

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: P333602-927

Luminaire Tested: **S125RDIP-S1090D1035U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333602-927
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: S125RDIP-S1090D1035U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6183.1 lumens
Efficiency: N/A
Efficacy: 102.2 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

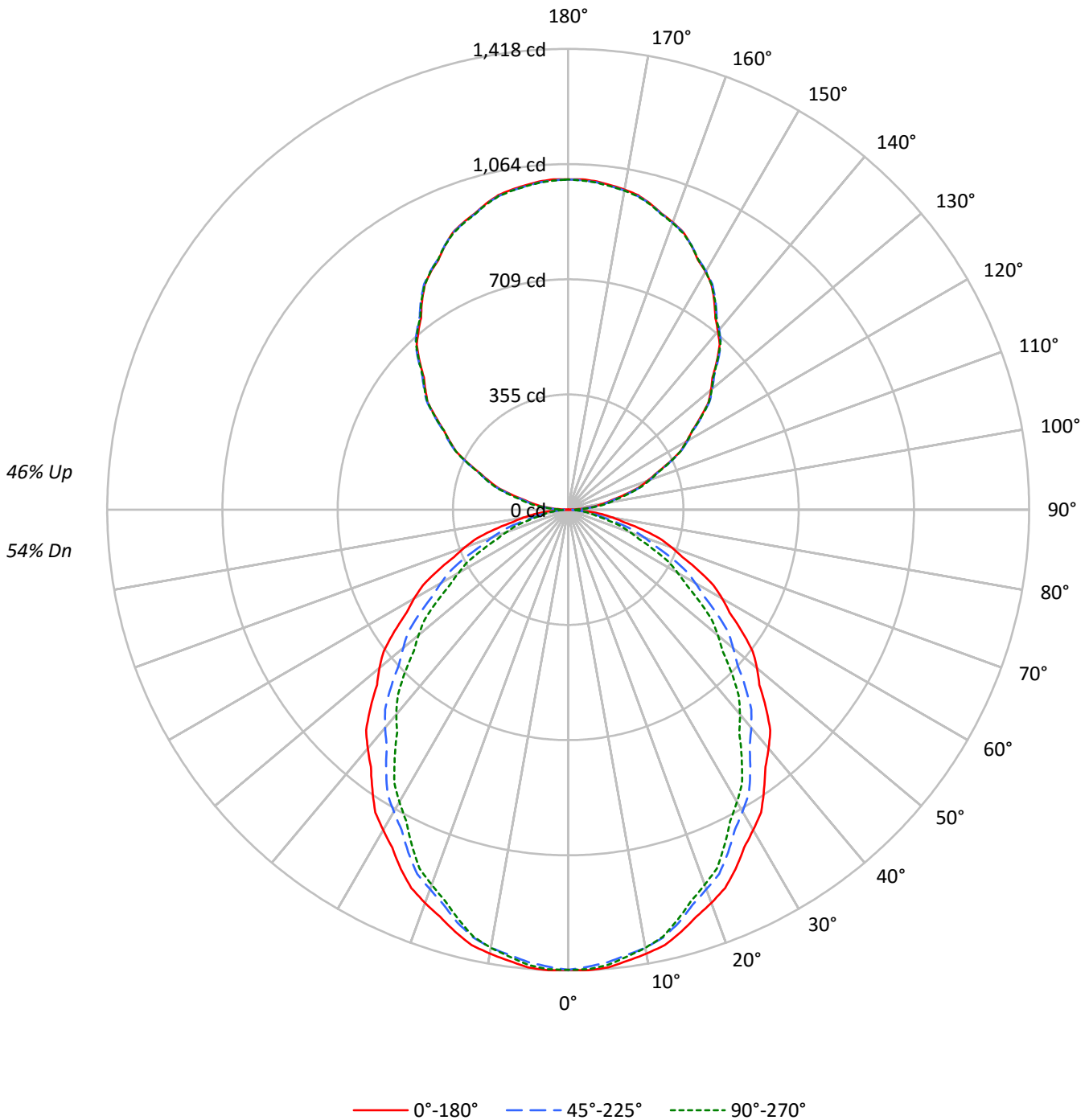
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54
1	99	95	91	87	92	88	85	82	75	73	71	64	62	61	53	52	51	46
2	90	83	77	72	84	77	72	67	66	62	59	56	54	51	47	45	43	39
3	83	73	66	60	76	68	62	57	59	54	50	50	46	43	42	39	37	33
4	76	65	57	51	70	61	54	48	52	47	43	45	41	37	38	35	32	29
5	69	58	50	44	64	54	47	42	47	41	37	40	36	33	34	31	28	25
6	64	52	44	38	59	49	41	36	42	37	32	36	32	29	31	28	25	22
7	59	47	39	34	55	44	37	32	38	33	29	33	29	25	28	25	22	20
8	55	43	35	30	51	40	33	28	35	30	25	30	26	23	26	23	20	18
9	51	39	32	27	48	37	30	25	32	27	23	28	24	20	24	21	18	16
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	22	19	16	15

