

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: P1060564

Luminaire Tested: S124RDRP-S795D840-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060564
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S795D840-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

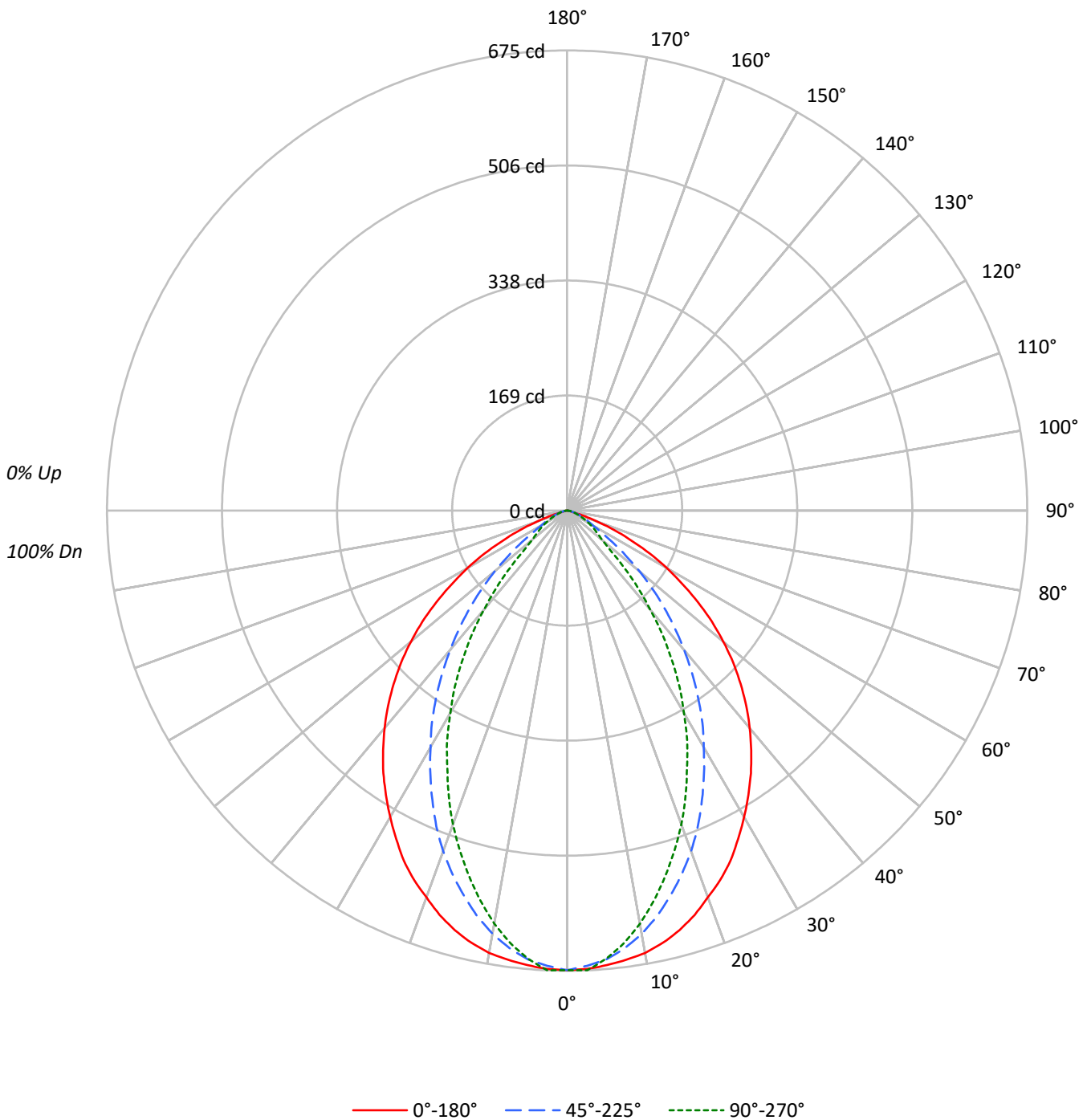
Lumens per Lamp: N/A
Luminaire Lumens: 993.8 lumens
Efficiency: N/A
Efficacy: 38.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1060564

CATALOG NUMBER: S124RDRP-S795D840-X4F0-XX-UDD-SVL-B

Luminous Intensity Polar Plot





TEST NUMBER: P1060564

CATALOG NUMBER: S124RDRP-S795D840-X4F0-XX-UDD-SVL-B

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	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	64	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	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5805	5805	5805
5°	5785	5712	5703
10°	5761	5512	5379
15°	5680	5213	4951
20°	5533	4872	4489
25°	5385	4448	3951
30°	5164	3984	3408
35°	4941	3523	2814
40°	4685	2999	2135
45°	4382	2451	1433
50°	4007	1857	891
55°	3521	1227	755
60°	2911	753	622
65°	2109	581	503
70°	1148	431	383
75°	253	316	346
80°	188	233	283
85°	188	188	277

