

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: P1031446

Luminaire Tested: S123DIW-B1165D1320UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031446
REPORT IS A COMBINATION OF REPORTS P990952 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1320UB30-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

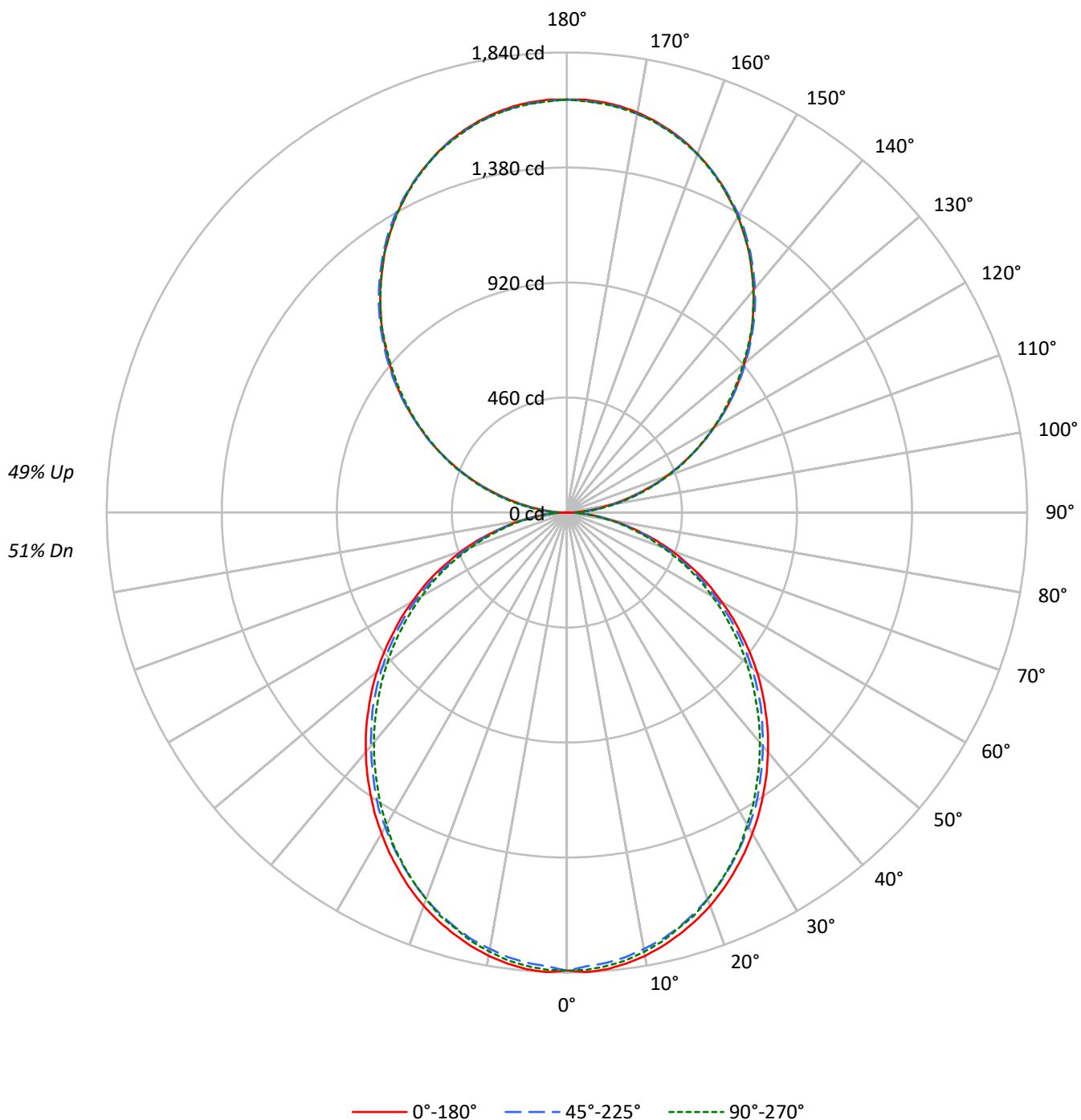
Lumens per Lamp: N/A
Luminaire Lumens: 9348.0 lumens
Efficiency: N/A
Efficacy: 90.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 103.4
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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57
1	98	94	90	86	90	87	83	80	73	71	69	61	60	58	50	49	48
2	89	82	76	70	82	76	70	66	64	60	57	54	51	48	44	42	40
3	81	72	64	59	75	67	60	55	57	52	48	48	44	41	39	37	34
4	74	64	56	49	68	59	52	47	50	45	41	42	38	35	35	32	30
5	68	57	48	42	63	53	45	40	45	39	35	38	34	30	32	28	26
6	63	51	43	37	58	47	40	35	41	35	31	34	30	27	29	25	23
7	58	46	38	32	54	43	36	30	37	31	27	31	27	24	26	23	20
8	54	42	34	28	50	39	32	27	34	28	24	29	24	21	24	21	18
9	50	38	30	25	46	35	29	24	31	25	21	26	22	19	22	19	16
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	21	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19719	19719	19719
5°	19769	19039	19011
10°	19593	18395	18206
15°	19321	17724	17330
20°	19008	16981	16460
25°	18604	16196	15531
30°	18162	15383	14554
35°	17699	14553	13583
40°	17214	13682	12629
45°	16681	12833	11630
50°	16138	11887	10629
55°	15441	10901	9615
60°	14725	9813	8534
65°	14052	8636	7407
70°	13081	7331	6093
75°	11686	5806	4730
80°	10092	4080	3345
85°	7867	2194	1676

