

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: P1059360

Luminaire Tested: S123RDR-S775D850-X4F0-XX-UDD-SVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059360
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-65)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D850-X4F0-XX-UDD-SVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

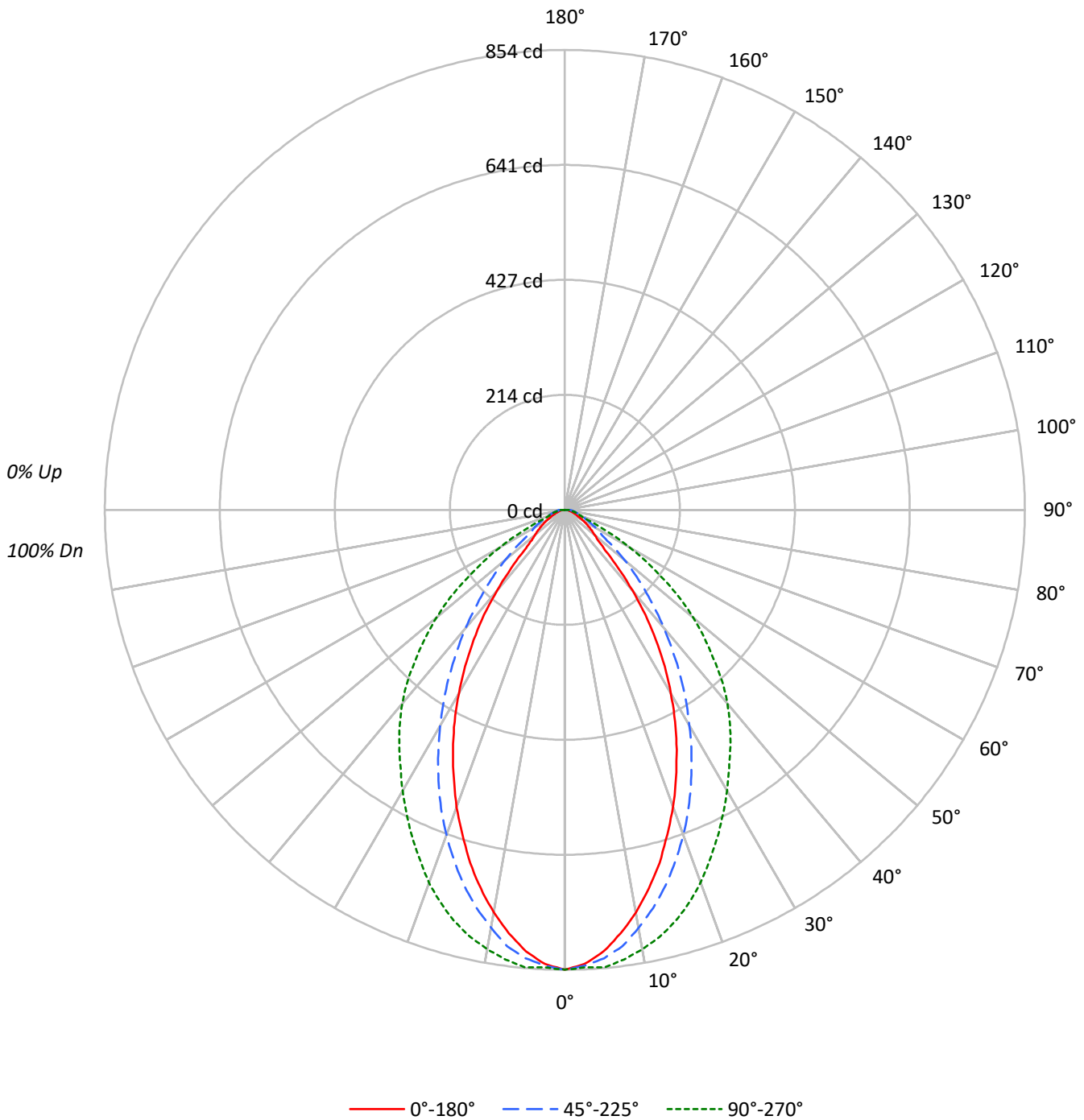
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1146.1 lumens
Efficiency: N/A
Efficacy: 44.4 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 1.08 / 0.98
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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: P1059360
CATALOG NUMBER: S123RDR-S775D850-X4F0-XX-UDD-SVL-W

