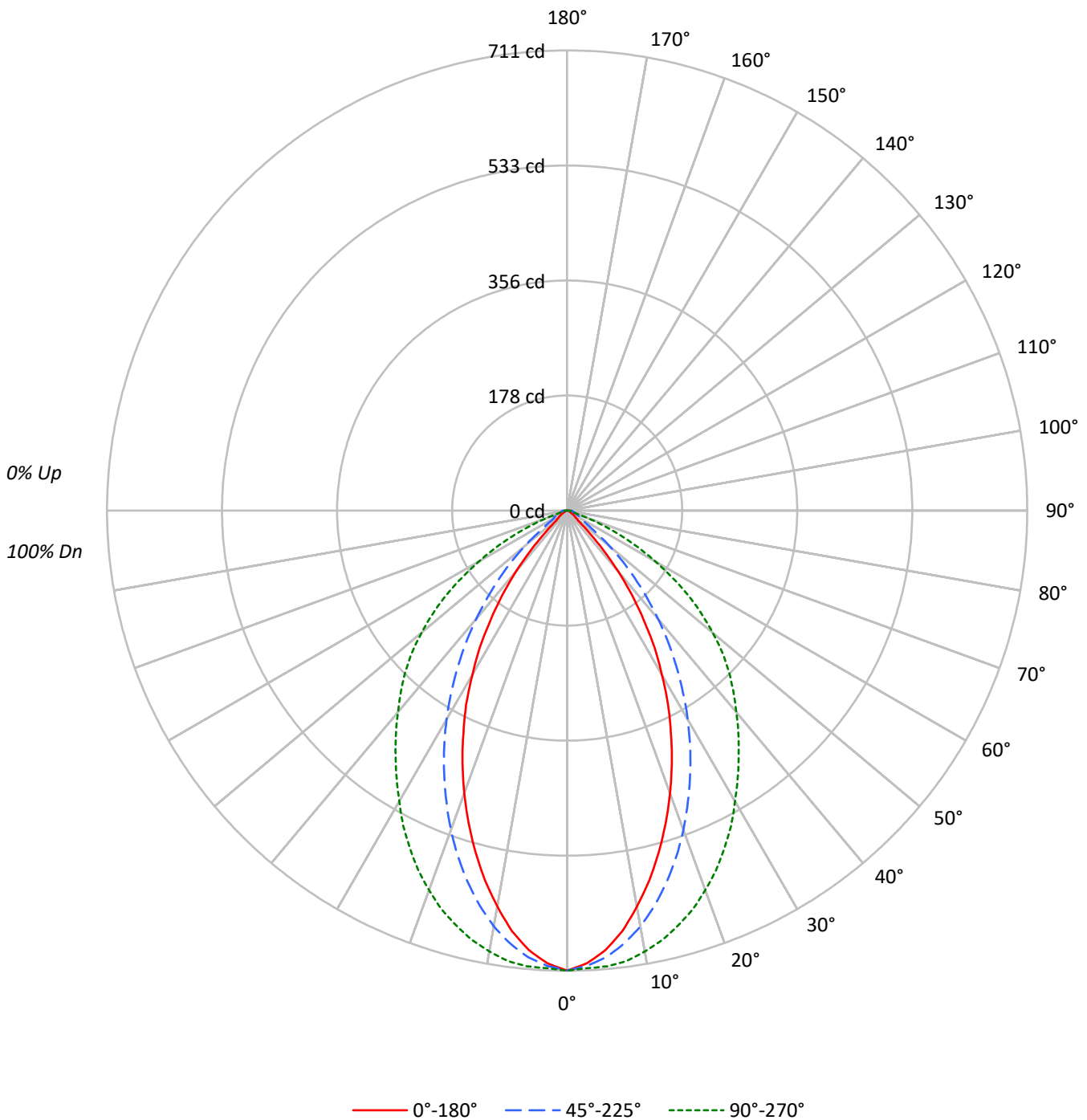
Lumens per Lamp: N/A
Luminaire Lumens: 891.8 lumens
Efficiency: N/A
Efficacy: 34.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (A_{in}): 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°	6119	6119	6119
5°	5890	5988	6110
10°	5432	5703	6049
15°	4875	5295	5915
20°	4260	4813	5718
25°	3604	4275	5464
30°	2910	3706	5157
35°	2167	3097	4858
40°	1376	2455	4571
45°	550	1800	4310
50°	240	1147	3935
55°	183	593	3433
60°	129	405	2723
65°	96	403	1860
70°	96	355	854
75°	126	376	346
80°	188	422	372
85°	375	741	553

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4310 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	7.3
10°-20°	167.8	18.8
20°-30°	211.9	23.8
30°-40°	194.6	21.8
40°-50°	132.7	14.9
50°-60°	72.0	8.1
60°-70°	30.5	3.4
70°-80°	10.6	1.2
80°-90°	6.7	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°	444.7	49.9
0°-40°	639.3	71.7
0°-60°	844.0	94.6
0°-90°	891.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	891.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	711	711	711	711	711	
5°	681	692	693	698	707	63
15°	547	565	594	636	664	152
25°	379	404	450	520	575	173
35°	206	233	295	387	462	128
45°	45	72	148	262	354	42
55°	12	13	40	144	229	11
65°	5	6	20	45	91	5
75°	4	10	11	10	10	4
85°	4	8	8	8	6	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	710.6	710.6	710.6	710.6	710.6
2.5°	700.2	708.7	704.0	705.9	707.8
5°	681.4	691.8	692.7	698.4	706.8
7.5°	655.1	667.3	674.8	688.9	702.1
10°	621.2	636.2	652.2	674.8	691.8
12.5°	585.4	601.4	624.9	656.9	679.5
15°	546.8	564.7	593.9	636.2	663.5
17.5°	506.4	526.1	560.9	610.8	645.7
20°	464.9	486.6	525.2	581.7	624.0
22.5°	422.6	445.2	487.5	551.5	601.4
25°	379.3	403.8	449.9	519.5	575.1
27.5°	337.9	360.5	411.3	487.5	548.7
30°	292.7	318.1	372.7	454.6	518.6
32.5°	251.3	275.8	333.2	420.7	490.4
