

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: NEO-RAY

Report Number: P333714-940

Luminaire Tested: **S125RDIW-S1090D1340U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333714-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIW-S1090D1340U940-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8551.3 lumens
Efficiency: N/A
Efficacy: 122.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

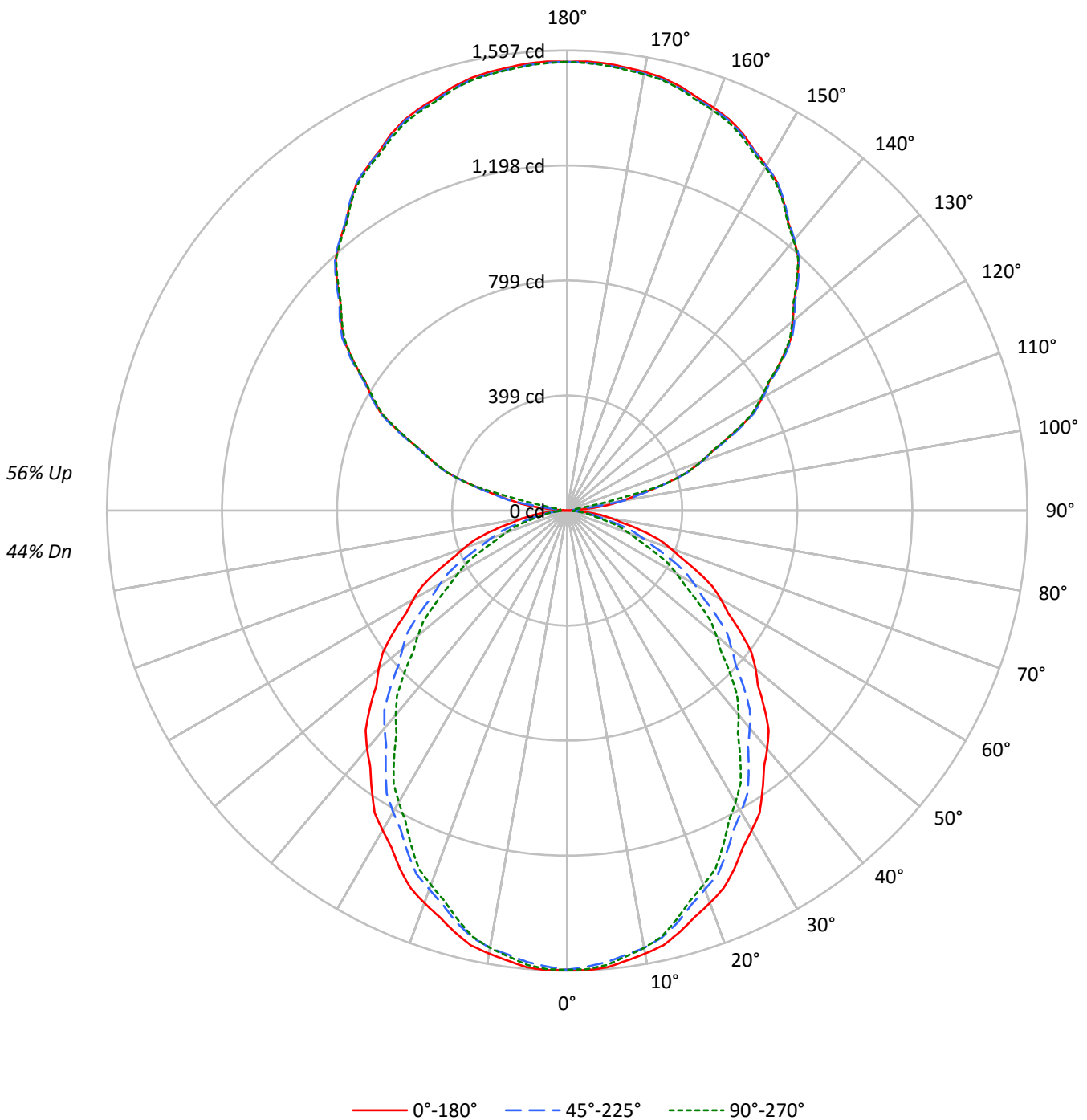
Input Watts (W): 69.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	92	89	85	88	85	82	79	70	68	66	57	56	54	45	44	43	38
2	88	81	75	70	80	74	69	65	62	58	55	50	48	46	40	38	37	32
3	80	71	64	58	73	66	59	54	55	50	46	45	41	39	35	33	31	27
4	74	63	55	49	67	58	51	46	49	44	40	40	36	33	32	29	27	23
5	68	56	48	42	62	52	45	40	44	38	34	36	32	29	29	26	24	20
6	62	50	43	37	57	47	40	35	39	34	30	32	28	25	26	23	21	18
7	58	46	38	32	53	42	35	30	36	30	26	30	26	22	24	21	19	16
8	53	41	34	29	49	38	32	27	33	27	23	27	23	20	22	19	17	14
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	20	17	15	13
10	47	35	28	23	43	32	26	22	27	22	19	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10293	10293	10293
5°	10317	10200	10263
10°	10239	10105	10105
15°	10117	9900	9819
20°	9961	9614	9498
25°	9779	9333	9128
30°	9552	9004	8717
35°	9320	8665	8257
40°	9104	8312	7804
45°	8840	7916	7311
50°	8575	7486	6797
55°	8268	7076	6248
60°	7962	6577	5660
65°	7597	5997	4985
70°	7183	5274	4296
75°	6608	4447	3573
80°	5821	3492	2998
85°	4905	2853	2675



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.9	1.8
10°-20°	418.8	4.9
20°-30°	607.3	7.1
30°-40°	692.2	8.1
40°-50°	674.7	7.9
50°-60°	567.9	6.6
60°-70°	398.1	4.7
70°-80°	204.6	2.4
80°-90°	54.9	0.6
90°-100°	56.6	0.7
100°-110°	348.8	4.1
110°-120°	632.6	7.4
120°-130°	811.9	9.5
130°-140°	873.3	10.2
140°-150°	819.7	9.6
150°-160°	663.1	7.8
160°-170°	428.8	5.0
170°-180°	147.9	1.7
0°-30°	1176.0	13.8
0°-40°	1868.2	21.8
0°-60°	3110.9	36.4
0°-90°	3768.5	44.1
90°-120°	1038.1	12.1
90°-150°	3542.9	41.4
90°-180°	4783.0	55.9
0°-180°	8551.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1594	1594	1594	1594	1594	
