

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: P1032657

Luminaire Tested: S124DIW-B350D1560UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032657
REPORT IS A COMBINATION OF REPORTS P997438 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1560UB2750-4F0-XX-W2A-F_3500K
Description: Define 4 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

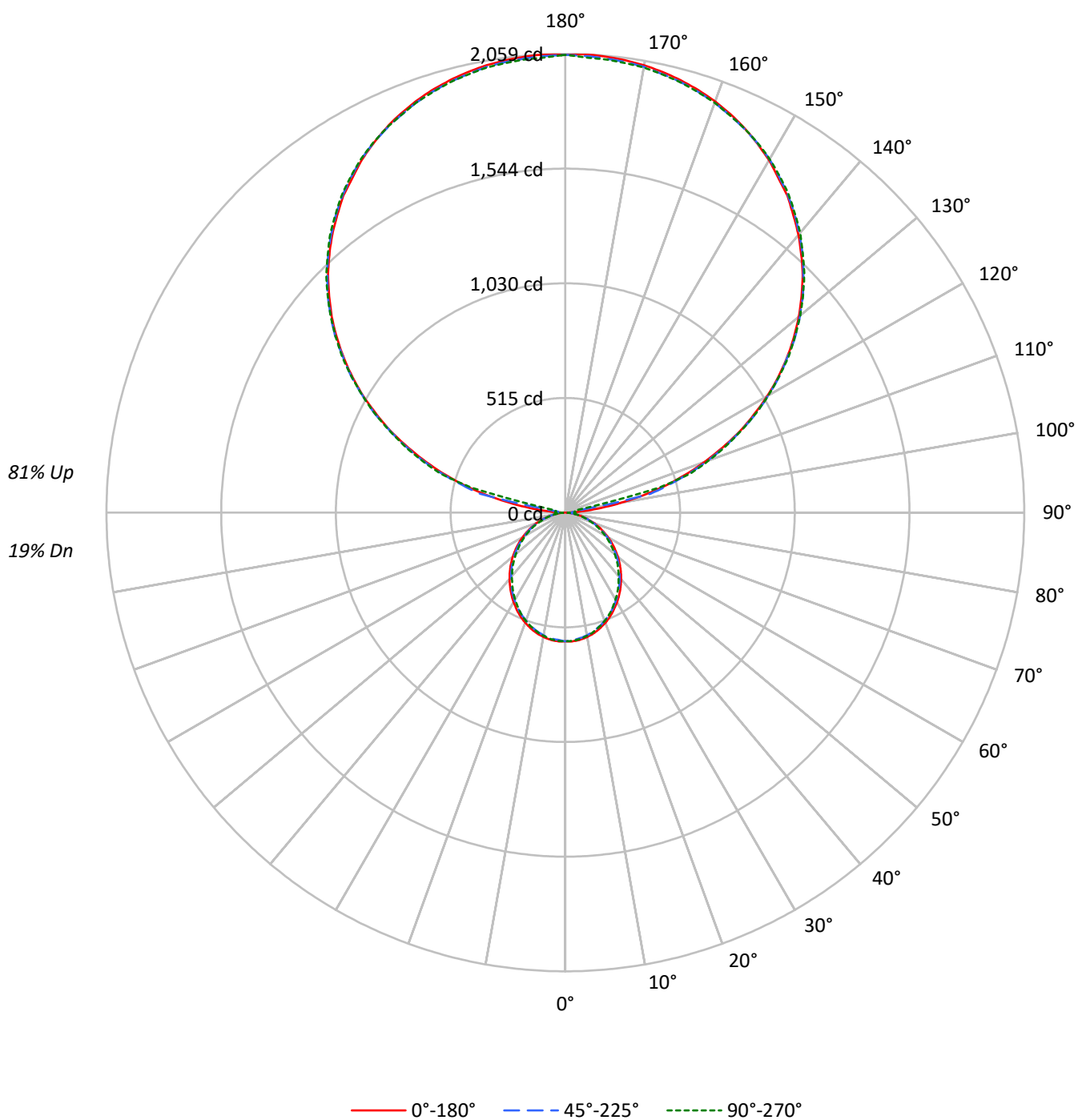
Lumens per Lamp: N/A
Luminaire Lumens: 7844.0 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1032657

