

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: P1060330

Luminaire Tested: S124RDR-S1195D850-X4F0-XX-UDD-SVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060330
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-38)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1195D850-X4F0-XX-UDD-SVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH SILVER STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

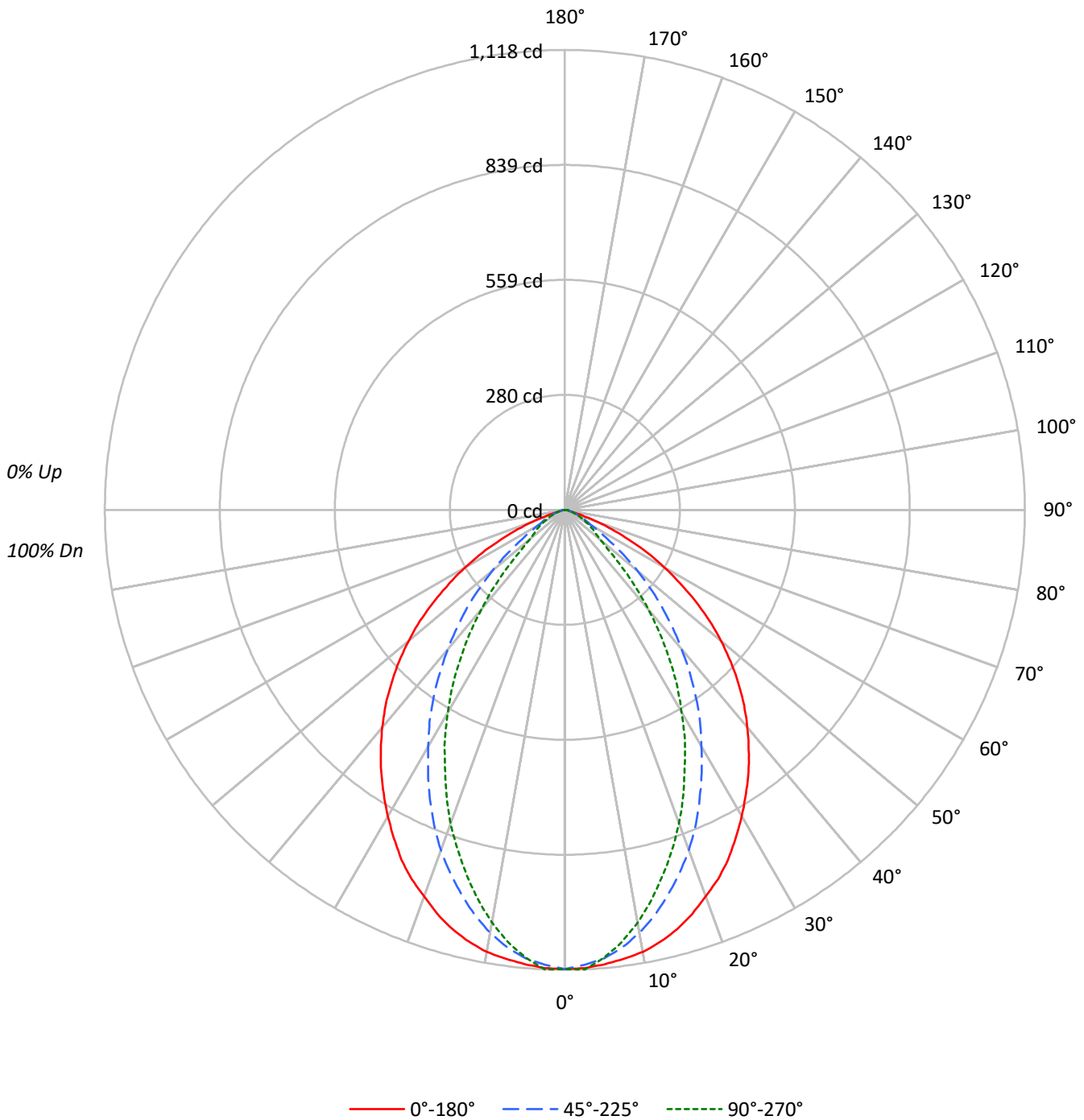
Lumens per Lamp: N/A
Luminaire Lumens: 1646.0 lumens
Efficiency: N/A
Efficacy: 39.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.87 / 1.02
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	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	97	98	96	94	95	93	92	90
2	104	98	93	88	102	96	91	87	93	89	85	90	86	83	87	84	82	80
3	97	89	82	77	95	87	81	76	84	79	75	82	78	74	79	76	73	71
4	90	81	74	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63
5	84	74	66	61	82	73	66	60	71	65	60	69	63	59	67	62	59	57
6	79	68	60	55	77	67	60	54	65	59	54	63	58	54	62	57	53	51
7	74	62	55	50	72	62	54	49	60	54	49	59	53	49	58	52	48	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9613	9613	9613
5°	9583	9460	9446
10°	9542	9130	8909
15°	9406	8635	8201
20°	9165	8070	7435
25°	8919	7365	6544
30°	8552	6598	5644
35°	8183	5835	4661
40°	7760	4967	3535
45°	7258	4060	2375
50°	6635	3076	1475
55°	5831	2030	1251
60°	4821	1245	1030
65°	3492	962	833
70°	1901	713	634
75°	419	522	576
80°	312	392	466
85°	306	306	464

