

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: P1060571

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060571
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-S795D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

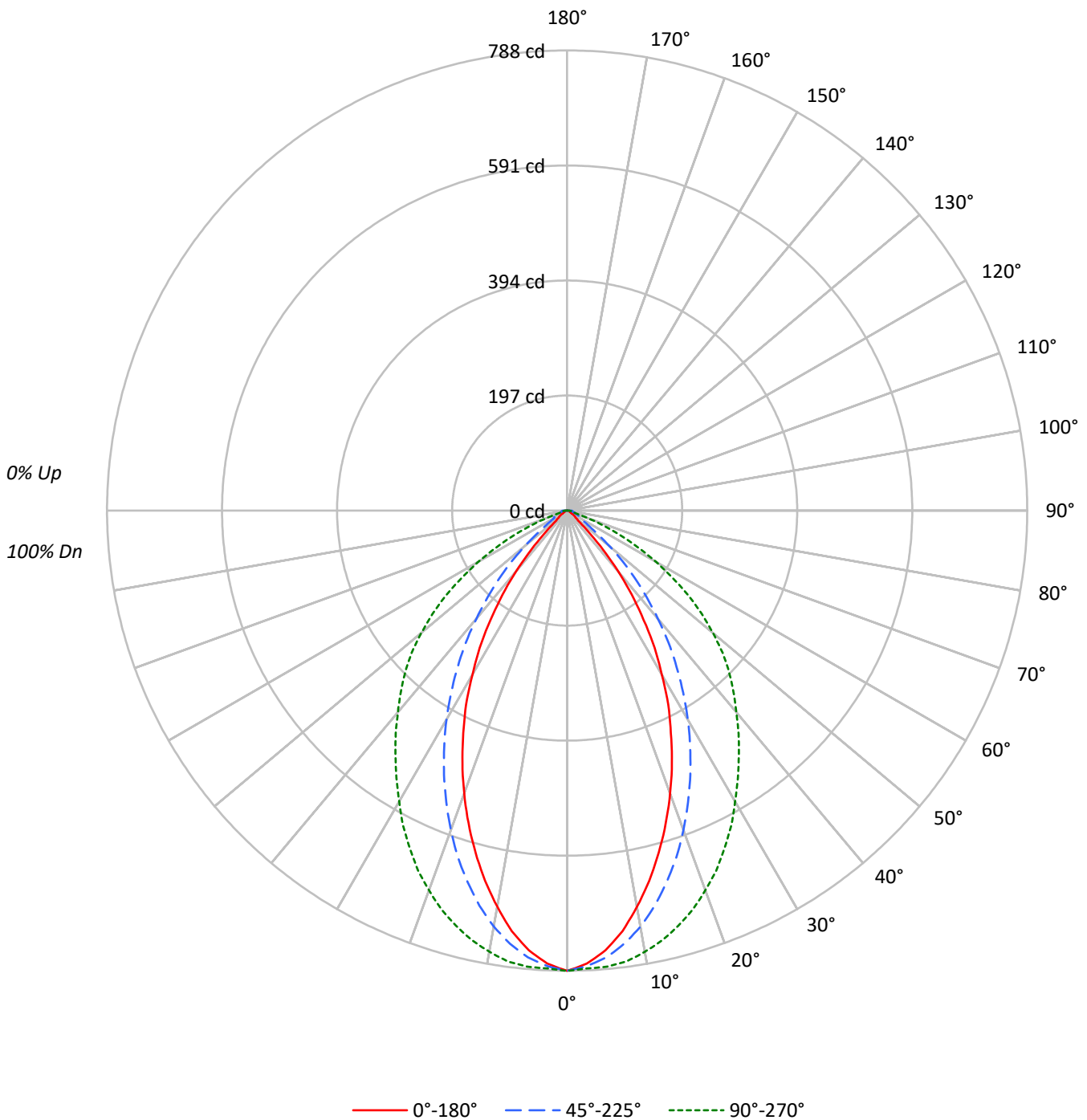
Lumens per Lamp: N/A
Luminaire Lumens: 989.1 lumens
Efficiency: N/A
Efficacy: 38.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	102	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°	6786	6786	6786
5°	6532	6640	6776
10°	6024	6325	6708
15°	5406	5871	6560
20°	4725	5337	6341
25°	3996	4740	6059
30°	3228	4110	5718
35°	2403	3434	5388
40°	1525	2723	5069
45°	610	1996	4780
50°	265	1273	4363
55°	204	658	3807
60°	145	450	3021
65°	106	446	2062
70°	106	395	947
75°	140	416	383
80°	208	466	417
85°	415	830	622

