

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: P998464

Luminaire Tested: S124DR-B1195DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P998464
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-5)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DR-B1195DB2750-4F0-XX-W2A-F_3500K
Description: Define 4 Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

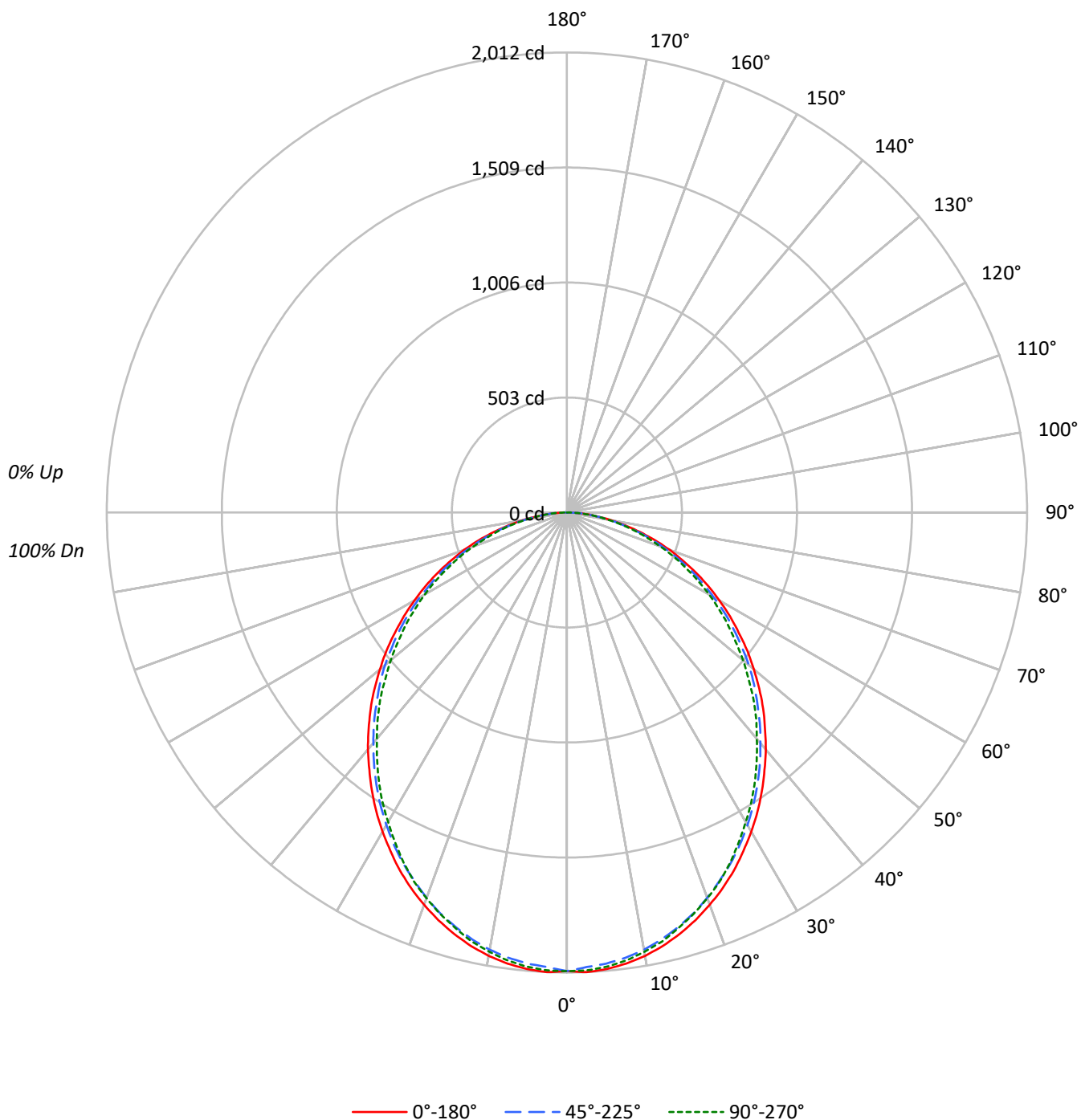
Lumens per Lamp: N/A
Luminaire Lumens: 5148.0 lumens
Efficiency: N/A
Efficacy: 84.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
Input Voltage (V):
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		79
3	91	80	72	66	88	79	71	65	76	69	64		73	67	63		70
4	83	71	63	56	81	70	62	56	67	60	55		65	59	54		63
5	77	64	55	48	74	63	54	48	61	53	48		59	52	47		57
6	71	58	49	42	69	57	48	42	55	47	42		53	47	41		52
7	66	52	44	38	64	52	43	37	50	43	37		49	42	37		47
8	61	48	39	34	60	47	39	34	46	39	33		45	38	33		43
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40
10	54	41	33	28	52	40	33	28	39	32	27		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16355	16355	16355
5°	16405	16208	16325
10°	16301	16075	16156
15°	16105	15847	15887
20°	15843	15565	15578
25°	15545	15241	15198
30°	15178	14860	14724
35°	14799	14462	14271
40°	14405	14011	13754
45°	13993	13566	13307
50°	13537	13171	12764
55°	13047	12657	12246
60°	12555	12083	11716
65°	12002	11537	11070
70°	11380	10805	10383
75°	10432	9925	9672
80°	9284	8904	8678
85°	8121	7822	7672

