

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: P1060397

Luminaire Tested: S124RDRP-S350D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060397
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-S350D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

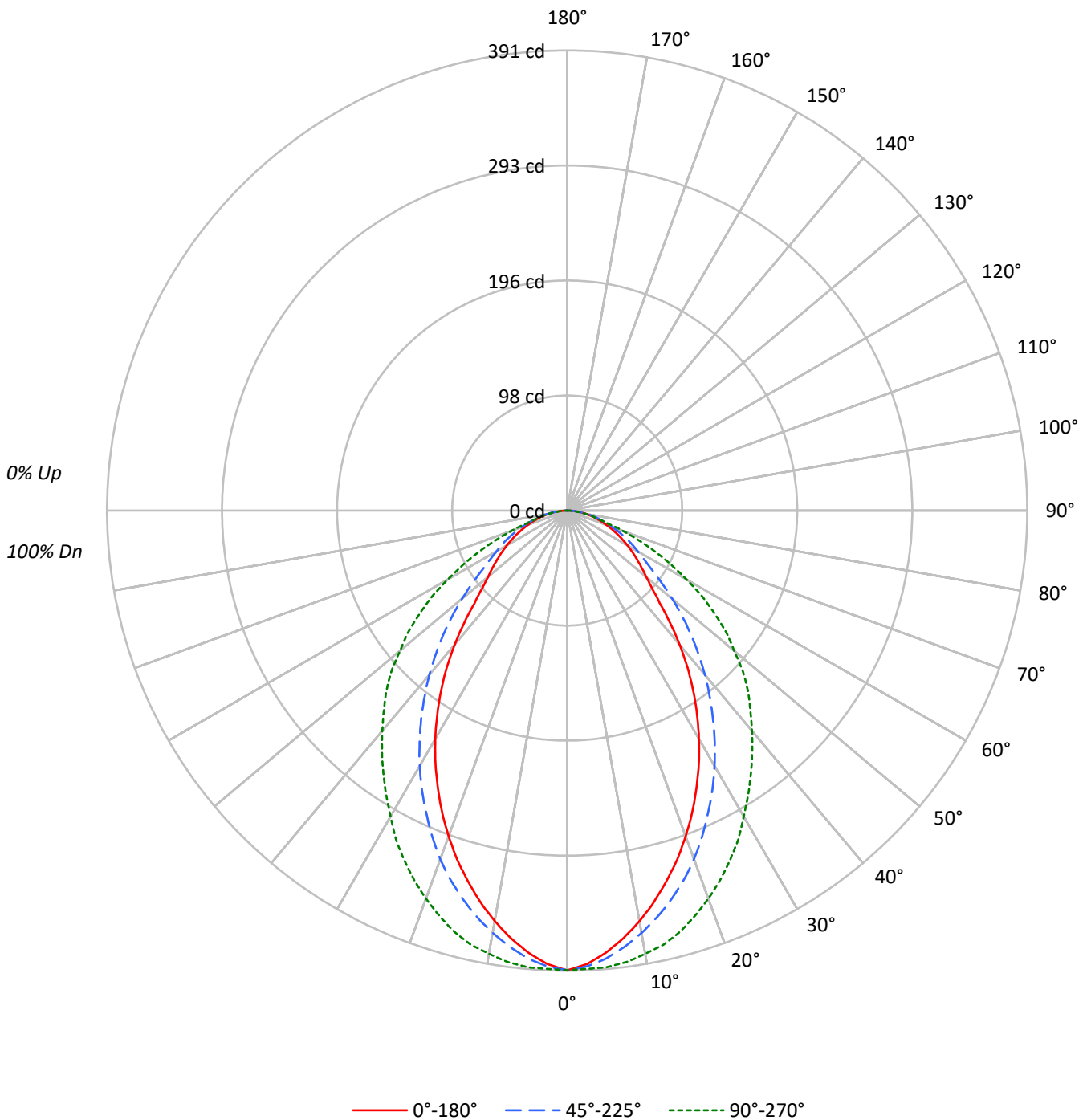
Lumens per Lamp: N/A
Luminaire Lumens: 711.1 lumens
Efficiency: N/A
Efficacy: 56.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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	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													100															
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87													87															
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75													75															
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65													65															
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57													57															
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50													50															
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45													45															
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41													41															
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37													37															
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34													34															
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31													31															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3364	3364	3364
5°	3260	3302	3366
10°	3097	3186	3344
15°	2905	3048	3303
20°	2698	2889	3216
25°	2470	2692	3113
30°	2227	2492	2984
35°	1963	2273	2862
40°	1670	2048	2747
45°	1357	1810	2647
50°	1174	1558	2480
55°	1088	1321	2298
60°	1016	1192	2017
65°	952	1119	1677
70°	886	1030	1269
75°	845	955	912
80°	793	873	774
85°	731	810	603

