

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: P1059196

Luminaire Tested: S123RDR-S340D850-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059196
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-S340D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

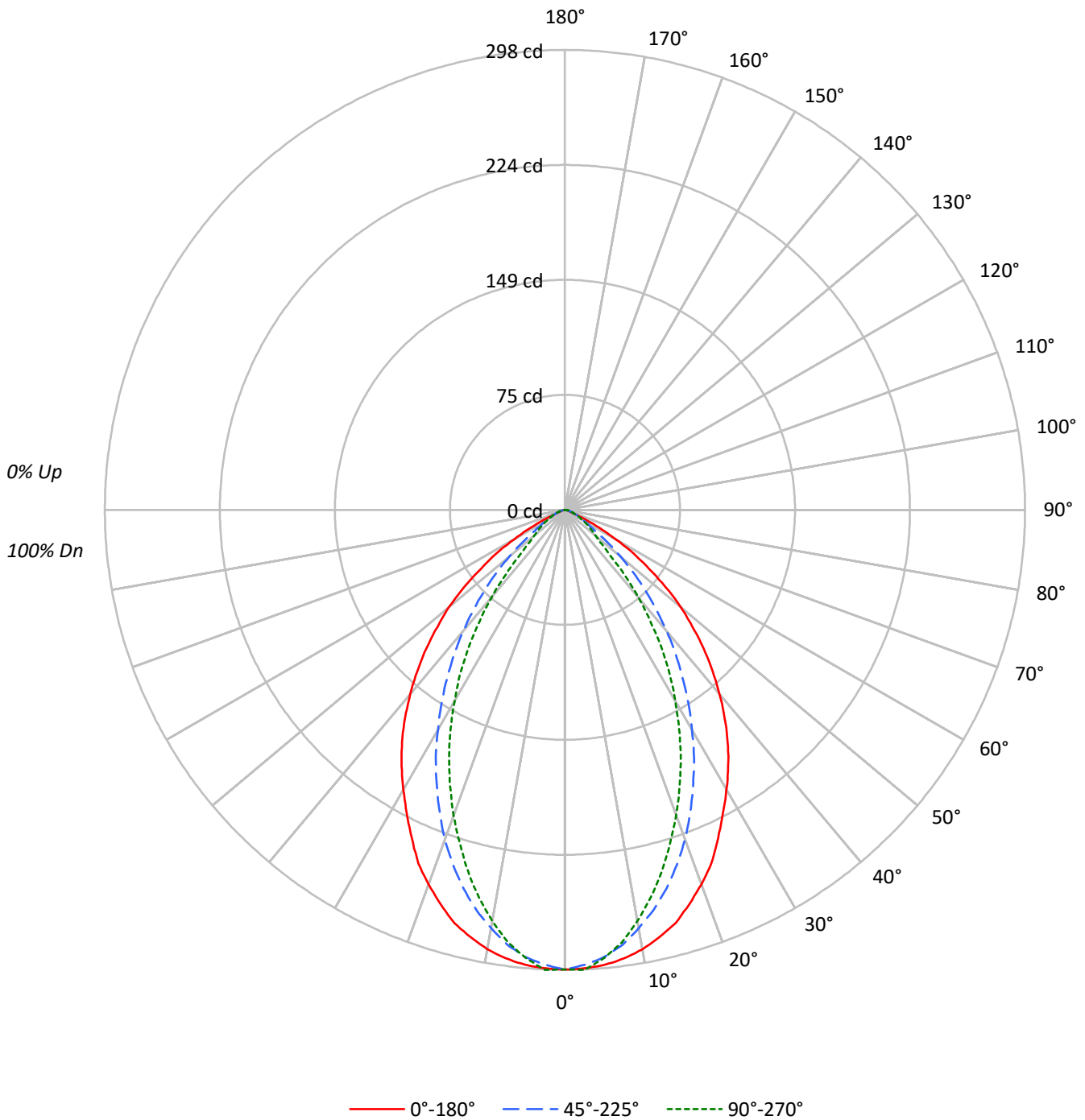
Lumens per Lamp: N/A
Luminaire Lumens: 384.5 lumens
Efficiency: N/A
Efficacy: 30.8 lumens/watt
Spacing Criteria (0/90/45): 1.08 / 0.85 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1059196

