

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: P1060458

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060458
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-S350D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

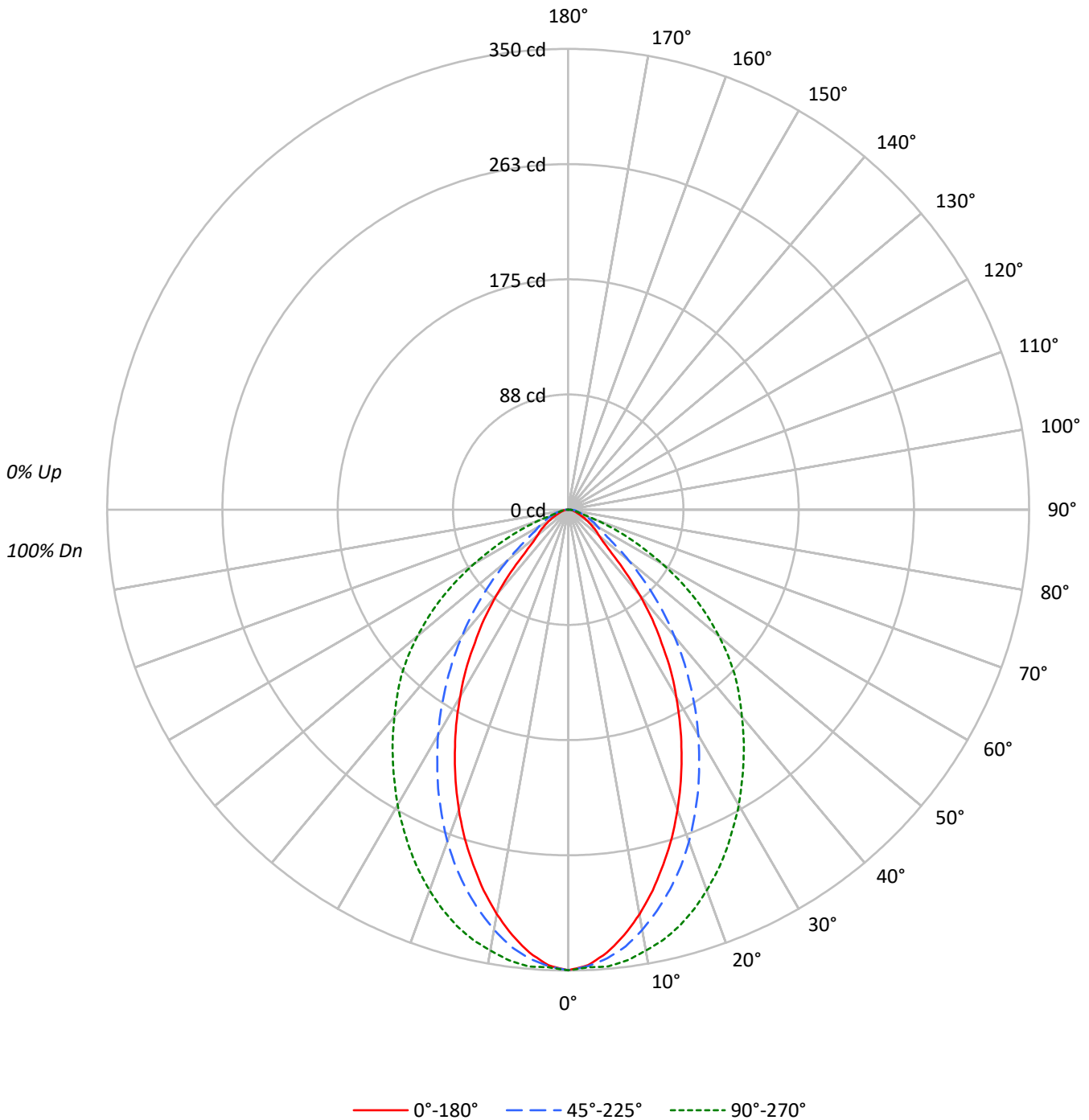
Lumens per Lamp: N/A
Luminaire Lumens: 495.1 lumens
Efficiency: N/A
Efficacy: 39.6 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	76	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°	3012	3012	3012
5°	2919	2956	3010
10°	2727	2833	2973
15°	2487	2662	2916
20°	2224	2457	2819
25°	1934	2220	2703
30°	1632	1966	2576
35°	1298	1692	2440
40°	944	1410	2307
45°	571	1113	2185
50°	409	806	2000
55°	347	545	1766
60°	282	444	1428
65°	222	397	1027
70°	186	335	541
75°	170	313	273
80°	174	312	273
85°	227	464	306

