

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: P1031451

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031451
REPORT IS A COMBINATION OF REPORTS P990960 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1320UB35-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

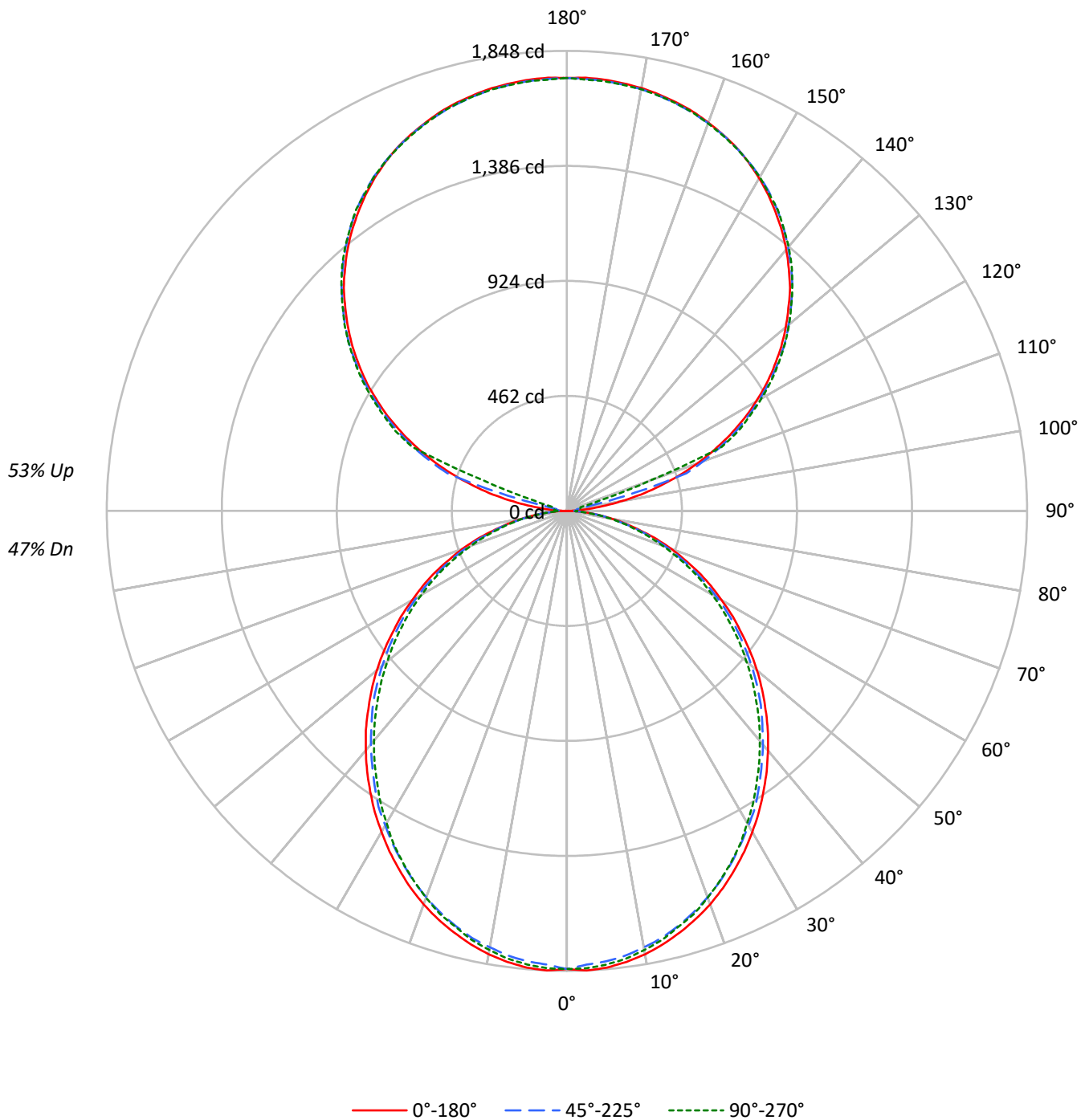
Lumens per Lamp: N/A
Luminaire Lumens: 10094.0 lumens
Efficiency: N/A
Efficacy: 97.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	47	47	47
1	97	93	89	85	89	85	82	79	72	69	67	59	57	56	47	46	45	40	40	40
2	88	81	75	70	81	75	69	65	63	59	56	52	49	47	42	40	38	33	33	33
3	81	71	64	58	74	66	59	54	55	51	47	46	42	39	37	35	32	28	28	28
4	74	63	55	49	68	58	51	46	49	44	40	41	37	34	33	30	28	24	24	24
5	68	56	48	42	62	52	45	39	44	38	34	37	32	29	30	27	24	21	21	21
6	62	50	42	36	57	47	39	34	40	34	30	33	29	26	27	24	21	18	18	18
7	58	45	37	32	53	42	35	30	36	30	26	30	26	23	25	21	19	16	16	16
8	53	41	33	28	49	38	31	26	33	27	23	27	23	20	23	19	17	15	15	15
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15	13	13	13
10	46	34	27	22	43	32	26	21	28	22	19	23	19	16	19	16	14	12	12	12

