

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: P1055982

Luminaire Tested: S124R3DR-S1195D830-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055982
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124R3DR-S1195D830-X4F0-XX-UDD-FLL-W
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

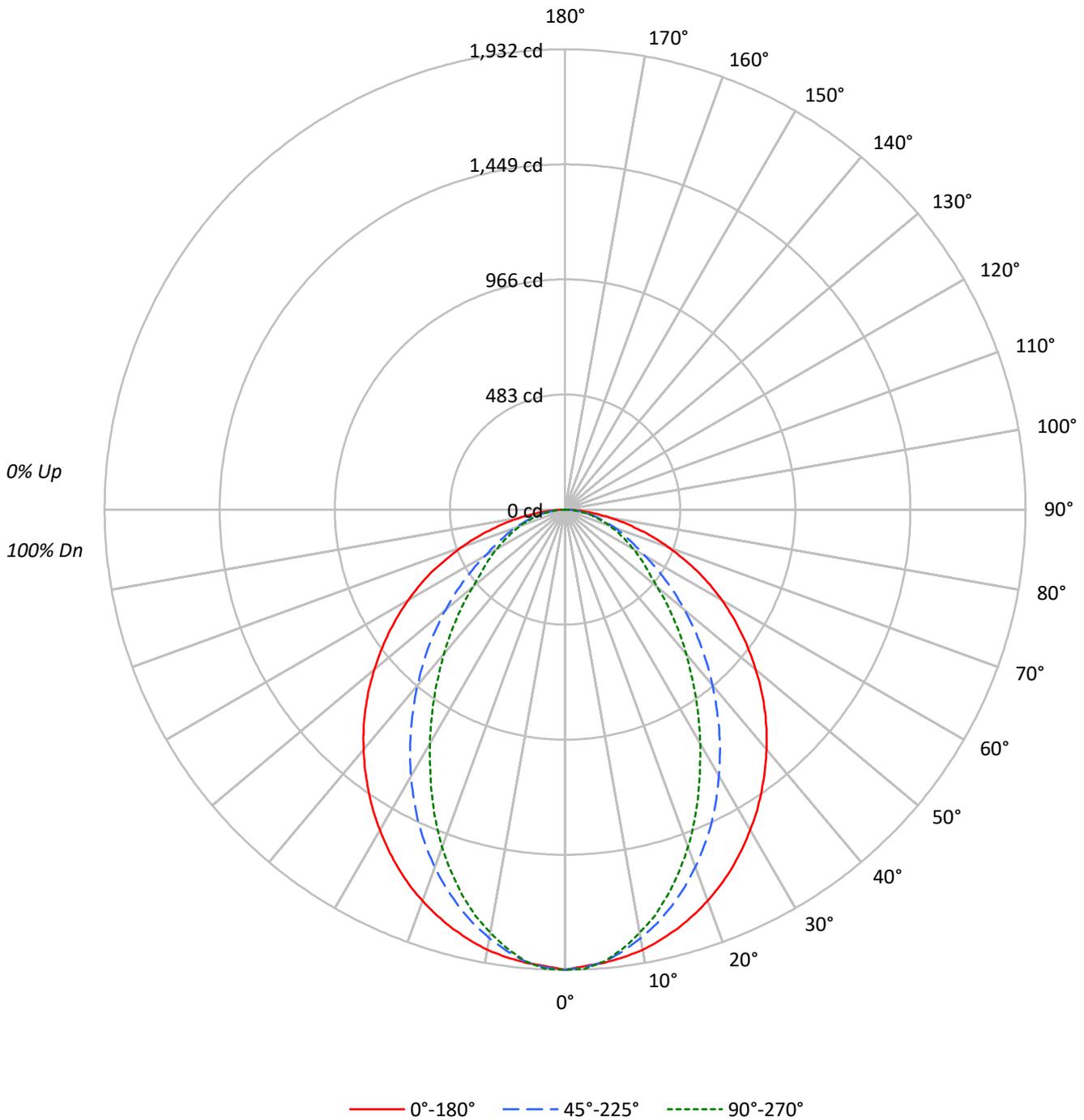
Lumens per Lamp: N/A
Luminaire Lumens: 3847.7 lumens
Efficiency: N/A
Efficacy: 91.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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

TEST NUMBER: P1055982

CATALOG NUMBER: S124R3DR-S1195D830-X4F0-XX-UDD-FLL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1055982