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4382 cd/sqm



TEST NUMBER: P1060564

CATALOG NUMBER: S124RDRP-S795D840-X4F0-XX-UDD-SVL-B

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.4	6.3
10°-20°	165.9	16.7
20°-30°	219.7	22.1
30°-40°	218.1	21.9
40°-50°	167.8	16.9
50°-60°	100.0	10.1
60°-70°	45.5	4.6
70°-80°	11.8	1.2
80°-90°	2.6	0.3
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°	448.1	45.1
0°-40°	666.2	67.0
0°-60°	934.0	94.0
0°-90°	993.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	993.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	674	674	674	674	674	
5°	669	670	661	661	660	64
15°	637	621	585	565	555	179
25°	567	526	468	429	416	260
35°	470	411	335	284	268	293
45°	360	290	201	140	118	277
55°	234	167	82	51	50	209
65°	104	62	28	25	25	104
75°	8	10	10	10	10	16
85°	2	2	2	3	3	2
90°	0	0	0	0	0	



TEST NUMBER: P1060564

CATALOG NUMBER: S124RDRP-S795D840-X4F0-XX-UDD-SVL-B

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	674.1	674.1	674.1	674.1	674.1
2.5°	673.1	674.1	668.4	673.1	675.0
5°	669.3	670.3	660.8	660.8	659.8
7.5°	664.6	662.7	647.5	641.8	639.9
10°	658.9	652.3	630.4	619.0	615.2
12.5°	649.4	639.0	609.5	593.4	586.7
15°	637.1	620.9	584.8	564.9	555.4
17.5°	621.9	601.9	559.2	533.6	523.1
20°	603.8	577.2	531.7	499.4	489.9
22.5°	586.7	553.5	501.3	464.3	453.8
25°	566.8	526.0	468.1	429.1	415.8
27.5°	543.1	499.4	434.8	395.0	381.7
30°	519.3	470.9	400.7	358.9	342.7
32.5°	494.6	441.5	369.3	321.9	306.7
35°	470.0	411.1	335.1	283.9	267.7
37.5°	443.4	380.7	301.0	247.8	229.8
40°	416.8	351.3	266.8	212.7	189.9
42.5°	389.3	320.9	233.6	176.6	153.8
45°	359.8	289.6	201.3	140.5	117.7
47.5°	330.4	260.1	169.0	105.4	84.5
50°	299.1	228.8	138.6	76.9	66.5
52.5°	267.7	198.4	108.2	59.8	57.0
55°	234.5	167.1	81.7	51.3	50.3
57.5°	200.3	138.6	58.9	44.6	42.7
60°	169.0	112.0	43.7	38.0	36.1
62.5°	136.7	84.5	36.1	31.3	29.4
65°	103.5	61.7	28.5	24.7	24.7
67.5°	75.0	41.8	22.8	19.9	19.0
70°	45.6	25.6	17.1	16.1	15.2
72.5°	22.8	15.2	13.3	12.3	12.3
75°	7.6	9.5	9.5	10.4	10.4
77.5°	5.7	6.6	6.6	7.6	7.6
80°	3.8	4.7	4.7	5.7	5.7
82.5°	2.8	2.8	3.8	3.8	4.7
85°	1.9	1.9	1.9	2.8	2.8
87.5°	0.9	0.9	0.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P1060564
 CATALOG NUMBER: S124RDRP-S795D840-X4F0-XX-UDD-SVL-B

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	15.23	16.56	15.59	16.88	17.19	6.78	8.11	7.14	8.42	8.74
	3H	15.74	16.92	16.12	17.25	17.61	7.59	8.77	7.97	9.10	9.47
	4H	15.70	16.80	16.11	17.15	17.54	7.87	8.97	8.27	9.32	9.70
	6H	15.64	16.65	16.05	17.02	17.41	8.04	9.05	8.46	9.42	9.82
	8H	15.60	16.55	16.03	16.95	17.35	8.11	9.06	8.54	9.45	9.86
	12H	15.56	16.47	16.00	16.86	17.29	8.15	9.06	8.58	9.45	9.88
4H	2H	15.07	16.17	15.47	16.52	16.90	7.22	8.32	7.62	8.67	9.05
	3H	15.63	16.52	16.04	16.92	17.33	8.18	9.07	8.59	9.48	9.88
	4H	15.59	16.39	16.03	16.81	17.25	8.54	9.34	8.98	9.76	10.20
	6H	15.54	16.23	16.00	16.67	17.14	8.79	9.48	9.26	9.93	10.39
	8H	15.49	16.13	15.96	16.58	17.05	8.88	9.52	9.35	9.97	10.44
	12H	15.46	16.02	15.94	16.50	16.98	8.95	9.52	9.44	10.00	10.48
8H	4H	15.48	16.12	15.95	16.57	17.04	8.63	9.27	9.10	9.72	10.19
	6H	15.42	15.94	15.92	16.44	16.92	8.94	9.46	9.44	9.96	10.44
	8H	15.37	15.84	15.90	16.36	16.85	9.07	9.54	9.59	10.06	10.55
	12H	15.34	15.76	15.86	16.25	16.82	9.20	9.62	9.72	10.11	10.68
12H	4H	15.44	16.01	15.93	16.49	16.96	8.60	9.17	9.09	9.65	10.13
	6H	15.37	15.83	15.89	16.35	16.84	8.92	9.39	9.44	9.91	10.40
	8H	15.34	15.75	15.85	16.25	16.82	9.09	9.50	9.61	10.00	10.57