5°	1591	1586	1573	1585	1583	151
15°	1513	1505	1481	1479	1469	426
25°	1372	1353	1310	1294	1281	631
35°	1182	1152	1099	1065	1047	740
45°	968	931	867	820	800	746
55°	734	694	628	576	555	657
65°	497	455	392	346	326	492
75°	265	228	178	153	143	280
85°	66	45	38	37	36	74
90°	1	10	18	24	28	6
95°	66	60	18	24	24	84
105°	340	344	344	344	343	360
115°	637	643	644	640	633	632
125°	906	914	914	910	906	809
135°	1130	1137	1135	1132	1126	871
145°	1310	1313	1313	1313	1307	819
155°	1443	1437	1439	1441	1433	665
165°	1523	1516	1517	1523	1515	430
175°	1558	1551	1552	1560	1550	148
180°	1558	1558	1558	1558	1558	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8
2.5°	1596.7	1596.1	1595.4	1594.7	1594.1	1592.8	1590.6	1588.5	1586.4	1584.2	1586.4
5°	1591.4	1590.4	1589.3	1588.2	1587.2	1585.1	1582.2	1579.2	1576.3	1573.3	1576.0
7.5°	1575.7	1574.8	1573.7	1572.7	1571.6	1569.4	1565.8	1562.4	1558.8	1555.3	1557.2
10°	1561.3	1560.5	1559.7	1558.9	1558.1	1555.9	1552.1	1548.4	1544.6	1540.9	1541.7
12.5°	1544.9	1543.9	1542.9	1541.9	1540.9	1537.8	1532.9	1527.8	1522.8	1517.7	1518.3
15°	1513.1	1511.5	1509.9	1508.3	1506.7	1503.2	1497.5	1491.9	1486.3	1480.7	1480.4
17.5°	1477.3	1474.8	1472.4	1469.9	1467.4	1462.7	1455.6	1448.6	1441.5	1434.4	1433.1
20°	1449.4	1446.7	1444.0	1441.4	1438.7	1433.1	1424.5	1415.9	1407.4	1398.8	1397.5
22.5°	1418.5	1415.9	1413.2	1410.5	1407.8	1402.0	1393.0	1384.0	1375.0	1366.0	1363.4
25°	1372.3	1368.3	1364.3	1360.3	1356.3	1349.3	1339.4	1329.5	1319.6	1309.7	1306.3
27.5°	1319.4	1314.5	1309.6	1304.8	1299.8	1292.2	1281.6	1271.0	1260.3	1249.7	1244.9
30°	1280.9	1275.8	1270.7	1265.6	1260.5	1252.3	1241.1	1229.8	1218.6	1207.4	1201.2
32.5°	1243.2	1237.3	1231.4	1225.5	1219.5	1210.9	1199.4	1187.9	1176.4	1165.0	1158.2
35°	1182.1	1175.7	1169.3	1162.9	1156.5	1147.2	1135.1	1123.1	1111.1	1099.0	1091.3
37.5°	1122.1	1114.4	1106.5	1098.8	1090.9	1080.8	1068.4	1056.0	1043.6	1031.2	1021.8
40°	1079.8	1071.7	1063.7	1055.7	1047.7	1037.2	1024.4	1011.6	998.7	985.9	975.7
42.5°	1035.5	1027.3	1019.0	1010.8	1002.6	991.8	978.5	965.3	952.0	938.7	929.0
