

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: FAIL-SAFE

Report Number: P837829

Luminaire Tested: **ORLG-24-2-INS-ASY2R-LD4-3HI-20-120-EDD**

Issue Date: 5/21/2024

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

Test Method: LM-79-08
Report Number: P837829
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/21/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-2-INS-ASY2R-LD4-3HI-20-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and
RFI grid
Light Source: 2000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

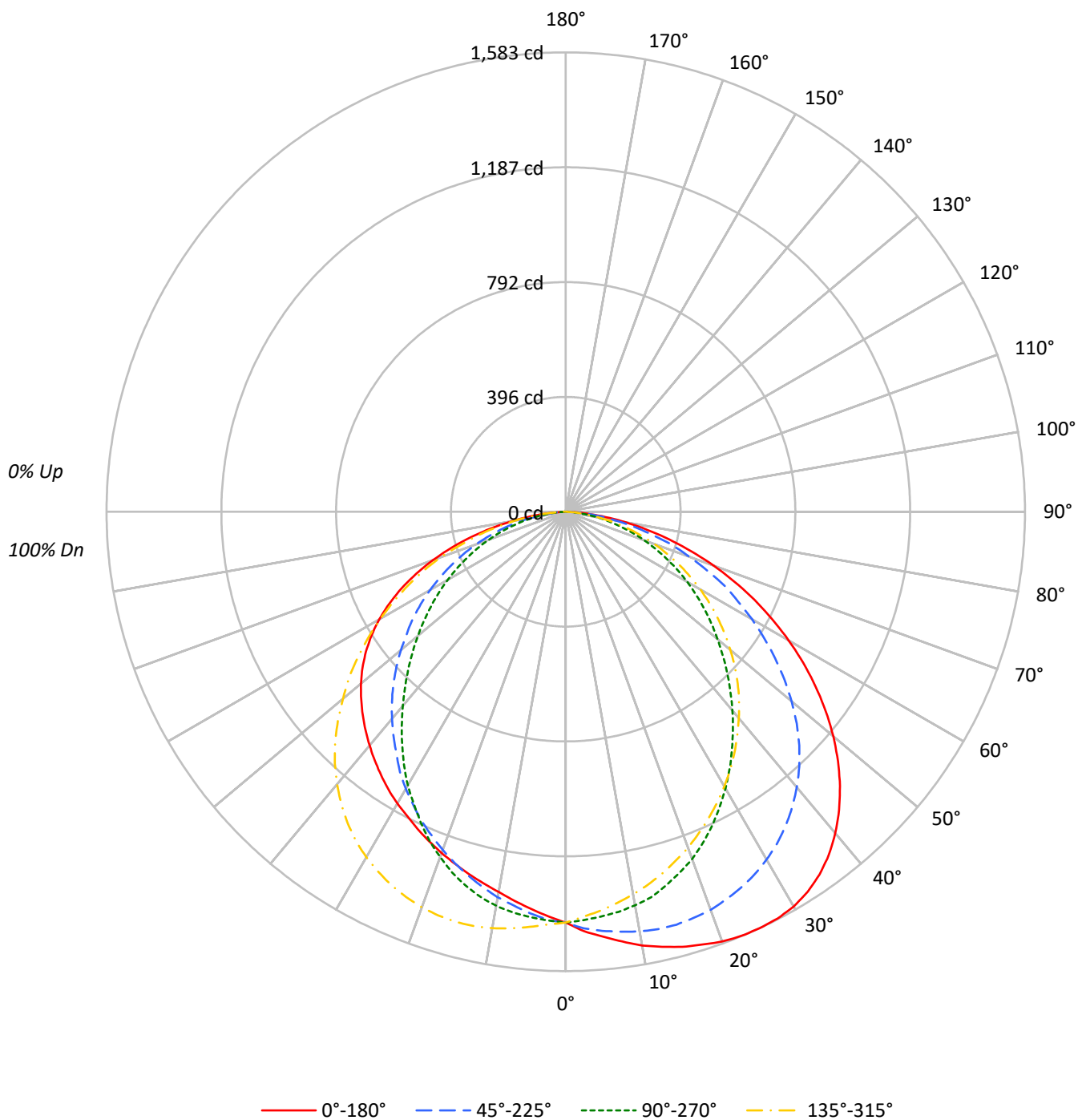
Lumens per Lamp: N/A
Luminaire Lumens: 4153.0 lumens
Efficiency: N/A
Efficacy: 62.9 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 66
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

