

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: P1033446

Luminaire Tested: S124DIW-B350D1560UB27-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033446
REPORT IS A COMBINATION OF REPORTS P997415 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1560UB27-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

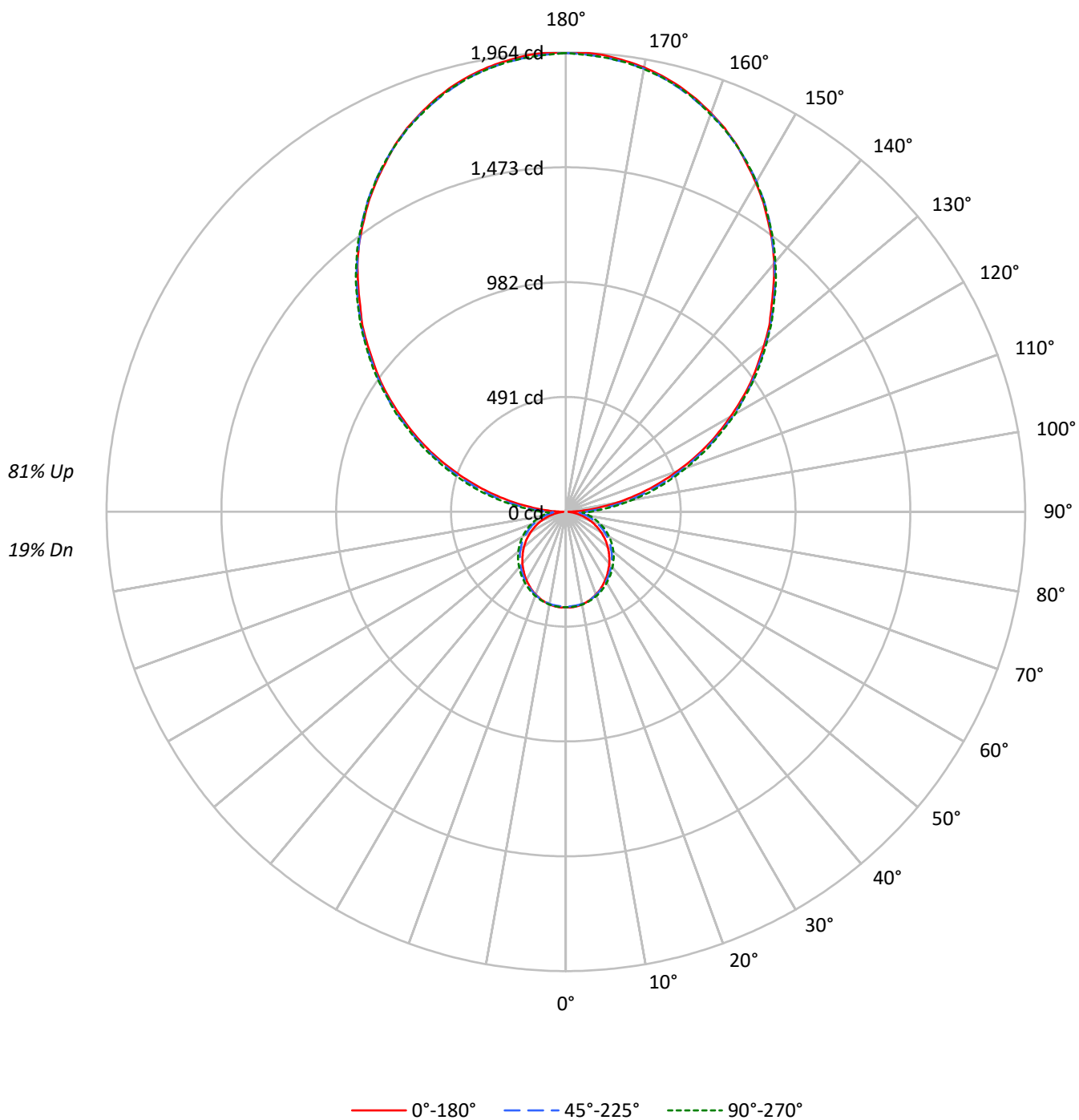
Lumens per Lamp: N/A
Luminaire Lumens: 6837.0 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1033446

