

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: P#

Luminaire Tested: **4SNLED-LD5-23SL-RM-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33524)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
METALIC FINISH REFLECTOR
Light Source: -
Ballast/Driver: -

Summary

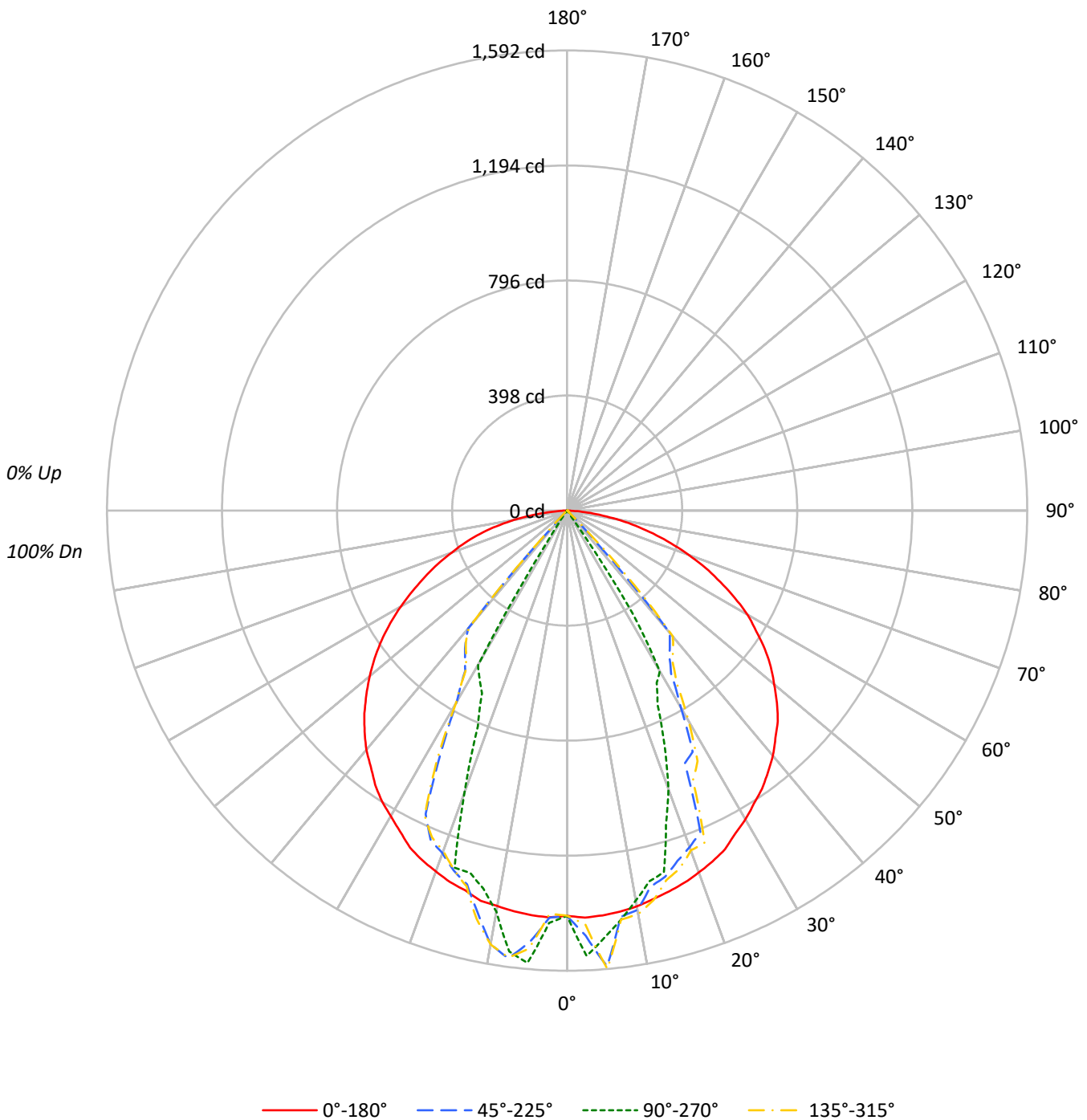
Lumens per Lamp: N/A
Luminaire Lumens: 1993.0 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Spacing Criteria (0/90/45): 1.3 / 0.81 / 0.97
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 16
Input Voltage (V): NR
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: P#
CATALOG NUMBER: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65
5	85	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59
6	80	69	62	57	79	69	62	57	67	61	56	65	60	56	64	59	55	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	41	49	44	40	39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	11326	11326	11326	11326
5°	11373	11649	11369	12336
10°	11346	10542	11338	10846
15°	11315	9839	11287	9864
20°	11328	7750	11295	7845
25°	11361	5608	11305	5292
30°	11309	4920	11189	4730
35°	11342	109	11175	131
40°	11381	23	11109	23
45°	11421	14	10992	11
50°	11334	11	10814	11
55°	11267	7	10575	7
60°	11054	8	10190	8
65°	10478	14	9733	8
70°	9720	15	9254	15
75°	8598	17	8738	17
80°	6985	19	7384	19
85°	4113	23	4195	23



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.6	7.1
10°-20°	383.6	19.2
20°-30°	488.1	24.5
30°-40°	412.3	20.7
40°-50°	269.6	13.5
50°-60°	169.8	8.5
60°-70°	90.4	4.5
70°-80°	33.0	1.7
80°-90°	5.7	0.3
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°	1012.3	50.8
0°-40°	1424.6	71.5
0°-60°	1864.0	93.5
0°-90°	1993.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1993.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1402	1402	1402	1402	1402	
5°	1406	1483	1405	1571	1406	134
15°	1364	1294	1360	1298	1364	386
25°	1293	739	1286	697	1293	594
35°	1175	14	1158	17	1175	735
45°	1031	2	992	1	1031	793
55°	835	1	784	1	835	744
65°	585	1	543	1	585	579
75°	308	1	312	1	308	326
85°	60	1	61	1	60	76
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°
0°	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6
2.5°	1409.6	1410.5	1410.9	1411.7	1413.0	1413.4	1414.2	1413.4	1413.4	1413.4	1413.4
5°	1405.8	1407.5	1408.8	1410.5	1413.4	1413.8	1417.2	1417.6	1419.3	1422.7	1425.2
7.5°	1399.5	1401.2	1403.7	1407.9	1412.1	1416.8	1422.7	1429.0	1437.8	1446.2	1456.7
10°	1390.3	1392.4	1395.3	1399.1	1419.7	1422.7	1435.7	1453.8	1458.8	1485.3	1505.1
12.5°	1376.8	1384.0	1391.5	1394.9	1414.7	1445.8	1489.5	1480.7	1471.0	1557.7	1556.4
15°	1363.8	1373.4	1369.7	1397.0	1415.1	1469.4	1450.8	1490.4	1562.7	1545.1	1545.9
17.5°	1349.9	1352.0	1373.0	1395.7	1428.1	1455.9	1478.6	1532.9	1547.2	1548.4	1532.9
20°	1332.2	1342.3	1373.0	1393.6	1448.3	1461.4	1510.6	1538.3	1532.5	1518.1	1491.6
22.5°	1314.1	1344.8	1376.0	1405.0	1443.3	1478.2	1502.6	1515.6	1484.9	1428.5	1398.3
25°	1292.7	1310.8	1351.6	1394.1	1442.0	1462.2	1476.5	1455.5	1415.5	1365.0	1314.1
27.5°	1259.4	1288.5	1340.6	1388.6	1431.9	1456.3	1433.2	1382.7	1318.3	1285.1	1262.0
30°	1233.8	1271.6	1314.6	1360.8	1405.8	1420.1	1361.2	1303.6	1259.4	1226.2	1221.2
32.5°	1202.7	1256.5	1297.3	1341.5	1379.3	1360.4	1303.2	1228.7	1192.1	1179.5	1184.6
35°	1174.9	1215.7	1269.1	1312.4	1339.8	1297.3	1206.9	1160.6	1142.9	1150.1	1140.8
37.5°	1141.7	1195.5	1244.7	1282.2	1272.9	1209.0	1132.4	1103.0	1105.1	1099.2	1081.5
40°	1107.2	1158.5	1209.8	1245.1	1212.8	1115.2	1064.3	1058.0	1059.2	1040.3	1015.0
42.5°	1066.8	1113.5	1164.8	1196.8	1126.9	1050.8	1016.3	1017.1	1006.2	979.7	966.2
45°	1030.6	1073.5	1126.9	1129.9	1044.1	980.5	970.5	959.5	935.1	926.3	916.2
47.5°	984.3	1031.9	1076.0	1060.1	962.9	923.3	915.8	891.8	879.6	872.9	864.4
50°	935.1	983.1	1023.5	978.0	886.3	877.1	852.2	833.3	824.9	817.8	810.2
52.5°	888.4	928.0	969.2	890.9	827.4	818.6	790.4	779.5	771.1	763.1	761.4
55°	835.4	870.3	898.5	808.1	771.1	750.5	730.3	722.7	714.7	710.9	717.2
57.5°	775.3	814.8	810.6	726.5	710.1	680.2	672.6	667.6	661.7	664.2	611.6
60°	721.0	751.3	730.7	666.7	639.0	618.8	612.1	608.7	612.1	560.7	493.0
62.5°	654.1	688.2	646.5	596.9	567.5	557.8	551.9	556.5	507.3	450.9	434.5
65°	584.7	621.7	560.3	522.0	503.5	495.1	494.7	455.6	407.2	385.3	385.3
67.5°	517.8	556.1	477.0	445.1	437.9	438.7	414.3	355.0	341.6	326.8	284.4
70°	446.7	480.4	394.2	374.8	370.6	367.7	308.3	292.4	276.4	237.3	233.9
72.5°	376.1	392.5	316.8	312.1	311.3	258.7	246.9	219.6	201.1	196.4	194.3
75°	307.5	302.5	250.3	254.5	214.5	196.0	177.1	161.1	158.6	156.9	39.1
