

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: P

Luminaire Tested: **4APN-24-26L950-UNV-NP**

Issue Date: 06/06/2024



Test Information

Test Method: LM-79-08
Report Number: P
Test Lab: INNOVATION CENTER(G2)
Issue Date: 06/06/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 4APN-24-26L950-UNV-NP
Description: ArcMed Patient Recessed 4 FT x6 IN Fixture Ambient and Exam Light
w/ Nature Pattern Lens
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

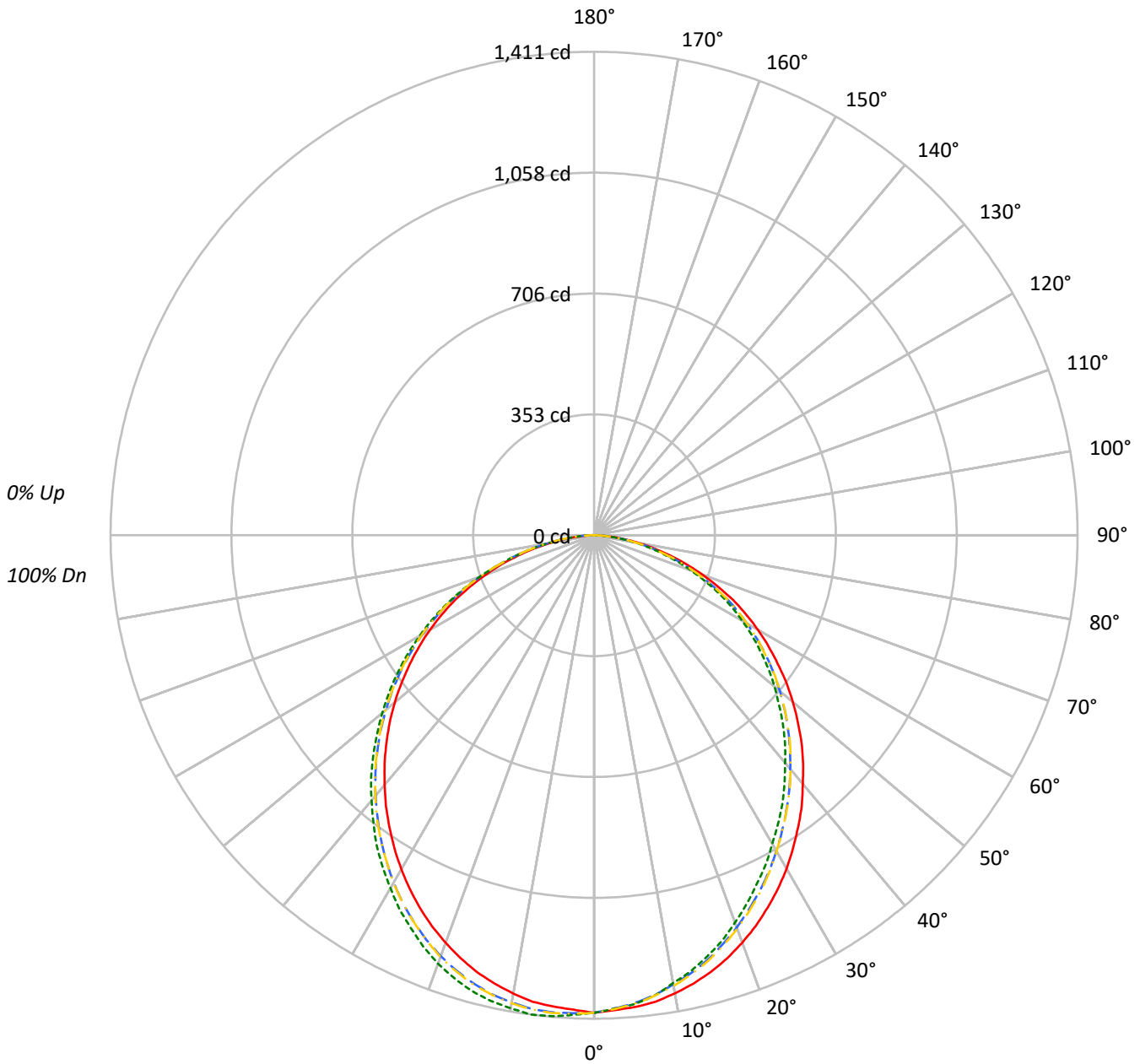
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3683.5 lumens
Efficiency: N/A
Efficacy: 65.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 56
Input Voltage (V): 120
Input Current (A_{in}): 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: 4APN-24-26L950-UNV-NP