45°	967.9	960.1	952.3	944.6	936.8	925.6	910.9	896.2	881.5	866.7	856.0
47.5°	897.8	889.6	881.4	873.3	865.0	853.5	838.7	823.9	809.0	794.2	783.2
50°	853.5	844.6	835.8	827.0	818.1	806.1	790.9	775.6	760.4	745.1	733.9
52.5°	805.3	796.3	787.2	778.2	769.2	757.4	743.1	728.6	714.3	699.9	687.8
55°	734.3	725.8	717.2	708.6	700.1	688.3	673.3	658.4	643.4	628.4	616.4
57.5°	662.5	653.4	644.3	635.1	626.0	614.2	599.8	585.3	570.9	556.4	544.7
60°	616.4	607.0	597.6	588.3	578.9	566.9	552.5	538.1	523.6	509.2	497.4
62.5°	567.2	558.3	549.4	540.4	531.5	519.7	505.1	490.4	475.7	461.0	450.1
65°	497.1	488.0	478.9	469.8	460.7	449.2	435.0	420.8	406.6	392.4	381.7
67.5°	427.6	418.5	409.4	400.3	391.2	379.9	366.2	352.7	339.1	325.5	315.8
70°	380.4	371.3	362.2	353.1	344.0	332.8	319.4	306.0	292.7	279.3	271.0
72.5°	334.2	325.3	316.4	307.6	298.6	287.9	275.4	262.9	250.4	237.9	230.2
75°	264.8	256.8	248.8	240.8	232.7	223.1	211.9	200.6	189.4	178.2	172.3
77.5°	196.0	189.6	183.2	176.7	170.3	162.6	153.6	144.6	135.6	126.6	122.5
80°	156.5	150.1	143.7	137.2	130.8	123.9	116.4	108.9	101.4	93.9	91.5
82.5°	118.0	112.2	106.4	100.7	94.9	89.4	84.3	79.1	74.0	68.8	67.8
85°	66.2	61.3	56.5	51.7	46.9	43.9	42.5	41.2	39.9	38.5	38.3
87.5°	22.4	21.3	20.2	19.1	18.0	17.6	17.7	17.8	18.0	18.1	18.4
90°	1.2	3.2	5.3	7.3	9.4	11.3	13.1	14.9	16.7	18.5	19.8
92.5°	17.7	16.3	14.9	13.5	12.0	12.1	13.7	15.2	16.9	18.5	19.8
95°	65.8	65.0	64.3	63.5	62.7	57.4	47.7	38.0	28.2	18.5	19.8
97.5°	137.4	138.8	140.2	141.5	142.9	133.9	114.7	95.4	76.1	56.8	49.6
100°	192.8	193.6	194.3	195.1	195.9	196.8	197.8	198.9	199.8	200.9	162.6
102.5°	249.1	250.1	251.1	252.1	253.1	253.9	254.5	255.1	255.7	256.3	249.1
105°	339.5	340.5	341.5	342.5	343.6	344.0	344.0	344.0	344.0	344.0	344.0
107.5°	433.2	433.2	433.2	433.2	433.2	433.5	434.0	434.4	435.0	435.5	435.5
110°	494.2	494.2	494.2	494.2	494.2	494.4	494.9	495.4	496.0	496.4	495.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	551.4	552.1	552.7	553.2	553.8	554.4	554.6	554.9	555.3	555.5	554.6
115°	637.3	638.6	639.9	641.1	642.5	643.2	643.5	643.7	644.0	644.3	643.2
117.5°	726.2	726.1	726.1	726.0	726.0	726.5	727.5	728.4	729.4	730.4	729.1