CATALOG NUMBER: S124R3DR-S1195D830-X4F0-XX-UDD-FLL-W

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	105	102	98	107	103	100	97	99	96	93	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73				73
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63				63
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55				55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				49
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43				43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39				39
8	64	51	43	38	62	51	43	38	49	42	37	48	42	37	47	41	37	35				35
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32				32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29				29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17080	17080	17080
5°	16944	16905	16893
10°	16846	16399	16195
15°	16667	15783	15302
20°	16450	15033	14190
25°	16183	14173	12897
30°	15862	13191	11581
35°	15527	12166	10310
40°	15176	11108	9122
45°	14806	10078	8016
50°	14352	8994	6921
55°	13915	7911	6289
60°	13423	6787	5832
65°	12818	6157	5441
70°	11907	5695	5144
75°	10781	5244	4858
80°	9409	4847	4562
85°	7213	4474	4179

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14806 cd/sqm



TEST NUMBER: P1055982

CATALOG NUMBER: S124R3DR-S1195D830-X4F0-XX-UDD-FLL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.9	4.7
10°-20°	487.9	12.7
20°-30°	675.5	17.6
30°-40°	725.0	18.8
40°-50°	659.4	17.1
50°-60°	519.2	13.5
60°-70°	355.4	9.2
70°-80°	191.3	5.0
80°-90°	54.2	1.4
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°	1343.2	34.9
0°-40°	2068.3	53.8
0°-60°	3246.9	84.4
0°-90°	3847.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3847.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1932	1932	1932	1932	1932	
5°	1909	1930	1905	1895	1903	181
15°	1821	1801	1724	1677	1672	513
25°	1659	1591	1453	1348	1322	764
35°	1439	1326	1127	991	955	900
45°	1184	1033	806	667	641	913
55°	903	731	513	414	408	807
65°	613	438	294	262	260	605
75°	316	192	154	141	142	337
85°	71	48	44	41	41	85
90°	0	0	0	0	0	



TEST NUMBER: P1055982

CATALOG NUMBER: S124R3DR-S1195D830-X4F0-XX-UDD-FLL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1931.8	1931.8	1931.8	1931.8	1931.8
2.5°	1917.6	1940.3	1923.3	1926.1	1929.0
5°	1909.1	1930.4	1904.8	1894.9	1903.4
7.5°	1894.9	1909.1	1869.3	1850.8	1859.3
10°	1876.4	1879.2	1826.6	1799.6	1803.9
12.5°	1850.8	1843.7	1779.7	1741.3	1744.2
15°	1820.9	1801.0	1724.3	1677.4	1671.7
17.5°	1786.8	1754.1	1663.2	1603.5	1592.1
20°	1748.4	1704.4	1597.8	1521.0	1508.2
22.5°	1705.8	1648.9	1526.7	1435.7	1417.2
25°	1658.9	1590.7	1452.8	1347.6	1322.0
27.5°	1607.7	1528.1	1373.2	1258.0	1225.3
30°	1553.7	1462.7	1292.1	1168.5	1134.4
32.5°	1498.3	1395.9	1209.7	1078.9	1043.4
35°	1438.6	1326.3	1127.2	990.8	955.2
37.5°	1377.4	1253.8	1043.4	905.5	868.5
40°	1314.9	1181.3	962.4	820.2	790.4
42.5°	1250.9	1107.3	882.8	740.6	713.6
45°	1184.1	1033.4	806.0	666.7	641.1
47.5°	1115.9	958.1	727.8	597.0	572.9
50°	1043.4	882.8	653.9	528.8	503.2
52.5°	973.7	806.0	582.8	462.0	449.2
55°	902.7	730.7	513.2	413.7	408.0
57.5°	831.6	655.3	449.2	375.3	369.6
60°	759.1	581.4	383.8	335.5	329.8
62.5°	686.6	508.9	335.5	297.1	294.3
65°	612.7	437.8	294.3	261.6	260.1
67.5°	534.5	369.6	257.3	230.3	228.9
70°	460.6	301.4	220.3	199.0	199.0
72.5°	390.9	238.8	186.2	169.2	169.2
75°	315.6	191.9	153.5	140.7	142.2
77.5°	248.8	150.7	123.7	115.1	115.1
80°	184.8	112.3	95.2	88.1	89.6
82.5°	125.1	78.2	68.2	64.0	64.0
85°	71.1	48.3	44.1	41.2	41.2
87.5°	25.6	22.7	21.3	18.5	19.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)