

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P288462

Luminaire Tested: **4WNLED-LD4-50SL-F-UNV-L835-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P288462
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1902-121-2)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4WNLED-LD4-50SL-F-UNV-L835-CD1-U
Description: 4FT WNLED WRAPAROUND
Light Source: (112) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

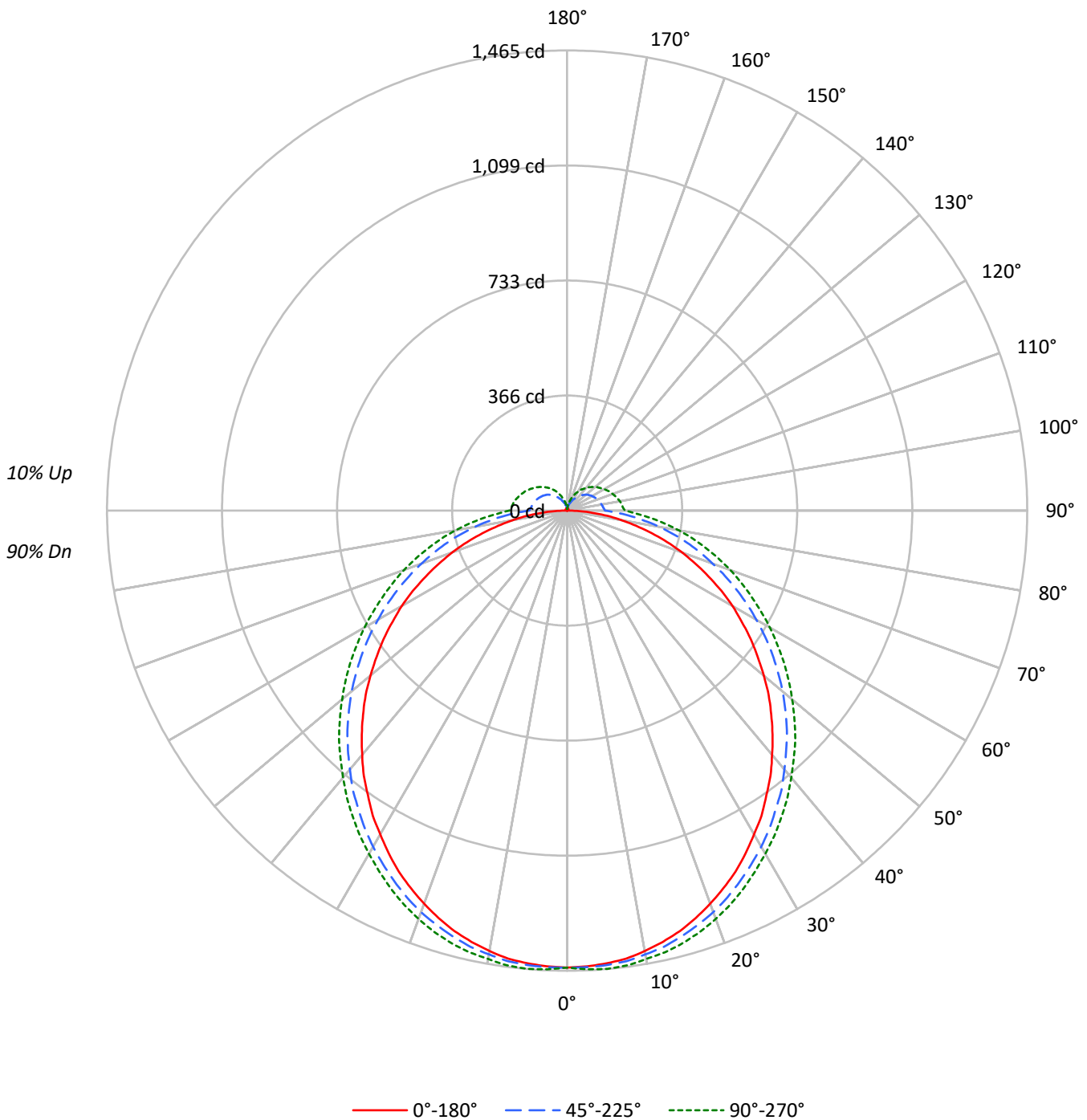
Lumens per Lamp: N/A
Luminaire Lumens: 4984.0 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.29 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 42.4
Input Voltage (V): 120
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: 25 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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	90
1	105	100	95	91	101	97	92	89	91	87	84	85	82	80	80	78	76	73
2	95	86	79	73	92	84	77	71	78	73	68	74	69	65	69	66	62	60
3	86	75	67	60	83	73	65	59	69	62	57	65	59	54	61	56	52	50
4	79	67	58	51	76	65	56	50	61	54	48	57	51	46	54	49	45	42
5	73	59	50	43	70	58	49	43	54	47	41	51	45	40	49	43	39	36
6	67	53	44	38	64	52	43	37	49	42	36	46	40	35	44	38	34	32
7	62	48	39	33	60	47	39	33	45	37	32	42	36	31	40	34	30	28
8	58	44	35	29	55	43	35	29	41	33	28	39	32	28	37	31	27	25
9	54	40	32	26	52	39	31	26	37	30	25	36	29	25	34	28	24	22
10	50	37	29	24	49	36	29	24	35	28	23	33	27	22	32	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3916	3916	3916
5°	3898	3886	3913
10°	3870	3846	3876
15°	3829	3798	3842
20°	3772	3745	3789
25°	3712	3677	3726
30°	3632	3610	3656
35°	3555	3533	3594
40°	3475	3459	3529
45°	3392	3391	3475
50°	3300	3315	3408
55°	3204	3231	3352
60°	3103	3143	3300
65°	2965	3059	3249
70°	2815	2974	3235
75°	2596	2910	3224
80°	2334	2837	3265
85°	1847	2789	3373



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.0	2.8
10°-20°	395.6	7.9
20°-30°	597.7	12.0
30°-40°	720.4	14.5
40°-50°	755.4	15.2
50°-60°	704.1	14.1
60°-70°	579.5	11.6
70°-80°	405.0	8.1
80°-90°	210.6	4.2
90°-100°	114.5	2.3
100°-110°	103.0	2.1
110°-120°	87.6	1.8
120°-130°	69.5	1.4
130°-140°	49.8	1.0
140°-150°	31.0	0.6
150°-160°	15.8	0.3
160°-170°	5.7	0.1
