

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: P1033328

Luminaire Tested: S124DIW-B1195D470UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033328
REPORT IS A COMBINATION OF REPORTS P997154 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-F1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

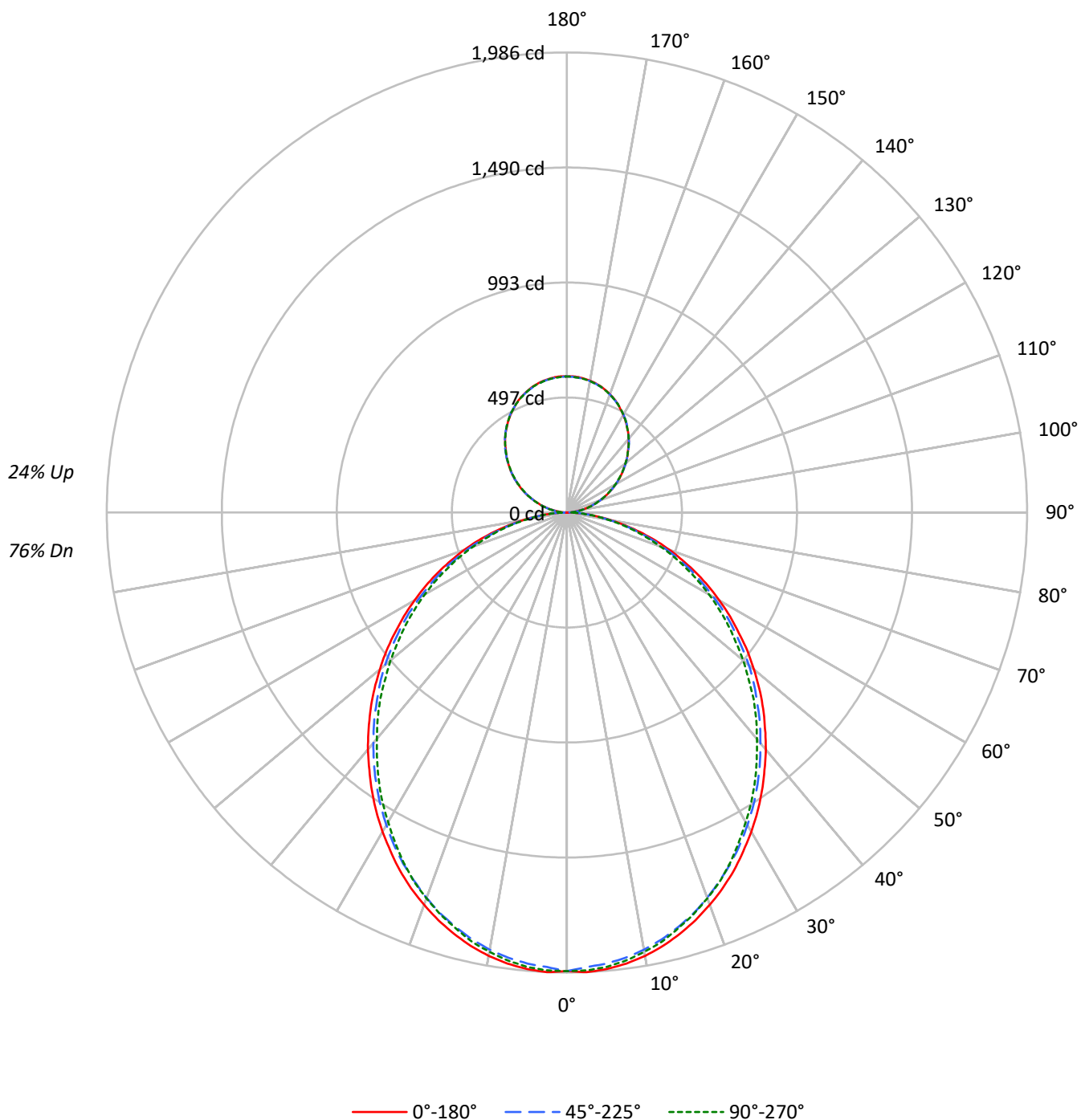
Lumens per Lamp: N/A
Luminaire Lumens: 6713.0 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	0
RCR																		
0	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80	76
1	104	99	95	91	98	94	91	87	86	83	80	78	76	74	70	69	67	64
2	94	86	80	75	89	83	77	72	75	71	67	68	65	62	62	59	57	53
3	86	76	68	62	82	73	66	60	66	61	56	60	56	52	55	51	48	45
4	79	67	59	53	75	65	57	51	59	53	48	54	49	45	49	45	42	39
5	72	60	52	45	69	58	50	44	53	46	41	48	43	39	44	40	36	34
6	67	54	46	40	63	52	44	39	48	41	36	44	38	34	40	36	32	30
7	62	49	41	35	59	47	39	34	43	37	32	40	34	30	37	32	29	26
8	58	45	37	31	55	43	36	30	40	33	29	37	31	27	34	29	26	23
9	54	41	33	28	51	40	32	27	37	30	26	34	28	24	31	27	23	21
10	50	38	30	25	48	36	29	25	34	28	23	31	26	22	29	24	21	19

