

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: P1033158

Luminaire Tested: S124DIW-B1020D1560UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033158
REPORT IS A COMBINATION OF REPORTS P996785 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1560UB30-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

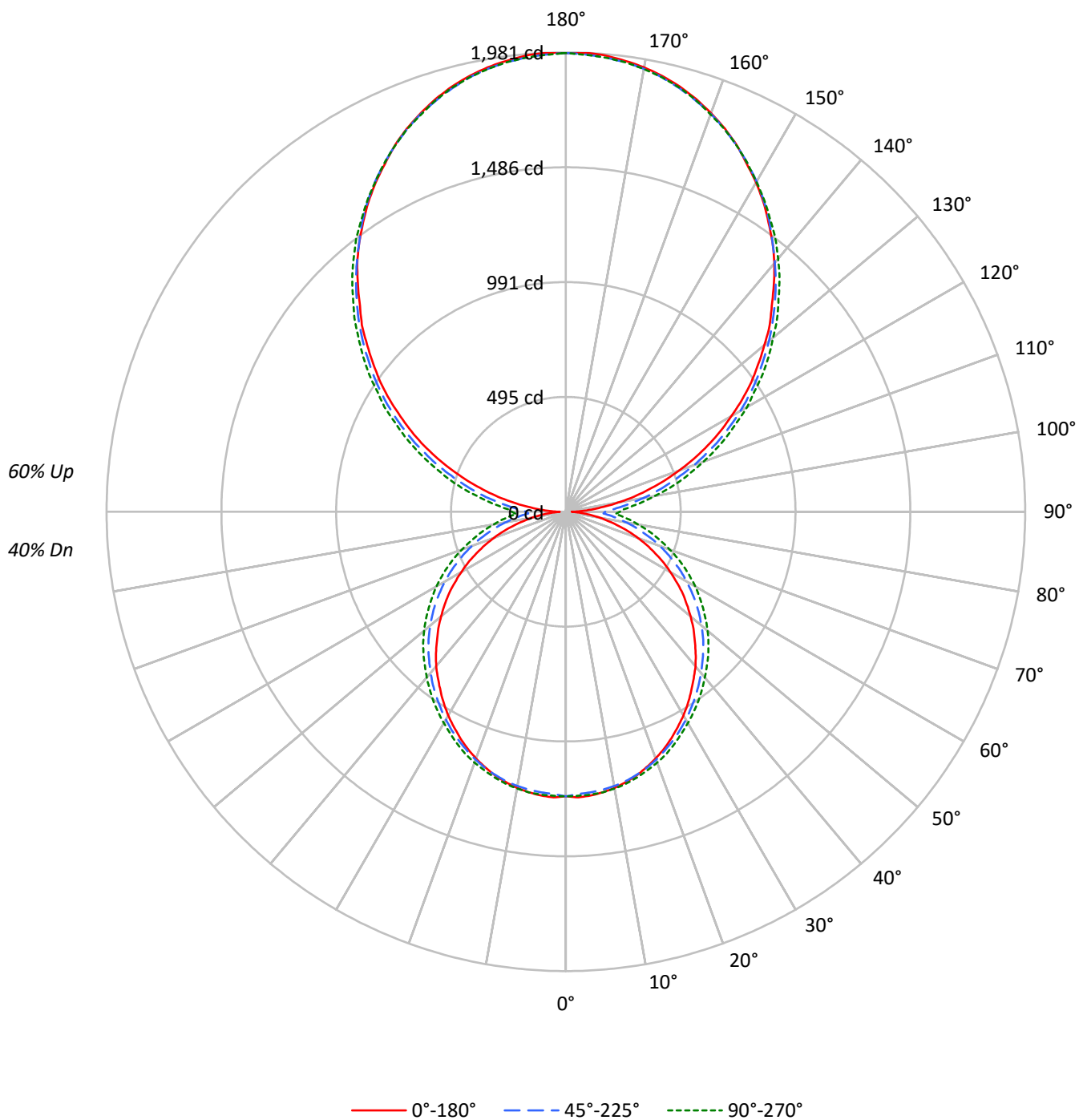
Lumens per Lamp: N/A
Luminaire Lumens: 9677.0 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 99
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: P1033158

