

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: P1059074

Luminaire Tested: S123RDRP-S1000D940-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059074
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDRP-S1000D940-X4F0-XX-UDD-WVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

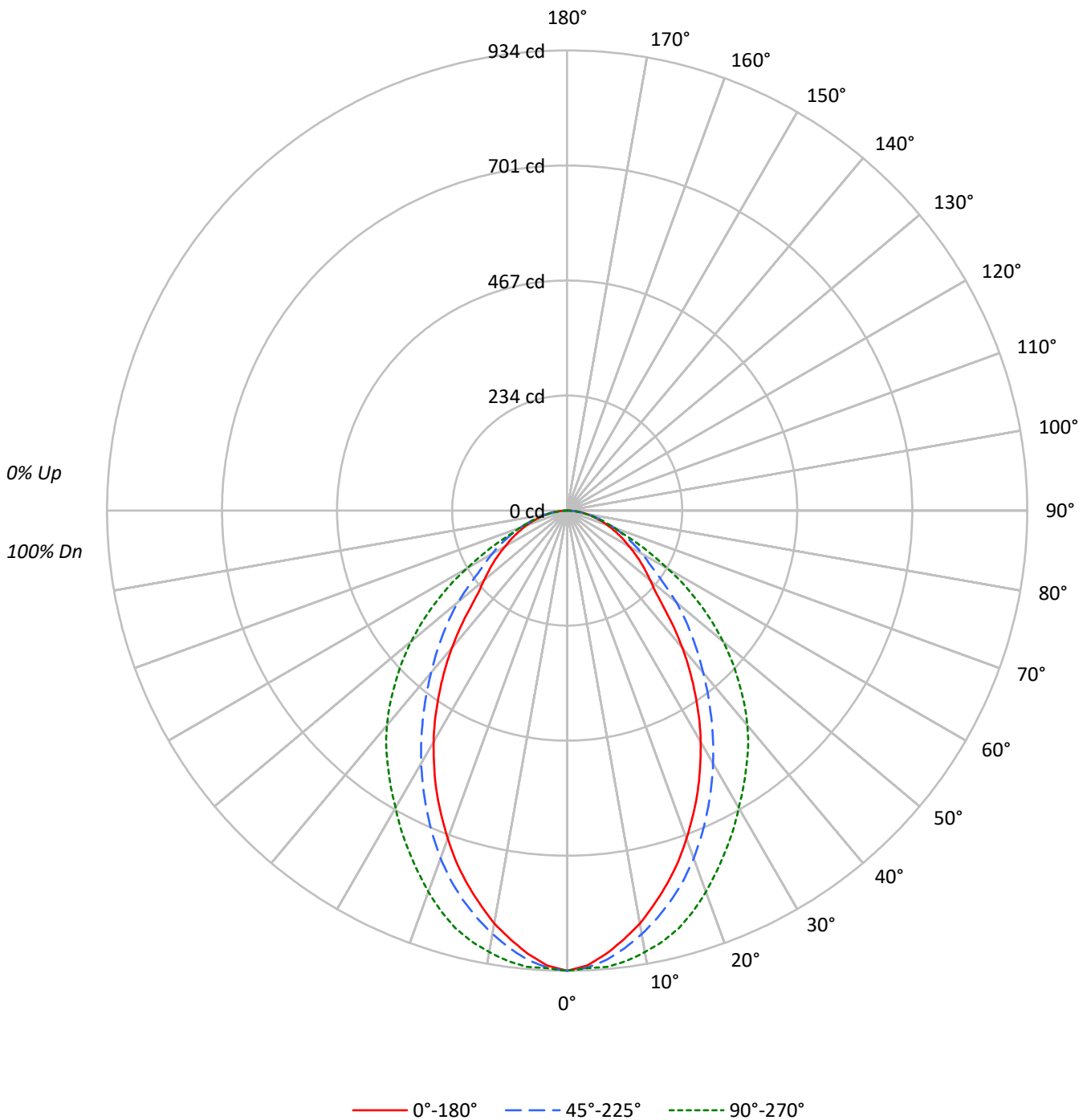
Lumens per Lamp: N/A
Luminaire Lumens: 1687.3 lumens
Efficiency: N/A
Efficacy: 48.2 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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

TEST NUMBER: P1059074

CATALOG NUMBER: S123RDRP-S1000D940-X4F0-XX-UDD-WVL-S

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	78	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	66	59	54	64	58	53	62	57	53	51													51															
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45													45															
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41													41															
8	65	53	45	39	64	52	45	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	36	45	39	35	34													34															
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31													31															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10969	10969	10969
5°	10649	10791	10959
10°	10146	10407	10850
15°	9532	9944	10664
20°	8853	9387	10290
25°	8130	8726	9861
30°	7350	8032	9444
35°	6484	7299	9088
40°	5574	6581	8728
45°	4583	5928	8184
50°	4021	5281	7541
55°	3722	4506	6680
60°	3419	4140	5528
65°	3195	3804	4351
70°	3008	3457	3457
75°	2831	3180	2981
80°	2664	2887	2516
85°	2506	2802	1913

