

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: P1060526

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1060526
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDRP-S575D940-X4F0-XX-UDD-BVL-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

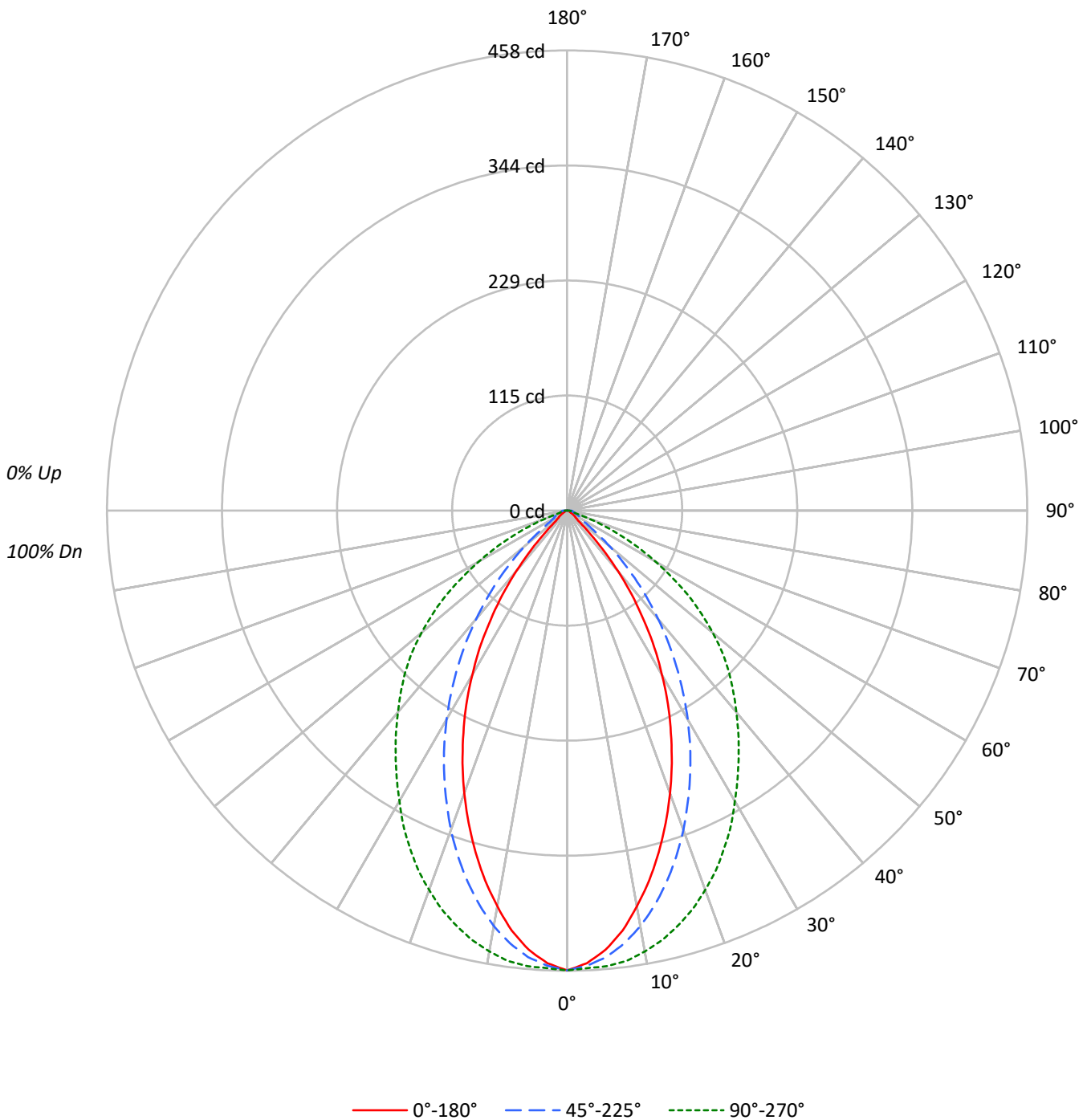
Lumens per Lamp: N/A
Luminaire Lumens: 574.3 lumens
Efficiency: N/A
Efficacy: 29.3 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3940	3940	3940
5°	3793	3856	3935
10°	3498	3672	3895
15°	3139	3409	3809
20°	2744	3099	3682
25°	2320	2753	3518
30°	1874	2386	3320
35°	1395	1994	3128
40°	886	1580	2943
45°	354	1159	2775
50°	154	739	2533
55°	119	383	2211
60°	83	262	1753
65°	61	259	1198
70°	60	229	549
75°	80	243	223
80°	119	273	238
85°	237	474	356

