

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: P333572

Luminaire Tested: **S125RDIP-S850D1035U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333572
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-S850D1035U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 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: 6831.1 lumens
Efficiency: N/A
Efficacy: 131.4 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

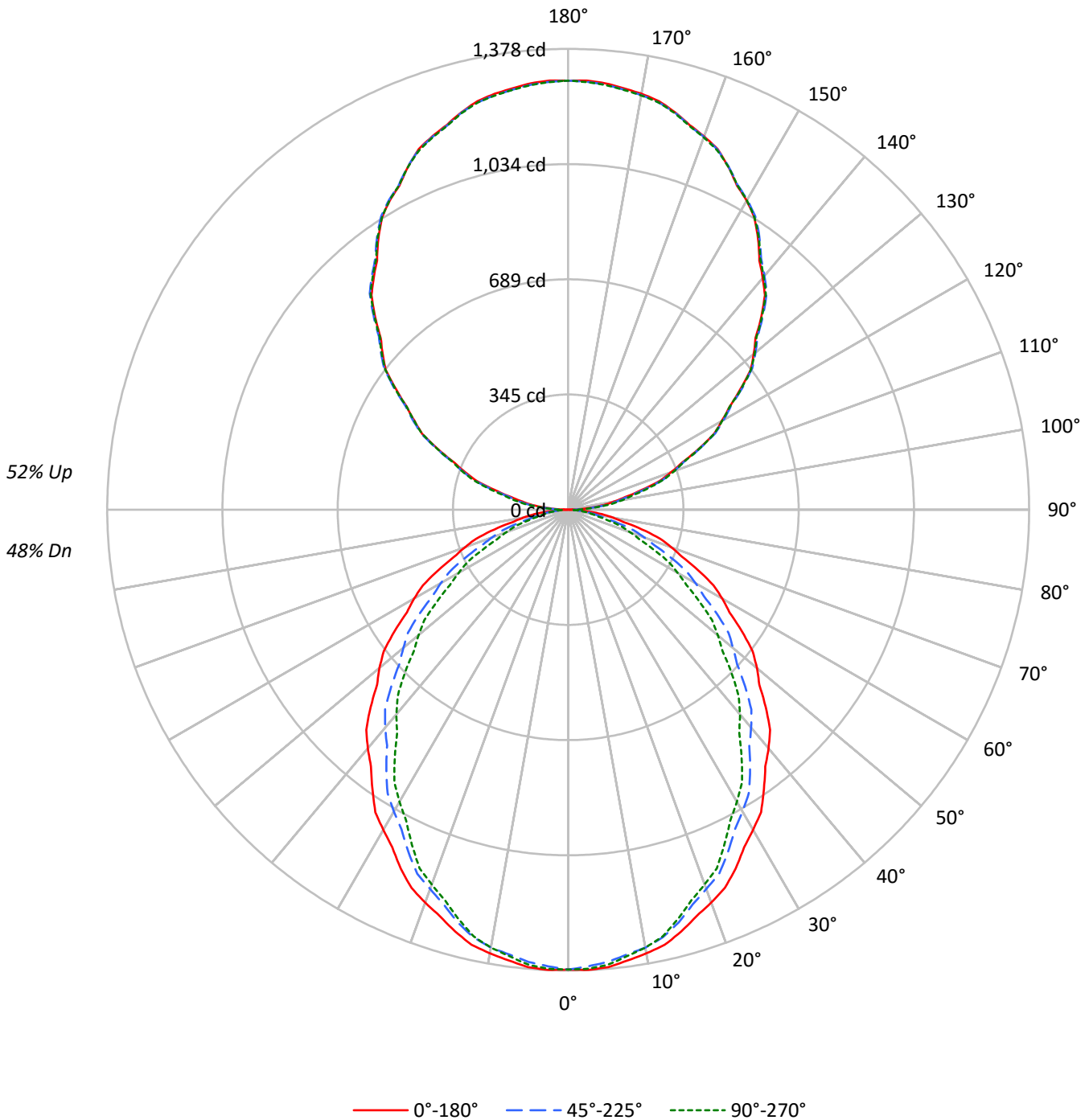
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48				48
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	48	47	46				41	
2	89	82	76	71	82	75	70	66	63	60	56	53	50	47	42	41	39				34	
3	81	72	65	59	74	66	60	55	56	51	48	47	43	40	38	35	33				29	
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	31	29				25	
5	68	57	49	43	63	53	46	40	45	39	35	37	33	30	31	28	25				22	
6	63	51	43	37	58	47	40	35	40	35	31	34	30	27	28	25	22				19	
7	58	46	38	33	53	43	36	31	37	31	27	31	27	24	25	22	20				17	
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18				16	
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	18	16				14	
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15				13	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8881	8881	8881
5°	8901	8800	8854
10°	8834	8718	8718
15°	8729	8541	8471
20°	8594	8294	8194
25°	8437	8052	7874
30°	8240	7768	7520
35°	8041	7476	7123
40°	7854	7171	6734
45°	7626	6830	6308
50°	7398	6459	5865
55°	7133	6104	5391
60°	6868	5674	4883
65°	6554	5174	4300
70°	6197	4549	3707
75°	5702	3835	3084
80°	5021	3013	2589
85°	4231	2460	2312



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.3	1.9
10°-20°	361.3	5.3
20°-30°	524.0	7.7
30°-40°	597.2	8.7
40°-50°	582.1	8.5
50°-60°	490.0	7.2
60°-70°	343.5	5.0
70°-80°	176.6	2.6
80°-90°	47.4	0.7
90°-100°	85.9	1.3
100°-110°	253.7	3.7
110°-120°	429.8	6.3
120°-130°	565.6	8.3
130°-140°	633.8	9.3
140°-150°	621.1	9.1
150°-160°	521.7	7.6
160°-170°	346.8	5.1
170°-180°	121.4	1.8
0°-30°	1014.6	14.9
0°-40°	1611.8	23.6
0°-60°	2683.9	39.3
0°-90°	3251.3	47.6
90°-120°	769.4	11.3
90°-150°	2589.9	37.9
90°-180°	3580.0	52.4