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8184 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.4	5.1
10°-20°	231.5	13.7
20°-30°	313.9	18.6
30°-40°	328.2	19.5
40°-50°	284.7	16.9
50°-60°	211.8	12.6
60°-70°	135.9	8.1
70°-80°	72.9	4.3
80°-90°	22.0	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°	631.9	37.4
0°-40°	960.1	56.9
0°-60°	1456.6	86.3
0°-90°	1687.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1687.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	934	934	934	934	934	
5°	903	919	916	922	930	85
15°	784	803	818	851	877	220
25°	628	647	674	718	761	288
35°	452	474	509	574	634	282
45°	276	297	357	434	493	217
55°	182	186	220	282	326	163
65°	115	125	137	146	157	114
75°	62	72	70	67	66	66
85°	19	23	21	18	14	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	934.1	934.1	934.1	934.1	934.1
2.5°	924.2	937.4	928.6	928.6	929.7
5°	903.4	918.8	915.5	922.1	929.7
7.5°	878.2	894.7	895.8	911.1	922.1
10°	850.9	867.3	872.8	894.7	910.0
12.5°	818.0	836.6	846.5	873.9	895.8
15°	784.1	802.7	818.0	850.9	877.2
17.5°	747.9	766.6	786.3	823.5	852.0
20°	708.5	728.2	751.2	788.5	823.5
22.5°	668.0	688.8	712.9	753.4	792.8
25°	627.5	647.2	673.5	718.4	761.1
27.5°	584.8	605.6	633.0	682.2	730.4
30°	542.1	562.9	592.4	645.0	696.5
32.5°	498.3	519.1	550.8	610.0	665.8
35°	452.3	474.2	509.2	573.8	634.0
37.5°	408.5	429.3	468.7	539.9	603.4
40°	363.6	385.5	429.3	505.9	569.4
42.5°	319.8	341.7	393.1	469.8	532.2
45°	276.0	296.8	357.0	433.6	492.8
47.5°	242.0	257.3	323.0	395.3	454.5
50°	220.1	225.6	289.1	358.1	412.8
52.5°	200.4	204.8	251.9	320.9	370.1
55°	181.8	186.2	220.1	282.5	326.3
57.5°	163.2	168.6	196.0	243.1	282.5
60°	145.6	152.2	176.3	208.1	235.4
62.5°	130.3	138.0	156.6	176.3	194.9
65°	115.0	124.8	136.9	145.6	156.6
67.5°	100.7	111.7	118.3	120.5	121.6
70°	87.6	98.6	100.7	100.7	100.7
72.5°	74.5	86.5	84.3	83.2	82.1
75°	62.4	72.3	70.1	66.8	65.7
77.5°	50.4	59.1	55.8	53.7	50.4
80°	39.4	46.0	42.7	40.5	37.2
82.5°	29.6	33.9	30.7	28.5	25.2
85°	18.6	23.0	20.8	17.5	14.2
87.5°	9.9	13.1	11.0	9.9	5.5
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	15.11	16.59	15.47	16.90	17.22	17.86	19.35	18.23	19.66	19.97
	3H	16.82	18.15	17.19	18.47	18.84	18.88	20.21	19.26	20.54	20.90
	4H	17.48	18.72	17.88	19.07	19.45	19.25	20.49	19.65	20.84	21.22
	6H	17.98	19.13	18.39	19.49	19.89	19.50	20.65	19.92	21.02	21.41
	8H	18.16	19.25	18.58	19.64	20.04	19.57	20.67	20.00	21.06	21.46
	12H	18.28	19.33	18.71	19.71	20.14	19.61	20.66	20.04	21.04	21.47
4H	2H	15.88	17.13	16.28	17.48	17.86	18.13	19.38	18.53	19.73	20.11
	3H	17.81	18.84	18.22	19.24	19.64	19.39	20.42	19.80	20.82	21.22
	4H	18.62	19.55	19.05	19.96	20.40	19.88	20.80	20.31	21.22	21.66
	6H	19.26	20.07	19.72	20.51	20.97	20.26	21.06	20.71	21.51	21.97
	8H	19.49	20.24	19.95	20.69	21.15	20.37	21.12	20.83	21.57	22.04
	12H	19.66	20.33	20.14	20.81	21.28	20.44	21.11	20.92	21.59	22.06
8H	4H	18.94	19.69	19.40	20.14	20.61	20.07	20.82	20.53	21.27	21.73
	6H	19.73	20.35	20.23	20.85	21.32	20.55	21.18	21.05	21.67	22.15
	8H	20.06	20.62	20.57	21.13	21.62	20.73	21.29	21.25	21.80	22.29
	12H	20.34	20.83	20.85	21.32	21.89	20.86	21.36	21.37	21.85	22.42
12H	4H	18.96	19.64	19.44	20.12	20.59	20.08	20.76	20.56	21.23	21.71
	6H	19.78	20.35	20.30	20.86	21.34	20.59	21.15	21.11	21.66	22.15
	8H	20.18	20.67	20.69	21.17	21.73	20.82	21.32	21.33	21.81	22.38