

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: P1060327

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060327
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-39)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1195D850-X4F0-XX-UDD-BVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

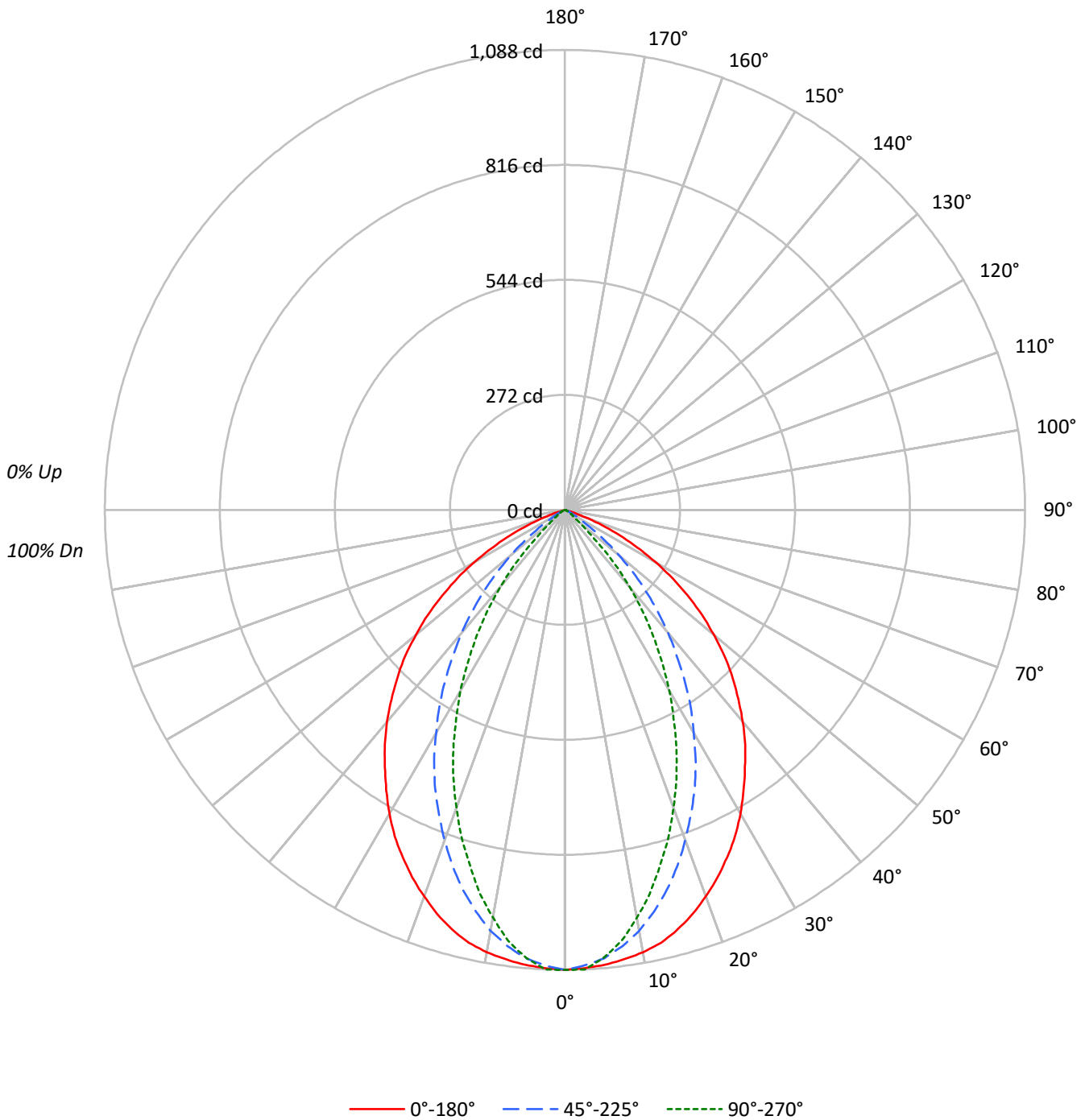
Lumens per Lamp: N/A
Luminaire Lumens: 1420.9 lumens
Efficiency: N/A
Efficacy: 34.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	109	106	103	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	90	103	98	93	89	94	91	87	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	82	76	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	84	75	69	64	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	63	58	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	74	64	57	53	63	57	52	61	56	52	60	55	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	56	49	44	54	48	44	54	48	44	53	48	44	42
10	64	52	46	41	63	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9370	9370	9370
5°	9338	9202	9189
10°	9295	8841	8566
15°	9168	8299	7752
20°	8919	7622	6874
25°	8621	6903	5932
30°	8256	6050	4909
35°	7802	5190	3818
40°	7353	4260	2669
45°	6817	3275	1321
50°	6152	2212	442
55°	5312	1133	306
60°	4252	406	217
65°	2916	224	96
70°	1307	118	78
75°	0	53	53
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6817 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.5	7.1
10°-20°	263.4	18.5
20°-30°	341.0	24.0
30°-40°	324.0	22.8
40°-50°	229.4	16.1
50°-60°	117.8	8.3
60°-70°	41.2	2.9
70°-80°	3.6	0.3
80°-90°	0.0	0.0
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°	704.9	49.6
0°-40°	1028.9	72.4
0°-60°	1376.1	96.8
0°-90°	1420.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1420.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1088	1088	1088	1088	1088	
5°	1080	1082	1065	1065	1063	103
15°	1028	997	931	887	870	289
25°	907	836	726	649	624	417
35°	742	634	494	398	363	464
45°	560	431	269	154	108	431
55°	354	233	76	22	20	316
65°	143	69	11	6	5	142
75°	0	2	2	2	2	12
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1088.1	1088.1	1088.1	1088.1	1088.1
2.5°	1085.0	1088.1	1078.7	1086.6	1088.1
5°	1080.3	1081.8	1064.6	1064.6	1063.0
7.5°	1072.4	1069.3	1041.0	1030.0	1028.4
10°	1063.0	1052.0	1011.1	987.5	979.6
12.5°	1048.8	1028.4	973.3	938.8	929.3
15°	1028.4	996.9	930.9	886.9	869.6
17.5°	1003.2	962.3	883.7	830.3	813.0
20°	973.3	921.5	831.8	772.1	750.1
22.5°	941.9	882.1	778.4	710.7	688.7
25°	907.3	836.5	726.5	649.4	624.3
27.5°	871.1	787.8	669.9	589.7	556.6
30°	830.3	739.1	608.5	525.2	493.7
32.5°	786.2	685.6	553.5	463.9	426.1
35°	742.2	633.7	493.7	397.8	363.2
37.5°	699.7	585.0	434.0	333.4	300.3
40°	654.1	531.5	379.0	275.2	237.4
42.5°	607.0	479.6	322.4	215.4	174.5
45°	559.8	430.9	268.9	154.1	108.5
47.5°	512.6	379.0	217.0	97.5	58.2
50°	459.2	328.6	165.1	51.9	33.0
52.5°	408.8	281.5	117.9	29.9	25.2
55°	353.8	232.7	75.5	22.0	20.4
57.5°	301.9	185.5	42.5	17.3	15.7
60°	246.9	143.1	23.6	14.2	12.6
62.5°	191.8	103.8	15.7	9.4	7.9
65°	143.1	69.2	11.0	6.3	4.7
67.5°	94.3	39.3	7.9	3.1	3.1
70°	51.9	18.9	4.7	3.1	3.1
72.5°	18.9	6.3	3.1	1.6	1.6
75°	0.0	1.6	1.6	1.6	1.6
77.5°	0.0	0.0	0.0	0.0	1.6
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)