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4780 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.1	7.3
10°-20°	186.1	18.8
20°-30°	235.0	23.8
30°-40°	215.9	21.8
40°-50°	147.2	14.9
50°-60°	79.8	8.1
60°-70°	33.9	3.4
70°-80°	11.7	1.2
80°-90°	7.5	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°	493.2	49.9
0°-40°	709.1	71.7
0°-60°	936.0	94.6
0°-90°	989.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	989.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	788	788	788	788	788	
5°	756	767	768	774	784	70
15°	606	626	659	706	736	169
25°	421	448	499	576	638	192
35°	229	259	327	429	512	142
45°	50	80	164	290	392	46
55°	14	15	44	160	254	12
65°	5	6	22	50	101	5
75°	4	12	12	12	12	4
85°	4	8	8	8	6	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	788.1	788.1	788.1	788.1	788.1
2.5°	776.6	786.0	780.7	782.8	784.9
5°	755.7	767.2	768.2	774.5	783.9
7.5°	726.5	740.0	748.4	764.0	778.7
10°	688.9	705.6	723.3	748.4	767.2
12.5°	649.2	667.0	693.1	728.6	753.6
15°	606.4	626.3	658.6	705.6	735.9
17.5°	561.6	583.5	622.1	677.4	716.0
20°	515.6	539.6	582.4	645.1	692.0
22.5°	468.7	493.7	540.7	611.7	667.0
25°	420.6	447.8	498.9	576.2	637.7
27.5°	374.7	399.8	456.1	540.7	608.5
30°	324.6	352.8	413.3	504.1	575.1
32.5°	278.7	305.8	369.5	466.6	543.8
35°	228.6	258.9	326.7	429.0	512.5
37.5°	181.6	210.8	285.0	393.5	482.2
40°	135.7	166.0	242.2	358.0	450.9
42.5°	90.8	123.2	201.4	321.5	421.7
45°	50.1	80.4	163.9	290.2	392.5
47.5°	26.1	43.8	128.4	258.9	361.1
50°	19.8	24.0	95.0	224.4	325.7
52.5°	16.7	17.7	64.7	190.0	290.2
55°	13.6	14.6	43.8	159.7	253.6
57.5°	10.4	11.5	31.3	130.5	212.9
60°	8.4	9.4	26.1	100.2	175.4
62.5°	6.3	7.3	25.1	74.1	137.8
65°	5.2	6.3	21.9	50.1	101.2
67.5°	4.2	6.3	18.8	32.4	67.8
70°	4.2	8.4	15.7	20.9	37.6
72.5°	4.2	9.4	13.6	13.6	13.6
75°	4.2	11.5	12.5	11.5	11.5
77.5°	4.2	10.4	10.4	10.4	10.4
80°	4.2	9.4	9.4	9.4	8.4
82.5°	4.2	8.4	9.4	9.4	7.3
85°	4.2	8.4	8.4	8.4	6.3
87.5°	3.1	8.4	8.4	8.4	4.2
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	0.00	0.00	0.00	0.00	0.00	15.10	16.37	15.46	16.68	17.00
	3H	0.00	0.00	0.00	0.09	0.45	15.45	16.58	15.83	16.91	17.27
	4H	0.01	1.06	0.42	1.41	1.80	15.42	16.47	15.82	16.82	17.20
	6H	1.38	2.34	1.79	2.71	3.11	15.39	16.36	15.81	16.73	17.12
	8H	2.06	2.97	2.49	3.36	3.77	15.38	16.29	15.81	16.68	17.09
	12H	2.87	3.74	3.30	4.12	4.55	15.38	16.25	15.81	16.63	17.06
4H	2H	0.79	1.84	1.20	2.19	2.58	14.90	15.95	15.30	16.30	16.68
	3H	2.22	3.08	2.64	3.48	3.89	15.29	16.15	15.71	16.55	16.96
	4H	3.67	4.44	4.11	4.86	5.30	15.27	16.04	15.71	16.46	16.90
	6H	4.92	5.58	5.38	6.02	6.49	15.29	15.95	15.76	16.40	16.87
	8H	5.49	6.11	5.96	6.55	7.03	15.30	15.92	15.77	16.36	16.84
	12H	6.17	6.71	6.66	7.20	7.67	15.34	15.88	15.83	16.37	16.84
8H	4H	4.74	5.36	5.21	5.81	6.28	15.17	15.79	15.64	16.24	16.71
	6H	6.36	6.86	6.86	7.36	7.84	15.22	15.73	15.73	16.22	16.71
	8H	7.20	7.65	7.72	8.16	8.66	15.28	15.73	15.80	16.25	16.74
	12H	8.17	8.57	8.68	9.06	9.64	15.40	15.80	15.91	16.29	16.87
12H	4H	4.93	5.47	5.42	5.96	6.43	15.14	15.68	15.62	16.16	16.64
	6H	6.70	7.15	7.22	7.67	8.16	15.19	15.64	15.72	16.16	16.65
	8H	7.73	8.13	8.25	8.62	9.20	15.30	15.70	15.81	16.19	16.76