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270° - · - 135°-315°



TEST NUMBER: P
 CATALOG NUMBER: 4APN-24-26L950-UNV-NP

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	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	72	72	72	70
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	62	62	62	59
4	83	71	62	56	81	70	62	55	67	60	54	65	59	54	63	57	53	53	53	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	46	46	46	44
6	71	57	48	42	69	56	48	42	55	47	41	53	46	41	51	45	41	41	41	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	36	36	36	34
8	61	48	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	32	32	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	29	29	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	12857	12857	12857	12857
5°	12799	12716	12784	13049
10°	12718	12434	12725	13131
15°	12599	12161	12606	13154
20°	12420	11809	12428	13062
25°	12203	11437	12228	12878
30°	11969	11080	11986	12666
35°	11696	10791	11723	12460
40°	11412	10446	11451	12170
45°	11168	10164	11178	11893
50°	10876	9867	10900	11580
55°	10529	9542	10568	11253
60°	10191	9211	10206	10841
65°	9769	8807	9769	10361
70°	9072	8147	9050	9622
75°	8227	7379	8167	8662
80°	7088	6349	6955	7438
85°	5452	4848	5282	5970



TEST NUMBER: P
 CATALOG NUMBER: 4APN-24-26L950-UNV-NP

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.6	3.6
10°-20°	372.6	10.1
20°-30°	551.6	15.0
30°-40°	647.2	17.6
40°-50°	655.9	17.8
50°-60°	582.1	15.8
60°-70°	437.0	11.9
70°-80°	242.7	6.6
80°-90°	62.7	1.7
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°	1055.8	28.7
0°-40°	1703.0	46.2
0°-60°	2941.1	79.8
0°-90°	3683.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3683.5	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1394	1394	1394	1394	1394	
5°	1382	1373	1380	1409	1382	131
15°	1319	1273	1320	1377	1319	372
25°	1199	1124	1201	1265	1199	552
35°	1038	958	1041	1106	1038	650
45°	856	779	857	912	856	660
55°	655	593	657	700	655	586
65°	448	403	448	475	448	441
75°	231	207	229	243	231	245
85°	52	46	50	56	52	62
90°	0	0	0	0	0	



