

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: P1060577

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060577
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-S795D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

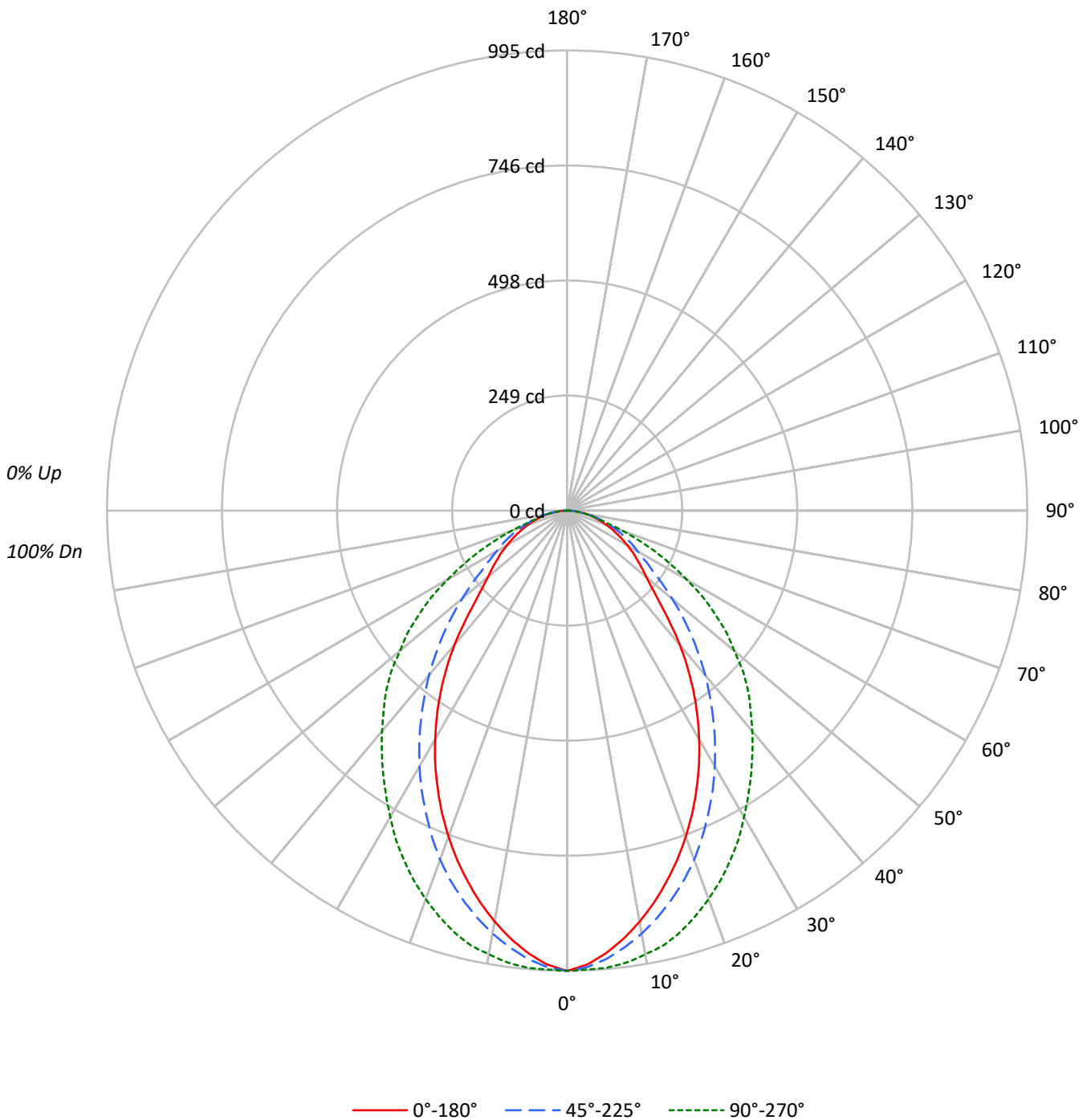
Lumens per Lamp: N/A
Luminaire Lumens: 1811.9 lumens
Efficiency: N/A
Efficacy: 70.2 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (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	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°	8570	8570	8570
5°	8305	8413	8576
10°	7891	8119	8520
15°	7403	7766	8417
20°	6874	7361	8192
25°	6294	6859	7930
30°	5674	6348	7604
35°	5001	5790	7292
40°	4257	5218	7001
45°	3456	4612	6745
50°	2990	3969	6316
55°	2771	3367	5858
60°	2587	3036	5139
65°	2423	2849	4273
70°	2258	2626	3230
75°	2153	2429	2326
80°	2018	2227	1964
85°	1857	2065	1541