CATALOG NUMBER: S123RDR-S340D850-X4F0-XX-UDD-SVL-B

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	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	48	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°	3497	3497	3497
5°	3489	3429	3435
10°	3447	3281	3227
15°	3369	3088	2948
20°	3226	2840	2633
25°	3041	2545	2300
30°	2838	2232	1938
35°	2636	1904	1560
40°	2388	1568	1131
45°	2106	1217	681
50°	1785	851	464
55°	1359	510	387
60°	888	324	303
65°	372	245	245
70°	127	175	189
75°	104	127	145
80°	61	95	122
85°	67	67	121

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2106 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.5	7.2
10°-20°	72.0	18.7
20°-30°	92.3	24.0
30°-40°	86.6	22.5
40°-50°	60.4	15.7
50°-60°	31.3	8.1
60°-70°	10.7	2.8
70°-80°	3.0	0.8
80°-90°	0.7	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°	191.8	49.9
0°-40°	278.4	72.4
0°-60°	370.1	96.3
0°-90°	384.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	384.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	298	298	298	298	298	
5°	296	296	291	292	291	28
15°	277	270	254	246	242	78
25°	235	220	196	183	178	108
35°	184	161	133	116	109	115
45°	127	104	73	51	41	98
55°	66	50	25	19	19	60
65°	13	12	9	8	9	16
75°	2	2	3	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°	297.8	297.8	297.8	297.8	297.8
2.5°	297.4	297.8	295.1	297.8	298.3
5°	296.0	295.5	290.9	292.3	291.4
7.5°	293.2	291.8	284.4	282.6	282.6
10°	289.1	286.3	275.2	272.0	270.6
12.5°	283.5	279.8	265.5	259.6	257.2
15°	277.1	270.2	254.0	245.7	242.5
17.5°	267.9	258.6	241.1	231.4	226.4
20°	258.2	246.6	227.3	215.8	210.7
22.5°	248.0	234.2	212.1	199.6	194.1
25°	234.7	219.9	196.4	183.0	177.5
27.5°	221.7	206.1	181.2	166.0	160.4
30°	209.3	190.9	164.6	149.8	142.9
32.5°	196.9	176.1	148.9	132.8	126.3
35°	183.9	161.4	132.8	115.7	108.8
37.5°	170.1	147.1	117.6	99.1	90.8
40°	155.8	131.9	102.3	81.6	73.8
42.5°	141.5	118.0	87.1	65.9	56.7
45°	126.8	103.7	73.3	50.7	41.0
47.5°	112.0	89.4	59.9	36.9	30.9
50°	97.7	76.1	46.6	27.2	25.4
52.5°	82.1	63.2	35.0	22.6	22.1
55°	66.4	49.8	24.9	19.4	18.9
57.5°	52.6	38.7	18.0	16.1	15.7
60°	37.8	27.7	13.8	13.4	12.9
62.5°	24.9	18.9	11.1	10.6	10.6
65°	13.4	11.5	8.8	8.3	8.8
67.5°	5.5	6.5	6.5	6.9	6.9
70°	3.7	4.1	5.1	5.5	5.5
72.5°	2.8	3.2	3.7	4.1	4.1
75°	2.3	2.3	2.8	3.2	3.2
77.5°	1.4	1.8	1.8	2.3	2.8
80°	0.9	1.4	1.4	1.8	1.8
82.5°	0.5	0.9	0.9	1.4	1.4
85°	0.5	0.5	0.5	0.5	0.9
87.5°	0.0	0.0	0.0	0.0	0.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)