77.5°	242.7	217.5	197.3	171.6	153.5	130.4	126.6	124.1	81.6	29.4	24.0
80°	176.7	140.9	131.2	111.5	95.1	91.3	93.4	28.6	22.7	18.9	16.4
82.5°	112.3	90.0	73.6	64.4	62.7	27.3	20.2	16.4	14.3	12.2	10.1
85°	60.2	40.0	37.0	31.1	18.5	12.6	10.5	8.0	6.7	5.5	5.0
87.5°	18.9	16.0	13.0	10.5	6.3	4.2	3.4	2.9	2.5	2.1	2.1
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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°	25°
0°	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6
2.5°	1412.6	1413.4	1413.0	1414.2	1414.2	1415.9	1417.2	1418.5	1421.0	1422.2	1431.9
5°	1430.7	1432.8	1439.1	1445.0	1452.1	1454.2	1466.4	1469.4	1483.7	1485.3	1532.5
7.5°	1471.0	1479.0	1494.2	1509.3	1524.5	1534.1	1551.0	1561.5	1572.8	1582.9	1620.4
10°	1519.8	1533.3	1548.0	1563.2	1572.0	1590.5	1600.6	1602.3	1599.3	1582.9	1522.4
12.5°	1567.8	1581.2	1574.9	1577.9	1588.4	1555.6	1560.2	1536.7	1553.1	1471.9	1411.7
15°	1561.1	1560.2	1544.6	1494.2	1502.6	1439.9	1414.7	1395.3	1410.9	1402.5	1393.2
17.5°	1540.9	1502.6	1475.7	1415.1	1389.4	1371.8	1372.2	1372.6	1365.0	1373.0	1349.5
20°	1455.5	1412.6	1372.6	1351.1	1343.6	1331.0	1337.3	1331.0	1331.4	1333.9	1297.7
22.5°	1341.9	1328.9	1305.7	1312.4	1309.9	1321.3	1312.9	1299.8	1304.0	1285.1	1257.8
25°	1296.0	1280.9	1280.1	1282.6	1278.8	1273.7	1266.2	1246.4	1245.1	1239.3	1226.6
27.5°	1249.8	1250.6	1253.1	1245.6	1232.1	1222.0	1210.6	1201.0	1204.8	1198.0	1180.8
30°	1217.8	1217.4	1202.2	1195.5	1170.7	1171.1	1168.2	1162.3	1158.5	1158.9	1148.0
32.5°	1172.4	1159.3	1142.1	1133.7	1131.6	1124.0	1118.1	1119.4	1122.3	1111.8	1123.2
35°	1125.7	1098.8	1096.2	1089.1	1082.3	1077.3	1079.4	1071.0	1070.6	1069.3	976.8
37.5°	1063.0	1050.0	1048.7	1041.1	1036.5	1035.2	1027.2	1028.5	1032.3	1039.0	832.9
40°	1011.3	999.5	996.5	996.1	986.0	985.2	987.3	995.3	1000.7	958.7	793.8
42.5°	955.7	956.6	947.3	941.4	942.7	946.5	956.6	928.8	804.7	766.9	725.6
45°	908.2	904.0	898.9	897.3	908.2	900.6	789.6	728.6	713.9	712.2	596.5
47.5°	858.6	857.3	855.2	856.5	794.2	708.0	682.7	674.7	677.3	675.6	512.4
50°	808.5	810.2	810.2	707.5	649.5	635.2	637.3	644.4	599.9	559.9	477.4
52.5°	765.2	752.1	644.4	607.4	594.4	600.7	585.6	529.6	489.2	465.7	441.7
55°	684.8	588.9	564.9	559.1	563.7	507.7	473.2	437.1	426.5	424.0	410.1
57.5°	538.9	519.5	521.6	498.1	444.6	413.1	399.2	394.2	389.5	386.2	33.7
60°	476.6	482.1	441.3	390.8	369.3	365.1	361.8	357.1	356.3	350.4	21.5
62.5°	436.2	383.6	348.3	335.7	330.6	329.4	323.1	321.0	272.6	37.4	16.0
65°	329.0	307.5	300.8	297.8	292.4	292.4	242.7	38.3	31.1	26.9	14.3
67.5°	268.4	266.7	263.3	259.5	176.7	37.0	32.4	28.2	24.4	21.5	12.6
70°	227.2	226.3	206.1	37.9	31.5	27.8	24.4	21.9	20.2	18.1	11.4
72.5°	186.4	37.9	32.0	27.8	24.0	21.9	19.8	17.7	16.0	14.7	9.3
75°	29.0	25.7	22.7	20.6	18.9	16.8	15.1	13.9	13.5	11.8	6.3
77.5°	21.0	18.1	16.4	14.7	13.0	11.8	10.1	8.8	8.0	6.7	4.6
80°	14.7	13.0	11.8	9.7	8.4	7.2	6.3	5.5	5.0	4.2	2.1
82.5°	8.4	7.2	6.3	5.0	4.6	3.8	3.4	2.9	2.9	2.1	2.1
85°	3.8	3.8	2.9	2.5	2.1	2.1	2.1	1.7	1.7	1.3	1.3
87.5°	1.7	1.7	1.7	1.7	1.7	1.3	1.3	1.3	1.3	1.3	0.8
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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°
0°	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6
2.5°	1445.4	1450.8	1461.4	1472.3	1460.1	1503.8	1500.5	1515.2	1523.2	1527.0	1535.8
5°	1574.1	1598.5	1606.5	1582.5	1568.6	1554.3	1521.9	1497.5	1500.5	1492.5	1463.5
7.5°	1571.6	1519.4	1449.2	1417.2	1414.7	1410.9	1421.0	1426.9	1427.7	1427.3	1426.4
10°	1438.6	1411.7	1407.1	1402.9	1404.6	1389.0	1381.9	1361.7	1372.6	1366.7	1368.8
12.5°	1398.3	1392.0	1367.1	1332.6	1353.3	1337.7	1328.9	1334.7	1328.0	1321.7	1319.6
15°	1374.3	1333.5	1319.6	1311.2	1305.3	1301.9	1304.9	1298.1	1296.0	1294.8	1297.7
17.5°	1324.6	1308.2	1293.1	1270.8	1271.2	1270.0	1278.4	1291.0	1291.8	1227.1	1168.6
20°	1285.5	1272.1	1252.7	1238.8	1257.8	1224.1	1094.1	1032.3	1022.6	1022.6	1024.3
22.5°	1254.4	1224.5	1225.8	1203.9	1026.8	990.6	991.5	995.3	978.0	919.1	912.8
25°	1211.9	1207.3	1115.2	963.7	965.0	936.8	893.5	832.5	766.4	766.4	755.5
27.5°	1179.9	1081.9	947.3	941.0	846.4	786.6	749.6	693.7	686.1	678.9	679.8
30°	1152.6	915.3	918.7	786.6	716.8	667.2	664.2	655.0	650.3	649.1	644.4
32.5°	911.1	891.4	769.0	669.7	642.3	634.3	630.6	620.0	619.6	611.6	556.1
35°	854.4	782.4	643.6	616.7	608.7	601.1	594.8	399.2	47.1	18.9	16.4
37.5°	789.6	653.7	595.2	583.0	575.5	425.3	42.5	14.7	10.5	7.6	6.7
40°	669.3	583.9	565.4	551.9	227.6	14.7	9.3	7.2	4.2	3.8	3.4
42.5°	564.5	550.2	530.4	161.5	16.8	7.2	4.6	3.4	2.9	2.9	2.5
