

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: P1059026

Luminaire Tested: S123RDR-S1000D840-X4F0-XX-UDD-SVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059026
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-68)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D840-X4F0-XX-UDD-SVL-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

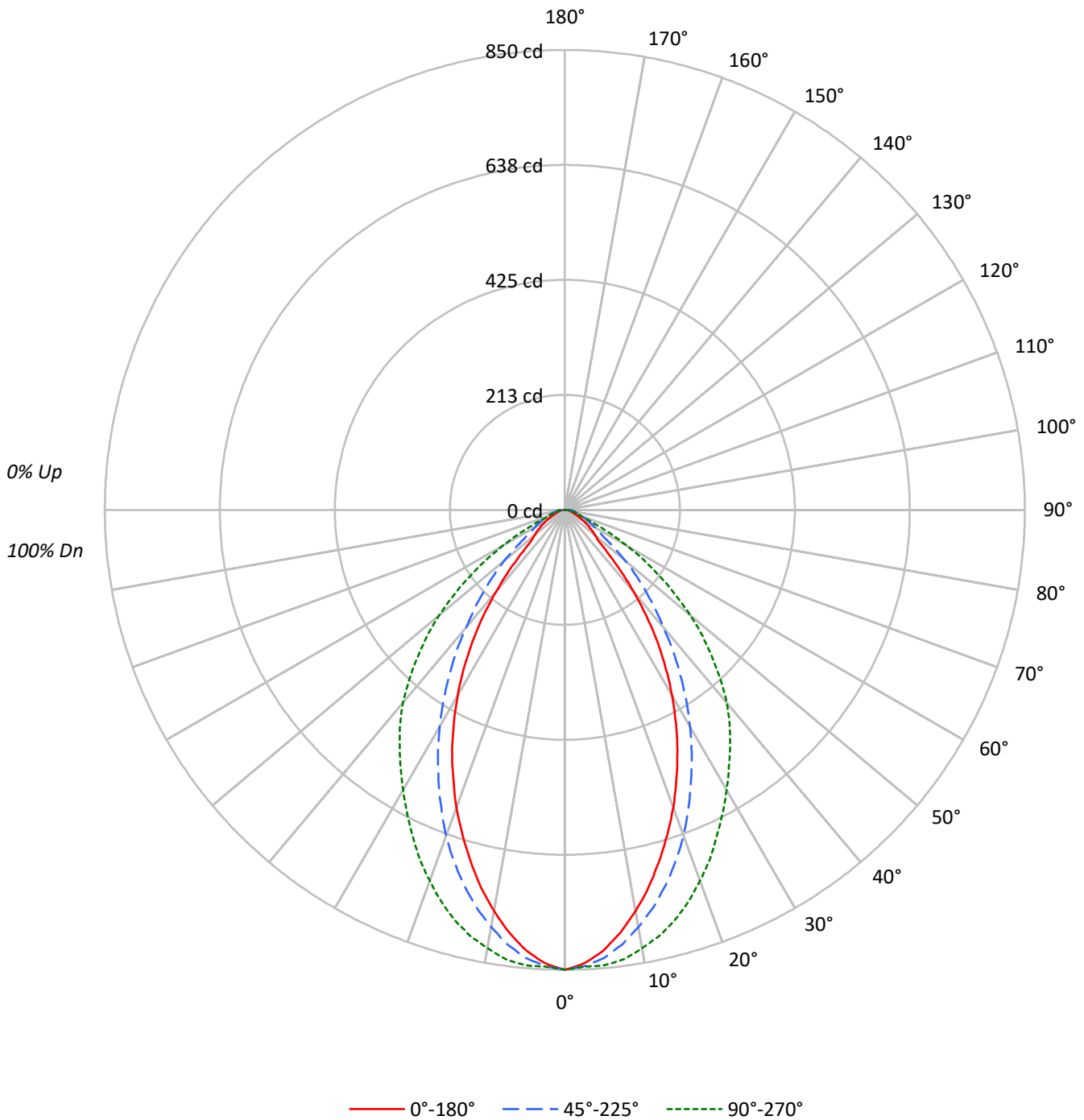
Lumens per Lamp: N/A
Luminaire Lumens: 1138.3 lumens
Efficiency: N/A
Efficacy: 32.5 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.07 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1059026