CATALOG NUMBER: S124DIW-B350D1560UB2750-4F0-XX-W2A-F_3500K

Luminous Intensity Polar Plot



TEST NUMBER: P1032657

CATALOG NUMBER: S124DIW-B350D1560UB2750-4F0-XX-W2A-F_3500K

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	50	30	10
RCR																				
0	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28	19		
1	91	87	83	80	80	77	74	71	58	56	54	40	39	38	24	24	23	16		
2	83	76	70	65	73	67	62	58	50	47	45	35	33	32	21	20	19	13		
3	75	66	59	54	66	59	53	48	44	41	37	31	29	27	19	18	17	11		
4	69	59	51	45	60	52	46	41	39	35	32	28	25	23	17	15	14	10		
5	63	52	44	39	55	46	40	35	35	31	27	25	22	20	15	14	12	8		
6	58	46	39	33	51	41	35	30	31	27	23	22	19	17	14	12	11	7		
7	53	42	34	29	47	37	31	26	28	24	20	20	17	15	12	11	10	7		
8	49	38	30	25	43	34	27	23	26	21	18	18	15	13	11	10	9	6		
9	46	34	27	22	40	30	24	20	23	19	16	17	14	12	11	9	8	5		
10	43	31	24	20	38	28	22	18	21	17	14	15	13	11	10	8	7	5		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4708	4708	4708
5°	4712	4573	4579
10°	4673	4446	4415
15°	4606	4295	4230
20°	4520	4132	4039
25°	4424	3959	3834
30°	4307	3772	3608
35°	4187	3581	3389
40°	4062	3376	3157
45°	3930	3171	2940
50°	3784	2971	2699
55°	3627	2737	2461
60°	3464	2482	2212
65°	3278	2218	1932
70°	3065	1900	1631
75°	2746	1532	1307
80°	2340	1107	919
85°	1819	618	495

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3930 cd/sqm

TEST NUMBER: P1032657

CATALOG NUMBER: S124DIW-B350D1560UB2750-4F0-XX-W2A-F_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	0.7
10°-20°	153.3	2.0
20°-30°	225.7	2.9
30°-40°	262.3	3.3
40°-50°	262.3	3.3
50°-60°	229.4	2.9
60°-70°	170.3	2.2
70°-80°	96.6	1.2
80°-90°	31.9	0.4
90°-100°	68.2	0.9
100°-110°	449.2	5.7
110°-120°	857.7	10.9
120°-130°	1088.8	13.9
130°-140°	1164.8	14.8
140°-150°	1089.2	13.9
150°-160°	878.3	11.2
160°-170°	566.4	7.2
170°-180°	195.2	2.5
0°-30°	433.4	5.5
0°-40°	695.7	8.9
0°-60°	1187.4	15.1
0°-90°	1486.3	18.9
90°-120°	1375.0	17.5
90°-150°	4717.8	60.1
90°-180°	6358.0	81.1
0°-180°	7844.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	577	575	570	575	574	55
15°	549	547	540	543	542	155
25°	497	494	488	488	486	229
35°	428	425	418	415	413	268
45°	349	346	339	334	332	269
55°	264	263	256	251	248	237
65°	179	177	172	168	165	177
75°	95	93	91	89	88	101
85°	25	25	24	24	24	27
90°	5	22	34	43	46	6
95°	84	32	34	43	45	104
105°	463	472	480	493	438	484
115°	864	868	867	870	870	850
125°	1214	1220	1217	1222	1223	1084
135°	1506	1504	1511	1514	1517	1160
145°	1736	1741	1741	1743	1746	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	