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2647 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.1	5.1
10°-20°	96.9	13.6
20°-30°	132.4	18.6
30°-40°	138.7	19.5
40°-50°	120.0	16.9
50°-60°	90.2	12.7
60°-70°	58.1	8.2
70°-80°	29.8	4.2
80°-90°	8.9	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°	265.4	37.3
0°-40°	404.0	56.8
0°-60°	614.2	86.4
0°-90°	711.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	711.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	391	391	391	391	391	
5°	377	383	382	385	389	35
15°	326	334	342	357	370	91
25°	260	270	283	305	328	119
35°	187	197	216	245	272	116
45°	111	123	149	185	217	88
55°	72	75	88	126	153	65
65°	47	48	55	66	82	46
75°	25	28	29	28	27	27
85°	7	9	8	8	6	8
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	390.6	390.6	390.6	390.6	390.6
2.5°	385.7	390.6	387.7	388.6	389.8
5°	377.1	382.8	382.0	384.9	389.4
7.5°	366.4	372.6	373.8	380.4	386.9
10°	354.2	361.1	364.4	374.2	382.4
12.5°	340.7	348.0	353.8	366.0	377.9
15°	325.9	334.1	341.9	357.4	370.5
17.5°	310.8	319.0	329.2	346.4	361.1
20°	294.4	303.4	315.3	333.3	350.9
22.5°	277.6	287.0	299.7	319.4	339.8
25°	260.0	269.8	283.3	305.4	327.6
27.5°	242.4	252.2	267.4	290.7	314.9
30°	224.0	234.2	250.6	276.0	300.1
32.5°	205.5	216.6	233.4	260.4	286.2
35°	186.7	197.3	216.2	244.8	272.3
37.5°	167.9	178.9	199.0	229.7	258.4
40°	148.6	160.1	182.2	214.5	244.4
42.5°	129.4	141.7	165.0	199.0	230.5
45°	111.4	122.8	148.6	185.1	217.4
47.5°	97.9	105.6	132.2	171.6	202.7
50°	87.6	91.7	116.3	156.8	185.1
52.5°	79.8	82.7	101.5	140.8	170.7
55°	72.5	74.9	88.0	125.7	153.1
57.5°	65.9	67.1	77.8	111.0	136.3
60°	59.0	60.2	69.2	95.0	117.1
62.5°	52.8	53.6	62.2	79.8	99.5
65°	46.7	47.5	54.9	66.3	82.3
67.5°	40.9	42.2	47.9	54.0	65.5
70°	35.2	37.7	40.9	43.8	50.4
72.5°	30.3	32.8	34.4	35.2	35.6
75°	25.4	28.3	28.7	28.3	27.4
77.5°	20.5	22.9	22.9	22.1	21.3
80°	16.0	18.0	17.6	16.8	15.6
82.5°	11.9	13.1	12.7	11.9	10.6
85°	7.4	8.6	8.2	7.8	6.1
87.5°	3.7	4.9	4.5	4.1	2.5
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	10.64	12.13	11.01	12.44	12.75	14.42	15.91	14.79	16.22	16.53
	3H	12.30	13.63	12.68	13.96	14.32	15.53	16.86	15.91	17.19	17.55
	4H	12.97	14.22	13.37	14.57	14.95	15.82	17.07	16.22	17.42	17.80
	6H	13.48	14.63	13.90	15.00	15.39	16.02	17.17	16.43	17.54	17.93
	8H	13.67	14.76	14.09	15.15	15.55	16.08	17.17	16.50	17.56	17.96
	12H	13.79	14.84	14.22	15.22	15.65	16.10	17.15	16.53	17.53	17.96
4H	2H	11.43	12.67	11.83	13.02	13.40	14.58	15.83	14.98	16.18	16.55
	3H	13.29	14.32	13.70	14.72	15.12	15.89	16.92	16.30	17.32	17.73
	4H	14.10	15.03	14.53	15.45	15.89	16.30	17.23	16.73	17.64	18.08
	6H	14.75	15.55	15.21	16.00	16.46	16.62	17.42	17.07	17.87	18.33
	8H	14.98	15.73	15.44	16.18	16.64	16.71	17.46	17.17	17.91	18.38
	12H	15.15	15.82	15.63	16.30	16.77	16.77	17.44	17.25	17.92	18.39
8H	4H	14.45	15.20	14.91	15.65	16.12	16.43	17.19	16.90	17.63	18.10
	6H	15.24	15.87	15.74	16.36	16.84	16.85	17.47	17.34	17.96	18.44
	8H	15.56	16.12	16.08	16.63	17.12	17.00	17.56	17.51	18.07	18.55
	12H	15.83	16.32	16.34	16.82	17.38	17.12	17.61	17.63	18.11	18.67
12H	4H	14.48	15.15	14.96	15.63	16.10	16.44	17.11	16.92	17.59	18.06
	6H	15.30	15.86	15.82	16.38	16.86	16.87	17.43	17.38	17.94	18.43
	8H	15.69	16.19	16.20	16.68	17.24	17.07	17.56	17.58	18.06	18.62