

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: P1031476

Luminaire Tested: S123DIW-B1165D1535UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031476
REPORT IS A COMBINATION OF REPORTS P991018 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1535UB30-4F0-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

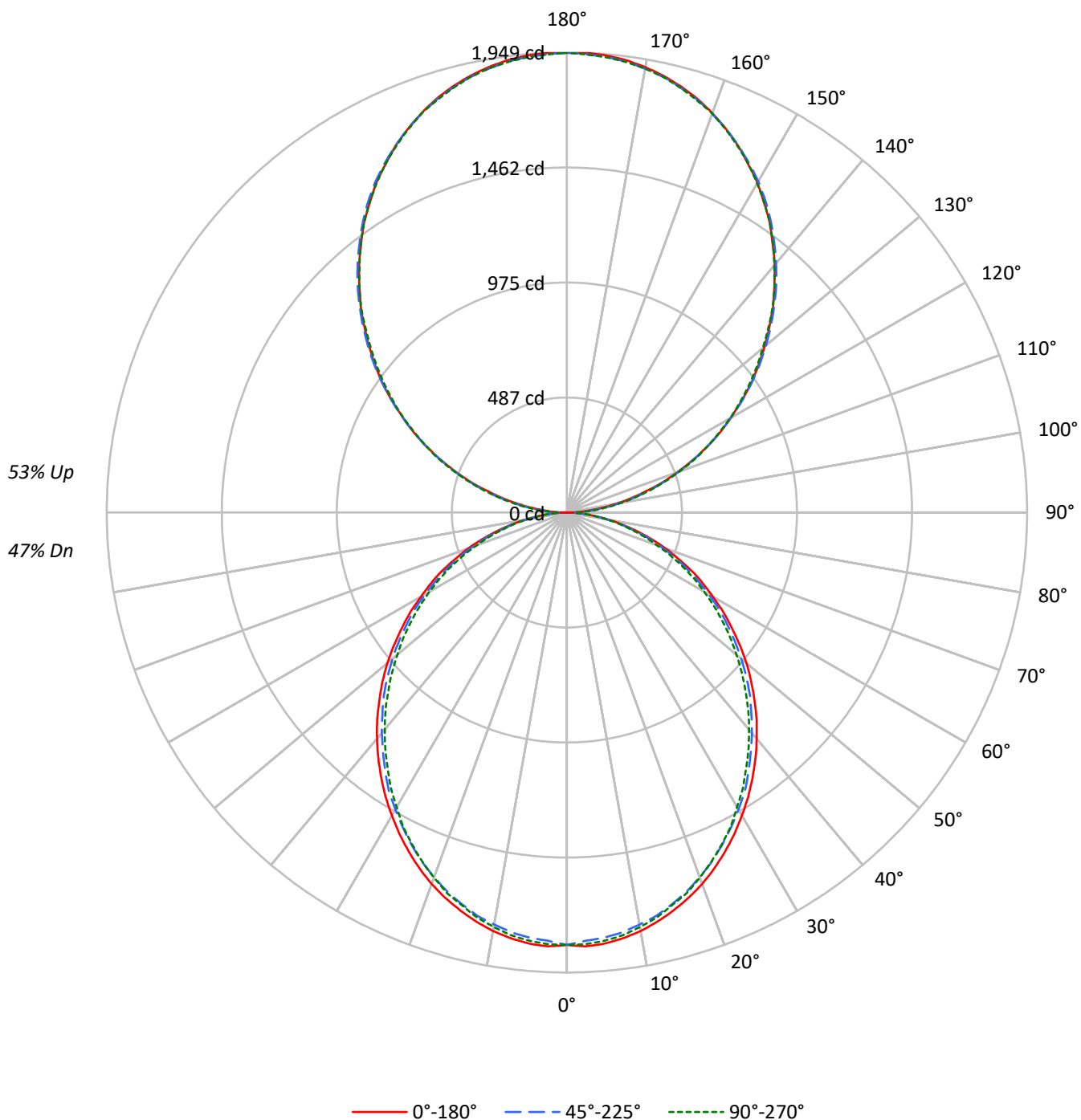
Lumens per Lamp: N/A
Luminaire Lumens: 10169.0 lumens
Efficiency: N/A
Efficacy: 89.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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°	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	1.7
10°-20°	487.7	4.8
20°-30°	720.3	7.1
30°-40°	841.2	8.3
40°-50°	845.7	8.3
50°-60°	742.9	7.3
60°-70°	553.3	5.4
70°-80°	314.9	3.1
80°-90°	93.6	0.9
90°-100°	125.4	1.2
100°-110°	379.5	3.7
110°-120°	646.1	6.4
120°-130°	849.9	8.4
130°-140°	955.3	9.4
140°-150°	939.2	9.2
150°-160°	790.7	7.8
160°-170°	526.4	5.2
170°-180°	184.3	1.8
0°-30°	1380.7	13.6
0°-40°	2221.8	21.8
0°-60°	3810.4	37.5
0°-90°	4772.1	46.9
90°-120°	1150.9	11.3
90°-150°	3895.4	38.3
90°-180°	5397.0	53.1
0°-180°	10169.0	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°	2	17	37	43	46	12
95°	90	101	113	119	119	99
105°	344	347	361	361	364	369
115°	650	655	652	653	652	644
125°	952	956	953	947	941	849
135°	1235	1244	1242	1236	1233	951
145°	1498	1501	1506	1504	1498	936
155°	1715	1715	1717	1723	1712	790
165°	1868	1864	1864	1873	1862	527
175°	1943	1937	1937	1946	1936	185
180°	1948	1948	1948	1948	1948	

