

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: P1060529

Luminaire Tested: S124RDRP-S575D940-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060529
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-77)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D940-X4F0-XX-UDD-SVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

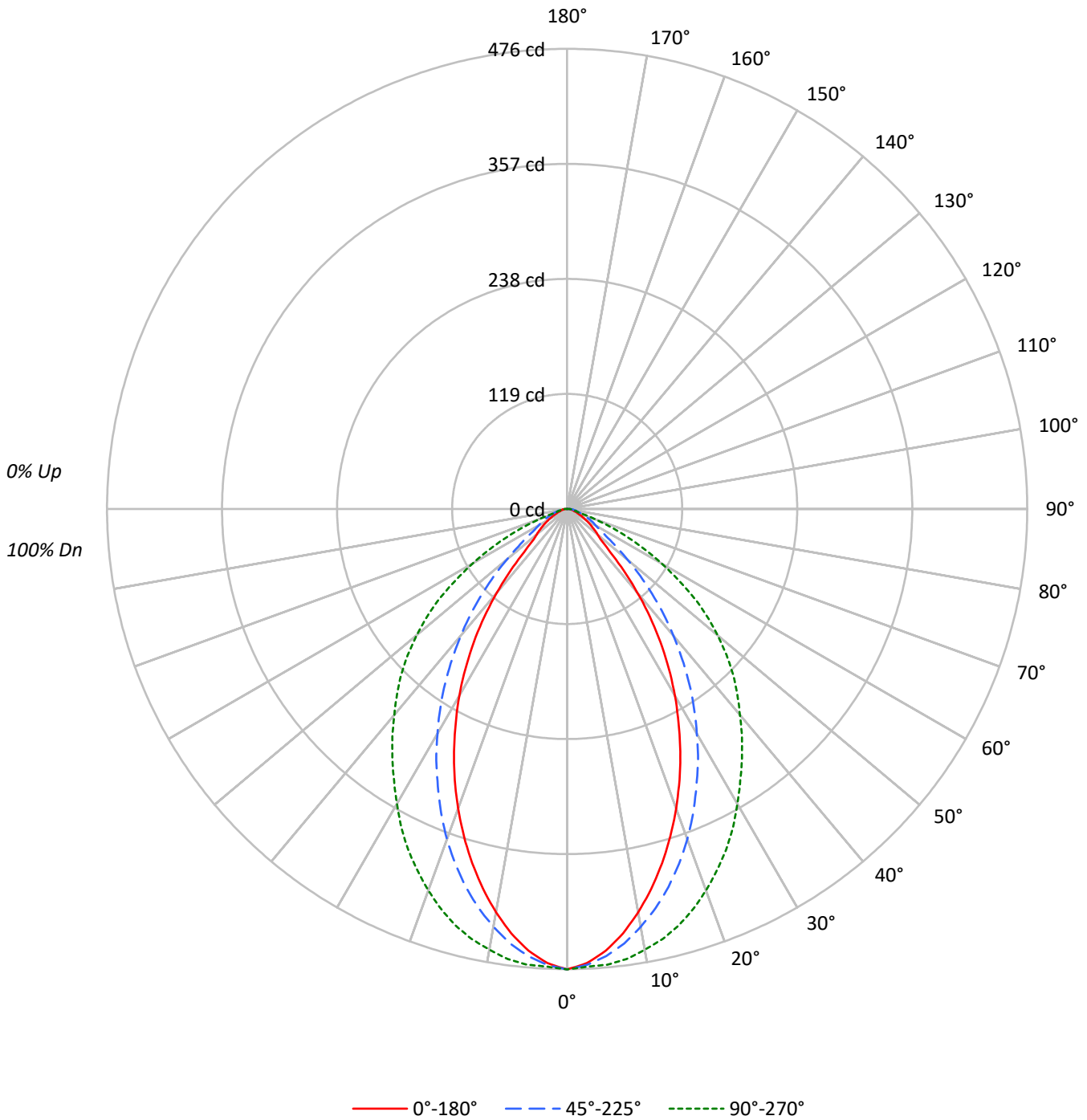
Lumens per Lamp: N/A
Luminaire Lumens: 669.7 lumens
Efficiency: N/A
Efficacy: 34.2 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.12 / 1.01
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	97	88	82	77	94	87	81	76	84	79	75	81	77	73	79	75	72	70					70			
4	90	80	73	68	88	79	72	67	77	71	67	75	70	66	73	68	65	63					63			
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57					57			
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51					51			
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	49	47					47			
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	45	43					43			
9	65	54	46	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39					39			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4101	4101	4101
5°	3965	4013	4090
10°	3704	3836	4048
15°	3381	3609	3976
20°	3020	3332	3848
25°	2631	3005	3696
30°	2217	2669	3501
35°	1771	2313	3312
40°	1274	1921	3126
45°	767	1513	2959
50°	552	1096	2719
55°	464	737	2411
60°	375	584	1941
65°	295	532	1396
70°	259	443	748
75°	243	403	363
80°	238	422	332
85°	356	603	415

