

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: P333719-927

Luminaire Tested: **S125RDIW-S1090D1560U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333719-927
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIW-S1090D1560U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7632.4 lumens
Efficiency: N/A
Efficacy: 99.6 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

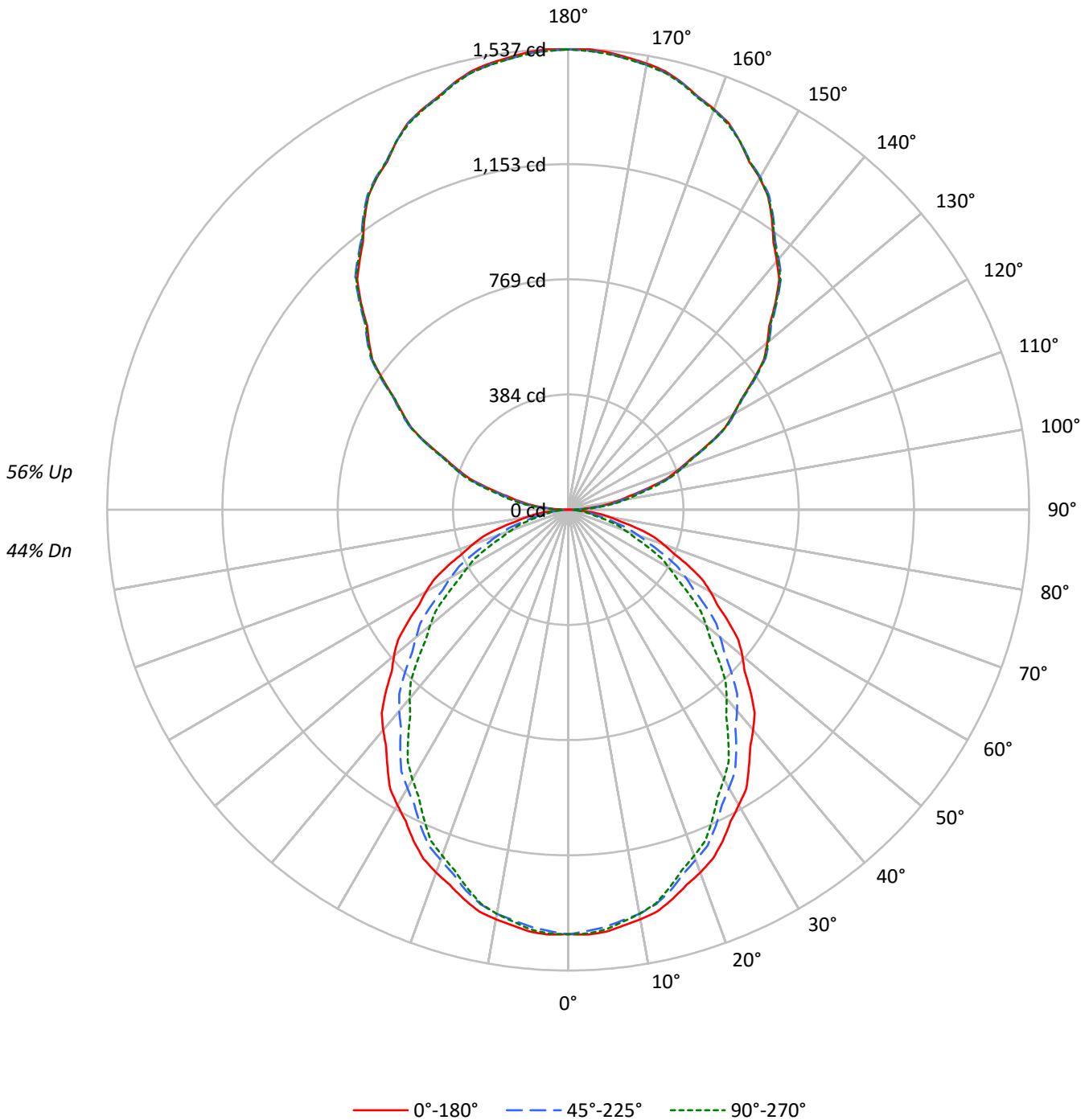
Input Watts (W): 76.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333719-927

