

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1059449

Luminaire Tested: S123RDR-H1000D927-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059449
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-H1000D927-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

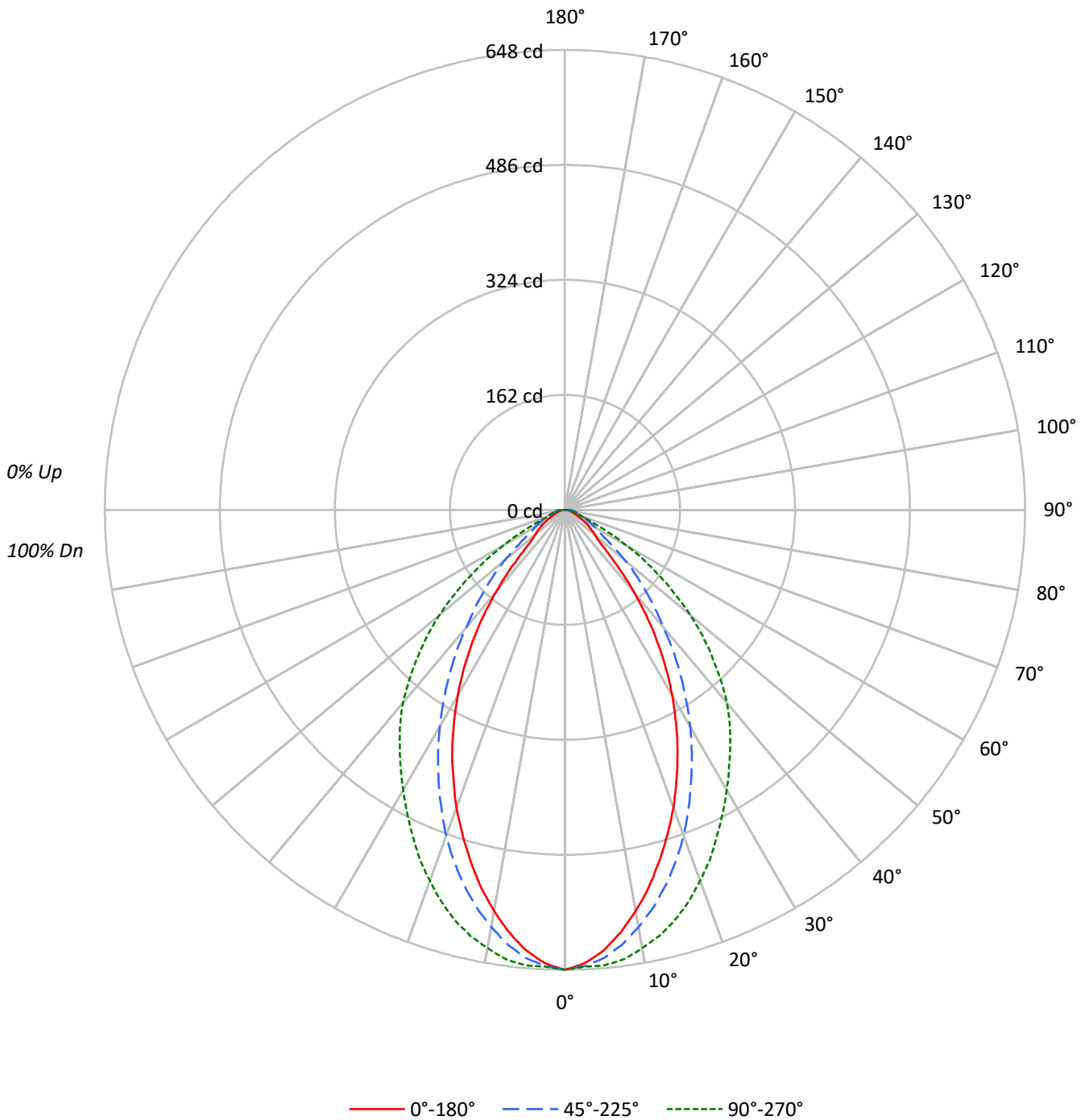
Lumens per Lamp: N/A
Luminaire Lumens: 867.7 lumens
Efficiency: N/A
Efficacy: 27.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (Ain): 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	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	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79			79	
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71			71	
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64			64	
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58			58	
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52			52	
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48			48	
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44			44	
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40			40	
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37			37	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7608	7608	7608
5°	7347	7470	7592
10°	6845	7116	7477
15°	6233	6658	7278
20°	5579	6111	6950
25°	4865	5453	6569
30°	4091	4784	6182
35°	3254	4054	5817
40°	2319	3306	5437
45°	1382	2655	4869
50°	1019	2022	4216
55°	852	1376	3349
60°	688	1132	2356
65°	553	972	1261
70°	453	845	779
75°	431	817	730
80°	446	893	703
85°	633	1280	889