0°-180°	6831.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1375	1375	1375	1375	1375	
5°	1373	1368	1357	1367	1366	130
15°	1306	1298	1277	1276	1267	368
25°	1184	1167	1130	1117	1105	545
35°	1020	994	948	919	904	638
45°	835	803	748	708	691	644
55°	634	599	542	497	479	566
65°	429	392	339	298	281	425
75°	228	197	154	132	124	242
85°	57	39	33	32	31	64
90°	1	9	16	21	24	6
95°	65	67	77	84	86	69
105°	228	233	239	244	248	243
115°	430	434	436	435	434	425
125°	628	634	635	633	632	562
135°	817	822	824	823	820	629
145°	989	993	996	996	993	618
155°	1132	1132	1133	1137	1132	521
165°	1231	1229	1230	1233	1228	347
175°	1280	1276	1276	1281	1275	122
180°	1283	1283	1283	1283	1283	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1375.1	1375.1	1375.1	1375.1	1375.1	1375.1	1375.1	1375.1	1375.1	1375.1	1375.1
2.5°	1377.5	1377.0	1376.4	1375.9	1375.3	1374.1	1372.3	1370.4	1368.6	1366.7	1368.6
5°	1373.0	1372.1	1371.1	1370.2	1369.3	1367.6	1365.0	1362.5	1359.9	1357.4	1359.7
7.5°	1359.5	1358.6	1357.7	1356.8	1356.0	1354.0	1351.0	1347.9	1344.9	1341.8	1343.4
10°	1347.0	1346.3	1345.6	1344.9	1344.2	1342.3	1339.1	1335.8	1332.6	1329.4	1330.0
12.5°	1332.9	1332.0	1331.1	1330.3	1329.4	1326.8	1322.4	1318.1	1313.8	1309.4	1309.9
15°	1305.5	1304.1	1302.7	1301.3	1299.9	1296.8	1292.0	1287.1	1282.3	1277.4	1277.2
17.5°	1274.5	1272.4	1270.3	1268.2	1266.0	1261.9	1255.8	1249.7	1243.6	1237.5	1236.4
20°	1250.4	1248.1	1245.8	1243.5	1241.2	1236.3	1229.0	1221.6	1214.2	1206.8	1205.7
22.5°	1223.8	1221.5	1219.2	1216.9	1214.6	1209.6	1201.8	1194.1	1186.3	1178.6	1176.3
25°	1184.0	1180.5	1177.0	1173.6	1170.1	1164.1	1155.6	1147.0	1138.5	1130.0	1127.0
27.5°	1138.3	1134.1	1129.9	1125.7	1121.5	1114.8	1105.7	1096.5	1087.4	1078.2	1074.0
30°	1105.0	1100.6	1096.3	1091.9	1087.5	1080.4	1070.8	1061.1	1051.4	1041.7	1036.4
32.5°	1072.6	1067.5	1062.4	1057.3	1052.1	1044.6	1034.8	1024.9	1015.0	1005.1	999.3
35°	1019.9	1014.3	1008.8	1003.2	997.7	989.7	979.4	969.0	958.6	948.2	941.5
37.5°	968.1	961.4	954.7	947.9	941.2	932.5	921.8	911.0	900.3	889.6	881.6
40°	931.6	924.7	917.7	910.8	903.9	894.9	883.8	872.7	861.7	850.6	841.8
