

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: P1060455

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060455
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
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-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

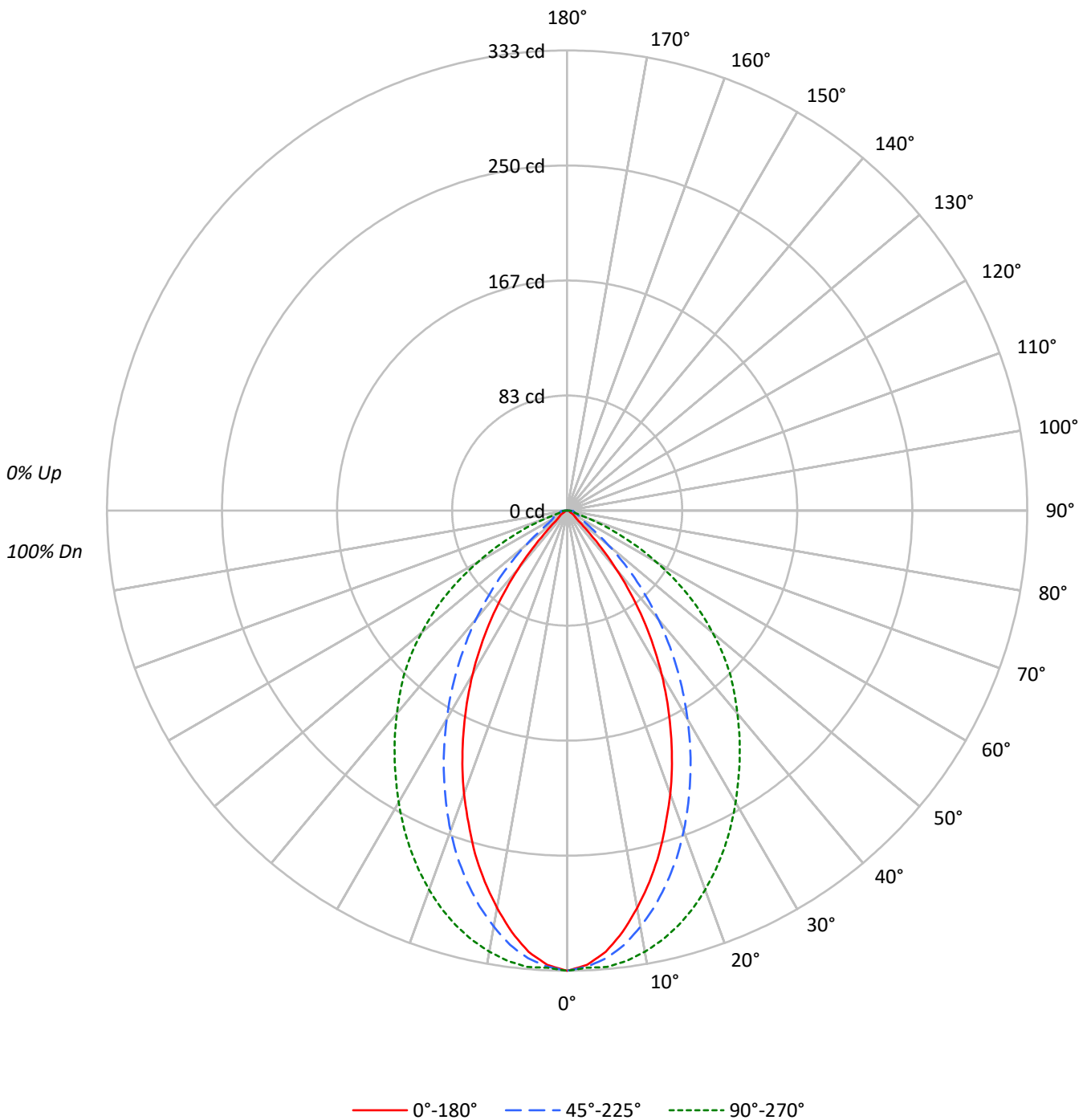
Lumens per Lamp: N/A
Luminaire Lumens: 419.8 lumens
Efficiency: N/A
Efficacy: 33.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2868	2868	2868
5°	2770	2811	2865
10°	2553	2673	2834
15°	2293	2485	2771
20°	1999	2261	2676
25°	1686	2006	2559
30°	1360	1733	2425
35°	1007	1451	2289
40°	624	1156	2153
45°	247	843	2028
50°	110	529	1843
55°	89	276	1614
60°	60	208	1287
65°	41	208	884
70°	40	186	413
75°	53	183	183
80°	79	213	213
85°	158	425	306

