

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: P1033457

Luminaire Tested: S124DIW-B350D1560UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033457
REPORT IS A COMBINATION OF REPORTS P997453 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1560UB35-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

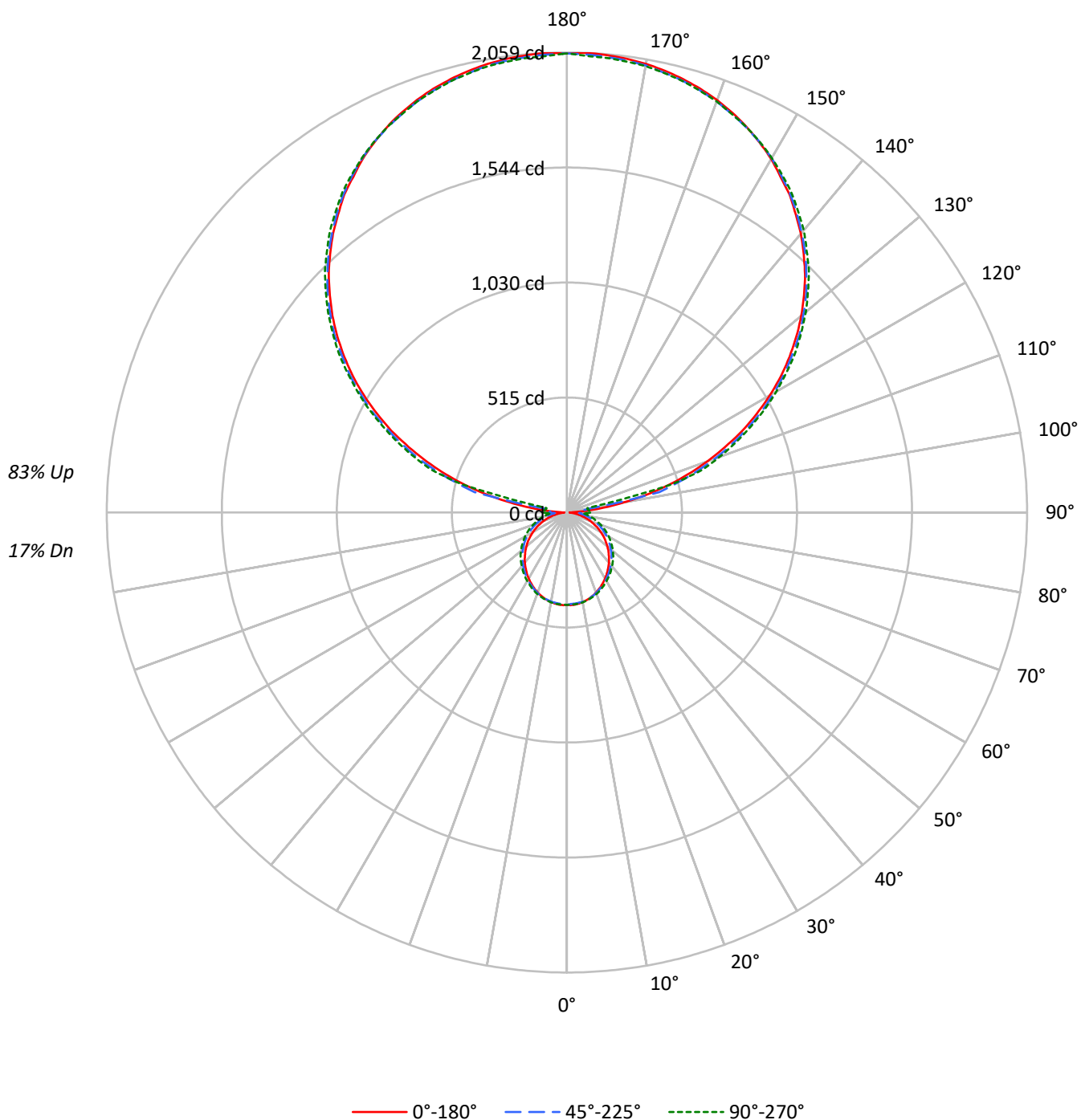
Lumens per Lamp: N/A
Luminaire Lumens: 7771.0 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 65.2
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	99	99	99	99	87	87	87	87	65	65	65	44	44	44	26	26	26
1	90	86	82	78	79	75	72	69	56	54	52	38	37	36	22	21	21
2	82	75	69	64	72	66	61	57	49	46	43	33	31	30	19	18	17
3	74	65	58	53	65	58	52	47	43	39	36	29	27	25	17	16	15
4	68	58	50	44	59	51	44	40	38	34	30	26	23	21	15	14	12
5	62	51	43	38	54	45	38	34	34	29	26	23	20	18	13	12	11
6	57	45	38	32	50	40	34	29	30	26	22	21	18	16	12	10	9
7	53	41	33	28	46	36	30	25	27	23	19	19	16	14	11	9	8
8	49	37	29	24	42	33	26	22	25	20	17	17	14	12	10	8	7
9	45	33	26	21	39	30	23	19	22	18	15	16	13	11	9	8	6
10	42	30	24	19	37	27	21	17	20	16	13	14	11	10	8	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3370	3370	3370
5°	3379	3282	3288
10°	3358	3218	3209
15°	3326	3145	3119
20°	3279	3066	3031
25°	3227	2980	2937
30°	3170	2894	2841
35°	3106	2806	2755
40°	3054	2721	2667
45°	2978	2643	2589
50°	2913	2552	2506
55°	2846	2466	2411
60°	2742	2358	2321
65°	2628	2242	2214
70°	2488	2110	2089
75°	2294	1962	1971
80°	2073	1811	1847
85°	1783	1660	1746

