

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: P1060475

Luminaire Tested: S124RDRP-S575D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060475
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D835-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

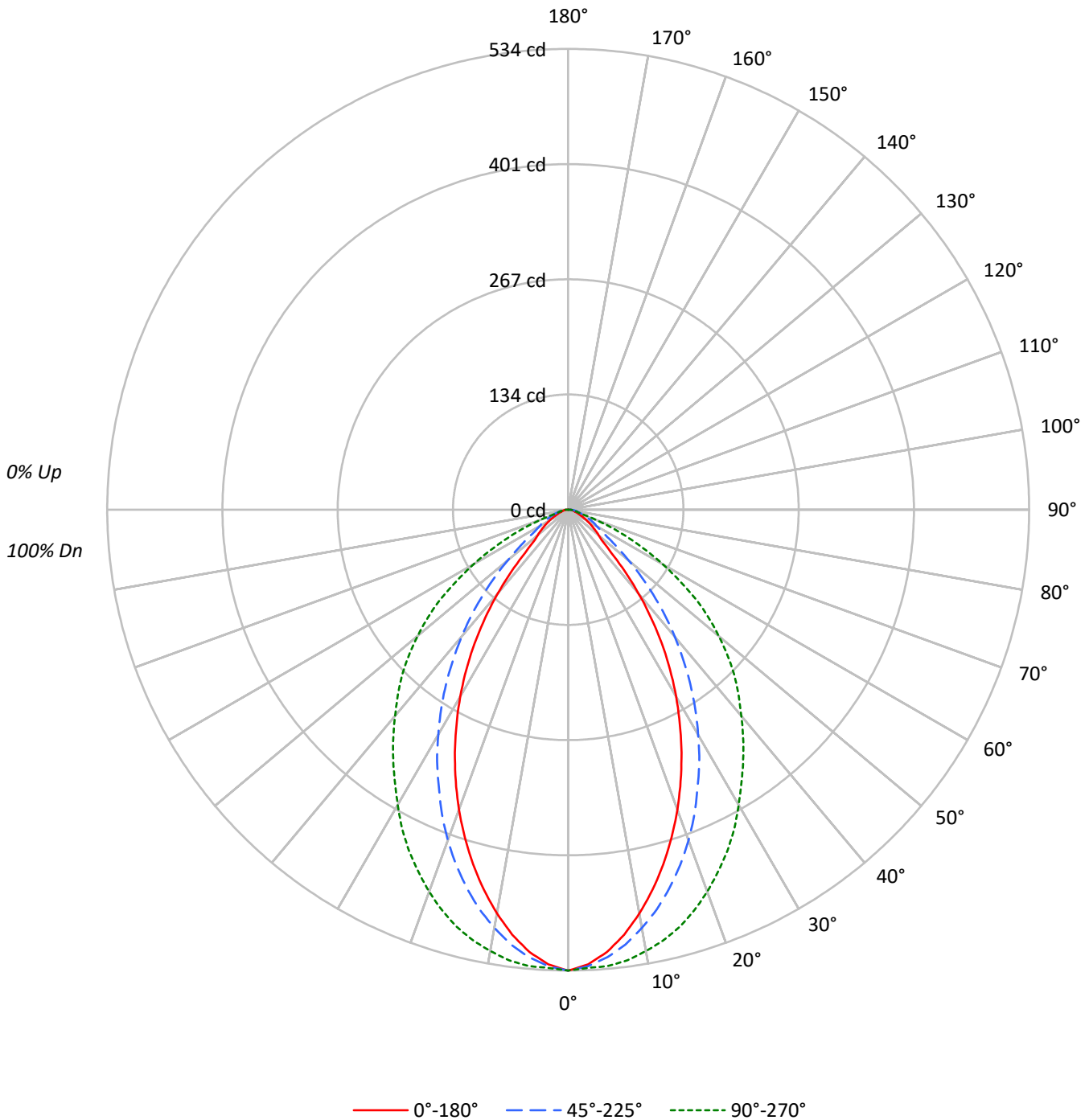
Lumens per Lamp: N/A
Luminaire Lumens: 751.0 lumens
Efficiency: N/A
Efficacy: 38.3 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	105	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	67	75	70	66	73	68	65	63
5	84	73	66	61	82	72	65	60	70	64	60	69	63	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	49	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4599	4599	4599
5°	4446	4499	4587
10°	4153	4302	4540
15°	3792	4046	4458
20°	3388	3736	4315
25°	2950	3370	4145
30°	2487	2993	3926
35°	1986	2593	3715
40°	1429	2154	3506
45°	861	1696	3318
50°	619	1228	3049
55°	521	826	2704
60°	422	656	2177
65°	332	595	1565
70°	292	496	838
75°	273	452	406
80°	268	471	372
85°	405	672	474