170°-180°	1.0	0.0
0°-30°	1131.3	22.7
0°-40°	1851.7	37.2
0°-60°	3311.3	66.4
0°-90°	4506.3	90.4
90°-120°	305.0	6.1
90°-150°	455.2	9.1
90°-180°	478.0	9.6
0°-180°	4984.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1455	1455	1455	1455	1455	
5°	1447	1435	1452	1450	1465	137
15°	1386	1378	1404	1408	1425	391
25°	1268	1268	1302	1309	1328	584
35°	1106	1117	1159	1174	1190	693
45°	919	942	990	1011	1027	709
55°	713	744	797	827	842	637
65°	497	536	594	634	647	493
75°	279	332	395	439	455	296
85°	81	138	204	249	265	86
90°	1	56	120	168	184	6
95°	1	53	115	161	176	1
105°	1	49	107	149	162	2
115°	3	46	98	134	146	3
125°	4	41	85	118	126	4
135°	4	32	70	99	106	3
145°	5	24	51	76	83	3
155°	7	18	34	50	57	3
165°	7	12	19	26	31	2
175°	7	8	10	8	10	1
180°	7	7	7	7	7	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1455.1	1455.1	1455.1	1455.1	1455.1	1455.1	1455.1	1455.1	1455.1	1455.1	1455.1
2.5°	1452.4	1459.2	1451.1	1453.8	1445.7	1440.2	1463.3	1448.4	1449.7	1463.3	1455.1
5°	1447.0	1453.8	1445.7	1448.4	1441.6	1434.8	1459.2	1445.7	1447.0	1459.2	1452.4
7.5°	1438.9	1444.3	1436.2	1438.9	1433.5	1426.7	1449.7	1438.9	1440.2	1451.1	1447.0
10°	1424.0	1429.4	1425.4	1426.7	1421.3	1414.5	1438.9	1425.4	1428.1	1440.2	1434.8
12.5°	1406.4	1413.2	1406.4	1409.1	1405.1	1398.3	1421.3	1410.5	1413.2	1425.4	1422.6
15°	1386.1	1390.2	1386.1	1388.8	1384.7	1378.0	1401.0	1392.9	1395.6	1407.8	1403.7
17.5°	1360.4	1365.8	1361.7	1365.8	1361.7	1355.0	1378.0	1369.9	1372.6	1386.1	1383.4
20°	1332.0	1338.7	1333.3	1338.7	1334.7	1329.2	1352.3	1345.5	1348.2	1361.7	1360.4
22.5°	1300.8	1307.6	1302.2	1306.2	1306.2	1300.8	1322.5	1318.4	1321.1	1333.3	1333.3
25°	1268.3	1272.4	1269.7	1273.8	1272.4	1268.3	1290.0	1287.3	1288.6	1299.5	1302.2
27.5°	1230.4	1237.2	1233.1	1238.6	1237.2	1234.5	1254.8	1252.1	1256.2	1268.3	1269.7
30°	1189.8	1196.6	1193.9	1200.7	1199.3	1196.6	1218.3	1216.9	1219.6	1230.4	1235.8
32.5°	1151.9	1154.6	1154.6	1160.0	1161.4	1158.7	1179.0	1179.0	1183.1	1192.5	1199.3
35°	1105.9	1112.7	1110.0	1120.8	1119.4	1116.7	1137.0	1138.4	1142.4	1153.3	1158.7
37.5°	1063.9	1066.6	1066.6	1076.1	1078.8	1074.8	1092.4	1097.8	1101.8	1111.3	1120.8