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16681 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.7	1.8
10°-20°	487.7	5.2
20°-30°	720.3	7.7
30°-40°	841.2	9.0
40°-50°	845.7	9.0
50°-60°	742.9	7.9
60°-70°	553.3	5.9
70°-80°	314.9	3.4
80°-90°	93.0	1.0
90°-100°	106.3	1.1
100°-110°	321.8	3.4
110°-120°	547.8	5.9
120°-130°	720.7	7.7
130°-140°	810.1	8.7
140°-150°	796.4	8.5
150°-160°	670.5	7.2
160°-170°	446.4	4.8
170°-180°	156.3	1.7
0°-30°	1380.7	14.8
0°-40°	2221.8	23.8
0°-60°	3810.4	40.8
0°-90°	4771.5	51.0
90°-120°	976.0	10.4
90°-150°	3303.2	35.3
90°-180°	4576.0	49.0
0°-180°	9348.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1832	1832	1832	1832	1832	
5°	1834	1826	1808	1824	1821	174
15°	1745	1739	1719	1731	1722	492
25°	1585	1575	1555	1556	1552	730
35°	1370	1361	1341	1331	1323	857
45°	1123	1117	1096	1078	1070	867
55°	852	851	830	813	805	763
65°	581	573	558	545	540	573
75°	307	301	296	288	284	328
85°	82	79	79	76	76	88
90°	1	14	31	36	39	11
95°	77	86	96	101	101	84
105°	292	294	306	306	309	313
115°	551	555	553	554	553	546
125°	807	811	808	803	798	720
135°	1047	1055	1054	1048	1046	807
145°	1270	1273	1277	1275	1270	793
155°	1454	1454	1456	1461	1452	670
165°	1584	1580	1580	1588	1579	447
175°	1648	1643	1643	1650	1641	157
180°	1652	1652	1652	1652	1652	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1832.0	1832.0	1832.0	1832.0	1832.0
2.5°	1839.9	1833.6	1816.3	1832.0	1830.5
5°	1833.6	1825.7	1808.4	1824.2	1821.0
7.5°	1819.4	1811.6	1794.2	1808.4	1806.8
10°	1800.5	1792.7	1772.2	1786.4	1783.2
12.5°	1775.3	1769.0	1750.1	1759.6	1758.0
15°	1745.4	1739.1	1718.6	1731.2	1721.8
17.5°	1712.3	1704.4	1684.0	1693.4	1690.3
20°	1674.5	1665.1	1644.6	1650.9	1646.2
22.5°	1632.0	1622.5	1602.1	1606.8	1600.5
25°	1584.7	1575.3	1554.8	1556.4	1551.6
27.5°	1535.9	1526.4	1504.4	1506.0	1501.2
30°	1482.3	1474.5	1452.4	1452.4	1441.4
32.5°	1428.8	1417.7	1402.0	1391.0	1386.2
35°	1370.5	1361.0	1340.6	1331.1	1323.2
37.5°	1312.2	1299.6	1279.1	1268.1	1263.4
40°	1250.8	1241.3	1219.3	1206.7	1200.4
42.5°	1189.3	1178.3	1156.3	1143.6	1137.3
45°	1123.2	1116.9	1096.4	1077.5	1069.6
