

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: P1060501

Luminaire Tested: S124RDRP-S575D927-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060501
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-S575D927-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

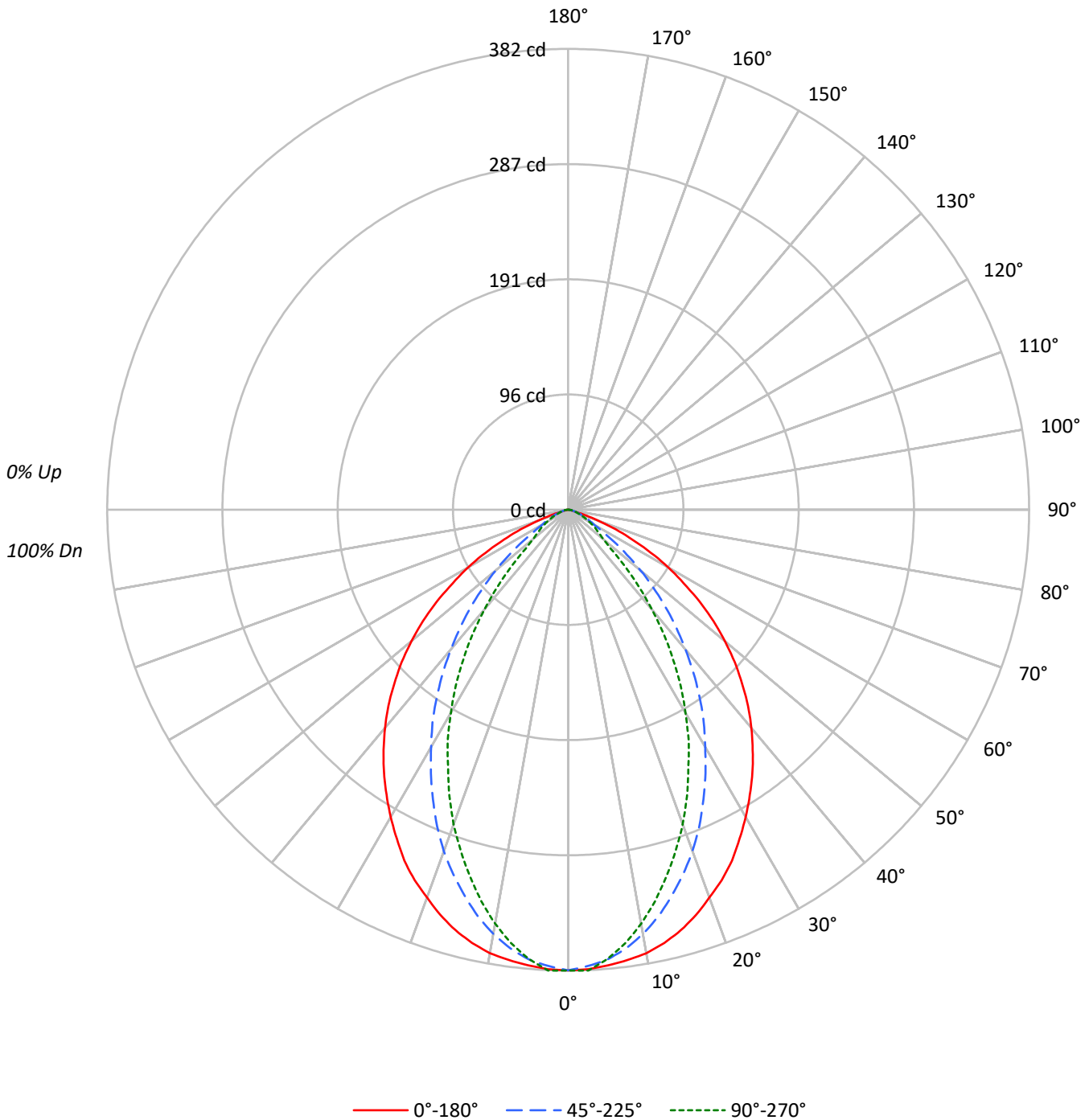
Lumens per Lamp: N/A
Luminaire Lumens: 563.0 lumens
Efficiency: N/A
Efficacy: 28.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (Ain): 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°	3289	3289	3289
5°	3278	3235	3231
10°	3264	3122	3047
15°	3217	2954	2805
20°	3135	2760	2543
25°	3051	2519	2239
30°	2925	2257	1931
35°	2798	1996	1595
40°	2654	1699	1210
45°	2482	1388	812
50°	2269	1052	504
55°	1994	695	428
60°	1648	425	351
65°	1194	328	285
70°	650	244	217
75°	143	180	196
80°	109	134	159
85°	109	109	158

