

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 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: S123RDRP-S775D835-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2024
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: S123RDRP-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

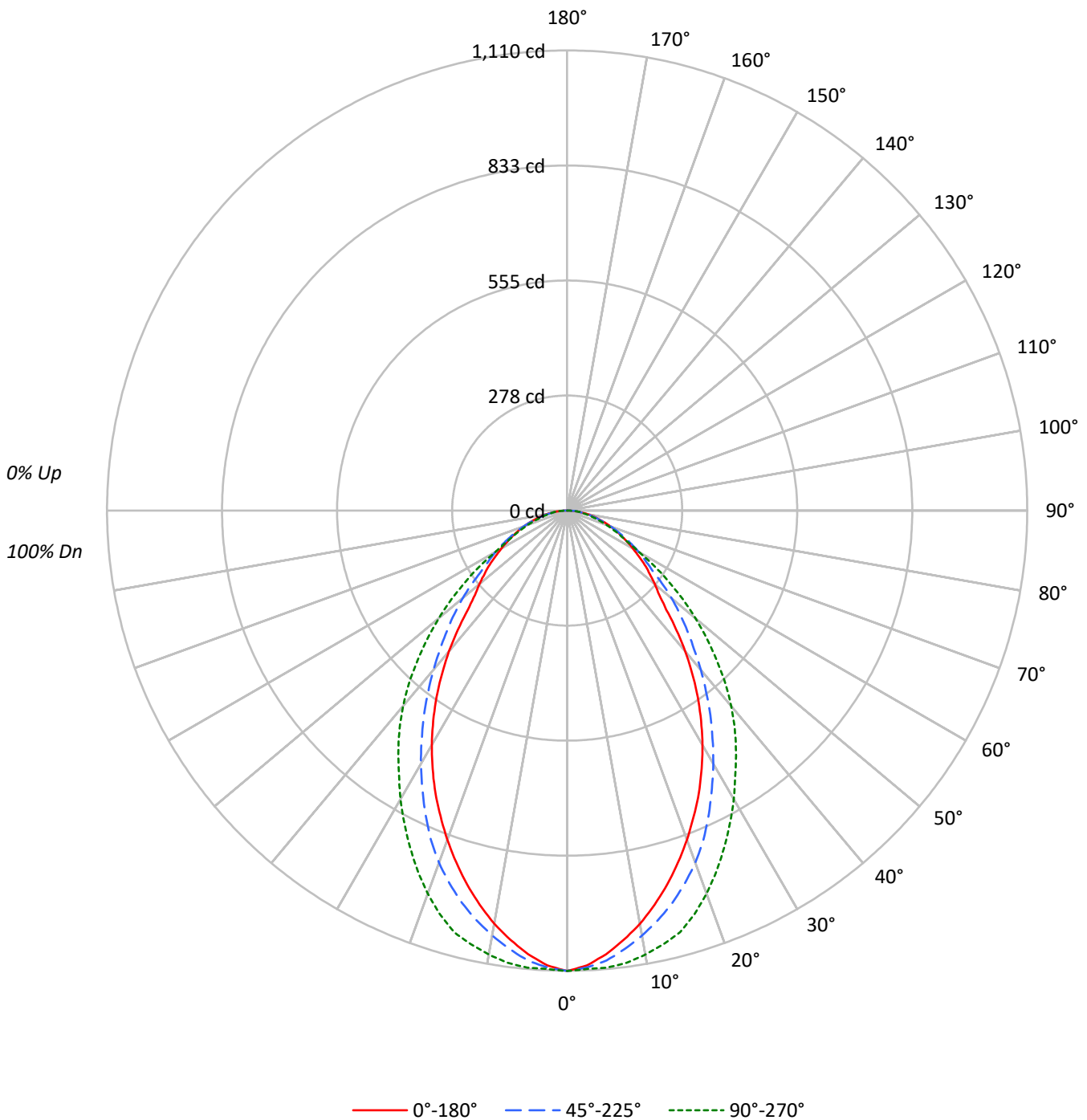
Lumens per Lamp: N/A
Luminaire Lumens: 1951.4 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

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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	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



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	16.11	17.57	16.47	17.88	18.20	17.18	18.64	17.54	18.95	19.27
	3H	17.80	19.11	18.18	19.44	19.81	18.26	19.57	18.64	19.90	20.26
	4H	18.46	19.69	18.86	20.04	20.41	18.66	19.89	19.06	20.24	20.62
	6H	18.96	20.09	19.37	20.46	20.85	18.97	20.11	19.39	20.47	20.87
	8H	19.13	20.21	19.56	20.60	21.00	19.11	20.19	19.54	20.58	20.98
	12H	19.26	20.29	19.69	20.67	21.10	19.23	20.26	19.66	20.64	21.07
4H	2H	16.71	17.94	17.11	18.29	18.66	17.58	18.81	17.98	19.16	19.54
	3H	18.64	19.65	19.05	20.05	20.46	18.90	19.92	19.31	20.32	20.72
	4H	19.45	20.36	19.88	20.78	21.22	19.42	20.33	19.85	20.75	21.19
	6H	20.10	20.89	20.55	21.34	21.80	19.85	20.65	20.31	21.09	21.55
	8H	20.32	21.06	20.78	21.51	21.97	20.04	20.78	20.50	21.23	21.70
	12H	20.49	21.15	20.97	21.63	22.11	20.22	20.89	20.71	21.37	21.84
8H	4H	19.68	20.43	20.15	20.87	21.34	19.66	20.41	20.13	20.85	21.32
	6H	20.47	21.09	20.97	21.58	22.06	20.21	20.83	20.71	21.32	21.80
	8H	20.79	21.34	21.30	21.85	22.34	20.49	21.04	21.00	21.55	22.04
	12H	21.05	21.54	21.56	22.04	22.60	20.78	21.27	21.29	21.76	22.33
12H	4H	19.70	20.36	20.18	20.84	21.31	19.69	20.35	20.17	20.83	21.30
	6H	20.51	21.06	21.02	21.57	22.06	20.26	20.82	20.78	21.33	21.82
	8H	20.88	21.37	21.39	21.86	22.43	20.60	21.09	21.11	21.59	22.15