

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: P1059620

Luminaire Tested: S123RDR-H340D930-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059620
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-H340D930-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

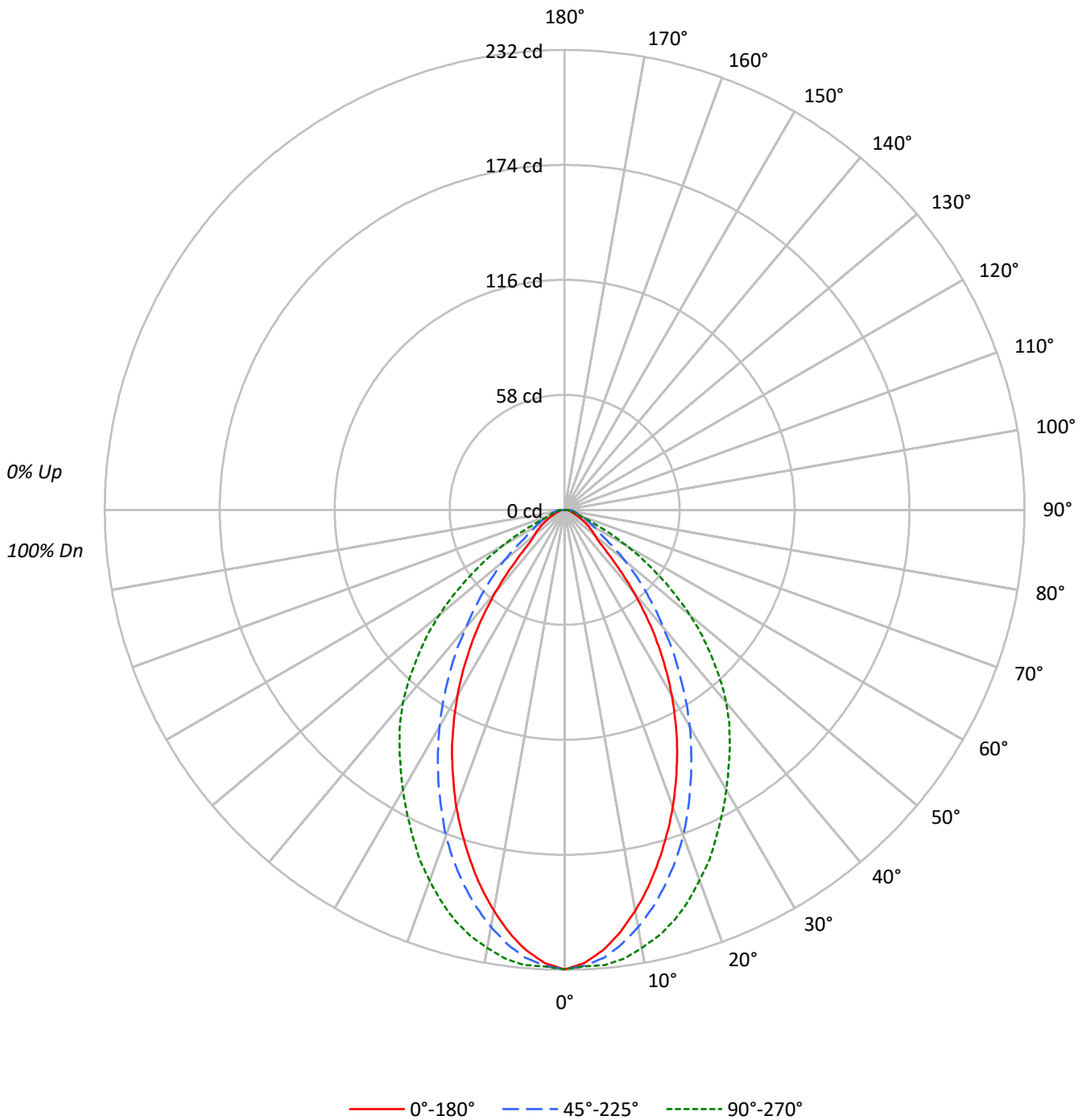
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 310.5 lumens
Efficiency: N/A
Efficacy: 26.5 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): 11.7
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	101	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	91	81	74	69	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	61	69	64	60	68	63	59	58				
6	79	68	61	56	78	67	60	55	66	60	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	59	51	46	69	58	51	46	57	50	46	56	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	50	43	39	49	43	39	48	43	39	37				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2722	2722	2722
5°	2629	2673	2717
10°	2449	2547	2676
15°	2230	2383	2604
20°	1996	2187	2487
25°	1741	1951	2350
30°	1464	1711	2211
35°	1164	1451	2081
40°	831	1183	1945
45°	495	950	1742
50°	365	723	1509
55°	305	491	1200
60°	247	406	843
65°	197	347	450
70°	161	302	278
75°	154	290	263
80°	162	318	250
85°	229	458	323

