

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: P1059005

Luminaire Tested: S123RDR-S1000D830-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059005
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-69)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D830-X4F0-XX-UDD-BVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

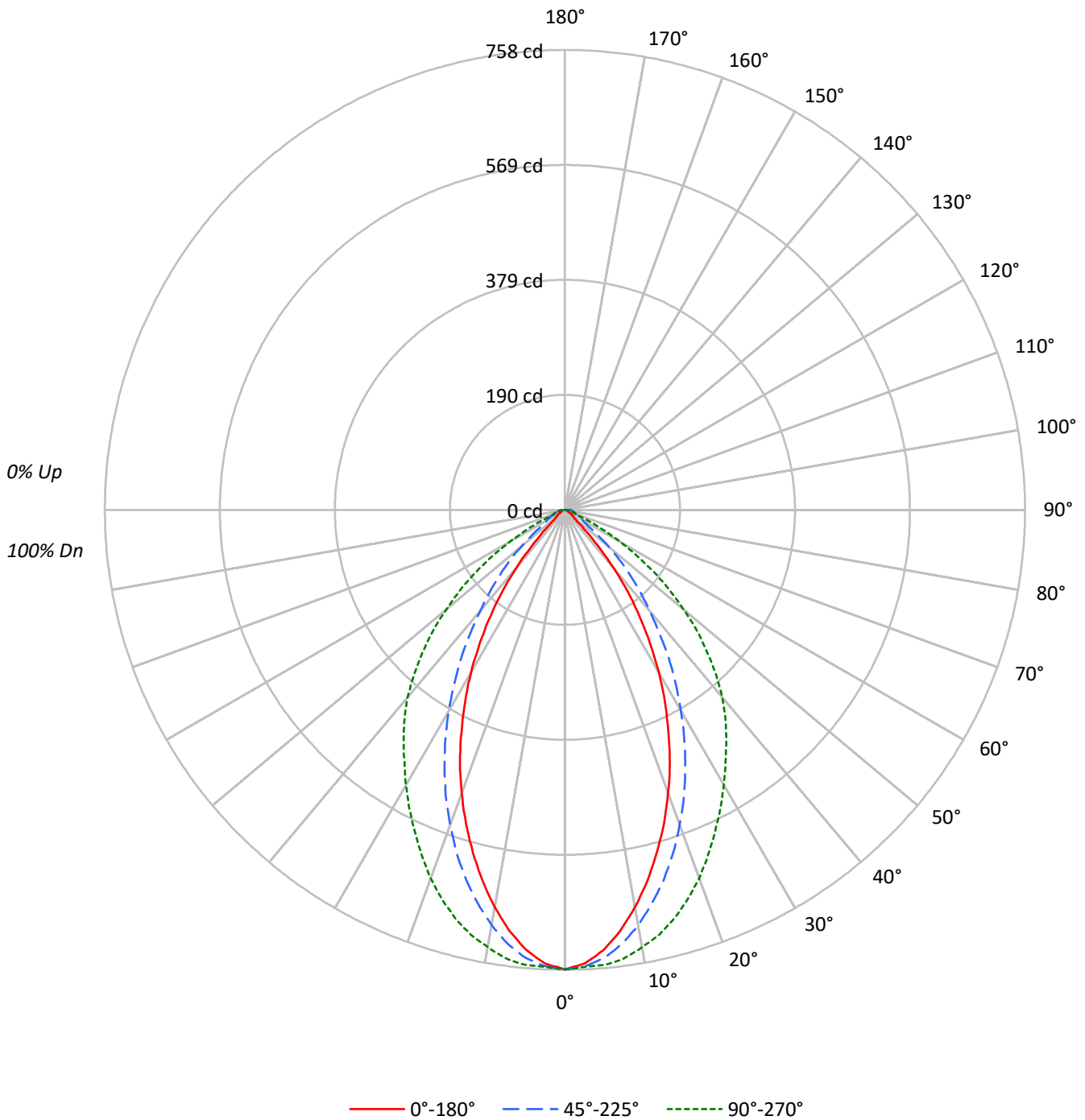
Lumens per Lamp: N/A
Luminaire Lumens: 909.9 lumens
Efficiency: N/A
Efficacy: 26.0 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	57	55
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	61	56	52	50
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8895	8895	8895
5°	8588	8738	8875
10°	7928	8287	8728
15°	7110	7660	8477
20°	6209	6904	8076
25°	5223	6078	7578
30°	4194	5182	7098
35°	3072	4267	6641
40°	1899	3320	6179
45°	731	2501	5502
50°	360	1714	4655
55°	285	948	3652
60°	190	789	2447
65°	161	709	1095
70°	158	635	635
75°	209	685	631
80°	311	859	703
85°	472	1401	930

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5502 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.5	7.6
10°-20°	177.8	19.5
20°-30°	220.7	24.3
30°-40°	197.7	21.7
40°-50°	130.0	14.3
50°-60°	65.1	7.2
60°-70°	25.7	2.8
70°-80°	14.4	1.6
80°-90°	9.0	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°	468.0	51.4
0°-40°	665.7	73.2
0°-60°	860.8	94.6
0°-90°	909.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	909.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	758	758	758	758	758	
5°	729	740	741	746	753	68
15°	585	604	630	673	697	163
25°	403	429	469	535	585	184
35°	214	243	298	389	463	133
45°	44	73	151	254	331	42
55°	14	16	46	125	178	12
65°	6	16	26	32	39	6
75°	5	15	15	14	14	5
85°	4	10	10	10	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	757.5	757.5	757.5	757.5	757.5
2.5°	748.2	758.7	752.9	752.9	754.0
5°	728.6	740.1	741.3	745.9	752.9
7.5°	699.6	714.7	721.6	735.5	745.9
10°	664.9	681.1	695.0	719.3	732.0
12.5°	626.6	642.8	663.7	697.3	717.0
15°	584.9	603.5	630.1	673.0	697.3
17.5°	542.1	560.6	593.0	641.7	673.0
20°	496.9	517.7	552.5	608.1	646.3
22.5°	451.7	474.9	512.0	572.2	616.2
25°	403.1	428.6	469.1	535.1	584.9
27.5°	356.7	383.4	426.2	498.1	554.8
30°	309.3	335.9	382.2	459.8	523.5
32.5°	260.6	290.7	339.4	423.9	492.3
35°	214.3	243.2	297.7	389.2	463.3
37.5°	169.1	198.1	254.8	355.6	434.4
40°	123.9	154.1	216.6	323.2	403.1
42.5°	81.1	112.4	183.0	290.7	368.3
45°	44.0	73.0	150.6	253.7	331.3
47.5°	24.3	39.4	121.6	218.9	295.4
50°	19.7	22.0	93.8	186.5	254.8
52.5°	16.2	18.5	67.2	155.2	217.8
55°	13.9	16.2	46.3	125.1	178.4
57.5°	11.6	13.9	37.1	96.1	140.2
60°	8.1	13.9	33.6	70.7	104.2
62.5°	6.9	13.9	29.0	48.6	69.5
65°	5.8	16.2	25.5	32.4	39.4
67.5°	4.6	16.2	22.0	20.8	20.8
70°	4.6	16.2	18.5	17.4	18.5
72.5°	4.6	17.4	17.4	16.2	16.2
75°	4.6	15.1	15.1	13.9	13.9
77.5°	4.6	13.9	13.9	12.7	12.7
80°	4.6	12.7	12.7	11.6	10.4
82.5°	4.6	11.6	11.6	10.4	9.3
85°	3.5	10.4	10.4	10.4	6.9
87.5°	3.5	9.3	10.4	9.3	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)