42.5°	893.4	886.3	879.2	872.0	864.9	855.7	844.2	832.8	821.3	809.9	801.5
45°	835.0	828.3	821.6	814.9	808.2	798.5	785.8	773.2	760.5	747.8	738.5
47.5°	774.6	767.5	760.4	753.4	746.3	736.4	723.6	710.8	698.0	685.2	675.7
50°	736.3	728.7	721.1	713.5	705.9	695.5	682.3	669.2	656.0	642.9	633.2
52.5°	694.8	687.0	679.2	671.4	663.6	653.5	641.1	628.7	616.2	603.8	593.4
55°	633.5	626.1	618.8	611.4	604.0	593.8	580.9	568.0	555.1	542.1	531.7
57.5°	571.6	563.7	555.8	547.9	540.1	529.9	517.4	504.9	492.5	480.0	469.9
60°	531.7	523.7	515.6	507.5	499.4	489.2	476.7	464.2	451.8	439.3	429.2
62.5°	489.4	481.7	474.0	466.2	458.5	448.4	435.7	423.1	410.4	397.8	388.4
65°	428.9	421.1	413.2	405.4	397.5	387.5	375.3	363.0	350.8	338.6	329.3
67.5°	368.9	361.0	353.2	345.4	337.5	327.7	316.0	304.3	292.6	280.8	272.4
70°	328.2	320.3	312.5	304.6	296.8	287.1	275.6	264.0	252.5	240.9	233.8
72.5°	288.3	280.6	273.0	265.3	257.7	248.4	237.6	226.8	216.0	205.2	198.6
75°	228.5	221.6	214.6	207.7	200.8	192.5	182.8	173.1	163.4	153.7	148.6
77.5°	169.1	163.5	158.0	152.5	146.9	140.3	132.5	124.8	117.0	109.3	105.7
80°	135.0	129.5	123.9	118.4	112.9	106.9	100.4	93.9	87.5	81.0	78.9
82.5°	101.8	96.8	91.8	86.8	81.8	77.1	72.7	68.3	63.8	59.4	58.4
85°	57.1	53.0	48.8	44.7	40.5	37.8	36.7	35.5	34.4	33.2	33.0
87.5°	19.3	18.4	17.4	16.5	15.6	15.2	15.3	15.4	15.5	15.7	15.9
90°	1.0	2.8	4.5	6.3	8.1	9.8	11.3	12.9	14.4	16.0	17.1
92.5°	24.2	25.4	26.6	27.9	29.1	30.7	32.6	34.5	36.4	38.3	39.8
95°	64.9	65.3	65.8	66.2	66.7	68.0	70.2	72.4	74.7	76.9	78.4
97.5°	107.8	108.0	108.2	108.4	108.5	110.2	113.2	116.3	119.3	122.4	123.9
100°	139.8	139.8	139.8	139.8	139.8	141.2	144.1	147.0	149.9	152.7	154.7
102.5°	174.1	175.0	175.9	176.8	177.7	178.8	180.3	181.8	183.2	184.7	186.9
105°	227.6	228.7	229.8	231.0	232.1	233.3	234.6	235.9	237.3	238.6	239.9
107.5°	286.7	287.8	288.9	290.1	291.2	292.2	293.2	294.3	295.3	296.3	297.0
110°	327.5	328.6	329.7	330.8	331.9	332.8	333.4	334.1	334.8	335.4	336.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	369.0	369.6	370.1	370.7	371.3	372.0	372.9	373.7	374.5	375.4	375.7
