

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: P1031452

Luminaire Tested: S123DIW-B1165D1320UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031452
REPORT IS A COMBINATION OF REPORTS P990961 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1320UB35-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

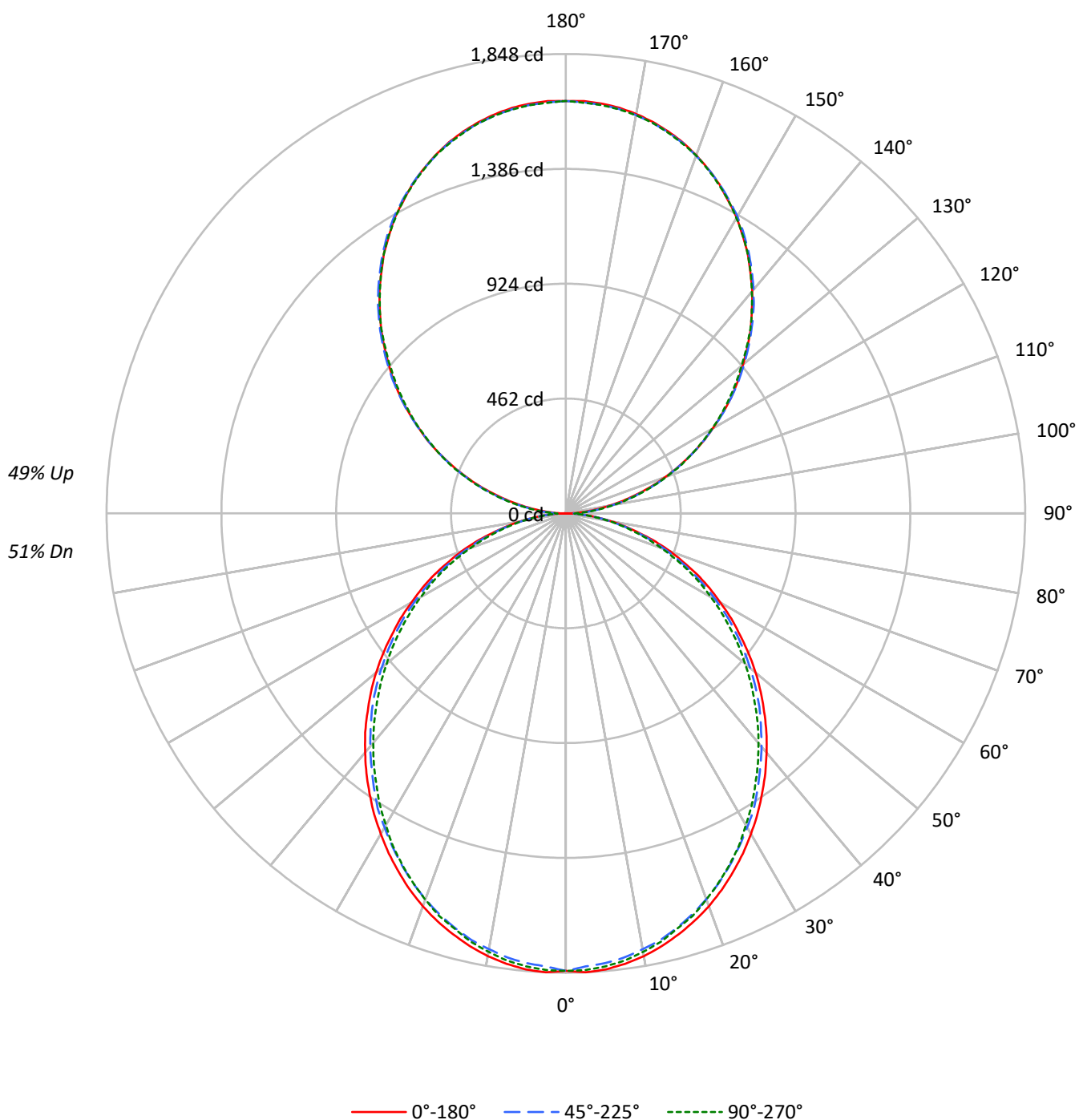
Lumens per Lamp: N/A
Luminaire Lumens: 9389.0 lumens
Efficiency: N/A
Efficacy: 90.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	19807	19807	19807
5°	19856	19123	19094
10°	19680	18476	18287
15°	19406	17803	17406
20°	19092	17055	16532
25°	18686	16267	15600
30°	18242	15451	14618
35°	17776	14618	13643
40°	17290	13742	12683
45°	16754	12889	11681
50°	16209	11939	10675
55°	15510	10948	9656
60°	14789	9857	8571
65°	14113	8675	7440
70°	13140	7364	6120
75°	11735	5832	4751
80°	10136	4098	3361
85°	7905	2203	1682

