

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: P1060566

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060566
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)
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-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

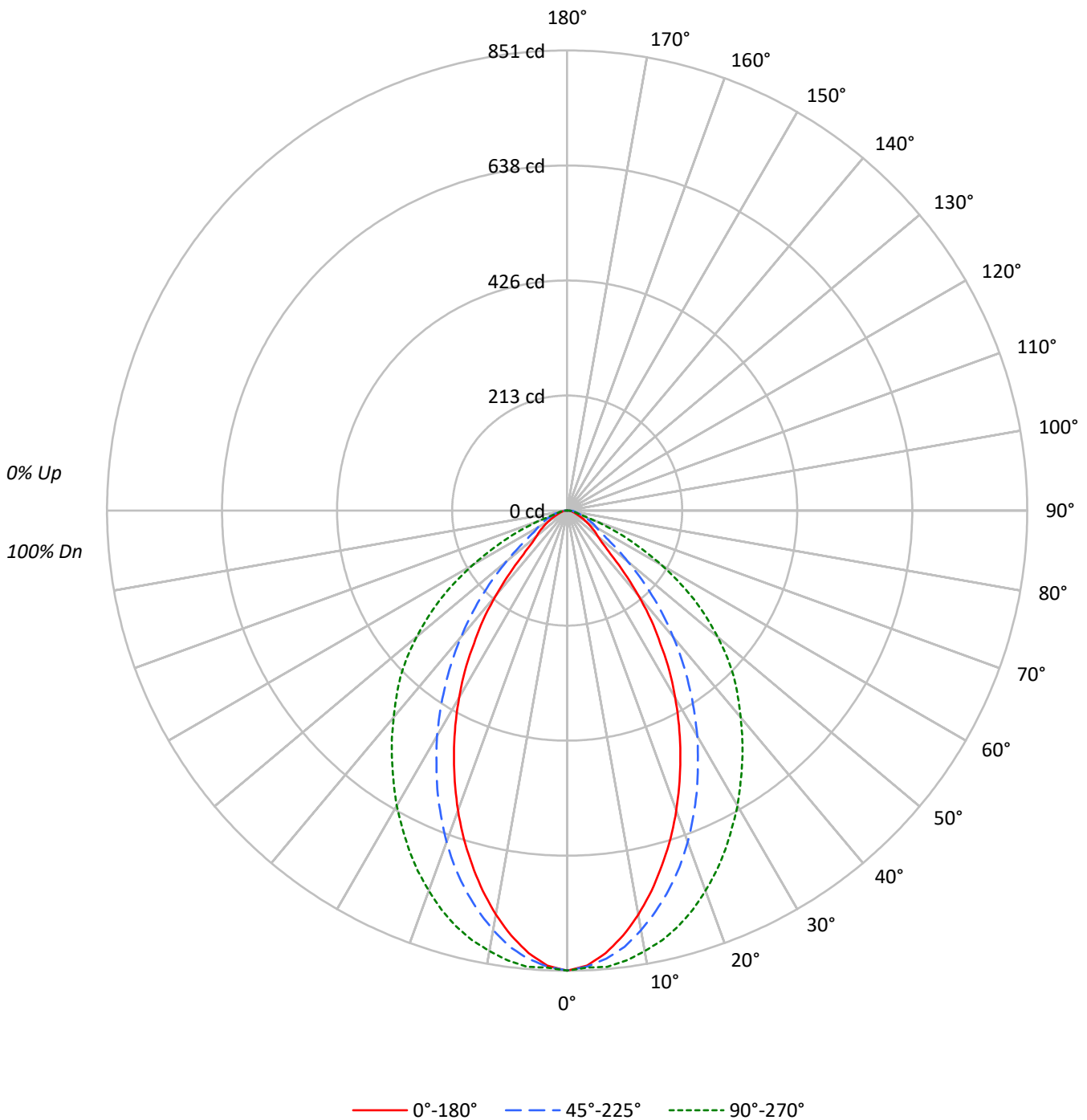
Lumens per Lamp: N/A
Luminaire Lumens: 1204.0 lumens
Efficiency: N/A
Efficacy: 46.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (Ain): 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	104	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	66	75	70	66	73	68	65	63
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7325	7325	7325
5°	7098	7188	7321
10°	6632	6889	7230
15°	6050	6473	7092
20°	5408	5975	6855
25°	4705	5401	6574
30°	3969	4782	6265
35°	3157	4117	5935
40°	2297	3430	5609
45°	1390	2708	5313
50°	993	1961	4864
55°	842	1327	4295
60°	687	1080	3470
65°	542	968	2498
70°	456	813	1317
75°	413	759	665
80°	426	754	660
85°	563	1126	751

