

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: P1060335

Luminaire Tested: S124RDR-S1195D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060335
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-73)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1195D850-X4F0-XX-UDD-WVL-W
Description: DEFINE 4 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

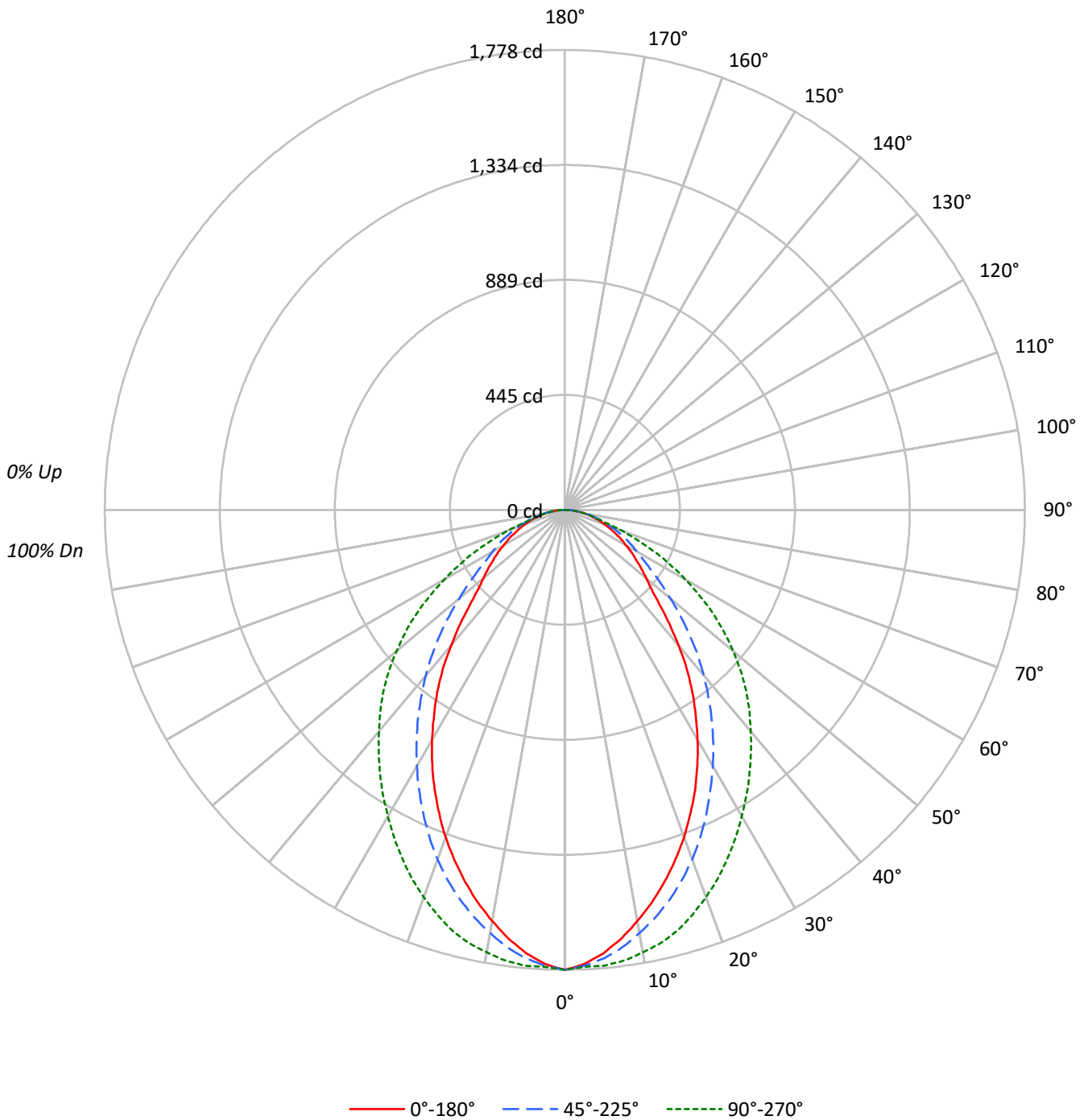
Lumens per Lamp: N/A
Luminaire Lumens: 3262.7 lumens
Efficiency: N/A
Efficacy: 78.1 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.15 / 1.11
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100	
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87			87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75			75	
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	75	70	67	65			65	
4	86	76	68	62	84	74	67	61	72	66	60	70	64	60	68	63	59	57			57	
5	80	68	60	54	78	67	60	54	65	59	53	63	58	53	62	56	52	50			50	
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45			45	
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40			40	
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37			37	
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33			33	
10	58	45	38	33	56	45	38	33	44	37	33	43	37	32	42	36	32	31			31	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15311	15311	15311
5°	14867	15043	15288
10°	14116	14529	15190
15°	13271	13915	15010
20°	12343	13179	14607
25°	11318	12304	14128
30°	10201	11375	13596
35°	9031	10404	13085
40°	7677	9392	12558
45°	6285	8297	12072
50°	5502	7126	11362
55°	5055	6142	10512
60°	4688	5528	9267
65°	4393	5194	7759
70°	4119	4753	5824
75°	3873	4345	4242
80°	3590	3977	3590
85°	3260	3883	3112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 12072 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.3	5.0
10°-20°	442.1	13.6
20°-30°	604.3	18.5
30°-40°	635.2	19.5
40°-50°	551.2	16.9
50°-60°	415.8	12.7
60°-70°	269.5	8.3
70°-80°	138.3	4.2
80°-90°	41.9	1.3