CATALOG NUMBER: S124DIW-B1020D1560UB30-4F0-XX-W2A-D1

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	50	30	10
RCR																				
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47			40
1	95	90	86	82	86	82	79	75	67	64	62	53	51	50	40	39	38			32
2	86	78	72	66	78	71	66	61	58	54	51	46	43	41	35	33	31			26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	31	28	26			22
4	71	60	52	46	64	55	48	43	45	40	36	36	32	29	27	25	22			18
5	65	54	45	39	59	49	42	36	40	35	31	32	28	25	24	22	19			16
6	60	48	40	34	54	44	37	31	36	31	26	29	25	22	22	19	17			14
7	55	43	35	29	50	39	32	27	33	27	23	26	22	19	20	17	15			12
8	51	39	31	26	46	36	29	24	30	24	20	24	20	17	18	15	13			11
9	48	35	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12			10
10	44	32	25	20	40	30	23	19	25	20	16	20	16	14	16	13	11			9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10007	10007	10007
5°	10035	9746	9764
10°	9969	9555	9527
15°	9876	9339	9260
20°	9738	9106	9001
25°	9582	8848	8722
30°	9414	8593	8436
35°	9223	8333	8182
40°	9070	8082	7919
45°	8844	7847	7686
50°	8650	7580	7441
55°	8452	7323	7159
60°	8141	7003	6893
65°	7801	6658	6574
70°	7389	6263	6205
75°	6813	5825	5852
80°	6161	5378	5483
85°	5298	4930	5186

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8844 cd/sqm

TEST NUMBER: P1033158

CATALOG NUMBER: S124DIW-B1020D1560UB30-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	1.2
10°-20°	333.2	3.4
20°-30°	503.7	5.2
30°-40°	609.4	6.3
40°-50°	644.3	6.7
50°-60°	606.3	6.3
60°-70°	503.1	5.2
70°-80°	353.1	3.6
80°-90°	203.3	2.1
90°-100°	247.5	2.6
100°-110°	474.0	4.9
110°-120°	715.0	7.4
120°-130°	898.5	9.3
130°-140°	986.2	10.2
140°-150°	958.1	9.9
150°-160°	803.4	8.3
160°-170°	534.5	5.5
170°-180°	187.2	1.9
0°-30°	953.2	9.8
0°-40°	1562.6	16.1
0°-60°	2813.2	29.1
0°-90°	3872.7	40.0
90°-120°	1436.4	14.8
90°-150°	4279.1	44.2
90°-180°	5804.0	60.0
0°-180°	9677.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1227	1227	1227	1227	1227	
5°	1229	1224	1215	1226	1224	117
15°	1178	1179	1175	1187	1186	332
25°	1077	1086	1090	1105	1106	496
35°	943	959	973	992	996	590
45°	786	812	838	862	868	608
55°	616	644	686	713	722	549
65°	426	470	517	551	562	422
75°	236	287	345	383	396	251
85°	73	131	192	234	247	76
90°	27	98	170	219	233	22
95°	110	169	236	278	290	114
105°	369	398	455	494	509	392
115°	675	688	729	757	765	667
125°	977	976	1008	1032	1037	871
135°	1256	1265	1275	1294	1297	972
145°	1524	1528	1530	1537	1538	954
155°	1744	1744	1743	1749	1743	803
165°	1899	1894	1891	1900	1894	535
175°	1975	1968	1966	1977	1966	188
180°	1978	1978	1978	1978	1978	