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5313 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.3	6.5
10°-20°	205.2	17.0
20°-30°	266.2	22.1
30°-40°	256.2	21.3
40°-50°	190.6	15.8
50°-60°	117.2	9.7
60°-70°	57.6	4.8
70°-80°	22.5	1.9
80°-90°	10.3	0.9
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°	549.7	45.7
0°-40°	805.9	66.9
0°-60°	1113.7	92.5
0°-90°	1204.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1204.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	851	851	851	851	851	
5°	821	834	832	839	847	76
15°	679	700	726	770	796	190
25°	495	522	568	640	692	227
35°	300	329	392	490	565	188
45°	114	142	222	343	436	95
55°	56	58	88	202	286	50
65°	27	28	48	76	123	27
75°	12	22	23	21	20	14
85°	6	10	11	11	8	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	850.7	850.7	850.7	850.7	850.7
2.5°	842.1	851.6	844.0	844.9	845.9
5°	821.2	833.5	831.6	839.2	846.9
7.5°	792.7	806.9	813.6	828.8	839.2
10°	758.5	774.6	787.9	812.6	826.9
12.5°	720.4	739.4	758.5	791.7	813.6
15°	678.6	700.5	726.1	769.9	795.5
17.5°	635.9	657.7	691.0	741.4	773.7
20°	590.2	614.0	652.0	708.1	748.0
22.5°	542.7	568.4	610.2	673.9	721.4
25°	495.2	521.8	568.4	639.7	691.9
27.5°	447.7	473.3	523.7	603.5	660.6
30°	399.2	425.8	480.9	564.6	630.1
32.5°	352.6	377.3	436.3	527.5	596.9
35°	300.3	328.9	391.6	489.5	564.6
37.5°	255.7	281.3	348.8	451.5	532.3
40°	204.3	232.9	305.1	414.4	499.0
42.5°	156.8	185.3	263.3	377.3	467.6
45°	114.1	141.6	222.4	343.1	436.3
47.5°	86.5	102.6	182.5	309.8	401.1
50°	74.1	78.9	146.4	273.7	363.1
52.5°	65.6	67.5	114.1	237.6	325.1
55°	56.1	58.0	88.4	201.5	286.1
57.5°	47.5	48.5	71.3	167.3	244.3
60°	39.9	40.9	62.7	134.0	201.5
62.5°	33.3	34.2	56.1	103.6	160.6
65°	26.6	28.5	47.5	76.0	122.6
67.5°	21.9	25.7	39.9	53.2	85.5
70°	18.1	24.7	32.3	37.1	52.3
72.5°	15.2	22.8	27.6	26.6	25.7
75°	12.4	21.9	22.8	20.9	20.0
77.5°	10.5	19.0	19.0	17.1	16.2
80°	8.6	15.2	15.2	15.2	13.3
82.5°	7.6	12.4	13.3	13.3	10.5
85°	5.7	10.5	11.4	11.4	7.6
87.5°	3.8	9.5	10.5	9.5	5.7
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	6.71	8.05	7.07	8.36	8.68	15.87	17.21	16.24	17.53	17.84
	3H	7.82	9.01	8.20	9.34	9.70	16.38	17.57	16.76	17.90	18.26
	4H	8.34	9.45	8.74	9.80	10.18	16.40	17.51	16.80	17.86	18.24
	6H	8.77	9.79	9.19	10.16	10.56	16.41	17.43	16.82	17.80	18.19
	8H	8.96	9.93	9.39	10.32	10.73	16.41	17.38	16.84	17.77	18.18
	12H	9.14	10.07	9.58	10.45	10.88	16.42	17.34	16.85	17.72	18.15
4H	2H	7.85	8.96	8.25	9.31	9.69	15.76	16.87	16.17	17.22	17.61
	3H	9.19	10.10	9.60	10.50	10.91	16.35	17.26	16.77	17.67	18.07
	4H	9.93	10.74	10.36	11.16	11.60	16.41	17.22	16.85	17.64	18.09
	6H	10.54	11.24	11.00	11.69	12.15	16.49	17.19	16.95	17.64	18.10
	8H	10.78	11.44	11.25	11.88	12.35	16.52	17.17	16.99	17.62	18.09
	12H	11.02	11.60	11.50	12.08	12.55	16.56	17.14	17.04	17.62	18.10
8H	4H	10.39	11.05	10.86	11.50	11.97	16.37	17.03	16.84	17.47	17.94
	6H	11.24	11.78	11.75	12.28	12.76	16.50	17.03	17.00	17.53	18.01
	8H	11.65	12.13	12.17	12.65	13.14	16.58	17.06	17.10	17.58	18.07
	12H	12.08	12.50	12.59	13.00	13.57	16.70	17.13	17.22	17.62	18.19
12H	4H	10.45	11.03	10.93	11.51	11.98	16.34	16.92	16.83	17.41	17.88
	6H	11.38	11.86	11.90	12.37	12.87	16.48	16.96	17.00	17.48	17.97
	8H	11.90	12.33	12.41	12.82	13.39	16.61	17.04	17.13	17.53	18.10