

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: P1031489

Luminaire Tested: S123DIW-B1165D1535UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031489
REPORT IS A COMBINATION OF REPORTS P991042 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-D1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

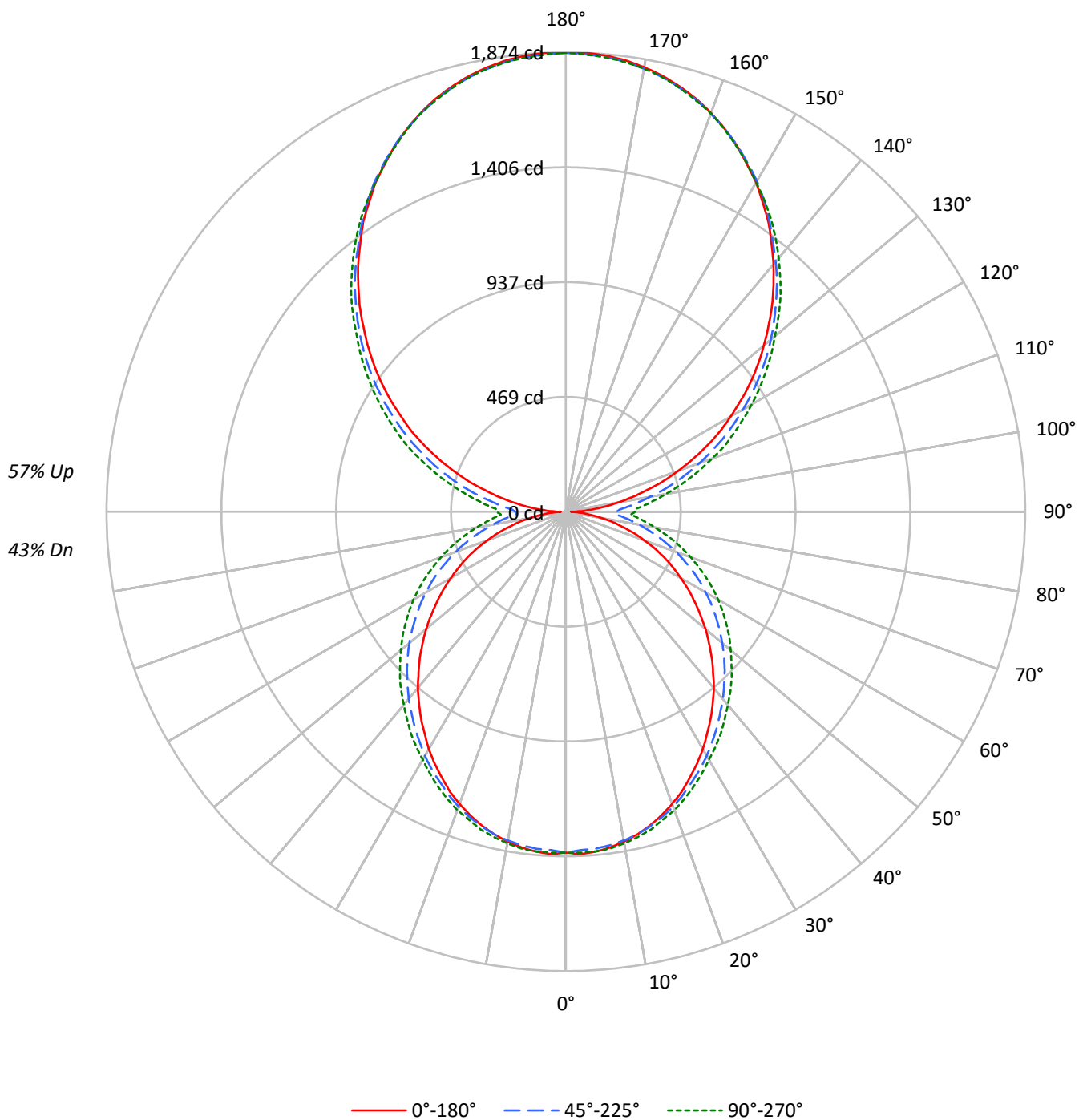
Lumens per Lamp: N/A
Luminaire Lumens: 9866.0 lumens
Efficiency: N/A
Efficacy: 86.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	97	97	97	97	80	80	80	64	64	64	50	50	50
1	95	91	87	83	87	83	79	76	68	66	63	55	53	52	43	42	40
2	86	79	72	67	79	72	66	62	59	55	52	48	45	42	37	35	33
3	79	69	61	55	71	63	56	51	52	47	43	42	38	35	33	30	28
4	72	61	53	46	65	56	49	43	46	41	36	37	33	30	29	26	24
5	66	54	46	39	60	49	42	37	41	36	31	33	29	26	26	23	21
6	60	48	40	34	55	44	37	32	37	31	27	30	26	23	24	20	18
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	21	18	16
8	52	39	32	26	47	36	29	24	30	25	21	25	21	18	20	17	14
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13
10	45	33	26	21	41	30	24	19	26	20	17	21	17	14	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14966	14966	14966
5°	15008	14527	14515
10°	14867	14134	14026
15°	14670	13699	13507
20°	14391	13215	12949
25°	14048	12670	12372
30°	13696	12176	11792
35°	13302	11658	11319
40°	12924	11183	10819
45°	12506	10726	10409
50°	12093	10272	9962
55°	11636	9805	9551
60°	11188	9329	9130
65°	10728	8820	8638
70°	10036	8250	8130
75°	9160	7602	7606
80°	8143	6943	7009
85°	7127	6410	6581

