

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: P1055985

Luminaire Tested: S124R3DR-S1195D835-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055985
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-S1195D835-X4F0-XX-UDD-FLL-W
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

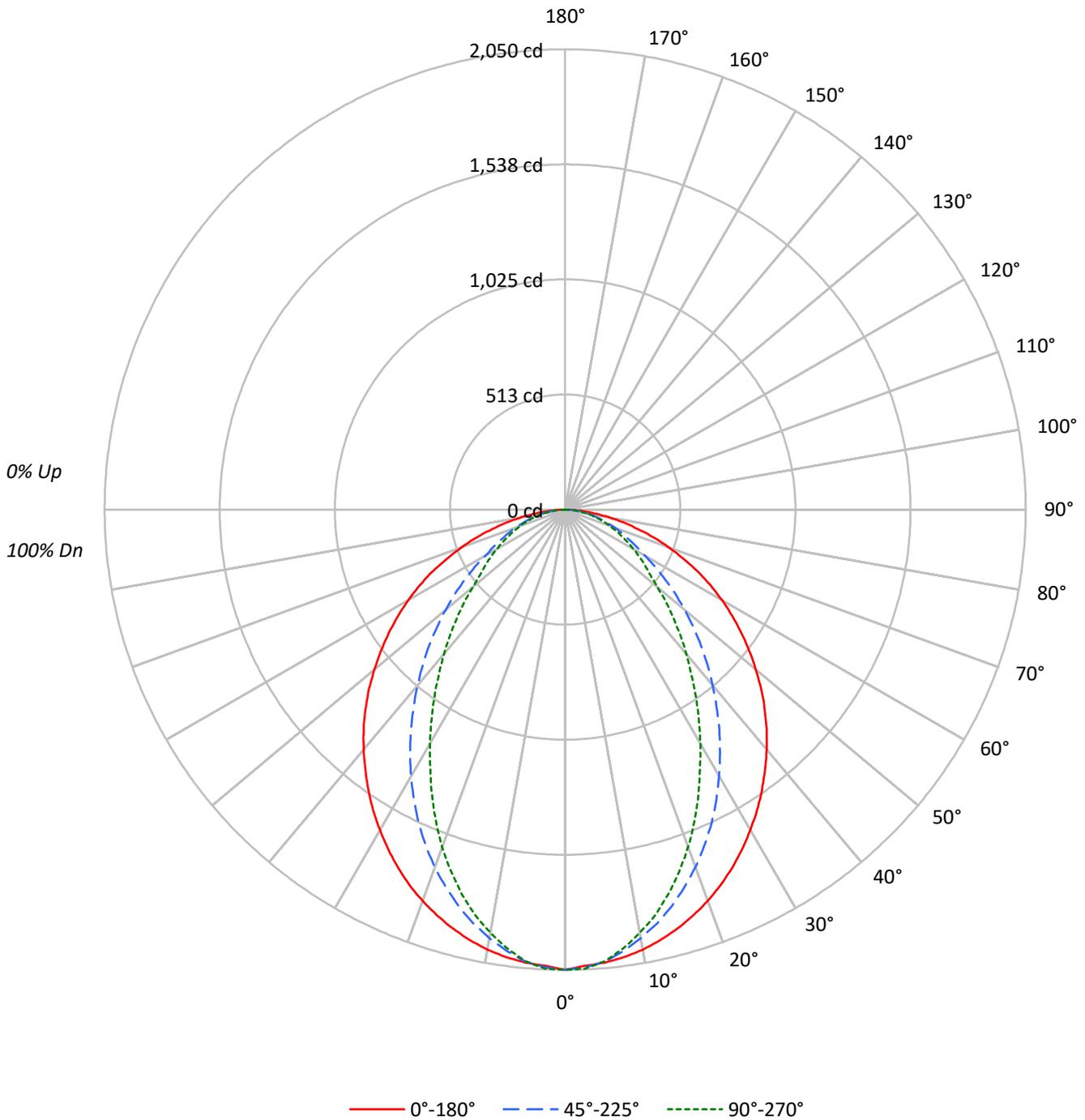
Lumens per Lamp: N/A
Luminaire Lumens: 4082.2 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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: P1055985