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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°	1.5	16.8	36.7	42.8	45.9
92.5°	45.9	55.1	64.3	68.9	65.8
95°	90.3	101.0	113.2	119.3	119.3
97.5°	148.4	156.1	165.2	172.9	171.4
100°	208.1	217.3	224.9	229.5	232.6
102.5°	276.9	281.5	292.2	296.8	295.3
105°	344.3	347.3	361.1	361.1	364.2
107.5°	423.8	425.4	431.5	436.1	434.5
110°	497.3	500.3	503.4	509.5	506.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	573.8	575.3	575.3	583.0	583.0
115°	650.3	654.9	651.8	653.3	651.8
117.5°	728.3	729.8	726.8	726.8	722.2
120°	800.2	809.4	801.7	800.2	797.2
122.5°	875.2	881.3	878.3	873.7	869.1
125°	951.7	956.3	953.2	947.1	941.0
127.5°	1022.1	1031.3	1028.2	1019.0	1012.9
130°	1092.5	1104.7	1100.1	1094.0	1083.3
132.5°	1162.8	1175.1	1172.0	1164.4	1156.7
135°	1234.8	1243.9	1242.4	1236.3	1233.2
137.5°	1300.5	1308.2	1312.8	1305.1	1300.5
140°	1369.4	1377.0	1378.6	1377.0	1366.3
142.5°	1432.1	1439.8	1442.8	1441.3	1433.7
145°	1497.9	1501.0	1505.6	1504.0	1497.9
147.5°	1554.5	1560.7	1565.2	1565.2	1556.1
150°	1614.2	1617.3	1620.3	1620.3	1611.1
152.5°	1663.2	1667.8	1669.3	1672.3	1664.7
155°	1715.2	1715.2	1716.7	1722.8	1712.1
157.5°	1759.6	1758.0	1759.6	1765.7	1756.5
160°	1800.9	1797.8	1797.8	1805.5	1799.3
162.5°	1837.6	1833.0	1834.5	1842.2	1831.5
165°	1868.2	1863.6	1863.6	1872.8	1862.1
167.5°	1894.2	1888.1	1889.6	1898.8	1889.6
170°	1915.6	1909.5	1909.5	1920.2	1909.5
172.5°	1932.5	1926.3	1926.3	1935.5	1924.8
175°	1943.2	1937.0	1937.0	1946.2	1935.5
177.5°	1949.3	1943.2	1943.2	1952.3	1941.6
180°	1947.8	1947.8	1947.8	1947.8	1947.8

(END OF REPORT)