

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: P1060572

Luminaire Tested: S124RDR-S795D850-X4F0-XX-UDD-BVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060572
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-75)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S795D850-X4F0-XX-UDD-BVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

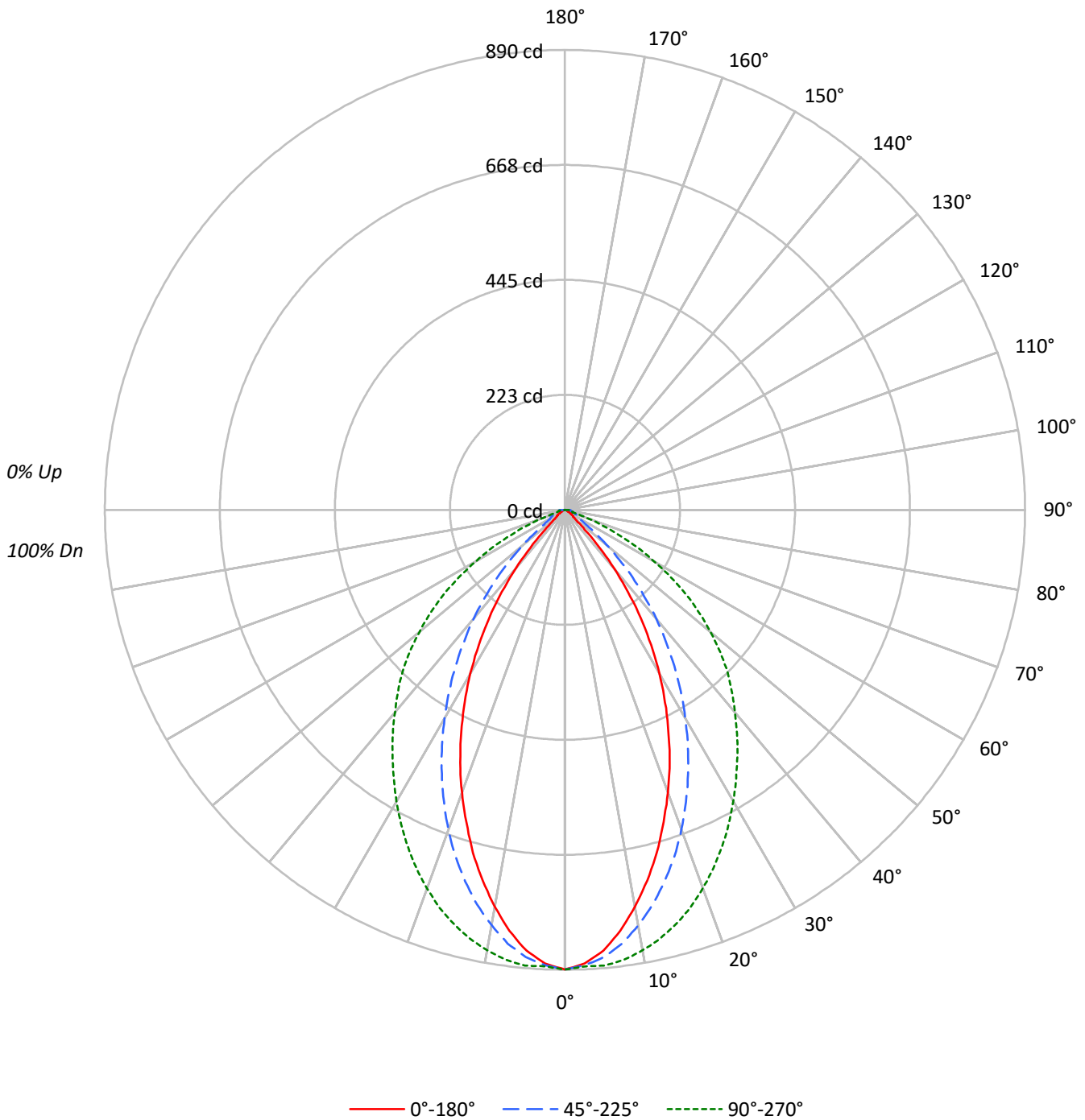
Lumens per Lamp: N/A
Luminaire Lumens: 1121.1 lumens
Efficiency: N/A
Efficacy: 43.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.96
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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									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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																												
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81																												
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72																												
4	91	82	75	70	89	81	75	70	79	73	69	76	72	68	74	70	67	65																												
5	86	75	68	63	84	74	68	63	72	67	62	71	66	62	69	65	61	59																												
6	80	70	62	57	79	69	62	57	67	61	56	66	60	56	64	59	56	54																												
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49																												
8	71	60	53	48	70	59	52	48	58	52	48	57	51	47	56	51	47	45																												
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42																												
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7660	7660	7660
5°	7400	7508	7653
10°	6819	7139	7568
15°	6124	6636	7399
20°	5338	6037	7147
25°	4504	5357	6834
30°	3633	4630	6478
35°	2689	3874	6113
40°	1666	3087	5751
45°	661	2250	5416
50°	293	1412	4923
55°	236	737	4310
60°	162	558	3434
65°	106	552	2362
70°	106	499	1103
75°	140	486	486
80°	208	570	570
85°	415	1136	830

