

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: P1033327

Luminaire Tested: S124DIW-B1195D470UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033327
REPORT IS A COMBINATION OF REPORTS P997153 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D470UB27-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

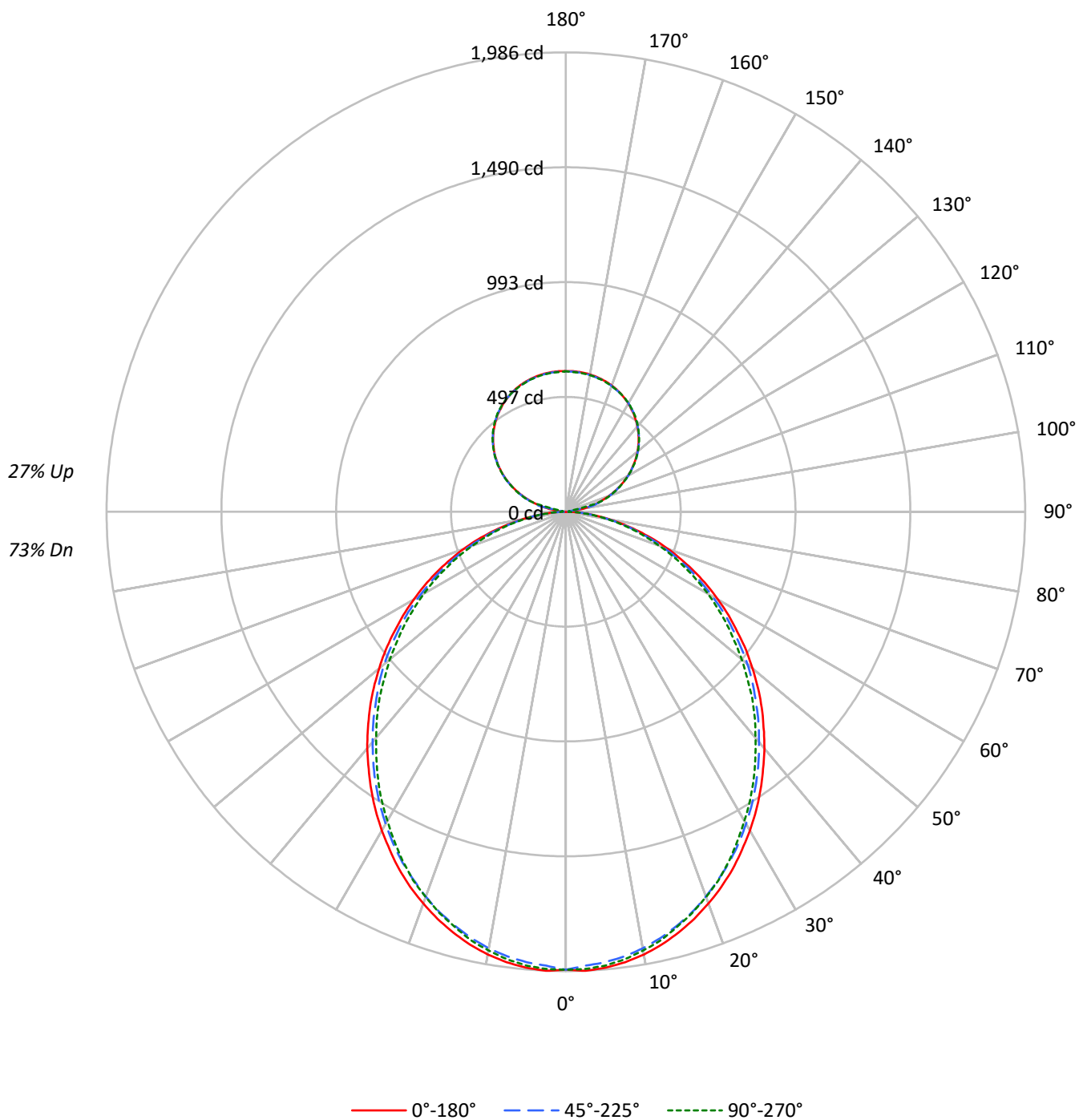
Lumens per Lamp: N/A
Luminaire Lumens: 6963.0 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
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	30	10
RCR																	
0	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77
1	103	98	94	91	97	94	90	87	84	82	79	76	74	72	68	67	65
2	94	86	80	74	89	82	76	71	74	69	66	67	63	60	60	57	55
3	86	76	68	62	81	72	65	60	65	60	55	59	55	51	53	50	47
4	78	67	59	52	74	64	56	51	58	52	47	53	48	44	48	44	40
5	72	60	51	45	68	57	49	44	52	46	41	47	42	38	43	39	35
6	66	54	45	39	63	52	44	38	47	41	36	43	37	33	39	35	31
7	62	49	40	35	58	47	39	34	43	36	32	39	34	30	36	31	28
8	57	44	36	31	54	43	35	30	39	33	28	36	30	26	33	28	25
9	53	41	33	28	51	39	32	27	36	30	25	33	28	24	30	26	22
10	50	37	30	25	47	36	29	24	33	27	23	31	25	22	28	24	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16146	16146	16146
5°	16159	15681	15700
10°	16022	15246	15139
15°	15792	14729	14506
20°	15499	14169	13850
25°	15168	13577	13145
30°	14770	12938	12371
35°	14357	12282	11622
40°	13928	11578	10826
45°	13476	10871	10081
50°	12977	10186	9257
55°	12435	9386	8438
60°	11879	8510	7585
65°	11244	7605	6624
70°	10512	6515	5593
75°	9418	5252	4480
80°	8024	3797	3151
85°	6236	2114	1696

