

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: P1060437

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060437
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-S350D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

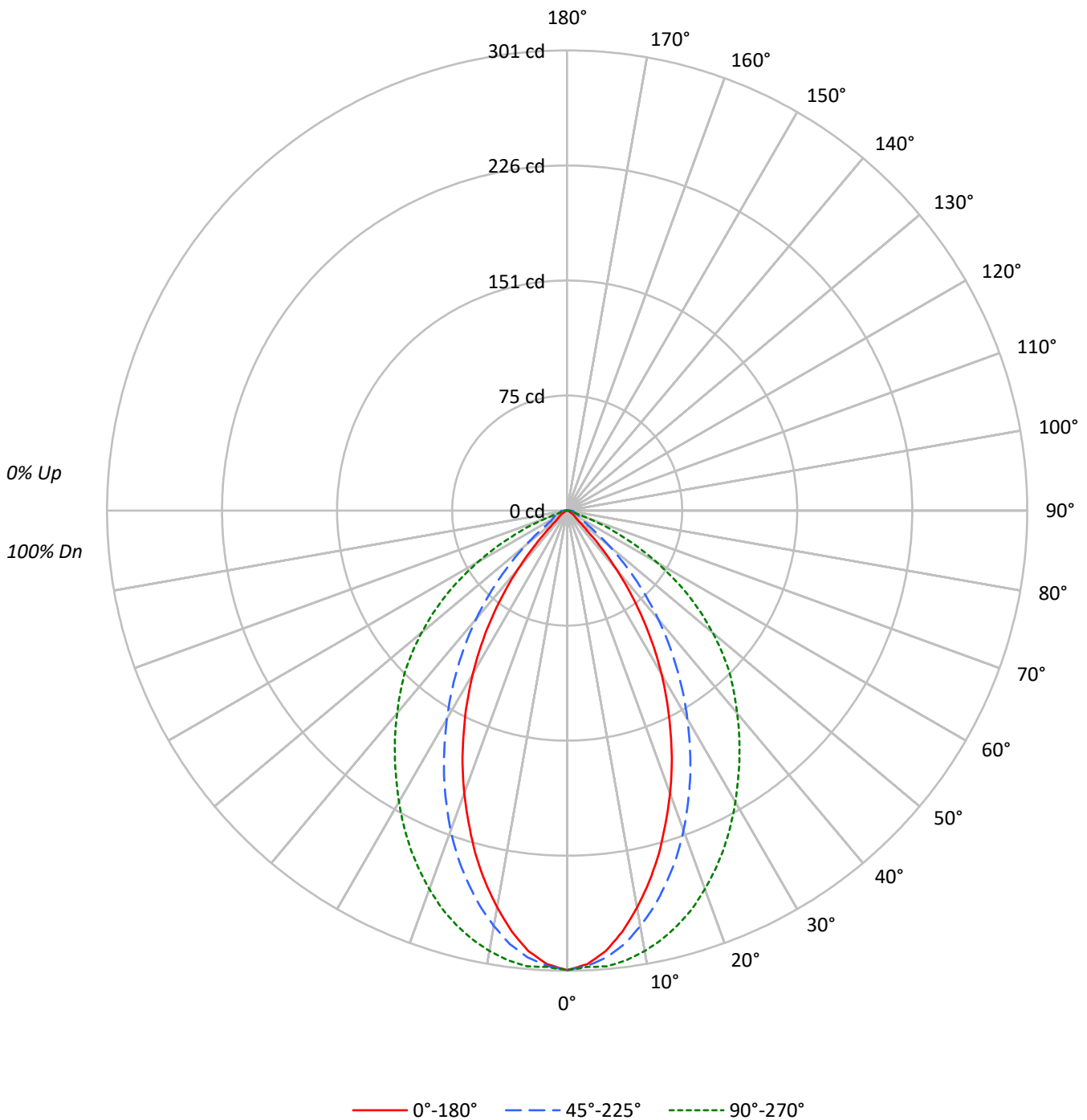
Lumens per Lamp: N/A
Luminaire Lumens: 378.8 lumens
Efficiency: N/A
Efficacy: 30.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2589	2589	2589
5°	2501	2537	2586
10°	2304	2412	2558
15°	2069	2242	2501
20°	1804	2040	2415
25°	1522	1810	2310
30°	1228	1564	2189
35°	908	1309	2066
40°	563	1043	1944
45°	223	760	1830
50°	99	477	1664
55°	80	249	1456
60°	55	188	1161
65°	37	187	799
70°	35	169	373
75°	47	163	163
80°	69	193	193
85°	138	385	277