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5416 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.6	7.3
10°-20°	210.6	18.8
20°-30°	265.8	23.7
30°-40°	243.9	21.8
40°-50°	166.1	14.8
50°-60°	90.5	8.1
60°-70°	39.2	3.5
70°-80°	14.3	1.3
80°-90°	9.2	0.8
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°	558.0	49.8
0°-40°	801.9	71.5
0°-60°	1058.4	94.4
0°-90°	1121.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1121.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	890	890	890	890	890	
5°	856	868	869	878	885	79
15°	687	711	744	798	830	191
25°	474	507	564	654	719	217
35°	256	293	368	486	582	158
45°	54	91	185	328	445	50
55°	16	17	49	181	287	14
65°	5	7	27	56	116	6
75°	4	14	15	15	15	4
85°	4	9	12	12	8	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	889.5	889.5	889.5	889.5	889.5
2.5°	879.0	889.5	882.2	884.3	884.3
5°	856.1	867.6	868.6	878.0	885.3
7.5°	821.6	838.3	846.7	865.5	878.0
10°	779.9	799.7	816.4	848.8	865.5
12.5°	735.0	757.9	783.0	825.8	849.8
15°	686.9	711.0	744.4	797.6	830.0
17.5°	633.7	662.9	703.7	767.3	807.0
20°	582.5	611.8	658.8	730.8	779.9
22.5°	529.3	559.6	611.8	692.2	750.6
25°	474.0	507.4	563.8	653.5	719.3
27.5°	419.7	455.2	514.7	612.8	685.9
30°	365.4	400.9	465.6	571.1	651.5
32.5°	310.1	346.6	416.6	527.2	616.0
35°	255.8	293.4	368.5	485.5	581.5
37.5°	200.4	240.1	320.5	444.7	547.1
40°	148.2	187.9	274.6	404.0	511.6
42.5°	99.2	138.9	227.6	364.4	478.1
45°	54.3	90.8	184.8	327.8	444.7
47.5°	29.2	50.1	143.0	292.3	407.2
50°	21.9	27.1	105.4	254.7	367.5
52.5°	18.8	20.9	73.1	215.1	327.8
55°	15.7	16.7	49.1	180.6	287.1
57.5°	12.5	13.6	36.5	146.2	243.3
60°	9.4	11.5	32.4	112.8	199.4
62.5°	7.3	9.4	30.3	82.5	157.6
65°	5.2	7.3	27.1	56.4	115.9
67.5°	5.2	8.4	23.0	36.5	78.3
70°	4.2	11.5	19.8	24.0	43.8
72.5°	4.2	12.5	16.7	16.7	16.7
75°	4.2	13.6	14.6	14.6	14.6
77.5°	4.2	12.5	13.6	12.5	12.5
80°	4.2	11.5	11.5	11.5	11.5
82.5°	4.2	10.4	11.5	11.5	9.4
85°	4.2	9.4	11.5	11.5	8.4
87.5°	3.1	9.4	10.4	10.4	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)