

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: P1060505

Luminaire Tested: S124RDRP-S575D927-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060505
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-76)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D927-X4F0-XX-UDD-WVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

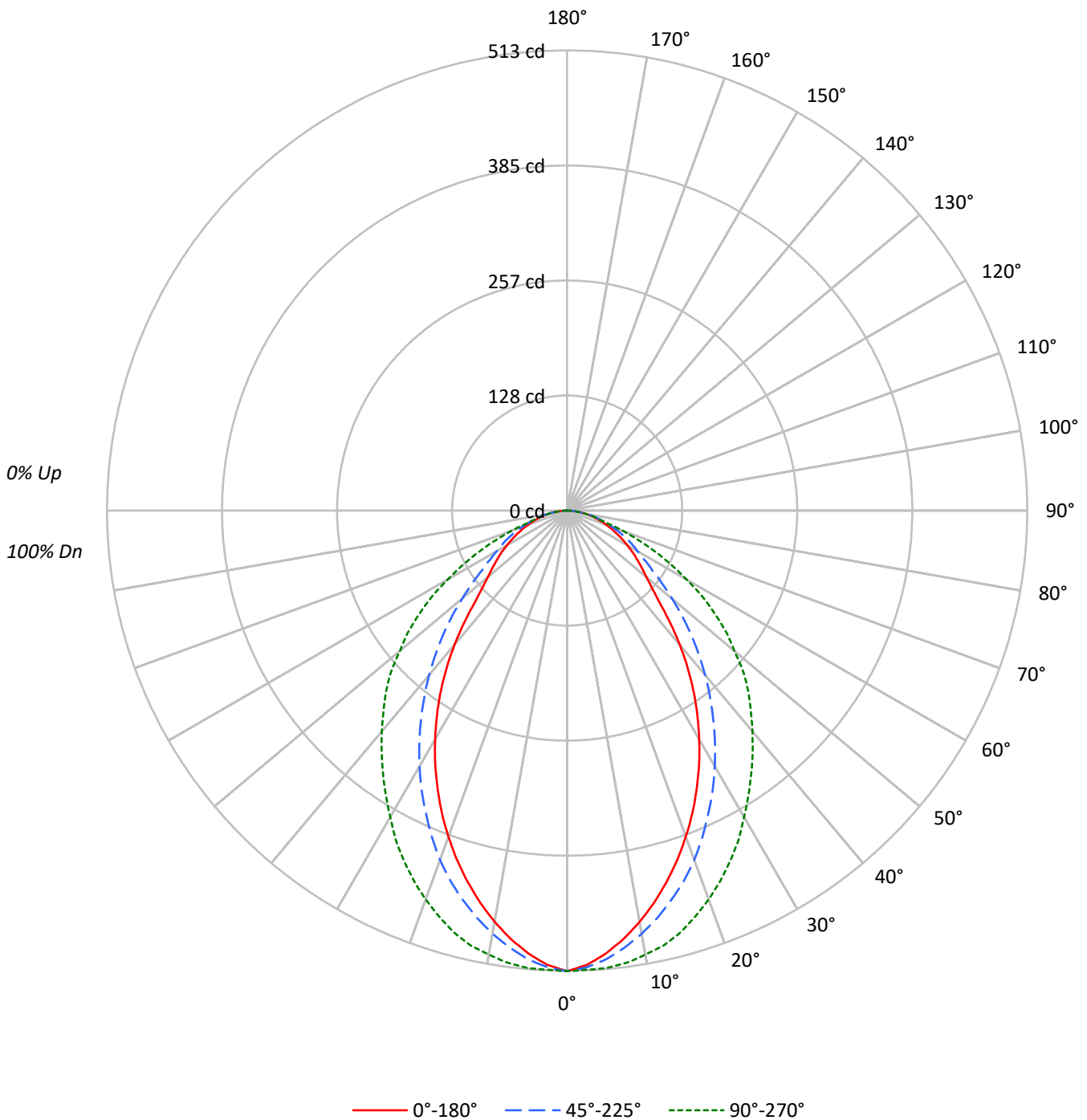
Lumens per Lamp: N/A
Luminaire Lumens: 934.6 lumens
Efficiency: N/A
Efficacy: 47.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.1
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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												100																
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87												87																
2	102	94	88	83	99	92	87	82	89	84	80	86	82	79	83	80	77	75												75																
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65												65																
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57												57																
5	80	69	60	54	78	68	60	54	65	59	54	64	58	53	62	57	52	50												50																
6	75	62	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45												45																
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41												41																
8	65	53	45	39	64	52	44	39	51	44	39	50	43	39	48	43	39	37												37																
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34												34																
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	36	32	31												31																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4421	4421	4421
5°	4284	4340	4424
10°	4070	4187	4395
15°	3819	4005	4342
20°	3545	3797	4226
25°	3247	3538	4090
30°	2927	3274	3923
35°	2580	2987	3762
40°	2195	2692	3612
45°	1783	2378	3479
50°	1543	2047	3258
55°	1429	1737	3022
60°	1335	1566	2651
65°	1249	1469	2205
70°	1166	1355	1667
75°	1111	1254	1201
80°	1041	1146	1012
85°	958	1067	800