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12506 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	1.3
10°-20°	376.0	3.8
20°-30°	562.3	5.7
30°-40°	671.4	6.8
40°-50°	702.4	7.1
50°-60°	659.2	6.7
60°-70°	550.6	5.6
70°-80°	393.7	4.0
80°-90°	238.2	2.4
90°-100°	267.8	2.7
100°-110°	473.1	4.8
110°-120°	693.4	7.0
120°-130°	858.4	8.7
130°-140°	937.0	9.5
140°-150°	906.9	9.2
150°-160°	760.3	7.7
160°-170°	506.1	5.1
170°-180°	177.2	1.8
0°-30°	1070.2	10.8
0°-40°	1741.6	17.7
0°-60°	3103.2	31.5
0°-90°	4285.7	43.4
90°-120°	1434.3	14.5
90°-150°	4136.6	41.9
90°-180°	5580.0	56.6
0°-180°	9866.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1392	1389	1380	1392	1390	132
15°	1325	1330	1328	1344	1342	373
25°	1197	1212	1216	1236	1236	552
35°	1030	1054	1074	1097	1103	644
45°	842	878	916	945	957	649
55°	642	692	747	788	800	575
65°	444	503	570	615	630	439
75°	241	312	388	438	456	257
85°	74	150	230	282	297	76
90°	21	110	206	264	282	21
95°	104	173	259	312	327	109
105°	343	382	461	503	520	367
115°	633	655	707	745	755	627
125°	920	924	965	991	996	821
135°	1190	1198	1213	1234	1239	917
145°	1442	1443	1448	1458	1458	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°	1390.4	1390.4	1390.4	1390.4	1390.4
2.5°	1398.0	1393.5	1381.4	1393.5	1392.0
5°	1392.0	1388.9	1379.8	1392.0	1390.4
7.5°	1381.4	1381.4	1372.3	1387.4	1385.9
10°	1366.2	1369.2	1361.7	1376.8	1373.8
12.5°	1348.0	1352.6	1348.0	1361.7	1358.6
15°	1325.3	1329.9	1328.3	1343.5	1342.0
17.5°	1298.1	1307.1	1305.6	1319.3	1316.2
20°	1267.8	1276.9	1279.9	1293.5	1295.0
22.5°	1236.0	1245.0	1249.6	1267.8	1266.2
25°	1196.6	1211.7	1216.3	1236.0	1236.0
27.5°	1158.7	1175.4	1184.5	1201.1	1202.6
30°	1117.8	1137.5	1149.6	1167.8	1167.8
32.5°	1072.4	1095.1	1111.8	1131.4	1136.0
35°	1030.0	1054.2	1073.9	1096.6	1102.7
37.5°	984.5	1011.8	1034.5	1060.3	1064.8
40°	939.1	966.3	996.6	1022.4	1028.4
42.5°	889.1	923.9	955.7	984.5	993.6
45°	842.1	878.5	916.4	945.1	957.3
47.5°	792.2	833.1	875.5	907.3	916.4
50°	743.7	786.1	833.1	867.9	878.5
52.5°	692.2	737.6	790.6	827.0	840.6
55°	642.2	692.2	746.7	787.6	799.7
57.5°	593.7	645.2	704.3	745.2	758.8
60°	542.2	596.8	658.9	701.3	717.9
62.5°	493.8	549.8	616.5	658.9	674.0
65°	443.8	502.9	569.5	614.9	630.1
67.5°	393.8	455.9	522.6	572.5	584.7
70°	340.8	405.9	478.6	527.1	542.2
72.5°	292.3	357.5	433.2	483.2	498.3
75°	240.8	312.0	387.8	437.7	455.9
77.5°	196.9	268.1	343.8	396.8	410.5
80°	150.0	224.2	302.9	354.4	369.6
82.5°	109.1	184.8	265.1	316.6	331.7
85°	74.2	150.0	230.2	281.7	296.9
87.5°	45.4	121.2	198.4	249.9	265.1
90°	21.2	110.1	206.5	263.9	281.9
92.5°	62.3	136.3	220.8	275.2	286.0
95°	103.5	172.8	258.9	311.6	326.8
97.5°	157.8	219.8	299.8	352.5	366.2
100°	213.7	271.0	348.1	396.4	414.4
102.5°	278.4	325.2	403.7	450.5	464.1
105°	343.1	382.4	460.8	503.2	519.7
107.5°	418.1	451.4	519.4	564.7	576.8
110°	487.2	517.5	580.9	626.2	635.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	560.8	583.4	640.9	686.2	699.8
115°	632.8	655.3	707.0	744.8	755.4
117.5°	707.9	721.4	770.0	806.3	814.1
120°	775.5	791.8	834.5	867.9	875.6
122.5°	847.6	856.5	900.4	929.4	935.6
125°	919.5	924.0	965.0	990.9	995.6
127.5°	987.2	994.5	1029.5	1051.0	1055.7
130°	1054.9	1065.2	1091.0	1114.0	1112.8
132.5°	1121.1	1132.8	1152.6	1172.5	1175.8
135°	1190.2	1197.5	1212.8	1234.1	1238.7
137.5°	1253.5	1259.3	1274.3	1291.3	1294.4
140°	1318.2	1325.5	1331.6	1352.8	1350.1
142.5°	1378.5	1384.3	1387.3	1405.5	1405.7
145°	1441.7	1443.2	1447.6	1458.2	1458.4
147.5°	1494.7	1500.6	1505.0	1509.5	1506.7
150°	1552.0	1555.0	1557.9	1557.9	1552.1
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)