

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: P1059345

Luminaire Tested: S123RDR-S775D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059345
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D835-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

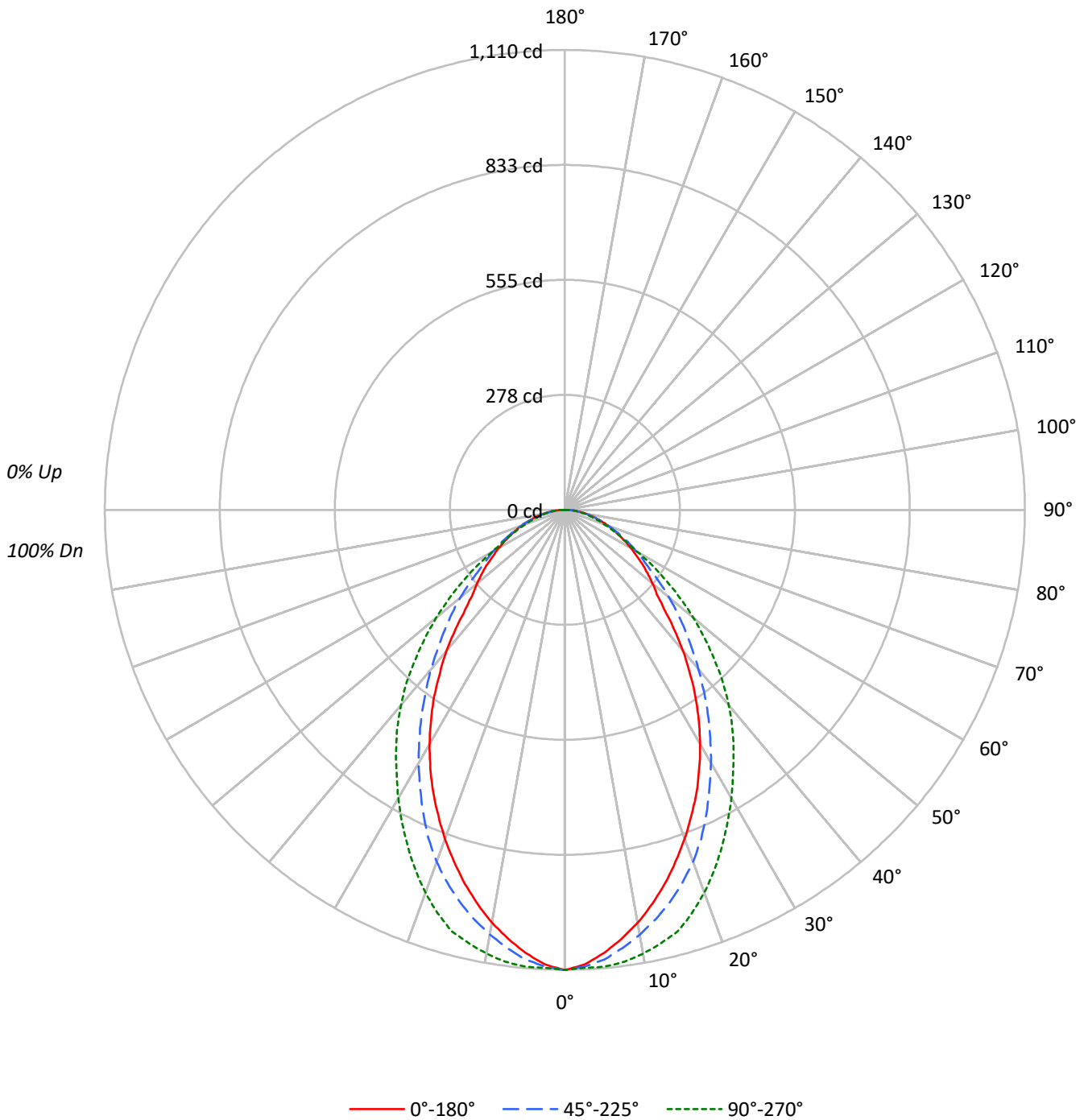
Lumens per Lamp: N/A
Luminaire Lumens: 1951.4 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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: P1059345