TEST NUMBER: P837829

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-3HI-20-120-EDD

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837829

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-3HI-20-120-EDD

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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84		
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70		
3	90	79	71	65	88	78	70	64	75	68	63	72	66	62	69	65	61	59		
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50		
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43		
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38		
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33		
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	29		
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26		
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	3809	3809	3809	3809
5°	3970	3782	3710	3788
10°	4147	3762	3635	3768
15°	4325	3714	3600	3716
20°	4513	3647	3584	3626
25°	4700	3545	3583	3509
30°	4882	3422	3608	3384
35°	5011	3281	3643	3229
40°	5078	3140	3694	3069
45°	5088	2997	3766	2922
50°	5040	2860	3858	2784
55°	4936	2733	3944	2657
60°	4780	2600	3997	2532
65°	4567	2447	3976	2390
70°	4266	2268	3835	2227
75°	3839	2022	3519	2012
80°	3254	1694	2958	1719
85°	2263	1121	1877	1152

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837829

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-3HI-20-120-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.4	3.2
10°-20°	389.2	9.4
20°-30°	596.4	14.4
30°-40°	725.2	17.5
40°-50°	753.9	18.2
50°-60°	681.0	16.4
60°-70°	517.7	12.5
70°-80°	288.6	7.0
80°-90°	66.5	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1120.0	27.0
0°-40°	1845.3	44.4
0°-60°	3280.2	79.0
0°-90°	4153.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4153.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1416	1416	1416	1416	1416	
5°	1470	1400	1374	1402	1470	142
15°	1552	1333	1292	1334	1552	440
25°	1583	1194	1207	1182	1583	731
35°	1526	999	1109	983	1526	953
45°	1337	788	990	768	1337	1029
55°	1052	582	841	566	1052	939
65°	717	384	624	375	717	709
75°	369	194	338	194	369	392
85°	73	36	61	37	73	92
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837829

