

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: P1031425

Luminaire Tested: S123DIW-B1165D1030UB35-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031425
REPORT IS A COMBINATION OF REPORTS P990895 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1165D1030UB35-4F0-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

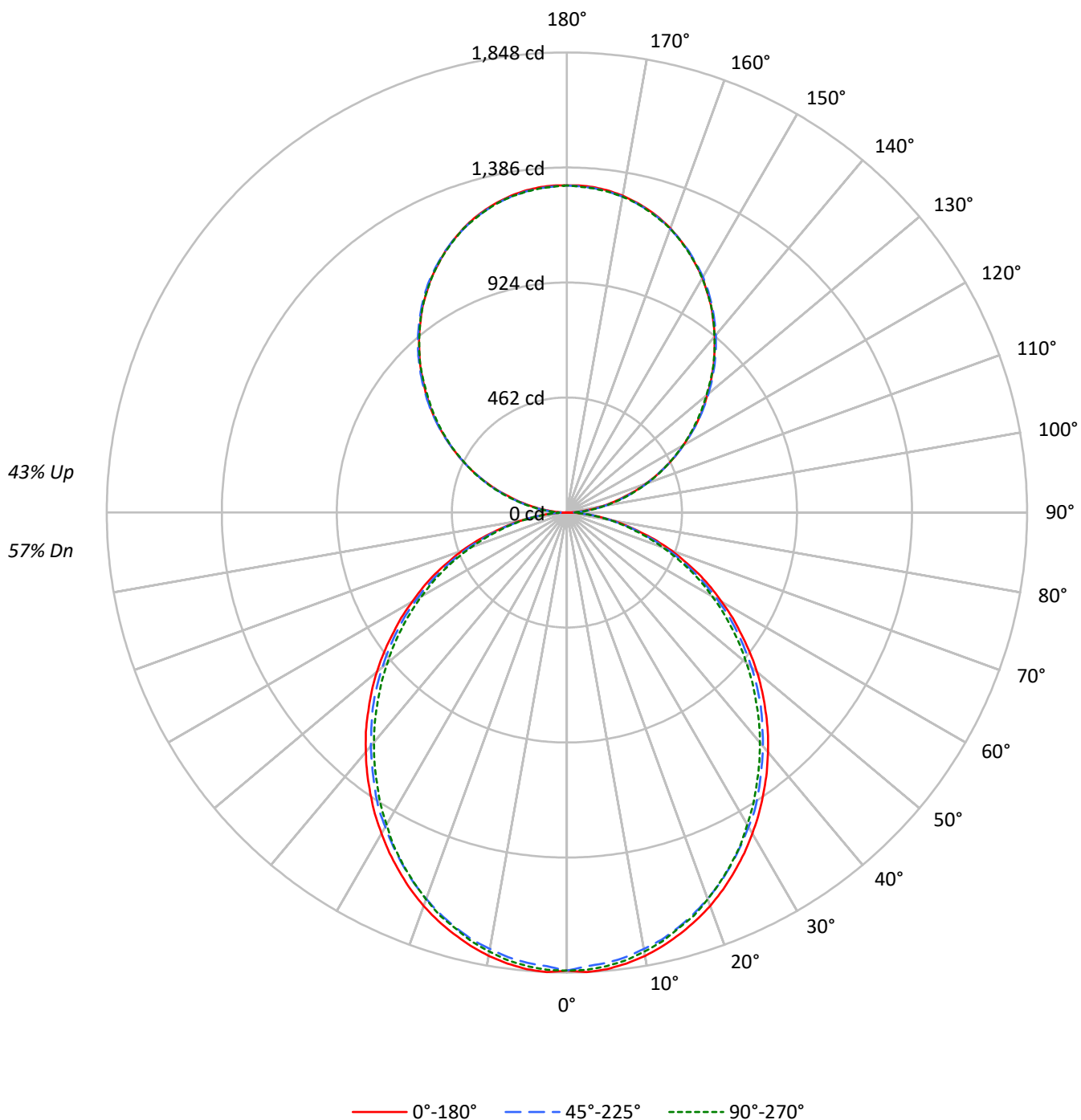
Lumens per Lamp: N/A
Luminaire Lumens: 8432.0 lumens
Efficiency: N/A
Efficacy: 90.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P1031425

CATALOG NUMBER: S123DIW-B1165D1030UB35-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1031425

