

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: P1060428

Luminaire Tested: S124RDRP-S350D930-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060428
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-S350D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

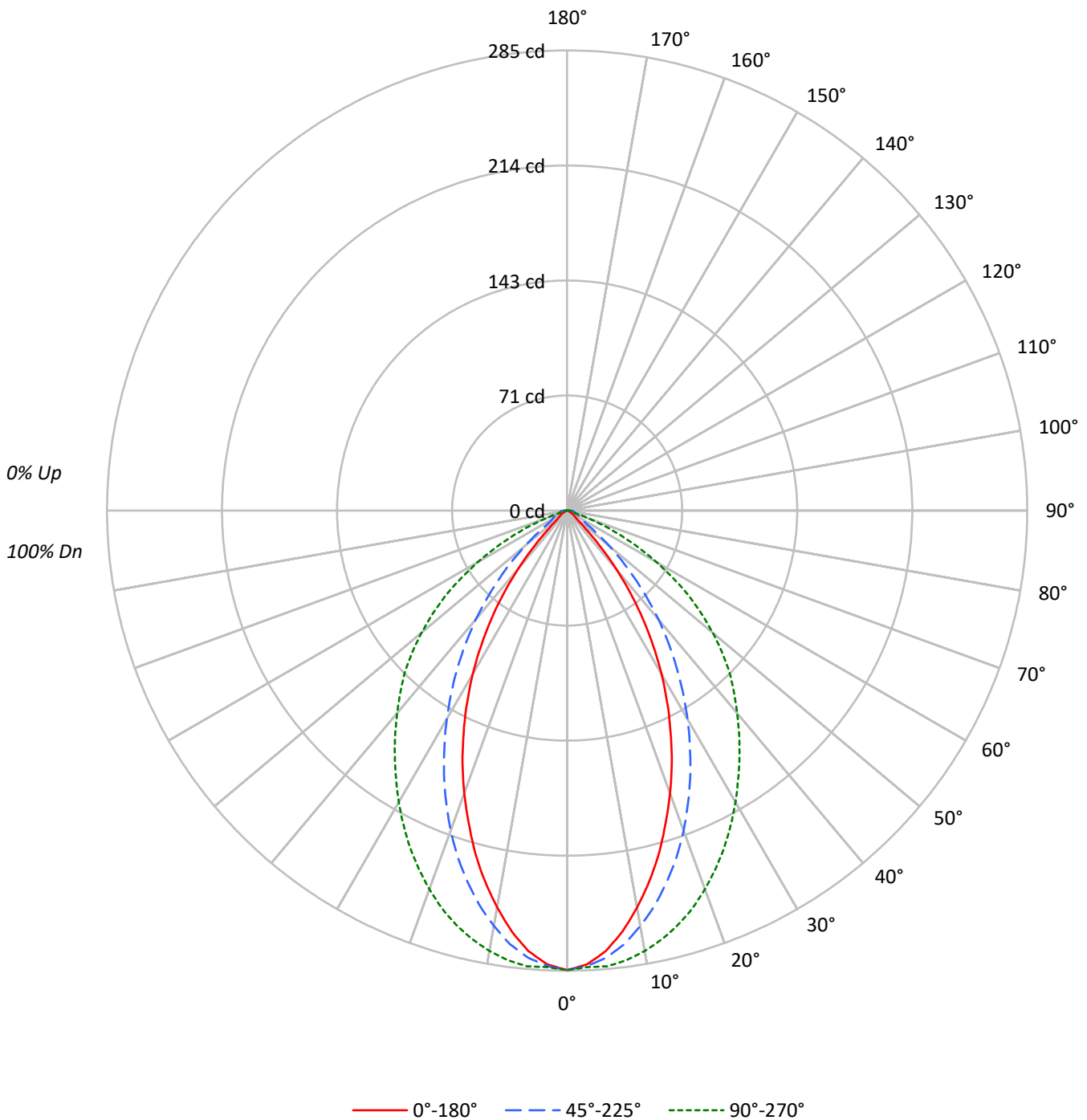
Lumens per Lamp: N/A
Luminaire Lumens: 358.7 lumens
Efficiency: N/A
Efficacy: 28.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	2451	2451	2451
5°	2368	2402	2449
10°	2182	2284	2421
15°	1959	2124	2368
20°	1708	1932	2286
25°	1441	1714	2187
30°	1162	1482	2073
35°	860	1239	1956
40°	533	988	1840
45°	212	720	1733
50°	94	451	1575
55°	75	236	1380
60°	52	179	1099
65°	35	177	756
70°	33	159	352
75°	43	156	156
80°	64	183	183
85°	128	366	267

