

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: P1059170

Luminaire Tested: S123RDRP-S340D830-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
Report Number: P1059170
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-S340D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

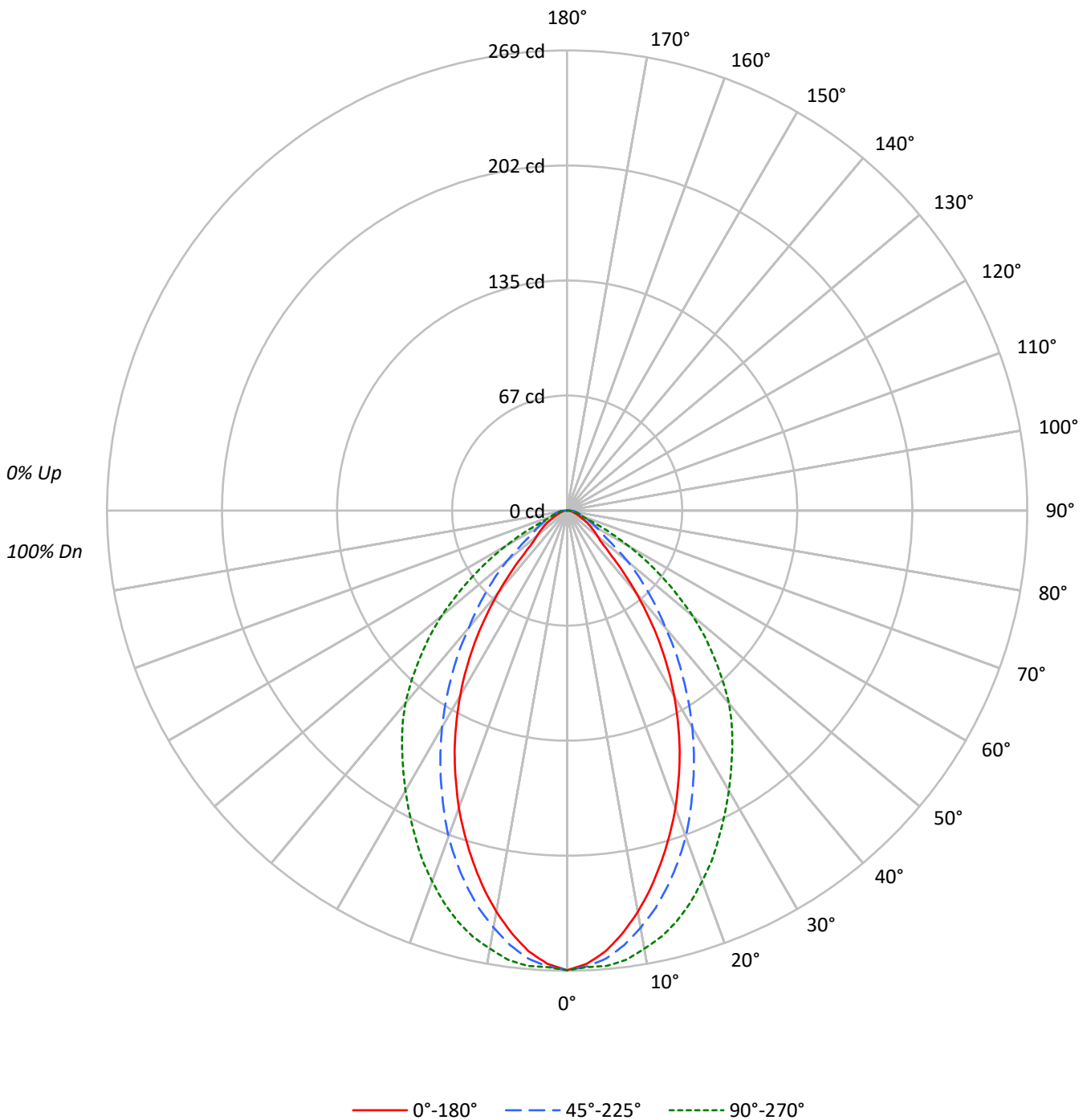
Lumens per Lamp: N/A
Luminaire Lumens: 359.8 lumens
Efficiency: N/A
Efficacy: 28.8 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	0		
RW	70	50	30	10	70	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	58	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°	3155	3155	3155
5°	3047	3098	3148
10°	2839	2951	3101
15°	2585	2761	3018
20°	2313	2534	2882
25°	2017	2261	2723
30°	1696	1984	2564
35°	1349	1681	2413
40°	963	1370	2255
45°	573	1101	2019
50°	422	839	1748
55°	354	569	1390
60°	287	470	977
65°	228	403	522
70°	189	350	323
75°	177	340	304
80°	183	372	291
85°	269	525	364

