

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: P1060537

Luminaire Tested: S124RDRP-S575D950-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060537
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D950-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

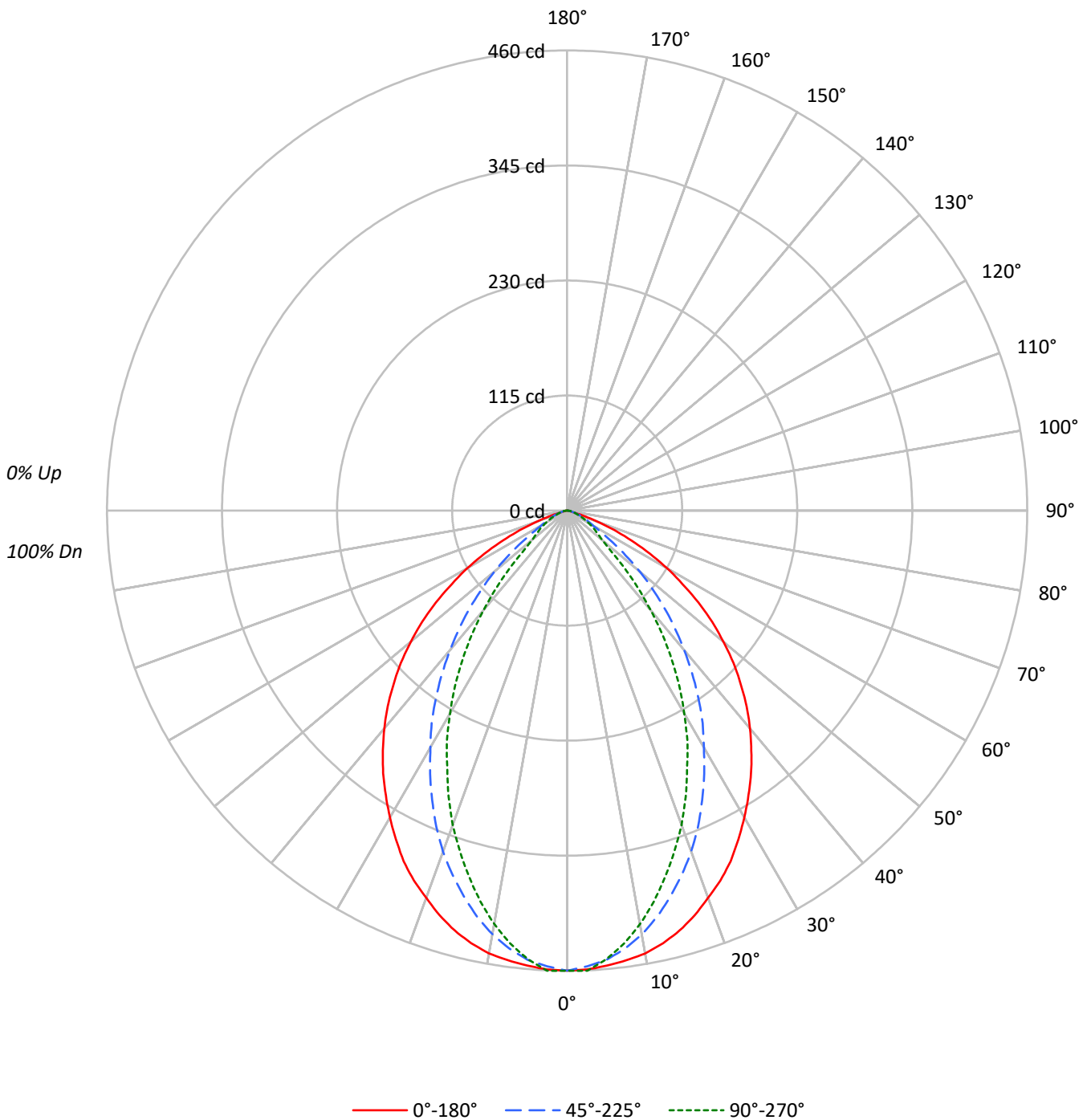
Lumens per Lamp: N/A
Luminaire Lumens: 678.0 lumens
Efficiency: N/A
Efficacy: 34.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
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	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	64	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3960	3960	3960
5°	3947	3897	3891
10°	3930	3761	3670
15°	3874	3557	3378
20°	3775	3324	3063
25°	3674	3034	2696
30°	3523	2717	2325
35°	3370	2403	1920
40°	3196	2046	1456
45°	2990	1672	978
50°	2733	1267	607
55°	2402	836	515
60°	1986	513	424
65°	1439	395	342
70°	783	295	262
75°	173	216	236
80°	129	159	193
85°	128	128	188