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13476 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.6	2.7
10°-20°	525.8	7.6
20°-30°	773.8	11.1
30°-40°	899.5	12.9
40°-50°	899.4	12.9
50°-60°	786.6	11.3
60°-70°	584.0	8.4
70°-80°	331.4	4.8
80°-90°	96.2	1.4
90°-100°	20.2	0.3
100°-110°	132.8	1.9
110°-120°	253.6	3.6
120°-130°	321.9	4.6
130°-140°	344.4	4.9
140°-150°	322.0	4.6
150°-160°	259.7	3.7
160°-170°	167.5	2.4
170°-180°	57.7	0.8
0°-30°	1486.2	21.3
0°-40°	2385.7	34.3
0°-60°	4071.7	58.5
0°-90°	5083.3	73.0
90°-120°	406.6	5.8
90°-150°	1394.9	20.0
90°-180°	1880.0	27.0
0°-180°	6963.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1980	1980	1980	1980	1980	
5°	1978	1972	1955	1972	1969	188
15°	1883	1877	1853	1863	1858	531
25°	1706	1694	1672	1674	1667	785
35°	1468	1456	1434	1423	1415	918
45°	1198	1187	1161	1144	1139	923
55°	906	901	879	860	850	811
65°	614	606	590	574	566	608
75°	327	319	311	305	303	347
85°	86	86	82	82	81	92
90°	1	6	10	13	14	7
95°	25	10	10	13	13	31
105°	137	140	142	146	130	143
115°	255	257	256	257	257	251
125°	359	361	360	361	362	321
135°	445	445	447	448	448	343
145°	513	515	515	515	516	321
155°	563	563	562	564	562	260
165°	594	592	592	595	591	168
175°	608	605	605	609	604	58
180°	608	608	608	608	608	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1980.0	1980.0	1980.0	1980.0	1980.0
2.5°	1986.3	1981.6	1964.1	1980.0	1978.4
5°	1978.4	1972.0	1954.6	1972.0	1968.9
7.5°	1964.1	1957.8	1938.7	1953.0	1951.4
10°	1943.5	1937.1	1916.5	1929.2	1926.0
12.5°	1916.5	1910.2	1888.0	1902.2	1897.5
15°	1883.2	1876.9	1853.1	1862.6	1857.8
17.5°	1845.1	1837.2	1815.0	1821.3	1818.2
20°	1802.3	1794.4	1770.6	1775.3	1772.1
22.5°	1756.3	1745.2	1721.4	1730.9	1724.5
25°	1705.5	1694.4	1672.2	1673.8	1667.4
27.5°	1648.4	1637.3	1616.7	1613.5	1605.6
30°	1591.3	1578.6	1558.0	1551.6	1543.7
32.5°	1531.0	1519.9	1497.7	1489.7	1481.8
35°	1467.5	1456.4	1434.2	1423.1	1415.2
37.5°	1400.9	1391.4	1367.6	1356.5	1345.4
40°	1335.9	1323.2	1299.4	1283.5	1275.6
42.5°	1266.0	1259.7	1232.7	1213.7	1208.9