45°	528.3	515.7	213.7	16.0	10.5	3.4	2.9	2.9	2.5	1.7	1.7
47.5°	494.7	435.4	19.4	10.1	6.7	2.9	2.5	1.7	1.7	1.7	1.3
50°	458.9	24.0	13.5	7.6	4.2	1.7	1.7	1.7	1.7	1.3	1.3
52.5°	85.8	16.8	10.9	6.7	2.1	1.7	1.7	1.7	1.3	1.3	1.3
55°	20.2	13.5	10.1	5.9	1.7	1.7	1.7	1.3	1.3	1.3	0.8
57.5°	15.1	10.1	8.0	5.5	1.7	1.3	1.3	1.3	1.3	1.3	0.8
60°	12.6	7.2	6.3	5.0	1.3	1.3	1.3	1.3	1.3	1.3	0.8
62.5°	8.8	5.9	4.6	3.8	1.3	1.3	1.3	1.3	1.3	1.3	1.3
65°	7.2	4.6	3.8	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
67.5°	6.3	3.8	2.5	0.8	1.3	1.3	1.3	1.3	1.3	1.3	1.3
70°	5.0	1.3	1.3	0.8	1.3	1.3	1.3	1.3	1.3	1.3	1.3
72.5°	4.2	1.3	0.8	0.8	1.3	1.3	1.3	1.3	1.3	1.3	1.3
75°	4.2	2.1	0.8	0.8	1.3	1.3	1.7	1.7	1.3	1.3	1.3
77.5°	2.9	2.1	0.8	0.8	1.3	1.3	1.7	1.7	1.3	1.3	1.3
80°	1.7	2.1	0.8	1.3	1.3	2.5	2.9	1.7	1.3	1.3	1.3
82.5°	1.7	2.1	2.5	2.5	1.3	2.1	2.5	2.1	1.7	1.3	1.3
85°	1.7	1.3	1.7	2.1	1.3	2.1	2.1	1.7	1.7	1.3	1.3
87.5°	0.8	1.3	1.3	1.7	1.7	1.7	2.1	1.7	1.7	1.7	1.3
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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	85°	90°	95°	100°	105°	110°	115°	120°	125°	130°	135°
0°	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6
2.5°	1540.0	1541.7	1515.2	1505.9	1513.9	1512.3	1505.1	1478.6	1475.7	1458.0	1432.3
5°	1471.9	1483.2	1469.4	1493.3	1482.0	1493.3	1527.8	1543.8	1569.9	1585.9	1591.8
7.5°	1424.3	1426.9	1426.9	1429.0	1431.1	1431.5	1429.0	1427.3	1420.1	1411.3	1427.3
10°	1366.7	1369.7	1374.7	1373.9	1373.4	1382.3	1384.4	1402.5	1401.6	1405.0	1417.2
12.5°	1336.8	1314.1	1334.7	1329.3	1336.8	1325.1	1346.9	1343.2	1344.4	1354.5	1380.6
15°	1287.2	1294.4	1299.4	1299.4	1302.4	1299.8	1297.3	1314.6	1325.1	1325.5	1323.8
17.5°	1191.7	1137.5	1193.0	1178.7	1292.7	1295.6	1285.9	1278.0	1278.0	1284.3	1297.7
20°	1023.0	1024.3	1024.7	1030.2	1036.9	1036.5	1036.9	1202.7	1281.3	1263.2	1251.0
22.5°	896.8	881.3	910.3	908.2	944.4	984.3	1022.6	1018.8	1021.4	1138.3	1243.5
25°	718.9	739.1	722.7	729.8	770.6	818.2	847.6	924.6	1008.3	1002.4	1029.8
27.5°	676.8	671.4	678.9	678.9	684.4	690.7	707.1	750.5	824.9	903.1	977.2
30°	636.9	641.5	642.3	649.9	654.1	658.3	660.9	677.3	694.1	748.3	839.6
32.5°	478.3	419.4	551.9	587.7	617.9	625.1	630.1	636.9	649.1	657.1	702.9
35°	13.9	13.9	14.7	16.8	21.5	144.7	551.1	607.4	615.4	625.5	633.9
37.5°	6.7	5.0	5.9	6.3	7.6	10.5	15.1	47.1	524.6	593.1	602.4
40°	2.9	2.9	2.9	2.9	3.4	4.2	6.3	10.5	16.0	421.9	569.1
42.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.9	3.8	7.6	18.1	298.7
45°	1.7	1.7	1.3	1.7	1.7	2.1	2.5	2.5	3.4	11.4	20.6
47.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.1	2.5	7.6	10.9
50°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	5.9	7.6
52.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.5	6.7
55°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.3	1.3	1.7	5.9
57.5°	0.8	0.8	0.8	0.8	0.8	1.3	0.8	0.8	1.3	1.3	5.5
60°	0.8	0.8	0.8	0.8	0.8	1.3	1.3	1.3	1.3	1.3	5.0
62.5°	1.3	1.3	0.8	1.3	0.8	0.8	1.3	1.3	1.3	1.3	3.4
65°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.8	1.3
67.5°	1.3	1.3	1.3	1.3	0.8	1.3	0.8	1.3	1.3	0.8	0.8
70°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.8	0.8	0.8	0.8
72.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.8	0.8	0.8	0.8
75°	1.3	1.3	1.3	1.3	1.3	1.3	1.7	1.7	0.8	0.8	0.8
77.5°	1.3	1.3	1.3	1.3	1.3	1.3	2.1	2.5	2.1	2.1	0.8
80°	1.3	1.3	1.3	1.3	1.3	1.3	2.1	2.1	2.1	2.1	2.9
82.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.7	1.7	1.7	1.7	2.1
85°	1.3	1.3	1.3	1.3	1.3	1.3	1.7	1.7	1.7	1.3	1.7
87.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.7	1.3	1.3	1.3
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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	140°	145°	150°	155°	160°	161°	162°	163°	164°	165°	166°
0°	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6
2.5°	1434.4	1420.1	1415.5	1405.8	1405.0	1405.8	1403.7	1400.8	1402.5	1399.5	1397.0
5°	1595.1	1556.8	1532.0	1498.8	1452.9	1442.9	1440.3	1426.0	1421.0	1419.3	1412.6
7.5°	1465.1	1535.0	1577.0	1591.3	1537.5	1524.9	1510.2	1498.4	1487.0	1465.6	1452.5
10°	1407.5	1410.9	1451.3	1498.4	1574.9	1585.5	1593.4	1567.8	1560.6	1505.9	1494.2
12.5°	1394.1	1394.5	1399.1	1427.7	1487.9	1494.6	1522.8	1537.9	1556.4	1566.9	1558.5
15°	1332.6	1366.7	1392.0	1394.5	1399.9	1411.7	1420.1	1472.7	1495.0	1554.7	1551.4
17.5°	1304.0	1315.0	1351.6	1381.4	1376.4	1372.2	1378.9	1386.1	1407.5	1467.2	1466.4
20°	1256.5	1291.4	1311.2	1342.3	1370.5	1371.8	1364.2	1360.0	1351.6	1361.2	1370.1
22.5°	1236.3	1241.8	1278.8	1300.7	1332.6	1344.0	1345.7	1346.1	1341.5	1336.4	1333.9