CATALOG NUMBER: S124DIW-B350D1560UB27-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P1033446

CATALOG NUMBER: S124DIW-B350D1560UB27-4F0-XX-W2A-D1

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	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28
1	90	86	82	79	80	76	73	70	57	55	53	40	38	37	24	23	22
2	82	75	69	64	72	66	61	57	50	46	44	35	33	31	21	19	19
3	75	66	59	53	66	58	52	47	44	40	36	30	28	26	18	17	16
4	68	58	50	44	60	51	45	40	39	34	31	27	24	22	16	15	13
5	62	51	43	38	55	45	39	34	34	30	26	24	21	19	14	13	11
6	57	46	38	32	50	41	34	29	31	26	23	22	19	16	13	11	10
7	53	41	33	28	46	36	30	25	28	23	20	19	16	14	12	10	9
8	49	37	30	25	43	33	27	22	25	20	17	18	15	12	11	9	8
9	45	34	26	22	40	30	24	19	23	18	15	16	13	11	10	8	7
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	9	7	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3327	3327	3327
5°	3336	3240	3246
10°	3314	3176	3168
15°	3283	3105	3079
20°	3238	3027	2993
25°	3186	2942	2900
30°	3130	2857	2805
35°	3066	2770	2720
40°	3015	2687	2633
45°	2940	2609	2555
50°	2877	2520	2474
55°	2810	2435	2380
60°	2707	2328	2292
65°	2593	2214	2186
70°	2456	2082	2062
75°	2265	1937	1946
80°	2048	1789	1822
85°	1761	1640	1723

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3882 cd/sqm

TEST NUMBER: P1033446

CATALOG NUMBER: S124DIW-B350D1560UB27-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	0.6
10°-20°	110.8	1.6
20°-30°	167.5	2.4
30°-40°	202.6	3.0
40°-50°	214.2	3.1
50°-60°	201.6	2.9
60°-70°	167.3	2.4
70°-80°	117.4	1.7
80°-90°	70.4	1.0
90°-100°	167.2	2.4
100°-110°	412.1	6.0
110°-120°	670.1	9.8
120°-130°	868.9	12.7
130°-140°	968.3	14.2
140°-150°	948.0	13.9
150°-160°	796.5	11.7
160°-170°	530.0	7.8
170°-180°	185.6	2.7
0°-30°	316.9	4.6
0°-40°	519.5	7.6
0°-60°	935.3	13.7
0°-90°	1290.3	18.9
90°-120°	1249.4	18.3
90°-150°	4034.6	59.0
90°-180°	5547.0	81.1
0°-180°	6837.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	408	408	408	408	408	
5°	408	407	404	408	407	39
15°	392	392	391	395	394	110
25°	358	361	362	367	368	165
35°	313	319	324	330	331	196
45°	261	270	279	286	289	202
55°	205	214	228	237	240	182
65°	142	156	172	183	187	140
75°	79	96	115	128	132	84
85°	24	43	64	78	82	25
90°	12	47	79	101	108	12
95°	97	126	155	172	176	103
105°	358	368	391	407	415	379
115°	664	668	680	688	690	655
125°	965	965	974	980	980	860
135°	1243	1252	1256	1260	1258	962
145°	1510	1515	1517	1518	1515	945
155°	1729	1729	1728	1734	1728	796
165°	1882	1878	1875	1884	1878	531
175°	1958	1951	1949	1960	1949	186
180°	1961	1961	1961	1961	1961	