CATALOG NUMBER: S125RDIW-S1090D1560U927-4F0-1E-UDD-F1

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	50	50	50	44
1	97	92	89	85	88	85	81	79	70	68	66	57	56	54	45	44	43	37
2	88	81	75	70	80	74	69	65	62	58	55	50	48	45	40	38	36	32
3	80	71	64	58	73	65	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	34	39	34	30	32	28	25	26	23	21	18
7	58	46	38	32	53	42	35	30	36	30	26	30	25	22	24	21	19	16
8	53	41	34	29	49	38	32	27	32	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	46	35	28	23	43	32	26	21	27	22	19	23	19	16	19	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9144	9144	9144
5°	9166	9061	9117
10°	9096	8977	8977
15°	8988	8795	8723
20°	8849	8541	8438
25°	8688	8292	8109
30°	8486	7999	7744
35°	8280	7698	7335
40°	8088	7384	6933
45°	7853	7033	6495
50°	7618	6650	6038
55°	7346	6286	5551
60°	7073	5842	5028
65°	6748	5327	4429
70°	6381	4685	3816
75°	5871	3950	3174
80°	5170	3102	2663
85°	4357	2534	2379



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	1.7
10°-20°	372.1	4.9
20°-30°	539.6	7.1
30°-40°	614.9	8.1
40°-50°	599.4	7.9
50°-60°	504.6	6.6
60°-70°	353.7	4.6
70°-80°	181.8	2.4
80°-90°	49.3	0.6
90°-100°	102.8	1.3
100°-110°	303.6	4.0
110°-120°	514.3	6.7
120°-130°	676.9	8.9
130°-140°	758.4	9.9
140°-150°	743.3	9.7
150°-160°	624.3	8.2
160°-170°	415.0	5.4
170°-180°	145.2	1.9
0°-30°	1044.8	13.7
0°-40°	1659.7	21.7
0°-60°	2763.6	36.2
0°-90°	3348.4	43.9
90°-120°	920.8	12.1
90°-150°	3099.4	40.6
90°-180°	4284.0	56.1
0°-180°	7632.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1416	1416	1416	1416	1416	
5°	1414	1409	1398	1408	1406	134
15°	1344	1337	1315	1314	1305	379
25°	1219	1202	1164	1150	1138	561
35°	1050	1023	976	946	930	657
45°	860	827	770	729	711	663
55°	652	617	558	512	493	583
65°	442	404	349	307	290	437
75°	235	202	158	136	127	249
85°	59	40	34	33	32	66
90°	1	11	19	25	29	7
95°	78	81	92	100	103	83
105°	272	278	286	292	296	291
115°	515	520	522	521	520	509
125°	752	758	760	758	756	673
135°	977	984	986	985	981	753
145°	1184	1189	1192	1192	1189	740
155°	1355	1355	1356	1360	1355	624
165°	1473	1471	1472	1476	1470	415
175°	1532	1527	1527	1533	1526	145
180°	1535	1535	1535	1535	1535	



