

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: P1033163

Luminaire Tested: S124DIW-B1020D1560UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033163
REPORT IS A COMBINATION OF REPORTS P996793 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B1020D1560UB35-4F0-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

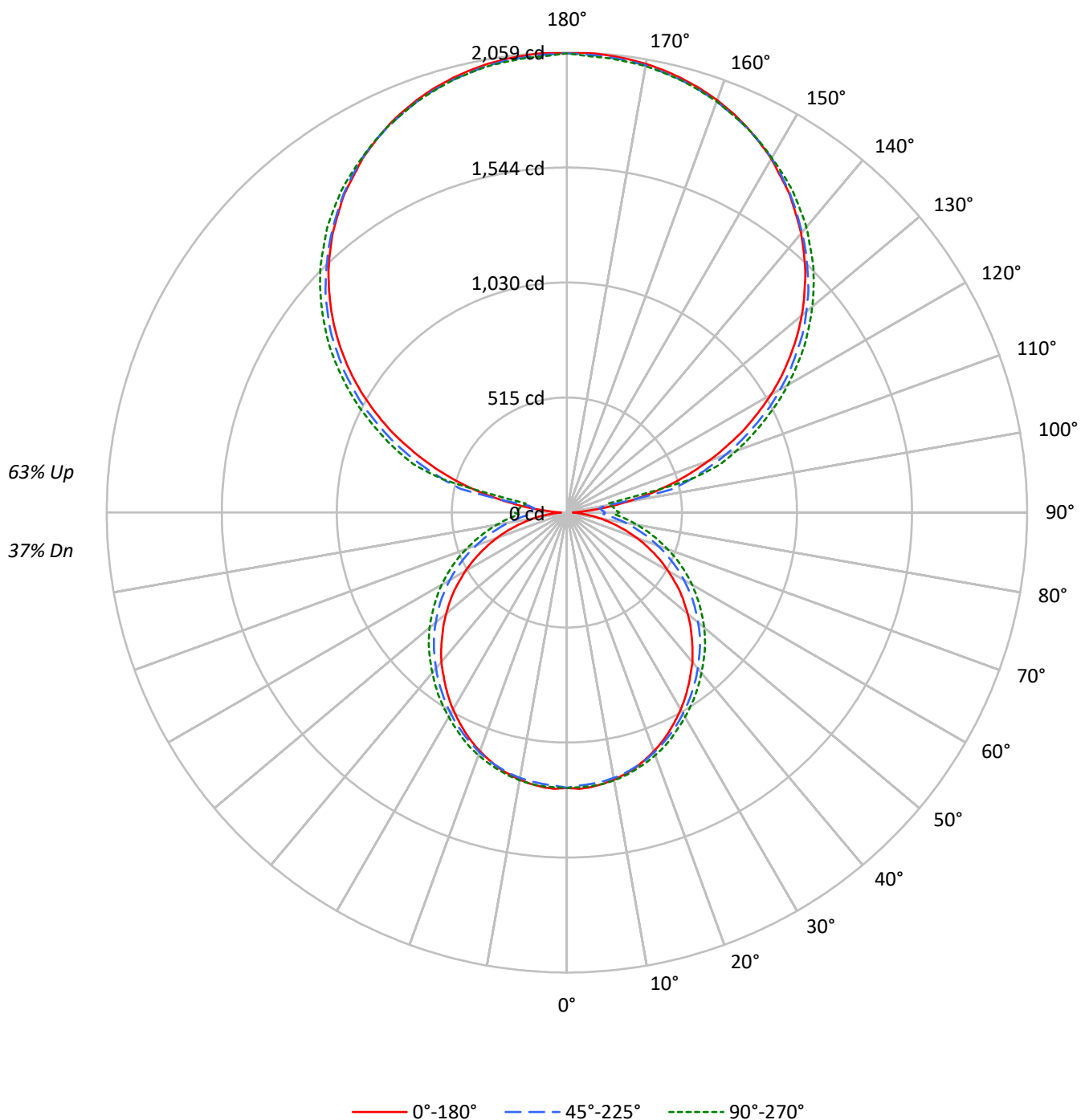
Lumens per Lamp: N/A
Luminaire Lumens: 10564.0 lumens
Efficiency: N/A
Efficacy: 106.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44
1	94	90	85	82	85	81	78	75	65	63	61	51	49	48	38	37	36
2	85	78	71	66	77	70	65	60	57	53	50	44	42	39	33	31	29
3	78	68	61	55	70	62	55	50	50	45	41	39	36	33	29	27	25
4	71	60	52	46	64	54	48	42	44	39	35	34	31	28	25	23	21
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18
6	60	48	39	34	54	43	36	31	35	30	26	28	24	21	21	18	16
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14
8	51	39	31	26	46	35	28	24	29	24	20	23	19	16	17	14	12
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	16	13	11
10	44	32	25	20	40	29	23	19	24	19	16	19	16	13	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10050	10050	10050
5°	10078	9788	9806
10°	10012	9595	9568
15°	9919	9379	9300
20°	9779	9145	9040
25°	9623	8887	8759
30°	9454	8630	8472
35°	9263	8368	8217
40°	9108	8117	7953
45°	8881	7881	7720
50°	8689	7613	7474
55°	8487	7355	7190
60°	8177	7033	6923
65°	7834	6686	6602
70°	7420	6291	6231
75°	6841	5850	5877
80°	6186	5403	5507
85°	5319	4951	5207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 8881 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	1.1
10°-20°	334.6	3.2
20°-30°	505.9	4.8
30°-40°	612.0	5.8
40°-50°	647.0	6.1
50°-60°	608.9	5.8
60°-70°	505.3	4.8
70°-80°	354.6	3.4
80°-90°	204.1	1.9
90°-100°	187.2	1.8
100°-110°	537.3	5.1
110°-120°	916.8	8.7
120°-130°	1122.1	10.6
130°-140°	1179.2	11.2
140°-150°	1092.0	10.3
150°-160°	878.3	8.3
160°-170°	566.4	5.4
170°-180°	195.2	1.8
0°-30°	957.3	9.1
0°-40°	1569.3	14.9
0°-60°	2825.3	26.7
0°-90°	3889.3	36.8
90°-120°	1641.4	15.5
90°-150°	5034.7	47.7
90°-180°	6675.0	63.2
0°-180°	10564.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1234	1230	1220	1231	1230	117
15°	1183	1184	1180	1192	1191	333
25°	1082	1090	1094	1110	1111	498
35°	947	963	977	996	1001	593
45°	789	816	842	865	872	610
55°	618	647	689	716	725	551
65°	428	472	519	553	564	424
75°	237	288	346	385	398	252
85°	73	131	193	235	248	76
90°	27	99	170	220	234	20
95°	102	96	154	200	214	119
105°	475	512	571	619	575	498
115°	872	889	932	965	975	859
125°	1220	1224	1256	1287	1296	1089