25°	1234.2	1217.0	1235.9	1263.2	1286.8	1299.0	1312.9	1317.5	1315.8	1315.8	1313.3
27.5°	1010.0	1211.5	1201.4	1219.5	1248.1	1256.5	1263.7	1278.0	1286.8	1293.1	1296.0
30°	962.0	998.2	1174.5	1177.0	1206.0	1205.2	1213.2	1225.0	1236.3	1251.0	1254.8
32.5°	851.0	939.7	1075.2	1134.5	1164.8	1167.7	1171.9	1175.3	1185.8	1202.2	1216.5
35°	681.9	856.0	921.2	1114.3	1119.8	1125.7	1128.2	1136.2	1139.6	1146.3	1158.9
37.5°	617.1	707.5	883.8	963.7	1068.0	1073.1	1086.6	1089.9	1095.4	1100.9	1110.5
40°	579.7	604.5	735.7	860.7	1026.4	1029.8	1034.4	1042.8	1043.2	1049.5	1058.4
42.5°	549.8	565.8	604.1	822.0	997.0	996.5	985.6	991.1	993.6	1000.3	1012.5
45°	439.2	530.9	555.3	671.4	793.8	851.0	960.8	942.7	942.3	944.8	957.8
47.5°	22.3	499.3	516.6	554.0	749.6	751.7	766.0	886.3	904.8	898.9	900.2
50°	15.1	34.5	481.2	498.5	646.1	698.3	708.8	714.3	783.7	861.1	848.5
52.5°	11.8	19.8	294.9	462.7	525.0	563.3	631.0	669.7	673.9	705.0	810.6
55°	10.5	15.1	32.0	427.0	446.3	454.7	494.3	562.0	616.7	633.1	634.3
57.5°	9.3	13.9	21.9	193.1	405.9	407.6	414.3	437.9	487.1	532.1	583.0
60°	8.4	12.2	17.2	33.2	368.9	373.1	374.4	380.7	386.6	417.3	475.8
62.5°	5.0	9.7	15.1	24.0	291.9	335.3	334.8	339.0	344.5	347.9	359.7
65°	4.2	7.6	13.0	20.2	35.8	44.6	270.9	301.2	304.6	309.2	311.3
67.5°	3.8	6.7	9.7	16.0	26.9	30.7	35.3	43.7	238.9	269.2	273.4
70°	3.4	4.6	8.0	13.5	21.9	23.6	26.5	30.3	35.8	44.2	216.2
72.5°	2.1	3.4	5.5	9.7	16.8	18.9	20.6	23.1	25.7	30.7	35.3
75°	0.8	2.5	4.6	7.2	13.0	14.3	15.6	17.2	19.4	22.7	25.2
77.5°	0.8	2.1	3.8	5.0	8.4	9.7	11.4	12.6	14.3	16.0	18.5
80°	2.9	1.7	2.5	3.8	5.9	6.3	7.2	8.0	9.3	10.5	12.2
82.5°	2.1	2.5	2.9	2.5	2.9	3.8	4.2	5.0	5.5	6.3	6.7
85°	1.7	1.7	2.1	2.1	2.1	2.1	2.1	2.1	2.5	2.9	3.8
87.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.7	1.7
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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	167°	168°	169°	170°	171°	172°	173°	174°	175°	176°	177°
0°	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6
2.5°	1397.0	1396.2	1393.6	1393.6	1393.2	1394.9	1396.2	1397.4	1397.0	1399.5	1397.0
5°	1407.5	1405.4	1401.6	1398.3	1397.0	1397.8	1396.6	1397.8	1396.2	1398.3	1394.5
7.5°	1436.5	1429.4	1414.7	1408.8	1401.2	1400.8	1397.0	1396.2	1393.6	1393.6	1389.0
10°	1487.9	1453.4	1449.2	1431.5	1425.2	1394.5	1401.2	1389.8	1388.6	1383.1	1381.0
12.5°	1529.9	1503.0	1495.0	1479.4	1461.8	1399.5	1413.4	1389.0	1387.7	1376.8	1365.5
15°	1530.8	1546.3	1524.5	1481.6	1477.8	1434.9	1406.7	1398.3	1387.3	1354.5	1360.0
17.5°	1481.6	1517.3	1527.8	1518.6	1491.6	1462.6	1423.1	1406.3	1373.4	1358.7	1348.6
20°	1401.6	1437.8	1482.8	1485.8	1502.6	1482.0	1430.2	1402.9	1363.3	1337.7	1329.3
22.5°	1338.1	1364.6	1416.3	1440.3	1460.9	1468.1	1435.3	1394.9	1345.7	1320.9	1315.8
25°	1304.5	1310.3	1325.9	1354.1	1399.5	1432.3	1437.0	1394.1	1368.4	1314.1	1285.5
27.5°	1292.3	1287.2	1280.9	1295.2	1329.3	1369.2	1395.7	1402.9	1338.9	1287.2	1258.6
30°	1261.1	1264.1	1254.4	1249.3	1271.6	1312.9	1360.0	1371.8	1322.5	1269.1	1236.3
32.5°	1222.8	1227.9	1229.6	1220.7	1216.1	1244.7	1295.6	1323.8	1321.3	1243.5	1206.9
35°	1174.9	1189.2	1193.0	1193.4	1185.8	1181.2	1210.6	1269.1	1291.4	1231.7	1178.7
37.5°	1124.4	1128.6	1149.2	1154.7	1154.7	1140.8	1162.7	1209.4	1240.5	1205.2	1144.2
40°	1061.3	1074.8	1094.1	1103.8	1113.5	1114.7	1102.5	1135.4	1186.7	1177.8	1111.8
42.5°	1015.5	1024.3	1036.1	1049.1	1068.9	1073.9	1061.3	1067.2	1120.6	1143.8	1069.7
45°	962.0	973.8	977.2	991.5	1012.1	1026.8	1026.4	1014.2	1057.1	1085.7	1039.0
47.5°	907.4	918.7	924.6	931.8	946.9	965.8	976.3	970.9	979.3	1035.2	998.2
50°	851.0	857.3	869.1	877.1	887.2	898.1	923.3	928.4	916.6	961.2	953.2
52.5°	797.6	799.7	807.7	815.7	829.1	837.1	857.3	872.4	871.6	884.6	903.1
55°	755.9	746.7	748.3	754.7	763.5	775.7	787.0	810.6	818.6	821.1	850.6
57.5°	590.6	685.7	694.1	693.7	704.2	709.6	720.2	735.7	764.3	758.0	790.8
60°	536.8	547.3	626.8	636.0	639.8	644.9	657.5	671.8	692.8	706.3	720.6
62.5°	409.3	473.2	497.2	567.5	578.4	581.3	589.8	596.5	618.4	649.1	643.2
65°	316.8	344.1	417.3	445.9	505.6	513.2	525.0	532.1	538.4	573.8	575.5
67.5°	273.8	278.1	297.8	352.9	390.8	449.3	456.4	462.7	472.4	497.6	513.2
70°	233.9	238.9	244.4	249.0	298.2	336.9	391.2	393.3	399.6	416.4	451.8
72.5°	44.2	199.8	203.2	206.1	211.6	237.3	289.0	331.1	333.6	341.6	374.0
75°	29.9	34.9	48.0	164.9	170.4	172.0	180.9	233.5	272.2	273.8	288.1
77.5°	21.5	24.0	29.0	34.5	87.9	132.1	134.2	143.9	183.8	212.9	215.4
80°	14.7	16.4	19.4	21.9	26.9	35.3	97.6	100.5	105.6	145.5	153.1