120°	781.6	781.4	781.1	780.9	780.6	780.9	781.6	782.4	783.2	783.9	783.5
122.5°	830.5	831.5	832.5	833.5	834.5	835.2	835.5	835.9	836.2	836.6	836.1
125°	906.3	908.1	909.9	911.7	913.5	914.4	914.4	914.4	914.4	914.4	913.4
127.5°	978.6	979.9	981.1	982.4	983.7	984.3	984.1	984.0	983.8	983.6	983.1
130°	1022.9	1024.2	1025.5	1026.8	1028.1	1028.9	1029.1	1029.3	1029.6	1029.8	1029.1
132.5°	1067.3	1068.7	1070.2	1071.7	1073.2	1073.7	1073.1	1072.5	1072.0	1071.4	1071.3
135°	1130.3	1131.8	1133.4	1134.9	1136.5	1136.9	1136.5	1136.0	1135.4	1134.9	1134.4
137.5°	1188.3	1189.5	1190.9	1192.2	1193.6	1194.0	1193.6	1193.1	1192.7	1192.2	1192.3
140°	1226.1	1226.6	1227.2	1227.6	1228.2	1228.3	1228.1	1227.8	1227.5	1227.3	1227.8
142.5°	1260.3	1260.6	1260.9	1261.2	1261.5	1261.9	1262.2	1262.6	1262.9	1263.3	1263.4
145°	1310.4	1310.9	1311.4	1312.0	1312.4	1312.7	1312.7	1312.7	1312.7	1312.7	1313.0
147.5°	1354.2	1354.2	1354.1	1354.0	1353.9	1354.0	1354.2	1354.6	1354.9	1355.2	1355.5
150°	1382.0	1381.4	1381.0	1380.5	1379.9	1379.9	1380.5	1381.0	1381.4	1382.0	1382.5
152.5°	1408.7	1407.7	1406.5	1405.4	1404.3	1403.9	1404.4	1405.0	1405.5	1406.0	1406.5
155°	1443.1	1441.6	1440.1	1438.6	1437.0	1436.5	1437.0	1437.5	1438.1	1438.6	1439.3
157.5°	1469.7	1468.8	1467.8	1467.0	1466.1	1465.6	1465.6	1465.7	1465.8	1465.8	1466.6
160°	1488.2	1486.7	1485.1	1483.5	1482.0	1481.4	1481.7	1481.9	1482.2	1482.5	1483.5
162.5°	1503.0	1501.5	1499.9	1498.3	1496.8	1496.2	1496.5	1496.7	1496.9	1497.2	1498.6
165°	1522.9	1521.3	1519.7	1518.2	1516.7	1516.0	1516.3	1516.5	1516.8	1517.1	1518.6
167.5°	1537.6	1536.1	1534.5	1532.9	1531.2	1530.6	1530.8	1531.1	1531.3	1531.6	1533.5
170°	1546.0	1544.2	1542.3	1540.5	1538.7	1537.9	1538.2	1538.5	1538.7	1539.0	1541.1
172.5°	1551.5	1549.7	1547.9	1546.0	1544.3	1543.6	1544.1	1544.5	1545.0	1545.4	1547.3
175°	1557.5	1555.9	1554.4	1552.8	1551.3	1550.7	1551.0	1551.2	1551.5	1551.7	1553.7
177.5°	1560.2	1559.0	1557.8	1556.6	1555.3	1554.8	1555.1	1555.2	1555.4	1555.6	1557.1
180°	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8	1593.8
2.5°	1588.5	1590.6	1592.8	1593.7	1593.5	1593.3	1593.0	1592.9
