

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: P1059450

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059450
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
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-W
Description: DEFINE 3 WHITE 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

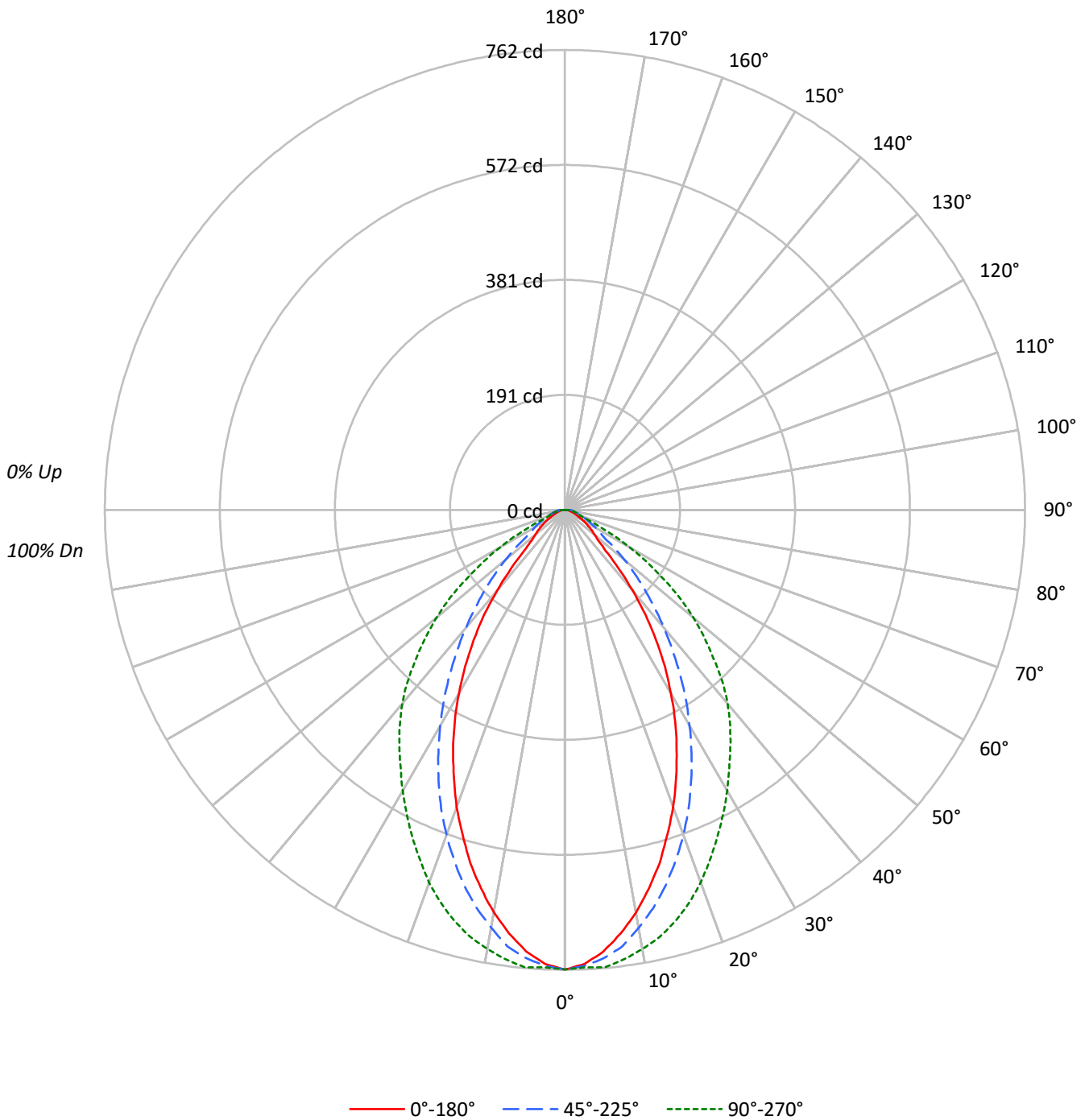
Lumens per Lamp: N/A
Luminaire Lumens: 1022.4 lumens
Efficiency: N/A
Efficacy: 32.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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				
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89				
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79				
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71				
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	66	64				
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	58				
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52				
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48				
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44				
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40				
10	62	51	44	39	61	50	44	39	49	43	39	49	43	39	48	43	39	37				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8943	8943	8943
5°	8654	8787	8967
10°	8077	8382	8810
15°	7361	7833	8580
20°	6549	7164	8216
25°	5675	6411	7747
30°	4759	5593	7287
35°	3770	4761	6849
40°	2669	3915	6424
45°	1571	3095	5782
50°	1175	2351	5064
55°	989	1589	4068
60°	801	1355	2889
65°	631	1156	1525
70°	553	1006	941
75°	517	944	903
80°	514	1021	893
85°	633	1536	1145

