

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: P1033370

Luminaire Tested: S124DIW-B1195D770UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033370
REPORT IS A COMBINATION OF REPORTS P997259 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1195D770UB35-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

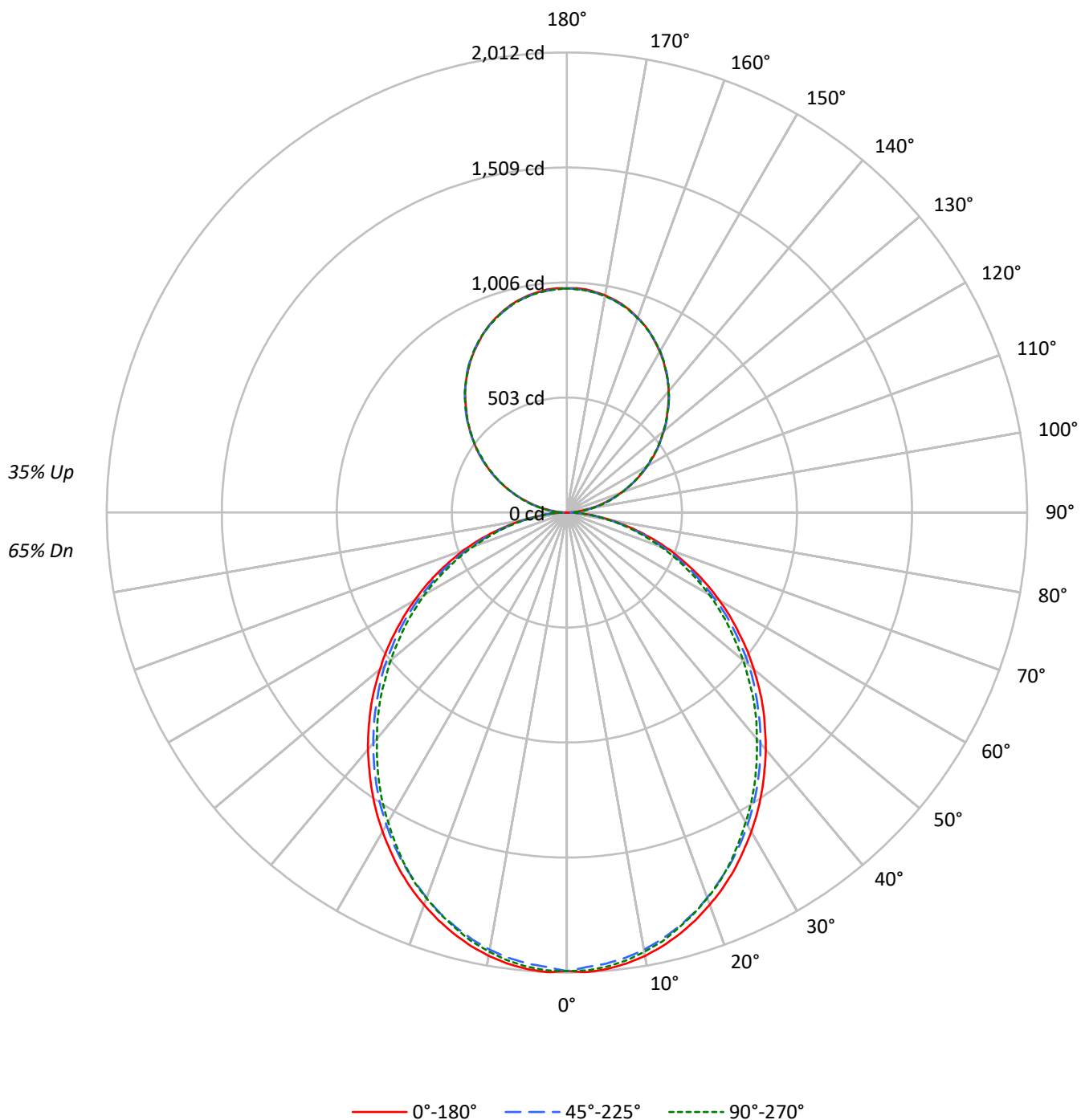
Lumens per Lamp: N/A
Luminaire Lumens: 7870.0 lumens
Efficiency: N/A
Efficacy: 93.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 84.5
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70
1	101	97	93	89	95	91	88	84	81	78	76	71	69	67	62	61	59
2	92	85	78	73	86	80	74	69	71	66	63	62	59	56	55	52	50
3	84	74	67	61	79	70	63	58	62	57	53	55	51	47	48	45	43
4	77	66	58	51	72	62	55	49	55	50	45	49	45	41	43	40	37
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	35	31	28
7	60	48	40	34	57	45	38	33	41	35	30	36	31	28	32	28	25
8	56	43	36	30	53	41	34	29	37	31	27	33	28	25	30	26	22
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	23	20
10	49	37	29	24	46	35	28	23	32	26	22	28	24	20	26	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16355	16355	16355
5°	16369	15885	15904
10°	16230	15444	15336
15°	15998	14919	14694
20°	15700	14353	14031
25°	15366	13753	13316
30°	14962	13105	12531
35°	14544	12442	11773
40°	14109	11728	10966
45°	13652	11012	10212
50°	13146	10318	9377
55°	12597	9508	8547
60°	12034	8620	7684
65°	11391	7704	6709
70°	10648	6599	5666
75°	9542	5320	4539
80°	8131	3845	3192
85°	6316	2142	1719