82.5°	8.4	9.7	11.4	13.9	16.0	20.2	26.1	33.7	68.6	73.2	97.2
85°	4.2	4.6	5.5	6.7	8.0	9.7	13.0	16.0	21.9	39.5	40.8
87.5°	2.1	2.1	2.1	2.1	3.4	3.8	4.6	5.9	7.6	11.4	14.7
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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	178°	179°	180°	181°	182°	183°	184°	185°	186°	187°	188°
0°	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6
2.5°	1397.4	1403.3	1408.4	1409.6	1409.6	1410.5	1411.7	1412.6	1413.4	1414.2	1413.4
5°	1394.9	1401.2	1405.4	1406.7	1406.7	1409.2	1411.3	1413.8	1415.1	1415.1	1414.2
7.5°	1388.6	1393.2	1398.7	1402.0	1402.5	1406.7	1410.5	1410.0	1411.7	1412.6	1414.7
10°	1380.2	1380.2	1389.4	1392.0	1394.1	1398.7	1399.9	1402.5	1408.4	1409.2	1414.7
12.5°	1376.0	1371.8	1382.7	1384.0	1391.1	1385.2	1392.8	1395.3	1389.4	1397.4	1386.9
15°	1357.0	1362.1	1360.4	1364.2	1376.8	1370.1	1390.7	1384.0	1399.1	1381.0	1413.0
17.5°	1341.5	1340.6	1347.4	1350.7	1353.3	1367.6	1373.0	1380.6	1386.5	1381.4	1394.1
20°	1330.1	1323.4	1328.4	1332.2	1341.1	1352.0	1355.4	1344.0	1363.8	1397.4	1405.4
22.5°	1308.7	1304.0	1309.9	1309.9	1323.4	1321.7	1334.3	1327.2	1345.7	1384.8	1425.6
25°	1279.6	1280.1	1286.4	1293.9	1296.5	1315.4	1322.1	1331.4	1354.5	1401.2	1426.0
27.5°	1250.2	1247.7	1251.5	1267.0	1280.1	1293.9	1296.0	1327.6	1359.1	1391.1	1413.0
30°	1220.7	1218.2	1220.7	1232.1	1247.7	1256.9	1280.1	1322.1	1351.6	1373.4	1394.1
32.5°	1189.2	1186.7	1192.6	1201.0	1228.3	1229.6	1275.4	1315.0	1338.1	1354.1	1350.3
35°	1155.5	1152.2	1157.6	1170.7	1195.9	1205.2	1253.1	1282.6	1308.7	1316.2	1298.6
37.5°	1115.2	1109.3	1116.0	1134.1	1160.6	1187.5	1227.5	1261.5	1275.4	1255.2	1234.2
40°	1073.1	1068.9	1080.7	1089.9	1121.0	1158.5	1204.3	1228.3	1219.5	1196.3	1173.2
42.5°	1035.7	1026.8	1037.3	1055.0	1090.3	1132.8	1169.8	1183.3	1162.3	1128.2	1101.3
45°	989.8	979.3	991.9	1015.5	1053.3	1101.7	1130.7	1126.1	1090.3	1060.9	1023.9
47.5°	941.8	929.2	941.8	970.0	1012.5	1063.8	1084.9	1063.8	1018.8	981.8	951.9
50°	894.7	880.0	892.2	934.7	976.3	1015.9	1015.5	974.7	947.7	907.4	881.3
52.5°	848.0	827.0	839.2	885.5	927.1	972.1	938.9	901.0	868.7	833.3	824.9
55°	790.4	767.7	784.1	851.4	883.4	909.9	856.9	823.6	791.7	774.0	763.5
57.5°	735.7	710.9	725.2	804.7	828.3	835.0	786.2	739.1	720.2	714.3	699.1
60°	679.4	651.2	664.6	756.3	772.7	745.4	697.4	660.9	657.1	645.3	633.5
62.5°	625.5	594.4	602.8	696.2	703.8	654.1	610.0	600.3	591.0	579.2	572.9
65°	563.7	531.3	543.1	632.2	625.1	561.2	536.3	534.2	522.0	512.4	521.6
67.5°	506.9	468.6	485.0	562.4	530.0	477.9	467.8	462.7	453.0	458.5	361.3
70°	444.6	403.0	425.3	487.1	439.2	404.7	400.9	393.3	393.7	313.0	263.8
72.5°	375.2	339.0	371.4	404.7	347.5	337.4	331.9	331.1	267.1	217.1	204.9
75°	314.2	277.6	312.5	325.2	276.8	270.1	269.6	222.9	175.4	167.4	163.6
77.5°	245.2	217.1	250.3	231.4	212.4	204.9	183.8	138.0	132.1	126.6	47.5
80°	165.3	167.4	186.8	159.4	151.4	129.1	101.8	97.6	84.1	33.7	26.5
82.5°	100.5	126.2	119.0	99.7	97.6	70.2	64.4	32.8	24.4	19.4	16.8
85°	52.2	63.9	61.4	54.3	40.4	36.2	20.2	15.6	12.6	9.7	8.0
87.5°	17.7	23.6	22.7	18.1	13.9	10.9	7.2	5.9	4.2	3.4	2.9
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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	189°	190°	191°	192°	193°	194°	195°	196°	197°	198°	199°
0°	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6
2.5°	1412.6	1412.6	1411.7	1412.6	1413.0	1412.1	1412.1	1413.0	1413.4	1413.8	1415.9
5°	1414.7	1415.5	1416.8	1419.3	1419.7	1424.8	1426.9	1428.1	1429.4	1429.8	1426.9
7.5°	1419.3	1422.2	1424.8	1424.3	1421.4	1413.4	1410.9	1408.8	1412.6	1422.2	1433.6
10°	1423.5	1410.0	1384.8	1419.3	1408.8	1418.5	1447.1	1453.4	1472.7	1500.1	1508.1
12.5°	1394.5	1431.5	1439.5	1400.8	1472.3	1445.8	1477.3	1505.1	1513.1	1540.9	1524.0
15°	1425.6	1443.7	1455.9	1494.6	1490.4	1513.1	1521.9	1516.5	1517.7	1524.9	1543.8
17.5°	1425.2	1461.4	1469.4	1495.4	1513.1	1513.5	1511.0	1508.5	1515.2	1520.7	1509.3
20°	1449.6	1461.4	1476.9	1487.4	1490.8	1495.0	1503.0	1496.7	1484.1	1471.9	1466.8
22.5°	1437.4	1463.9	1477.3	1479.0	1476.9	1463.9	1452.1	1434.4	1428.5	1422.2	1424.3
25°	1439.9	1452.1	1450.4	1443.7	1434.9	1410.5	1404.6	1397.0	1385.6	1358.3	1333.5
27.5°	1421.8	1415.5	1407.9	1391.5	1375.5	1362.5	1347.8	1323.4	1303.2	1273.7	1262.8
30°	1391.5	1366.3	1347.8	1338.1	1322.5	1300.7	1278.4	1248.5	1222.8	1217.0	1211.5
32.5°	1333.5	1308.7	1293.5	1270.0	1243.5	1217.4	1191.7	1179.9	1174.5	1175.3	1170.3
35°	1274.2	1252.3	1229.6	1194.2	1174.5	1148.4	1139.1	1136.6	1131.6	1126.1	1120.2
37.5°	1211.1	1185.4	1151.3	1130.3	1110.5	1100.0	1095.4	1091.6	1082.8	1073.1	1066.4
