

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: P1056003

Luminaire Tested: S124R3DR-S1195D940-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1056003
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-S1195D940-X4F0-XX-UDD-FLL-W
Description: DEFINE 4, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

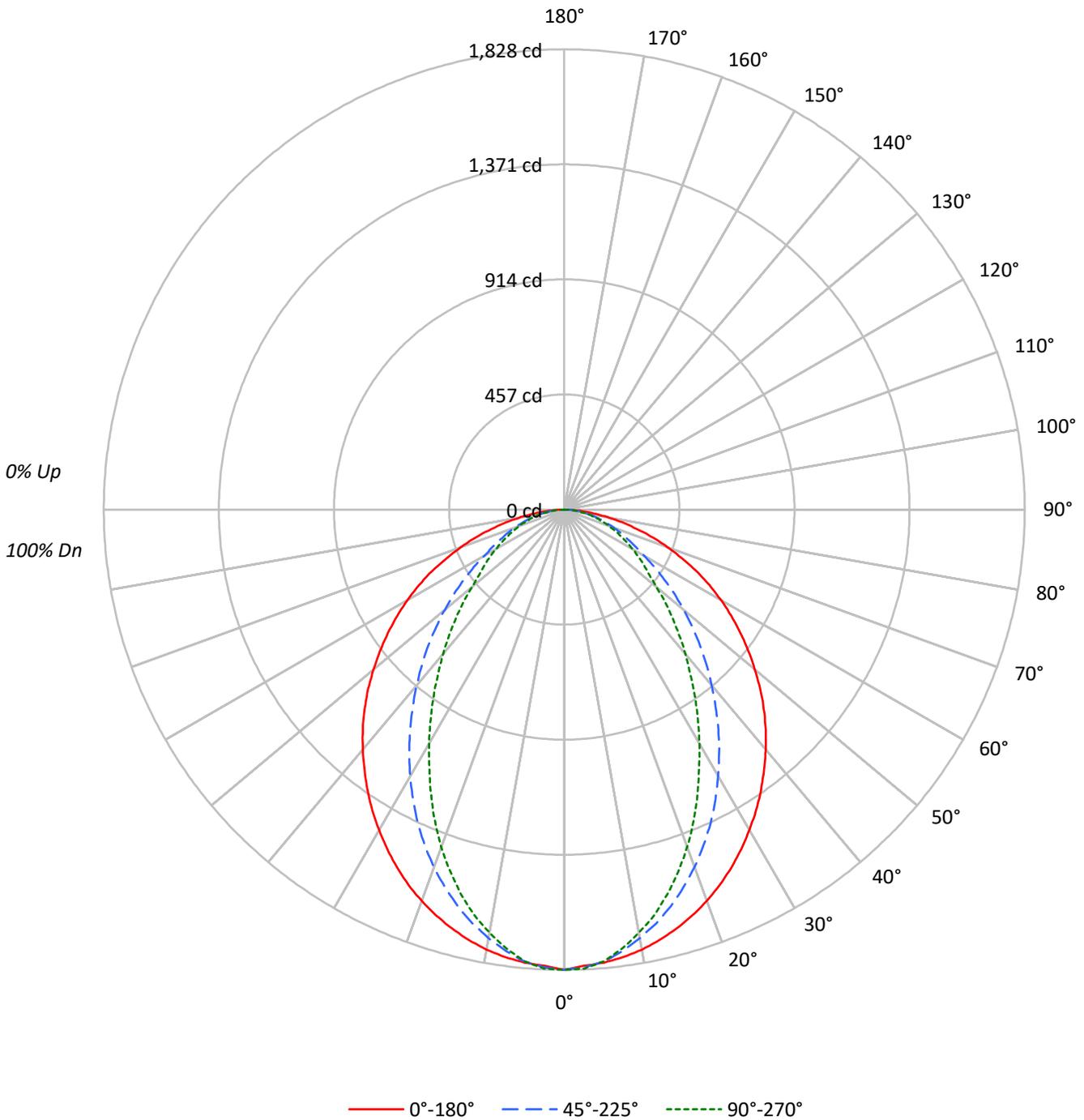
Lumens per Lamp: N/A
Luminaire Lumens: 3640.2 lumens
Efficiency: N/A
Efficacy: 86.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.95 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 3.9' x H: 0')
CIE Type: Direct