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-3HI-20-120-EDD

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6
2.5°	1446.9	1425.8	1426.1	1444.6	1430.4	1437.3	1417.5	1425.1	1422.8	1424.5	1408.3
5°	1469.7	1446.9	1446.6	1462.4	1446.6	1449.6	1424.5	1429.4	1422.2	1417.5	1400.0
7.5°	1493.8	1471.0	1468.7	1482.6	1461.8	1459.5	1431.7	1431.7	1418.5	1407.0	1390.5
10°	1517.6	1494.1	1491.2	1501.7	1476.0	1468.4	1434.7	1429.4	1411.9	1394.7	1376.9
12.5°	1535.4	1511.6	1509.3	1515.9	1486.9	1473.0	1434.7	1424.5	1398.7	1374.6	1360.7
15°	1552.3	1527.8	1521.5	1524.8	1491.5	1473.0	1430.1	1414.2	1381.2	1349.5	1333.3
17.5°	1564.1	1540.7	1534.4	1534.1	1493.8	1467.4	1420.2	1398.4	1358.8	1320.5	1304.3
20°	1576.0	1552.6	1544.7	1538.7	1493.1	1459.8	1405.6	1376.3	1330.0	1287.1	1273.6
22.5°	1582.0	1557.9	1549.3	1540.4	1488.9	1445.9	1387.8	1350.5	1297.7	1246.5	1235.3
25°	1583.0	1558.2	1549.0	1536.1	1480.3	1429.4	1364.7	1319.5	1260.4	1203.6	1194.0
27.5°	1580.3	1553.2	1544.0	1528.5	1467.4	1409.3	1337.3	1284.1	1220.7	1158.0	1147.8
30°	1571.1	1543.7	1534.8	1514.6	1449.2	1384.5	1307.2	1244.8	1176.8	1110.1	1101.2
32.5°	1552.6	1525.8	1518.6	1498.4	1429.4	1355.8	1272.2	1202.6	1128.3	1064.6	1051.3
35°	1525.5	1498.8	1494.1	1473.0	1401.7	1321.4	1233.9	1156.3	1076.8	1011.7	998.8
37.5°	1490.2	1467.7	1460.8	1440.0	1369.0	1282.5	1190.0	1106.2	1024.3	954.3	946.3
40°	1445.6	1424.5	1419.2	1400.7	1331.0	1239.2	1142.5	1054.3	970.1	905.1	893.8
42.5°	1394.7	1374.9	1372.0	1352.8	1284.1	1191.3	1091.0	1000.5	913.7	850.9	839.7
45°	1337.0	1317.8	1317.2	1299.0	1233.0	1138.2	1036.8	946.0	858.5	793.5	787.5
47.5°	1273.2	1256.1	1256.1	1239.2	1175.8	1079.7	981.0	889.2	803.0	745.6	735.0
50°	1203.9	1187.7	1182.8	1174.5	1112.8	1016.0	922.2	833.7	748.2	693.4	683.2
52.5°	1129.9	1116.1	1119.4	1104.2	1044.4	949.6	862.8	771.3	693.1	643.2	633.0
55°	1052.0	1032.2	1035.2	1029.6	973.1	881.3	796.1	719.8	638.9	592.0	582.5
57.5°	971.1	945.4	955.9	952.6	897.1	811.3	735.0	661.4	585.1	541.9	532.6
60°	888.2	863.5	874.4	871.4	819.2	741.3	671.9	603.6	531.6	492.3	483.1
62.5°	803.0	780.3	790.2	787.8	740.0	669.6	609.2	546.5	477.8	442.5	433.9
65°	717.2	695.4	704.3	702.7	658.4	604.9	544.8	487.4	423.6	392.9	384.3
67.5°	629.4	609.2	617.5	617.5	576.9	525.7	480.1	427.6	370.5	344.1	336.1
70°	542.2	523.4	530.6	530.0	495.6	454.0	414.7	367.8	316.7	294.9	288.3
72.5°	454.4	437.8	444.4	443.8	415.1	388.3	349.3	308.7	264.2	246.7	240.7
75°	369.2	353.6	359.9	359.3	335.8	310.7	284.6	250.9	212.6	200.4	194.5
77.5°	287.9	272.1	277.4	277.4	260.2	242.0	221.2	195.1	168.1	154.9	150.6
80°	210.0	202.4	199.8	200.1	188.5	176.7	166.1	141.0	121.2	112.3	109.3
82.5°	138.0	131.7	129.1	129.8	123.2	115.9	109.3	91.8	78.6	73.3	71.7
85°	73.3	68.7	66.4	68.0	66.7	62.7	59.4	47.5	39.3	37.3	36.3
87.5°	23.1	20.1	18.5	24.4	20.8	18.5	17.8	14.2	10.9	10.9	10.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837829