47.5°	1058.6	1049.1	1030.2	1011.3	1005.0
50°	992.4	984.5	964.1	946.7	937.3
52.5°	923.1	918.4	896.3	882.2	872.7
55°	852.2	850.6	830.2	812.8	805.0
57.5°	786.1	779.8	764.0	748.3	738.8
60°	713.6	712.0	693.1	678.9	671.1
62.5°	649.0	644.3	625.4	611.2	606.5
65°	581.3	573.4	557.6	545.0	540.3
67.5°	508.8	502.5	489.9	478.9	472.6
70°	444.2	434.8	425.3	414.3	406.4
72.5°	376.5	370.2	359.2	349.7	346.6
75°	307.2	300.9	296.2	288.3	283.5
77.5°	245.7	242.6	236.3	230.0	230.0
80°	185.9	181.2	178.0	176.4	176.4
82.5°	127.6	127.6	127.6	124.4	122.9
85°	81.9	78.8	78.8	75.6	75.6
87.5°	41.0	36.2	34.7	33.1	33.1
90°	1.3	14.3	31.1	36.3	38.9
92.5°	38.9	46.7	54.5	58.4	55.8
95°	76.6	85.6	96.0	101.2	101.2
97.5°	125.9	132.3	140.1	146.6	145.3
100°	176.5	184.2	190.7	194.6	197.2
102.5°	234.8	238.7	247.8	251.7	250.4
105°	291.9	294.5	306.2	306.2	308.8
107.5°	359.4	360.7	365.9	369.8	368.5
110°	421.7	424.3	426.9	432.1	429.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	486.6	487.8	487.8	494.3	494.3
115°	551.4	555.3	552.7	554.0	552.7
117.5°	617.6	618.9	616.3	616.3	612.4
120°	678.6	686.4	679.9	678.6	676.0
122.5°	742.2	747.3	744.7	740.9	737.0
125°	807.0	810.9	808.3	803.1	797.9
127.5°	866.7	874.5	871.9	864.1	858.9
130°	926.4	936.8	932.9	927.7	918.6
132.5°	986.1	996.5	993.9	987.4	980.9
135°	1047.1	1054.8	1053.5	1048.4	1045.8
137.5°	1102.9	1109.3	1113.2	1106.7	1102.9
140°	1161.2	1167.7	1169.0	1167.7	1158.6
142.5°	1214.4	1220.9	1223.5	1222.2	1215.7
145°	1270.2	1272.8	1276.7	1275.4	1270.2
147.5°	1318.2	1323.4	1327.3	1327.3	1319.5
150°	1368.8	1371.4	1374.0	1374.0	1366.2
152.5°	1410.4	1414.2	1415.5	1418.1	1411.6
155°	1454.5	1454.5	1455.8	1461.0	1451.9
157.5°	1492.1	1490.8	1492.1	1497.3	1489.5
160°	1527.1	1524.5	1524.5	1531.0	1525.8
162.5°	1558.3	1554.4	1555.7	1562.2	1553.1
165°	1584.2	1580.3	1580.3	1588.1	1579.0
167.5°	1606.3	1601.1	1602.4	1610.2	1602.4
170°	1624.4	1619.2	1619.2	1628.3	1619.2
172.5°	1638.7	1633.5	1633.5	1641.3	1632.2
175°	1647.8	1642.6	1642.6	1650.4	1641.3
177.5°	1653.0	1647.8	1647.8	1655.6	1646.5
180°	1651.7	1651.7	1651.7	1651.7	1651.7

(END OF REPORT)