

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: P1060536

Luminaire Tested: S124RDRP-S575D950-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060536
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D950-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

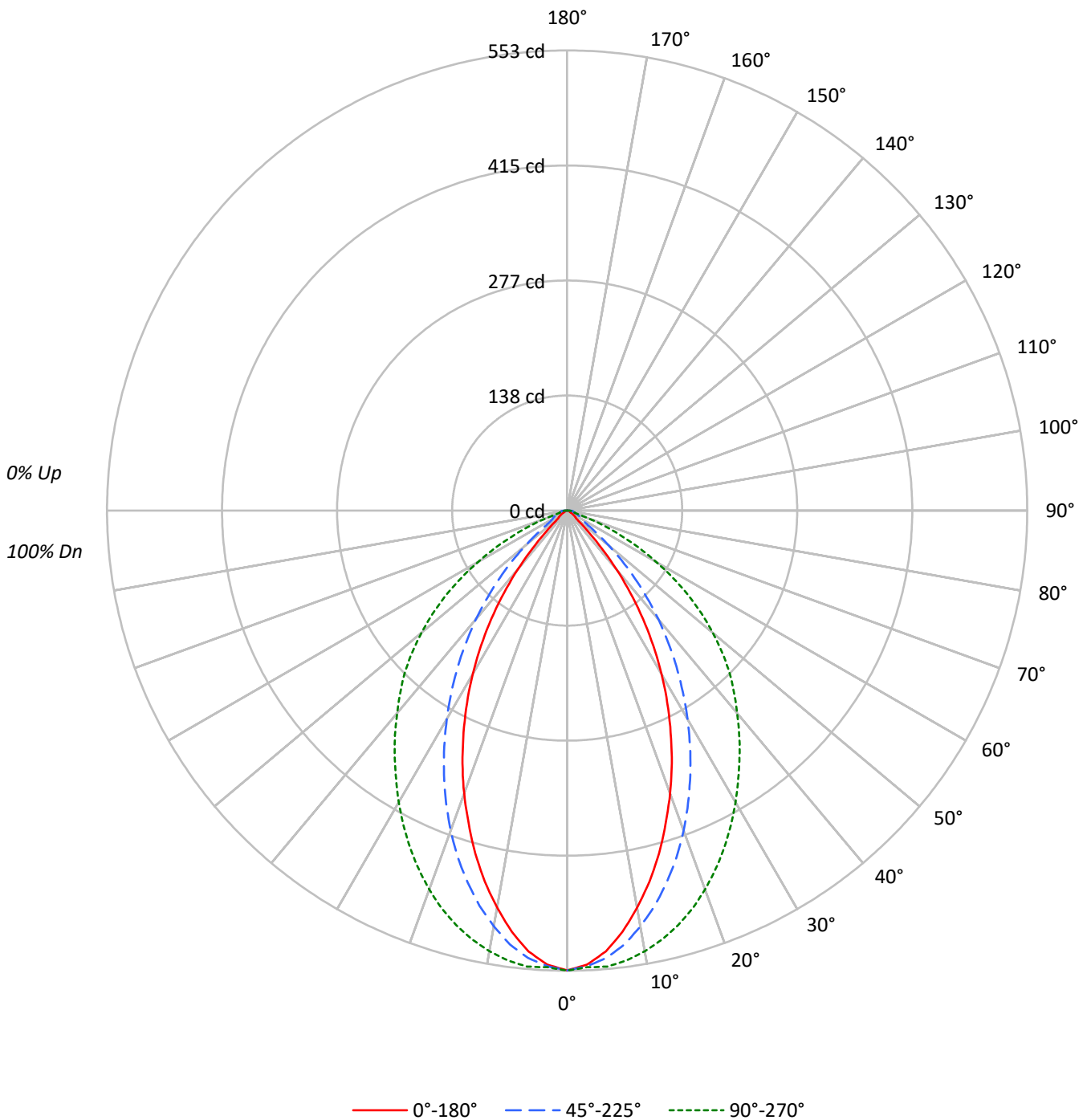
Lumens per Lamp: N/A
Luminaire Lumens: 696.4 lumens
Efficiency: N/A
Efficacy: 35.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4759	4759	4759
5°	4597	4664	4754
10°	4236	4435	4701
15°	3804	4122	4597
20°	3316	3750	4440
25°	2797	3327	4245
30°	2257	2876	4024
35°	1670	2406	3797
40°	1035	1918	3572
45°	410	1398	3365
50°	182	877	3058
55°	146	458	2677
60°	100	346	2134
65°	65	344	1467
70°	65	310	685
75°	87	303	303
80°	129	352	352
85°	257	701	514