40°	1015.2	1020.6	1020.6	1031.5	1034.2	1031.5	1050.4	1055.8	1059.9	1070.7	1076.1
42.5°	967.8	971.9	974.6	984.1	989.5	986.8	1004.4	1011.1	1015.2	1027.4	1032.8
45°	919.1	923.2	924.5	936.7	942.1	942.1	957.0	966.5	971.9	981.4	989.5
47.5°	870.4	871.7	875.8	886.6	894.7	894.7	909.6	917.7	924.5	934.0	942.1
50°	817.6	820.3	825.7	837.9	844.7	844.7	859.5	870.4	877.1	886.6	896.1
52.5°	764.8	768.9	774.3	786.4	794.6	795.9	808.1	821.6	825.7	836.5	846.0
55°	713.4	716.1	722.8	736.4	744.5	744.5	759.4	771.6	778.3	787.8	797.3
57.5°	659.2	663.3	670.0	683.6	691.7	693.1	706.6	718.8	726.9	736.4	747.2
60°	607.8	607.8	615.9	632.1	640.3	643.0	653.8	667.3	675.5	684.9	695.8
62.5°	553.6	553.6	563.1	576.6	586.1	588.8	603.7	615.9	624.0	633.5	645.7
65°	496.8	500.8	509.0	523.8	534.7	536.0	546.9	561.7	572.6	582.1	594.2
67.5°	442.6	448.0	453.5	468.4	480.5	483.2	495.4	510.3	519.8	529.3	544.2
70°	388.5	393.9	400.7	415.6	426.4	433.2	442.6	457.5	468.4	479.2	492.7
72.5°	334.3	339.8	346.5	362.8	375.0	381.7	391.2	408.8	418.3	429.1	444.0
75°	278.8	282.9	293.7	310.0	323.5	331.6	339.8	356.0	368.2	379.0	395.3
77.5°	224.7	231.5	240.9	257.2	270.7	277.5	287.0	307.3	318.1	331.6	346.5
80°	177.3	181.4	190.9	207.1	220.6	230.1	238.2	257.2	268.0	281.6	297.8
82.5°	128.6	134.0	143.5	159.7	176.0	184.1	190.9	209.8	222.0	235.5	249.1
85°	81.2	88.0	97.5	113.7	129.9	138.1	146.2	162.4	177.3	189.5	204.4
87.5°	37.9	44.7	55.5	70.4	85.3	94.8	101.5	119.1	132.7	146.2	159.7
90°	1.4	6.8	17.6	32.5	48.7	55.5	63.6	79.9	93.4	106.9	120.5
92.5°	0.0	5.4	16.2	31.1	46.0	54.1	60.9	77.2	90.7	104.2	117.8
95°	1.4	5.4	16.2	29.8	44.7	52.8	59.6	75.8	89.3	102.9	115.1
97.5°	1.4	5.4	16.2	29.8	44.7	51.4	59.6	74.4	88.0	101.5	113.7
100°	1.4	5.4	16.2	29.8	43.3	51.4	58.2	73.1	86.6	98.8	111.0
102.5°	1.4	5.4	16.2	28.4	43.3	50.1	56.9	71.7	85.3	97.5	109.6
105°	1.4	6.8	16.2	28.4	42.0	48.7	56.9	70.4	82.6	94.8	106.9
107.5°	2.7	6.8	16.2	28.4	42.0	48.7	55.5	69.0	81.2	93.4	104.2
110°	2.7	6.8	16.2	27.1	40.6	47.4	54.1	67.7	79.9	90.7	102.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	2.7	6.8	16.2	27.1	40.6	47.4	52.8	66.3	78.5	89.3	100.2
115°	2.7	6.8	14.9	27.1	39.3	46.0	51.4	65.0	75.8	86.6	97.5
