

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: P1060418

Luminaire Tested: S124RDRP-S350D927-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060418
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-S350D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

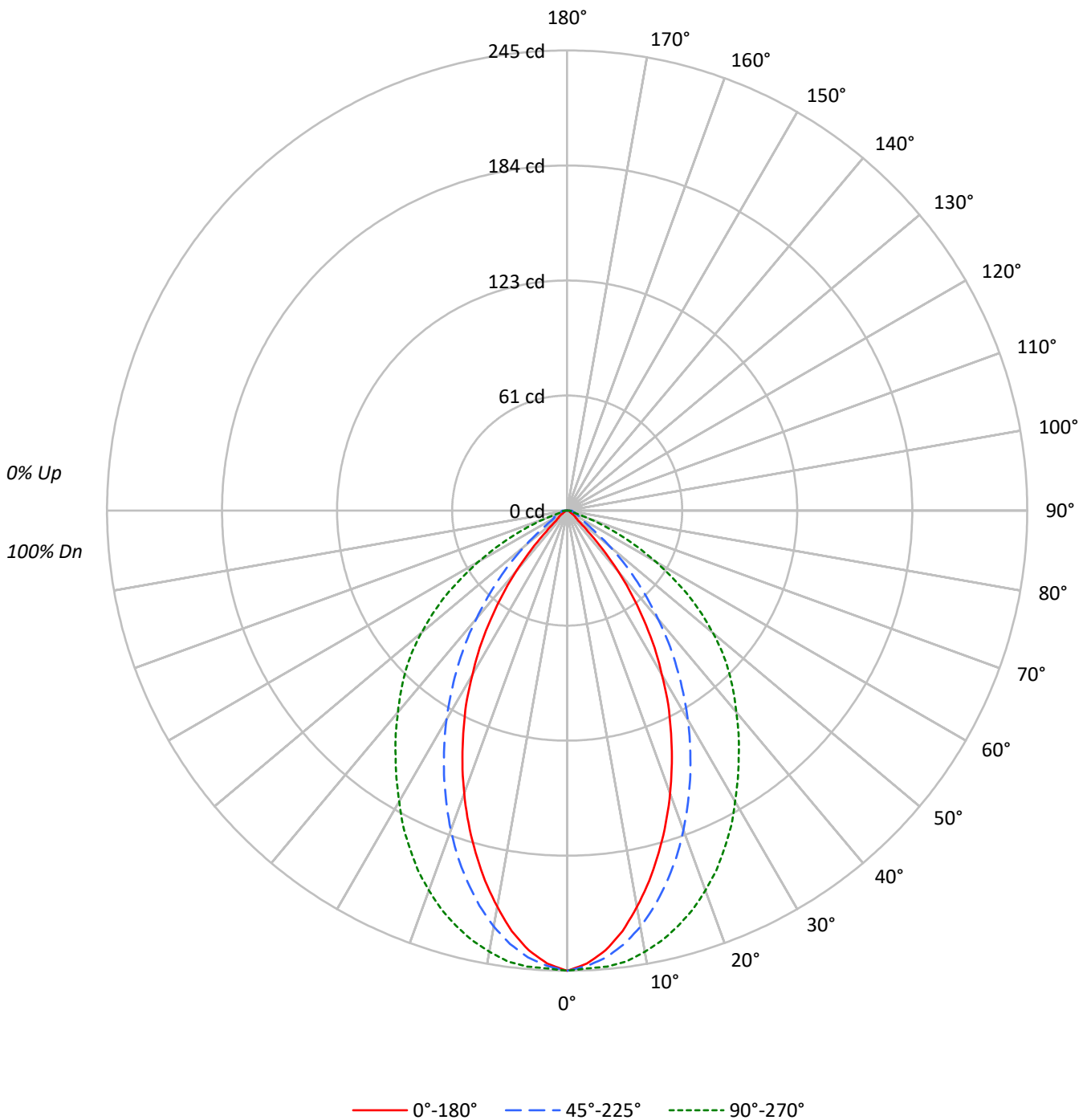
Lumens per Lamp: N/A
Luminaire Lumens: 307.5 lumens
Efficiency: N/A
Efficacy: 24.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	2110	2110	2110
5°	2031	2064	2107
10°	1873	1967	2085
15°	1680	1826	2040
20°	1469	1660	1972
25°	1243	1474	1884
30°	1003	1278	1778
35°	747	1068	1675
40°	474	846	1576
45°	190	621	1486
50°	83	395	1357
55°	63	204	1185
60°	45	140	939
65°	33	139	642
70°	33	123	295
75°	43	130	120
80°	64	144	129
85°	128	257	188