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2775 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.9	7.3
10°-20°	108.0	18.8
20°-30°	136.5	23.8
30°-40°	125.3	21.8
40°-50°	85.5	14.9
50°-60°	46.4	8.1
60°-70°	19.6	3.4
70°-80°	6.8	1.2
80°-90°	4.3	0.7
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°	286.4	49.9
0°-40°	411.7	71.7
0°-60°	543.5	94.6
0°-90°	574.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	574.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	458	458	458	458	458	
5°	439	446	446	450	455	41
15°	352	364	382	410	427	98
25°	244	260	290	335	370	112
35°	133	150	190	249	298	82
45°	29	47	95	168	228	27
55°	8	8	26	93	147	7
65°	3	4	13	29	59	3
75°	2	7	7	7	7	3
85°	2	5	5	5	4	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	457.6	457.6	457.6	457.6	457.6
2.5°	450.9	456.4	453.3	454.6	455.8
5°	438.8	445.5	446.1	449.7	455.2
7.5°	421.8	429.7	434.6	443.6	452.1
10°	400.0	409.7	420.0	434.6	445.5
12.5°	377.0	387.3	402.4	423.0	437.6
15°	352.1	363.6	382.4	409.7	427.3
17.5°	326.1	338.8	361.2	393.3	415.8
20°	299.4	313.3	338.2	374.6	401.8
22.5°	272.1	286.7	313.9	355.2	387.3
25°	244.2	260.0	289.7	334.6	370.3
27.5°	217.6	232.1	264.9	313.9	353.3
30°	188.5	204.9	240.0	292.7	333.9
32.5°	161.8	177.6	214.5	270.9	315.8
35°	132.7	150.3	189.7	249.1	297.6
37.5°	105.5	122.4	165.5	228.5	280.0
40°	78.8	96.4	140.6	207.9	261.8
42.5°	52.7	71.5	117.0	186.7	244.9
45°	29.1	46.7	95.2	168.5	227.9
47.5°	15.2	25.5	74.5	150.3	209.7
50°	11.5	13.9	55.2	130.3	189.1
52.5°	9.7	10.3	37.6	110.3	168.5
55°	7.9	8.5	25.5	92.7	147.3
57.5°	6.1	6.7	18.2	75.8	123.6
60°	4.8	5.5	15.2	58.2	101.8
62.5°	3.6	4.2	14.5	43.0	80.0
65°	3.0	3.6	12.7	29.1	58.8
67.5°	2.4	3.6	10.9	18.8	39.4
70°	2.4	4.8	9.1	12.1	21.8
72.5°	2.4	5.5	7.9	7.9	7.9
75°	2.4	6.7	7.3	6.7	6.7
77.5°	2.4	6.1	6.1	6.1	6.1
80°	2.4	5.5	5.5	5.5	4.8
82.5°	2.4	4.8	5.5	5.5	4.2
85°	2.4	4.8	4.8	4.8	3.6
87.5°	1.8	4.8	4.8	4.8	2.4
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	13.21	14.48	13.57	14.80	15.11
	3H	0.00	0.00	0.00	0.00	0.00	13.56	14.69	13.94	15.02	15.39
	4H	0.00	0.00	0.00	0.00	0.00	13.53	14.58	13.93	14.93	15.31
	6H	0.00	0.43	0.00	0.80	1.19	13.51	14.47	13.92	14.84	15.23
	8H	0.14	1.05	0.57	1.44	1.85	13.49	14.41	13.93	14.80	15.20
	12H	0.93	1.80	1.36	2.18	2.61	13.49	14.36	13.92	14.75	15.18
4H	2H	0.00	0.00	0.00	0.31	0.69	13.01	14.06	13.41	14.41	14.80
	3H	0.32	1.18	0.73	1.58	1.98	13.41	14.26	13.82	14.67	15.07
	4H	1.78	2.54	2.22	2.96	3.41	13.39	14.15	13.82	14.57	15.01
	6H	3.03	3.69	3.49	4.14	4.60	13.41	14.06	13.87	14.51	14.98
	8H	3.59	4.20	4.06	4.65	5.12	13.41	14.03	13.88	14.48	14.95
	12H	4.25	4.79	4.74	5.28	5.75	13.45	13.99	13.94	14.48	14.95
8H	4H	2.86	3.48	3.33	3.93	4.40	13.29	13.90	13.76	14.35	14.82
	6H	4.48	4.98	4.98	5.48	5.96	13.34	13.84	13.84	14.34	14.82
	8H	5.30	5.75	5.82	6.27	6.76	13.40	13.85	13.92	14.36	14.86
	12H	6.25	6.65	6.76	7.14	7.71	13.51	13.91	14.03	14.40	14.98
12H	4H	3.06	3.60	3.54	4.08	4.56	13.25	13.79	13.74	14.28	14.75
	6H	4.83	5.28	5.35	5.80	6.29	13.31	13.76	13.83	14.28	14.77
	8H	5.84	6.23	6.35	6.73	7.30	13.41	13.81	13.93	14.31	14.88