

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: P1059179

Luminaire Tested: S123RDRP-S340D835-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059179
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: S123RDRP-S340D835-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

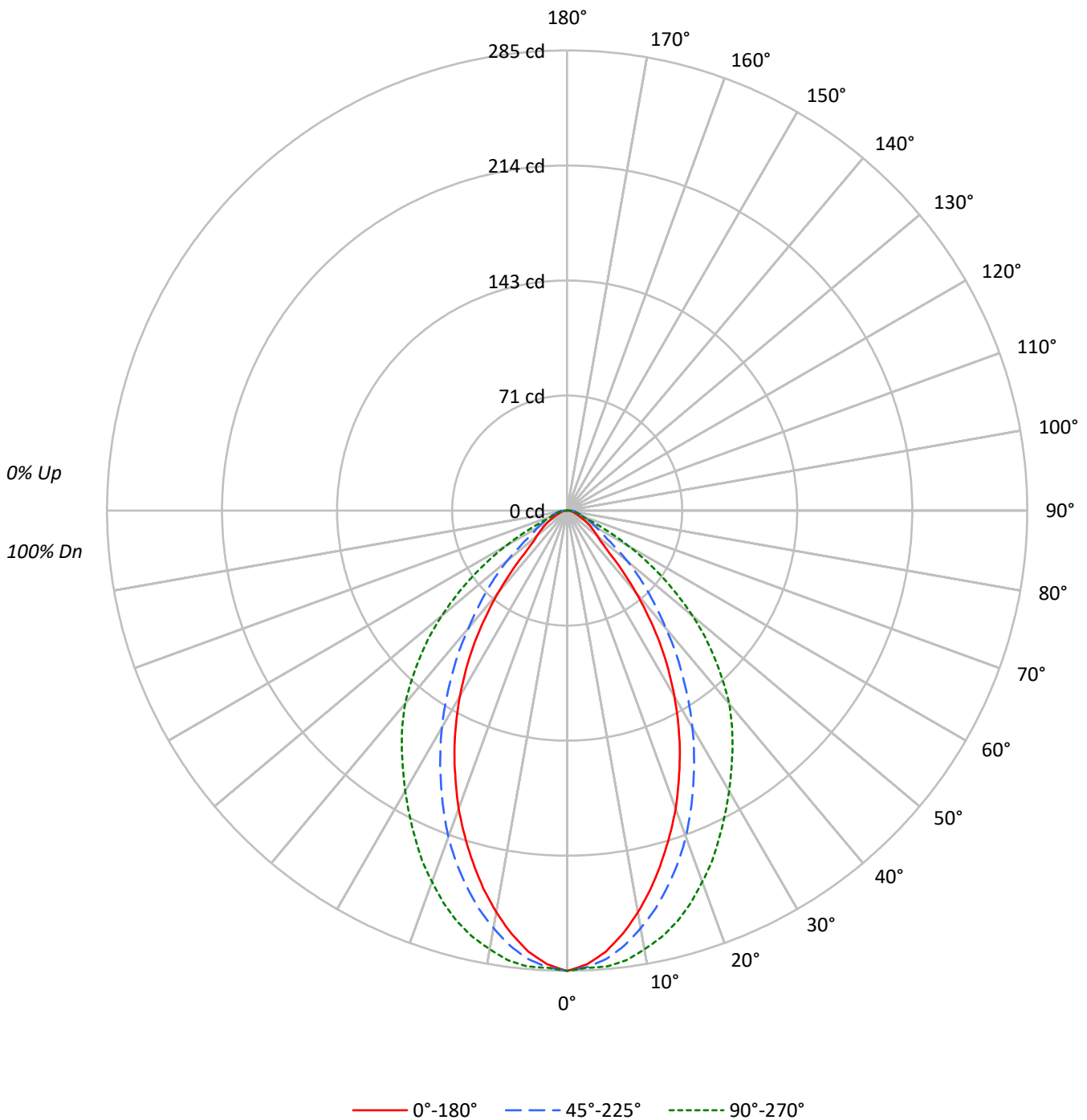
Lumens per Lamp: N/A
Luminaire Lumens: 381.7 lumens
Efficiency: N/A
Efficacy: 30.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3348	3348	3348
5°	3232	3286	3341
10°	3012	3131	3290
15°	2743	2929	3202
20°	2454	2688	3058
25°	2140	2400	2891
30°	1801	2104	2720
35°	1432	1783	2559
40°	1021	1455	2393
45°	608	1167	2142
50°	449	890	1854
55°	375	604	1474
60°	303	498	1036
65°	242	428	556
70°	199	371	343
75°	191	358	322
80°	196	392	311
85°	283	566	391