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 90°
Luminance: 3914 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	0.5
10°-20°	112.2	1.4
20°-30°	169.6	2.2
30°-40°	205.2	2.6
40°-50°	217.0	2.8
50°-60°	204.2	2.6
60°-70°	169.4	2.2
70°-80°	118.9	1.5
80°-90°	71.3	0.9
90°-100°	108.1	1.4
100°-110°	478.7	6.2
110°-120°	877.5	11.3
120°-130°	1100.0	14.2
130°-140°	1169.6	15.1
140°-150°	1090.1	14.0
150°-160°	878.3	11.3
160°-170°	566.4	7.3
170°-180°	195.2	2.5
0°-30°	321.0	4.1
0°-40°	526.2	6.8
0°-60°	947.4	12.2
0°-90°	1307.0	16.8
90°-120°	1464.3	18.8
90°-150°	4824.0	62.1
90°-180°	6464.0	83.2
0°-180°	7771.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	414	412	409	413	412	39
15°	397	397	396	400	399	112
25°	363	366	367	372	372	167
35°	318	323	328	334	336	199
45°	265	274	282	290	292	205
55°	207	217	231	240	243	185
65°	144	158	174	186	189	142
75°	80	97	116	129	133	85
85°	24	44	65	79	83	26
90°	12	47	80	102	109	9
95°	90	54	74	96	102	109
105°	467	485	510	535	484	489
115°	866	875	888	902	905	853
125°	1216	1222	1230	1244	1248	1086
135°	1507	1505	1515	1525	1531	1161
145°	1737	1741	1741	1746	1750	1085
155°	1904	1906	1901	1907	1902	878
165°	2008	2001	2001	2013	1999	568
175°	2055	2045	2047	2061	2042	196
180°	2055	2055	2055	2055	2055	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	413.3	413.3	413.3	413.3	413.3
2.5°	415.1	413.7	410.0	413.3	412.8
5°	413.7	412.3	409.1	412.8	412.3
7.5°	411.0	410.0	407.3	411.4	411.0
10°	407.3	406.8	404.5	408.6	408.2
12.5°	402.2	402.2	400.8	404.5	404.5
15°	396.6	397.1	395.7	399.8	399.4
17.5°	389.2	390.6	390.1	394.3	393.8
20°	381.3	382.7	383.2	387.8	387.8
22.5°	372.5	374.4	375.3	379.9	380.9
25°	362.8	365.6	367.0	372.1	372.5
27.5°	352.2	356.3	358.2	362.8	363.3
30°	341.5	345.2	348.5	353.6	354.5
32.5°	330.0	334.6	338.3	344.3	345.2
35°	317.5	323.0	327.7	334.1	335.5
37.5°	305.0	311.5	317.0	323.5	324.9
40°	292.9	299.0	305.4	312.4	314.2
42.5°	279.1	286.0	293.9	301.7	303.1
45°	264.7	273.5	282.3	290.2	292.5
47.5°	251.3	260.1	270.3	278.1	280.9
50°	236.5	246.7	256.8	266.1	268.9