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13652 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.0	2.4
10°-20°	532.6	6.8
20°-30°	783.8	10.0
30°-40°	911.2	11.6
40°-50°	911.1	11.6
50°-60°	796.9	10.1
60°-70°	591.6	7.5
70°-80°	335.7	4.3
80°-90°	98.2	1.2
90°-100°	63.9	0.8
100°-110°	191.4	2.4
110°-120°	325.1	4.1
120°-130°	428.8	5.4
130°-140°	481.6	6.1
140°-150°	473.3	6.0
150°-160°	398.1	5.1
160°-170°	264.9	3.4
170°-180°	92.8	1.2
0°-30°	1505.5	19.1
0°-40°	2416.7	30.7
0°-60°	4124.6	52.4
0°-90°	5150.1	65.4
90°-120°	580.4	7.4
90°-150°	1964.1	25.0
90°-180°	2720.0	34.6
0°-180°	7870.0	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	93
90°	2	11	17	21	23	9
95°	46	52	58	60	60	49
105°	177	177	180	183	185	187
115°	330	330	329	328	328	326
125°	481	481	481	479	478	429
135°	621	626	626	624	622	480
145°	754	757	758	757	755	472
155°	864	864	864	867	864	398
165°	941	939	937	942	939	265
175°	979	975	974	980	974	93
180°	980	980	980	980	980	

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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°	2.3	10.6	16.7	21.2	22.7
92.5°	19.7	29.6	33.4	35.6	36.4
95°	45.5	52.3	57.6	59.9	59.9
97.5°	72.8	78.8	84.9	87.9	87.9
100°	106.1	109.2	116.0	117.5	117.5
102.5°	141.0	141.8	147.8	150.1	150.9
105°	176.6	177.4	180.4	182.7	185.0
107.5°	213.8	214.6	215.3	218.3	217.6
110°	251.7	253.2	252.5	250.9	253.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	291.1	291.1	289.6	289.6	289.6
115°	330.5	330.5	329.0	328.3	327.5
117.5°	367.7	367.7	366.9	364.7	362.4
120°	404.8	407.9	405.6	401.8	403.3
122.5°	443.5	444.3	443.5	441.2	437.4
125°	481.4	481.4	480.7	479.1	477.6
127.5°	515.5	517.8	516.3	514.8	514.0
130°	551.9	554.2	554.2	552.7	549.7
132.5°	589.1	590.6	589.8	588.3	587.6
135°	620.9	625.5	625.5	623.9	621.7
137.5°	656.5	658.8	660.3	658.1	658.8
140°	692.2	693.7	693.7	692.9	692.2
142.5°	724.8	726.3	725.5	725.5	725.5
145°	754.3	757.4	758.1	757.4	755.1
147.5°	784.7	788.5	787.7	786.9	786.2
150°	812.0	815.0	815.0	815.0	814.2
152.5°	837.7	839.3	840.0	842.3	840.0
155°	864.3	864.3	863.5	866.6	863.5
157.5°	887.0	885.5	885.5	887.8	885.5
160°	906.7	906.0	905.2	907.5	903.7
162.5°	924.9	922.7	921.9	926.4	922.7
165°	940.9	938.6	937.1	941.6	938.6
167.5°	953.7	950.7	950.7	955.3	950.7
170°	964.4	960.6	961.3	965.9	960.6
172.5°	971.9	968.9	968.9	974.2	968.9
175°	978.8	975.0	974.2	979.5	974.2
177.5°	981.8	978.0	978.0	983.3	977.2
180°	980.3	980.3	980.3	980.3	980.3

(END OF REPORT)