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2142 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.2	6.9
10°-20°	68.0	17.8
20°-30°	86.8	22.7
30°-40°	81.6	21.4
40°-50°	58.6	15.4
50°-60°	33.6	8.8
60°-70°	15.4	4.0
70°-80°	7.7	2.0
80°-90°	3.8	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°	181.0	47.4
0°-40°	262.6	68.8
0°-60°	354.9	93.0
0°-90°	381.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	381.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	285	285	285	285	285	
5°	274	280	279	281	283	25
15°	226	234	241	254	263	63
25°	165	173	185	205	223	75
35°	100	107	124	153	178	62
45°	37	44	70	104	129	31
55°	18	19	30	54	72	16
65°	9	12	15	17	20	9
75°	4	8	8	7	7	5
85°	2	4	4	4	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	285.1	285.1	285.1	285.1	285.1
2.5°	281.3	285.5	283.0	283.0	283.4
5°	274.2	279.7	278.8	280.9	283.4
7.5°	264.3	270.1	271.7	276.7	280.9
10°	252.6	259.3	262.6	270.5	275.9
12.5°	239.7	247.2	252.6	262.6	270.5
15°	225.6	233.5	240.9	253.8	263.4
17.5°	211.0	218.9	228.5	243.4	254.7
20°	196.4	204.3	215.1	231.0	244.7
22.5°	180.6	188.5	200.2	218.1	234.7
25°	165.2	172.7	185.2	205.2	223.1
27.5°	149.0	156.5	170.2	191.8	211.8
30°	132.8	140.2	155.2	178.5	200.6
32.5°	116.5	123.6	139.8	165.6	189.3
35°	99.9	106.9	124.4	152.7	178.5
37.5°	82.8	89.9	110.3	141.1	167.7
40°	66.6	74.5	94.9	129.4	156.1
42.5°	50.8	59.1	82.4	116.9	142.7
45°	36.6	44.5	70.3	103.6	129.0
47.5°	27.9	32.0	59.5	90.3	115.7
50°	24.6	25.0	48.7	78.2	101.5
52.5°	21.2	21.6	37.9	66.6	86.6
55°	18.3	18.7	29.5	54.5	72.0
57.5°	15.4	16.2	24.1	43.3	57.8
60°	12.9	14.6	21.2	32.9	44.1
62.5°	10.4	13.3	18.3	24.1	31.6
65°	8.7	12.1	15.4	17.1	20.0
67.5°	7.1	11.2	12.9	12.1	12.1
70°	5.8	10.0	10.8	10.0	10.0
72.5°	5.0	9.6	9.2	8.3	8.3
75°	4.2	8.3	7.9	7.1	7.1
77.5°	3.7	7.1	6.7	6.2	5.8
80°	2.9	5.8	5.8	5.4	4.6
82.5°	2.5	5.0	5.0	4.6	3.7
85°	2.1	4.2	4.2	3.7	2.9
87.5°	1.7	3.7	3.7	3.3	2.1
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	4.17	5.49	4.54	5.80	6.12	11.41	12.72	11.77	13.04	13.35
	3H	5.58	6.74	5.95	7.07	7.44	11.64	12.81	12.02	13.14	13.51
	4H	6.14	7.23	6.54	7.58	7.96	11.75	12.84	12.15	13.19	13.58
	6H	6.60	7.60	7.01	7.97	8.36	11.86	12.86	12.27	13.23	13.62
	8H	6.78	7.73	7.21	8.12	8.53	11.90	12.85	12.33	13.24	13.65
	12H	6.98	7.88	7.41	8.27	8.70	11.95	12.86	12.39	13.24	13.67
4H	2H	5.25	6.34	5.65	6.69	7.07	11.37	12.46	11.77	12.81	13.19
	3H	6.94	7.84	7.36	8.24	8.64	11.74	12.63	12.15	13.03	13.44
	4H	7.78	8.58	8.21	8.99	9.44	11.92	12.72	12.36	13.14	13.58
	6H	8.43	9.12	8.89	9.57	10.04	12.14	12.83	12.61	13.28	13.75
	8H	8.69	9.33	9.16	9.78	10.25	12.24	12.89	12.71	13.33	13.81
	12H	8.95	9.52	9.43	10.00	10.48	12.36	12.93	12.84	13.41	13.89
8H	4H	8.21	8.86	8.68	9.31	9.78	11.97	12.61	12.44	13.06	13.53
	6H	9.16	9.69	9.66	10.19	10.67	12.30	12.83	12.80	13.32	13.80
	8H	9.63	10.10	10.15	10.62	11.11	12.49	12.96	13.01	13.48	13.97
	12H	10.11	10.54	10.63	11.03	11.60	12.72	13.14	13.23	13.63	14.20
12H	4H	8.27	8.85	8.76	9.33	9.80	11.96	12.53	12.45	13.01	13.49
	6H	9.31	9.79	9.83	10.30	10.79	12.32	12.80	12.85	13.32	13.81
	8H	9.90	10.33	10.42	10.82	11.39	12.58	13.01	13.10	13.50	14.07