115°	430.3	431.2	432.1	433.0	433.8	434.5	434.9	435.4	435.8	436.3	436.1
117.5°	491.8	492.2	492.6	493.0	493.4	493.8	494.2	494.6	495.0	495.4	495.6
120°	530.1	531.2	532.3	533.5	534.6	535.2	535.4	535.7	535.9	536.1	536.1
122.5°	571.7	572.1	572.5	572.9	573.3	573.7	574.3	574.9	575.5	576.0	575.9
125°	628.0	629.3	630.6	632.0	633.3	634.1	634.3	634.5	634.7	635.0	634.5
127.5°	687.9	688.6	689.4	690.1	690.9	691.4	691.7	691.9	692.2	692.5	692.2
130°	723.8	724.9	726.0	727.1	728.2	729.0	729.5	729.9	730.3	730.8	730.6
132.5°	759.7	761.6	763.4	765.2	767.0	767.9	767.8	767.7	767.6	767.5	767.3
135°	816.7	818.0	819.3	820.6	822.0	822.8	823.0	823.2	823.4	823.6	823.6
137.5°	870.2	871.4	872.7	874.0	875.3	876.2	876.7	877.2	877.7	878.1	878.4
140°	904.5	905.6	906.7	907.8	908.9	909.8	910.5	911.2	911.8	912.5	912.9
142.5°	938.8	939.8	940.7	941.6	942.6	943.5	944.3	945.2	946.0	946.8	947.1
145°	989.4	990.3	991.1	992.0	992.9	993.7	994.4	995.0	995.7	996.4	996.4
147.5°	1036.1	1036.6	1037.1	1037.6	1038.0	1038.6	1039.1	1039.6	1040.1	1040.7	1041.2
150°	1067.2	1067.0	1066.8	1066.6	1066.4	1066.7	1067.6	1068.5	1069.3	1070.2	1070.2
152.5°	1092.8	1093.1	1093.4	1093.7	1094.0	1094.4	1094.7	1095.1	1095.4	1095.8	1096.3
155°	1132.1	1132.1	1132.1	1132.1	1132.1	1132.2	1132.5	1132.7	1132.9	1133.1	1134.0
157.5°	1167.3	1166.8	1166.3	1165.8	1165.3	1165.2	1165.4	1165.6	1165.9	1166.1	1167.0
160°	1188.0	1187.4	1186.7	1186.0	1185.4	1185.2	1185.4	1185.6	1185.8	1186.0	1186.9
162.5°	1206.4	1205.9	1205.4	1204.9	1204.5	1204.2	1204.3	1204.3	1204.4	1204.4	1205.5
165°	1231.0	1230.5	1230.1	1229.6	1229.2	1229.1	1229.3	1229.5	1229.7	1230.0	1230.9
167.5°	1251.7	1250.8	1250.0	1249.1	1248.2	1247.7	1247.7	1247.7	1247.7	1247.7	1249.1
170°	1262.9	1262.0	1261.1	1260.3	1259.4	1258.9	1258.9	1258.9	1258.9	1258.9	1260.3
172.5°	1270.9	1270.0	1269.1	1268.2	1267.4	1266.9	1266.9	1266.9	1266.9	1266.9	1268.2
175°	1279.9	1279.0	1278.1	1277.2	1276.3	1275.9	1275.9	1275.9	1275.9	1275.9	1277.2
177.5°	1284.5	1283.8	1283.1	1282.3	1281.6	1281.2	1281.0	1280.8	1280.7	1280.5	1281.6
180°	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1375.1	1375.1	1375.1	1375.1	1375.1	1375.1	1375.1	1375.1