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6745 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.9	5.1
10°-20°	247.0	13.6
20°-30°	337.2	18.6
30°-40°	353.3	19.5
40°-50°	305.8	16.9
50°-60°	229.8	12.7
60°-70°	148.2	8.2
70°-80°	76.0	4.2
80°-90°	22.7	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°	676.1	37.3
0°-40°	1029.4	56.8
0°-60°	1565.0	86.4
0°-90°	1811.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1811.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	995	995	995	995	995	
5°	961	975	973	981	992	90
15°	830	851	871	911	944	233
25°	662	688	722	778	835	304
35°	476	503	551	624	694	296
45°	284	313	379	472	554	224
55°	185	191	224	320	390	166
65°	119	121	140	169	210	118
75°	65	72	73	72	70	68
85°	19	22	21	20	16	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	995.2	995.2	995.2	995.2	995.2
2.5°	982.7	995.2	987.9	990.0	993.1
5°	960.8	975.4	973.3	980.6	992.1
7.5°	933.7	949.3	952.5	969.1	985.8
10°	902.4	920.1	928.5	953.5	974.4
12.5°	868.0	886.7	901.3	932.6	962.9
15°	830.4	851.3	871.1	910.7	944.1
17.5°	791.8	812.7	838.7	882.6	920.1
20°	750.1	773.0	803.3	849.2	894.0
22.5°	707.3	731.3	763.6	813.7	865.9
25°	662.4	687.5	721.9	778.2	834.6
27.5°	617.6	642.6	681.2	740.7	802.2
30°	570.6	596.7	638.4	703.1	764.7
32.5°	523.7	551.9	594.6	663.5	729.2
35°	475.7	502.8	550.8	623.8	693.7
37.5°	427.7	455.9	507.0	585.2	658.3
40°	378.7	407.9	464.2	546.6	622.8
42.5°	329.7	361.0	420.4	507.0	587.3
45°	283.8	313.0	378.7	471.5	553.9
47.5°	249.3	269.1	337.0	437.1	516.4
50°	223.2	233.7	296.3	399.6	471.5
52.5°	203.4	210.7	258.7	358.9	435.0
55°	184.6	190.9	224.3	320.3	390.2
57.5°	168.0	171.1	198.2	282.7	347.4
60°	150.2	153.4	176.3	242.0	298.4
62.5°	134.6	136.7	158.6	203.4	253.5
65°	118.9	121.0	139.8	169.0	209.7
67.5°	104.3	107.5	122.1	137.7	166.9
70°	89.7	96.0	104.3	111.6	128.3
72.5°	77.2	83.5	87.6	89.7	90.8
75°	64.7	72.0	73.0	72.0	69.9
77.5°	52.2	58.4	58.4	56.3	54.2
80°	40.7	45.9	44.9	42.8	39.6
82.5°	30.3	33.4	32.3	30.3	27.1
85°	18.8	21.9	20.9	19.8	15.6
87.5°	9.4	12.5	11.5	10.4	6.3
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	13.90	15.38	14.26	15.69	16.01	17.67	19.15	18.03	19.47	19.78
	3H	15.55	16.88	15.93	17.21	17.57	18.78	20.11	19.16	20.44	20.80
	4H	16.22	17.47	16.62	17.82	18.20	19.07	20.32	19.47	20.67	21.05
	6H	16.74	17.89	17.15	18.25	18.64	19.27	20.42	19.68	20.79	21.18
	8H	16.92	18.01	17.34	18.40	18.80	19.32	20.42	19.75	20.81	21.21
	12H	17.04	18.09	17.47	18.47	18.90	19.35	20.40	19.78	20.78	21.21
4H	2H	14.68	15.93	15.08	16.27	16.65	17.83	19.07	18.23	19.42	19.80
	3H	16.54	17.57	16.95	17.97	18.38	19.14	20.17	19.55	20.57	20.97
	4H	17.35	18.28	17.78	18.70	19.14	19.55	20.48	19.98	20.89	21.33
	6H	18.00	18.80	18.46	19.25	19.71	19.86	20.67	20.32	21.11	21.58
	8H	18.23	18.98	18.69	19.43	19.89	19.96	20.71	20.42	21.16	21.62
	12H	18.40	19.07	18.88	19.55	20.02	20.02	20.69	20.50	21.17	21.64
8H	4H	17.70	18.45	18.16	18.90	19.37	19.68	20.44	20.15	20.88	21.35
	6H	18.49	19.12	18.99	19.61	20.09	20.09	20.72	20.59	21.21	21.69
	8H	18.81	19.37	19.33	19.88	20.37	20.24	20.80	20.76	21.31	21.80
	12H	19.08	19.57	19.59	20.07	20.63	20.37	20.86	20.88	21.35	21.92
12H	4H	17.73	18.40	18.21	18.88	19.35	19.69	20.36	20.17	20.84	21.31
	6H	18.55	19.11	19.07	19.62	20.11	20.11	20.67	20.63	21.19	21.67
	8H	18.94	19.44	19.45	19.93	20.49	20.32	20.81	20.83	21.30	21.87