

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: P1060318

Luminaire Tested: S124RDR-S1195D840-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060318
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-S1195D840-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

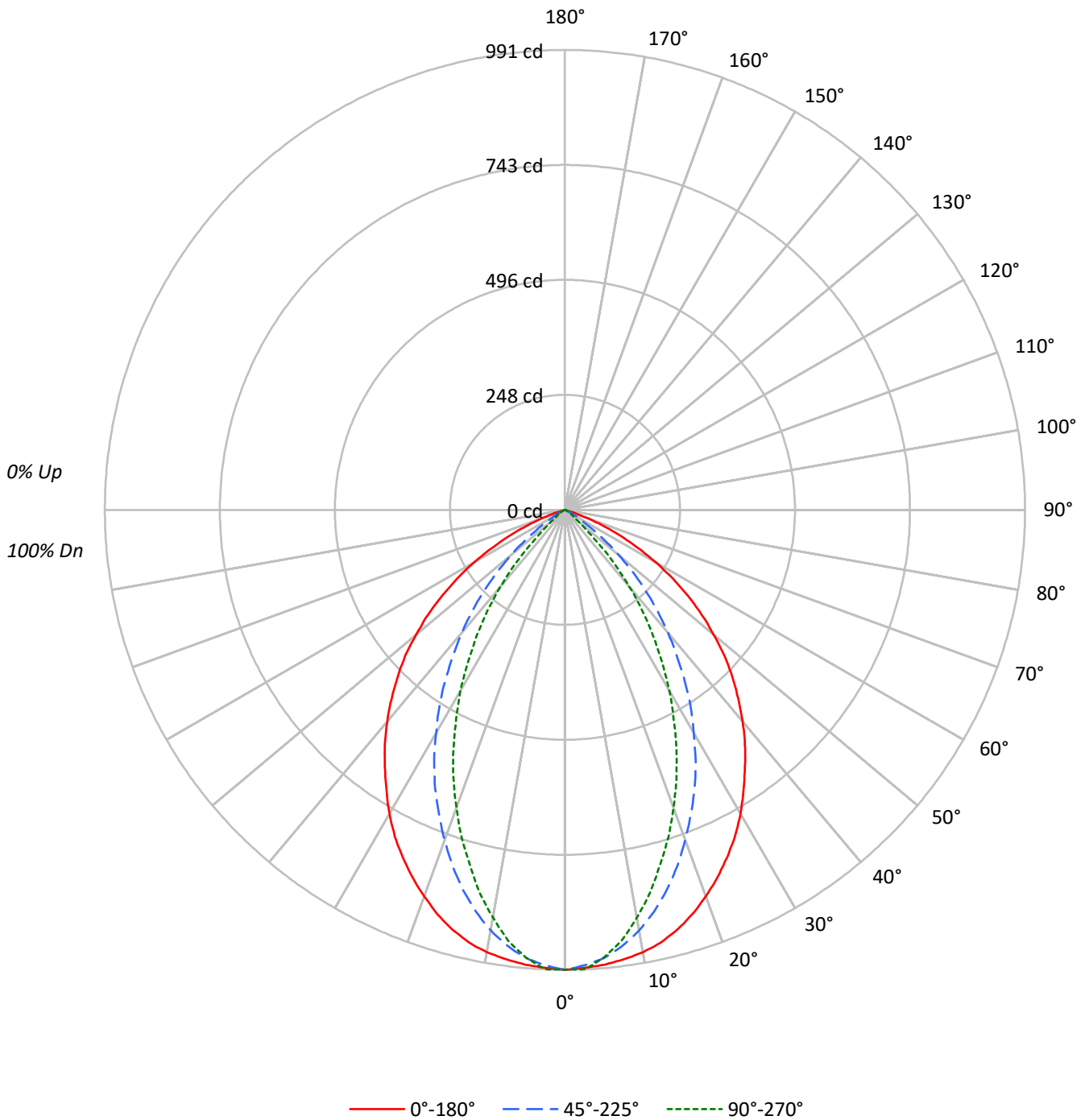
Lumens per Lamp: N/A
Luminaire Lumens: 1293.9 lumens
Efficiency: N/A
Efficacy: 31.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.83 / 0.98
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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°	8533	8533	8533
5°	8503	8380	8367
10°	8464	8051	7800
15°	8349	7557	7059
20°	8122	6942	6259
25°	7850	6285	5402
30°	7517	5510	4470
35°	7105	4726	3477
40°	6696	3879	2430
45°	6208	2982	1203
50°	5601	2014	403
55°	4837	1031	279
60°	3872	370	198
65°	2655	204	88
70°	1191	108	73
75°	0	47	47
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6208 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	7.1
10°-20°	239.9	18.5
20°-30°	310.5	24.0
30°-40°	295.0	22.8
40°-50°	208.9	16.1
50°-60°	107.3	8.3
60°-70°	37.5	2.9
70°-80°	3.2	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°	641.9	49.6
0°-40°	936.9	72.4
0°-60°	1253.1	96.8
0°-90°	1293.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1293.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	991	991	991	991	991	
5°	984	985	969	969	968	93
15°	936	908	848	808	792	263
25°	826	762	662	591	568	380
35°	676	577	450	362	331	423
45°	510	392	245	140	99	392
55°	322	212	69	20	19	288
65°	130	63	10	6	4	130
75°	0	1	1	1	1	11
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°	990.9	990.9	990.9	990.9	990.9
2.5°	988.0	990.9	982.3	989.4	990.9
5°	983.7	985.1	969.4	969.4	968.0
7.5°	976.5	973.7	947.9	937.9	936.5
10°	968.0	957.9	920.7	899.2	892.1
12.5°	955.1	936.5	886.3	854.8	846.2
15°	936.5	907.8	847.7	807.6	791.8
17.5°	913.5	876.3	804.7	756.0	740.3
20°	886.3	839.1	757.5	703.1	683.0
22.5°	857.7	803.3	708.8	647.2	627.2
25°	826.2	761.8	661.5	591.4	568.5
27.5°	793.3	717.4	610.0	537.0	506.9
30°	756.0	673.0	554.1	478.3	449.6
32.5°	715.9	624.3	504.0	422.4	388.0
35°	675.9	577.1	449.6	362.3	330.8
37.5°	637.2	532.7	395.2	303.6	273.5
40°	595.7	484.0	345.1	250.6	216.2
42.5°	552.7	436.7	293.5	196.2	158.9
45°	509.8	392.3	244.9	140.3	98.8
47.5°	466.8	345.1	197.6	88.8	53.0
50°	418.1	299.3	150.3	47.3	30.1
52.5°	372.3	256.3	107.4	27.2	22.9
55°	322.2	211.9	68.7	20.0	18.6
57.5°	274.9	169.0	38.7	15.8	14.3
60°	224.8	130.3	21.5	12.9	11.5
62.5°	174.7	94.5	14.3	8.6	7.2
65°	130.3	63.0	10.0	5.7	4.3
67.5°	85.9	35.8	7.2	2.9	2.9
70°	47.3	17.2	4.3	2.9	2.9
72.5°	17.2	5.7	2.9	1.4	1.4
75°	0.0	1.4	1.4	1.4	1.4
77.5°	0.0	0.0	0.0	0.0	1.4
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)