

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: P1031491

Luminaire Tested: S123DIW-B1165D1535UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031491
REPORT IS A COMBINATION OF REPORTS P991045 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1535UB50-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

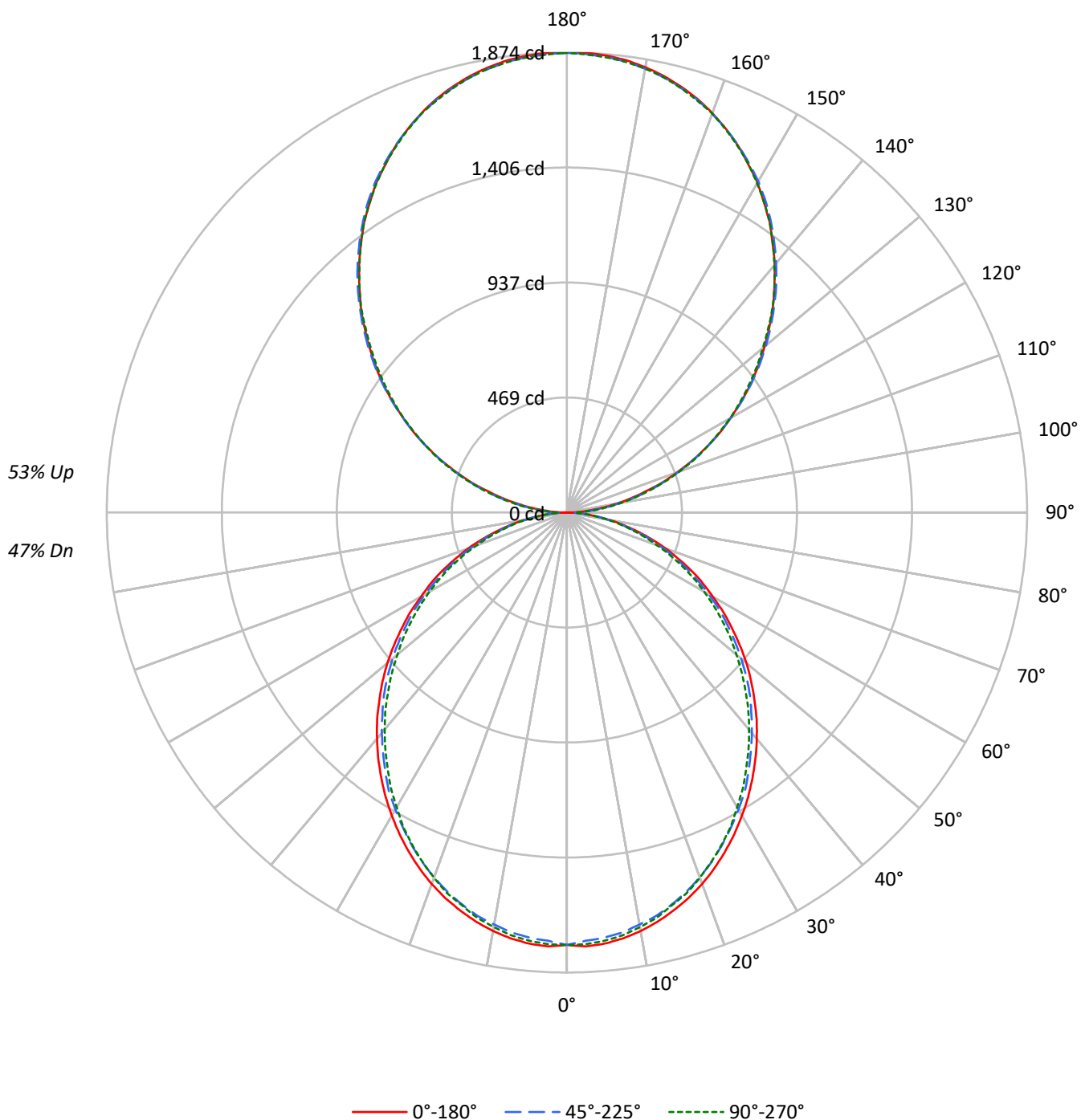
Lumens per Lamp: N/A
Luminaire Lumens: 9778.0 lumens
Efficiency: N/A
Efficacy: 86.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 113.5
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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53
1	97	93	89	85	89	85	82	79	71	69	67	59	57	56	47	46	45
2	88	81	75	70	81	75	69	65	63	59	55	52	49	46	41	39	38
3	81	71	64	58	74	66	59	54	55	50	46	46	42	39	37	34	32
4	74	63	55	49	67	58	51	46	49	44	40	41	37	34	33	30	28
5	68	56	48	42	62	52	45	39	44	38	34	36	32	29	29	26	24
6	62	50	42	36	57	46	39	34	39	34	30	33	29	25	27	24	21
7	58	45	37	32	53	42	35	30	36	30	26	30	26	22	24	21	19
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	22	19	17
9	50	37	30	25	46	35	28	24	30	24	21	25	21	18	21	18	15
10	46	34	27	22	43	32	25	21	27	22	19	23	19	16	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18963	18963	18963
5°	19010	18309	18281
10°	18841	17689	17508
15°	18579	17045	16664
20°	18278	16330	15828
25°	17890	15574	14935
30°	17464	14793	13996
35°	17020	13994	13061
40°	16554	13157	12144
45°	16041	12340	11184
50°	15518	11431	10221
55°	14849	10482	9245
60°	14159	9436	8206
65°	13513	8305	7123
70°	12581	7050	5860
75°	11237	5583	4550
80°	9702	3924	3218
85°	7569	2108	1611