117.5°	2.7	6.8	14.9	25.7	37.9	44.7	50.1	63.6	74.4	83.9	94.8
120°	4.1	6.8	14.9	25.7	36.5	43.3	48.7	60.9	71.7	82.6	92.0
122.5°	4.1	8.1	14.9	24.4	36.5	42.0	47.4	59.6	69.0	79.9	89.3
125°	4.1	8.1	14.9	24.4	35.2	40.6	46.0	56.9	67.7	77.2	85.3
127.5°	4.1	8.1	14.9	23.0	33.8	37.9	43.3	54.1	65.0	73.1	82.6
130°	4.1	8.1	13.5	21.7	31.1	36.5	40.6	51.4	60.9	70.4	78.5
132.5°	4.1	8.1	13.5	21.7	29.8	33.8	39.3	48.7	58.2	66.3	74.4
135°	4.1	6.8	12.2	20.3	28.4	32.5	36.5	46.0	54.1	62.3	70.4
137.5°	4.1	6.8	12.2	19.0	25.7	29.8	33.8	42.0	50.1	58.2	65.0
140°	5.4	6.8	12.2	17.6	24.4	28.4	31.1	39.3	46.0	52.8	60.9
142.5°	5.4	6.8	10.8	16.2	23.0	25.7	28.4	36.5	43.3	48.7	55.5
145°	5.4	6.8	10.8	16.2	21.7	24.4	27.1	33.8	39.3	44.7	51.4
147.5°	5.4	6.8	10.8	14.9	20.3	23.0	24.4	31.1	36.5	40.6	46.0
150°	6.8	8.1	10.8	14.9	19.0	20.3	23.0	28.4	32.5	37.9	42.0
152.5°	6.8	8.1	10.8	13.5	17.6	19.0	21.7	25.7	29.8	33.8	37.9
155°	6.8	8.1	9.5	12.2	16.2	17.6	20.3	23.0	27.1	29.8	33.8
157.5°	6.8	8.1	9.5	12.2	14.9	16.2	17.6	21.7	24.4	27.1	29.8
160°	6.8	8.1	9.5	10.8	13.5	14.9	16.2	19.0	21.7	24.4	25.7
162.5°	6.8	8.1	9.5	10.8	12.2	13.5	14.9	16.2	19.0	20.3	23.0
165°	6.8	8.1	8.1	9.5	12.2	12.2	13.5	14.9	16.2	17.6	19.0
167.5°	6.8	6.8	8.1	9.5	10.8	10.8	12.2	13.5	14.9	14.9	16.2
170°	6.8	6.8	8.1	8.1	9.5	9.5	10.8	10.8	12.2	13.5	13.5
172.5°	6.8	6.8	8.1	8.1	8.1	9.5	9.5	9.5	10.8	10.8	10.8
175°	6.8	6.8	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	9.5
177.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
180°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1455.1	1455.1	1455.1	1455.1	1455.1	1455.1	1455.1	1455.1	1455.1	1455.1
2.5°	1456.5	1459.2	1460.5	1456.5	1451.1	1455.1	1461.9	1453.8	1447.0	1461.9
5°	1453.8	1456.5	1456.5	1453.8	1449.7	1453.8	1460.5	1453.8	1447.0	1464.6
7.5°	1448.4	1449.7	1449.7	1447.0	1444.3	1449.7	1456.5	1449.7	1443.0	1460.5
10°	1438.9	1440.2	1440.2	1438.9	1434.8	1438.9	1445.7	1440.2	1433.5	1449.7
12.5°	1425.4	1426.7	1428.1	1425.4	1422.6	1429.4	1434.8	1428.1	1421.3	1440.2
15°	1407.8	1410.5	1410.5	1411.8	1407.8	1414.5	1419.9	1414.5	1407.8	1425.4
17.5°	1387.5	1390.2	1391.5	1391.5	1388.8	1394.2	1399.6	1394.2	1388.8	1406.4
