

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: P1060510

Luminaire Tested: S124RDRP-S575D930-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060510
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-S575D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

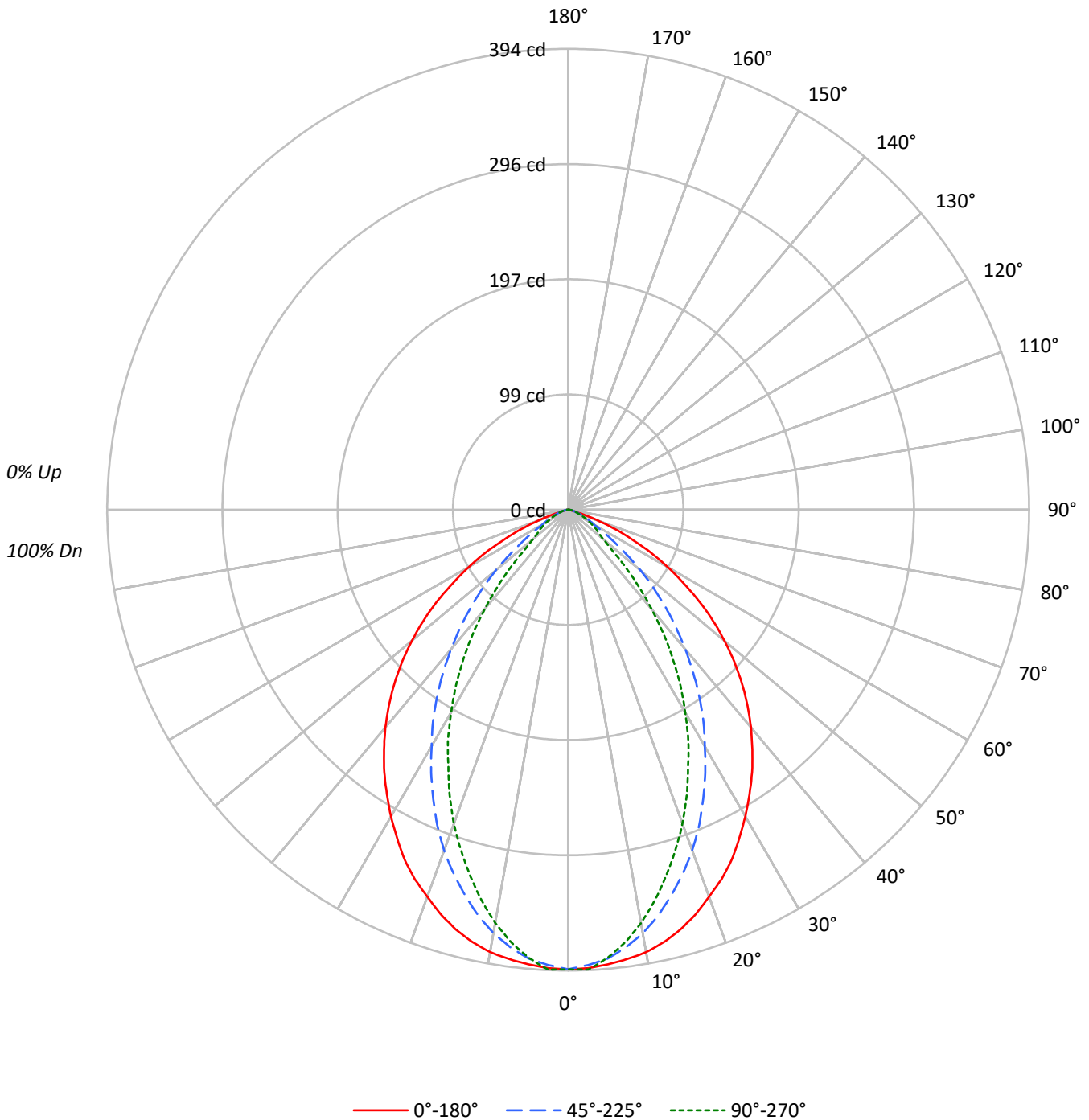
Lumens per Lamp: N/A
Luminaire Lumens: 579.4 lumens
Efficiency: N/A
Efficacy: 29.6 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	63	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°	3384	3384	3384
5°	3373	3331	3325
10°	3359	3213	3136
15°	3311	3040	2887
20°	3226	2841	2617
25°	3140	2593	2303
30°	3011	2323	1987
35°	2880	2054	1641
40°	2732	1748	1244
45°	2555	1428	835
50°	2336	1082	518
55°	2052	715	440
60°	1696	439	362
65°	1229	338	293
70°	670	252	224
75°	146	183	203
80°	109	139	164
85°	109	109	168

