

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: P1060454

Luminaire Tested: S124RDRP-S350D950-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060454
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S350D950-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

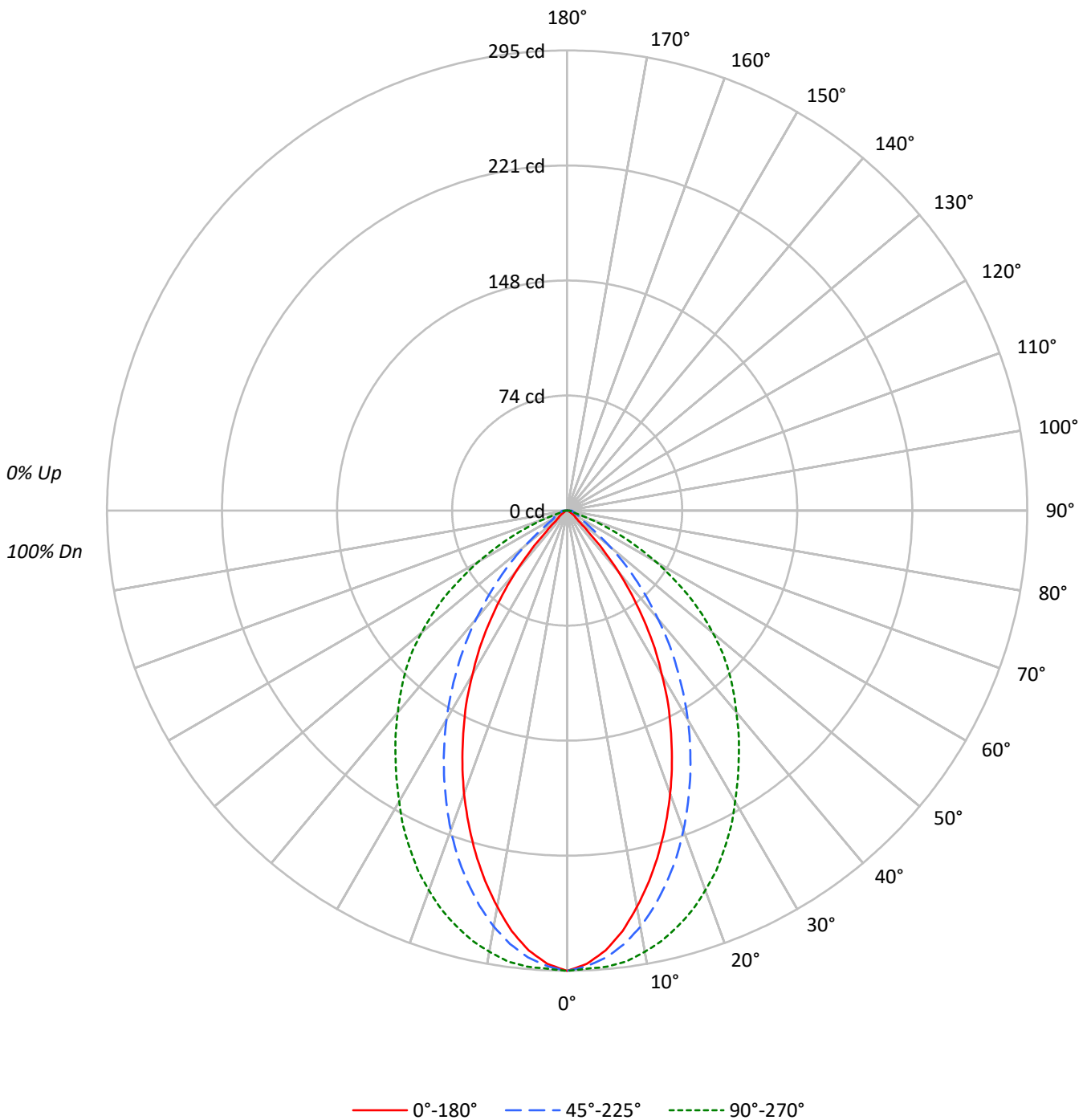
Lumens per Lamp: N/A
Luminaire Lumens: 370.3 lumens
Efficiency: N/A
Efficacy: 29.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	88	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2541	2541	2541
5°	2446	2486	2537
10°	2255	2368	2511
15°	2025	2198	2456
20°	1770	1999	2374
25°	1496	1775	2269
30°	1208	1539	2141
35°	900	1286	2017
40°	571	1020	1897
45°	229	748	1789
50°	99	477	1633
55°	77	246	1426
60°	53	169	1132
65°	41	167	772
70°	40	149	355
75°	53	156	143
80°	79	174	154
85°	158	306	227