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1830 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.6	7.3
10°-20°	71.2	18.8
20°-30°	89.8	23.7
30°-40°	82.4	21.8
40°-50°	56.1	14.8
50°-60°	30.6	8.1
60°-70°	13.2	3.5
70°-80°	4.8	1.3
80°-90°	3.1	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°	188.6	49.8
0°-40°	271.0	71.5
0°-60°	357.7	94.4
0°-90°	378.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	378.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	301	301	301	301	301	
5°	289	293	294	297	299	27
15°	232	240	252	270	280	65
25°	160	172	190	221	243	73
35°	86	99	124	164	196	53
45°	18	31	62	111	150	17
55°	5	6	17	61	97	5
65°	2	2	9	19	39	2
75°	1	5	5	5	5	1
85°	1	3	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°	300.6	300.6	300.6	300.6	300.6
2.5°	297.0	300.6	298.1	298.8	298.8
5°	289.3	293.2	293.5	296.7	299.2
7.5°	277.6	283.3	286.1	292.5	296.7
10°	263.5	270.2	275.9	286.8	292.5
12.5°	248.4	256.1	264.6	279.1	287.2
15°	232.1	240.2	251.5	269.5	280.5
17.5°	214.1	224.0	237.8	259.3	272.7
20°	196.9	206.7	222.6	247.0	263.5
22.5°	178.9	189.1	206.7	233.9	253.7
25°	160.2	171.5	190.5	220.8	243.1
27.5°	141.8	153.8	173.9	207.1	231.8
30°	123.5	135.5	157.3	193.0	220.1
32.5°	104.8	117.1	140.8	178.2	208.1
35°	86.4	99.1	124.5	164.0	196.5
37.5°	67.7	81.1	108.3	150.3	184.9
40°	50.1	63.5	92.8	136.5	172.9
42.5°	33.5	46.9	76.9	123.1	161.6
45°	18.3	30.7	62.4	110.8	150.3
47.5°	9.9	16.9	48.3	98.8	137.6
50°	7.4	9.2	35.6	86.1	124.2
52.5°	6.4	7.1	24.7	72.7	110.8
55°	5.3	5.6	16.6	61.0	97.0
57.5°	4.2	4.6	12.3	49.4	82.2
60°	3.2	3.9	10.9	38.1	67.4
62.5°	2.5	3.2	10.2	27.9	53.3
65°	1.8	2.5	9.2	19.1	39.2
67.5°	1.8	2.8	7.8	12.3	26.5
70°	1.4	3.9	6.7	8.1	14.8
72.5°	1.4	4.2	5.6	5.6	5.6
75°	1.4	4.6	4.9	4.9	4.9
77.5°	1.4	4.2	4.6	4.2	4.2
80°	1.4	3.9	3.9	3.9	3.9
82.5°	1.4	3.5	3.9	3.9	3.2
85°	1.4	3.2	3.9	3.9	2.8
87.5°	1.1	3.2	3.5	3.5	2.1
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	11.71	12.99	12.08	13.30	13.62
	3H	0.00	0.00	0.00	0.00	0.00	12.09	13.22	12.47	13.55	13.92
	4H	0.00	0.00	0.00	0.00	0.00	12.07	13.12	12.47	13.47	13.85
	6H	0.00	0.00	0.00	0.00	0.00	12.05	13.02	12.47	13.39	13.79
	8H	0.00	0.00	0.00	0.05	0.46	12.05	12.97	12.49	13.36	13.77
	12H	0.00	0.28	0.00	0.67	1.10	12.07	12.94	12.50	13.32	13.75
4H	2H	0.00	0.00	0.00	0.00	0.00	11.52	12.58	11.93	12.93	13.31
	3H	0.00	0.41	0.00	0.81	1.22	11.94	12.80	12.36	13.21	13.61
	4H	0.84	1.61	1.28	2.03	2.47	11.94	12.71	12.38	13.13	13.57
	6H	1.96	2.62	2.43	3.07	3.54	11.98	12.64	12.44	13.09	13.56
	8H	2.46	3.08	2.94	3.53	4.00	12.01	12.63	12.48	13.07	13.55
	12H	3.01	3.56	3.50	4.04	4.52	12.07	12.62	12.56	13.10	13.58
8H	4H	1.92	2.54	2.39	2.98	3.45	11.85	12.47	12.32	12.92	13.39
	6H	3.46	3.97	3.96	4.46	4.94	11.93	12.43	12.43	12.93	13.41
	8H	4.26	4.72	4.79	5.23	5.73	12.01	12.47	12.54	12.98	13.48
	12H	5.10	5.50	5.61	5.99	6.57	12.18	12.59	12.70	13.08	13.65
12H	4H	2.11	2.65	2.60	3.14	3.61	11.81	12.36	12.30	12.84	13.32
	6H	3.82	4.27	4.34	4.79	5.28	11.90	12.36	12.43	12.87	13.37
	8H	4.83	5.23	5.34	5.72	6.30	12.04	12.44	12.56	12.94	13.51