CATALOG NUMBER: S123DIW-B1165D1030UB35-4F0-XX-W2A-F1

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	99	95	91	87	92	88	85	82	76	74	71	65	63	62	55	54	53
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44
3	82	73	65	59	76	68	61	56	59	54	50	51	47	44	43	40	38
4	75	64	56	50	70	60	53	48	52	47	42	45	41	37	38	35	32
5	69	57	49	43	64	54	46	41	47	41	37	40	36	32	35	31	28
6	64	52	43	37	59	48	41	36	42	36	32	37	32	28	31	28	25
7	59	47	38	33	55	44	36	31	38	32	28	33	29	25	29	25	22
8	55	42	34	29	51	40	33	28	35	29	25	30	26	22	26	23	20
9	51	39	31	26	47	36	29	25	32	26	22	28	23	20	24	21	18
10	48	35	28	23	44	33	27	22	30	24	20	26	21	18	23	19	16

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

TEST NUMBER: P1031425

CATALOG NUMBER: S123DIW-B1165D1030UB35-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.5	2.1
10°-20°	489.8	5.8
20°-30°	723.4	8.6
30°-40°	844.9	10.0
40°-50°	849.4	10.1
50°-60°	746.1	8.8
60°-70°	555.7	6.6
70°-80°	316.2	3.8
80°-90°	92.7	1.1
90°-100°	84.6	1.0
100°-110°	256.0	3.0
110°-120°	435.8	5.2
120°-130°	573.3	6.8
130°-140°	644.4	7.6
140°-150°	633.5	7.5
150°-160°	533.3	6.3
160°-170°	355.1	4.2
170°-180°	124.3	1.5
0°-30°	1386.7	16.4
0°-40°	2231.6	26.5
0°-60°	3827.2	45.4
0°-90°	4791.8	56.8
90°-120°	776.3	9.2
90°-150°	2627.5	31.2
90°-180°	3640.0	43.2
0°-180°	8432.0	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	11	25	29	31	10
95°	61	68	76	80	80	67
105°	232	234	244	244	246	249
115°	439	442	440	441	440	434
125°	642	645	643	639	635	572
135°	833	839	838	834	832	642
145°	1010	1012	1016	1014	1010	631
155°	1157	1157	1158	1162	1155	533
165°	1260	1257	1257	1263	1256	355
175°	1311	1306	1306	1313	1306	125
180°	1314	1314	1314	1314	1314	

TEST NUMBER: P1031425

CATALOG NUMBER: S123DIW-B1165D1030UB35-4F0-XX-W2A-F1

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°	1.0	11.4	24.8	28.9	31.0
92.5°	31.0	37.2	43.3	46.4	44.4
95°	60.9	68.1	76.4	80.5	80.5
97.5°	100.1	105.3	111.5	116.6	115.6
100°	140.4	146.5	151.7	154.8	156.9
102.5°	186.8	189.9	197.1	200.2	199.2
105°	232.2	234.3	243.6	243.6	245.6
107.5°	285.9	286.9	291.0	294.1	293.1
110°	335.4	337.5	339.5	343.7	341.6

TEST NUMBER: P1031425

CATALOG NUMBER: S123DIW-B1165D1030UB35-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	387.0	388.0	388.0	393.2	393.2
115°	438.6	441.7	439.6	440.7	439.6
117.5°	491.2	492.3	490.2	490.2	487.1
120°	539.8	545.9	540.8	539.8	537.7
122.5°	590.3	594.4	592.4	589.3	586.2
125°	641.9	645.0	643.0	638.8	634.7
127.5°	689.4	695.6	693.5	687.3	683.2
130°	736.9	745.1	742.0	737.9	730.7
132.5°	784.3	792.6	790.5	785.4	780.2
135°	832.8	839.0	838.0	833.9	831.8
137.5°	877.2	882.4	885.5	880.3	877.2
140°	923.7	928.8	929.9	928.8	921.6
142.5°	966.0	971.1	973.2	972.2	967.0
145°	1010.4	1012.4	1015.5	1014.5	1010.4
147.5°	1048.5	1052.7	1055.8	1055.8	1049.6
150°	1088.8	1090.9	1092.9	1092.9	1086.7
152.5°	1121.8	1124.9	1125.9	1128.0	1122.8
155°	1156.9	1156.9	1157.9	1162.1	1154.8
157.5°	1186.8	1185.8	1186.8	1191.0	1184.8
160°	1214.7	1212.6	1212.6	1217.8	1213.7
162.5°	1239.5	1236.4	1237.4	1242.6	1235.3
165°	1260.1	1257.0	1257.0	1263.2	1256.0
167.5°	1277.7	1273.5	1274.6	1280.7	1274.6
170°	1292.1	1288.0	1288.0	1295.2	1288.0
172.5°	1303.5	1299.3	1299.3	1305.5	1298.3
175°	1310.7	1306.5	1306.5	1312.7	1305.5
177.5°	1314.8	1310.7	1310.7	1316.9	1309.6
180°	1313.8	1313.8	1313.8	1313.8	1313.8

(END OF REPORT)