CATALOG NUMBER: S124R3DR-S1195D835-X4F0-XX-UDD-FLL-W

Luminous Intensity Polar Plot





TEST NUMBER: P1055985

CATALOG NUMBER: S124R3DR-S1195D835-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				
1	110	105	102	98	107	103	100	97	99	96	93	95	93	91	92	90	88	86				
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	76	73				
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63				
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55				
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				
6	73	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43				
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39				
8	64	51	43	38	62	51	43	38	49	42	37	48	42	37	47	41	37	35				
9	60	47	39	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32				
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18121	18121	18121
5°	17977	17936	17922
10°	17873	17399	17182
15°	17683	16745	16234
20°	17453	15950	15056
25°	17169	15036	13683
30°	16829	13996	12287
35°	16474	12909	10939
40°	16101	11784	9678
45°	15708	10692	8505
50°	15226	9543	7344
55°	14762	8392	6671
60°	14242	7200	6187
65°	13598	6531	5774
70°	12631	6044	5457
75°	11437	5565	5151
80°	9985	5142	4837
85°	7649	4748	4433

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15708 cd/sqm

TEST NUMBER: P1055985

CATALOG NUMBER: S124R3DR-S1195D835-X4F0-XX-UDD-FLL-W

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.8	4.7
10°-20°	517.6	12.7
20°-30°	716.7	17.6
30°-40°	769.2	18.8
40°-50°	699.6	17.1
50°-60°	550.9	13.5
60°-70°	377.0	9.2
70°-80°	203.0	5.0
80°-90°	57.5	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°	1425.1	34.9
0°-40°	2194.3	53.8
0°-60°	3444.8	84.4
0°-90°	4082.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4082.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2050	2050	2050	2050	2050	
5°	2026	2048	2021	2010	2019	192
15°	1932	1911	1829	1780	1774	545
25°	1760	1688	1541	1430	1403	810
35°	1526	1407	1196	1051	1014	955
45°	1256	1096	855	707	680	969
55°	958	775	544	439	433	856
65°	650	464	312	278	276	641
75°	335	204	163	149	151	357
85°	75	51	47	44	44	91
90°	0	0	0	0	0	



TEST NUMBER: P1055985

CATALOG NUMBER: S124R3DR-S1195D835-X4F0-XX-UDD-FLL-W

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2049.6	2049.6	2049.6	2049.6	2049.6
2.5°	2034.5	2058.6	2040.5	2043.6	2046.6
5°	2025.5	2048.1	2020.9	2010.4	2019.4
7.5°	2010.4	2025.5	1983.2	1963.6	1972.7
10°	1990.8	1993.8	1938.0	1909.3	1913.8
12.5°	1963.6	1956.1	1888.2	1847.5	1850.5
15°	1931.9	1910.8	1829.4	1779.6	1773.6
17.5°	1895.8	1861.1	1764.5	1701.2	1689.1
20°	1855.0	1808.3	1695.2	1613.7	1600.2
22.5°	1809.8	1749.5	1619.8	1523.2	1503.6
25°	1760.0	1687.6	1541.3	1429.7	1402.6
27.5°	1705.7	1621.3	1456.9	1334.7	1300.0
30°	1648.4	1551.9	1370.9	1239.7	1203.5
32.5°	1589.6	1481.0	1283.4	1144.7	1107.0
35°	1526.3	1407.1	1196.0	1051.2	1013.5
37.5°	1461.4	1330.2	1107.0	960.7	921.5
40°	1395.0	1253.3	1021.0	870.2	838.5
42.5°	1327.2	1174.9	936.6	785.7	757.1
45°	1256.3	1096.4	855.1	707.3	680.2
47.5°	1183.9	1016.5	772.2	633.4	607.8
50°	1107.0	936.6	693.8	561.0	533.9
52.5°	1033.1	855.1	618.3	490.2	476.6
55°	957.7	775.2	544.4	438.9	432.8
57.5°	882.3	695.3	476.6	398.2	392.1
60°	805.4	616.8	407.2	355.9	349.9
62.5°	728.4	539.9	355.9	315.2	312.2
65°	650.0	464.5	312.2	277.5	276.0
67.5°	567.1	392.1	273.0	244.3	242.8
70°	488.6	319.7	233.8	211.1	211.1
72.5°	414.7	253.4	197.6	179.5	179.5
75°	334.8	203.6	162.9	149.3	150.8
77.5°	263.9	159.9	131.2	122.2	122.2
80°	196.1	119.1	101.0	93.5	95.0
82.5°	132.7	82.9	72.4	67.9	67.9
85°	75.4	51.3	46.8	43.7	43.7
87.5°	27.1	24.1	22.6	19.6	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)