40°	1150.1	1103.8	1084.9	1064.3	1058.4	1053.7	1047.0	1037.8	1025.6	1023.9	1020.9
42.5°	1068.5	1035.2	1018.8	1014.6	1007.5	999.5	993.6	983.5	978.4	981.8	984.3
45°	991.1	974.2	968.8	963.7	950.3	938.9	935.1	931.8	936.0	954.5	910.3
47.5°	928.4	921.7	914.9	906.5	893.9	885.5	889.3	892.6	896.4	760.5	694.1
50°	874.1	864.9	854.4	845.1	837.5	836.7	856.5	797.1	667.6	664.2	596.9
52.5°	814.8	800.9	794.6	789.2	792.5	805.1	666.3	618.4	593.1	515.3	480.8
55°	750.9	738.7	738.7	743.7	725.6	588.1	580.9	502.3	454.7	441.3	435.8
57.5°	686.9	685.7	692.8	633.5	533.8	511.9	430.3	413.1	405.5	403.8	395.0
60°	628.5	640.2	535.9	493.0	428.6	386.6	374.8	372.7	364.7	361.8	353.8
62.5°	581.8	482.5	449.3	366.8	345.4	339.9	333.6	330.6	323.5	285.6	83.7
65°	420.2	397.1	322.2	308.3	306.7	298.7	296.1	266.3	62.7	42.1	35.8
67.5°	317.2	281.4	271.7	269.2	261.2	245.2	72.8	41.6	35.8	31.1	27.3
70°	243.6	237.3	230.1	224.2	66.0	41.2	35.8	30.3	26.1	23.1	21.0
72.5°	199.4	195.2	113.6	43.3	35.3	29.9	26.5	23.1	20.2	18.5	16.8
75°	156.1	43.3	35.8	29.9	25.7	21.9	19.4	17.2	15.6	14.3	13.0
77.5°	35.3	28.6	24.4	20.6	18.5	16.4	14.7	12.6	11.4	10.1	8.4
80°	21.9	18.9	16.0	14.7	12.6	10.5	9.3	8.4	6.7	6.3	5.5
82.5°	14.3	11.4	10.1	8.4	6.7	6.3	5.5	4.2	3.8	3.4	2.9
85°	6.3	5.5	4.6	3.8	2.9	2.5	2.1	1.7	1.7	1.7	1.7
87.5°	2.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.8	0.8
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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	200°	205°	210°	215°	220°	225°	230°	235°	240°	245°	250°
0°	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6
2.5°	1416.8	1424.3	1431.5	1429.4	1421.8	1410.0	1406.7	1402.0	1405.4	1412.6	1415.5
5°	1426.9	1422.7	1437.8	1460.1	1496.3	1499.6	1524.9	1530.8	1551.0	1563.6	1563.2
7.5°	1441.2	1500.9	1525.7	1552.6	1564.8	1561.9	1565.7	1562.7	1558.1	1556.0	1553.5
10°	1513.9	1559.4	1568.6	1568.6	1549.7	1524.0	1513.1	1494.2	1456.3	1457.2	1450.8
12.5°	1556.4	1572.4	1550.5	1532.0	1455.9	1426.4	1394.5	1379.3	1370.5	1357.0	1362.1
15°	1534.1	1511.4	1498.4	1438.6	1392.0	1338.9	1339.8	1330.5	1320.9	1321.7	1315.4
17.5°	1501.3	1483.2	1390.7	1349.5	1326.7	1306.1	1302.4	1290.2	1283.8	1281.7	1281.3
20°	1456.3	1391.1	1322.1	1312.0	1284.7	1261.1	1257.3	1261.1	1280.5	1246.0	1129.0
22.5°	1403.7	1309.9	1289.7	1261.1	1242.6	1233.4	1256.5	1151.3	992.3	1011.7	991.1
25°	1314.6	1273.7	1239.3	1217.4	1215.3	1158.5	965.4	945.2	843.0	788.3	726.9
27.5°	1249.3	1231.7	1195.5	1191.7	1164.4	947.3	846.8	735.7	694.9	688.6	675.2
30°	1209.8	1184.6	1162.7	1067.2	929.2	762.6	679.4	663.8	656.6	649.1	637.3
32.5°	1162.3	1138.3	1148.8	897.3	740.8	656.6	639.8	628.5	615.4	610.4	567.9
35°	1113.9	1103.0	897.7	754.2	636.9	616.7	604.1	592.3	471.1	114.0	38.7
37.5°	1062.2	1059.6	806.8	625.9	596.5	577.6	541.8	111.9	26.5	18.1	13.5
40°	1021.8	807.2	637.7	586.8	562.8	533.0	74.9	18.5	11.8	7.2	4.6
42.5°	994.9	726.1	570.8	550.6	498.5	55.1	18.9	8.0	4.6	3.8	2.9
45°	766.9	573.4	533.4	512.4	63.1	18.9	10.9	3.8	2.9	2.5	1.7
47.5°	707.5	520.8	497.2	111.9	21.0	10.1	7.6	2.5	1.7	1.7	1.7
50°	535.9	481.2	395.8	27.3	13.5	7.2	5.5	1.7	1.7	1.7	1.3
52.5°	469.9	444.2	42.5	18.1	10.5	5.5	3.4	1.3	1.3	1.3	1.3
55°	429.5	281.8	25.2	13.9	8.8	5.0	2.1	1.3	1.3	1.3	0.8
57.5°	392.9	37.9	18.5	11.8	8.0	4.6	1.3	1.3	1.3	1.3	0.8
60°	333.2	27.3	15.1	10.5	7.6	4.2	1.3	1.3	1.3	1.3	1.3
62.5°	43.3	21.5	13.0	9.3	5.5	3.4	0.8	1.3	1.3	1.3	1.3
65°	31.5	16.8	11.8	6.3	3.4	1.3	0.8	1.3	1.3	1.3	1.3
67.5°	24.4	13.9	8.8	5.5	2.9	0.8	0.8	1.3	1.3	1.3	1.3
70°	19.4	11.8	7.2	4.6	2.5	0.8	0.8	1.3	1.3	1.3	1.3
72.5°	15.1	8.4	5.0	2.5	1.7	0.8	0.8	1.3	1.3	1.3	1.3
75°	11.4	6.7	3.8	2.1	0.8	0.8	0.8	1.3	1.3	1.3	1.3
77.5°	7.6	4.2	2.9	1.7	1.7	1.7	2.1	2.1	1.3	1.3	1.3
80°	5.0	2.9	2.1	2.1	2.1	1.7	2.1	2.1	1.3	2.1	1.3
82.5°	2.5	2.1	2.1	1.7	1.7	1.3	1.7	1.7	1.7	1.7	1.3
85°	1.7	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.7	1.7	1.3
87.5°	0.8	0.8	0.8	0.8	1.3	1.3	1.3	1.3	1.7	1.7	1.3
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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	305°
0°	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6
2.5°	1411.7	1413.0	1409.6	1427.7	1418.5	1419.3	1423.1	1413.4	1415.5	1408.8	1404.2
5°	1564.8	1567.4	1569.9	1570.7	1572.4	1574.5	1572.0	1570.7	1568.2	1559.8	1551.0
7.5°	1540.9	1537.9	1536.7	1538.3	1541.3	1542.5	1540.4	1543.4	1554.3	1559.0	1561.9
10°	1414.7	1401.2	1410.5	1409.2	1398.7	1434.0	1424.3	1429.8	1433.6	1472.3	1495.9
12.5°	1354.5	1362.9	1346.9	1338.9	1349.5	1356.6	1363.8	1348.6	1369.7	1360.0	1391.1