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1733 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.1	7.3
10°-20°	67.4	18.8
20°-30°	85.1	23.7
30°-40°	78.0	21.8
40°-50°	53.1	14.8
50°-60°	28.9	8.1
60°-70°	12.5	3.5
70°-80°	4.6	1.3
80°-90°	2.9	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°	178.6	49.8
0°-40°	256.6	71.5
0°-60°	338.7	94.4
0°-90°	358.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	358.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	285	285	285	285	285	
5°	274	278	278	281	283	25
15°	220	228	238	255	266	61
25°	152	162	180	209	230	69
35°	82	94	118	155	186	51
45°	17	29	59	105	142	16
55°	5	5	16	58	92	4
65°	2	2	9	18	37	2
75°	1	4	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°	284.6	284.6	284.6	284.6	284.6
2.5°	281.3	284.6	282.3	283.0	283.0
5°	273.9	277.6	277.9	280.9	283.3
7.5°	262.9	268.3	270.9	276.9	280.9
10°	249.5	255.9	261.2	271.6	276.9
12.5°	235.2	242.5	250.5	264.2	271.9
15°	219.8	227.5	238.2	255.2	265.6
17.5°	202.8	212.1	225.2	245.5	258.2
20°	186.4	195.8	210.8	233.8	249.5
22.5°	169.4	179.1	195.8	221.5	240.2
25°	151.7	162.4	180.4	209.1	230.2
27.5°	134.3	145.7	164.7	196.1	219.5
30°	116.9	128.3	149.0	182.7	208.5
32.5°	99.2	110.9	133.3	168.7	197.1
35°	81.8	93.9	117.9	155.3	186.1
37.5°	64.1	76.8	102.6	142.3	175.0
40°	47.4	60.1	87.9	129.3	163.7
42.5°	31.7	44.4	72.8	116.6	153.0
45°	17.4	29.1	59.1	104.9	142.3
47.5°	9.4	16.0	45.8	93.5	130.3
50°	7.0	8.7	33.7	81.5	117.6
52.5°	6.0	6.7	23.4	68.8	104.9
55°	5.0	5.3	15.7	57.8	91.9
57.5°	4.0	4.3	11.7	46.8	77.8
60°	3.0	3.7	10.4	36.1	63.8
62.5°	2.3	3.0	9.7	26.4	50.4
65°	1.7	2.3	8.7	18.0	37.1
67.5°	1.7	2.7	7.3	11.7	25.1
70°	1.3	3.7	6.3	7.7	14.0
72.5°	1.3	4.0	5.3	5.3	5.3
75°	1.3	4.3	4.7	4.7	4.7
77.5°	1.3	4.0	4.3	4.0	4.0
80°	1.3	3.7	3.7	3.7	3.7
82.5°	1.3	3.3	3.7	3.7	3.0
85°	1.3	3.0	3.7	3.7	2.7
87.5°	1.0	3.0	3.3	3.3	2.0
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	11.53	12.80	11.89	13.12	13.43
	3H	0.00	0.00	0.00	0.00	0.00	11.90	13.03	12.28	13.36	13.73
	4H	0.00	0.00	0.00	0.00	0.00	11.88	12.93	12.28	13.28	13.67
	6H	0.00	0.00	0.00	0.00	0.00	11.87	12.83	12.28	13.21	13.60
	8H	0.00	0.00	0.00	0.00	0.21	11.87	12.78	12.30	13.17	13.58
	12H	0.00	0.03	0.00	0.41	0.84	11.88	12.76	12.32	13.14	13.57
4H	2H	0.00	0.00	0.00	0.00	0.00	11.34	12.39	11.74	12.74	13.12
	3H	0.00	0.21	0.00	0.61	1.01	11.76	12.62	12.17	13.02	13.42
	4H	0.62	1.39	1.05	1.81	2.25	11.76	12.52	12.19	12.94	13.39
	6H	1.75	2.41	2.21	2.85	3.32	11.80	12.46	12.26	12.90	13.37
	8H	2.24	2.86	2.71	3.31	3.78	11.82	12.44	12.29	12.89	13.36
	12H	2.78	3.33	3.27	3.81	4.29	11.89	12.44	12.38	12.92	13.39
8H	4H	1.71	2.32	2.18	2.77	3.24	11.66	12.28	12.13	12.73	13.20
	6H	3.26	3.76	3.76	4.26	4.74	11.74	12.25	12.25	12.75	13.23
	8H	4.05	4.51	4.58	5.02	5.52	11.83	12.28	12.35	12.80	13.29
	12H	4.87	5.28	5.39	5.77	6.34	12.00	12.40	12.52	12.90	13.47
12H	4H	1.90	2.44	2.39	2.93	3.40	11.63	12.17	12.12	12.66	13.13
	6H	3.62	4.07	4.14	4.59	5.08	11.72	12.17	12.24	12.69	13.18
	8H	4.62	5.02	5.14	5.52	6.09	11.86	12.26	12.37	12.75	13.33