TEST NUMBER: P333719-927

CATALOG NUMBER: S125RDIW-S1090D1560U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1418.5	1417.9	1417.4	1416.7	1416.2	1415.0	1413.1	1411.2	1409.3	1407.4	1409.3
5°	1413.8	1412.9	1411.9	1411.0	1410.0	1408.2	1405.6	1403.0	1400.3	1397.7	1400.1
7.5°	1399.9	1399.0	1398.0	1397.2	1396.2	1394.2	1391.1	1388.0	1384.8	1381.7	1383.4
10°	1387.0	1386.3	1385.6	1384.9	1384.2	1382.2	1378.9	1375.5	1372.2	1368.9	1369.6
12.5°	1372.5	1371.6	1370.7	1369.8	1368.9	1366.2	1361.8	1357.2	1352.8	1348.3	1348.8
15°	1344.3	1342.8	1341.4	1340.0	1338.6	1335.4	1330.4	1325.4	1320.4	1315.4	1315.2
17.5°	1312.4	1310.2	1308.1	1305.8	1303.6	1299.4	1293.2	1286.9	1280.6	1274.3	1273.1
20°	1287.6	1285.2	1282.9	1280.5	1278.1	1273.1	1265.5	1257.9	1250.3	1242.7	1241.5
22.5°	1260.2	1257.8	1255.5	1253.1	1250.7	1245.5	1237.5	1229.5	1221.5	1213.5	1211.2
25°	1219.2	1215.6	1212.0	1208.5	1204.9	1198.7	1189.9	1181.1	1172.4	1163.6	1160.5
27.5°	1172.1	1167.8	1163.4	1159.1	1154.8	1148.0	1138.5	1129.1	1119.7	1110.2	1106.0
30°	1137.9	1133.4	1128.9	1124.3	1119.8	1112.5	1102.6	1092.6	1082.6	1072.6	1067.1
32.5°	1104.5	1099.2	1093.9	1088.7	1083.4	1075.7	1065.5	1055.3	1045.1	1035.0	1029.0
35°	1050.2	1044.5	1038.8	1033.1	1027.4	1019.1	1008.4	997.8	987.1	976.4	969.5
37.5°	996.9	990.0	983.0	976.1	969.2	960.2	949.1	938.1	927.1	916.1	907.8
40°	959.3	952.1	945.0	937.9	930.7	921.5	910.1	898.7	887.2	875.8	866.8
42.5°	919.9	912.6	905.3	897.9	890.7	881.1	869.3	857.5	845.7	833.9	825.3
45°	859.8	852.9	846.1	839.2	832.3	822.3	809.2	796.1	783.1	770.0	760.5
47.5°	797.6	790.3	783.0	775.8	768.5	758.3	745.1	731.9	718.7	705.6	695.8
50°	758.2	750.4	742.5	734.7	726.8	716.1	702.6	689.0	675.5	661.9	652.0
52.5°	715.4	707.4	699.3	691.3	683.3	672.9	660.1	647.3	634.5	621.8	611.0
55°	652.4	644.8	637.2	629.5	621.9	611.5	598.2	584.9	571.6	558.3	547.6
57.5°	588.6	580.5	572.4	564.2	556.1	545.7	532.8	520.0	507.2	494.3	483.9
60°	547.6	539.2	530.9	522.6	514.3	503.7	490.8	478.0	465.2	452.3	441.9
62.5°	503.9	496.0	488.1	480.1	472.1	461.7	448.7	435.6	422.6	409.6	399.9
65°	441.6	433.6	425.5	417.4	409.3	399.0	386.4	373.8	361.2	348.6	339.1
67.5°	379.9	371.8	363.7	355.6	347.5	337.5	325.3	313.3	301.3	289.1	280.5
70°	337.9	329.9	321.8	313.7	305.6	295.6	283.8	271.9	260.0	248.1	240.7
72.5°	296.9	289.0	281.1	273.2	265.3	255.8	244.7	233.5	222.4	211.4	204.5
75°	235.3	228.1	221.0	213.9	206.8	198.2	188.2	178.2	168.3	158.3	153.0
77.5°	174.1	168.4	162.7	157.0	151.3	144.4	136.5	128.5	120.5	112.5	108.8
80°	139.0	133.3	127.6	121.9	116.2	110.0	103.4	96.7	90.1	83.4	81.3
82.5°	104.8	99.7	94.5	89.4	84.3	79.5	74.9	70.3	65.8	61.2	60.2
85°	58.8	54.5	50.2	45.9	41.7	39.0	37.8	36.6	35.4	34.2	34.0
87.5°	19.9	19.0	18.1	17.2	16.3	15.9	16.1	16.3	16.5	16.6	17.0
90°	1.2	3.3	5.5	7.6	9.7	11.6	13.5	15.4	17.3	19.1	20.4
92.5°	28.9	30.4	31.9	33.4	34.9	36.8	39.1	41.3	43.6	45.9	47.6
95°	77.6	78.2	78.7	79.2	79.8	81.4	84.1	86.7	89.4	92.0	93.9
97.5°	129.0	129.2	129.4	129.7	129.9	131.8	135.5	139.2	142.8	146.5	148.2
100°	167.2	167.2	167.2	167.2	167.2	169.0	172.5	175.9	179.4	182.8	185.2
102.5°	208.3	209.5	210.5	211.5	212.6	214.0	215.8	217.5	219.3	221.0	223.6
105°	272.4	273.7	275.0	276.4	277.7	279.2	280.7	282.3	283.9	285.6	287.2
107.5°	343.1	344.4	345.8	347.1	348.4	349.7	350.9	352.1	353.4	354.6	355.4
110°	391.9	393.2	394.5	395.9	397.2	398.2	399.0	399.8	400.6	401.4	402.2



