

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: P1060519

Luminaire Tested: S124RDRP-S575D935-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060519
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-S575D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

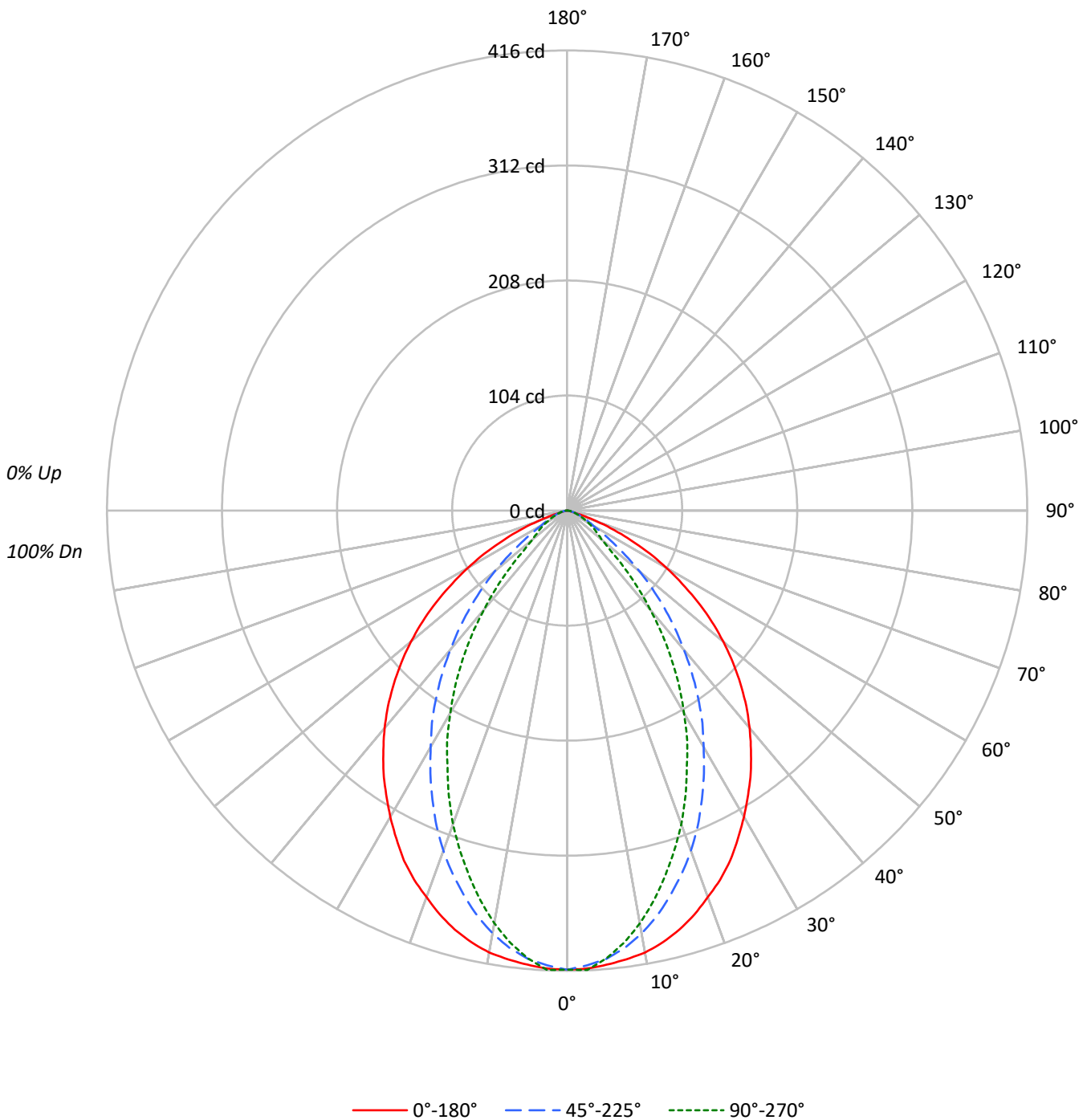
Lumens per Lamp: N/A
Luminaire Lumens: 611.9 lumens
Efficiency: N/A
Efficacy: 31.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	3574	3574	3574
5°	3562	3516	3512
10°	3547	3394	3312
15°	3496	3210	3049
20°	3407	2999	2764
25°	3316	2738	2432
30°	3179	2453	2098
35°	3042	2169	1732
40°	2884	1847	1314
45°	2697	1509	883
50°	2466	1143	548
55°	2168	755	465
60°	1791	463	382
65°	1298	357	310
70°	707	264	237
75°	156	193	213
80°	114	144	174
85°	119	119	178