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 4869 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.5	6.9
10°-20°	154.6	17.8
20°-30°	197.2	22.7
30°-40°	185.6	21.4
40°-50°	133.3	15.4
50°-60°	76.4	8.8
60°-70°	34.9	4.0
70°-80°	17.6	2.0
80°-90°	8.6	1.0
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°	411.3	47.4
0°-40°	596.9	68.8
0°-60°	806.7	93.0
0°-90°	867.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	867.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	648	648	648	648	648	
5°	623	636	634	638	644	58
15°	513	531	548	577	599	143
25°	376	392	421	466	507	171
35°	227	243	283	347	406	141
45°	83	101	160	236	293	70
55°	42	43	67	124	164	37
65°	20	27	35	39	45	20
75°	10	19	18	16	16	10
85°	5	10	10	8	7	5
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	647.9	647.9	647.9	647.9	647.9
2.5°	639.4	648.9	643.2	643.2	644.1
5°	623.3	635.6	633.7	638.5	644.1
7.5°	600.6	613.9	617.7	629.0	638.5
10°	574.1	589.3	596.8	614.8	627.1
12.5°	544.8	561.8	574.1	596.8	614.8
15°	512.7	530.6	547.7	577.0	598.7
17.5°	479.6	497.5	519.3	553.3	578.9
20°	446.5	464.4	489.0	525.0	556.2
22.5°	410.5	428.5	455.0	495.6	533.5
25°	375.5	392.5	420.9	466.3	507.0
27.5°	338.6	355.6	386.9	436.0	481.4
30°	301.7	318.8	352.8	405.8	455.9
32.5°	264.8	280.9	317.8	376.5	430.4
35°	227.0	243.1	282.8	347.1	405.8
37.5°	188.2	204.3	250.7	320.7	381.2
40°	151.3	169.3	215.7	294.2	354.7
42.5°	115.4	134.3	187.3	265.8	324.4
45°	83.2	101.2	159.9	235.5	293.2
47.5°	63.4	72.8	135.3	205.3	263.0
50°	55.8	56.8	110.7	177.8	230.8
52.5°	48.2	49.2	86.1	151.3	196.7
55°	41.6	42.6	67.2	123.9	163.6
57.5°	35.0	36.9	54.9	98.4	131.5
60°	29.3	33.1	48.2	74.7	100.3
62.5°	23.6	30.3	41.6	54.9	71.9
65°	19.9	27.4	35.0	38.8	45.4
67.5°	16.1	25.5	29.3	27.4	27.4
70°	13.2	22.7	24.6	22.7	22.7
72.5°	11.4	21.8	20.8	18.9	18.9
75°	9.5	18.9	18.0	16.1	16.1
77.5°	8.5	16.1	15.1	14.2	13.2
80°	6.6	13.2	13.2	12.3	10.4
82.5°	5.7	11.4	11.4	10.4	8.5
85°	4.7	9.5	9.5	8.5	6.6
87.5°	3.8	8.5	8.5	7.6	4.7
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	7.04	8.35	7.40	8.67	8.98	14.26	15.58	14.62	15.89	16.21
	3H	8.43	9.60	8.81	9.93	10.30	14.49	15.66	14.87	15.99	16.36
	4H	9.00	10.09	9.40	10.44	10.82	14.60	15.69	15.00	16.04	16.43
	6H	9.46	10.46	9.87	10.83	11.22	14.71	15.71	15.12	16.08	16.47
	8H	9.64	10.59	10.07	10.98	11.39	14.76	15.71	15.19	16.10	16.50
	12H	9.83	10.74	10.27	11.12	11.55	14.81	15.71	15.24	16.10	16.53
4H	2H	8.11	9.20	8.51	9.55	9.93	14.22	15.31	14.62	15.66	16.04
	3H	9.80	10.69	10.21	11.09	11.50	14.59	15.48	15.00	15.88	16.29
	4H	10.63	11.43	11.07	11.85	12.29	14.77	15.57	15.21	15.99	16.43
	6H	11.29	11.98	11.75	12.43	12.89	14.99	15.69	15.46	16.13	16.60
	8H	11.55	12.19	12.01	12.64	13.11	15.09	15.74	15.56	16.19	16.66
	12H	11.80	12.37	12.29	12.86	13.33	15.21	15.78	15.70	16.26	16.74
8H	4H	11.07	11.71	11.54	12.16	12.63	14.82	15.46	15.29	15.91	16.38
	6H	12.02	12.55	12.52	13.04	13.52	15.15	15.68	15.65	16.17	16.66
	8H	12.48	12.96	13.01	13.48	13.97	15.34	15.82	15.86	16.33	16.82
	12H	12.97	13.39	13.48	13.88	14.45	15.57	15.99	16.08	16.49	17.06
12H	4H	11.13	11.70	11.61	12.18	12.66	14.81	15.38	15.30	15.86	16.34
	6H	12.16	12.64	12.69	13.16	13.65	15.18	15.65	15.70	16.17	16.66
	8H	12.76	13.18	13.28	13.68	14.25	15.44	15.86	15.95	16.35	16.92