5°	1578.7	1581.4	1584.0	1585.1	1584.6	1584.0	1583.5	1583.0
7.5°	1559.1	1560.9	1562.8	1563.4	1562.8	1562.3	1561.7	1561.0
10°	1542.5	1543.3	1544.1	1544.1	1543.3	1542.5	1541.7	1540.9
12.5°	1518.9	1519.5	1520.1	1519.7	1518.5	1517.3	1516.1	1514.8
15°	1480.2	1479.9	1479.6	1478.3	1475.9	1473.5	1471.1	1468.6
17.5°	1431.7	1430.4	1429.1	1427.5	1425.4	1423.4	1421.5	1419.5
20°	1396.2	1394.8	1393.5	1391.6	1389.2	1386.8	1384.4	1382.0
22.5°	1360.8	1358.2	1355.6	1353.3	1351.3	1349.3	1347.3	1345.3
25°	1302.8	1299.3	1295.8	1292.6	1289.7	1286.7	1283.8	1280.9
27.5°	1240.0	1235.2	1230.3	1226.5	1223.6	1220.8	1217.9	1215.1
30°	1195.1	1188.9	1182.8	1178.5	1176.1	1173.7	1171.3	1168.9
32.5°	1151.5	1144.6	1137.8	1132.9	1129.9	1126.9	1123.7	1120.7
35°	1083.5	1075.8	1068.0	1062.3	1058.5	1054.8	1051.1	1047.3
37.5°	1012.5	1003.3	993.9	987.5	983.8	980.2	976.5	972.9
40°	965.5	955.4	945.2	938.5	935.3	932.1	928.9	925.7
42.5°	919.3	909.5	899.7	892.5	887.8	883.2	878.4	873.7
45°	845.3	834.6	823.9	816.5	812.5	808.5	804.5	800.5
47.5°	772.2	761.2	750.2	742.4	738.0	733.5	729.2	724.7
50°	722.6	711.4	700.2	692.6	688.6	684.6	680.6	676.5
52.5°	675.7	663.6	651.5	643.5	639.4	635.4	631.4	627.4
55°	604.3	592.3	580.2	572.0	567.8	563.5	559.2	554.9
57.5°	532.9	521.1	509.3	501.5	497.8	493.9	490.1	486.3
60°	485.6	473.9	462.1	454.2	450.2	446.2	442.2	438.2
62.5°	439.3	428.3	417.4	409.9	405.9	401.9	397.9	393.9
65°	371.0	360.3	349.6	342.2	338.2	334.2	330.2	326.2
67.5°	305.9	296.1	286.3	279.8	276.6	273.4	270.2	267.0
70°	262.7	254.4	246.1	240.3	237.1	233.9	230.7	227.5
72.5°	222.6	214.9	207.2	202.3	200.2	198.0	195.9	193.8
75°	166.4	160.5	154.6	150.7	148.8	147.0	145.1	143.2
77.5°	118.4	114.3	110.1	107.4	106.0	104.6	103.3	101.8
80°	89.1	86.7	84.3	82.8	82.2	81.7	81.1	80.6
82.5°	66.6	65.5	64.4	63.7	63.3	63.0	62.7	62.3
85°	38.0	37.7	37.5	37.2	36.9	36.6	36.4	36.1
87.5°	18.6	18.9	19.2	19.3	19.2	19.2	19.1	19.0
90°	21.0	22.3	23.6	24.6	25.4	26.1	26.9	27.7
92.5°	21.0	22.3	23.6	24.4	24.8	25.1	25.5	25.9
95°	21.0	22.3	23.6	24.3	24.3	24.3	24.3	24.3
97.5°	42.4	35.1	27.8	24.3	24.3	24.3	24.3	24.3