TEST NUMBER: P333719-927

CATALOG NUMBER: S125RDIW-S1090D1560U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	441.6	442.3	443.0	443.6	444.3	445.2	446.2	447.2	448.2	449.2	449.6
115°	514.9	516.0	517.1	518.1	519.2	520.0	520.5	521.0	521.6	522.1	521.8
117.5°	588.5	589.0	589.5	589.9	590.4	590.9	591.4	591.8	592.3	592.9	593.0
120°	634.4	635.7	637.1	638.4	639.7	640.5	640.8	641.0	641.3	641.6	641.6
122.5°	684.1	684.6	685.1	685.6	686.0	686.6	687.3	688.0	688.6	689.4	689.1
125°	751.5	753.0	754.7	756.3	757.9	758.8	759.1	759.3	759.6	759.9	759.3
127.5°	823.2	824.1	825.0	825.9	826.8	827.4	827.8	828.1	828.4	828.7	828.4
130°	866.2	867.5	868.9	870.1	871.5	872.4	873.0	873.5	874.0	874.6	874.3
132.5°	909.2	911.4	913.5	915.8	917.9	918.9	918.9	918.7	918.6	918.5	918.2
135°	977.3	978.9	980.5	982.1	983.7	984.6	984.8	985.2	985.4	985.6	985.6
137.5°	1041.3	1042.9	1044.4	1045.9	1047.5	1048.5	1049.2	1049.7	1050.3	1050.9	1051.2
140°	1082.4	1083.8	1085.1	1086.4	1087.7	1088.8	1089.6	1090.4	1091.2	1092.0	1092.5
142.5°	1123.6	1124.7	1125.8	1126.9	1128.0	1129.0	1130.0	1131.1	1132.1	1133.1	1133.4
145°	1184.0	1185.0	1186.1	1187.2	1188.3	1189.1	1189.9	1190.7	1191.5	1192.3	1192.3
147.5°	1239.9	1240.5	1241.0	1241.7	1242.2	1242.9	1243.5	1244.1	1244.8	1245.4	1246.0
150°	1277.2	1276.9	1276.7	1276.4	1276.1	1276.5	1277.6	1278.7	1279.7	1280.8	1280.8
152.5°	1307.7	1308.1	1308.5	1308.8	1309.2	1309.6	1310.1	1310.5	1310.9	1311.4	1312.0
155°	1354.9	1354.9	1354.9	1354.9	1354.9	1354.9	1355.3	1355.5	1355.7	1356.1	1357.1
157.5°	1396.9	1396.3	1395.7	1395.1	1394.6	1394.4	1394.6	1395.0	1395.2	1395.4	1396.5
160°	1421.7	1420.9	1420.1	1419.4	1418.6	1418.3	1418.6	1418.8	1419.1	1419.4	1420.4
162.5°	1443.8	1443.1	1442.6	1442.0	1441.4	1441.1	1441.1	1441.2	1441.3	1441.3	1442.6
165°	1473.1	1472.6	1472.0	1471.6	1471.0	1470.8	1471.2	1471.4	1471.6	1472.0	1473.0
167.5°	1497.9	1496.9	1495.9	1494.8	1493.7	1493.2	1493.2	1493.2	1493.2	1493.2	1494.8
170°	1511.3	1510.3	1509.2	1508.2	1507.1	1506.6	1506.6	1506.6	1506.6	1506.6	1508.2
172.5°	1520.9	1519.9	1518.8	1517.7	1516.6	1516.2	1516.2	1516.2	1516.2	1516.2	1517.7
175°	1531.7	1530.6	1529.5	1528.4	1527.4	1526.9	1526.9	1526.9	1526.9	1526.9	1528.4
177.5°	1537.2	1536.3	1535.5	1534.6	1533.7	1533.2	1533.0	1532.8	1532.6	1532.4	1533.7
180°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2



