

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: P1059169

Luminaire Tested: S123RDR-S340D830-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059169
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-29)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D830-X4F0-XX-UDD-SVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

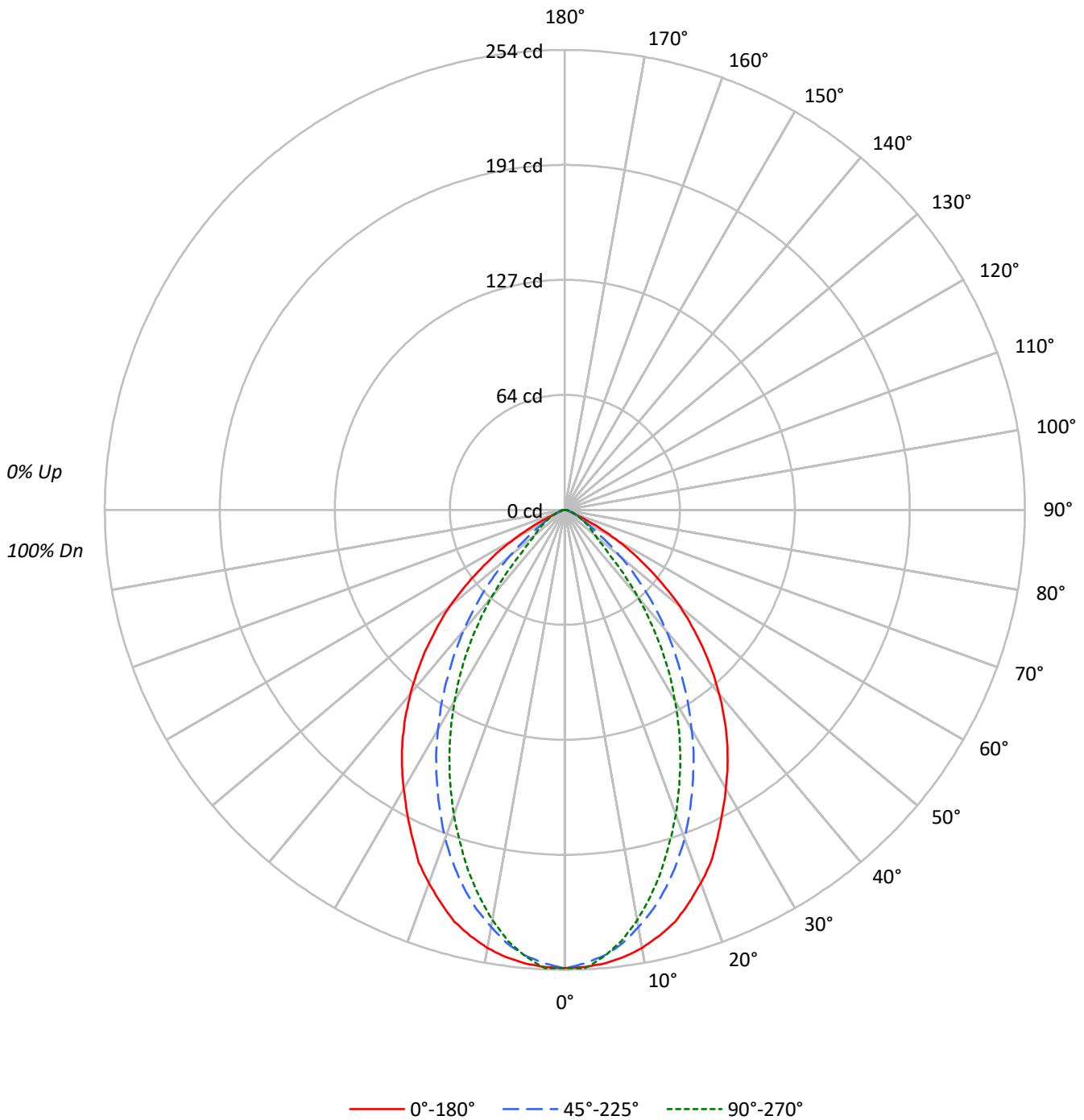
Lumens per Lamp: N/A
Luminaire Lumens: 326.8 lumens
Efficiency: N/A
Efficacy: 26.1 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (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									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	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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91																												
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82																												
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73																												
4	92	83	76	71	90	82	75	70	79	74	70	77	73	69	75	71	68	66																												
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60																												
6	81	70	63	58	79	69	62	58	68	62	57	66	61	57	65	60	56	55																												
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50																												
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46																												
9	67	56	49	45	66	56	49	44	55	48	44	54	48	44	53	48	44	42																												
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2972	2972	2972
5°	2965	2914	2919
10°	2930	2789	2742
15°	2863	2625	2505
20°	2742	2414	2238
25°	2583	2162	1955
30°	2412	1897	1647
35°	2241	1617	1326
40°	2030	1334	961
45°	1790	1035	580
50°	1518	723	395
55°	1155	434	330
60°	754	277	258
65°	317	206	206
70°	106	148	161
75°	91	109	122
80°	54	81	108
85°	54	54	108