TEST NUMBER: P

CATALOG NUMBER: 4APN-24-26L950-UNV-NP

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5
2.5°	1387.0	1390.2	1394.3	1390.2	1383.6	1380.4	1380.4	1379.6	1382.0	1382.8	1382.0
5°	1382.0	1383.6	1384.5	1379.6	1372.2	1368.2	1366.5	1365.7	1368.9	1373.0	1368.9
7.5°	1373.0	1372.2	1371.4	1364.8	1356.6	1350.9	1348.5	1347.7	1350.9	1355.1	1351.7
10°	1357.5	1356.6	1354.2	1346.0	1335.4	1328.0	1325.6	1323.1	1325.6	1327.2	1325.6
12.5°	1340.3	1337.0	1333.8	1324.7	1313.3	1305.1	1301.0	1297.7	1301.0	1303.4	1301.9
15°	1319.0	1314.1	1308.4	1298.5	1287.1	1278.1	1273.2	1270.0	1272.4	1273.2	1273.2
17.5°	1293.7	1287.9	1282.2	1270.0	1256.0	1246.2	1240.5	1236.4	1239.6	1241.3	1241.3
20°	1265.0	1258.4	1251.1	1238.0	1223.3	1212.6	1206.1	1201.2	1202.0	1202.8	1202.8
22.5°	1233.9	1225.7	1216.8	1202.8	1187.3	1175.8	1169.3	1163.6	1163.6	1164.4	1164.4
25°	1198.7	1189.7	1180.7	1166.8	1150.5	1138.2	1130.0	1124.3	1124.3	1123.5	1125.1
27.5°	1162.7	1152.9	1143.9	1129.2	1112.0	1099.8	1091.6	1085.8	1085.0	1084.2	1085.8
30°	1123.5	1112.0	1102.2	1086.7	1070.3	1058.0	1049.8	1043.2	1041.7	1040.0	1041.7
32.5°	1081.7	1071.1	1060.5	1044.1	1027.8	1015.5	1007.3	1000.7	999.9	999.1	1000.7
35°	1038.4	1026.9	1017.1	1001.6	985.2	972.9	963.9	958.1	958.1	958.1	958.1
37.5°	995.9	984.3	973.7	958.1	941.8	929.6	920.5	914.8	913.1	912.3	913.1
40°	947.5	937.7	927.9	913.1	896.8	884.6	877.2	870.6	869.0	867.3	869.8
42.5°	903.4	893.5	882.9	869.0	852.6	840.3	832.2	826.4	825.7	824.8	825.7
45°	855.9	844.5	833.8	820.7	806.0	794.5	786.4	780.6	779.8	779.0	779.8
47.5°	806.0	797.0	787.9	774.8	760.2	748.7	741.3	734.7	733.2	731.5	733.2
50°	757.7	747.8	738.9	726.6	712.7	702.1	695.6	689.7	688.2	687.4	688.2
52.5°	707.0	698.0	689.7	677.5	666.1	655.4	648.1	643.2	642.4	641.5	642.4
55°	654.6	646.4	639.0	629.3	617.7	608.0	601.4	595.7	594.9	593.2	594.9
57.5°	603.9	597.4	590.0	579.3	568.7	559.7	553.9	549.1	548.2	547.4	548.2
60°	552.3	545.7	539.2	530.2	519.5	510.6	505.7	501.6	499.9	499.2	499.9
62.5°	500.7	494.2	489.3	480.3	470.5	463.1	458.2	454.1	452.5	451.7	452.5
65°	447.5	441.8	436.1	427.9	420.6	414.8	409.9	405.9	404.2	403.4	403.4
67.5°	391.1	386.2	382.1	374.8	366.6	360.9	356.0	352.7	351.0	350.2	351.0
70°	336.3	332.2	328.1	322.4	315.9	310.9	307.7	304.4	302.8	302.0	302.0
72.5°	284.0	280.7	276.6	271.6	266.7	261.8	258.5	256.1	254.5	253.6	253.6
75°	230.8	227.5	225.8	221.7	216.9	213.5	210.3	208.6	207.0	207.0	207.0
77.5°	180.8	179.2	177.6	173.4	170.2	166.9	164.5	163.7	162.0	162.0	162.0
80°	133.4	132.6	131.8	129.3	126.0	122.7	121.1	120.3	119.5	119.5	119.5
82.5°	90.0	90.0	89.2	86.8	84.3	83.4	81.8	81.0	81.0	81.0	81.0
85°	51.5	51.5	51.5	50.7	49.1	49.1	47.5	46.7	45.8	45.8	45.8
87.5°	20.5	21.3	22.1	21.3	19.6	19.6	19.6	19.6	19.6	19.6	19.6
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: 4APN-24-26L950-UNV-NP

CANDELA DISTRIBUTION (continued):

