

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: P1060436

Luminaire Tested: S124RDRP-S350D935-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060436
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-S350D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

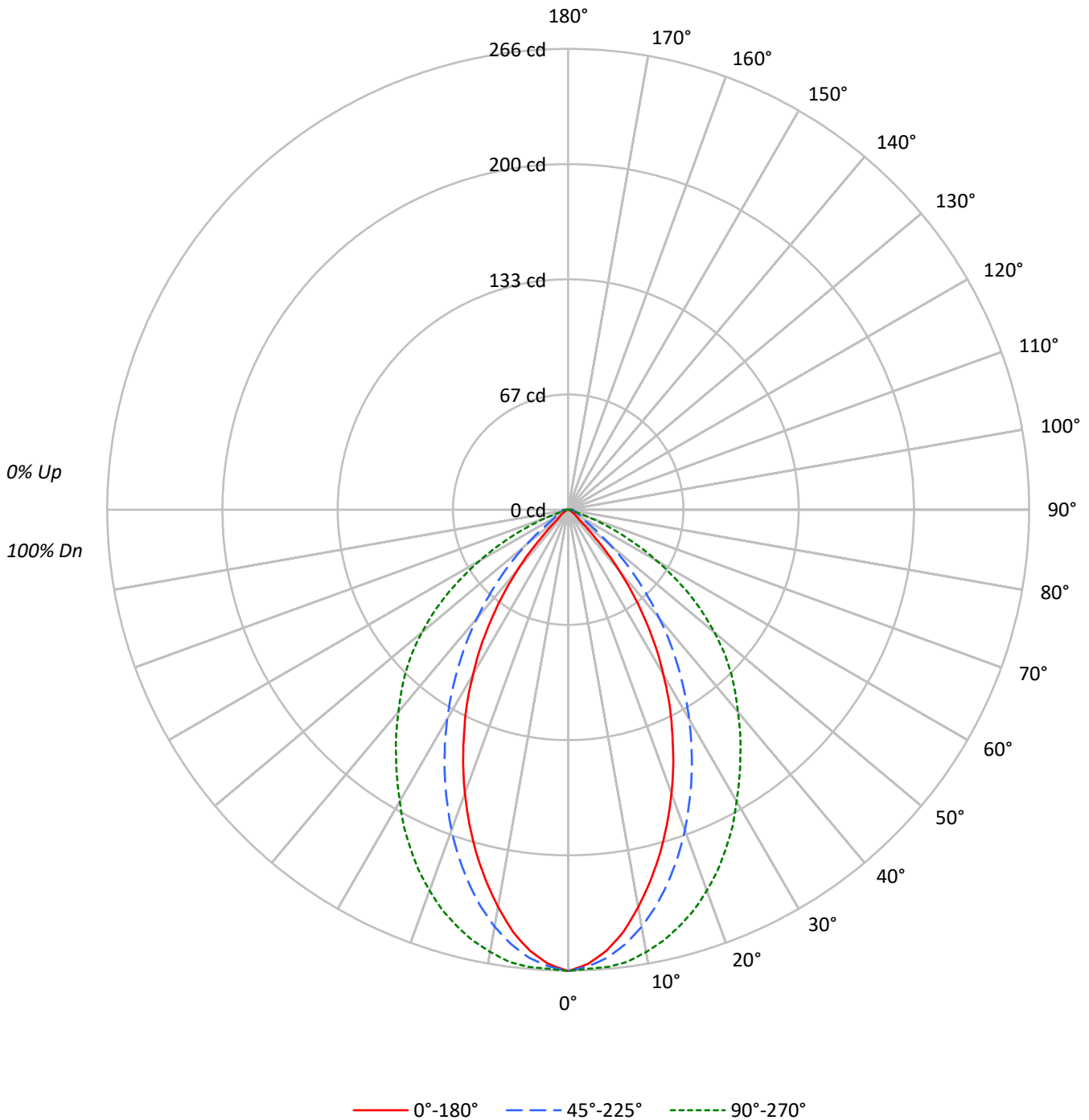
Lumens per Lamp: N/A
Luminaire Lumens: 334.2 lumens
Efficiency: N/A
Efficacy: 26.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	87	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°	2293	2293	2293
5°	2208	2244	2290
10°	2036	2137	2266
15°	1827	1984	2217
20°	1596	1803	2143
25°	1350	1602	2048
30°	1091	1389	1932
35°	812	1161	1821
40°	516	920	1713
45°	206	675	1615
50°	90	430	1474
55°	69	222	1287
60°	48	152	1021
65°	37	151	697
70°	35	133	320
75°	47	140	130
80°	69	159	139
85°	138	277	207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1615 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.4	7.3
10°-20°	62.9	18.8
20°-30°	79.4	23.8
30°-40°	72.9	21.8
40°-50°	49.7	14.9
50°-60°	27.0	8.1
60°-70°	11.4	3.4
70°-80°	4.0	1.2
80°-90°	2.5	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°	166.7	49.9
0°-40°	239.6	71.7
0°-60°	316.3	94.6
0°-90°	334.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	334.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	266	266	266	266	266	
5°	255	259	260	262	265	24
15°	205	212	223	238	249	57
25°	142	151	169	195	216	65
35°	77	88	110	145	173	48
45°	17	27	55	98	133	16
55°	5	5	15	54	86	4
65°	2	2	7	17	34	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°	266.3	266.3	266.3	266.3	266.3
2.5°	262.4	265.6	263.8	264.5	265.2
5°	255.4	259.2	259.6	261.7	264.9
7.5°	245.5	250.1	252.9	258.2	263.1
10°	232.8	238.4	244.4	252.9	259.2
12.5°	219.4	225.4	234.2	246.2	254.7
15°	204.9	211.6	222.6	238.4	248.7
17.5°	189.8	197.2	210.2	228.9	242.0
20°	174.2	182.4	196.8	218.0	233.9
22.5°	158.4	166.8	182.7	206.7	225.4
25°	142.1	151.3	168.6	194.7	215.5
