

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: P1060319

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060319
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-78)
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-S
Description: DEFINE 4 SILVER REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

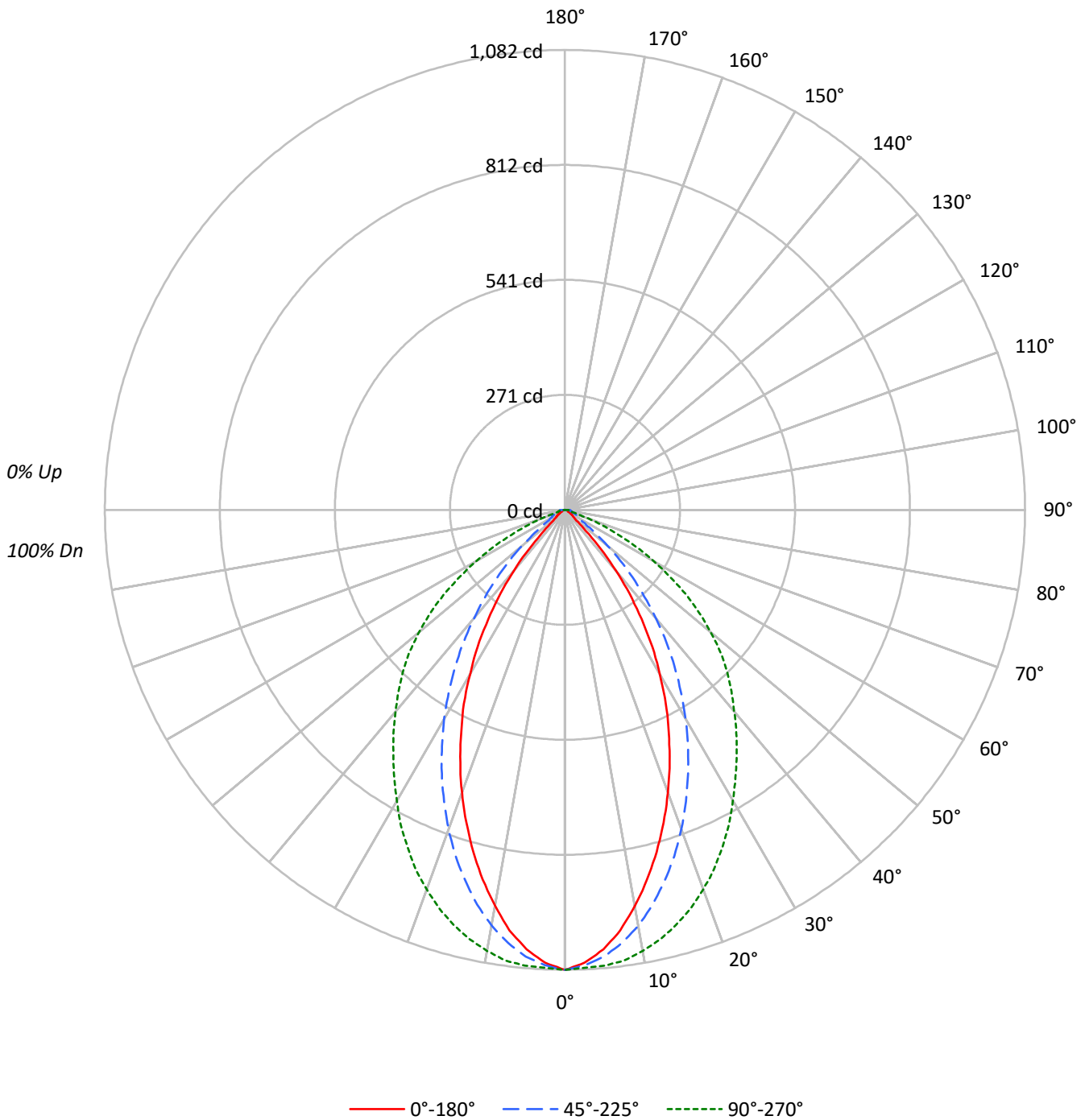
Lumens per Lamp: N/A
Luminaire Lumens: 1358.3 lumens
Efficiency: N/A
Efficacy: 32.5 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.11 / 0.97
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	98	98	96	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	68	63	84	75	68	63	73	67	62	71	66	62	69	65	61	59
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	59	56	54
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	51	47	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9320	9320	9320
5°	8971	9119	9305
10°	8273	8686	9213
15°	7424	8064	9009
20°	6489	7330	8709
25°	5489	6510	8321
30°	4433	5644	7853
35°	3300	4717	7399
40°	2094	3739	6962
45°	838	2741	6564
50°	364	1747	5991
55°	279	904	5229
60°	198	617	4147
65°	147	613	2832
70°	144	541	1299
75°	190	572	526
80°	283	640	570
85°	563	1136	850