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1486 cd/sqm

TEST NUMBER: P1060418

CATALOG NUMBER: S124RDRP-S350D927-X4F0-XX-UDD-BVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.4	7.3
10°-20°	57.9	18.8
20°-30°	73.1	23.8
30°-40°	67.1	21.8
40°-50°	45.8	14.9
50°-60°	24.8	8.1
60°-70°	10.5	3.4
70°-80°	3.6	1.2
80°-90°	2.3	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°	153.3	49.9
0°-40°	220.5	71.7
0°-60°	291.0	94.6
0°-90°	307.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	307.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	245	245	245	245	245	
5°	235	238	239	241	244	22
15°	188	195	205	219	229	53
25°	131	139	155	179	198	60
35°	71	80	102	133	159	44
45°	16	25	51	90	122	14
55°	4	4	14	50	79	4
65°	2	2	7	16	32	2
75°	1	4	4	4	4	1
85°	1	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°	245.0	245.0	245.0	245.0	245.0
2.5°	241.4	244.4	242.7	243.4	244.0
5°	235.0	238.5	238.8	240.8	243.7
7.5°	225.9	230.1	232.7	237.6	242.1
10°	214.2	219.4	224.9	232.7	238.5
12.5°	201.9	207.4	215.5	226.5	234.3
15°	188.5	194.7	204.8	219.4	228.8
17.5°	174.6	181.4	193.4	210.6	222.6
20°	160.3	167.8	181.1	200.6	215.2
22.5°	145.7	153.5	168.1	190.2	207.4
25°	130.8	139.2	155.1	179.1	198.3
27.5°	116.5	124.3	141.8	168.1	189.2
30°	100.9	109.7	128.5	156.7	178.8
32.5°	86.6	95.1	114.9	145.1	169.1
35°	71.1	80.5	101.6	133.4	159.3
37.5°	56.5	65.6	88.6	122.3	149.9
40°	42.2	51.6	75.3	111.3	140.2
42.5°	28.2	38.3	62.6	100.0	131.1
45°	15.6	25.0	51.0	90.2	122.0
47.5°	8.1	13.6	39.9	80.5	112.3
50°	6.2	7.5	29.5	69.8	101.3
52.5°	5.2	5.5	20.1	59.1	90.2
55°	4.2	4.5	13.6	49.7	78.9
57.5°	3.2	3.6	9.7	40.6	66.2
60°	2.6	2.9	8.1	31.2	54.5
62.5°	1.9	2.3	7.8	23.0	42.8
65°	1.6	1.9	6.8	15.6	31.5
67.5°	1.3	1.9	5.8	10.1	21.1
70°	1.3	2.6	4.9	6.5	11.7
72.5°	1.3	2.9	4.2	4.2	4.2
75°	1.3	3.6	3.9	3.6	3.6
77.5°	1.3	3.2	3.2	3.2	3.2
80°	1.3	2.9	2.9	2.9	2.6
82.5°	1.3	2.6	2.9	2.9	2.3
85°	1.3	2.6	2.6	2.6	1.9
87.5°	1.0	2.6	2.6	2.6	1.3
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	11.04	12.32	11.41	12.63	12.94
	3H	0.00	0.00	0.00	0.00	0.00	11.40	12.52	11.78	12.86	13.22
	4H	0.00	0.00	0.00	0.00	0.00	11.36	12.41	11.77	12.76	13.15
	6H	0.00	0.00	0.00	0.00	0.00	11.34	12.30	11.75	12.67	13.07
	8H	0.00	0.00	0.00	0.00	0.00	11.33	12.24	11.76	12.63	13.03
	12H	0.00	0.00	0.00	0.04	0.47	11.32	12.19	11.76	12.58	13.01
4H	2H	0.00	0.00	0.00	0.00	0.00	10.84	11.89	11.25	12.24	12.63
	3H	0.00	0.00	0.00	0.00	0.00	11.24	12.09	11.65	12.50	12.90
	4H	0.00	0.38	0.05	0.80	1.24	11.22	11.98	11.66	12.40	12.85
	6H	0.84	1.50	1.31	1.95	2.42	11.24	11.89	11.70	12.34	12.81
	8H	1.41	2.03	1.88	2.48	2.95	11.25	11.86	11.72	12.31	12.78
	12H	2.09	2.63	2.58	3.12	3.59	11.28	11.82	11.77	12.31	12.78
8H	4H	0.68	1.29	1.15	1.74	2.21	11.12	11.73	11.59	12.18	12.65
	6H	2.27	2.77	2.77	3.27	3.75	11.17	11.67	11.67	12.17	12.65
	8H	3.11	3.56	3.63	4.08	4.57	11.22	11.68	11.75	12.19	12.68
	12H	4.08	4.48	4.60	4.98	5.55	11.34	11.74	11.85	12.23	12.81
12H	4H	0.86	1.41	1.35	1.89	2.36	11.08	11.62	11.57	12.11	12.58
	6H	2.61	3.07	3.14	3.58	4.07	11.13	11.59	11.66	12.10	12.60
	8H	3.64	4.04	4.16	4.53	5.11	11.24	11.64	11.75	12.13	12.71