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 2019 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.7	6.9
10°-20°	64.1	17.8
20°-30°	81.8	22.7
30°-40°	76.9	21.4
40°-50°	55.3	15.4
50°-60°	31.7	8.8
60°-70°	14.5	4.0
70°-80°	7.3	2.0
80°-90°	3.5	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°	170.6	47.4
0°-40°	247.5	68.8
0°-60°	334.5	93.0
0°-90°	359.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	359.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	269	269	269	269	269	
5°	258	264	263	265	267	24
15°	213	220	227	239	248	59
25°	156	163	174	193	210	71
35°	94	101	117	144	168	58
45°	34	42	66	98	122	29
55°	17	18	28	51	68	15
65°	8	11	14	16	19	8
75°	4	8	8	7	7	4
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°	268.7	268.7	268.7	268.7	268.7
2.5°	265.2	269.1	266.7	266.7	267.1
5°	258.5	263.6	262.8	264.8	267.1
7.5°	249.1	254.6	256.1	260.8	264.8
10°	238.1	244.4	247.5	255.0	260.1
12.5°	225.9	233.0	238.1	247.5	255.0
15°	212.6	220.0	227.1	239.3	248.3
17.5°	198.9	206.3	215.3	229.5	240.0
20°	185.1	192.6	202.8	217.7	230.6
22.5°	170.2	177.7	188.7	205.5	221.2
25°	155.7	162.8	174.5	193.4	210.2
27.5°	140.4	147.5	160.4	180.8	199.6
30°	125.1	132.2	146.3	168.3	189.1
32.5°	109.8	116.5	131.8	156.1	178.5
35°	94.1	100.8	117.3	144.0	168.3
37.5°	78.1	84.7	103.9	133.0	158.1
40°	62.8	70.2	89.4	122.0	147.1
42.5°	47.9	55.7	77.7	110.2	134.5
45°	34.5	42.0	66.3	97.7	121.6
47.5°	26.3	30.2	56.1	85.1	109.0
50°	23.1	23.5	45.9	73.7	95.7
52.5°	20.0	20.4	35.7	62.8	81.6
55°	17.3	17.7	27.8	51.4	67.9
57.5°	14.5	15.3	22.7	40.8	54.5
60°	12.2	13.7	20.0	31.0	41.6
62.5°	9.8	12.6	17.3	22.7	29.8
65°	8.2	11.4	14.5	16.1	18.8
67.5°	6.7	10.6	12.2	11.4	11.4
70°	5.5	9.4	10.2	9.4	9.4
72.5°	4.7	9.0	8.6	7.8	7.8
75°	3.9	7.8	7.5	6.7	6.7
77.5°	3.5	6.7	6.3	5.9	5.5
80°	2.7	5.5	5.5	5.1	4.3
82.5°	2.4	4.7	4.7	4.3	3.5
85°	2.0	3.9	3.9	3.5	2.7
87.5°	1.6	3.5	3.5	3.1	2.0
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	3.98	5.29	4.34	5.61	5.92	11.20	12.52	11.57	12.83	13.15
	3H	5.38	6.55	5.76	6.88	7.24	11.44	12.61	11.82	12.94	13.30
	4H	5.94	7.02	6.34	7.38	7.76	11.54	12.63	11.95	12.98	13.37
	6H	6.39	7.39	6.81	7.76	8.16	11.65	12.65	12.07	13.02	13.42
	8H	6.58	7.53	7.01	7.92	8.32	11.70	12.65	12.13	13.04	13.44
	12H	6.78	7.68	7.21	8.07	8.50	11.75	12.65	12.18	13.04	13.47
4H	2H	5.05	6.14	5.45	6.49	6.87	11.16	12.25	11.56	12.60	12.98
	3H	6.74	7.63	7.15	8.04	8.44	11.53	12.42	11.94	12.83	13.23
	4H	7.57	8.36	8.00	8.78	9.23	11.71	12.51	12.15	12.93	13.38
	6H	8.22	8.91	8.69	9.36	9.83	11.94	12.63	12.40	13.07	13.54
	8H	8.48	9.13	8.95	9.57	10.05	12.04	12.68	12.50	13.13	13.60
	12H	8.74	9.31	9.23	9.80	10.27	12.15	12.72	12.63	13.20	13.68
8H	4H	8.00	8.65	8.47	9.10	9.57	11.76	12.41	12.23	12.85	13.32
	6H	8.96	9.49	9.46	9.98	10.46	12.09	12.62	12.59	13.12	13.60
	8H	9.42	9.90	9.95	10.42	10.91	12.28	12.76	12.80	13.27	13.76
	12H	9.91	10.33	10.42	10.82	11.39	12.51	12.93	13.02	13.42	14.00
12H	4H	8.06	8.64	8.55	9.12	9.59	11.75	12.32	12.24	12.81	13.28
	6H	9.10	9.58	9.63	10.10	10.59	12.12	12.60	12.64	13.11	13.60
	8H	9.70	10.12	10.21	10.62	11.19	12.38	12.80	12.89	13.29	13.86