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2028 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.5	7.3
10°-20°	78.8	18.8
20°-30°	99.5	23.7
30°-40°	91.3	21.8
40°-50°	62.2	14.8
50°-60°	33.9	8.1
60°-70°	14.7	3.5
70°-80°	5.4	1.3
80°-90°	3.4	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°	208.9	49.8
0°-40°	300.2	71.5
0°-60°	396.3	94.4
0°-90°	419.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	419.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	333	333	333	333	333	
5°	320	325	325	329	332	30
15°	257	266	279	299	311	72
25°	178	190	211	245	269	81
35°	96	110	138	182	218	59
45°	20	34	69	123	166	19
55°	6	6	18	68	108	5
65°	2	3	10	21	43	2
75°	2	5	6	6	6	2
85°	2	4	4	4	3	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	333.0	333.0	333.0	333.0	333.0
2.5°	329.1	333.0	330.3	331.1	331.1
5°	320.5	324.8	325.2	328.7	331.5
7.5°	307.6	313.9	317.0	324.1	328.7
10°	292.0	299.4	305.7	317.8	324.1
12.5°	275.2	283.8	293.2	309.2	318.2
15°	257.2	266.2	278.7	298.6	310.8
17.5°	237.3	248.2	263.5	287.3	302.2
20°	218.1	229.1	246.7	273.6	292.0
22.5°	198.2	209.5	229.1	259.2	281.1
25°	177.5	190.0	211.1	244.7	269.3
27.5°	157.1	170.4	192.7	229.5	256.8
30°	136.8	150.1	174.3	213.8	243.9
32.5°	116.1	129.8	156.0	197.4	230.6
35°	95.8	109.8	138.0	181.8	217.7
37.5°	75.1	89.9	120.0	166.5	204.8
40°	55.5	70.4	102.8	151.3	191.5
42.5°	37.1	52.0	85.2	136.4	179.0
45°	20.3	34.0	69.2	122.7	166.5
47.5°	10.9	18.8	53.6	109.5	152.4
50°	8.2	10.2	39.5	95.4	137.6
52.5°	7.0	7.8	27.4	80.5	122.7
55°	5.9	6.3	18.4	67.6	107.5
57.5°	4.7	5.1	13.7	54.7	91.1
60°	3.5	4.3	12.1	42.2	74.7
62.5°	2.7	3.5	11.3	30.9	59.0
65°	2.0	2.7	10.2	21.1	43.4
67.5°	2.0	3.1	8.6	13.7	29.3
70°	1.6	4.3	7.4	9.0	16.4
72.5°	1.6	4.7	6.3	6.3	6.3
75°	1.6	5.1	5.5	5.5	5.5
77.5°	1.6	4.7	5.1	4.7	4.7
80°	1.6	4.3	4.3	4.3	4.3
82.5°	1.6	3.9	4.3	4.3	3.5
85°	1.6	3.5	4.3	4.3	3.1
87.5°	1.2	3.5	3.9	3.9	2.3
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	12.07	13.35	12.43	13.66	13.97
	3H	0.00	0.00	0.00	0.00	0.00	12.44	13.57	12.82	13.90	14.27
	4H	0.00	0.00	0.00	0.00	0.00	12.42	13.47	12.83	13.83	14.21
	6H	0.00	0.00	0.00	0.00	0.31	12.41	13.38	12.83	13.75	14.14
	8H	0.00	0.09	0.00	0.48	0.89	12.41	13.32	12.84	13.72	14.12
	12H	0.00	0.73	0.29	1.11	1.55	12.42	13.30	12.86	13.68	14.11
4H	2H	0.00	0.00	0.00	0.00	0.12	11.88	12.93	12.28	13.28	13.67
	3H	0.00	0.77	0.33	1.18	1.58	12.30	13.16	12.71	13.56	13.97
	4H	1.22	1.98	1.65	2.40	2.85	12.30	13.06	12.73	13.49	13.93
	6H	2.35	3.01	2.81	3.46	3.93	12.34	13.00	12.80	13.45	13.91
	8H	2.86	3.48	3.33	3.93	4.40	12.36	12.98	12.84	13.43	13.90
	12H	3.42	3.97	3.91	4.45	4.92	12.43	12.97	12.92	13.46	13.93
8H	4H	2.30	2.92	2.77	3.37	3.84	12.21	12.83	12.68	13.27	13.74
	6H	3.84	4.35	4.35	4.85	5.33	12.29	12.79	12.79	13.29	13.77
	8H	4.65	5.10	5.17	5.62	6.11	12.37	12.82	12.89	13.34	13.83
	12H	5.48	5.88	6.00	6.38	6.95	12.54	12.94	13.05	13.44	14.01
12H	4H	2.49	3.03	2.98	3.52	3.99	12.17	12.72	12.66	13.20	13.68
	6H	4.20	4.65	4.72	5.17	5.66	12.26	12.71	12.78	13.23	13.72
	8H	5.20	5.61	5.72	6.10	6.67	12.40	12.80	12.91	13.29	13.87