TEST NUMBER: P333719-927

CATALOG NUMBER: S125RDIW-S1090D1560U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9	1415.9
2.5°	1411.2	1413.1	1415.0	1415.8	1415.6	1415.5	1415.2	1415.1
5°	1402.5	1404.9	1407.2	1408.2	1407.7	1407.2	1406.8	1406.3
7.5°	1385.1	1386.7	1388.4	1388.9	1388.4	1387.9	1387.3	1386.8
10°	1370.3	1371.0	1371.7	1371.7	1371.0	1370.3	1369.6	1368.9
12.5°	1349.4	1349.9	1350.4	1350.1	1349.0	1348.0	1346.9	1345.8
15°	1314.9	1314.7	1314.5	1313.3	1311.1	1309.0	1306.9	1304.7
17.5°	1271.9	1270.7	1269.6	1268.1	1266.3	1264.6	1262.8	1261.1
20°	1240.3	1239.1	1237.9	1236.3	1234.1	1232.0	1229.9	1227.7
22.5°	1208.9	1206.6	1204.3	1202.2	1200.5	1198.7	1196.9	1195.2
25°	1157.4	1154.3	1151.2	1148.3	1145.7	1143.1	1140.5	1137.9
27.5°	1101.6	1097.3	1093.0	1089.6	1087.0	1084.5	1082.0	1079.5
30°	1061.7	1056.2	1050.8	1046.9	1044.8	1042.7	1040.5	1038.4
32.5°	1022.9	1016.8	1010.8	1006.5	1003.8	1001.1	998.3	995.6
35°	962.6	955.7	948.8	943.7	940.4	937.1	933.7	930.4
37.5°	899.5	891.3	883.0	877.3	874.0	870.8	867.5	864.3
40°	857.8	848.7	839.7	833.8	830.9	828.1	825.2	822.4
42.5°	816.7	807.9	799.3	792.9	788.7	784.6	780.4	776.2
45°	751.0	741.5	732.0	725.4	721.8	718.3	714.7	711.1
47.5°	686.0	676.2	666.5	659.6	655.6	651.6	647.8	643.8
50°	642.0	632.0	622.0	615.3	611.7	608.2	604.6	601.0
52.5°	600.3	589.5	578.8	571.6	568.1	564.5	560.9	557.4
55°	536.9	526.2	515.5	508.2	504.4	500.6	496.8	493.0
57.5°	473.4	463.0	452.5	445.5	442.2	438.8	435.4	432.1
60°	431.4	421.0	410.5	403.5	400.0	396.4	392.8	389.3
62.5°	390.2	380.5	370.8	364.2	360.6	357.0	353.5	349.9
65°	329.6	320.1	310.6	304.0	300.5	296.9	293.3	289.8
67.5°	271.8	263.1	254.4	248.6	245.7	242.9	240.0	237.2
70°	233.4	226.0	218.6	213.5	210.6	207.8	204.9	202.1
72.5°	197.7	190.9	184.1	179.7	177.8	175.9	174.0	172.1
75°	147.8	142.6	137.4	133.9	132.2	130.6	128.9	127.2
77.5°	105.2	101.6	97.8	95.4	94.2	92.9	91.7	90.5
80°	79.1	77.0	74.9	73.5	73.0	72.6	72.1	71.6
82.5°	59.2	58.1	57.2	56.6	56.2	55.9	55.7	55.4
85°	33.7	33.5	33.3	33.0	32.8	32.6	32.3	32.1
87.5°	17.2	17.4	17.7	17.8	17.8	17.7	17.7	17.7
90°	21.8	23.1	24.4	25.5	26.3	27.1	27.9	28.7
92.5°	49.4	51.1	52.9	54.0	54.7	55.2	55.8	56.4
95°	95.7	97.6	99.4	100.6	101.2	101.7	102.2	102.7
97.5°	150.0	151.7	153.4	154.6	154.9	155.2	155.5	155.8
100°	187.6	190.0	192.3	193.8	194.3	194.9	195.4	195.9
102.5°	226.2	228.9	231.4	233.1	233.9	234.6	235.4	236.1
105°	288.8	290.3	291.9	293.1	293.9	294.7	295.5	296.3
107.5°	356.2	357.0	357.7	358.1	358.1	358.1	358.0	357.9
110°	403.1	403.9	404.6	404.9	404.6	404.3	404.1	403.9