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6564 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.0	7.3
10°-20°	255.5	18.8
20°-30°	322.7	23.8
30°-40°	296.4	21.8
40°-50°	202.1	14.9
50°-60°	109.6	8.1
60°-70°	46.5	3.4
70°-80°	16.1	1.2
80°-90°	10.2	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°	677.3	49.9
0°-40°	973.8	71.7
0°-60°	1285.5	94.6
0°-90°	1358.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1358.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1082	1082	1082	1082	1082	
5°	1038	1054	1055	1064	1076	96
15°	833	860	904	969	1011	232
25°	578	615	685	791	876	264
35°	314	356	449	589	704	195
45°	69	110	225	398	539	63
55°	19	20	60	219	348	17
65°	7	9	30	69	139	7
75°	6	16	17	16	16	6
85°	6	12	12	12	9	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1082.3	1082.3	1082.3	1082.3	1082.3
2.5°	1066.5	1079.4	1072.2	1075.1	1078.0
5°	1037.8	1053.6	1055.0	1063.6	1076.5
7.5°	997.7	1016.3	1027.8	1049.3	1069.4
10°	946.1	969.0	993.4	1027.8	1053.6
12.5°	891.6	916.0	951.8	1000.6	1035.0
15°	832.8	860.1	904.5	969.0	1010.6
17.5°	771.2	801.3	854.3	930.3	983.4
20°	708.1	741.1	799.9	885.9	950.4
22.5°	643.6	678.0	742.5	840.0	916.0
25°	577.7	615.0	685.2	791.3	875.8
27.5°	514.6	549.0	626.4	742.5	835.7
30°	445.8	484.5	567.6	692.4	789.8
32.5°	382.7	420.0	507.4	640.8	746.8
35°	313.9	355.5	448.7	589.2	703.8
37.5°	249.4	289.6	391.3	540.4	662.3
40°	186.3	227.9	332.6	491.7	619.3
42.5°	124.7	169.1	276.7	441.5	579.1
45°	68.8	110.4	225.1	398.5	539.0
47.5°	35.8	60.2	176.3	355.5	496.0
50°	27.2	33.0	130.4	308.2	447.2
52.5°	22.9	24.4	88.9	260.9	398.5
55°	18.6	20.1	60.2	219.3	348.3
57.5°	14.3	15.8	43.0	179.2	292.4
60°	11.5	12.9	35.8	137.6	240.8
62.5°	8.6	10.0	34.4	101.8	189.2
65°	7.2	8.6	30.1	68.8	139.0
67.5°	5.7	8.6	25.8	44.4	93.2
70°	5.7	11.5	21.5	28.7	51.6
72.5°	5.7	12.9	18.6	18.6	18.6
75°	5.7	15.8	17.2	15.8	15.8
77.5°	5.7	14.3	14.3	14.3	14.3
80°	5.7	12.9	12.9	12.9	11.5
82.5°	5.7	11.5	12.9	12.9	10.0
85°	5.7	11.5	11.5	11.5	8.6
87.5°	4.3	11.5	11.5	11.5	5.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)