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-3HI-20-120-EDD

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6
2.5°	1413.6	1413.6	1400.7	1397.7	1396.4	1398.1	1385.2	1382.9	1401.4	1395.1	1380.9
5°	1402.3	1401.7	1383.5	1380.2	1380.2	1378.2	1363.7	1360.4	1378.9	1373.6	1358.1
7.5°	1388.5	1386.5	1365.0	1362.7	1359.4	1358.1	1341.9	1339.6	1355.5	1352.2	1337.6
10°	1371.6	1369.7	1344.2	1342.6	1338.9	1336.3	1321.1	1319.5	1335.6	1330.4	1318.8
12.5°	1349.5	1345.9	1319.8	1318.1	1315.2	1314.2	1299.3	1298.7	1316.5	1311.2	1299.0
15°	1320.5	1317.5	1288.4	1289.1	1289.4	1289.4	1277.5	1276.9	1294.4	1292.1	1278.9
17.5°	1288.4	1284.5	1256.7	1258.7	1261.0	1263.7	1254.4	1256.1	1274.6	1271.6	1259.7
20°	1252.1	1248.1	1221.1	1226.7	1231.6	1236.9	1231.0	1235.6	1252.8	1251.4	1242.5
22.5°	1211.5	1207.5	1182.4	1191.0	1199.3	1209.2	1206.5	1211.8	1230.0	1229.7	1221.7
25°	1162.0	1163.0	1140.8	1151.4	1165.3	1179.1	1180.1	1188.7	1208.8	1206.9	1199.6
27.5°	1115.7	1117.1	1093.6	1111.4	1129.9	1147.8	1152.1	1163.9	1184.4	1182.8	1176.5
30°	1067.2	1068.8	1046.1	1070.5	1093.0	1114.7	1124.0	1140.2	1161.0	1161.0	1154.4
32.5°	1016.7	1019.6	995.9	1028.6	1054.6	1080.1	1096.3	1113.1	1136.9	1136.2	1130.6
35°	964.8	968.1	946.3	987.9	1014.0	1045.1	1065.2	1087.7	1108.8	1109.1	1104.8
37.5°	912.0	916.0	896.2	941.7	971.4	1008.1	1033.8	1056.3	1079.7	1081.1	1077.1
40°	859.5	863.8	846.6	890.5	928.2	969.1	998.8	1025.3	1051.0	1051.7	1049.0
42.5°	807.0	811.6	798.7	841.7	884.3	928.2	963.2	993.2	1019.6	1021.3	1018.3
45°	755.8	759.8	750.5	797.4	838.4	886.2	926.5	960.5	987.3	989.6	988.6
47.5°	705.0	708.6	700.3	743.3	790.5	841.3	887.9	925.5	953.9	956.6	955.9
50°	655.1	658.1	649.2	694.1	741.0	795.1	843.7	887.2	918.9	921.6	921.2
52.5°	605.6	608.6	601.0	648.2	690.8	747.9	800.7	847.9	879.3	883.3	883.9
55°	557.7	559.0	553.1	598.3	639.6	699.4	760.1	806.0	837.4	840.7	842.7
57.5°	509.8	510.2	505.2	548.5	588.1	649.2	712.9	761.1	790.8	794.1	797.1
60°	462.3	461.9	456.3	498.3	536.2	596.7	663.0	710.9	739.6	742.6	746.6
62.5°	415.1	414.1	409.1	447.7	483.4	543.2	609.9	656.1	683.5	685.5	690.8
65°	368.2	367.2	362.6	398.2	430.6	487.7	553.1	597.0	621.8	624.4	623.4
67.5°	321.9	320.0	316.3	348.4	377.7	430.6	493.3	535.2	555.7	558.0	564.3
70°	275.7	273.4	265.1	299.2	324.9	372.1	430.6	467.9	485.1	487.4	486.4
72.5°	230.1	227.8	218.9	250.3	272.1	313.4	365.5	396.6	411.4	413.4	413.4
75°	185.9	184.6	179.0	202.7	220.9	254.6	298.8	324.6	336.1	338.5	337.8
77.5°	143.3	142.3	136.7	157.2	171.4	196.5	232.1	252.3	260.9	263.5	269.1
80°	102.7	102.4	93.4	113.6	119.9	141.0	167.1	182.6	187.2	190.9	194.8
82.5°	65.7	66.0	57.1	74.3	76.9	90.5	106.7	116.2	119.5	122.5	125.5
85°	32.0	33.3	28.4	39.3	39.6	46.6	53.5	57.1	58.4	60.8	63.4
87.5°	8.3	9.6	5.3	11.2	9.9	12.9	14.9	15.8	15.5	17.2	18.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P837829