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5782 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.1	6.9
10°-20°	182.2	17.8
20°-30°	232.0	22.7
30°-40°	218.2	21.3
40°-50°	157.2	15.4
50°-60°	90.8	8.9
60°-70°	41.5	4.1
70°-80°	20.7	2.0
80°-90°	9.8	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°	484.2	47.4
0°-40°	702.5	68.7
0°-60°	950.4	93.0
0°-90°	1022.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1022.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	762	762	762	762	762	
5°	734	746	746	753	761	68
15°	606	627	644	680	706	169
25°	438	461	495	550	598	200
35°	263	286	332	409	478	163
45°	95	118	186	280	348	80
55°	48	50	78	148	199	43
65°	23	32	42	46	55	23
75°	11	22	21	20	20	12
85°	5	10	11	10	8	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	761.6	761.6	761.6	761.6	761.6
2.5°	753.1	762.6	755.9	756.9	758.8
5°	734.2	746.5	745.5	753.1	760.7
7.5°	707.7	721.9	729.4	740.8	751.2
10°	677.4	693.5	703.0	723.8	738.9
12.5°	642.4	663.2	675.5	703.0	724.7
15°	605.5	627.3	644.3	680.2	705.8
17.5°	563.9	587.5	609.3	651.9	683.1
20°	524.1	546.8	573.3	619.7	657.5
22.5°	480.6	505.2	535.5	584.7	627.3
25°	438.0	460.8	494.8	549.7	597.9
27.5°	395.5	418.2	454.1	514.7	567.7
30°	351.0	374.7	412.5	479.7	537.4
32.5°	307.5	330.2	372.8	445.6	506.2
35°	263.0	285.7	332.1	408.7	477.8
37.5°	219.5	243.1	292.3	378.4	449.4
40°	174.1	199.6	255.4	347.2	419.1
42.5°	131.5	158.9	218.5	315.1	386.0
45°	94.6	118.3	186.4	280.0	348.2
47.5°	73.8	86.1	157.1	244.1	313.2
50°	64.3	66.2	128.7	211.0	277.2
52.5°	55.8	57.7	101.2	179.8	239.4
55°	48.3	50.1	77.6	147.6	198.7
57.5°	40.7	43.5	64.3	117.3	159.9
60°	34.1	37.8	57.7	89.9	123.0
62.5°	27.4	34.1	49.2	66.2	88.0
65°	22.7	32.2	41.6	46.4	54.9
67.5°	18.9	29.3	35.0	33.1	32.2
70°	16.1	26.5	29.3	26.5	27.4
72.5°	13.2	24.6	24.6	22.7	22.7
75°	11.4	21.8	20.8	19.9	19.9
77.5°	9.5	18.9	18.0	17.0	16.1
80°	7.6	15.1	15.1	14.2	13.2
82.5°	6.6	12.3	12.3	12.3	10.4
85°	4.7	10.4	11.4	10.4	8.5
87.5°	3.8	9.5	9.5	8.5	5.7
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	7.58	8.90	7.95	9.21	9.53	14.94	16.26	15.31	16.58	16.89
	3H	8.97	10.14	9.35	10.47	10.83	15.18	16.35	15.55	16.68	17.04
	4H	9.52	10.61	9.93	10.96	11.35	15.29	16.38	15.69	16.73	17.12
	6H	9.96	10.96	10.37	11.33	11.73	15.40	16.41	15.82	16.78	17.17
	8H	10.14	11.09	10.57	11.48	11.88	15.46	16.41	15.89	16.80	17.20
	12H	10.29	11.20	10.72	11.58	12.01	15.52	16.42	15.95	16.81	17.24
4H	2H	8.68	9.77	9.08	10.12	10.50	14.90	15.99	15.31	16.34	16.73
	3H	10.34	11.24	10.76	11.64	12.04	15.26	16.16	15.68	16.56	16.96
	4H	11.16	11.95	11.59	12.37	12.82	15.46	16.26	15.90	16.68	17.12
	6H	11.79	12.48	12.25	12.93	13.39	15.69	16.38	16.15	16.82	17.29
	8H	12.03	12.67	12.49	13.12	13.59	15.79	16.44	16.26	16.88	17.35
	12H	12.24	12.81	12.72	13.29	13.77	15.92	16.49	16.41	16.97	17.45
8H	4H	11.60	12.24	12.07	12.69	13.16	15.50	16.14	15.97	16.59	17.06
	6H	12.51	13.04	13.01	13.53	14.01	15.83	16.36	16.33	16.85	17.33
	8H	12.93	13.40	13.45	13.92	14.41	16.02	16.49	16.54	17.01	17.50
	12H	13.34	13.76	13.86	14.26	14.83	16.26	16.69	16.78	17.18	17.75
12H	4H	11.65	12.23	12.14	12.71	13.18	15.49	16.06	15.97	16.54	17.02
	6H	12.64	13.12	13.16	13.63	14.13	15.84	16.32	16.36	16.83	17.33
	8H	13.18	13.60	13.69	14.10	14.67	16.10	16.52	16.61	17.02	17.59