

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: P1059193

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059193
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S340D850-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

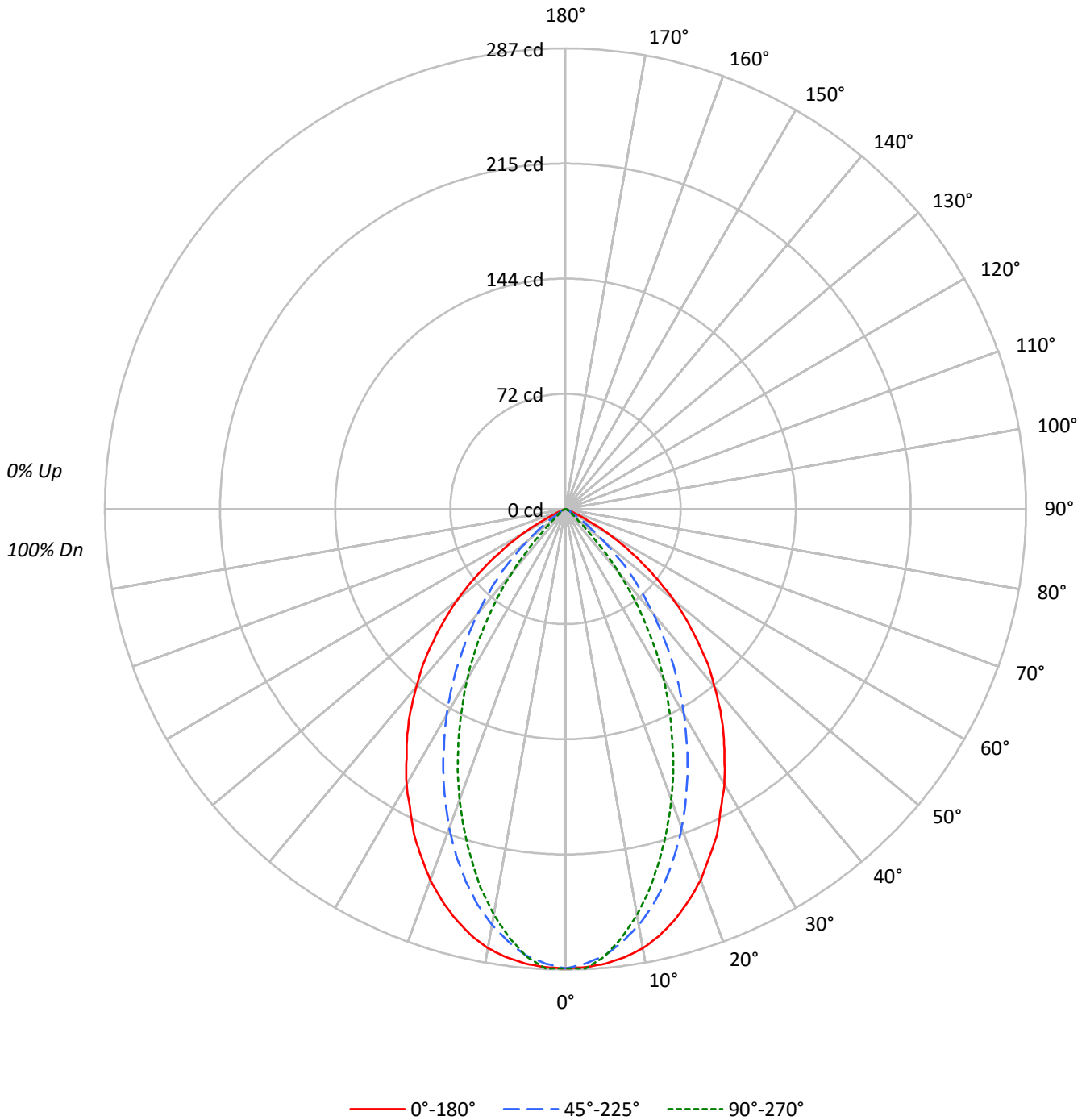
Lumens per Lamp: N/A
Luminaire Lumens: 326.7 lumens
Efficiency: N/A
Efficacy: 26.1 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.93
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	
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	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3362	3362	3362
5°	3352	3293	3298
10°	3315	3138	3062
15°	3217	2920	2751
20°	3077	2644	2408
25°	2897	2335	2037
30°	2687	2007	1662
35°	2464	1659	1236
40°	2212	1300	791
45°	1930	950	329
50°	1600	564	126
55°	1179	235	94
60°	714	87	54
65°	192	50	25
70°	0	17	17
75°	0	0	23
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1930 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.4	8.1
10°-20°	68.0	20.8
20°-30°	84.8	25.9
30°-40°	75.8	23.2
40°-50°	47.8	14.6
50°-60°	20.0	6.1
60°-70°	3.8	1.2
70°-80°	0.1	0.0
80°-90°	0.0	0.0
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°	179.1	54.8
0°-40°	254.9	78.0
0°-60°	322.8	98.8
0°-90°	326.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	326.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	286	286	286	286	286	
5°	284	284	279	280	280	27
15°	265	258	240	230	226	74
25°	224	206	180	165	157	102
35°	172	147	116	95	86	107
45°	116	90	57	30	20	90
55°	58	40	12	5	5	52
65°	7	5	2	1	1	10
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	286.3	286.3	286.3	286.3	286.3
2.5°	285.8	286.3	283.5	286.3	286.7
5°	284.4	284.0	279.4	280.3	279.8
7.5°	281.7	280.3	272.0	270.1	269.2
10°	278.0	274.3	263.2	258.6	256.8
12.5°	272.0	266.9	252.6	245.2	242.5
15°	264.6	258.2	240.2	230.0	226.3
17.5°	255.8	246.6	226.3	215.3	209.7
20°	246.2	233.3	211.6	198.2	192.7
22.5°	234.6	220.3	195.9	181.6	175.6
25°	223.6	205.6	180.2	164.6	157.2
27.5°	209.7	190.8	163.6	147.5	139.7
30°	198.2	176.6	148.0	130.0	122.6
32.5°	184.4	161.8	131.8	112.0	105.1
35°	171.9	147.1	115.7	95.0	86.2
37.5°	158.6	132.8	99.6	77.9	69.6
40°	144.3	118.5	84.8	60.8	51.6
42.5°	131.4	104.2	70.1	45.2	36.0
45°	116.2	90.4	57.2	30.4	19.8
47.5°	102.3	77.4	43.3	17.1	10.6
50°	87.6	64.1	30.9	8.8	6.9
52.5°	72.4	51.2	20.3	6.0	5.5
55°	57.6	39.6	11.5	4.6	4.6
57.5°	43.3	28.6	6.0	3.7	3.2
60°	30.4	18.9	3.7	2.8	2.3
62.5°	17.5	11.1	2.8	1.8	1.8
65°	6.9	5.1	1.8	0.9	0.9
67.5°	0.5	1.4	0.9	0.5	0.5
70°	0.0	0.0	0.5	0.5	0.5
72.5°	0.0	0.0	0.5	0.5	0.5
75°	0.0	0.0	0.0	0.0	0.5
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)