	110°	120°	130°	140°	150°	160°	170°	180°	190°	200°	210°
0°	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5
2.5°	1379.6	1381.2	1382.0	1386.1	1391.0	1394.3	1390.2	1386.1	1392.7	1400.1	1400.1
5°	1365.7	1367.3	1369.7	1374.7	1381.2	1385.3	1383.6	1380.4	1390.2	1398.4	1399.2
7.5°	1348.5	1350.1	1353.4	1358.3	1366.5	1372.2	1372.2	1373.0	1382.0	1391.9	1394.3
10°	1323.1	1327.2	1332.1	1339.5	1347.7	1355.1	1357.5	1358.3	1369.7	1380.4	1383.6
12.5°	1299.4	1303.4	1308.4	1316.5	1326.4	1334.6	1337.0	1340.3	1352.6	1364.8	1369.7
15°	1272.4	1276.5	1282.2	1290.3	1301.0	1310.0	1315.0	1319.8	1332.1	1345.2	1350.9
17.5°	1240.5	1244.5	1250.3	1260.1	1272.4	1283.1	1288.8	1294.5	1308.4	1322.3	1328.0
20°	1202.8	1208.6	1216.8	1226.5	1240.5	1252.7	1259.3	1265.8	1280.6	1294.5	1301.0
22.5°	1164.4	1170.9	1179.9	1191.4	1206.1	1219.2	1227.4	1235.6	1250.3	1264.2	1271.5
25°	1125.9	1133.2	1142.3	1154.5	1168.5	1181.5	1191.4	1201.2	1215.9	1230.7	1238.0
27.5°	1086.7	1093.2	1102.2	1114.4	1130.0	1143.9	1153.7	1164.4	1179.1	1194.6	1202.0
30°	1043.2	1050.6	1058.8	1071.1	1088.2	1103.8	1113.6	1125.1	1139.8	1155.4	1162.7
32.5°	1001.6	1008.1	1016.2	1028.6	1045.7	1062.1	1072.7	1084.2	1098.9	1114.4	1121.0
35°	958.1	964.7	973.7	986.0	1003.1	1018.7	1029.3	1040.8	1054.8	1069.4	1076.8
37.5°	915.6	922.2	931.1	943.5	959.8	975.4	986.0	997.4	1011.3	1025.3	1031.8
40°	871.5	878.0	885.3	897.7	914.0	929.6	939.3	950.8	964.7	979.4	986.0
42.5°	826.4	832.9	842.0	854.2	869.8	883.7	894.3	904.9	918.0	931.1	937.7
45°	781.4	787.1	796.1	807.6	822.3	835.4	846.0	856.7	869.0	881.2	887.8
47.5°	734.7	741.3	748.7	760.2	774.8	788.8	799.5	809.2	820.7	832.9	838.7
50°	689.7	695.6	702.8	713.5	727.5	740.6	749.5	759.4	770.0	781.4	786.4
52.5°	643.2	648.9	656.3	666.9	678.3	690.6	698.8	707.8	718.4	729.0	734.0
55°	595.7	599.8	606.3	616.2	628.4	639.9	648.1	657.0	666.1	675.1	680.8
57.5°	549.1	553.9	560.5	569.5	580.1	590.8	598.1	605.5	614.5	623.5	627.6
60°	501.6	505.7	510.6	518.8	529.4	538.4	545.7	553.1	560.5	568.7	572.7
62.5°	453.3	457.4	462.3	470.5	479.5	487.6	494.2	500.7	507.3	514.7	518.8
65°	405.0	409.1	414.1	419.8	427.2	434.4	441.0	447.5	452.5	457.4	461.5
67.5°	352.7	356.7	361.7	366.6	373.1	380.5	385.4	391.1	396.0	401.7	404.2
70°	303.6	306.8	311.7	315.9	321.6	326.5	330.5	335.5	338.7	343.6	347.8
72.5°	255.3	258.5	262.7	266.7	270.1	274.1	279.0	283.1	287.2	292.1	293.7
75°	208.6	210.3	213.5	216.9	220.1	223.4	225.8	229.1	232.3	235.7	238.2
77.5°	162.8	164.5	167.7	170.2	172.7	175.1	176.7	178.4	181.6	184.1	186.5
80°	119.5	121.1	123.5	126.0	128.4	130.9	130.9	130.9	135.0	138.3	139.1
82.5°	81.0	81.8	83.4	85.1	86.8	88.3	88.3	87.6	90.0	92.5	94.1
85°	46.7	47.5	49.1	49.1	49.9	49.9	49.9	49.9	51.5	54.0	55.6
87.5°	18.8	18.8	19.6	19.6	20.5	20.5	19.6	18.8	20.5	22.9	23.7
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: 4APN-24-26L950-UNV-NP