2.5°	1370.4	1372.3	1374.1	1375.0	1374.8	1374.6	1374.4	1374.2
5°	1362.0	1364.3	1366.6	1367.6	1367.1	1366.6	1366.2	1365.7
7.5°	1345.1	1346.7	1348.3	1348.8	1348.3	1347.8	1347.3	1346.8
10°	1330.7	1331.4	1332.1	1332.1	1331.4	1330.7	1330.0	1329.4
12.5°	1310.4	1310.9	1311.4	1311.2	1310.1	1309.0	1308.0	1306.9
15°	1277.0	1276.7	1276.5	1275.4	1273.3	1271.2	1269.1	1267.0
17.5°	1235.2	1234.1	1232.9	1231.5	1229.8	1228.1	1226.4	1224.7
20°	1204.5	1203.3	1202.2	1200.6	1198.5	1196.4	1194.3	1192.3
22.5°	1174.0	1171.8	1169.5	1167.5	1165.8	1164.1	1162.4	1160.7
25°	1124.0	1121.0	1118.0	1115.2	1112.6	1110.1	1107.6	1105.0
27.5°	1069.8	1065.6	1061.4	1058.1	1055.7	1053.2	1050.8	1048.3
30°	1031.1	1025.8	1020.4	1016.8	1014.7	1012.6	1010.5	1008.4
32.5°	993.4	987.5	981.7	977.4	974.8	972.2	969.5	966.9
35°	934.8	928.1	921.4	916.5	913.2	910.0	906.8	903.5
37.5°	873.6	865.5	857.5	851.9	848.8	845.6	842.5	839.4
40°	833.0	824.3	815.5	809.7	807.0	804.2	801.4	798.7
42.5°	793.1	784.7	776.3	770.0	766.0	761.9	757.8	753.8
45°	729.3	720.1	710.8	704.5	701.0	697.6	694.1	690.6
47.5°	666.2	656.7	647.2	640.5	636.7	632.9	629.0	625.2
50°	623.5	613.8	604.1	597.5	594.1	590.6	587.1	583.7
52.5°	583.0	572.5	562.1	555.1	551.7	548.2	544.8	541.3
55°	521.4	511.0	500.6	493.5	489.9	486.2	482.5	478.8
57.5°	459.7	449.6	439.4	432.7	429.4	426.1	422.9	419.6
60°	419.0	408.8	398.7	391.9	388.4	385.0	381.5	378.0
62.5°	378.9	369.5	360.1	353.7	350.2	346.7	343.3	339.8
65°	320.1	310.9	301.6	295.3	291.8	288.4	284.9	281.4
67.5°	263.9	255.5	247.0	241.4	238.7	235.9	233.1	230.4
70°	226.6	219.5	212.3	207.4	204.6	201.8	199.1	196.3
72.5°	192.0	185.4	178.8	174.6	172.7	170.9	169.1	167.2
75°	143.6	138.5	133.4	130.1	128.4	126.8	125.2	123.6
77.5°	102.1	98.6	95.0	92.7	91.5	90.3	89.1	87.9
80°	76.9	74.8	72.7	71.4	71.0	70.5	70.0	69.6
82.5°	57.5	56.5	55.5	54.9	54.6	54.4	54.1	53.8
85°	32.8	32.5	32.3	32.1	31.8	31.6	31.4	31.2
87.5°	16.1	16.3	16.5	16.6	16.6	16.5	16.5	16.4
90°	18.2	19.3	20.4	21.3	22.0	22.6	23.3	24.0
92.5°	41.3	42.7	44.2	45.2	45.7	46.1	46.6	47.1
95°	80.0	81.5	83.1	84.1	84.5	85.0	85.4	85.9