15°	1304.0	1299.0	1297.3	1297.7	1295.6	1305.7	1308.2	1311.6	1314.6	1327.6	1332.6
17.5°	1281.3	1289.7	1293.1	1295.6	1291.4	1286.8	1282.2	1275.4	1277.5	1274.2	1283.8
20°	1050.4	1022.2	1020.5	1036.9	1018.8	1028.9	1053.3	1216.5	1211.1	1274.6	1253.1
22.5°	876.6	850.1	827.4	807.7	835.8	847.6	893.1	944.4	1027.7	1014.6	1105.1
25°	716.0	706.3	700.4	697.4	699.6	698.7	708.8	732.8	770.6	859.8	975.1
27.5°	669.7	665.1	663.0	656.2	661.3	659.6	667.6	672.6	684.0	692.8	730.3
30°	633.1	627.6	623.8	616.7	621.7	622.2	624.7	637.7	642.3	649.9	661.7
32.5°	231.4	136.3	127.9	121.6	132.9	173.3	304.1	531.7	606.6	612.5	625.9
35°	22.7	18.9	16.8	16.8	17.2	18.9	25.2	66.5	121.6	469.9	588.1
37.5°	8.8	7.6	6.3	5.9	6.3	7.2	9.7	12.6	17.2	35.8	159.4
40°	3.8	3.4	2.9	2.9	2.9	2.9	3.4	4.2	6.3	11.8	18.5
42.5°	2.5	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.9	3.8	7.6
45°	1.7	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.7	2.1	3.4
47.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.7
50°	1.3	1.3	1.3	1.3	0.8	1.3	0.8	1.3	1.3	1.3	1.3
52.5°	1.3	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.3	1.3
55°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.3
57.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
60°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
62.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.3	1.3	0.8
65°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.3	0.8
67.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
70°	1.3	1.3	0.8	1.3	0.8	0.8	1.3	1.3	1.3	0.8	0.8
72.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.5	2.5	1.7
75°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.1	2.5	2.1
77.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.1	2.1	2.1
80°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.7	1.7	1.7
82.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.7	1.7	1.7
85°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
87.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	310°	315°	320°	325°	330°	335°	340°	341°	342°	343°	344°
0°	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6
2.5°	1396.2	1395.7	1404.6	1411.3	1408.8	1411.3	1414.2	1414.7	1415.5	1412.1	1410.9
5°	1534.1	1521.1	1495.9	1477.8	1456.7	1418.5	1399.5	1401.6	1402.0	1400.8	1402.5
7.5°	1560.6	1559.4	1550.5	1546.8	1532.5	1505.1	1461.4	1453.8	1435.3	1423.5	1413.8
10°	1494.2	1524.5	1532.5	1545.9	1554.3	1549.3	1512.3	1506.8	1495.0	1481.6	1484.5
12.5°	1422.2	1447.1	1448.3	1521.5	1537.9	1539.6	1525.3	1532.9	1534.6	1504.3	1486.6
15°	1333.9	1345.7	1370.5	1438.6	1488.3	1519.4	1528.7	1532.9	1512.3	1511.0	1503.8
17.5°	1295.2	1302.8	1314.1	1352.4	1427.7	1473.6	1512.7	1509.7	1517.7	1511.8	1493.8
20°	1246.4	1252.7	1272.9	1292.3	1329.3	1390.3	1463.5	1468.9	1479.4	1478.2	1483.2
22.5°	1245.6	1223.3	1226.6	1241.8	1280.5	1335.2	1413.0	1431.1	1437.8	1442.4	1447.9
25°	988.1	1165.2	1197.6	1207.3	1232.5	1264.5	1356.2	1362.9	1375.5	1396.2	1411.3
27.5°	856.0	976.3	1105.9	1173.2	1189.2	1215.7	1270.4	1280.5	1323.4	1328.4	1352.0
30°	675.6	768.5	962.0	1124.0	1150.5	1169.0	1207.7	1227.9	1246.4	1266.6	1291.4
32.5°	635.6	650.3	757.6	930.1	1136.2	1122.3	1150.9	1163.1	1183.3	1201.0	1219.1
35°	599.0	609.1	631.8	761.8	925.4	1084.0	1103.4	1111.4	1122.7	1136.2	1149.2
37.5°	560.7	575.9	591.4	626.4	856.0	1053.7	1053.3	1062.6	1069.3	1080.7	1091.6
40°	101.8	528.8	554.0	576.7	663.8	840.5	1006.2	1010.4	1015.0	1022.2	1033.6
42.5°	16.4	88.3	519.1	541.0	565.8	752.6	984.8	967.5	964.6	969.6	979.7
45°	8.4	21.5	104.3	505.2	527.5	600.3	805.1	937.6	934.7	925.0	927.1
47.5°	6.3	13.5	25.7	174.6	493.9	515.3	742.9	734.9	790.8	898.1	881.7
50°	5.5	9.3	15.1	35.8	436.2	474.5	572.1	668.4	697.9	701.7	830.4
52.5°	5.0	6.3	10.9	23.1	91.7	438.7	465.2	498.9	548.5	655.0	652.4
55°	4.6	5.9	9.3	15.6	32.0	395.4	422.8	429.1	439.6	490.5	557.8
57.5°	2.5	5.5	8.8	13.5	24.0	72.4	383.6	388.7	397.1	399.2	423.2
60°	1.3	5.0	8.0	11.8	17.7	33.7	344.9	350.8	355.9	356.7	364.3
62.5°	0.8	4.6	6.7	10.9	14.7	24.0	81.6	166.6	316.8	316.8	325.6
65°	0.8	3.4	4.2	7.2	13.5	19.8	34.5	40.0	77.8	191.4	285.6
67.5°	0.8	1.3	3.8	5.9	10.1	15.1	25.2	29.4	35.3	40.4	74.9
70°	0.8	0.8	3.4	3.8	6.3	11.4	18.1	20.6	24.0	27.3	31.5
72.5°	0.8	0.8	2.9	2.9	4.2	7.6	13.9	15.1	17.2	19.4	22.3
75°	2.1	1.7	2.5	2.5	2.9	5.9	10.5	11.8	12.6	14.3	16.4
77.5°	2.1	2.1	2.1	2.1	2.1	3.8	6.7	7.6	8.8	9.7	11.4
80°	1.7	1.7	1.7	2.1	2.1	2.5	4.2	4.6	5.0	6.3	6.7
82.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.5	2.9	3.8
85°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.7	1.7	1.7	1.7