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2697 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.4	6.3
10°-20°	102.1	16.7
20°-30°	135.3	22.1
30°-40°	134.3	21.9
40°-50°	103.3	16.9
50°-60°	61.6	10.1
60°-70°	28.0	4.6
70°-80°	7.2	1.2
80°-90°	1.6	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°	275.9	45.1
0°-40°	410.1	67.0
0°-60°	575.1	94.0
0°-90°	611.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	611.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	415	415	415	415	415	
5°	412	413	407	407	406	39
15°	392	382	360	348	342	110
25°	349	324	288	264	256	160
35°	289	253	206	175	165	181
45°	222	178	124	86	72	171
55°	144	103	50	32	31	129
65°	64	38	18	15	15	64
75°	5	6	6	6	6	10
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°	415.0	415.0	415.0	415.0	415.0
2.5°	414.4	415.0	411.5	414.4	415.6
5°	412.1	412.7	406.8	406.8	406.3
7.5°	409.2	408.0	398.7	395.2	394.0
10°	405.7	401.6	388.1	381.1	378.8
12.5°	399.8	393.4	375.3	365.3	361.3
15°	392.2	382.3	360.1	347.8	342.0
17.5°	382.9	370.6	344.3	328.5	322.1
20°	371.8	355.4	327.3	307.5	301.6
22.5°	361.3	340.8	308.6	285.8	279.4
25°	349.0	323.8	288.2	264.2	256.0
27.5°	334.4	307.5	267.7	243.2	235.0
30°	319.7	289.9	246.7	221.0	211.0
32.5°	304.5	271.8	227.4	198.2	188.8
35°	289.4	253.1	206.3	174.8	164.8
37.5°	273.0	234.4	185.3	152.6	141.5
40°	256.6	216.3	164.3	130.9	116.9
42.5°	239.7	197.6	143.8	108.7	94.7
45°	221.5	178.3	123.9	86.5	72.5
47.5°	203.4	160.2	104.0	64.9	52.0
50°	184.1	140.9	85.3	47.3	40.9
52.5°	164.8	122.2	66.6	36.8	35.1
55°	144.4	102.9	50.3	31.6	31.0
57.5°	123.3	85.3	36.2	27.5	26.3
60°	104.0	69.0	26.9	23.4	22.2
62.5°	84.2	52.0	22.2	19.3	18.1
65°	63.7	38.0	17.5	15.2	15.2
67.5°	46.2	25.7	14.0	12.3	11.7
70°	28.1	15.8	10.5	9.9	9.4
72.5°	14.0	9.4	8.2	7.6	7.6
75°	4.7	5.8	5.8	6.4	6.4
77.5°	3.5	4.1	4.1	4.7	4.7
80°	2.3	2.9	2.9	3.5	3.5
82.5°	1.8	1.8	2.3	2.3	2.9
85°	1.2	1.2	1.2	1.8	1.8
87.5°	0.6	0.6	0.6	1.2	1.2
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	13.54	14.88	13.91	15.19	15.50	5.10	6.43	5.46	6.75	7.06
	3H	14.05	15.23	14.43	15.56	15.93	5.92	7.10	6.30	7.43	7.79
	4H	14.02	15.12	14.42	15.47	15.85	6.20	7.29	6.60	7.64	8.03
	6H	13.95	14.96	14.37	15.33	15.72	6.37	7.38	6.78	7.75	8.14
	8H	13.91	14.87	14.34	15.26	15.66	6.43	7.39	6.86	7.78	8.18
	12H	13.88	14.79	14.31	15.17	15.60	6.48	7.39	6.91	7.77	8.20
4H	2H	13.38	14.48	13.79	14.83	15.21	5.54	6.63	5.94	6.99	7.37
	3H	13.94	14.83	14.35	15.24	15.64	6.50	7.39	6.91	7.80	8.20
	4H	13.91	14.70	14.34	15.12	15.57	6.86	7.66	7.30	8.08	8.52
	6H	13.85	14.54	14.32	14.99	15.45	7.11	7.80	7.58	8.25	8.71
	8H	13.81	14.45	14.28	14.89	15.37	7.20	7.84	7.67	8.29	8.76
	12H	13.77	14.33	14.26	14.82	15.29	7.28	7.84	7.76	8.33	8.80
8H	4H	13.80	14.44	14.27	14.88	15.35	6.95	7.59	7.42	8.04	8.51
	6H	13.73	14.26	14.24	14.75	15.23	7.26	7.78	7.76	8.28	8.76
	8H	13.69	14.16	14.21	14.67	15.16	7.39	7.86	7.91	8.37	8.87
	12H	13.66	14.07	14.17	14.57	15.14	7.53	7.94	8.04	8.44	9.01
12H	4H	13.75	14.32	14.24	14.80	15.28	6.92	7.49	7.41	7.97	8.45
	6H	13.68	14.15	14.20	14.66	15.16	7.24	7.71	7.76	8.22	8.72
	8H	13.65	14.07	14.17	14.56	15.13	7.41	7.82	7.92	8.32	8.89