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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	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	102	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	90	81	74	68	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	60	69	64	60	68	63	59	58																												
6	79	68	61	55	78	67	60	55	66	59	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	55	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	49	43	39	49	43	39	48	43	39	37																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10026	10026	10026
5°	9701	9851	10051
10°	9055	9396	9876
15°	8252	8780	9618
20°	7343	8031	9211
25°	6362	7187	8685
30°	5335	6270	8168
35°	4226	5337	7678
40°	2991	4390	7201
45°	1762	3469	6481
50°	1317	2634	5676
55°	1108	1781	4559
60°	897	1519	3239
65°	709	1298	1709
70°	618	1130	1057
75°	576	1057	1012
80°	575	1150	1001
85°	714	1711	1280

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6481 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.6	6.9
10°-20°	204.2	17.8
20°-30°	260.1	22.7
30°-40°	244.6	21.3
40°-50°	176.2	15.4
50°-60°	101.7	8.9
60°-70°	46.5	4.1
70°-80°	23.2	2.0
80°-90°	11.0	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°	542.8	47.4
0°-40°	787.4	68.7
0°-60°	1065.4	93.0
0°-90°	1146.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1146.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	854	854	854	854	854	
5°	823	837	836	844	853	77
15°	679	703	722	762	791	189
25°	491	516	555	616	670	225
35°	295	320	372	458	536	183
45°	106	133	209	314	390	90
55°	54	56	87	165	223	48
65°	26	36	47	52	62	26
75°	13	24	23	22	22	14
85°	5	12	13	12	10	6
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	853.8	853.8	853.8	853.8	853.8
2.5°	844.2	854.8	847.4	848.4	850.6
5°	823.0	836.8	835.7	844.2	852.7
7.5°	793.3	809.2	817.7	830.4	842.1
10°	759.4	777.4	788.0	811.3	828.3
12.5°	720.1	743.5	757.2	788.0	812.4
15°	678.8	703.2	722.2	762.5	791.2
17.5°	632.1	658.6	683.0	730.7	765.7
20°	587.6	613.0	642.7	694.7	737.1
22.5°	538.8	566.3	600.3	655.4	703.2
25°	491.0	516.5	554.7	616.2	670.3
27.5°	443.3	468.8	509.1	576.9	636.3
30°	393.5	420.0	462.4	537.7	602.4
32.5°	344.7	370.1	417.9	499.5	567.4
35°	294.8	320.3	372.3	458.2	535.6
37.5°	246.1	272.6	327.7	424.2	503.8
40°	195.1	223.8	286.4	389.2	469.8
42.5°	147.4	178.2	245.0	353.2	432.7
45°	106.1	132.6	208.9	313.9	390.3
47.5°	82.7	96.5	176.1	273.6	351.0
50°	72.1	74.2	144.2	236.5	310.7
52.5°	62.6	64.7	113.5	201.5	268.3
55°	54.1	56.2	87.0	165.4	222.7
57.5°	45.6	48.8	72.1	131.5	179.2
60°	38.2	42.4	64.7	100.8	137.9
62.5°	30.8	38.2	55.1	74.2	98.6
65°	25.5	36.1	46.7	52.0	61.5
67.5°	21.2	32.9	39.2	37.1	36.1
70°	18.0	29.7	32.9	29.7	30.8
72.5°	14.8	27.6	27.6	25.5	25.5
75°	12.7	24.4	23.3	22.3	22.3
77.5°	10.6	21.2	20.2	19.1	18.0
80°	8.5	17.0	17.0	15.9	14.8
82.5°	7.4	13.8	13.8	13.8	11.7
85°	5.3	11.7	12.7	11.7	9.5
87.5°	4.2	10.6	10.6	9.5	6.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)