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2482 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.4	6.3
10°-20°	94.0	16.7
20°-30°	124.5	22.1
30°-40°	123.6	21.9
40°-50°	95.1	16.9
50°-60°	56.7	10.1
60°-70°	25.8	4.6
70°-80°	6.7	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°	253.8	45.1
0°-40°	377.4	67.0
0°-60°	529.1	94.0
0°-90°	563.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	563.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	382	382	382	382	382	
5°	379	380	374	374	374	36
15°	361	352	331	320	315	102
25°	321	298	265	243	236	147
35°	266	233	190	161	152	166
45°	204	164	114	80	67	157
55°	133	95	46	29	28	118
65°	59	35	16	14	14	59
75°	4	5	5	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°	381.9	381.9	381.9	381.9	381.9
2.5°	381.3	381.9	378.6	381.3	382.4
5°	379.2	379.7	374.3	374.3	373.8
7.5°	376.5	375.4	366.8	363.6	362.5
10°	373.3	369.5	357.1	350.7	348.5
12.5°	367.9	362.0	345.3	336.1	332.4
15°	360.9	351.7	331.3	320.0	314.6
17.5°	352.3	341.0	316.8	302.3	296.3
20°	342.1	327.0	301.2	282.9	277.5
22.5°	332.4	313.6	284.0	263.0	257.1
25°	321.1	298.0	265.1	243.1	235.6
27.5°	307.6	282.9	246.3	223.7	216.2
30°	294.2	266.8	227.0	203.3	194.2
32.5°	280.2	250.1	209.2	182.3	173.7
35°	266.2	232.9	189.9	160.8	151.7
37.5°	251.2	215.7	170.5	140.4	130.2
40°	236.1	199.0	151.1	120.5	107.6
42.5°	220.5	181.8	132.3	100.0	87.1
45°	203.8	164.0	114.0	79.6	66.7
47.5°	187.2	147.4	95.7	59.7	47.9
50°	169.4	129.6	78.5	43.6	37.6
52.5°	151.7	112.4	61.3	33.9	32.3
55°	132.8	94.7	46.3	29.0	28.5
57.5°	113.5	78.5	33.3	25.3	24.2
60°	95.7	63.5	24.7	21.5	20.4
62.5°	77.4	47.9	20.4	17.7	16.7
65°	58.6	35.0	16.1	14.0	14.0
67.5°	42.5	23.7	12.9	11.3	10.8
70°	25.8	14.5	9.7	9.1	8.6
72.5°	12.9	8.6	7.5	7.0	7.0
75°	4.3	5.4	5.4	5.9	5.9
77.5°	3.2	3.8	3.8	4.3	4.3
80°	2.2	2.7	2.7	3.2	3.2
82.5°	1.6	1.6	2.2	2.2	2.7
85°	1.1	1.1	1.1	1.6	1.6
87.5°	0.5	0.5	0.5	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	13.25	14.59	13.62	14.90	15.22	4.81	6.14	5.17	6.46	6.77
	3H	13.76	14.94	14.14	15.27	15.64	5.62	6.80	6.00	7.13	7.50
	4H	13.73	14.83	14.13	15.18	15.56	5.91	7.00	6.31	7.35	7.74
	6H	13.66	14.67	14.08	15.04	15.44	6.08	7.08	6.49	7.45	7.85
	8H	13.63	14.58	14.06	14.97	15.38	6.14	7.10	6.57	7.49	7.89
	12H	13.59	14.50	14.02	14.88	15.31	6.19	7.10	6.62	7.48	7.91
4H	2H	13.10	14.19	13.50	14.54	14.93	5.25	6.34	5.65	6.70	7.08
	3H	13.65	14.54	14.06	14.95	15.35	6.21	7.10	6.62	7.51	7.91
	4H	13.62	14.41	14.05	14.83	15.28	6.57	7.37	7.01	7.79	8.23
	6H	13.57	14.25	14.03	14.70	15.16	6.82	7.51	7.28	7.95	8.42
	8H	13.52	14.16	13.99	14.61	15.08	6.91	7.55	7.38	8.00	8.47
	12H	13.48	14.05	13.97	14.53	15.00	6.99	7.55	7.47	8.03	8.51
8H	4H	13.51	14.15	13.98	14.60	15.07	6.66	7.30	7.13	7.75	8.22
	6H	13.45	13.97	13.95	14.47	14.95	6.97	7.49	7.47	7.99	8.47
	8H	13.40	13.87	13.92	14.38	14.88	7.10	7.57	7.63	8.09	8.58
	12H	13.37	13.78	13.88	14.28	14.85	7.24	7.65	7.76	8.15	8.72
12H	4H	13.47	14.03	13.95	14.51	14.99	6.64	7.20	7.12	7.68	8.16
	6H	13.39	13.86	13.91	14.38	14.87	6.95	7.42	7.47	7.94	8.43
	8H	13.37	13.78	13.88	14.27	14.85	7.13	7.54	7.64	8.03	8.61