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1790 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.4	7.2
10°-20°	61.2	18.7
20°-30°	78.5	24.0
30°-40°	73.6	22.5
40°-50°	51.4	15.7
50°-60°	26.6	8.1
60°-70°	9.1	2.8
70°-80°	2.6	0.8
80°-90°	0.6	0.2
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°	163.0	49.9
0°-40°	236.6	72.4
0°-60°	314.6	96.3
0°-90°	326.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	326.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	253	253	253	253	253	
5°	252	251	247	248	248	24
15°	236	230	216	209	206	66
25°	199	187	167	156	151	92
35°	156	137	113	98	92	97
45°	108	88	62	43	35	83
55°	56	42	21	16	16	51
65°	11	10	7	7	7	13
75°	2	2	2	3	3	2
85°	0	0	0	0	1	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	253.1	253.1	253.1	253.1	253.1
2.5°	252.7	253.1	250.8	253.1	253.5
5°	251.5	251.2	247.2	248.4	247.6
7.5°	249.2	248.0	241.8	240.2	240.2
10°	245.7	243.3	233.9	231.2	230.0
12.5°	241.0	237.8	225.7	220.6	218.6
15°	235.5	229.6	215.9	208.8	206.1
17.5°	227.6	219.8	204.9	196.7	192.4
20°	219.4	209.6	193.2	183.4	179.1
22.5°	210.8	199.0	180.2	169.7	165.0
25°	199.4	186.9	166.9	155.6	150.9
27.5°	188.5	175.1	154.0	141.1	136.4
30°	177.9	162.2	139.9	127.3	121.5
32.5°	167.3	149.7	126.6	112.8	107.4
35°	156.3	137.1	112.8	98.3	92.5
37.5°	144.6	125.0	99.9	84.2	77.2
40°	132.4	112.1	87.0	69.4	62.7
42.5°	120.3	100.3	74.1	56.0	48.2
45°	107.8	88.2	62.3	43.1	34.9
47.5°	95.2	76.0	50.9	31.3	26.3
50°	83.1	64.7	39.6	23.1	21.6
52.5°	69.7	53.7	29.8	19.2	18.8
55°	56.4	42.3	21.2	16.5	16.1
57.5°	44.7	32.9	15.3	13.7	13.3
60°	32.1	23.5	11.8	11.4	11.0
62.5°	21.2	16.1	9.4	9.0	9.0
65°	11.4	9.8	7.4	7.1	7.4
67.5°	4.7	5.5	5.5	5.9	5.9
70°	3.1	3.5	4.3	4.7	4.7
72.5°	2.4	2.7	3.1	3.5	3.5
75°	2.0	2.0	2.4	2.7	2.7
77.5°	1.2	1.6	1.6	2.0	2.4
80°	0.8	1.2	1.2	1.6	1.6
82.5°	0.4	0.8	0.8	1.2	1.2
85°	0.4	0.4	0.4	0.4	0.8
87.5°	0.0	0.0	0.0	0.0	0.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)