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	1.7
10°-20°	489.8	4.9
20°-30°	723.4	7.2
30°-40°	844.9	8.4
40°-50°	849.4	8.4
50°-60°	746.1	7.4
60°-70°	555.7	5.5
70°-80°	316.2	3.1
80°-90°	93.4	0.9
90°-100°	61.3	0.6
100°-110°	296.5	2.9
110°-120°	726.6	7.2
120°-130°	922.4	9.1
130°-140°	985.3	9.8
140°-150°	921.4	9.1
150°-160°	743.2	7.4
160°-170°	479.6	4.8
170°-180°	165.3	1.6
0°-30°	1386.7	13.7
0°-40°	2231.6	22.1
0°-60°	3827.2	37.9
0°-90°	4792.5	47.5
90°-120°	1084.4	10.7
90°-150°	3913.5	38.8
90°-180°	5302.0	52.5
0°-180°	10094.0	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	10
95°	79	26	40	49	49	94
105°	385	399	283	54	57	408
115°	722	730	742	754	760	713
125°	1018	1028	1034	1036	1039	910
135°	1267	1275	1280	1284	1280	976
145°	1462	1472	1474	1477	1477	916
155°	1611	1608	1610	1616	1608	742
165°	1699	1695	1694	1704	1695	480
175°	1739	1733	1734	1743	1733	166
180°	1739	1739	1739	1739	1739	

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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	14.2	31.0	36.2	38.8
92.5°	29.7	22.0	33.6	42.6	43.9
95°	78.8	25.8	40.1	49.1	49.1
97.5°	143.4	107.2	41.3	51.7	53.0
100°	218.3	244.2	42.6	53.0	54.3
102.5°	303.6	320.4	95.6	53.0	55.6
105°	385.0	399.2	282.9	54.3	56.8
107.5°	471.6	483.2	502.6	303.6	134.4
110°	558.1	568.5	582.7	540.0	355.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	640.8	649.9	664.1	675.7	673.1
115°	722.2	730.0	741.6	754.5	759.7
117.5°	802.3	811.4	817.8	828.2	829.5
120°	876.0	887.6	891.5	901.8	901.8
122.5°	950.9	959.9	965.1	971.6	972.9
125°	1018.1	1028.4	1033.6	1036.2	1038.8
127.5°	1085.3	1095.6	1102.1	1105.9	1103.4
130°	1147.3	1157.6	1162.8	1168.0	1165.4
132.5°	1206.7	1217.1	1220.9	1226.1	1222.2
135°	1267.4	1275.2	1280.4	1284.2	1280.4
137.5°	1319.1	1329.5	1332.0	1338.5	1335.9
140°	1370.8	1378.5	1382.4	1387.6	1385.0
142.5°	1418.6	1426.4	1430.2	1434.1	1430.2
145°	1462.5	1471.6	1474.2	1476.7	1476.7
147.5°	1505.2	1511.6	1514.2	1516.8	1510.3
150°	1543.9	1547.8	1550.4	1553.0	1549.1
152.5°	1578.8	1580.1	1581.4	1586.6	1580.1
155°	1611.1	1608.5	1609.8	1616.3	1608.5
157.5°	1636.9	1636.9	1635.7	1643.4	1633.1
160°	1660.2	1658.9	1657.6	1665.4	1656.3
162.5°	1682.2	1678.3	1677.0	1686.0	1678.3
165°	1699.0	1695.1	1693.8	1704.1	1695.1
167.5°	1713.2	1708.0	1708.0	1718.3	1708.0
170°	1724.8	1719.6	1719.6	1730.0	1719.6
172.5°	1732.6	1726.1	1727.4	1737.7	1726.1
175°	1739.0	1732.6	1733.8	1742.9	1732.6
177.5°	1741.6	1735.1	1736.4	1746.8	1733.8
180°	1739.0	1739.0	1739.0	1739.0	1739.0

(END OF REPORT)