

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: P1060422

Luminaire Tested: S124RDRP-S350D927-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060422
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S350D927-X4F0-XX-UDD-SVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

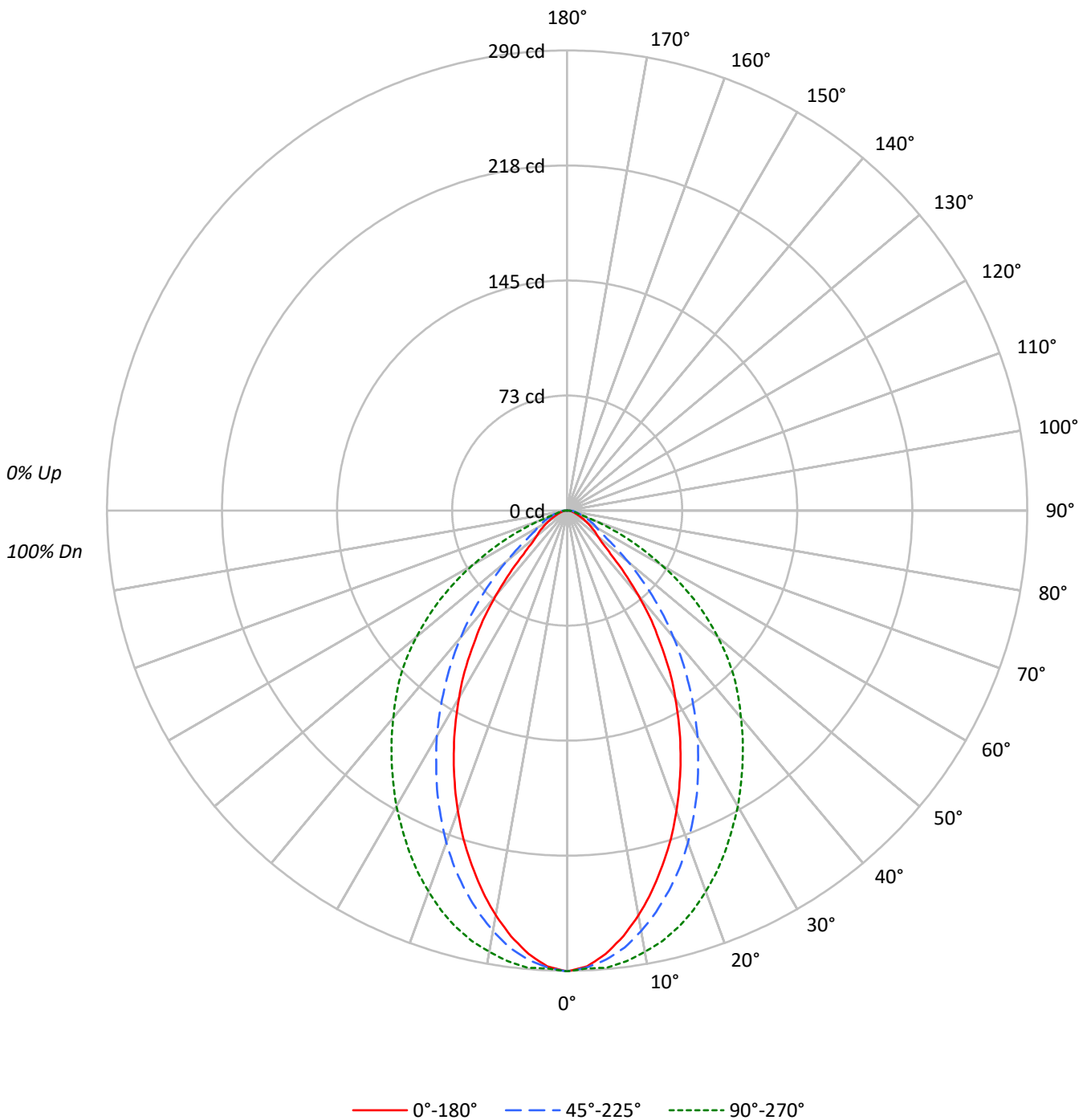
Lumens per Lamp: N/A
Luminaire Lumens: 411.1 lumens
Efficiency: N/A
Efficacy: 32.9 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2501	2501	2501
5°	2424	2455	2499
10°	2265	2352	2468
15°	2066	2210	2421
20°	1847	2040	2340
25°	1607	1844	2244
30°	1355	1633	2140
35°	1078	1405	2027
40°	785	1171	1915
45°	474	924	1815
50°	339	670	1661
55°	287	453	1467
60°	234	369	1185
65°	185	330	854
70°	156	277	448
75°	140	260	226
80°	144	258	223
85°	188	385	257