CATALOG NUMBER: S123RDR-S1000D840-X4F0-XX-UDD-SVL-S

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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	61	69	64	60	68	63	59	58
6	79	68	61	56	78	67	60	55	66	60	55	64	59	54	63	58	54	52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48
8	70	58	51	46	69	58	51	46	57	50	46	56	50	46	54	49	45	44
9	66	54	47	43	65	54	47	43	53	47	42	52	46	42	51	46	42	40
10	62	51	44	39	61	50	44	39	50	43	39	49	43	39	48	43	39	37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9980	9980	9980
5°	9638	9799	9960
10°	8980	9335	9808
15°	8175	8733	9548
20°	7318	8016	9117
25°	6382	7153	8616
30°	5367	6275	8108
35°	4269	5318	7630
40°	3043	4336	7132
45°	1813	3482	6387
50°	1337	2653	5530
55°	1118	1804	4395
60°	904	1487	3088
65°	725	1275	1656
70°	597	1109	1023
75°	563	1071	957
80°	588	1177	920
85°	835	1671	1172

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6387 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.1	6.9
10°-20°	202.8	17.8
20°-30°	258.7	22.7
30°-40°	243.4	21.4
40°-50°	174.9	15.4
50°-60°	100.3	8.8
60°-70°	45.9	4.0
70°-80°	23.0	2.0
80°-90°	11.2	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°	539.6	47.4
0°-40°	783.0	68.8
0°-60°	1058.1	93.0
0°-90°	1138.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1138.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	850	850	850	850	850	
5°	818	834	831	838	845	76
15°	672	696	718	757	785	188
25°	493	515	552	612	665	225
35°	298	319	371	455	532	184
45°	109	133	210	309	385	91
55°	55	56	88	162	215	49
65°	26	36	46	51	60	26
75°	12	25	24	21	21	14
85°	6	12	12	11	9	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	849.9	849.9	849.9	849.9	849.9
2.5°	838.8	851.2	843.7	843.7	845.0
5°	817.7	833.8	831.3	837.5	845.0
7.5°	787.9	805.3	810.2	825.1	837.5
10°	753.1	773.0	782.9	806.5	822.6
12.5°	714.7	737.0	753.1	782.9	806.5
15°	672.5	696.1	718.4	756.9	785.4
17.5°	629.1	652.6	681.2	725.8	759.3
20°	585.6	609.2	641.5	688.6	729.6
22.5°	538.5	562.1	596.8	650.2	699.8
25°	492.6	514.9	552.1	611.7	665.0
27.5°	444.2	466.5	507.5	572.0	631.5
30°	395.8	418.1	462.8	532.3	598.0
32.5°	347.4	368.5	416.9	493.8	564.5
35°	297.8	318.9	371.0	455.4	532.3
37.5°	246.9	268.0	328.8	420.6	500.0
40°	198.5	222.1	282.9	385.9	465.3
42.5°	151.4	176.2	245.7	348.7	425.6
45°	109.2	132.8	209.7	308.9	384.6
47.5°	83.1	95.5	177.4	269.2	344.9
50°	73.2	74.4	145.2	233.3	302.7
52.5°	63.3	64.5	112.9	198.5	258.1
55°	54.6	55.8	88.1	162.5	214.7
57.5°	45.9	48.4	72.0	129.0	172.5
60°	38.5	43.4	63.3	98.0	131.5
62.5°	31.0	39.7	54.6	72.0	94.3
65°	26.1	36.0	45.9	50.9	59.6
67.5°	21.1	33.5	38.5	36.0	36.0
70°	17.4	29.8	32.3	29.8	29.8
72.5°	14.9	28.5	27.3	24.8	24.8
75°	12.4	24.8	23.6	21.1	21.1
77.5°	11.2	21.1	19.9	18.6	17.4
80°	8.7	17.4	17.4	16.1	13.6
82.5°	7.4	14.9	14.9	13.6	11.2
85°	6.2	12.4	12.4	11.2	8.7
87.5°	5.0	11.2	11.2	9.9	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)