TEST NUMBER: P1033446

CATALOG NUMBER: S124DIW-B350D1560UB27-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	408.0	408.0	408.0	408.0	408.0
2.5°	409.8	408.4	404.8	408.0	407.5
5°	408.4	407.1	403.9	407.5	407.1
7.5°	405.7	404.8	402.0	406.2	405.7
10°	402.0	401.6	399.3	403.4	403.0
12.5°	397.0	397.0	395.7	399.3	399.3
15°	391.5	392.0	390.6	394.7	394.3
17.5°	384.2	385.6	385.1	389.3	388.8
20°	376.5	377.8	378.3	382.9	382.9
22.5°	367.8	369.6	370.5	375.1	376.0
25°	358.2	360.9	362.3	367.3	367.8
27.5°	347.7	351.8	353.6	358.2	358.6
30°	337.2	340.8	344.0	349.1	350.0
32.5°	325.8	330.3	334.0	339.9	340.8
35°	313.4	318.9	323.5	329.9	331.2
37.5°	301.1	307.5	313.0	319.4	320.7
40°	289.2	295.1	301.5	308.4	310.2
42.5°	275.5	282.3	290.1	297.9	299.3
45°	261.3	270.0	278.7	286.5	288.7
47.5°	248.1	256.8	266.8	274.6	277.3
50°	233.5	243.5	253.6	262.7	265.4
52.5°	218.8	228.9	240.8	249.9	252.7
55°	204.7	214.3	228.0	237.1	239.9
57.5°	188.7	200.6	213.8	224.8	227.1
60°	173.2	185.0	200.1	210.6	214.3
62.5°	158.1	171.3	186.4	196.9	200.6
65°	141.6	156.3	171.8	183.2	186.9
67.5°	126.1	141.6	158.1	169.5	173.2
70°	110.1	125.6	143.0	155.3	158.5
72.5°	94.6	110.6	129.3	141.2	144.8
75°	78.6	95.5	114.7	127.5	131.6
77.5°	63.5	81.3	101.4	114.2	118.8
80°	49.8	68.1	88.2	101.9	105.5
82.5°	36.1	55.3	75.4	89.5	93.7
85°	24.2	43.4	64.0	77.7	82.2
87.5°	15.1	33.8	53.9	67.2	71.3
90°	11.9	46.8	78.6	101.0	107.6
92.5°	46.3	82.0	109.2	126.6	131.7
95°	96.9	125.7	155.0	171.9	176.0
97.5°	151.1	176.5	207.4	225.3	229.5
100°	217.4	235.3	266.8	282.2	285.4
102.5°	287.1	298.7	328.2	344.6	349.9
105°	357.5	368.1	391.2	407.2	415.3
107.5°	431.8	441.2	458.7	476.1	477.8
110°	507.3	516.7	531.1	538.6	546.8

TEST NUMBER: P1033446

CATALOG NUMBER: S124DIW-B350D1560UB27-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	585.7	591.2	603.2	613.2	616.9
115°	664.0	668.2	679.8	688.3	690.0
117.5°	738.4	741.2	753.3	758.4	757.4
120°	812.3	819.8	828.4	829.9	836.7
122.5°	889.7	891.2	902.0	906.6	902.2
125°	965.0	964.6	974.5	980.1	979.8
127.5°	1033.2	1037.4	1043.5	1048.6	1050.3
130°	1105.7	1109.7	1117.0	1122.2	1118.9
132.5°	1180.0	1182.5	1186.5	1191.3	1192.4
135°	1243.2	1252.3	1255.5	1259.8	1258.0
137.5°	1314.5	1318.6	1323.5	1325.7	1329.5
140°	1385.8	1388.4	1388.8	1393.3	1394.0
142.5°	1450.6	1453.6	1451.6	1456.6	1458.5
145°	1509.8	1515.3	1516.8	1518.0	1515.4
147.5°	1570.4	1577.5	1576.0	1575.0	1575.3
150°	1625.0	1630.6	1630.6	1630.6	1629.1
152.5°	1676.1	1679.1	1680.7	1685.2	1680.7
155°	1729.2	1729.2	1727.7	1733.7	1727.7
157.5°	1774.7	1771.7	1771.7	1776.2	1771.7
160°	1814.1	1812.6	1811.1	1815.7	1808.1
162.5°	1850.5	1846.0	1844.5	1853.6	1846.0
165°	1882.4	1877.8	1874.8	1883.9	1877.8
167.5°	1908.2	1902.1	1902.1	1911.2	1902.1
170°	1929.4	1921.8	1923.4	1932.5	1921.8
172.5°	1944.6	1938.5	1938.5	1949.1	1938.5
175°	1958.2	1950.7	1949.1	1959.8	1949.1
177.5°	1964.3	1956.7	1956.7	1967.3	1955.2
180°	1961.3	1961.3	1961.3	1961.3	1961.3

(END OF REPORT)