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16041 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.1	1.7
10°-20°	469.0	4.8
20°-30°	692.6	7.1
30°-40°	808.9	8.3
40°-50°	813.2	8.3
50°-60°	714.4	7.3
60°-70°	532.0	5.4
70°-80°	302.8	3.1
80°-90°	90.0	0.9
90°-100°	120.6	1.2
100°-110°	364.9	3.7
110°-120°	621.2	6.4
120°-130°	817.2	8.4
130°-140°	918.6	9.4
140°-150°	903.0	9.2
150°-160°	760.3	7.8
160°-170°	506.1	5.2
170°-180°	177.2	1.8
0°-30°	1327.7	13.6
0°-40°	2136.6	21.9
0°-60°	3664.1	37.5
0°-90°	4589.0	46.9
90°-120°	1106.6	11.3
90°-150°	3745.4	38.3
90°-180°	5189.0	53.1
0°-180°	9778.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1762	1762	1762	1762	1762	
5°	1763	1756	1739	1754	1751	167
15°	1678	1672	1653	1665	1656	473
25°	1524	1515	1495	1497	1492	702
35°	1318	1309	1289	1280	1272	825
45°	1080	1074	1054	1036	1029	834
55°	820	818	798	782	774	734
65°	559	551	536	524	520	551
75°	295	289	285	277	273	316
85°	79	76	76	73	73	84
90°	2	16	35	41	44	12
95°	87	97	109	115	115	96
105°	331	334	347	347	350	354
115°	625	630	627	628	627	619
125°	915	920	916	911	905	816
135°	1187	1196	1195	1189	1186	915
145°	1440	1443	1448	1446	1440	900
155°	1649	1649	1651	1656	1646	759
165°	1796	1792	1792	1801	1790	507
175°	1868	1862	1862	1871	1861	178
180°	1873	1873	1873	1873	1873	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1761.7	1761.7	1761.7	1761.7	1761.7
2.5°	1769.3	1763.2	1746.6	1761.7	1760.2
5°	1763.2	1755.7	1739.0	1754.2	1751.1
7.5°	1749.6	1742.0	1725.4	1739.0	1737.5
10°	1731.4	1723.9	1704.2	1717.8	1714.8
12.5°	1707.2	1701.1	1683.0	1692.0	1690.5
15°	1678.4	1672.4	1652.7	1664.8	1655.7
17.5°	1646.6	1639.0	1619.3	1628.4	1625.4
20°	1610.2	1601.2	1581.5	1587.5	1583.0
22.5°	1569.3	1560.3	1540.6	1545.1	1539.1
25°	1523.9	1514.8	1495.1	1496.6	1492.1
27.5°	1476.9	1467.9	1446.6	1448.2	1443.6
30°	1425.4	1417.9	1396.7	1396.7	1386.1
32.5°	1373.9	1363.3	1348.2	1337.6	1333.0
35°	1317.9	1308.8	1289.1	1280.0	1272.4
37.5°	1261.8	1249.7	1230.0	1219.4	1214.9
40°	1202.8	1193.7	1172.5	1160.3	1154.3
42.5°	1143.7	1133.1	1111.9	1099.8	1093.7
45°	1080.1	1074.0	1054.3	1036.1	1028.6
