

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: P1059014

Luminaire Tested: S123RDR-S1000D835-X4F0-XX-UDD-BVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059014
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-S1000D835-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

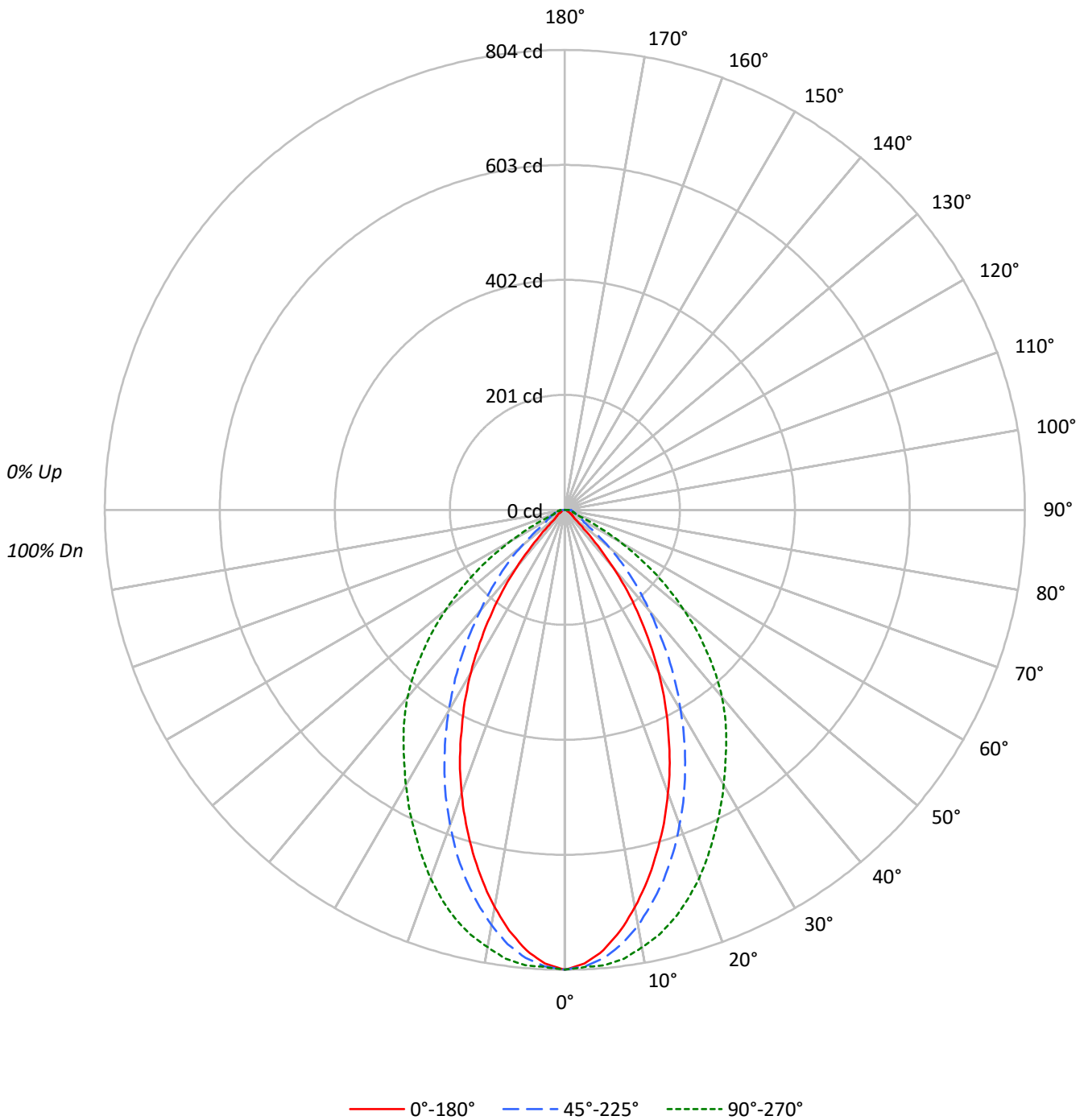
Lumens per Lamp: N/A
Luminaire Lumens: 965.4 lumens
Efficiency: N/A
Efficacy: 27.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.06 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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°	9437	9437	9437
5°	9112	9271	9416
10°	8411	8791	9261
15°	7544	8127	8994
20°	6588	7325	8569
25°	5541	6448	8041
30°	4449	5498	7532
35°	3258	4527	7047
40°	2016	3523	6556
45°	776	2654	5837
50°	382	1818	4940
55°	301	1007	3873
60°	202	836	2597
65°	169	750	1161
70°	168	676	676
75°	222	726	667
80°	331	913	751
85°	498	1495	997

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5837 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.7	7.6
10°-20°	188.7	19.5
20°-30°	234.1	24.3
30°-40°	209.8	21.7
40°-50°	137.9	14.3
50°-60°	69.1	7.2
60°-70°	27.3	2.8
70°-80°	15.3	1.6
80°-90°	9.6	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°	496.5	51.4
0°-40°	706.3	73.2
0°-60°	913.2	94.6
0°-90°	965.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	965.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	804	804	804	804	804	
5°	773	785	786	791	799	72
15°	621	640	668	714	740	173
25°	428	455	498	568	621	196
35°	227	258	316	413	492	141
45°	47	77	160	269	352	44
55°	15	17	49	133	189	13
65°	6	17	27	34	42	6
75°	5	16	16	15	15	5
85°	4	11	11	11	7	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	803.7	803.7	803.7	803.7	803.7
2.5°	793.9	804.9	798.8	798.8	800.0
5°	773.0	785.3	786.5	791.4	798.8
7.5°	742.2	758.2	765.6	780.3	791.4
10°	705.4	722.6	737.3	763.1	776.7
12.5°	664.8	682.0	704.2	739.8	760.7
15°	620.6	640.2	668.5	714.0	739.8
17.5°	575.1	594.8	629.2	680.8	714.0
20°	527.2	549.3	586.2	645.2	685.7
22.5°	479.3	503.8	543.2	607.1	653.8
25°	427.7	454.7	497.7	567.7	620.6
27.5°	378.5	406.8	452.2	528.4	588.6
30°	328.1	356.4	405.5	487.9	555.5
32.5°	276.5	308.5	360.1	449.8	522.3
35°	227.3	258.1	315.8	412.9	491.6
37.5°	179.4	210.1	270.4	377.3	460.8
40°	131.5	163.4	229.8	342.9	427.7
42.5°	86.0	119.2	194.2	308.5	390.8
45°	46.7	77.4	159.8	269.1	351.5
47.5°	25.8	41.8	129.0	232.3	313.4
50°	20.9	23.3	99.5	197.9	270.4
52.5°	17.2	19.7	71.3	164.7	231.0
55°	14.7	17.2	49.2	132.7	189.2
57.5°	12.3	14.7	39.3	102.0	148.7
60°	8.6	14.7	35.6	75.0	110.6
62.5°	7.4	14.7	30.7	51.6	73.7
65°	6.1	17.2	27.0	34.4	41.8
67.5°	4.9	17.2	23.3	22.1	22.1
70°	4.9	17.2	19.7	18.4	19.7
72.5°	4.9	18.4	18.4	17.2	17.2
75°	4.9	16.0	16.0	14.7	14.7
77.5°	4.9	14.7	14.7	13.5	13.5
80°	4.9	13.5	13.5	12.3	11.1
82.5°	4.9	12.3	12.3	11.1	9.8
85°	3.7	11.1	11.1	11.1	7.4
87.5°	3.7	9.8	11.1	9.8	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)