TEST NUMBER: P1032657

CATALOG NUMBER: S124DIW-B350D1560UB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	577.4	577.4	577.4	577.4	577.4
2.5°	579.2	577.9	572.8	577.4	576.9
5°	576.9	575.1	570.0	575.1	574.2
7.5°	572.8	570.9	565.4	569.5	569.1
10°	566.8	564.9	558.9	562.6	561.7
12.5°	558.9	557.0	550.6	554.7	553.3
15°	549.2	547.3	540.4	543.2	541.8
17.5°	538.1	535.8	529.3	531.1	530.2
20°	525.6	523.3	516.3	517.7	516.8
22.5°	512.2	508.9	502.0	504.8	502.9
25°	497.4	494.1	487.6	488.1	486.3
27.5°	480.7	477.5	471.4	470.5	468.2
30°	464.0	460.3	454.3	452.5	450.2
32.5°	446.5	443.2	436.7	434.4	432.1
35°	428.0	424.7	418.2	415.0	412.7
37.5°	408.5	405.8	398.8	395.6	392.3
40°	389.6	385.9	378.9	374.3	372.0
42.5°	369.2	367.3	359.5	353.9	352.5
45°	349.3	346.1	338.7	333.6	332.2
47.5°	328.5	326.2	319.2	313.7	310.0
50°	307.2	305.4	298.9	292.4	289.6
52.5°	286.4	284.1	277.1	271.6	267.9
55°	264.2	262.8	256.3	250.8	248.0
57.5°	243.4	242.0	235.5	229.9	227.2
60°	221.6	219.3	213.3	209.1	206.8
62.5°	200.3	198.5	192.0	188.3	186.0
65°	179.0	176.7	172.1	167.5	165.2
67.5°	157.3	155.5	150.8	146.2	145.7
70°	137.4	134.2	130.5	126.8	125.4
72.5°	116.1	112.9	110.1	107.3	105.9
75°	95.3	93.0	90.7	88.8	88.4
77.5°	75.0	74.0	71.7	71.2	69.9
80°	56.9	55.5	54.6	53.7	53.2
82.5°	39.3	38.9	38.9	38.4	37.9
85°	25.0	25.0	24.1	24.1	23.6
87.5°	12.0	11.6	11.1	11.1	11.1
90°	4.6	21.5	33.8	43.0	46.1
92.5°	23.1	20.0	32.3	41.5	41.5
95°	84.5	32.3	33.8	43.0	44.6
97.5°	161.4	195.2	33.8	41.5	43.0
100°	252.0	279.7	67.6	41.5	43.0
102.5°	353.5	371.9	390.3	44.6	44.6
105°	462.6	471.8	479.5	493.3	438.0
107.5°	562.4	567.1	577.8	585.5	591.6
110°	663.9	668.5	677.7	680.8	685.4

TEST NUMBER: P1032657

CATALOG NUMBER: S124DIW-B350D1560UB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	762.2	771.4	774.5	773.0	779.1
115°	863.7	868.3	866.7	869.8	869.8
117.5°	954.3	960.5	965.1	963.5	963.5
120°	1046.5	1052.7	1051.1	1054.2	1051.1
122.5°	1132.6	1135.7	1138.7	1140.3	1137.2
125°	1214.0	1220.2	1217.1	1221.7	1223.3
127.5°	1292.4	1293.9	1301.6	1300.1	1298.6
130°	1367.7	1369.2	1373.9	1375.4	1375.4
132.5°	1436.9	1439.9	1446.1	1447.6	1446.1
135°	1506.0	1504.5	1510.6	1513.7	1516.8
137.5°	1567.5	1567.5	1575.2	1578.2	1576.7
140°	1627.4	1630.5	1633.6	1638.2	1639.7
142.5°	1681.2	1687.3	1688.9	1692.0	1692.0
145°	1736.5	1741.1	1741.1	1742.7	1745.7
147.5°	1779.6	1788.8	1787.2	1788.8	1790.3
150°	1827.2	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)