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2555 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.4	6.3
10°-20°	96.7	16.7
20°-30°	128.1	22.1
30°-40°	127.2	21.9
40°-50°	97.8	16.9
50°-60°	58.3	10.1
60°-70°	26.5	4.6
70°-80°	6.9	1.2
80°-90°	1.5	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°	261.2	45.1
0°-40°	388.4	67.0
0°-60°	544.5	94.0
0°-90°	579.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	579.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	393	393	393	393	393	
5°	390	391	385	385	385	37
15°	371	362	341	329	324	104
25°	330	307	273	250	242	152
35°	274	240	195	166	156	171
45°	210	169	117	82	69	162
55°	137	97	48	30	29	122
65°	60	36	17	14	14	61
75°	4	6	6	6	6	9
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°	393.0	393.0	393.0	393.0	393.0
2.5°	392.4	393.0	389.7	392.4	393.6
5°	390.2	390.8	385.3	385.3	384.7
7.5°	387.5	386.4	377.5	374.2	373.1
10°	384.1	380.3	367.5	360.9	358.7
12.5°	378.6	372.5	355.4	346.0	342.1
15°	371.4	362.0	341.0	329.3	323.8
17.5°	362.6	350.9	326.0	311.1	305.0
20°	352.0	336.5	310.0	291.2	285.6
22.5°	342.1	322.7	292.3	270.7	264.6
25°	330.5	306.7	272.9	250.2	242.4
27.5°	316.6	291.2	253.5	230.3	222.5
30°	302.8	274.5	233.6	209.2	199.8
32.5°	288.4	257.4	215.3	187.6	178.8
35°	274.0	239.7	195.4	165.5	156.1
37.5°	258.5	222.0	175.5	144.5	134.0
40°	243.0	204.8	155.5	124.0	110.7
42.5°	226.9	187.1	136.2	103.0	89.7
45°	209.8	168.8	117.3	81.9	68.6
47.5°	192.6	151.7	98.5	61.4	49.3
50°	174.4	133.4	80.8	44.8	38.7
52.5°	156.1	115.7	63.1	34.9	33.2
55°	136.7	97.4	47.6	29.9	29.3
57.5°	116.8	80.8	34.3	26.0	24.9
60°	98.5	65.3	25.5	22.1	21.0
62.5°	79.7	49.3	21.0	18.3	17.2
65°	60.3	36.0	16.6	14.4	14.4
67.5°	43.7	24.4	13.3	11.6	11.1
70°	26.6	14.9	10.0	9.4	8.9
72.5°	13.3	8.9	7.7	7.2	7.2
75°	4.4	5.5	5.5	6.1	6.1
77.5°	3.3	3.9	3.9	4.4	4.4
80°	2.2	2.8	2.8	3.3	3.3
82.5°	1.7	1.7	2.2	2.2	2.8
85°	1.1	1.1	1.1	1.7	1.7
87.5°	0.6	0.6	0.6	1.1	1.1
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	13.35	14.69	13.72	15.00	15.32	4.90	6.23	5.26	6.55	6.86
	3H	13.86	15.04	14.24	15.37	15.74	5.72	6.90	6.10	7.23	7.59
	4H	13.83	14.93	14.23	15.28	15.66	6.00	7.10	6.40	7.45	7.83
	6H	13.76	14.77	14.18	15.14	15.54	6.17	7.18	6.59	7.55	7.94
	8H	13.73	14.68	14.16	15.07	15.48	6.24	7.19	6.67	7.58	7.99
	12H	13.69	14.60	14.12	14.98	15.41	6.28	7.20	6.72	7.58	8.01
4H	2H	13.20	14.29	13.60	14.64	15.03	5.34	6.44	5.74	6.79	7.17
	3H	13.75	14.64	14.16	15.05	15.45	6.31	7.20	6.72	7.60	8.01
	4H	13.72	14.51	14.15	14.93	15.38	6.67	7.47	7.11	7.89	8.33
	6H	13.67	14.35	14.13	14.80	15.26	6.92	7.61	7.38	8.05	8.52
	8H	13.62	14.26	14.09	14.71	15.18	7.01	7.65	7.48	8.10	8.57
	12H	13.58	14.15	14.07	14.63	15.10	7.09	7.65	7.57	8.14	8.61
8H	4H	13.61	14.25	14.08	14.69	15.17	6.76	7.40	7.23	7.85	8.32
	6H	13.55	14.07	14.05	14.56	15.05	7.07	7.59	7.57	8.09	8.57
	8H	13.50	13.97	14.02	14.48	14.98	7.20	7.67	7.72	8.18	8.68
	12H	13.47	13.88	13.98	14.38	14.95	7.34	7.75	7.86	8.25	8.82
12H	4H	13.57	14.13	14.05	14.61	15.09	6.73	7.30	7.22	7.78	8.26
	6H	13.49	13.96	14.01	14.48	14.97	7.05	7.52	7.57	8.03	8.52
	8H	13.47	13.88	13.98	14.37	14.95	7.22	7.63	7.73	8.13	8.70