52.5°	221.7	231.9	243.9	253.1	255.9
55°	207.3	217.0	230.9	240.2	243.0
57.5°	191.1	203.2	216.6	227.7	230.0
60°	175.4	187.4	202.7	213.3	217.0
62.5°	160.1	173.5	188.8	199.5	203.2
65°	143.5	158.3	174.0	185.6	189.3
67.5°	127.7	143.5	160.1	171.7	175.4
70°	111.5	127.3	144.9	157.3	160.6
72.5°	95.8	112.0	131.0	143.0	146.7
75°	79.6	96.7	116.2	129.1	133.3
77.5°	64.3	82.4	102.7	115.7	120.3
80°	50.4	69.0	89.3	103.2	106.9
82.5°	36.6	56.0	76.4	90.7	94.9
85°	24.5	44.0	64.8	78.7	83.3
87.5°	15.3	34.2	54.6	68.0	72.2
90°	12.0	47.4	79.6	102.2	109.0
92.5°	30.0	43.1	75.3	97.5	101.2
95°	90.5	53.6	74.1	95.8	101.5
97.5°	167.0	214.2	71.7	91.5	97.1
100°	257.1	296.8	102.8	89.2	93.9
102.5°	358.6	387.2	423.2	89.5	93.2
105°	466.8	485.2	510.0	535.4	483.8
107.5°	566.6	579.1	606.0	625.3	634.6
110°	667.6	678.7	704.1	717.8	726.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	765.4	780.2	798.6	807.2	817.0
115°	866.5	875.2	888.5	901.7	905.0
117.5°	957.1	966.1	984.5	992.7	996.4
120°	1048.8	1056.4	1068.2	1080.6	1081.2
122.5°	1134.9	1138.0	1153.5	1164.4	1164.5
125°	1215.9	1221.6	1230.1	1243.5	1247.8
127.5°	1294.3	1295.3	1312.2	1319.1	1320.8
130°	1369.1	1370.1	1382.2	1392.1	1394.8
132.5°	1438.3	1440.8	1452.6	1461.9	1463.2
135°	1506.9	1505.4	1514.8	1525.3	1531.1
137.5°	1568.4	1568.0	1577.5	1587.5	1588.3
140°	1628.3	1631.0	1634.5	1645.1	1649.0
142.5°	1681.7	1687.8	1688.9	1697.1	1698.9
145°	1737.0	1741.1	1741.1	1745.5	1750.3
147.5°	1780.1	1788.8	1787.2	1789.3	1792.6
150°	1827.7	1833.3	1831.8	1831.8	1833.3
152.5°	1867.1	1871.8	1868.7	1871.8	1870.2
155°	1904.0	1905.6	1901.0	1907.1	1902.5
157.5°	1936.3	1936.3	1930.2	1937.8	1930.2
160°	1964.0	1959.4	1957.8	1967.0	1957.8
162.5°	1988.6	1982.4	1980.9	1990.1	1979.3
165°	2008.5	2000.8	2000.8	2013.1	1999.3
167.5°	2025.4	2017.8	2016.2	2030.0	2014.7
170°	2039.3	2030.0	2031.6	2043.9	2028.5
172.5°	2048.5	2039.3	2040.8	2053.1	2036.2
175°	2054.6	2045.4	2046.9	2060.8	2042.3
177.5°	2059.2	2048.5	2051.6	2063.9	2045.4
180°	2054.6	2054.6	2054.6	2054.6	2054.6

(END OF REPORT)