135°	1509	1507	1523	1548	1560	1163
145°	1738	1741	1741	1751	1760	1086
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°	1232.5	1232.5	1232.5	1232.5	1232.5
2.5°	1238.0	1233.9	1222.8	1232.5	1231.1
5°	1233.9	1229.7	1220.0	1231.1	1229.7
7.5°	1225.6	1222.8	1214.5	1227.0	1225.6
10°	1214.5	1213.1	1206.2	1218.7	1217.3
12.5°	1199.3	1199.3	1195.2	1206.2	1206.2
15°	1182.8	1184.2	1180.0	1192.4	1191.1
17.5°	1160.7	1164.8	1163.5	1175.9	1174.5
20°	1137.2	1141.4	1142.8	1156.6	1156.6
22.5°	1111.0	1116.5	1119.3	1133.1	1135.9
25°	1082.0	1090.3	1094.5	1109.6	1111.0
27.5°	1050.3	1062.7	1068.2	1082.0	1083.4
30°	1018.5	1029.6	1039.3	1054.4	1057.2
32.5°	984.0	997.8	1008.9	1026.8	1029.6
35°	946.8	963.3	977.1	996.5	1000.6
37.5°	909.5	928.8	945.4	964.7	968.9
40°	873.6	891.6	910.9	931.6	937.1
42.5°	832.2	852.9	876.4	899.9	904.0
45°	789.4	815.7	841.9	865.4	872.3
47.5°	749.4	775.6	806.0	829.5	837.7
50°	705.3	735.6	766.0	793.6	801.9
52.5°	661.1	691.5	727.3	754.9	763.2
55°	618.3	647.3	688.7	716.3	724.6
57.5°	570.0	605.9	645.9	679.0	685.9
60°	523.1	559.0	604.5	636.2	647.3
62.5°	477.5	517.6	563.1	594.8	605.9
65°	427.8	472.0	518.9	553.4	564.5
67.5°	380.9	427.8	477.5	512.0	523.1
70°	332.6	379.5	432.0	469.2	478.9
72.5°	285.7	334.0	390.6	426.5	437.5
75°	237.4	288.5	346.4	385.1	397.5
77.5°	191.8	245.7	306.4	345.0	358.8
80°	150.4	205.6	266.4	307.8	318.8
82.5°	109.0	167.0	227.7	270.5	282.9
85°	73.1	131.1	193.2	234.6	248.4
87.5°	45.5	102.1	162.9	202.9	215.3
90°	26.7	98.8	170.4	219.7	233.8
92.5°	43.8	89.0	160.7	208.5	219.5
95°	102.4	95.8	153.9	200.3	214.4
97.5°	178.0	251.8	147.0	190.6	204.5
100°	267.2	330.8	172.5	183.7	194.8
102.5°	368.7	417.4	488.3	178.5	189.5
105°	475.0	511.8	570.6	618.9	574.6
107.5°	574.8	603.0	662.0	704.2	720.0
110°	674.9	698.9	756.4	791.2	806.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	771.9	797.6	846.3	875.1	892.3
115°	872.0	889.0	931.6	965.0	974.7
117.5°	962.6	977.1	1023.1	1050.4	1061.5
120°	1053.4	1063.7	1102.2	1132.9	1140.8
122.5°	1139.5	1142.6	1182.9	1212.1	1218.6
125°	1219.5	1224.3	1255.7	1286.6	1296.4
127.5°	1297.9	1298.0	1333.3	1356.7	1364.8
130°	1371.8	1372.0	1398.7	1425.1	1433.4
132.5°	1441.0	1442.7	1465.4	1490.4	1497.2
135°	1508.8	1507.3	1523.0	1548.2	1559.6
137.5°	1570.3	1568.9	1582.1	1605.8	1611.2
140°	1630.2	1631.9	1636.4	1658.9	1667.3
142.5°	1682.6	1688.7	1688.9	1707.2	1712.7
145°	1737.9	1741.1	1741.1	1751.0	1759.5
147.5°	1781.0	1788.8	1787.2	1790.2	1797.2
150°	1828.6	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)