35°	206.1	233.4	294.6	386.8	462.1
37.5°	163.8	190.1	256.9	354.8	434.8
40°	122.4	149.6	218.4	322.8	406.6
42.5°	81.9	111.1	181.6	289.9	380.2
45°	45.2	72.5	147.8	261.6	353.9
47.5°	23.5	39.5	115.8	233.4	325.7
50°	17.9	21.6	85.6	202.4	293.7
52.5°	15.1	16.0	58.4	171.3	261.6
55°	12.2	13.2	39.5	144.0	228.7
57.5°	9.4	10.4	28.2	117.6	192.0
60°	7.5	8.5	23.5	90.4	158.1
62.5°	5.6	6.6	22.6	66.8	124.2
65°	4.7	5.6	19.8	45.2	91.3
67.5°	3.8	5.6	16.9	29.2	61.2
70°	3.8	7.5	14.1	18.8	33.9
72.5°	3.8	8.5	12.2	12.2	12.2
75°	3.8	10.4	11.3	10.4	10.4
77.5°	3.8	9.4	9.4	9.4	9.4
80°	3.8	8.5	8.5	8.5	7.5
82.5°	3.8	7.5	8.5	8.5	6.6
85°	3.8	7.5	7.5	7.5	5.6
87.5°	2.8	7.5	7.5	7.5	3.8
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	0.00	0.00	0.00	0.00	0.00	14.73	16.01	15.10	16.32	16.64
	3H	0.00	0.00	0.00	0.00	0.09	15.09	16.22	15.47	16.55	16.91
	4H	0.00	0.71	0.06	1.06	1.44	15.06	16.11	15.46	16.46	16.84
	6H	1.03	1.99	1.45	2.36	2.76	15.03	15.99	15.45	16.36	16.76
	8H	1.71	2.62	2.14	3.02	3.42	15.02	15.93	15.45	16.32	16.73
	12H	2.52	3.39	2.95	3.77	4.20	15.02	15.89	15.45	16.27	16.70
4H	2H	0.45	1.50	0.85	1.85	2.23	14.54	15.59	14.94	15.94	16.32
	3H	1.86	2.72	2.28	3.12	3.53	14.93	15.79	15.34	16.19	16.60
	4H	3.32	4.09	3.76	4.51	4.95	14.91	15.68	15.35	16.10	16.54
	6H	4.57	5.23	5.03	5.67	6.14	14.93	15.59	15.39	16.04	16.50
	8H	5.14	5.75	5.61	6.20	6.67	14.94	15.56	15.41	16.00	16.48
	12H	5.82	6.36	6.30	6.84	7.32	14.98	15.52	15.46	16.00	16.48
8H	4H	4.39	5.01	4.86	5.45	5.93	14.81	15.43	15.28	15.88	16.35
	6H	6.01	6.51	6.51	7.01	7.49	14.86	15.37	15.37	15.86	16.34
	8H	6.84	7.29	7.36	7.80	8.30	14.92	15.37	15.44	15.89	16.38
	12H	7.80	8.20	8.32	8.69	9.27	15.04	15.44	15.55	15.93	16.50
12H	4H	4.58	5.12	5.07	5.61	6.08	14.77	15.32	15.26	15.80	16.28
	6H	6.35	6.80	6.88	7.32	7.81	14.83	15.28	15.35	15.80	16.29
	8H	7.37	7.77	7.88	8.26	8.84	14.94	15.34	15.45	15.83	16.40