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

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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	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°	16159	16159	16159
5°	16029	15994	15981
10°	15937	15514	15321
15°	15768	14932	14476
20°	15564	14222	13425
25°	15310	13408	12201
30°	15006	12481	10956
35°	14690	11511	9754
40°	14358	10509	8630
45°	14008	9534	7583
50°	13577	8509	6549
55°	13164	7484	5950
60°	12698	6421	5517
65°	12126	5824	5149
70°	11263	5387	4868
75°	10200	4960	4595
80°	8900	4587	4313
85°	6817	4230	3956

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14008 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.2	4.7
10°-20°	461.6	12.7
20°-30°	639.1	17.6
30°-40°	685.9	18.8
40°-50°	623.8	17.1
50°-60°	491.2	13.5
60°-70°	336.2	9.2
70°-80°	181.0	5.0
80°-90°	51.2	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°	1270.8	34.9
0°-40°	1956.7	53.8
0°-60°	3071.7	84.4
0°-90°	3640.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3640.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1828	1828	1828	1828	1828	
5°	1806	1826	1802	1793	1801	171
15°	1723	1704	1631	1587	1582	486
25°	1569	1505	1374	1275	1251	723
35°	1361	1255	1066	937	904	851
45°	1120	978	762	631	606	864
55°	854	691	486	391	386	764
65°	580	414	278	248	246	572
75°	299	182	145	133	134	319
85°	67	46	42	39	39	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1827.6	1827.6	1827.6	1827.6	1827.6
2.5°	1814.2	1835.7	1819.6	1822.3	1824.9
5°	1806.1	1826.3	1802.1	1792.7	1800.7
7.5°	1792.7	1806.1	1768.5	1751.0	1759.0
10°	1775.2	1777.9	1728.1	1702.6	1706.6
12.5°	1751.0	1744.3	1683.7	1647.4	1650.1
15°	1722.7	1703.9	1631.3	1586.9	1581.5
17.5°	1690.5	1659.5	1573.5	1517.0	1506.2
20°	1654.2	1612.5	1511.6	1439.0	1426.9
22.5°	1613.8	1560.0	1444.4	1358.3	1340.8
25°	1569.4	1504.9	1374.4	1274.9	1250.7
27.5°	1521.0	1445.7	1299.1	1190.2	1159.3
30°	1469.9	1383.8	1222.5	1105.5	1073.2
32.5°	1417.5	1320.6	1144.5	1020.7	987.1
35°	1361.0	1254.7	1066.5	937.4	903.7
37.5°	1303.1	1186.1	987.1	856.7	821.7
40°	1244.0	1117.6	910.5	776.0	747.7
42.5°	1183.5	1047.6	835.1	700.7	675.1
45°	1120.3	977.7	762.5	630.7	606.5
47.5°	1055.7	906.4	688.6	564.8	542.0
50°	987.1	835.1	618.6	500.3	476.1
52.5°	921.2	762.5	551.4	437.1	425.0
55°	854.0	691.2	485.5	391.3	386.0
57.5°	786.7	620.0	425.0	355.0	349.7
60°	718.1	550.0	363.1	317.4	312.0
62.5°	649.6	481.5	317.4	281.1	278.4
65°	579.6	414.2	278.4	247.5	246.1
67.5°	505.7	349.7	243.4	217.9	216.5
70°	435.7	285.1	208.4	188.3	188.3
72.5°	369.8	225.9	176.2	160.0	160.0
75°	298.6	181.6	145.2	133.1	134.5
77.5°	235.3	142.6	117.0	108.9	108.9
80°	174.8	106.2	90.1	83.4	84.7
82.5°	118.3	74.0	64.6	60.5	60.5
85°	67.2	45.7	41.7	39.0	39.0
87.5°	24.2	21.5	20.2	17.5	18.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)