CATALOG NUMBER: S123RDR-S775D835-X4F0-XX-UDD-WVL-W

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	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	110	106	102	99	108	104	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51				
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46				
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41				
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38				
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34				
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13040	13040	13040
5°	12662	12842	13045
10°	12068	12410	12968
15°	11351	11909	12803
20°	10558	11298	12289
25°	9744	10475	11615
30°	8851	9563	10899
35°	7877	8631	10179
40°	6798	7690	9435
45°	5618	6809	8459
50°	5046	6007	7386
55°	4676	5126	6123
60°	4309	4669	4690
65°	4009	4223	3929
70°	3773	3838	3444
75°	3557	3425	3035
80°	3361	3104	2847
85°	3220	3476	3220

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8459 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.9	5.3
10°-20°	277.1	14.2
20°-30°	374.9	19.2
30°-40°	385.2	19.7
40°-50°	323.5	16.6
50°-60°	232.0	11.9
60°-70°	147.7	7.6
70°-80°	81.1	4.2
80°-90°	27.0	1.4
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°	754.8	38.7
0°-40°	1140.1	58.4
0°-60°	1695.6	86.9
0°-90°	1951.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1951.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1110	1110	1110	1110	1110	
5°	1074	1093	1090	1097	1107	101
15°	934	960	980	1022	1053	262
25°	752	781	808	852	896	345
35°	550	579	602	656	710	342
45°	338	368	410	469	509	267
55°	228	233	250	284	299	204
65°	144	153	152	143	141	144
75°	78	86	76	70	67	83
85°	24	25	26	27	24	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1110.5	1110.5	1110.5	1110.5	1110.5
2.5°	1098.1	1113.4	1102.9	1103.8	1106.7
5°	1074.2	1093.3	1089.5	1097.2	1106.7
7.5°	1044.6	1065.6	1066.6	1084.7	1100.0
10°	1012.1	1034.1	1040.8	1068.5	1087.6
12.5°	973.9	997.8	1012.1	1046.5	1071.4
15°	933.7	959.5	979.6	1021.7	1053.2
17.5°	889.8	917.5	943.3	988.2	1020.7
20°	844.9	874.5	904.1	946.2	983.4
22.5°	798.0	828.6	859.2	900.3	941.4
25°	752.1	780.8	808.5	852.5	896.5
27.5°	702.4	732.1	756.0	804.7	850.6
30°	652.8	682.4	705.3	756.0	803.8
32.5°	601.1	631.7	652.8	705.3	755.0
35°	549.5	579.2	602.1	655.6	710.1
37.5°	495.1	527.6	550.5	610.7	664.2
40°	443.5	474.0	501.7	564.8	615.5
42.5°	389.9	421.5	453.0	518.0	564.8
45°	338.3	367.9	410.0	469.3	509.4
47.5°	301.0	320.2	368.9	418.6	456.8
50°	276.2	283.8	328.8	372.7	404.3
52.5°	251.4	257.1	287.7	327.8	351.7
55°	228.4	233.2	250.4	283.8	299.1
57.5°	203.6	208.3	222.7	241.8	250.4
60°	183.5	187.3	198.8	201.7	199.7
62.5°	163.4	169.2	174.9	168.2	165.3
65°	144.3	152.9	152.0	143.4	141.4
67.5°	127.1	135.7	130.9	122.3	119.5
70°	109.9	118.5	111.8	103.2	100.3
72.5°	93.7	103.2	92.7	85.1	83.1
75°	78.4	86.0	75.5	69.8	66.9
77.5°	64.0	69.8	60.2	55.4	53.5
80°	49.7	53.5	45.9	43.0	42.1
82.5°	36.3	38.2	33.4	35.4	34.4
85°	23.9	24.8	25.8	26.8	23.9
87.5°	11.5	16.2	16.2	15.3	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)