20°	1363.1	1363.1	1367.1	1367.1	1365.8	1372.6	1378.0	1371.2	1365.8	1383.4
22.5°	1337.4	1337.4	1338.7	1338.7	1338.7	1345.5	1352.3	1345.5	1340.1	1357.7
25°	1304.9	1306.2	1307.6	1311.7	1308.9	1315.7	1322.5	1315.7	1308.9	1327.9
27.5°	1273.8	1273.8	1275.1	1279.2	1277.8	1284.6	1290.0	1283.2	1279.2	1295.4
30°	1239.9	1239.9	1241.3	1245.3	1245.3	1252.1	1256.2	1249.4	1246.7	1261.6
32.5°	1203.4	1203.4	1204.7	1210.1	1210.1	1215.5	1221.0	1215.5	1212.8	1227.7
35°	1162.8	1164.1	1166.8	1172.2	1173.6	1179.0	1184.4	1179.0	1174.9	1189.8
37.5°	1123.5	1123.5	1124.9	1133.0	1134.3	1141.1	1146.5	1141.1	1137.0	1151.9
40°	1081.5	1081.5	1084.2	1092.4	1095.1	1099.1	1105.9	1100.5	1096.4	1110.0
42.5°	1038.2	1039.6	1043.6	1050.4	1053.1	1058.5	1063.9	1059.9	1054.5	1068.0
45°	993.6	996.3	999.0	1008.4	1011.1	1015.2	1022.0	1016.6	1013.9	1027.4
47.5°	948.9	948.9	952.9	963.8	966.5	969.2	976.0	973.2	969.2	981.4
50°	901.5	902.9	906.9	916.4	920.5	923.2	931.3	928.6	924.5	935.3
52.5°	852.8	854.1	860.9	870.4	874.4	878.5	885.3	883.9	878.5	889.3
55°	804.0	806.8	814.9	824.4	827.1	831.1	839.2	835.2	835.2	841.9
57.5°	754.0	758.0	766.1	775.6	778.3	782.4	790.5	787.8	786.4	793.2
60°	703.9	709.3	717.4	726.9	732.3	733.7	743.1	741.8	739.1	745.8
62.5°	655.1	660.6	668.7	679.5	682.2	686.3	695.8	693.1	691.7	695.8
65°	603.7	609.1	620.0	630.8	633.5	637.6	647.0	644.3	641.6	647.0
67.5°	553.6	561.7	569.9	580.7	584.8	587.5	598.3	596.9	594.2	599.7
70°	503.5	511.7	521.1	532.0	536.0	540.1	549.6	548.2	548.2	552.3
72.5°	454.8	462.9	473.8	484.6	490.0	491.4	499.5	499.5	500.8	503.5
75°	406.1	414.2	425.0	435.9	438.6	444.0	452.1	450.8	452.1	454.8
77.5°	357.4	366.8	377.7	388.5	392.5	393.9	403.4	403.4	404.7	408.8
80°	310.0	319.5	330.3	341.1	345.2	345.2	354.6	356.0	357.4	360.1
82.5°	261.2	270.7	281.6	292.4	297.8	300.5	308.6	308.6	310.0	312.7
85°	215.2	223.3	235.5	245.0	249.1	251.8	259.9	261.2	262.6	265.3
87.5°	170.6	181.4	190.9	201.7	205.7	208.5	215.2	216.6	219.3	220.6
90°	132.7	143.5	154.3	163.8	167.8	170.6	178.7	181.4	182.7	184.1
92.5°	129.9	140.8	150.3	159.7	163.8	166.5	173.3	176.0	178.7	178.7
95°	128.6	138.1	147.5	158.4	161.1	163.8	170.6	173.3	176.0	176.0
97.5°	125.9	135.4	146.2	155.7	158.4	162.4	167.8	170.6	173.3	173.3