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-3HI-20-120-EDD

CANDELA DISTRIBUTION (continued):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6
2.5°	1385.5	1396.1	1390.8	1408.0	1414.6	1404.0	1422.5	1422.8	1409.6	1425.1	1433.7
5°	1364.0	1374.9	1371.6	1389.5	1397.7	1388.5	1410.9	1415.2	1402.3	1419.8	1433.7
7.5°	1342.2	1355.1	1350.8	1369.0	1378.9	1371.6	1395.7	1402.7	1392.8	1411.9	1430.4
10°	1323.4	1334.3	1329.7	1348.9	1357.4	1351.5	1375.3	1388.1	1378.9	1402.3	1424.5
12.5°	1304.9	1313.9	1308.6	1324.4	1332.7	1325.1	1354.1	1366.0	1359.4	1383.9	1412.3
15°	1281.2	1291.1	1283.8	1298.0	1304.3	1297.7	1321.4	1341.9	1333.7	1360.4	1391.8
17.5°	1263.0	1268.6	1258.7	1269.9	1273.6	1264.7	1288.8	1308.9	1303.0	1332.0	1368.3
20°	1242.9	1247.5	1233.6	1239.9	1239.6	1228.3	1250.5	1270.3	1266.3	1298.3	1339.6
22.5°	1220.4	1222.7	1206.5	1207.9	1207.2	1188.7	1208.5	1228.7	1227.0	1259.4	1305.6
25°	1196.6	1197.0	1176.2	1175.5	1168.2	1146.4	1163.9	1186.7	1181.8	1216.8	1265.3
27.5°	1173.2	1169.9	1144.8	1138.8	1127.3	1101.2	1116.7	1137.2	1134.2	1168.6	1222.4
30°	1148.1	1143.8	1113.1	1102.2	1085.4	1055.3	1068.2	1087.3	1089.0	1119.0	1175.5
32.5°	1124.3	1113.4	1079.4	1063.6	1042.4	1007.4	1014.4	1033.8	1036.5	1066.9	1125.0
35°	1093.6	1086.3	1044.4	1017.3	996.5	958.2	965.5	979.0	983.0	1012.7	1071.8
37.5°	1064.6	1053.0	1008.4	975.4	948.7	908.4	910.4	924.2	928.2	958.2	1016.7
40°	1034.5	1018.0	970.1	931.5	900.8	858.5	856.2	870.7	873.7	903.1	955.9
42.5°	1002.5	982.7	928.8	886.6	851.2	808.3	803.7	816.2	819.5	848.3	900.1
45°	970.1	946.3	886.6	840.4	801.7	757.8	753.2	762.8	767.7	794.8	844.6
47.5°	935.8	908.0	843.0	791.5	751.5	707.6	702.0	711.6	715.5	742.3	789.5
50°	899.8	866.1	798.1	741.3	701.7	658.4	650.2	661.4	665.0	690.1	736.3
52.5°	860.2	822.8	750.2	690.8	651.1	609.9	600.0	610.9	615.2	639.6	682.2
55°	818.2	777.9	702.0	644.2	601.3	561.0	552.7	557.0	566.3	589.4	629.0
57.5°	771.0	731.1	651.1	592.4	551.1	512.5	505.5	509.5	518.1	540.5	576.2
60°	720.8	678.6	599.3	540.5	500.6	463.9	457.7	461.3	470.5	491.0	524.0
62.5°	671.3	623.7	545.8	487.4	451.0	417.0	415.4	414.1	422.7	442.5	471.5
65°	611.2	565.6	490.0	434.5	401.5	370.8	364.2	367.2	375.4	393.6	424.0
67.5°	546.8	505.5	432.9	381.7	352.3	324.9	319.3	320.6	329.2	345.1	371.5
70°	478.5	442.1	374.4	328.5	303.8	278.0	274.4	274.7	283.0	296.8	320.0
72.5°	406.8	374.1	315.3	276.0	255.6	237.1	233.8	229.8	237.4	249.3	269.1
75°	333.8	305.1	256.6	224.5	208.4	192.8	189.9	185.9	193.5	203.7	219.3
77.5°	260.2	237.1	199.4	174.7	162.1	150.6	147.9	143.6	151.2	158.8	171.0
80°	188.2	171.4	148.9	122.8	118.5	110.9	108.3	103.7	110.9	115.9	125.1
82.5°	121.5	110.3	97.4	79.2	78.6	73.0	71.7	66.4	73.0	75.9	82.9
85°	61.4	56.1	52.8	40.3	41.6	38.0	37.6	32.0	37.3	38.6	42.6
87.5°	17.5	18.5	16.5	9.9	12.5	11.9	11.9	8.6	11.9	11.9	13.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P837829