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2990 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.6	6.3
10°-20°	113.2	16.7
20°-30°	149.9	22.1
30°-40°	148.8	21.9
40°-50°	114.5	16.9
50°-60°	68.2	10.1
60°-70°	31.0	4.6
70°-80°	8.0	1.2
80°-90°	1.8	0.3
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°	305.7	45.1
0°-40°	454.4	67.0
0°-60°	637.2	94.0
0°-90°	678.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	678.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	460	460	460	460	460	
5°	457	457	451	451	450	43
15°	435	424	399	385	379	122
25°	387	359	319	293	284	177
35°	321	280	229	194	183	200
45°	246	198	137	96	80	189
55°	160	114	56	35	34	143
65°	71	42	19	17	17	71
75°	5	6	6	7	7	11
85°	1	1	1	2	2	1
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	459.9	459.9	459.9	459.9	459.9
2.5°	459.2	459.9	456.0	459.2	460.5
5°	456.6	457.3	450.8	450.8	450.1
7.5°	453.4	452.1	441.7	437.8	436.5
10°	449.5	445.0	430.1	422.3	419.7
12.5°	443.0	435.9	415.8	404.8	400.3
15°	434.6	423.6	399.0	385.4	378.9
17.5°	424.2	410.6	381.5	364.0	356.9
20°	411.9	393.8	362.7	340.7	334.2
22.5°	400.3	377.6	342.0	316.7	309.6
25°	386.7	358.8	319.3	292.8	283.7
27.5°	370.5	340.7	296.6	269.4	260.4
30°	354.3	321.3	273.3	244.8	233.8
32.5°	337.4	301.2	252.0	219.6	209.2
35°	320.6	280.4	228.6	193.7	182.6
37.5°	302.5	259.7	205.3	169.0	156.7
40°	284.3	239.6	182.0	145.1	129.5
42.5°	265.6	218.9	159.3	120.5	104.9
45°	245.5	197.5	137.3	95.9	80.3
47.5°	225.4	177.5	115.3	71.9	57.6
50°	204.0	156.1	94.6	52.5	45.3
52.5°	182.6	135.4	73.8	40.8	38.9
55°	160.0	114.0	55.7	35.0	34.3
57.5°	136.7	94.6	40.2	30.4	29.1
60°	115.3	76.4	29.8	25.9	24.6
62.5°	93.3	57.6	24.6	21.4	20.1
65°	70.6	42.1	19.4	16.8	16.8
67.5°	51.2	28.5	15.5	13.6	13.0
70°	31.1	17.5	11.7	11.0	10.4
72.5°	15.5	10.4	9.1	8.4	8.4
75°	5.2	6.5	6.5	7.1	7.1
77.5°	3.9	4.5	4.5	5.2	5.2
80°	2.6	3.2	3.2	3.9	3.9
82.5°	1.9	1.9	2.6	2.6	3.2
85°	1.3	1.3	1.3	1.9	1.9
87.5°	0.6	0.6	0.6	1.3	1.3
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	13.90	15.24	14.27	15.55	15.86	5.44	6.78	5.81	7.09	7.40
	3H	14.41	15.59	14.79	15.92	16.29	6.26	7.44	6.64	7.77	8.14
	4H	14.38	15.48	14.78	15.83	16.21	6.54	7.64	6.95	7.99	8.37
	6H	14.31	15.32	14.73	15.69	16.09	6.72	7.72	7.13	8.09	8.49
	8H	14.28	15.23	14.71	15.62	16.02	6.78	7.73	7.21	8.13	8.53
	12H	14.24	15.15	14.67	15.53	15.96	6.82	7.73	7.26	8.12	8.55
4H	2H	13.74	14.84	14.15	15.19	15.58	5.88	6.98	6.28	7.33	7.71
	3H	14.30	15.19	14.71	15.60	16.00	6.85	7.74	7.26	8.15	8.55
	4H	14.27	15.06	14.70	15.48	15.93	7.21	8.01	7.65	8.43	8.87
	6H	14.22	14.90	14.68	15.35	15.81	7.47	8.15	7.93	8.60	9.07
	8H	14.17	14.81	14.64	15.25	15.73	7.55	8.19	8.02	8.64	9.11
	12H	14.13	14.69	14.62	15.18	15.65	7.63	8.19	8.11	8.67	9.15
8H	4H	14.16	14.80	14.63	15.24	15.72	7.30	7.94	7.77	8.39	8.86
	6H	14.10	14.62	14.60	15.11	15.60	7.62	8.14	8.12	8.63	9.12
	8H	14.05	14.52	14.57	15.03	15.52	7.75	8.21	8.27	8.73	9.22
	12H	14.02	14.43	14.53	14.92	15.50	7.88	8.29	8.39	8.79	9.36
12H	4H	14.11	14.68	14.60	15.16	15.64	7.28	7.84	7.76	8.32	8.80
	6H	14.04	14.51	14.56	15.02	15.52	7.59	8.06	8.12	8.58	9.07
	8H	14.01	14.43	14.53	14.92	15.49	7.76	8.18	8.28	8.67	9.24