45°	1197.8	1186.7	1161.3	1143.9	1139.1
47.5°	1126.4	1118.5	1094.7	1075.7	1063.0
50°	1053.4	1047.1	1024.9	1002.7	993.2
52.5°	982.1	974.1	950.3	931.3	918.6
55°	905.9	901.1	878.9	859.9	850.4
57.5°	834.5	829.8	807.5	788.5	779.0
60°	759.9	752.0	731.4	717.1	709.2
62.5°	687.0	680.6	658.4	645.7	637.8
65°	614.0	606.1	590.2	574.3	566.4
67.5°	539.4	533.1	517.2	501.3	499.8
70°	471.2	460.1	447.4	434.7	429.9
72.5°	398.2	387.1	377.6	368.1	363.3
75°	326.8	318.9	311.0	304.6	303.0
77.5°	257.0	253.8	245.9	244.3	239.6
80°	195.1	190.4	187.2	184.0	182.4
82.5°	134.9	133.3	133.3	131.7	130.1
85°	85.7	85.7	82.5	82.5	80.9
87.5°	41.2	39.7	38.1	38.1	38.1
90°	1.4	6.4	10.0	12.7	13.6
92.5°	6.8	5.9	9.5	12.3	12.3
95°	25.0	9.5	10.0	12.7	13.2
97.5°	47.7	57.7	10.0	12.3	12.7
100°	74.5	82.7	20.0	12.3	12.7
102.5°	104.5	110.0	115.4	13.2	13.2
105°	136.8	139.5	141.8	145.8	129.5
107.5°	166.3	167.7	170.8	173.1	174.9
110°	196.3	197.6	200.4	201.3	202.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	225.4	228.1	229.0	228.5	230.4
115°	255.3	256.7	256.3	257.2	257.2
117.5°	282.2	284.0	285.3	284.9	284.9
120°	309.4	311.2	310.8	311.7	310.8
122.5°	334.9	335.8	336.7	337.1	336.2
125°	358.9	360.8	359.9	361.2	361.7
127.5°	382.1	382.6	384.8	384.4	383.9
130°	404.4	404.8	406.2	406.7	406.7
132.5°	424.8	425.7	427.6	428.0	427.6
135°	445.3	444.8	446.6	447.5	448.5
137.5°	463.4	463.4	465.7	466.6	466.2
140°	481.2	482.1	483.0	484.3	484.8
142.5°	497.1	498.9	499.3	500.2	500.2
145°	513.4	514.8	514.8	515.2	516.2
147.5°	526.1	528.9	528.4	528.9	529.3
150°	540.2	542.0	541.6	541.6	542.0
152.5°	552.0	553.4	552.5	553.4	553.0
155°	562.9	563.4	562.0	563.9	562.5
157.5°	572.5	572.5	570.7	572.9	570.7
160°	580.7	579.3	578.9	581.6	578.9
162.5°	587.9	586.1	585.7	588.4	585.2
165°	593.8	591.6	591.6	595.2	591.1
167.5°	598.8	596.6	596.1	600.2	595.7
170°	602.9	600.2	600.7	604.3	599.8
172.5°	605.7	602.9	603.4	607.0	602.0
175°	607.5	604.8	605.2	609.3	603.8
177.5°	608.8	605.7	606.6	610.2	604.8
180°	607.5	607.5	607.5	607.5	607.5

(END OF REPORT)