CATALOG NUMBER: ORLG-24-2-INS-ASY2R-LD4-3HI-20-120-EDD

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6	1415.6
2.5°	1416.9	1422.5	1423.8	1423.5	1427.1	1446.9	1440.3	1446.9
5°	1420.2	1432.7	1436.0	1440.6	1446.6	1469.0	1461.8	1469.7
7.5°	1422.2	1441.0	1448.2	1457.2	1466.7	1491.8	1485.9	1493.8
10°	1422.2	1446.6	1457.2	1472.0	1484.9	1514.0	1508.3	1517.6
12.5°	1416.2	1447.6	1462.4	1483.2	1499.8	1531.1	1528.8	1535.4
15°	1404.0	1442.6	1463.1	1489.8	1510.3	1545.3	1544.3	1552.3
17.5°	1387.5	1434.0	1458.8	1492.5	1518.2	1557.5	1559.8	1564.1
20°	1366.7	1417.9	1450.2	1491.5	1523.9	1567.1	1570.1	1576.0
22.5°	1339.3	1398.4	1437.3	1487.2	1524.5	1571.1	1576.4	1582.0
25°	1306.9	1374.9	1420.5	1479.0	1521.2	1570.7	1578.0	1583.0
27.5°	1269.9	1344.6	1399.0	1465.7	1512.0	1565.5	1574.4	1580.3
30°	1227.0	1312.2	1374.6	1448.6	1499.4	1555.6	1565.1	1571.1
32.5°	1182.8	1276.5	1345.6	1426.4	1481.3	1539.7	1548.0	1552.6
35°	1134.6	1233.3	1310.5	1398.1	1457.8	1514.3	1520.6	1525.5
37.5°	1082.1	1186.4	1270.6	1366.0	1424.8	1479.0	1484.6	1490.2
40°	1027.9	1137.2	1225.7	1326.7	1385.5	1435.7	1441.6	1445.6
42.5°	973.4	1082.7	1177.8	1280.5	1338.9	1387.2	1390.8	1394.7
45°	918.3	1026.3	1124.0	1229.3	1287.1	1332.3	1333.7	1337.0
47.5°	862.1	967.8	1064.9	1170.9	1228.0	1269.3	1270.6	1273.2
50°	805.7	909.4	1001.8	1107.8	1163.6	1207.2	1201.3	1203.9
52.5°	750.2	847.9	942.4	1039.8	1094.9	1133.6	1135.2	1129.9
55°	695.7	787.8	874.7	968.5	1021.0	1051.0	1050.0	1052.0
57.5°	640.6	727.1	806.7	892.5	943.7	972.1	978.0	971.1
60°	584.4	665.7	737.0	814.6	864.1	887.9	894.8	888.2
62.5°	528.6	603.3	668.0	735.7	781.6	811.0	810.3	803.0
65°	472.8	540.5	598.3	655.8	695.7	725.1	723.8	717.2
67.5°	421.3	477.1	529.0	575.5	610.2	630.3	637.3	629.4
70°	364.5	412.7	458.3	495.6	524.4	542.5	549.1	542.2
72.5°	307.7	348.7	380.7	416.7	438.8	454.0	461.0	454.4
75°	251.6	285.3	311.4	339.4	355.0	367.8	375.8	369.2
77.5°	197.1	223.2	244.0	264.5	282.3	285.3	292.2	287.9
80°	145.3	164.1	179.3	192.8	205.7	207.0	212.6	210.0
82.5°	96.7	109.3	113.3	127.5	135.7	134.4	140.0	138.0
85°	51.2	58.8	65.7	70.0	74.6	70.3	75.3	73.3
87.5°	17.2	18.2	15.8	22.5	24.8	21.1	24.1	23.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)