100°	123.2	134.0	143.5	153.0	155.7	158.4	165.1	167.8	170.6	170.6
102.5°	120.5	131.3	140.8	148.9	153.0	155.7	161.1	163.8	166.5	166.5
105°	119.1	128.6	138.1	146.2	148.9	151.6	158.4	161.1	163.8	162.4
107.5°	116.4	124.5	134.0	143.5	146.2	148.9	154.3	157.0	159.7	158.4
110°	113.7	121.8	131.3	139.4	142.1	144.8	150.3	153.0	155.7	154.3



TEST NUMBER: P288462

CATALOG NUMBER: 4WNLED-LD4-50SL-F-UNV-L835-CD1-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	111.0	119.1	127.2	135.4	138.1	140.8	146.2	148.9	151.6	150.3
115°	106.9	115.1	124.5	131.3	134.0	136.7	142.1	144.8	146.2	146.2
117.5°	104.2	112.3	120.5	128.6	129.9	132.7	136.7	139.4	142.1	140.8
120°	101.5	108.3	116.4	123.2	125.9	128.6	132.7	135.4	136.7	136.7
122.5°	97.5	105.6	112.3	119.1	121.8	123.2	128.6	129.9	132.7	131.3
125°	94.8	101.5	108.3	115.1	117.8	119.1	123.2	125.9	127.2	125.9
127.5°	90.7	97.5	104.2	111.0	112.3	115.1	117.8	120.5	121.8	121.8
130°	86.6	93.4	100.2	106.9	108.3	109.6	113.7	115.1	116.4	116.4
132.5°	82.6	89.3	96.1	101.5	102.9	105.6	108.3	111.0	112.3	111.0
135°	78.5	83.9	90.7	96.1	98.8	100.2	102.9	104.2	106.9	105.6
137.5°	73.1	79.9	85.3	90.7	93.4	94.8	97.5	98.8	100.2	100.2
140°	69.0	74.4	81.2	86.6	88.0	89.3	92.0	93.4	94.8	94.8
142.5°	63.6	69.0	74.4	79.9	82.6	83.9	86.6	88.0	89.3	88.0
145°	58.2	62.3	69.0	74.4	75.8	77.2	81.2	82.6	82.6	82.6
147.5°	52.8	56.9	62.3	67.7	70.4	71.7	74.4	75.8	77.2	77.2
150°	47.4	51.4	56.9	60.9	63.6	65.0	69.0	69.0	70.4	70.4
152.5°	42.0	46.0	50.1	55.5	56.9	59.6	62.3	63.6	63.6	63.6
155°	37.9	40.6	44.7	48.7	50.1	51.4	55.5	56.9	58.2	56.9
157.5°	32.5	36.5	39.3	42.0	43.3	44.7	48.7	50.1	51.4	51.4
160°	28.4	31.1	33.8	36.5	36.5	39.3	42.0	43.3	44.7	43.3
162.5°	24.4	25.7	28.4	29.8	31.1	32.5	35.2	36.5	37.9	37.9
165°	21.7	21.7	23.0	24.4	25.7	27.1	28.4	29.8	31.1	31.1
167.5°	17.6	19.0	19.0	20.3	20.3	21.7	21.7	24.4	25.7	25.7
170°	14.9	14.9	14.9	16.2	16.2	16.2	16.2	17.6	20.3	20.3
172.5°	12.2	12.2	12.2	12.2	12.2	12.2	12.2	13.5	13.5	14.9
175°	9.5	9.5	9.5	9.5	8.1	9.5	8.1	8.1	9.5	9.5
177.5°	6.8	6.8	6.8	6.8	6.8	6.8	5.4	5.4	5.4	5.4
180°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8

(END OF REPORT)