TEST NUMBER: P333719-927

CATALOG NUMBER: S125RDIW-S1090D1560U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	450.0	450.4	450.7	450.7	450.2	449.7	449.2	448.8
115°	521.6	521.3	521.0	520.8	520.5	520.2	520.0	519.8
117.5°	593.3	593.5	593.7	593.3	592.2	591.1	590.1	589.0
120°	641.6	641.6	641.6	641.0	640.0	638.9	637.9	636.8
122.5°	689.0	688.7	688.5	688.0	687.1	686.3	685.4	684.6
125°	758.8	758.3	757.7	757.3	757.1	756.8	756.5	756.3
127.5°	828.1	827.9	827.6	827.2	826.6	826.2	825.6	825.1
130°	874.0	873.8	873.5	873.1	872.6	872.0	871.5	871.0
132.5°	918.0	917.7	917.4	917.0	916.2	915.4	914.7	913.9
135°	985.6	985.6	985.6	985.2	984.0	983.0	981.9	980.9
137.5°	1051.5	1051.9	1052.2	1051.7	1050.4	1049.0	1047.7	1046.3
140°	1093.1	1093.6	1094.1	1093.7	1092.4	1091.1	1089.7	1088.4
142.5°	1133.7	1134.0	1134.4	1133.9	1132.5	1131.2	1129.9	1128.5
145°	1192.3	1192.3	1192.3	1191.9	1191.1	1190.3	1189.5	1188.7
147.5°	1246.7	1247.3	1247.9	1247.4	1245.5	1243.7	1242.0	1240.2
150°	1280.8	1280.8	1280.8	1280.5	1279.9	1279.5	1278.9	1278.3
152.5°	1312.6	1313.3	1313.9	1313.8	1312.8	1311.9	1310.9	1310.0
155°	1358.1	1359.2	1360.3	1360.2	1358.8	1357.5	1356.1	1354.9
157.5°	1397.6	1398.7	1399.7	1399.4	1397.6	1395.8	1394.1	1392.3
160°	1421.5	1422.5	1423.6	1423.5	1422.1	1420.8	1419.5	1418.2
162.5°	1443.9	1445.2	1446.4	1446.3	1444.8	1443.2	1441.7	1440.1
165°	1474.0	1475.1	1476.2	1475.9	1474.3	1472.7	1471.2	1469.5
167.5°	1496.4	1497.9	1499.5	1499.5	1497.9	1496.3	1494.6	1492.9
170°	1509.7	1511.3	1512.9	1512.8	1510.9	1509.1	1507.2	1505.4
172.5°	1519.3	1520.9	1522.5	1522.5	1520.8	1519.2	1517.5	1515.9
175°	1530.1	1531.7	1533.3	1533.1	1531.3	1529.4	1527.6	1525.7
177.5°	1534.9	1536.2	1537.5	1537.4	1535.9	1534.4	1532.9	1531.4
180°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2

(END OF REPORT)