27.5°	126.6	135.1	154.1	182.7	205.6
30°	109.7	119.2	139.7	170.4	194.3
32.5°	94.2	103.3	124.9	157.7	183.8
35°	77.2	87.5	110.4	145.0	173.2
37.5°	61.4	71.2	96.3	133.0	163.0
40°	45.9	56.1	81.8	121.0	152.4
42.5°	30.7	41.6	68.1	108.6	142.5
45°	16.9	27.2	55.4	98.1	132.6
47.5°	8.8	14.8	43.4	87.5	122.0
50°	6.7	8.1	32.1	75.8	110.0
52.5°	5.6	6.0	21.9	64.2	98.1
55°	4.6	4.9	14.8	54.0	85.7
57.5°	3.5	3.9	10.6	44.1	72.0
60°	2.8	3.2	8.8	33.9	59.3
62.5°	2.1	2.5	8.5	25.0	46.6
65°	1.8	2.1	7.4	16.9	34.2
67.5°	1.4	2.1	6.3	10.9	22.9
70°	1.4	2.8	5.3	7.1	12.7
72.5°	1.4	3.2	4.6	4.6	4.6
75°	1.4	3.9	4.2	3.9	3.9
77.5°	1.4	3.5	3.5	3.5	3.5
80°	1.4	3.2	3.2	3.2	2.8
82.5°	1.4	2.8	3.2	3.2	2.5
85°	1.4	2.8	2.8	2.8	2.1
87.5°	1.1	2.8	2.8	2.8	1.4
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	0.00	0.00	0.00	0.00	0.00	11.33	12.60	11.69	12.92	13.23
	3H	0.00	0.00	0.00	0.00	0.00	11.68	12.81	12.06	13.14	13.51
	4H	0.00	0.00	0.00	0.00	0.00	11.65	12.70	12.05	13.05	13.43
	6H	0.00	0.00	0.00	0.00	0.00	11.62	12.59	12.04	12.96	13.35
	8H	0.00	0.00	0.00	0.00	0.00	11.61	12.52	12.04	12.92	13.32
	12H	0.00	0.00	0.00	0.30	0.73	11.61	12.48	12.04	12.87	13.30
4H	2H	0.00	0.00	0.00	0.00	0.00	11.13	12.18	11.53	12.53	12.92
	3H	0.00	0.00	0.00	0.00	0.11	11.53	12.38	11.94	12.79	13.19
	4H	0.00	0.67	0.34	1.09	1.53	11.51	12.27	11.94	12.69	13.13
	6H	1.14	1.80	1.60	2.25	2.71	11.52	12.18	11.99	12.63	13.10
	8H	1.70	2.32	2.17	2.77	3.24	11.53	12.15	12.00	12.60	13.07
	12H	2.37	2.91	2.86	3.40	3.87	11.57	12.11	12.06	12.60	13.07
8H	4H	0.97	1.58	1.44	2.03	2.50	11.41	12.02	11.88	12.47	12.94
	6H	2.58	3.09	3.09	3.58	4.06	11.46	11.96	11.96	12.46	12.94
	8H	3.41	3.86	3.93	4.38	4.87	11.51	11.97	12.04	12.48	12.98
	12H	4.36	4.76	4.88	5.26	5.83	11.63	12.03	12.15	12.53	13.10
12H	4H	1.16	1.70	1.65	2.19	2.66	11.37	11.91	11.85	12.39	12.87
	6H	2.93	3.39	3.46	3.90	4.39	11.42	11.88	11.95	12.39	12.89
	8H	3.95	4.34	4.46	4.84	5.41	11.53	11.93	12.05	12.43	13.00