

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: P1060503

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060503
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-74)
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-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

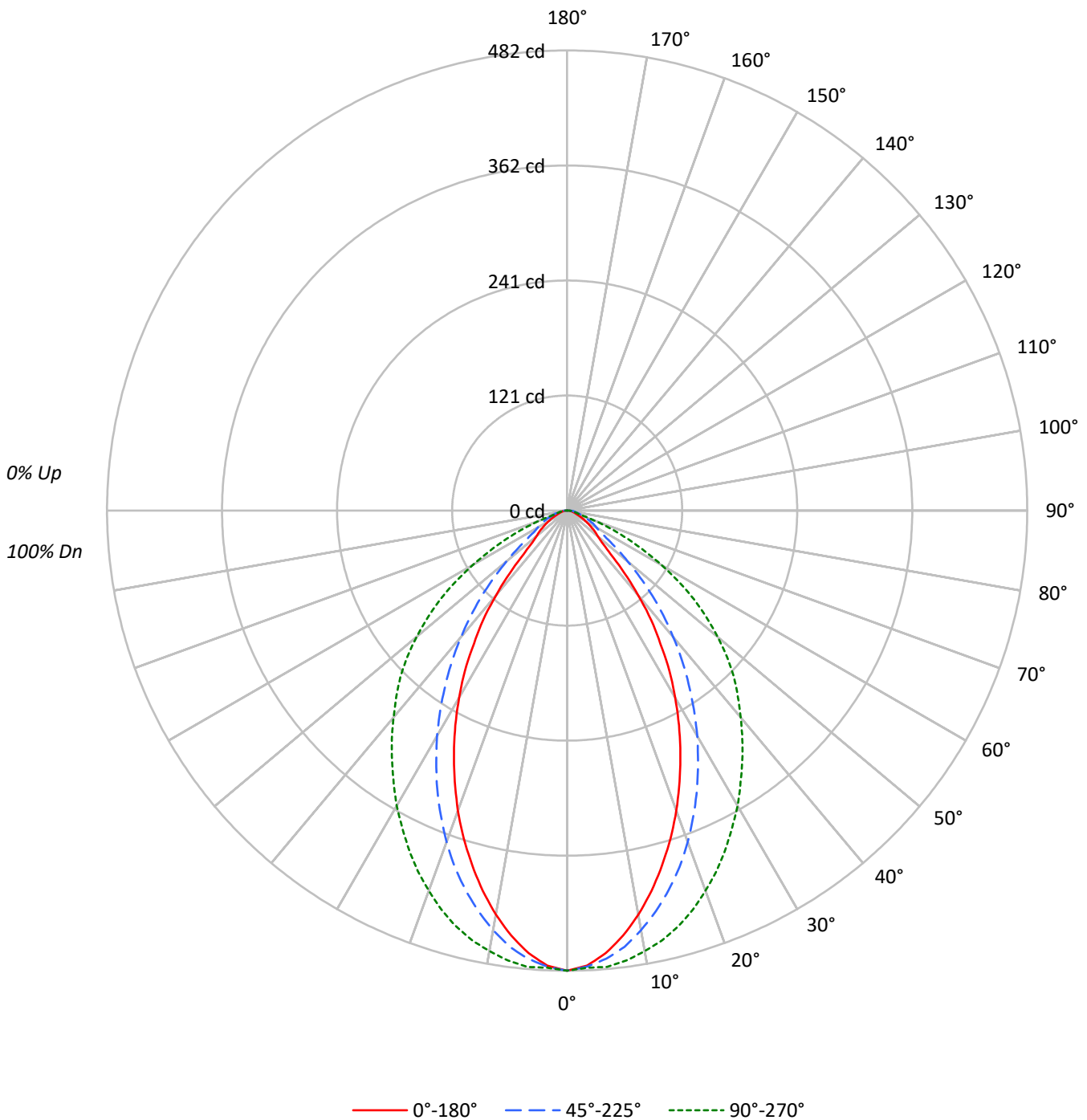
Lumens per Lamp: N/A
Luminaire Lumens: 682.0 lumens
Efficiency: N/A
Efficacy: 34.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63
5	84	73	66	60	82	72	65	60	70	64	60	69	63	59	67	62	58	57
6	79	67	60	54	77	67	59	54	65	59	54	63	58	53	62	57	53	51
7	74	62	55	49	72	61	54	49	60	54	49	59	53	49	57	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	53	48	44	43
9	65	54	46	42	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	49	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4150	4150	4150
5°	4021	4072	4147
10°	3757	3902	4096
15°	3427	3667	4017
20°	3064	3384	3883
25°	2665	3059	3725
30°	2248	2709	3550
35°	1788	2332	3362
40°	1302	1942	3178
45°	787	1534	3009
50°	563	1111	2756
55°	477	752	2434
60°	389	611	1965
65°	308	548	1416
70°	257	461	745
75°	233	429	376
80°	238	426	372
85°	316	642	425