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 3479 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	5.1
10°-20°	127.4	13.6
20°-30°	174.0	18.6
30°-40°	182.3	19.5
40°-50°	157.7	16.9
50°-60°	118.5	12.7
60°-70°	76.4	8.2
70°-80°	39.2	4.2
80°-90°	11.7	1.3
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°	348.8	37.3
0°-40°	531.0	56.8
0°-60°	807.3	86.4
0°-90°	934.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	934.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	513	513	513	513	513	
5°	496	503	502	506	512	46
15°	428	439	449	470	487	120
25°	342	355	372	401	430	157
35°	245	259	284	322	358	153
45°	146	161	195	243	286	115
55°	95	98	116	165	201	86
65°	61	62	72	87	108	61
75°	33	37	38	37	36	35
85°	10	11	11	10	8	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	513.4	513.4	513.4	513.4	513.4
2.5°	506.9	513.4	509.6	510.7	512.3
5°	495.6	503.2	502.1	505.8	511.8
7.5°	481.6	489.7	491.3	499.9	508.5
10°	465.5	474.6	478.9	491.9	502.6
12.5°	447.7	457.4	464.9	481.1	496.7
15°	428.4	439.1	449.3	469.8	487.0
17.5°	408.4	419.2	432.7	455.3	474.6
20°	386.9	398.8	414.4	438.0	461.2
22.5°	364.9	377.2	393.9	419.7	446.7
25°	341.7	354.6	372.4	401.4	430.5
27.5°	318.6	331.5	351.4	382.1	413.8
30°	294.4	307.8	329.3	362.7	394.5
32.5°	270.1	284.7	306.7	342.3	376.2
35°	245.4	259.4	284.1	321.8	357.9
37.5°	220.6	235.2	261.5	301.9	339.6
40°	195.3	210.4	239.5	282.0	321.3
42.5°	170.1	186.2	216.9	261.5	303.0
45°	146.4	161.4	195.3	243.2	285.7
47.5°	128.6	138.8	173.8	225.5	266.4
50°	115.2	120.5	152.8	206.1	243.2
52.5°	104.9	108.7	133.5	185.1	224.4
55°	95.2	98.5	115.7	165.2	201.3
57.5°	86.6	88.3	102.2	145.8	179.2
60°	77.5	79.1	90.9	124.8	153.9
62.5°	69.4	70.5	81.8	104.9	130.8
65°	61.3	62.4	72.1	87.2	108.2
67.5°	53.8	55.4	63.0	71.0	86.1
70°	46.3	49.5	53.8	57.6	66.2
72.5°	39.8	43.1	45.2	46.3	46.8
75°	33.4	37.1	37.7	37.1	36.1
77.5°	26.9	30.1	30.1	29.1	28.0
80°	21.0	23.7	23.1	22.1	20.4
82.5°	15.6	17.2	16.7	15.6	14.0
85°	9.7	11.3	10.8	10.2	8.1
87.5°	4.8	6.5	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	11.60	13.08	11.96	13.40	13.71	15.37	16.85	15.73	17.17	17.48
	3H	13.25	14.58	13.63	14.91	15.27	16.48	17.81	16.86	18.14	18.50
	4H	13.92	15.17	14.32	15.52	15.90	16.77	18.02	17.17	18.37	18.75
	6H	14.44	15.59	14.85	15.95	16.34	16.97	18.12	17.38	18.49	18.88
	8H	14.62	15.71	15.04	16.10	16.50	17.02	18.12	17.45	18.51	18.91
	12H	14.74	15.79	15.17	16.17	16.60	17.05	18.10	17.48	18.48	18.91
4H	2H	12.38	13.63	12.78	13.98	14.35	15.53	16.77	15.93	17.12	17.50
	3H	14.24	15.27	14.65	15.67	16.08	16.84	17.87	17.25	18.27	18.67
	4H	15.05	15.98	15.48	16.40	16.83	17.25	18.18	17.68	18.59	19.03
	6H	15.70	16.50	16.15	16.95	17.41	17.56	18.37	18.02	18.81	19.28
	8H	15.93	16.68	16.39	17.12	17.59	17.66	18.41	18.12	18.86	19.32
	12H	16.10	16.77	16.58	17.25	17.72	17.72	18.39	18.20	18.87	19.34
8H	4H	15.40	16.15	15.86	16.60	17.07	17.38	18.14	17.85	18.58	19.05
	6H	16.19	16.81	16.69	17.31	17.78	17.79	18.42	18.29	18.91	19.39
	8H	16.51	17.07	17.03	17.58	18.07	17.94	18.50	18.46	19.01	19.50
	12H	16.78	17.27	17.29	17.76	18.33	18.07	18.56	18.58	19.06	19.62
12H	4H	15.43	16.10	15.91	16.58	17.05	17.39	18.06	17.87	18.54	19.01
	6H	16.25	16.81	16.77	17.32	17.81	17.82	18.38	18.33	18.89	19.37
	8H	16.64	17.13	17.15	17.63	18.19	18.02	18.51	18.53	19.00	19.57