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	2.2
10°-20°	372.1	6.0
20°-30°	539.6	8.7
30°-40°	614.9	9.9
40°-50°	599.4	9.7
50°-60°	504.6	8.2
60°-70°	353.7	5.7
70°-80°	181.8	2.9
80°-90°	48.1	0.8
90°-100°	68.1	1.1
100°-110°	201.0	3.3
110°-120°	340.5	5.5
120°-130°	448.1	7.2
130°-140°	502.1	8.1
140°-150°	492.1	8.0
150°-160°	413.3	6.7
160°-170°	274.7	4.4
170°-180°	96.1	1.6
0°-30°	1044.8	16.9
0°-40°	1659.7	26.8
0°-60°	2763.6	44.7
0°-90°	3347.2	54.1
90°-120°	609.5	9.9
90°-150°	2051.7	33.2
90°-180°	2836.0	45.9
0°-180°	6183.1	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	7	13	17	19	6
95°	51	53	61	66	68	55
105°	180	184	189	194	196	193
115°	341	344	346	345	344	337
125°	498	502	503	501	501	445
135°	647	652	652	652	649	498
145°	784	787	789	789	787	490
155°	897	897	898	900	897	413
165°	975	974	974	977	973	275
175°	1014	1011	1011	1015	1010	96
180°	1016	1016	1016	1016	1016	



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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°	19.8	18.8	17.7	16.7	15.6	15.1	15.2	15.3	15.3	15.4	15.5
90°	0.8	2.2	3.6	5.0	6.4	7.8	9.0	10.2	11.4	12.7	13.5
92.5°	19.2	20.1	21.1	22.1	23.1	24.3	25.8	27.3	28.8	30.3	31.5
95°	51.4	51.7	52.1	52.4	52.8	53.9	55.6	57.4	59.2	60.9	62.1
97.5°	85.4	85.6	85.7	85.9	86.0	87.3	89.7	92.1	94.5	97.0	98.2
100°	110.7	110.7	110.7	110.7	110.7	111.9	114.2	116.5	118.7	121.0	122.6
102.5°	137.9	138.6	139.3	140.1	140.8	141.6	142.8	144.0	145.1	146.3	148.1
105°	180.3	181.2	182.0	183.0	183.9	184.8	185.8	186.9	188.0	189.0	190.0
107.5°	227.1	228.0	228.9	229.8	230.7	231.5	232.3	233.1	233.9	234.7	235.3
110°	259.4	260.3	261.2	262.1	262.9	263.6	264.1	264.7	265.2	265.7	266.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	292.3	292.8	293.2	293.7	294.1	294.7	295.4	296.0	296.7	297.4	297.6
115°	340.9	341.6	342.3	343.0	343.6	344.2	344.5	344.9	345.2	345.6	345.5
117.5°	389.6	389.9	390.2	390.5	390.9	391.2	391.5	391.8	392.1	392.4	392.6
120°	419.9	420.8	421.7	422.6	423.5	424.0	424.1	424.4	424.5	424.7	424.7
122.5°	452.9	453.2	453.5	453.8	454.2	454.5	455.0	455.4	455.9	456.3	456.2
125°	497.5	498.5	499.6	500.7	501.7	502.3	502.5	502.6	502.8	503.0	502.6
127.5°	544.9	545.5	546.1	546.7	547.3	547.7	548.0	548.1	548.3	548.6	548.3
130°	573.4	574.3	575.1	576.0	576.9	577.5	577.9	578.2	578.5	578.9	578.8
132.5°	601.8	603.3	604.8	606.2	607.6	608.3	608.2	608.2	608.1	608.0	607.8
135°	647.0	648.0	649.0	650.1	651.2	651.8	652.0	652.1	652.3	652.4	652.4
137.5°	689.4	690.3	691.3	692.4	693.4	694.1	694.5	694.9	695.3	695.6	695.9
140°	716.5	717.4	718.3	719.1	720.0	720.7	721.3	721.8	722.3	722.9	723.2
142.5°	743.7	744.5	745.2	745.9	746.7	747.4	748.1	748.8	749.4	750.0	750.3
145°	783.8	784.5	785.1	785.8	786.6	787.2	787.7	788.2	788.8	789.3	789.3
147.5°	820.8	821.2	821.6	822.0	822.3	822.8	823.2	823.6	823.9	824.4	824.8
150°	845.4	845.3	845.1	844.9	844.8	845.0	845.7	846.4	847.1	847.8	847.8
152.5°	865.7	865.9	866.2	866.4	866.6	867.0	867.2	867.5	867.8	868.1	868.5
155°	896.8	896.8	896.8	896.8	896.8	896.9	897.1	897.3	897.5	897.6	898.3
157.5°	924.7	924.3	923.9	923.5	923.1	923.1	923.2	923.4	923.6	923.8	924.5
160°	941.1	940.6	940.1	939.5	939.1	938.9	939.1	939.2	939.4	939.5	940.2
162.5°	955.7	955.3	954.9	954.5	954.2	953.9	954.0	954.0	954.1	954.1	955.0
165°	975.2	974.8	974.5	974.1	973.8	973.7	973.8	974.0	974.1	974.4	975.1
167.5°	991.6	990.9	990.2	989.5	988.8	988.4	988.4	988.4	988.4	988.4	989.5
170°	1000.4	999.7	999.0	998.4	997.7	997.3	997.3	997.3	997.3	997.3	998.4
172.5°	1006.8	1006.1	1005.4	1004.6	1004.0	1003.6	1003.6	1003.6	1003.6	1003.6	1004.6
175°	1013.9	1013.2	1012.5	1011.8	1011.1	1010.7	1010.7	1010.7	1010.7	1010.7	1011.8
177.5°	1017.6	1017.0	1016.4	1015.8	1015.3	1014.9	1014.8	1014.6	1014.5	1014.4	1015.3
180°	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3