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1789 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.0	7.3
10°-20°	69.7	18.8
20°-30°	88.0	23.8
30°-40°	80.8	21.8
40°-50°	55.1	14.9
50°-60°	29.9	8.1
60°-70°	12.7	3.4
70°-80°	4.4	1.2
80°-90°	2.8	0.7
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°	184.7	49.9
0°-40°	265.5	71.7
0°-60°	350.5	94.6
0°-90°	370.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	370.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	295	295	295	295	295	
5°	283	287	288	290	294	26
15°	227	234	247	264	276	63
25°	158	168	187	216	239	72
35°	86	97	122	161	192	53
45°	19	30	61	109	147	17
55°	5	6	16	60	95	5
65°	2	2	8	19	38	2
75°	2	4	5	4	4	2
85°	2	3	3	3	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	295.1	295.1	295.1	295.1	295.1
2.5°	290.8	294.3	292.3	293.1	293.9
5°	283.0	287.2	287.6	290.0	293.5
7.5°	272.0	277.1	280.2	286.1	291.5
10°	257.9	264.2	270.8	280.2	287.2
12.5°	243.1	249.7	259.5	272.8	282.2
15°	227.1	234.5	246.6	264.2	275.5
17.5°	210.3	218.5	232.9	253.6	268.1
20°	193.1	202.1	218.1	241.5	259.1
22.5°	175.5	184.9	202.4	229.0	249.7
25°	157.5	167.7	186.8	215.7	238.8
27.5°	140.3	149.7	170.8	202.4	227.8
30°	121.5	132.1	154.8	188.8	215.3
32.5°	104.3	114.5	138.3	174.7	203.6
35°	85.6	96.9	122.3	160.6	191.9
37.5°	68.0	78.9	106.7	147.3	180.6
40°	50.8	62.1	90.7	134.0	168.8
42.5°	34.0	46.1	75.4	120.4	157.9
45°	18.8	30.1	61.4	108.6	146.9
47.5°	9.8	16.4	48.1	96.9	135.2
50°	7.4	9.0	35.6	84.0	121.9
52.5°	6.3	6.6	24.2	71.1	108.6
55°	5.1	5.5	16.4	59.8	95.0
57.5°	3.9	4.3	11.7	48.9	79.7
60°	3.1	3.5	9.8	37.5	65.7
62.5°	2.3	2.7	9.4	27.7	51.6
65°	2.0	2.3	8.2	18.8	37.9
67.5°	1.6	2.3	7.0	12.1	25.4
70°	1.6	3.1	5.9	7.8	14.1
72.5°	1.6	3.5	5.1	5.1	5.1
75°	1.6	4.3	4.7	4.3	4.3
77.5°	1.6	3.9	3.9	3.9	3.9
80°	1.6	3.5	3.5	3.5	3.1
82.5°	1.6	3.1	3.5	3.5	2.7
85°	1.6	3.1	3.1	3.1	2.3
87.5°	1.2	3.1	3.1	3.1	1.6
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	0.00	0.00	0.00	0.00	0.00	11.69	12.96	12.05	13.27	13.59
	3H	0.00	0.00	0.00	0.00	0.00	12.04	13.17	12.42	13.50	13.86
	4H	0.00	0.00	0.00	0.00	0.00	12.01	13.06	12.41	13.41	13.79
	6H	0.00	0.00	0.00	0.00	0.00	11.98	12.94	12.40	13.32	13.71
	8H	0.00	0.00	0.00	0.00	0.39	11.97	12.88	12.40	13.27	13.68
	12H	0.00	0.37	0.00	0.75	1.18	11.97	12.84	12.40	13.22	13.65
4H	2H	0.00	0.00	0.00	0.00	0.00	11.49	12.54	11.89	12.89	13.27
	3H	0.00	0.00	0.00	0.06	0.46	11.88	12.74	12.30	13.14	13.55
	4H	0.26	1.02	0.69	1.44	1.88	11.86	12.63	12.30	13.05	13.49
	6H	1.51	2.17	1.97	2.61	3.08	11.88	12.54	12.35	12.99	13.45
	8H	2.08	2.70	2.55	3.15	3.62	11.89	12.50	12.36	12.95	13.42
	12H	2.77	3.31	3.26	3.79	4.27	11.92	12.47	12.41	12.95	13.42
8H	4H	1.33	1.94	1.80	2.39	2.86	11.76	12.38	12.23	12.83	13.30
	6H	2.94	3.44	3.44	3.94	4.42	11.81	12.31	12.32	12.81	13.29
	8H	3.77	4.22	4.29	4.74	5.23	11.87	12.32	12.39	12.84	13.33
	12H	4.74	5.14	5.26	5.63	6.21	11.98	12.38	12.50	12.88	13.45
12H	4H	1.52	2.06	2.00	2.54	3.02	11.73	12.27	12.21	12.75	13.23
	6H	3.28	3.73	3.80	4.25	4.74	11.78	12.23	12.30	12.75	13.24
	8H	4.30	4.70	4.81	5.19	5.76	11.88	12.28	12.40	12.78	13.35