47.5°	1018.0	1008.9	990.7	972.5	966.5
50°	954.3	946.8	927.1	910.4	901.3
52.5°	887.7	883.1	861.9	848.3	839.2
55°	819.5	818.0	798.3	781.6	774.1
57.5°	755.9	749.8	734.7	719.5	710.4
60°	686.2	684.7	666.5	652.9	645.3
62.5°	624.1	619.6	601.4	587.7	583.2
65°	559.0	551.4	536.2	524.1	519.6
67.5°	489.3	483.2	471.1	460.5	454.4
70°	427.2	418.1	409.0	398.4	390.8
72.5°	362.0	356.0	345.4	336.3	333.3
75°	295.4	289.3	284.8	277.2	272.7
77.5°	236.3	233.3	227.2	221.2	221.2
80°	178.7	174.2	171.2	169.7	169.7
82.5°	122.7	122.7	122.7	119.7	118.2
85°	78.8	75.7	75.7	72.7	72.7
87.5°	39.4	34.8	33.3	31.8	31.8
90°	1.5	16.2	35.3	41.2	44.1
92.5°	44.1	53.0	61.8	66.2	63.3
95°	86.8	97.1	108.9	114.7	114.7
97.5°	142.7	150.1	158.9	166.2	164.8
100°	200.1	208.9	216.3	220.7	223.6
102.5°	266.3	270.7	281.0	285.4	283.9
105°	331.0	333.9	347.2	347.2	350.1
107.5°	407.5	409.0	414.9	419.3	417.8
110°	478.1	481.1	484.0	489.9	486.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	551.7	553.1	553.1	560.5	560.5
115°	625.2	629.6	626.7	628.2	626.7
117.5°	700.3	701.7	698.8	698.8	694.4
120°	769.4	778.2	770.9	769.4	766.5
122.5°	841.5	847.4	844.4	840.0	835.6
125°	915.0	919.5	916.5	910.6	904.7
127.5°	982.7	991.5	988.6	979.8	973.9
130°	1050.4	1062.2	1057.7	1051.9	1041.6
132.5°	1118.1	1129.8	1126.9	1119.5	1112.2
135°	1187.2	1196.0	1194.6	1188.7	1185.7
137.5°	1250.5	1257.8	1262.2	1254.9	1250.5
140°	1316.7	1324.0	1325.5	1324.0	1313.7
142.5°	1377.0	1384.3	1387.3	1385.8	1378.4
145°	1440.2	1443.2	1447.6	1446.1	1440.2
147.5°	1494.7	1500.6	1505.0	1505.0	1496.1
150°	1552.0	1555.0	1557.9	1557.9	1549.1
152.5°	1599.1	1603.5	1605.0	1607.9	1600.6
155°	1649.1	1649.1	1650.6	1656.5	1646.2
157.5°	1691.8	1690.3	1691.8	1697.7	1688.9
160°	1731.5	1728.6	1728.6	1735.9	1730.0
162.5°	1766.8	1762.4	1763.9	1771.2	1760.9
165°	1796.2	1791.8	1791.8	1800.7	1790.4
167.5°	1821.3	1815.4	1816.8	1825.7	1816.8
170°	1841.9	1836.0	1836.0	1846.3	1836.0
172.5°	1858.0	1852.2	1852.2	1861.0	1850.7
175°	1868.3	1862.4	1862.4	1871.3	1861.0
177.5°	1874.2	1868.3	1868.3	1877.2	1866.9
180°	1872.7	1872.7	1872.7	1872.7	1872.7

(END OF REPORT)