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1815 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.7	6.5
10°-20°	70.1	17.0
20°-30°	90.9	22.1
30°-40°	87.5	21.3
40°-50°	65.1	15.8
50°-60°	40.0	9.7
60°-70°	19.7	4.8
70°-80°	7.7	1.9
80°-90°	3.5	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°	187.7	45.7
0°-40°	275.2	66.9
0°-60°	380.3	92.5
0°-90°	411.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	411.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	290	290	290	290	290	
5°	280	285	284	286	289	26
15°	232	239	248	263	272	65
25°	169	178	194	218	236	77
35°	102	112	134	167	193	64
45°	39	48	76	117	149	32
55°	19	20	30	69	98	17
65°	9	10	16	26	42	9
75°	4	8	8	7	7	5
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	290.4	290.4	290.4	290.4	290.4
2.5°	287.5	290.8	288.2	288.5	288.8
5°	280.4	284.6	284.0	286.5	289.1
7.5°	270.6	275.5	277.8	283.0	286.5
10°	259.0	264.5	269.0	277.5	282.3
12.5°	246.0	252.5	259.0	270.3	277.8
15°	231.7	239.2	247.9	262.9	271.6
17.5°	217.1	224.6	235.9	253.1	264.2
20°	201.5	209.6	222.6	241.8	255.4
22.5°	185.3	194.1	208.3	230.1	246.3
25°	169.1	178.2	194.1	218.4	236.2
27.5°	152.8	161.6	178.8	206.1	225.5
30°	136.3	145.4	164.2	192.8	215.2
32.5°	120.4	128.8	149.0	180.1	203.8
35°	102.5	112.3	133.7	167.1	192.8
37.5°	87.3	96.1	119.1	154.1	181.7
40°	69.8	79.5	104.2	141.5	170.4
42.5°	53.5	63.3	89.9	128.8	159.7
45°	38.9	48.4	75.9	117.2	149.0
47.5°	29.5	35.0	62.3	105.8	136.9
50°	25.3	26.9	50.0	93.5	124.0
52.5°	22.4	23.0	38.9	81.1	111.0
55°	19.1	19.8	30.2	68.8	97.7
57.5°	16.2	16.6	24.3	57.1	83.4
60°	13.6	14.0	21.4	45.8	68.8
62.5°	11.4	11.7	19.1	35.4	54.8
65°	9.1	9.7	16.2	26.0	41.9
67.5°	7.5	8.8	13.6	18.2	29.2
70°	6.2	8.4	11.0	12.7	17.8
72.5°	5.2	7.8	9.4	9.1	8.8
75°	4.2	7.5	7.8	7.1	6.8
77.5°	3.6	6.5	6.5	5.8	5.5
80°	2.9	5.2	5.2	5.2	4.5
82.5°	2.6	4.2	4.5	4.5	3.6
85°	1.9	3.6	3.9	3.9	2.6
87.5°	1.3	3.2	3.6	3.2	1.9
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	2.98	4.33	3.35	4.64	4.95	12.14	13.48	12.50	13.79	14.11
	3H	4.10	5.29	4.48	5.62	5.98	12.64	13.83	13.02	14.16	14.53
	4H	4.61	5.72	5.01	6.07	6.46	12.66	13.77	13.07	14.12	14.51
	6H	5.05	6.07	5.46	6.44	6.83	12.67	13.69	13.09	14.06	14.46
	8H	5.24	6.20	5.66	6.59	7.00	12.68	13.64	13.11	14.04	14.44
	12H	5.41	6.34	5.84	6.72	7.15	12.68	13.60	13.11	13.99	14.42
4H	2H	4.12	5.23	4.52	5.58	5.96	12.03	13.14	12.43	13.49	13.87
	3H	5.46	6.37	5.87	6.77	7.18	12.62	13.53	13.03	13.93	14.33
	4H	6.20	7.01	6.63	7.43	7.87	12.68	13.49	13.11	13.91	14.35
	6H	6.81	7.51	7.27	7.96	8.42	12.75	13.45	13.21	13.90	14.36
	8H	7.05	7.70	7.52	8.15	8.62	12.78	13.44	13.25	13.88	14.35
	12H	7.28	7.86	7.77	8.34	8.82	12.82	13.40	13.31	13.89	14.36
8H	4H	6.66	7.32	7.13	7.77	8.24	12.63	13.29	13.10	13.74	14.21
	6H	7.51	8.05	8.02	8.55	9.03	12.76	13.30	13.26	13.79	14.27
	8H	7.92	8.40	8.44	8.92	9.41	12.84	13.33	13.36	13.84	14.33
	12H	8.34	8.77	8.85	9.26	9.83	12.96	13.39	13.48	13.89	14.46
12H	4H	6.72	7.30	7.20	7.78	8.26	12.61	13.19	13.09	13.67	14.14
	6H	7.64	8.13	8.16	8.64	9.13	12.74	13.23	13.26	13.74	14.23
	8H	8.16	8.59	8.68	9.09	9.66	12.87	13.30	13.39	13.80	14.37