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2185 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.2	6.5
10°-20°	84.4	17.0
20°-30°	109.4	22.1
30°-40°	105.3	21.3
40°-50°	78.4	15.8
50°-60°	48.2	9.7
60°-70°	23.7	4.8
70°-80°	9.2	1.9
80°-90°	4.2	0.9
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°	226.0	45.7
0°-40°	331.4	66.9
0°-60°	457.9	92.5
0°-90°	495.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	495.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	350	350	350	350	350	
5°	338	343	342	345	348	31
15°	279	288	299	317	327	78
25°	204	215	234	263	284	93
35°	124	135	161	201	232	77
45°	47	58	91	141	179	39
55°	23	24	36	83	118	21
65°	11	12	20	31	50	11
75°	5	9	9	9	8	6
85°	2	4	5	5	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	349.8	349.8	349.8	349.8	349.8
2.5°	346.3	350.2	347.0	347.4	347.8
5°	337.7	342.7	342.0	345.1	348.2
7.5°	325.9	331.8	334.5	340.8	345.1
10°	311.9	318.5	324.0	334.1	340.0
12.5°	296.2	304.0	311.9	325.5	334.5
15°	279.0	288.0	298.6	316.6	327.1
17.5°	261.4	270.4	284.1	304.8	318.1
20°	242.7	252.5	268.1	291.2	307.6
22.5°	223.2	233.7	250.9	277.1	296.6
25°	203.6	214.6	233.7	263.0	284.5
27.5°	184.1	194.6	215.3	248.2	271.6
30°	164.1	175.1	197.7	232.1	259.1
32.5°	145.0	155.2	179.4	216.9	245.4
35°	123.5	135.2	161.0	201.3	232.1
37.5°	105.1	115.7	143.4	185.6	218.9
40°	84.0	95.7	125.4	170.4	205.2
42.5°	64.5	76.2	108.3	155.2	192.3
45°	46.9	58.2	91.4	141.1	179.4
47.5°	35.6	42.2	75.0	127.4	164.9
50°	30.5	32.4	60.2	112.6	149.3
52.5°	27.0	27.7	46.9	97.7	133.7
55°	23.1	23.8	36.3	82.9	117.6
57.5°	19.5	19.9	29.3	68.8	100.4
60°	16.4	16.8	25.8	55.1	82.9
62.5°	13.7	14.1	23.1	42.6	66.0
65°	10.9	11.7	19.5	31.3	50.4
67.5°	9.0	10.6	16.4	21.9	35.2
70°	7.4	10.2	13.3	15.2	21.5
72.5°	6.3	9.4	11.3	10.9	10.6
75°	5.1	9.0	9.4	8.6	8.2
77.5°	4.3	7.8	7.8	7.0	6.6
80°	3.5	6.3	6.3	6.3	5.5
82.5°	3.1	5.1	5.5	5.5	4.3
85°	2.3	4.3	4.7	4.7	3.1
87.5°	1.6	3.9	4.3	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	3.60	4.95	3.97	5.26	5.57	12.78	14.13	13.15	14.44	14.75
	3H	4.72	5.91	5.10	6.24	6.61	13.29	14.48	13.67	14.81	15.18
	4H	5.24	6.36	5.65	6.71	7.09	13.31	14.42	13.71	14.77	15.15
	6H	5.68	6.70	6.09	7.07	7.46	13.32	14.34	13.74	14.71	15.11
	8H	5.87	6.83	6.30	7.22	7.63	13.33	14.29	13.75	14.68	15.09
	12H	6.04	6.97	6.48	7.35	7.78	13.33	14.25	13.76	14.64	15.07
4H	2H	4.75	5.86	5.15	6.21	6.59	12.68	13.79	13.08	14.14	14.52
	3H	6.10	7.01	6.51	7.41	7.81	13.26	14.17	13.68	14.58	14.98
	4H	6.84	7.65	7.27	8.07	8.51	13.32	14.14	13.76	14.56	15.00
	6H	7.45	8.15	7.91	8.60	9.06	13.40	14.10	13.86	14.55	15.01
	8H	7.69	8.34	8.16	8.79	9.26	13.43	14.09	13.90	14.53	15.00
	12H	7.92	8.50	8.41	8.98	9.46	13.47	14.05	13.96	14.53	15.01
8H	4H	7.30	7.96	7.77	8.41	8.88	13.28	13.94	13.75	14.38	14.86
	6H	8.16	8.69	8.66	9.19	9.67	13.41	13.95	13.91	14.44	14.92
	8H	8.56	9.05	9.08	9.56	10.05	13.49	13.98	14.02	14.49	14.98
	12H	8.98	9.41	9.50	9.90	10.47	13.61	14.04	14.13	14.54	15.11
12H	4H	7.36	7.94	7.84	8.42	8.89	13.25	13.84	13.74	14.32	14.79
	6H	8.29	8.77	8.81	9.29	9.78	13.39	13.88	13.91	14.39	14.88
	8H	8.81	9.24	9.33	9.74	10.31	13.53	13.95	14.04	14.45	15.02