87.5°	1.3	1.3	1.3	0.8	0.8	1.3	1.3	1.3	1.3	1.3	1.3
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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	345°	346°	347°	348°	349°	350°	351°	352°	353°	354°	355°
0°	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6	1401.6
2.5°	1410.5	1407.9	1405.8	1407.1	1403.3	1401.6	1402.9	1403.3	1404.2	1406.3	1406.7
5°	1406.7	1405.8	1409.6	1411.7	1410.9	1411.7	1411.7	1410.0	1407.5	1409.2	1405.4
7.5°	1404.2	1398.7	1394.5	1395.3	1391.1	1396.2	1400.8	1407.5	1409.6	1409.6	1405.4
10°	1447.5	1441.6	1418.0	1402.0	1391.5	1382.3	1404.2	1381.9	1392.4	1352.4	1398.3
12.5°	1483.2	1491.2	1480.7	1437.0	1429.4	1401.6	1417.6	1390.3	1382.3	1336.4	1351.1
15°	1497.5	1482.4	1479.0	1466.8	1450.4	1442.4	1399.5	1394.9	1381.9	1386.9	1367.6
17.5°	1484.9	1492.5	1482.4	1474.4	1457.6	1438.6	1413.0	1390.3	1372.2	1331.8	1365.9
20°	1472.7	1482.8	1452.5	1457.6	1459.3	1437.4	1423.9	1405.0	1382.3	1344.4	1315.0
22.5°	1452.5	1445.4	1447.9	1440.3	1434.0	1437.0	1418.5	1405.4	1367.1	1349.9	1309.9
25°	1419.7	1417.2	1423.9	1423.1	1407.9	1402.9	1393.6	1379.8	1364.6	1336.8	1304.0
27.5°	1366.3	1379.3	1391.1	1396.6	1388.6	1375.1	1370.1	1362.1	1351.6	1323.4	1299.0
30°	1309.9	1324.6	1338.1	1349.9	1357.0	1351.1	1346.5	1341.9	1325.9	1307.4	1280.1
32.5°	1245.6	1264.9	1283.4	1297.7	1313.3	1317.9	1314.6	1310.8	1297.3	1280.5	1258.6
35°	1171.1	1197.6	1224.5	1250.2	1256.9	1267.9	1278.8	1272.5	1265.3	1248.5	1228.3
37.5°	1108.0	1126.9	1146.3	1178.7	1202.2	1216.1	1235.5	1238.0	1225.8	1217.8	1191.3
40°	1042.8	1060.1	1088.2	1107.2	1139.6	1155.5	1176.2	1185.4	1182.5	1177.8	1154.7
42.5°	991.5	999.9	1018.4	1035.2	1067.2	1100.0	1118.1	1128.2	1138.7	1134.9	1123.2
45°	936.8	944.4	950.7	965.4	996.5	1025.6	1047.9	1063.0	1081.9	1090.8	1076.5
47.5°	882.5	884.6	892.2	904.4	922.9	945.2	982.7	1005.4	1023.0	1040.3	1031.0
50°	840.9	833.3	834.6	842.2	857.3	879.2	906.1	938.1	958.3	979.3	981.4
52.5°	734.9	796.3	781.6	785.8	793.8	804.3	832.5	864.0	888.8	906.9	925.0
55°	616.7	628.9	747.1	730.3	735.3	744.6	757.6	789.2	813.1	838.4	863.6
57.5°	478.3	569.1	573.8	683.1	680.6	681.5	692.4	710.5	734.5	766.0	787.5
60°	371.9	410.1	484.6	522.5	618.4	621.7	628.0	638.6	659.2	689.0	723.1
62.5°	328.1	333.2	359.7	416.4	478.7	554.0	567.5	569.1	578.4	608.3	647.8
65°	288.1	291.5	299.5	305.4	357.6	430.3	495.1	505.6	511.5	529.2	562.8
67.5°	198.5	251.1	258.3	262.5	267.5	301.2	381.5	435.0	441.7	457.3	486.7
70°	38.3	79.5	217.5	222.1	224.6	232.2	245.2	330.2	374.8	389.5	403.0
72.5°	26.1	30.7	37.0	87.5	185.1	189.3	192.2	203.2	278.5	321.4	328.5
75°	18.9	21.0	24.8	30.7	37.9	123.3	152.7	158.2	163.6	225.9	262.1
77.5°	13.5	15.1	16.8	19.8	23.1	29.9	42.9	118.2	123.7	126.6	178.8
80°	7.6	9.3	11.4	13.0	14.7	16.8	21.9	27.3	61.0	89.2	93.8
82.5°	4.2	5.0	5.9	7.2	8.0	10.1	12.2	14.7	19.4	28.6	60.6
85°	2.1	2.1	2.1	2.9	3.4	4.6	5.5	6.3	8.8	12.2	16.8
87.5°	1.3	1.3	1.7	1.7	1.7	2.1	2.1	2.1	2.5	3.8	5.5
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: P#

CATALOG NUMBER: 4SNLED-LD5-23SL-RM-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	356°	357°	358°	359°	360°
0°	1401.6	1401.6	1401.6	1401.6	1401.6
2.5°	1407.1	1405.8	1405.8	1410.9	1409.6
5°	1404.6	1403.3	1402.9	1408.4	1405.8
7.5°	1402.5	1397.8	1396.6	1401.6	1399.5
10°	1394.1	1390.7	1392.8	1391.1	1390.3
12.5°	1379.8	1377.6	1368.8	1369.7	1376.8
15°	1354.1	1362.5	1347.4	1360.8	1363.8
17.5°	1307.0	1325.9	1340.6	1348.6	1349.9
20°	1328.0	1334.3	1326.7	1327.2	1332.2
22.5°	1300.7	1303.6	1305.7	1303.2	1314.1
25°	1256.9	1245.6	1270.0	1275.0	1292.7
27.5°	1243.5	1234.2	1245.6	1244.7	1259.4
30°	1232.5	1202.7	1207.7	1215.7	1233.8
32.5°	1217.0	1169.8	1164.8	1182.5	1202.7
35°	1189.6	1145.0	1133.2	1144.6	1174.9
37.5°	1166.5	1110.5	1087.0	1102.1	1141.7
40°	1132.0	1083.6	1047.0	1060.5	1107.2
42.5°	1090.8	1060.5	1004.1	1013.4	1066.8
45°	1049.1	1022.2	962.5	967.1	1030.6
47.5°	1006.6	981.8	919.1	920.0	984.3
50°	965.0	932.2	880.4	865.7	935.1
52.5°	910.7	880.4	841.3	817.3	888.4
55°	859.4	825.3	796.7	759.7	835.4
57.5°	809.3	771.5	752.1	704.6	775.3
60°	740.8	722.7	694.1	648.7	721.0
62.5°	670.5	664.6	635.6	588.5	654.1
65°	588.5	602.4	572.5	532.1	584.7
67.5°	511.1	535.9	503.1	478.3	517.8
70°	428.6	457.3	438.7	429.9	446.7
72.5°	347.5	375.2	376.9	370.6	376.1
75°	268.4	299.1	315.9	306.2	307.5
77.5°	203.6	218.3	236.8	244.4	242.7
80°	125.8	151.4	166.6	182.1	176.7
82.5°	63.5	85.0	103.5	120.3	112.3
85°	26.5	34.1	47.5	62.7	60.2
87.5°	8.0	13.5	14.3	20.2	18.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)