CANDELA DISTRIBUTION (continued):

	220°	230°	240°	250°	260°	270°	280°	290°	300°	310°	320°
0°	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5	1393.5
2.5°	1396.7	1395.9	1398.4	1399.2	1400.9	1400.9	1401.6	1401.6	1400.1	1397.6	1398.4
5°	1397.6	1397.6	1400.1	1402.5	1405.8	1409.0	1406.6	1404.1	1402.5	1400.1	1399.2
7.5°	1393.5	1395.1	1397.6	1401.6	1405.8	1410.7	1407.4	1404.1	1400.1	1396.7	1395.1
10°	1383.6	1385.3	1389.4	1393.5	1397.6	1401.6	1398.4	1395.1	1391.9	1387.8	1386.1
12.5°	1371.4	1373.9	1378.8	1382.8	1387.0	1391.9	1387.8	1383.6	1379.6	1375.4	1373.0
15°	1353.4	1356.6	1362.3	1367.3	1373.0	1377.1	1373.9	1370.6	1365.7	1360.0	1355.8
17.5°	1330.4	1335.4	1341.1	1346.9	1351.7	1355.8	1353.4	1350.1	1344.4	1337.8	1332.9
20°	1305.1	1310.0	1315.0	1320.7	1326.4	1330.4	1327.2	1323.1	1317.4	1312.5	1307.6
22.5°	1275.7	1280.6	1286.3	1291.2	1296.1	1300.2	1296.1	1291.2	1286.3	1281.4	1276.5
25°	1242.1	1247.0	1253.6	1258.4	1261.8	1265.0	1261.8	1257.6	1252.7	1247.8	1242.9
27.5°	1206.9	1211.8	1218.3	1223.3	1226.5	1229.9	1226.5	1222.5	1217.6	1212.6	1207.7
30°	1167.6	1172.5	1179.1	1184.0	1186.4	1188.9	1185.6	1182.4	1178.3	1173.3	1168.5
32.5°	1125.9	1130.8	1135.7	1140.6	1144.8	1148.0	1144.8	1141.4	1136.5	1130.0	1125.1
35°	1081.7	1086.7	1092.4	1097.3	1102.2	1106.3	1101.3	1095.6	1091.6	1087.5	1083.4
37.5°	1035.1	1040.8	1047.4	1053.1	1054.8	1058.0	1054.8	1051.4	1047.4	1043.2	1038.4
40°	989.3	994.2	999.9	1005.6	1008.1	1010.5	1007.3	1004.0	999.1	995.0	990.0
42.5°	941.8	946.7	951.6	956.6	959.8	963.1	959.8	954.9	951.6	948.4	944.2
45°	892.7	897.7	901.7	906.6	909.1	911.5	908.3	904.2	900.9	898.4	894.3
47.5°	842.8	846.9	851.0	855.1	856.7	859.1	855.9	853.4	851.0	848.5	845.3
50°	790.4	794.5	799.5	803.5	804.4	806.8	803.5	801.0	798.6	796.1	793.7
52.5°	738.9	742.1	746.3	750.3	752.0	753.6	750.3	747.1	744.6	742.9	740.6
55°	684.9	688.2	692.2	695.6	698.0	699.6	696.3	693.1	690.6	689.7	687.4
57.5°	630.8	634.2	638.2	641.5	643.2	644.8	641.5	638.2	636.6	635.0	633.3
60°	576.1	579.3	582.6	585.0	586.7	587.5	584.3	581.8	581.0	580.1	578.5
62.5°	522.0	523.7	526.9	528.6	530.2	531.1	528.6	526.9	526.1	525.4	524.5
65°	465.6	469.7	472.2	473.7	473.7	474.6	472.2	471.3	470.5	469.7	468.0
67.5°	407.5	410.8	412.4	414.1	414.1	414.1	414.1	414.1	413.2	411.6	409.9
70°	351.8	354.3	356.0	356.7	356.7	356.7	355.2	354.3	355.2	355.2	354.3
72.5°	295.4	297.1	297.8	298.6	297.8	297.8	297.8	299.5	299.5	298.6	297.1
75°	240.5	242.2	243.0	243.9	243.0	243.0	243.0	244.7	243.9	243.9	243.0
77.5°	189.0	189.8	189.8	190.7	189.8	189.8	190.7	192.3	191.5	191.5	191.5
80°	140.0	140.0	140.0	140.7	140.0	140.0	140.7	142.4	141.5	141.5	141.5
82.5°	94.9	95.7	95.7	95.7	96.5	97.4	97.4	97.4	97.4	97.4	96.5
85°	56.4	57.3	56.4	56.4	56.4	56.4	57.3	58.1	58.1	58.1	58.1
87.5°	24.5	25.4	24.5	23.7	22.9	22.9	24.5	26.2	26.2	25.4	25.4
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: 4APN-24-26L950-UNV-NP