97.5°	125.3	126.8	128.3	129.1	129.4	129.7	129.9	130.2
100°	156.7	158.7	160.7	162.0	162.4	162.8	163.3	163.7
102.5°	189.0	191.2	193.4	194.8	195.4	196.0	196.7	197.3
105°	241.3	242.6	243.9	244.9	245.6	246.3	246.9	247.6
107.5°	297.6	298.3	299.0	299.3	299.2	299.2	299.2	299.1
110°	336.8	337.4	338.1	338.3	338.1	337.9	337.7	337.4



TEST NUMBER: P333572

CATALOG NUMBER: S125RDIP-S850D1035U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	376.0	376.3	376.6	376.6	376.2	375.8	375.4	375.0
115°	435.8	435.6	435.4	435.2	434.9	434.7	434.5	434.3
117.5°	495.7	495.9	496.1	495.7	494.8	494.0	493.1	492.2
120°	536.1	536.1	536.1	535.7	534.8	533.9	533.0	532.1
122.5°	575.7	575.5	575.3	574.9	574.2	573.5	572.8	572.1
125°	634.1	633.6	633.2	632.8	632.6	632.4	632.2	632.0
127.5°	692.0	691.8	691.6	691.2	690.8	690.3	689.9	689.5
130°	730.3	730.1	729.9	729.6	729.1	728.7	728.2	727.8
132.5°	767.1	766.9	766.6	766.2	765.6	765.0	764.4	763.7
135°	823.6	823.6	823.6	823.2	822.3	821.4	820.5	819.6
137.5°	878.7	878.9	879.2	878.8	877.7	876.6	875.5	874.4
140°	913.4	913.8	914.3	913.9	912.8	911.7	910.6	909.5
142.5°	947.4	947.6	947.9	947.5	946.4	945.3	944.2	943.0
145°	996.4	996.4	996.4	996.0	995.4	994.7	994.0	993.4
147.5°	1041.7	1042.3	1042.8	1042.3	1040.8	1039.3	1037.8	1036.3
150°	1070.2	1070.2	1070.2	1070.0	1069.6	1069.1	1068.7	1068.2
152.5°	1096.9	1097.4	1097.9	1097.8	1097.0	1096.2	1095.4	1094.6
155°	1134.9	1135.8	1136.7	1136.6	1135.5	1134.3	1133.2	1132.1
157.5°	1167.8	1168.7	1169.6	1169.3	1167.9	1166.4	1164.9	1163.5
160°	1187.8	1188.7	1189.6	1189.5	1188.4	1187.3	1186.2	1185.0
162.5°	1206.5	1207.6	1208.7	1208.6	1207.3	1206.0	1204.7	1203.4
165°	1231.7	1232.6	1233.5	1233.3	1232.0	1230.6	1229.3	1228.0
167.5°	1250.4	1251.7	1253.1	1253.0	1251.7	1250.3	1248.9	1247.5
170°	1261.6	1262.9	1264.2	1264.1	1262.6	1261.0	1259.5	1257.9
172.5°	1269.6	1270.9	1272.2	1272.2	1270.8	1269.5	1268.1	1266.7
175°	1278.6	1279.9	1281.2	1281.1	1279.6	1278.0	1276.4	1274.9
177.5°	1282.6	1283.7	1284.7	1284.7	1283.4	1282.2	1280.9	1279.7
180°	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9	1282.9

(END OF REPORT)