TEST NUMBER: P1033158

CATALOG NUMBER: S124DIW-B1020D1560UB30-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1227.2	1227.2	1227.2	1227.2	1227.2
2.5°	1232.7	1228.6	1217.6	1227.2	1225.8
5°	1228.6	1224.4	1214.8	1225.8	1224.4
7.5°	1220.3	1217.6	1209.3	1221.7	1220.3
10°	1209.3	1208.0	1201.1	1213.4	1212.1
12.5°	1194.2	1194.2	1190.1	1201.1	1201.1
15°	1177.7	1179.1	1175.0	1187.3	1186.0
17.5°	1155.7	1159.9	1158.5	1170.8	1169.5
20°	1132.4	1136.5	1137.9	1151.6	1151.6
22.5°	1106.3	1111.8	1114.5	1128.2	1131.0
25°	1077.4	1085.6	1089.8	1104.9	1106.3
27.5°	1045.8	1058.2	1063.7	1077.4	1078.8
30°	1014.2	1025.2	1034.8	1049.9	1052.7
32.5°	979.8	993.6	1004.6	1022.4	1025.2
35°	942.7	959.2	973.0	992.2	996.3
37.5°	905.6	924.9	941.4	960.6	964.7
40°	869.9	887.8	907.0	927.6	933.1
42.5°	828.7	849.3	872.6	896.0	900.1
45°	786.1	812.2	838.3	861.6	868.5
47.5°	746.2	772.3	802.6	825.9	834.2
50°	702.2	732.5	762.7	790.2	798.4
52.5°	658.3	688.5	724.2	751.7	760.0
55°	615.7	644.5	685.7	713.2	721.5
57.5°	567.6	603.3	643.1	676.1	683.0
60°	520.8	556.6	601.9	633.5	644.5
62.5°	475.5	515.3	560.7	592.3	603.3
65°	426.0	470.0	516.7	551.1	562.1
67.5°	379.3	426.0	475.5	509.8	520.8
70°	331.2	377.9	430.1	467.2	476.9
72.5°	284.5	332.6	388.9	424.6	435.6
75°	236.4	287.2	344.9	383.4	395.8
77.5°	191.0	244.6	305.1	343.6	357.3
80°	149.8	204.8	265.2	306.5	317.4
82.5°	108.6	166.3	226.7	269.4	281.7
85°	72.8	130.6	192.4	233.6	247.4
87.5°	45.3	101.7	162.2	202.0	214.4
90°	26.6	98.4	169.7	218.7	232.8
92.5°	60.4	128.4	195.1	238.2	250.7
95°	109.7	168.8	235.9	277.6	289.9
97.5°	163.4	215.4	284.1	325.9	338.3
100°	229.3	271.1	338.5	378.6	388.3
102.5°	299.7	331.4	395.9	436.2	448.8
105°	368.9	397.9	454.8	493.8	509.3
107.5°	443.8	468.7	518.3	558.8	566.9
110°	518.9	541.2	587.8	616.3	631.9

TEST NUMBER: P1033158

CATALOG NUMBER: S124DIW-B1020D1560UB30-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	597.1	613.6	655.9	686.1	697.1
115°	675.2	687.6	728.6	757.3	765.3
117.5°	750.2	758.5	798.2	822.5	828.9
120°	823.9	834.1	869.3	889.2	903.2
122.5°	901.9	903.4	939.0	961.9	963.9
125°	977.0	975.6	1008.5	1031.5	1036.7
127.5°	1045.9	1049.0	1073.5	1095.1	1103.3
130°	1117.9	1121.1	1143.1	1164.8	1166.9
132.5°	1192.9	1194.5	1209.5	1229.8	1236.5
135°	1255.7	1264.9	1274.6	1293.5	1297.1
137.5°	1327.6	1330.9	1339.5	1355.5	1363.9
140°	1399.5	1401.3	1402.6	1419.0	1424.3
142.5°	1464.0	1467.1	1464.1	1479.2	1484.7
145°	1523.7	1528.4	1529.9	1536.6	1537.5
147.5°	1584.9	1591.1	1589.6	1589.5	1593.4
150°	1640.0	1644.7	1644.7	1644.7	1643.1
152.5°	1690.6	1693.6	1695.2	1699.8	1695.2
155°	1744.1	1744.1	1742.6	1748.7	1742.6
157.5°	1790.0	1787.0	1787.0	1791.5	1787.0
160°	1829.8	1828.3	1826.7	1831.3	1823.7
162.5°	1866.5	1861.9	1860.4	1869.6	1861.9
165°	1898.6	1894.1	1891.0	1900.2	1894.1
167.5°	1924.7	1918.5	1918.5	1927.7	1918.5
170°	1946.1	1938.4	1939.9	1949.1	1938.4
172.5°	1961.4	1955.2	1955.2	1966.0	1955.2
175°	1975.1	1967.5	1966.0	1976.7	1966.0
177.5°	1981.3	1973.6	1973.6	1984.3	1972.1
180°	1978.2	1978.2	1978.2	1978.2	1978.2

(END OF REPORT)