100°	124.4	86.2	48.0	28.4	27.3	26.3	25.2	24.3
102.5°	241.8	234.6	227.4	215.0	197.6	180.1	162.6	145.3
105°	344.0	344.0	344.0	343.9	343.7	343.4	343.1	342.9
107.5°	435.6	435.7	435.7	435.3	434.5	433.8	433.0	432.3
110°	494.9	494.2	493.4	493.1	493.4	493.7	493.9	494.2



TEST NUMBER: P333714-940

CATALOG NUMBER: S125RDIW-S1090D1340U940-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	553.6	552.7	551.7	551.0	550.6	550.3	549.9	549.6
115°	642.2	641.1	640.2	638.8	637.3	635.8	634.2	632.7
117.5°	727.7	726.4	725.1	724.0	723.4	722.7	722.0	721.4
120°	782.9	782.4	781.9	781.0	779.7	778.4	777.1	775.9
122.5°	835.5	835.0	834.6	833.5	832.1	830.5	829.0	827.6
125°	912.3	911.3	910.3	909.4	908.7	907.9	907.0	906.3
127.5°	982.6	982.0	981.4	980.2	978.3	976.4	974.5	972.6
130°	1028.3	1027.5	1026.8	1025.7	1024.5	1023.1	1021.9	1020.7
132.5°	1071.1	1070.9	1070.8	1070.1	1068.8	1067.6	1066.2	1065.0
135°	1133.9	1133.4	1132.8	1131.8	1130.3	1128.7	1127.2	1125.7
137.5°	1192.4	1192.5	1192.6	1191.9	1190.6	1189.3	1187.9	1186.6
140°	1228.3	1228.8	1229.3	1228.8	1227.3	1225.7	1224.2	1222.6
142.5°	1263.5	1263.6	1263.7	1263.0	1261.4	1259.9	1258.4	1256.9
145°	1313.2	1313.5	1313.8	1313.1	1311.5	1310.0	1308.5	1307.0
147.5°	1355.8	1356.1	1356.5	1355.7	1353.8	1351.9	1350.1	1348.3
150°	1383.0	1383.5	1384.0	1383.2	1381.2	1379.1	1377.1	1375.0
152.5°	1407.0	1407.6	1408.0	1407.4	1405.5	1403.7	1401.9	1400.0
155°	1440.1	1440.8	1441.6	1441.0	1439.0	1436.9	1434.9	1432.8
157.5°	1467.5	1468.3	1469.1	1468.5	1466.4	1464.4	1462.3	1460.3
160°	1484.5	1485.5	1486.6	1486.0	1484.0	1481.9	1479.9	1477.8
162.5°	1500.0	1501.6	1503.0	1502.5	1500.3	1498.0	1495.8	1493.5
165°	1520.1	1521.7	1523.2	1523.0	1520.9	1518.9	1516.8	1514.7
167.5°	1535.3	1537.1	1539.0	1538.7	1536.4	1534.2	1531.9	1529.6
170°	1543.1	1545.2	1547.2	1547.1	1544.8	1542.5	1540.2	1537.8
172.5°	1549.2	1551.0	1552.8	1552.6	1550.3	1548.0	1545.7	1543.4
175°	1555.8	1557.8	1559.9	1559.8	1557.5	1555.1	1552.8	1550.5
177.5°	1558.5	1560.0	1561.4	1561.3	1559.6	1558.0	1556.3	1554.7
180°	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5	1557.5

(END OF REPORT)