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 16754 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.5	1.8
10°-20°	489.8	5.2
20°-30°	723.4	7.7
30°-40°	844.9	9.0
40°-50°	849.4	9.0
50°-60°	746.1	7.9
60°-70°	555.7	5.9
70°-80°	316.2	3.4
80°-90°	93.4	1.0
90°-100°	106.8	1.1
100°-110°	323.2	3.4
110°-120°	550.2	5.9
120°-130°	723.9	7.7
130°-140°	813.7	8.7
140°-150°	799.9	8.5
150°-160°	673.4	7.2
160°-170°	448.3	4.8
170°-180°	157.0	1.7
0°-30°	1386.7	14.8
0°-40°	2231.6	23.8
0°-60°	3827.2	40.8
0°-90°	4792.5	51.0
90°-120°	980.2	10.4
90°-150°	3317.7	35.3
90°-180°	4596.0	49.0
0°-180°	9389.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1840	1840	1840	1840	1840	
5°	1842	1834	1816	1832	1829	175
15°	1753	1747	1726	1739	1729	494
25°	1592	1582	1562	1563	1558	733
35°	1376	1367	1346	1337	1329	861
45°	1128	1122	1101	1082	1074	871
55°	856	854	834	816	808	767
65°	584	576	560	547	543	576
75°	308	302	298	290	285	330
85°	82	79	79	76	76	88
90°	1	14	31	36	39	11
95°	77	86	96	102	102	85
105°	293	296	308	308	310	314
115°	554	558	555	556	555	548
125°	811	814	812	807	801	723
135°	1052	1060	1058	1053	1050	810
145°	1276	1278	1282	1281	1276	797
155°	1461	1461	1462	1467	1458	672
165°	1591	1587	1587	1595	1586	449
175°	1655	1650	1650	1658	1648	157
180°	1659	1659	1659	1659	1659	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1840.1	1840.1	1840.1	1840.1	1840.1
2.5°	1848.0	1841.7	1824.3	1840.1	1838.5
5°	1841.7	1833.8	1816.4	1832.2	1829.0
7.5°	1827.5	1819.5	1802.1	1816.4	1814.8
10°	1808.5	1800.6	1780.0	1794.2	1791.1
12.5°	1783.2	1776.8	1757.8	1767.3	1765.7
15°	1753.1	1746.8	1726.2	1738.9	1729.4
17.5°	1719.9	1712.0	1691.4	1700.9	1697.7
20°	1681.9	1672.4	1651.8	1658.2	1653.4
22.5°	1639.2	1629.7	1609.1	1613.9	1607.5
25°	1591.7	1582.2	1561.6	1563.2	1558.5
27.5°	1542.7	1533.2	1511.0	1512.6	1507.8
30°	1488.9	1481.0	1458.8	1458.8	1447.7
32.5°	1435.1	1424.0	1408.2	1397.1	1392.3
35°	1376.5	1367.0	1346.5	1337.0	1329.1
37.5°	1318.0	1305.3	1284.8	1273.7	1268.9
40°	1256.3	1246.8	1224.6	1212.0	1205.6
42.5°	1194.6	1183.5	1161.3	1148.7	1142.4
45°	1128.1	1121.8	1101.2	1082.2	1074.3
47.5°	1063.2	1053.8	1034.8	1015.8	1009.5
50°	996.8	988.9	968.3	950.9	941.4
52.5°	927.2	922.4	900.3	886.0	876.5
55°	856.0	854.4	833.8	816.4	808.5
57.5°	789.5	783.2	767.4	751.6	742.1
60°	716.7	715.2	696.2	681.9	674.0
62.5°	651.9	647.1	628.1	613.9	609.2
65°	583.8	575.9	560.1	547.4	542.7
67.5°	511.1	504.7	492.1	481.0	474.7
70°	446.2	436.7	427.2	416.1	408.2
72.5°	378.1	371.8	360.7	351.3	348.1
75°	308.5	302.2	297.5	289.5	284.8
77.5°	246.8	243.7	237.3	231.0	231.0
80°	186.7	182.0	178.8	177.2	177.2
82.5°	128.2	128.2	128.2	125.0	123.4
85°	82.3	79.1	79.1	75.9	75.9
87.5°	41.1	36.4	34.8	33.2	33.2
90°	1.3	14.3	31.3	36.5	39.1
92.5°	39.1	46.9	54.7	58.6	56.0
95°	76.9	86.0	96.4	101.6	101.6
97.5°	126.4	132.9	140.7	147.3	146.0
100°	177.2	185.0	191.6	195.5	198.1
102.5°	235.9	239.8	248.9	252.8	251.5
105°	293.2	295.8	307.5	307.5	310.1
107.5°	361.0	362.3	367.5	371.4	370.1
110°	423.5	426.1	428.7	433.9	431.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	488.7	490.0	490.0	496.5	496.5
115°	553.8	557.7	555.1	556.4	555.1
117.5°	620.3	621.6	619.0	619.0	615.1
120°	681.5	689.4	682.8	681.5	678.9
122.5°	745.4	750.6	748.0	744.1	740.2
125°	810.6	814.5	811.9	806.6	801.4
127.5°	870.5	878.3	875.7	867.9	862.7
130°	930.4	940.9	937.0	931.7	922.6
132.5°	990.4	1000.8	998.2	991.7	985.2
135°	1051.6	1059.5	1058.1	1052.9	1050.3
137.5°	1107.7	1114.2	1118.1	1111.6	1107.7
140°	1166.3	1172.8	1174.1	1172.8	1163.7
142.5°	1219.7	1226.3	1228.9	1227.6	1221.0
145°	1275.8	1278.4	1282.3	1281.0	1275.8
147.5°	1324.0	1329.2	1333.1	1333.1	1325.3
150°	1374.8	1377.4	1380.0	1380.0	1372.2
152.5°	1416.5	1420.4	1421.7	1424.3	1417.8
155°	1460.8	1460.8	1462.1	1467.3	1458.2
157.5°	1498.6	1497.3	1498.6	1503.8	1496.0
160°	1533.8	1531.2	1531.2	1537.7	1532.5
162.5°	1565.1	1561.2	1562.5	1569.0	1559.9
165°	1591.1	1587.2	1587.2	1595.0	1585.9
167.5°	1613.3	1608.1	1609.4	1617.2	1609.4
170°	1631.5	1626.3	1626.3	1635.4	1626.3
172.5°	1645.9	1640.6	1640.6	1648.5	1639.3
175°	1655.0	1649.8	1649.8	1657.6	1648.5
177.5°	1660.2	1655.0	1655.0	1662.8	1653.7
180°	1658.9	1658.9	1658.9	1658.9	1658.9

(END OF REPORT)