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 1742 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.3	6.9
10°-20°	55.3	17.8
20°-30°	70.6	22.7
30°-40°	66.4	21.4
40°-50°	47.7	15.4
50°-60°	27.3	8.8
60°-70°	12.5	4.0
70°-80°	6.3	2.0
80°-90°	3.1	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°	147.2	47.4
0°-40°	213.6	68.8
0°-60°	288.6	93.0
0°-90°	310.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	310.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	232	232	232	232	232	
5°	223	227	227	228	230	21
15°	183	190	196	206	214	51
25°	134	140	151	167	181	61
35°	81	87	101	124	145	50
45°	30	36	57	84	105	25
55°	15	15	24	44	59	13
65°	7	10	12	14	16	7
75°	3	7	6	6	6	4
85°	2	3	3	3	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	231.8	231.8	231.8	231.8	231.8
2.5°	228.8	232.2	230.1	230.1	230.5
5°	223.0	227.4	226.8	228.5	230.5
7.5°	214.9	219.7	221.0	225.1	228.5
10°	205.4	210.9	213.6	220.0	224.4
12.5°	194.9	201.0	205.4	213.6	220.0
15°	183.4	189.9	196.0	206.5	214.2
17.5°	171.6	178.0	185.8	198.0	207.1
20°	159.7	166.2	175.0	187.8	199.0
22.5°	146.9	153.3	162.8	177.3	190.9
25°	134.4	140.5	150.6	166.9	181.4
27.5°	121.2	127.3	138.4	156.0	172.3
30°	108.0	114.1	126.2	145.2	163.1
32.5°	94.8	100.5	113.7	134.7	154.0
35°	81.2	87.0	101.2	124.2	145.2
37.5°	67.4	73.1	89.7	114.7	136.4
40°	54.2	60.6	77.2	105.3	126.9
42.5°	41.3	48.1	67.0	95.1	116.1
45°	29.8	36.2	57.2	84.3	104.9
47.5°	22.7	26.1	48.4	73.4	94.1
50°	20.0	20.3	39.6	63.6	82.6
52.5°	17.3	17.6	30.8	54.2	70.4
55°	14.9	15.2	24.0	44.3	58.6
57.5°	12.5	13.2	19.6	35.2	47.0
60°	10.5	11.8	17.3	26.7	35.9
62.5°	8.5	10.8	14.9	19.6	25.7
65°	7.1	9.8	12.5	13.9	16.2
67.5°	5.8	9.1	10.5	9.8	9.8
70°	4.7	8.1	8.8	8.1	8.1
72.5°	4.1	7.8	7.4	6.8	6.8
75°	3.4	6.8	6.4	5.8	5.8
77.5°	3.0	5.8	5.4	5.1	4.7
80°	2.4	4.7	4.7	4.4	3.7
82.5°	2.0	4.1	4.1	3.7	3.0
85°	1.7	3.4	3.4	3.0	2.4
87.5°	1.4	3.0	3.0	2.7	1.7
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	3.46	4.78	3.83	5.09	5.41	10.69	12.00	11.05	12.32	12.63
	3H	4.86	6.03	5.24	6.36	6.72	10.92	12.09	11.30	12.42	12.78
	4H	5.43	6.52	5.83	6.87	7.25	11.03	12.12	11.43	12.47	12.85
	6H	5.88	6.89	6.30	7.26	7.65	11.14	12.14	11.55	12.51	12.90
	8H	6.07	7.02	6.50	7.41	7.81	11.18	12.13	11.61	12.52	12.93
	12H	6.26	7.17	6.69	7.55	7.98	11.23	12.14	11.67	12.52	12.95
4H	2H	4.53	5.62	4.94	5.97	6.36	10.65	11.74	11.05	12.09	12.47
	3H	6.22	7.11	6.63	7.52	7.92	11.01	11.91	11.43	12.31	12.71
	4H	7.06	7.86	7.50	8.28	8.72	11.20	12.00	11.64	12.42	12.86
	6H	7.72	8.41	8.18	8.86	9.32	11.42	12.11	11.88	12.56	13.03
	8H	7.97	8.62	8.44	9.07	9.54	11.52	12.17	11.99	12.61	13.08
	12H	8.23	8.80	8.72	9.29	9.76	11.64	12.21	12.12	12.69	13.16
8H	4H	7.50	8.14	7.97	8.59	9.06	11.24	11.89	11.71	12.34	12.81
	6H	8.45	8.97	8.95	9.47	9.95	11.58	12.11	12.08	12.60	13.08
	8H	8.91	9.39	9.43	9.91	10.40	11.76	12.24	12.28	12.75	13.25
	12H	9.40	9.82	9.91	10.31	10.88	11.99	12.42	12.51	12.91	13.48
12H	4H	7.56	8.13	8.04	8.61	9.08	11.24	11.81	11.72	12.29	12.77
	6H	8.59	9.07	9.11	9.59	10.08	11.60	12.08	12.12	12.59	13.09
	8H	9.19	9.61	9.71	10.11	10.68	11.86	12.28	12.37	12.78	13.35