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2959 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.7	6.5
10°-20°	114.6	17.1
20°-30°	148.6	22.2
30°-40°	142.9	21.3
40°-50°	106.0	15.8
50°-60°	64.9	9.7
60°-70°	31.5	4.7
70°-80°	12.0	1.8
80°-90°	5.4	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°	306.9	45.8
0°-40°	449.8	67.2
0°-60°	620.8	92.7
0°-90°	669.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	669.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	459	465	464	468	473	43
15°	379	390	405	429	446	106
25°	277	291	316	357	389	127
35°	168	184	220	272	315	104
45°	63	79	124	190	243	52
55°	31	32	49	111	161	28
65°	14	16	26	41	68	15
75°	7	12	12	11	11	8
85°	4	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°	476.3	476.3	476.3	476.3	476.3
2.5°	470.2	475.7	472.0	473.2	473.8
5°	458.7	465.4	464.2	468.4	473.2
7.5°	442.9	450.8	453.2	461.7	469.6
10°	423.6	433.2	438.7	452.6	462.9
12.5°	402.3	412.6	422.9	441.7	455.7
15°	379.3	390.2	404.8	429.0	446.0
17.5°	355.1	367.2	384.8	413.9	433.9
20°	329.6	342.4	363.6	395.7	419.9
22.5°	303.6	316.9	340.5	376.3	404.8
25°	276.9	290.9	316.3	356.9	389.0
27.5°	249.6	264.2	293.3	336.3	371.4
30°	223.0	236.9	268.4	315.1	352.1
32.5°	195.7	210.3	244.2	293.3	333.3
35°	168.5	183.6	220.0	272.1	315.1
37.5°	140.6	156.9	195.1	251.5	296.9
40°	113.3	129.1	170.9	230.3	278.1
42.5°	86.6	103.6	147.8	209.0	260.6
45°	63.0	78.8	124.2	189.7	243.0
47.5°	47.3	57.0	102.4	171.5	223.6
50°	41.2	43.0	81.8	151.5	203.0
52.5°	35.8	37.0	63.6	129.7	182.4
55°	30.9	32.1	49.1	110.9	160.6
57.5°	26.1	27.3	39.4	92.7	135.7
60°	21.8	23.0	33.9	73.9	112.7
62.5°	18.2	18.8	30.3	56.4	90.3
65°	14.5	15.8	26.1	41.2	68.5
67.5°	12.1	13.3	21.2	28.5	47.9
70°	10.3	13.3	17.6	20.0	29.7
72.5°	8.5	12.1	14.5	13.9	13.9
75°	7.3	11.5	12.1	10.9	10.9
77.5°	6.1	10.3	9.7	9.1	8.5
80°	4.8	8.5	8.5	7.3	6.7
82.5°	4.2	6.7	6.7	6.7	5.5
85°	3.6	6.1	6.1	5.5	4.2
87.5°	2.4	4.8	5.5	4.8	3.0
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	4.72	6.06	5.09	6.38	6.69	13.81	15.15	14.18	15.47	15.78
	3H	5.76	6.95	6.14	7.28	7.64	14.32	15.50	14.70	15.83	16.20
	4H	6.28	7.39	6.68	7.74	8.12	14.33	15.44	14.73	15.79	16.17
	6H	6.73	7.75	7.14	8.12	8.51	14.33	15.35	14.74	15.72	16.11
	8H	6.92	7.88	7.35	8.27	8.68	14.33	15.29	14.76	15.68	16.09
	12H	7.13	8.05	7.56	8.43	8.86	14.33	15.25	14.76	15.63	16.06
4H	2H	5.82	6.93	6.22	7.28	7.66	13.70	14.81	14.11	15.16	15.54
	3H	7.08	7.99	7.50	8.39	8.80	14.28	15.19	14.70	15.59	16.00
	4H	7.79	8.60	8.22	9.02	9.46	14.33	15.14	14.76	15.56	16.00
	6H	8.42	9.12	8.88	9.56	10.03	14.38	15.08	14.85	15.53	15.99
	8H	8.66	9.32	9.13	9.76	10.23	14.40	15.05	14.87	15.50	15.97
	12H	8.94	9.51	9.42	10.00	10.47	14.43	15.01	14.92	15.49	15.97
8H	4H	8.21	8.87	8.68	9.31	9.79	14.28	14.93	14.75	15.38	15.85
	6H	9.09	9.63	9.59	10.12	10.61	14.37	14.91	14.88	15.40	15.89
	8H	9.50	9.98	10.02	10.50	10.99	14.44	14.92	14.96	15.43	15.92
	12H	9.98	10.40	10.49	10.90	11.47	14.54	14.96	15.05	15.46	16.03
12H	4H	8.26	8.84	8.74	9.32	9.79	14.25	14.83	14.74	15.31	15.79
	6H	9.21	9.69	9.73	10.20	10.69	14.35	14.83	14.87	15.35	15.84
	8H	9.72	10.15	10.24	10.65	11.22	14.46	14.89	14.97	15.38	15.95