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13993 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.0	3.7
10°-20°	532.6	10.3
20°-30°	783.8	15.2
30°-40°	911.2	17.7
40°-50°	911.1	17.7
50°-60°	796.9	15.5
60°-70°	591.6	11.5
70°-80°	335.7	6.5
80°-90°	96.2	1.9
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°	1505.5	29.2
0°-40°	2416.7	46.9
0°-60°	4124.6	80.1
0°-90°	5148.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5148.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2006	2006	2006	2006	2006	
5°	2004	1998	1980	1998	1994	190
15°	1908	1901	1877	1887	1882	538
25°	1728	1716	1694	1696	1689	795
35°	1487	1475	1453	1442	1434	930
45°	1213	1202	1176	1159	1154	935
55°	918	913	890	871	861	822
65°	622	614	598	582	574	616
75°	331	323	315	309	307	351
85°	87	87	84	84	82	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2005.7	2005.7	2005.7	2005.7	2005.7
2.5°	2012.1	2007.3	1989.6	2005.7	2004.1
5°	2004.1	1997.7	1980.0	1997.7	1994.4
7.5°	1989.6	1983.2	1963.9	1978.4	1976.8
10°	1968.7	1962.3	1941.4	1954.3	1951.1
12.5°	1941.4	1935.0	1912.5	1926.9	1922.1
15°	1907.7	1901.2	1877.1	1886.8	1881.9
17.5°	1869.1	1861.1	1838.6	1845.0	1841.8
20°	1825.7	1817.7	1793.6	1798.4	1795.2
22.5°	1779.1	1767.8	1743.7	1753.4	1746.9
25°	1727.7	1716.4	1693.9	1695.5	1689.1
27.5°	1669.8	1658.6	1637.7	1634.4	1626.4
30°	1611.9	1599.1	1578.2	1571.8	1563.7
32.5°	1550.9	1539.6	1517.1	1509.1	1501.1
35°	1486.6	1475.3	1452.8	1441.6	1433.6
37.5°	1419.1	1409.4	1385.3	1374.1	1362.8
40°	1353.2	1340.3	1316.2	1300.2	1292.1
42.5°	1282.5	1276.1	1248.7	1229.5	1224.6
45°	1213.4	1202.1	1176.4	1158.7	1153.9
47.5°	1141.1	1133.0	1108.9	1089.6	1076.8
50°	1067.1	1060.7	1038.2	1015.7	1006.1
52.5°	994.8	986.8	962.7	943.4	930.5
55°	917.7	912.8	890.3	871.1	861.4
57.5°	845.3	840.5	818.0	798.7	789.1
60°	769.8	761.8	740.9	726.4	718.4
62.5°	695.9	689.5	667.0	654.1	646.1
65°	622.0	613.9	597.9	581.8	573.7
67.5°	546.4	540.0	523.9	507.9	506.2
70°	477.3	466.1	453.2	440.4	435.5
72.5°	403.4	392.1	382.5	372.9	368.0
75°	331.1	323.0	315.0	308.6	307.0
77.5°	260.4	257.1	249.1	247.5	242.7
80°	197.7	192.9	189.6	186.4	184.8
82.5°	136.6	135.0	135.0	133.4	131.8
85°	86.8	86.8	83.6	83.6	82.0
87.5°	41.8	40.2	38.6	38.6	38.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)