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3365 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.7	7.3
10°-20°	130.8	18.8
20°-30°	165.1	23.7
30°-40°	151.5	21.8
40°-50°	103.2	14.8
50°-60°	56.2	8.1
60°-70°	24.3	3.5
70°-80°	8.9	1.3
80°-90°	5.7	0.8
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°	346.6	49.8
0°-40°	498.1	71.5
0°-60°	657.5	94.4
0°-90°	696.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	696.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	532	539	540	545	550	49
15°	427	442	462	496	516	119
25°	294	315	350	406	447	135
35°	159	182	229	302	361	98
45°	34	56	115	204	276	31
55°	10	10	30	112	178	9
65°	3	4	17	35	72	4
75°	3	8	9	9	9	3
85°	3	6	7	7	5	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	552.6	552.6	552.6	552.6	552.6
2.5°	546.1	552.6	548.0	549.3	549.3
5°	531.8	538.9	539.6	545.4	550.0
7.5°	510.4	520.8	526.0	537.6	545.4
10°	484.5	496.8	507.2	527.3	537.6
12.5°	456.6	470.8	486.4	513.0	527.9
15°	426.7	441.7	462.4	495.5	515.6
17.5°	393.7	411.8	437.1	476.7	501.3
20°	361.9	380.0	409.2	454.0	484.5
22.5°	328.8	347.6	380.0	430.0	466.3
25°	294.4	315.2	350.2	406.0	446.8
27.5°	260.7	282.8	319.7	380.7	426.1
30°	227.0	249.0	289.2	354.8	404.7
32.5°	192.6	215.3	258.8	327.5	382.6
35°	158.9	182.2	228.9	301.6	361.2
37.5°	124.5	149.2	199.1	276.3	339.8
40°	92.1	116.7	170.6	251.0	317.8
42.5°	61.6	86.3	141.4	226.3	297.0
45°	33.7	56.4	114.8	203.6	276.3
47.5°	18.2	31.1	88.9	181.6	252.9
50°	13.6	16.9	65.5	158.2	228.3
52.5°	11.7	13.0	45.4	133.6	203.6
55°	9.7	10.4	30.5	112.2	178.3
57.5°	7.8	8.4	22.7	90.8	151.1
60°	5.8	7.1	20.1	70.0	123.9
62.5°	4.5	5.8	18.8	51.2	97.9
65°	3.2	4.5	16.9	35.0	72.0
67.5°	3.2	5.2	14.3	22.7	48.6
70°	2.6	7.1	12.3	14.9	27.2
72.5°	2.6	7.8	10.4	10.4	10.4
75°	2.6	8.4	9.1	9.1	9.1
77.5°	2.6	7.8	8.4	7.8	7.8
80°	2.6	7.1	7.1	7.1	7.1
82.5°	2.6	6.5	7.1	7.1	5.8
85°	2.6	5.8	7.1	7.1	5.2
87.5°	1.9	5.8	6.5	6.5	3.9
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	0.00	0.00	0.00	0.00	0.00	13.83	15.11	14.19	15.42	15.73
	3H	0.00	0.00	0.00	0.00	0.00	14.20	15.33	14.58	15.66	16.03
	4H	0.00	0.14	0.00	0.49	0.88	14.18	15.23	14.59	15.59	15.97
	6H	0.28	1.24	0.69	1.61	2.01	14.17	15.14	14.59	15.51	15.90
	8H	0.87	1.79	1.30	2.18	2.58	14.17	15.08	14.60	15.47	15.88
	12H	1.54	2.42	1.98	2.80	3.23	14.18	15.06	14.62	15.44	15.87
4H	2H	0.08	1.13	0.48	1.48	1.86	13.64	14.69	14.04	15.04	15.43
	3H	1.65	2.51	2.07	2.92	3.32	14.06	14.92	14.47	15.32	15.73
	4H	2.94	3.71	3.38	4.13	4.58	14.06	14.82	14.49	15.24	15.69
	6H	4.07	4.74	4.54	5.18	5.65	14.10	14.76	14.56	15.21	15.67
	8H	4.59	5.20	5.06	5.65	6.12	14.12	14.74	14.59	15.19	15.66
	12H	5.14	5.68	5.62	6.17	6.64	14.19	14.73	14.68	15.22	15.69
8H	4H	4.03	4.65	4.50	5.10	5.57	13.97	14.58	14.44	15.03	15.50
	6H	5.57	6.08	6.07	6.57	7.05	14.04	14.55	14.55	15.05	15.53
	8H	6.38	6.84	6.90	7.35	7.84	14.13	14.58	14.65	15.10	15.59
	12H	7.21	7.61	7.73	8.11	8.68	14.30	14.70	14.81	15.19	15.77
12H	4H	4.22	4.76	4.71	5.25	5.72	13.93	14.48	14.42	14.96	15.43
	6H	5.92	6.38	6.45	6.90	7.39	14.02	14.47	14.54	14.99	15.48
	8H	6.94	7.34	7.45	7.83	8.41	14.15	14.55	14.67	15.05	15.62