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	2.8
10°-20°	525.8	7.8
20°-30°	773.8	11.5
30°-40°	899.5	13.4
40°-50°	899.4	13.4
50°-60°	786.6	11.7
60°-70°	584.0	8.7
70°-80°	331.4	4.9
80°-90°	96.2	1.4
90°-100°	38.3	0.6
100°-110°	114.7	1.7
110°-120°	194.8	2.9
120°-130°	256.9	3.8
130°-140°	288.6	4.3
140°-150°	283.6	4.2
150°-160°	238.5	3.6
160°-170°	158.7	2.4
170°-180°	55.6	0.8
0°-30°	1486.2	22.1
0°-40°	2385.7	35.5
0°-60°	4071.7	60.7
0°-90°	5083.3	75.7
90°-120°	347.8	5.2
90°-150°	1176.9	17.5
90°-180°	1630.0	24.3
0°-180°	6713.0	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	8
95°	27	31	34	36	36	30
105°	106	106	108	110	111	112
115°	198	198	197	197	196	195
125°	288	288	288	287	286	257
135°	372	375	375	374	372	288
145°	452	454	454	454	452	283
155°	518	518	517	519	517	238
165°	564	562	562	564	562	159
175°	586	584	584	587	584	56
180°	587	587	587	587	587	

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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°	11.8	17.7	20.0	21.4	21.8
95°	27.3	31.3	34.5	35.9	35.9
97.5°	43.6	47.2	50.9	52.7	52.7
100°	63.6	65.4	69.5	70.4	70.4
102.5°	84.5	84.9	88.6	89.9	90.4
105°	105.8	106.3	108.1	109.5	110.8
107.5°	128.1	128.6	129.0	130.8	130.4
110°	150.8	151.7	151.3	150.4	151.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.4	174.4	173.5	173.5	173.5
115°	198.1	198.1	197.2	196.7	196.2
117.5°	220.3	220.3	219.9	218.5	217.1
120°	242.6	244.4	243.0	240.8	241.7
122.5°	265.7	266.2	265.7	264.4	262.1
125°	288.5	288.5	288.0	287.1	286.2
127.5°	308.9	310.3	309.4	308.5	308.0
130°	330.7	332.1	332.1	331.2	329.3
132.5°	353.0	353.9	353.4	352.5	352.1
135°	372.0	374.8	374.8	373.9	372.5
137.5°	393.4	394.8	395.7	394.3	394.8
140°	414.7	415.7	415.7	415.2	414.7
142.5°	434.3	435.2	434.7	434.7	434.7
145°	452.0	453.8	454.3	453.8	452.5
147.5°	470.2	472.4	472.0	471.5	471.1
150°	486.5	488.3	488.3	488.3	487.9
152.5°	502.0	502.9	503.3	504.7	503.3
155°	517.9	517.9	517.4	519.2	517.4
157.5°	531.5	530.6	530.6	532.0	530.6
160°	543.3	542.9	542.4	543.8	541.5
162.5°	554.2	552.8	552.4	555.1	552.8
165°	563.8	562.4	561.5	564.2	562.4
167.5°	571.5	569.7	569.7	572.4	569.7
170°	577.8	575.6	576.0	578.7	575.6
172.5°	582.4	580.6	580.6	583.7	580.6
175°	586.5	584.2	583.7	586.9	583.7
177.5°	588.3	586.0	586.0	589.2	585.6
180°	587.4	587.4	587.4	587.4	587.4

(END OF REPORT)