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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°	15.7	15.9	16.1	16.1	16.0	15.9	15.8	15.8
90°	14.4	15.3	16.2	16.9	17.4	17.9	18.5	19.0
92.5°	32.7	33.8	35.0	35.8	36.2	36.5	36.9	37.3
95°	63.4	64.6	65.8	66.6	66.9	67.3	67.7	68.0
97.5°	99.3	100.4	101.6	102.3	102.5	102.7	102.9	103.1
100°	124.1	125.7	127.3	128.3	128.7	129.0	129.4	129.7
102.5°	149.7	151.5	153.2	154.3	154.8	155.3	155.8	156.3
105°	191.2	192.2	193.2	194.0	194.6	195.1	195.6	196.1
107.5°	235.8	236.3	236.9	237.1	237.0	237.0	237.0	236.9
110°	266.8	267.3	267.8	268.0	267.8	267.7	267.5	267.3



TEST NUMBER: P333602-927

CATALOG NUMBER: S125RDIP-S1090D1035U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	297.9	298.1	298.3	298.3	298.0	297.7	297.4	297.1
115°	345.2	345.1	344.9	344.8	344.5	344.4	344.2	344.0
117.5°	392.7	392.8	393.0	392.7	392.0	391.3	390.6	389.9
120°	424.7	424.7	424.7	424.4	423.7	422.9	422.2	421.5
122.5°	456.1	455.9	455.7	455.4	454.9	454.3	453.8	453.2
125°	502.3	501.9	501.6	501.3	501.1	501.0	500.8	500.7
127.5°	548.2	548.0	547.9	547.6	547.2	546.8	546.5	546.2
130°	578.5	578.4	578.2	578.0	577.6	577.3	576.9	576.6
132.5°	607.7	607.5	607.3	607.0	606.5	606.0	605.5	605.0
135°	652.4	652.4	652.4	652.1	651.4	650.7	650.0	649.3
137.5°	696.1	696.2	696.5	696.2	695.3	694.4	693.6	692.7
140°	723.6	723.9	724.3	724.0	723.1	722.2	721.4	720.5
142.5°	750.5	750.7	750.9	750.6	749.7	748.8	748.0	747.0
145°	789.3	789.3	789.3	789.0	788.5	788.0	787.4	787.0
147.5°	825.2	825.7	826.1	825.7	824.5	823.3	822.1	820.9
150°	847.8	847.8	847.8	847.6	847.3	846.9	846.6	846.2
152.5°	868.9	869.3	869.7	869.7	869.0	868.4	867.8	867.1
155°	899.0	899.8	900.5	900.4	899.5	898.6	897.7	896.8
157.5°	925.1	925.8	926.5	926.3	925.2	924.0	922.8	921.7
160°	941.0	941.7	942.4	942.3	941.4	940.6	939.7	938.7
162.5°	955.8	956.6	957.5	957.4	956.4	955.4	954.3	953.3
165°	975.7	976.4	977.2	977.0	976.0	974.9	973.8	972.8
167.5°	990.5	991.6	992.7	992.6	991.6	990.5	989.4	988.2
170°	999.4	1000.4	1001.5	1001.4	1000.2	998.9	997.8	996.5
172.5°	1005.8	1006.8	1007.8	1007.8	1006.7	1005.7	1004.6	1003.5
175°	1012.9	1013.9	1014.9	1014.9	1013.7	1012.4	1011.1	1010.0
177.5°	1016.1	1016.9	1017.7	1017.7	1016.7	1015.7	1014.7	1013.8
180°	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3

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