

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: P1059166

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059166
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-S340D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

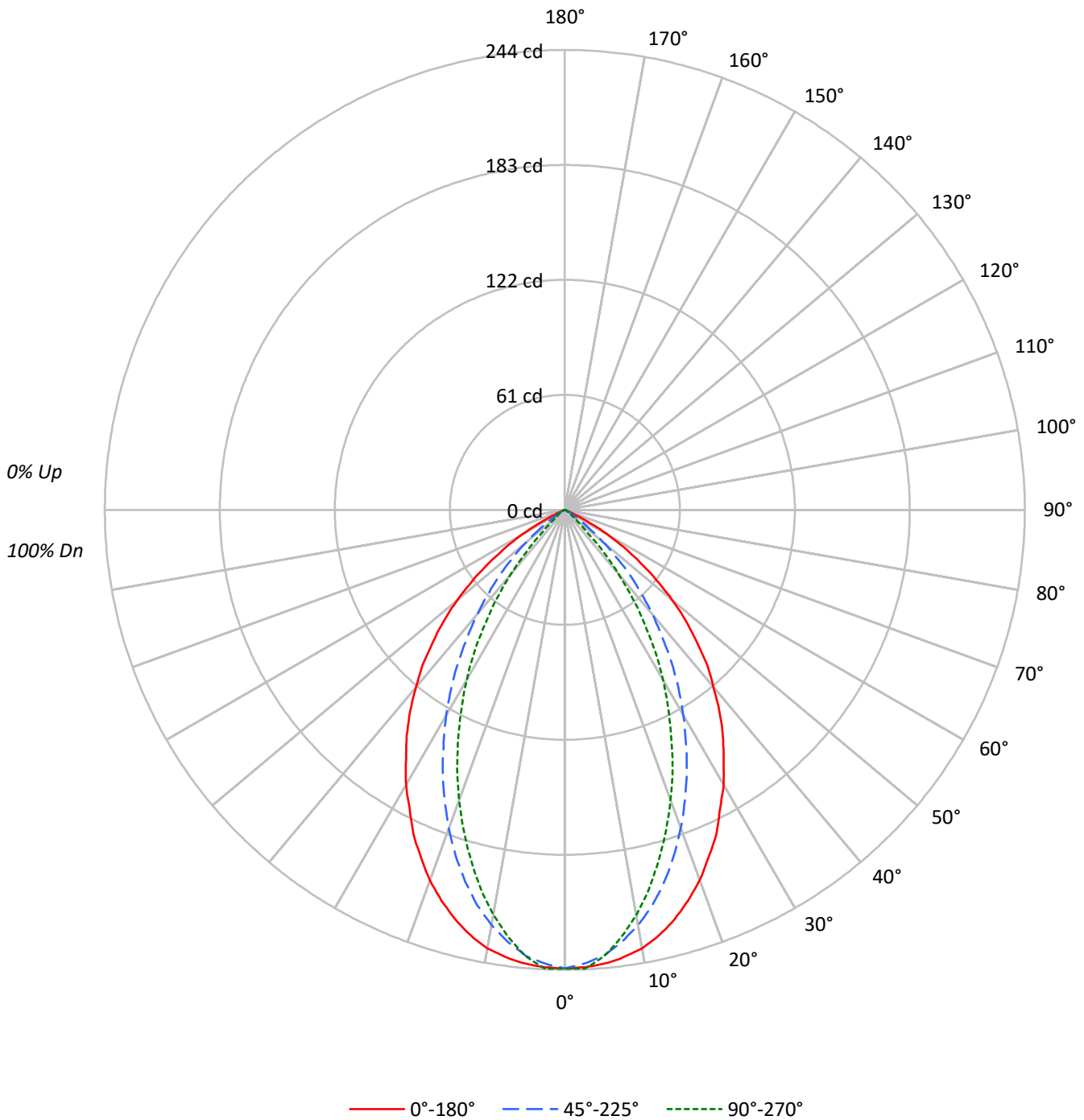
Lumens per Lamp: N/A
Luminaire Lumens: 277.7 lumens
Efficiency: N/A
Efficacy: 22.2 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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°	2857	2857	2857
5°	2849	2798	2803
10°	2816	2667	2602
15°	2734	2481	2339
20°	2614	2247	2047
25°	2462	1985	1731
30°	2285	1706	1413
35°	2094	1409	1051
40°	1879	1105	673
45°	1639	807	279
50°	1359	479	108
55°	1003	201	80
60°	608	73	47
65°	164	44	22
70°	0	14	14
75°	0	0	18
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1639 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.4	8.1
10°-20°	57.8	20.8
20°-30°	72.0	25.9
30°-40°	64.4	23.2
40°-50°	40.7	14.6
50°-60°	17.0	6.1
60°-70°	3.2	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°	152.2	54.8
0°-40°	216.7	78.0
0°-60°	274.3	98.8
0°-90°	277.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	277.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	243	243	243	243	243	
5°	242	241	237	238	238	23
15°	225	219	204	196	192	63
25°	190	175	153	140	134	87
35°	146	125	98	81	73	91
45°	99	77	49	26	17	76
55°	49	34	10	4	4	44
65°	6	4	2	1	1	8
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°	243.3	243.3	243.3	243.3	243.3
2.5°	242.9	243.3	241.0	243.3	243.7
5°	241.7	241.3	237.4	238.2	237.8
7.5°	239.4	238.2	231.2	229.6	228.8
10°	236.2	233.1	223.7	219.8	218.2
12.5°	231.2	226.8	214.7	208.4	206.1
15°	224.9	219.4	204.1	195.5	192.4
17.5°	217.4	209.6	192.4	183.0	178.3
20°	209.2	198.2	179.8	168.5	163.8
22.5°	199.4	187.3	166.5	154.4	149.3
25°	190.0	174.7	153.2	139.9	133.6
27.5°	178.3	162.2	139.1	125.4	118.7
30°	168.5	150.1	125.8	110.5	104.2
32.5°	156.7	137.5	112.1	95.2	89.3
35°	146.1	125.0	98.3	80.7	73.3
37.5°	134.8	112.8	84.6	66.2	59.2
40°	122.6	100.7	72.1	51.7	43.9
42.5°	111.7	88.5	59.6	38.4	30.6
45°	98.7	76.8	48.6	25.9	16.8
47.5°	87.0	65.8	36.8	14.5	9.0
50°	74.4	54.5	26.2	7.4	5.9
52.5°	61.5	43.5	17.2	5.1	4.7
55°	49.0	33.7	9.8	3.9	3.9
57.5°	36.8	24.3	5.1	3.1	2.7
60°	25.9	16.1	3.1	2.4	2.0
62.5°	14.9	9.4	2.4	1.6	1.6
65°	5.9	4.3	1.6	0.8	0.8
67.5°	0.4	1.2	0.8	0.4	0.4
70°	0.0	0.0	0.4	0.4	0.4
72.5°	0.0	0.0	0.4	0.4	0.4
75°	0.0	0.0	0.0	0.0	0.4
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)