

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: P1031418

Luminaire Tested: S123DIW-B1165D1030UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031418
REPORT IS A COMBINATION OF REPORTS P990885 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1030UB30-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

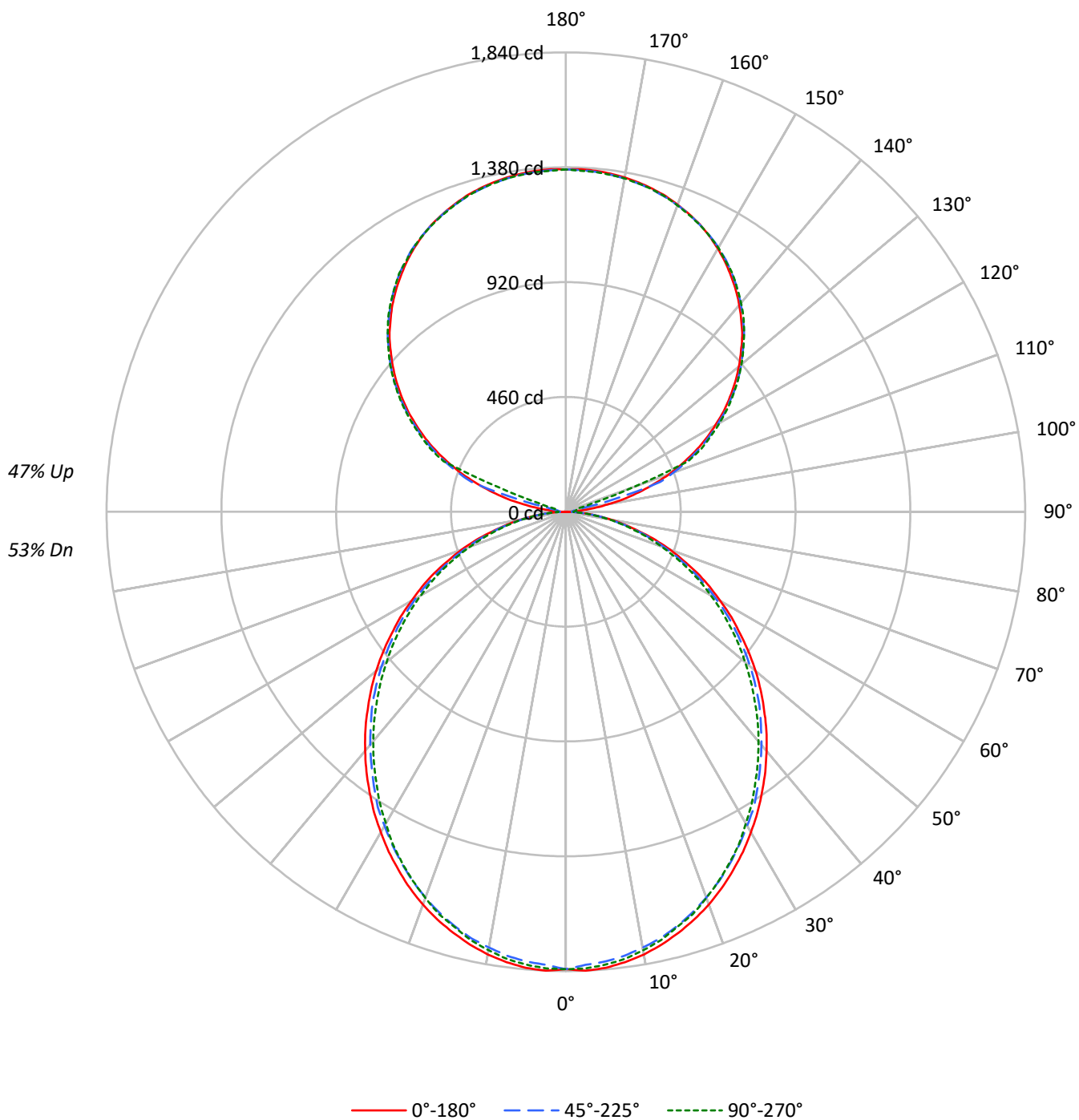
Lumens per Lamp: N/A
Luminaire Lumens: 8951.0 lumens
Efficiency: N/A
Efficacy: 96.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 92.8
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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59
1	98	94	90	87	91	87	84	81	75	72	70	63	61	60	52	51	50
2	90	82	76	71	83	76	71	66	65	61	58	55	52	50	46	44	42
3	82	72	65	59	75	67	61	55	58	53	49	49	45	42	41	38	36
4	75	64	56	50	69	59	52	47	51	46	41	43	39	36	36	33	31
5	69	57	49	43	63	53	46	40	46	40	36	39	35	31	33	29	27
6	63	51	43	37	58	48	40	35	41	35	31	35	31	27	30	26	24
7	58	46	38	32	54	43	36	31	37	32	27	32	28	24	27	24	21
8	54	42	34	29	50	39	32	27	34	28	24	29	25	22	25	21	19
9	51	38	31	26	47	36	29	24	31	26	22	27	23	19	23	19	17
10	47	35	28	23	44	33	26	22	29	23	20	25	21	18	21	18	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	1.9
10°-20°	487.7	5.4
20°-30°	720.3	8.0
30°-40°	841.2	9.4
40°-50°	845.7	9.4
50°-60°	742.9	8.3
60°-70°	553.3	6.2
70°-80°	314.9	3.5
80°-90°	92.3	1.0
90°-100°	48.4	0.5
100°-110°	233.8	2.6
110°-120°	572.9	6.4
120°-130°	727.3	8.1
130°-140°	776.9	8.7
140°-150°	726.5	8.1
150°-160°	586.0	6.5
160°-170°	378.2	4.2
170°-180°	130.3	1.5
0°-30°	1380.7	15.4
0°-40°	2221.8	24.8
0°-60°	3810.4	42.6
0°-90°	4770.7	53.3
90°-120°	855.0	9.6
90°-150°	3085.8	34.5
90°-180°	4180.0	46.7
0°-180°	8951.0	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	11	24	28	31	9
95°	62	20	32	39	39	74
105°	304	315	223	43	45	322
115°	570	576	585	595	599	562
125°	803	811	815	817	819	717
135°	999	1006	1010	1013	1010	769
145°	1153	1160	1162	1164	1164	722
155°	1270	1268	1269	1274	1268	585
165°	1340	1337	1336	1344	1337	379
175°	1371	1366	1367	1374	1366	130
180°	1371	1371	1371	1371	1371	