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°	1210.8	37.1
0°-40°	1846.0	56.6
0°-60°	2812.9	86.2
0°-90°	3262.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3262.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1778	1778	1778	1778	1778	
5°	1720	1744	1740	1754	1769	161
15°	1489	1525	1561	1632	1684	417
25°	1191	1234	1295	1394	1487	546
35°	859	906	990	1122	1245	534
45°	516	565	681	851	991	406
55°	337	346	409	581	700	303
65°	216	220	255	308	381	215
75°	116	131	131	132	128	124
85°	33	41	39	38	32	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1778.1	1778.1	1778.1	1778.1	1778.1
2.5°	1757.6	1779.7	1763.9	1767.1	1768.6
5°	1719.9	1743.5	1740.3	1754.5	1768.6
7.5°	1671.1	1699.4	1705.7	1734.0	1757.6
10°	1614.4	1645.9	1661.6	1707.3	1737.2
12.5°	1554.6	1586.1	1614.4	1672.7	1715.1
15°	1488.6	1524.7	1560.9	1631.7	1683.7
17.5°	1419.3	1457.1	1502.7	1579.8	1641.2
20°	1346.9	1384.7	1438.2	1521.6	1594.0
22.5°	1269.8	1312.3	1369.0	1458.7	1543.6
25°	1191.2	1233.6	1295.0	1394.1	1487.0
27.5°	1109.3	1153.4	1219.5	1329.6	1428.8
30°	1025.9	1073.1	1144.0	1260.4	1367.4
32.5°	941.0	991.3	1066.8	1191.2	1307.6
35°	859.1	906.3	989.7	1121.9	1244.7
37.5°	774.2	821.4	911.1	1054.3	1181.7
40°	682.9	734.8	835.5	983.5	1117.2
42.5°	597.9	649.9	758.4	915.8	1055.8
45°	516.1	564.9	681.3	851.3	991.3
47.5°	453.2	487.8	604.2	788.3	922.1
50°	410.7	426.4	531.9	719.1	848.1
52.5°	372.9	385.5	465.8	649.9	775.7
55°	336.7	346.2	409.1	580.6	700.2
57.5°	305.3	310.0	358.8	511.4	618.4
60°	272.2	278.5	321.0	440.6	538.1
62.5°	245.5	248.6	288.0	372.9	457.9
65°	215.6	220.3	254.9	308.4	380.8
67.5°	188.8	196.7	220.3	251.8	300.5
70°	163.6	174.7	188.8	204.6	231.3
72.5°	140.0	152.6	160.5	166.8	162.1
75°	116.4	130.6	130.6	132.2	127.5
77.5°	94.4	107.0	105.4	103.9	97.6
80°	72.4	83.4	80.2	78.7	72.4
82.5°	53.5	61.4	58.2	56.6	48.8
85°	33.0	40.9	39.3	37.8	31.5
87.5°	15.7	23.6	22.0	20.5	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)