CANDELA DISTRIBUTION (continued):

	330°	340°	350°	360°
0°	1393.5	1393.5	1393.5	1393.5
2.5°	1401.6	1401.6	1394.3	1387.0
5°	1400.9	1399.2	1391.0	1382.0
7.5°	1395.9	1393.5	1382.8	1373.0
10°	1384.5	1381.2	1369.7	1357.5
12.5°	1370.6	1365.7	1352.6	1340.3
15°	1352.6	1346.9	1332.9	1319.0
17.5°	1328.9	1322.3	1308.4	1293.7
20°	1303.4	1296.1	1280.6	1265.0
22.5°	1272.4	1265.8	1249.5	1233.9
25°	1238.8	1231.4	1215.1	1198.7
27.5°	1202.8	1194.6	1178.3	1162.7
30°	1163.6	1155.4	1139.0	1123.5
32.5°	1121.8	1115.3	1098.9	1081.7
35°	1079.3	1071.1	1054.8	1038.4
37.5°	1034.3	1026.9	1011.3	995.9
40°	986.8	979.4	963.1	947.5
42.5°	940.2	933.6	918.0	903.4
45°	890.3	883.7	869.0	855.9
47.5°	840.3	833.8	819.8	806.0
50°	789.6	783.1	770.0	757.7
52.5°	736.4	731.5	719.3	707.0
55°	683.2	677.5	665.2	654.6
57.5°	630.1	625.9	614.5	603.9
60°	575.2	570.3	561.3	552.3
62.5°	522.0	518.0	508.9	500.7
65°	465.6	462.3	454.9	447.5
67.5°	407.5	405.0	397.7	391.1
70°	351.8	347.8	342.1	336.3
72.5°	295.4	293.7	288.9	284.0
75°	241.4	239.7	234.8	230.8
77.5°	190.7	189.0	185.0	180.8
80°	140.7	140.0	136.6	133.4
82.5°	96.5	95.7	93.3	90.0
85°	58.1	56.4	54.0	51.5
87.5°	25.4	24.5	22.1	20.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)