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3009 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.4	6.5
10°-20°	116.3	17.0
20°-30°	150.8	22.1
30°-40°	145.1	21.3
40°-50°	108.0	15.8
50°-60°	66.4	9.7
60°-70°	32.6	4.8
70°-80°	12.7	1.9
80°-90°	5.8	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°	311.4	45.7
0°-40°	456.5	66.9
0°-60°	630.9	92.5
0°-90°	682.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	682.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	482	482	482	482	482	
5°	465	472	471	475	480	43
15°	384	397	411	436	451	107
25°	280	296	322	362	392	128
35°	170	186	222	277	320	106
45°	65	80	126	194	247	54
55°	32	33	50	114	162	29
65°	15	16	27	43	70	15
75°	7	12	13	12	11	8
85°	3	6	6	6	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	481.9	481.9	481.9	481.9	481.9
2.5°	477.0	482.4	478.1	478.6	479.2
5°	465.2	472.2	471.1	475.4	479.7
7.5°	449.0	457.1	460.9	469.5	475.4
10°	429.7	438.8	446.3	460.3	468.4
12.5°	408.1	418.9	429.7	448.5	460.9
15°	384.4	396.8	411.3	436.1	450.6
17.5°	360.2	372.6	391.4	420.0	438.3
20°	334.4	347.8	369.3	401.1	423.7
22.5°	307.4	322.0	345.7	381.7	408.7
25°	280.5	295.6	322.0	362.4	392.0
27.5°	253.6	268.1	296.7	341.9	374.2
30°	226.1	241.2	272.4	319.8	357.0
32.5°	199.8	213.7	247.1	298.8	338.1
35°	170.1	186.3	221.8	277.3	319.8
37.5°	144.8	159.4	197.6	255.7	301.5
40°	115.8	131.9	172.8	234.7	282.7
42.5°	88.8	105.0	149.1	213.7	264.9
45°	64.6	80.2	126.0	194.4	247.1
47.5°	49.0	58.1	103.4	175.5	227.2
50°	42.0	44.7	82.9	155.1	205.7
52.5°	37.2	38.2	64.6	134.6	184.1
55°	31.8	32.8	50.1	114.1	162.1
57.5°	26.9	27.5	40.4	94.8	138.4
60°	22.6	23.2	35.5	75.9	114.1
62.5°	18.8	19.4	31.8	58.7	91.0
65°	15.1	16.2	26.9	43.1	69.5
67.5°	12.4	14.5	22.6	30.2	48.5
70°	10.2	14.0	18.3	21.0	29.6
72.5°	8.6	12.9	15.6	15.1	14.5
75°	7.0	12.4	12.9	11.8	11.3
77.5°	5.9	10.8	10.8	9.7	9.2
80°	4.8	8.6	8.6	8.6	7.5
82.5°	4.3	7.0	7.5	7.5	5.9
85°	3.2	5.9	6.5	6.5	4.3
87.5°	2.2	5.4	5.9	5.4	3.2
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	4.74	6.08	5.10	6.39	6.71	13.90	15.24	14.26	15.55	15.87
	3H	5.84	7.03	6.22	7.36	7.73	14.41	15.60	14.79	15.93	16.29
	4H	6.36	7.47	6.76	7.82	8.20	14.43	15.54	14.83	15.89	16.27
	6H	6.79	7.81	7.21	8.18	8.57	14.44	15.46	14.85	15.83	16.22
	8H	6.98	7.95	7.41	8.34	8.74	14.44	15.41	14.87	15.80	16.20
	12H	7.16	8.08	7.59	8.47	8.90	14.44	15.37	14.87	15.75	16.18
4H	2H	5.88	6.99	6.28	7.34	7.72	13.79	14.90	14.19	15.25	15.63
	3H	7.22	8.12	7.63	8.53	8.93	14.38	15.29	14.79	15.69	16.10
	4H	7.95	8.76	8.39	9.18	9.63	14.44	15.25	14.87	15.67	16.11
	6H	8.56	9.26	9.02	9.71	10.17	14.51	15.22	14.98	15.66	16.13
	8H	8.80	9.45	9.27	9.90	10.37	14.54	15.20	15.01	15.65	16.12
	12H	9.03	9.61	9.52	10.10	10.57	14.58	15.17	15.07	15.65	16.12
8H	4H	8.42	9.07	8.89	9.52	9.99	14.40	15.05	14.87	15.50	15.97
	6H	9.26	9.80	9.77	10.30	10.78	14.52	15.06	15.02	15.56	16.04
	8H	9.67	10.15	10.19	10.67	11.16	14.61	15.09	15.13	15.60	16.10
	12H	10.09	10.52	10.60	11.01	11.58	14.73	15.15	15.24	15.65	16.22
12H	4H	8.47	9.05	8.96	9.53	10.01	14.37	14.95	14.86	15.43	15.91
	6H	9.40	9.88	9.92	10.39	10.89	14.50	14.99	15.03	15.50	15.99
	8H	9.92	10.34	10.43	10.84	11.41	14.64	15.06	15.15	15.56	16.13