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7258 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.4	6.3
10°-20°	274.7	16.7
20°-30°	363.9	22.1
30°-40°	361.2	21.9
40°-50°	278.0	16.9
50°-60°	165.7	10.1
60°-70°	75.3	4.6
70°-80°	19.5	1.2
80°-90°	4.3	0.3
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°	742.1	45.1
0°-40°	1103.3	67.0
0°-60°	1546.9	94.0
0°-90°	1646.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1646.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1109	1110	1094	1094	1093	105
15°	1055	1028	969	936	920	297
25°	939	871	775	711	689	431
35°	778	681	555	470	443	486
45°	596	480	333	233	195	459
55°	388	277	135	85	83	346
65°	171	102	47	41	41	172
75°	13	16	16	17	17	26
85°	3	3	3	5	5	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1116.4	1116.4	1116.4	1116.4	1116.4
2.5°	1114.9	1116.4	1107.0	1114.9	1118.0
5°	1108.6	1110.1	1094.4	1094.4	1092.8
7.5°	1100.7	1097.6	1072.4	1063.0	1059.8
10°	1091.3	1080.3	1044.1	1025.2	1018.9
12.5°	1075.5	1058.2	1009.5	982.8	971.8
15°	1055.1	1028.4	968.6	935.6	919.9
17.5°	1029.9	996.9	926.2	883.7	866.4
20°	1000.1	956.0	880.6	827.1	811.4
22.5°	971.8	916.7	830.2	768.9	751.6
25°	938.7	871.1	775.2	710.7	688.7
27.5°	899.4	827.1	720.2	654.1	632.1
30°	860.1	779.9	663.6	594.4	567.6
32.5°	819.2	731.2	611.7	533.1	507.9
35°	778.4	680.9	555.1	470.2	443.4
37.5°	734.3	630.5	498.5	410.4	380.5
40°	690.3	581.8	441.9	352.2	314.5
42.5°	644.7	531.5	386.8	292.5	254.7
45°	596.0	479.6	333.4	232.7	195.0
47.5°	547.2	430.8	279.9	174.5	139.9
50°	495.3	379.0	229.6	127.4	110.1
52.5°	443.4	328.6	179.3	99.1	94.3
55°	388.4	276.7	135.2	84.9	83.3
57.5°	331.8	229.6	97.5	73.9	70.8
60°	279.9	185.5	72.3	62.9	59.8
62.5°	226.4	139.9	59.8	51.9	48.7
65°	171.4	102.2	47.2	40.9	40.9
67.5°	124.2	69.2	37.7	33.0	31.4
70°	75.5	42.5	28.3	26.7	25.2
72.5°	37.7	25.2	22.0	20.4	20.4
75°	12.6	15.7	15.7	17.3	17.3
77.5°	9.4	11.0	11.0	12.6	12.6
80°	6.3	7.9	7.9	9.4	9.4
82.5°	4.7	4.7	6.3	6.3	7.9
85°	3.1	3.1	3.1	4.7	4.7
87.5°	1.6	1.6	1.6	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)