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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°	1.0	11.2	24.4	28.5	30.6
92.5°	23.4	17.3	26.5	33.6	34.6
95°	62.1	20.4	31.6	38.7	38.7
97.5°	113.1	84.6	32.6	40.7	41.8
100°	172.2	192.5	33.6	41.8	42.8
102.5°	239.4	252.6	75.4	41.8	43.8
105°	303.6	314.8	223.1	42.8	44.8
107.5°	371.8	381.0	396.3	239.4	105.9
110°	440.1	448.2	459.4	425.8	280.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	505.3	512.4	523.6	532.8	530.8
115°	569.5	575.6	584.8	594.9	599.0
117.5°	632.6	639.8	644.9	653.0	654.0
120°	690.7	699.9	702.9	711.1	711.1
122.5°	749.8	756.9	761.0	766.1	767.1
125°	802.8	810.9	815.0	817.0	819.1
127.5°	855.7	863.9	869.0	872.0	870.0
130°	904.6	912.8	916.9	920.9	918.9
132.5°	951.5	959.6	962.7	966.8	963.7
135°	999.4	1005.5	1009.6	1012.6	1009.6
137.5°	1040.1	1048.3	1050.3	1055.4	1053.4
140°	1080.9	1087.0	1090.0	1094.1	1092.1
142.5°	1118.6	1124.7	1127.7	1130.8	1127.7
145°	1153.2	1160.3	1162.4	1164.4	1164.4
147.5°	1186.8	1191.9	1194.0	1196.0	1190.9
150°	1217.4	1220.4	1222.5	1224.5	1221.5
152.5°	1244.9	1245.9	1246.9	1251.0	1245.9
155°	1270.4	1268.3	1269.3	1274.4	1268.3
157.5°	1290.7	1290.7	1289.7	1295.8	1287.7
160°	1309.1	1308.1	1307.0	1313.1	1306.0
162.5°	1326.4	1323.3	1322.3	1329.4	1323.3
165°	1339.6	1336.6	1335.6	1343.7	1336.6
167.5°	1350.8	1346.8	1346.8	1354.9	1346.8
170°	1360.0	1355.9	1355.9	1364.1	1355.9
172.5°	1366.1	1361.0	1362.0	1370.2	1361.0
175°	1371.2	1366.1	1367.1	1374.3	1366.1
177.5°	1373.3	1368.2	1369.2	1377.3	1367.1
180°	1371.2	1371.2	1371.2	1371.2	1371.2

(END OF REPORT)