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3318 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.0	6.5
10°-20°	128.5	17.1
20°-30°	166.7	22.2
30°-40°	160.2	21.3
40°-50°	118.9	15.8
50°-60°	72.8	9.7
60°-70°	35.4	4.7
70°-80°	13.5	1.8
80°-90°	6.1	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°	344.2	45.8
0°-40°	504.4	67.2
0°-60°	696.1	92.7
0°-90°	751.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	751.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	534	534	534	534	534	
5°	514	522	520	525	531	48
15°	425	438	454	481	500	119
25°	310	326	355	400	436	142
35°	189	206	247	305	353	117
45°	71	88	139	213	272	59
55°	35	36	55	124	180	31
65°	16	18	29	46	77	17
75°	8	13	14	12	12	9
85°	4	7	7	6	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	534.1	534.1	534.1	534.1	534.1
2.5°	527.3	533.4	529.4	530.7	531.4
5°	514.4	521.9	520.5	525.3	530.7
7.5°	496.7	505.6	508.3	517.8	526.6
10°	475.0	485.9	492.0	507.6	519.2
12.5°	451.2	462.8	474.3	495.4	511.0
15°	425.4	437.6	453.9	481.1	500.1
17.5°	398.2	411.8	431.5	464.1	486.5
20°	369.7	383.9	407.7	443.7	470.9
22.5°	340.4	355.4	381.9	422.0	453.9
25°	310.5	326.2	354.7	400.2	436.3
27.5°	280.0	296.3	328.9	377.1	416.6
30°	250.1	265.7	301.0	353.4	394.8
32.5°	219.5	235.8	273.8	328.9	373.7
35°	188.9	205.9	246.7	305.1	353.4
37.5°	157.7	176.0	218.8	282.0	333.0
40°	127.1	144.7	191.6	258.2	311.9
42.5°	97.2	116.2	165.8	234.4	292.2
45°	70.7	88.3	139.3	212.7	272.5
47.5°	53.0	63.9	114.8	192.3	250.7
50°	46.2	48.2	91.7	169.9	227.6
52.5°	40.1	41.5	71.4	145.4	204.5
55°	34.7	36.0	55.0	124.4	180.1
57.5°	29.2	30.6	44.2	104.0	152.2
60°	24.5	25.8	38.1	82.9	126.4
62.5°	20.4	21.1	34.0	63.2	101.2
65°	16.3	17.7	29.2	46.2	76.8
67.5°	13.6	14.9	23.8	31.9	53.7
70°	11.6	14.9	19.7	22.4	33.3
72.5°	9.5	13.6	16.3	15.6	15.6
75°	8.2	12.9	13.6	12.2	12.2
77.5°	6.8	11.6	10.9	10.2	9.5
80°	5.4	9.5	9.5	8.2	7.5
82.5°	4.8	7.5	7.5	7.5	6.1
85°	4.1	6.8	6.8	6.1	4.8
87.5°	2.7	5.4	6.1	5.4	3.4
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	5.12	6.46	5.48	6.77	7.08	14.22	15.55	14.58	15.87	16.18
	3H	6.16	7.35	6.54	7.68	8.04	14.72	15.90	15.10	16.23	16.60
	4H	6.68	7.78	7.08	8.13	8.52	14.73	15.84	15.13	16.19	16.57
	6H	7.13	8.14	7.54	8.51	8.91	14.73	15.75	15.14	16.12	16.51
	8H	7.32	8.28	7.75	8.67	9.08	14.72	15.69	15.15	16.08	16.48
	12H	7.53	8.46	7.97	8.84	9.27	14.72	15.65	15.16	16.03	16.46
4H	2H	6.21	7.32	6.61	7.67	8.05	14.10	15.21	14.51	15.56	15.94
	3H	7.48	8.38	7.89	8.79	9.19	14.68	15.59	15.09	15.99	16.39
	4H	8.18	8.99	8.62	9.41	9.86	14.73	15.54	15.16	15.96	16.40
	6H	8.82	9.52	9.28	9.96	10.43	14.78	15.48	15.24	15.93	16.39
	8H	9.06	9.72	9.53	10.16	10.63	14.80	15.45	15.27	15.90	16.37
	12H	9.34	9.92	9.83	10.40	10.88	14.83	15.41	15.32	15.89	16.37
8H	4H	8.61	9.27	9.08	9.71	10.18	14.68	15.33	15.15	15.78	16.25
	6H	9.49	10.02	9.99	10.52	11.00	14.77	15.31	15.27	15.80	16.28
	8H	9.90	10.38	10.42	10.89	11.39	14.83	15.31	15.35	15.83	16.32
	12H	10.38	10.80	10.89	11.30	11.87	14.93	15.36	15.45	15.85	16.42
12H	4H	8.66	9.23	9.14	9.72	10.19	14.65	15.23	15.14	15.71	16.18
	6H	9.60	10.08	10.12	10.60	11.09	14.75	15.23	15.27	15.75	16.24
	8H	10.12	10.55	10.64	11.04	11.61	14.86	15.28	15.37	15.78	16.35