

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: P333571

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333571
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: S125RDIP-S850D1035U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7387.5 lumens
Efficiency: N/A
Efficacy: 142.1 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

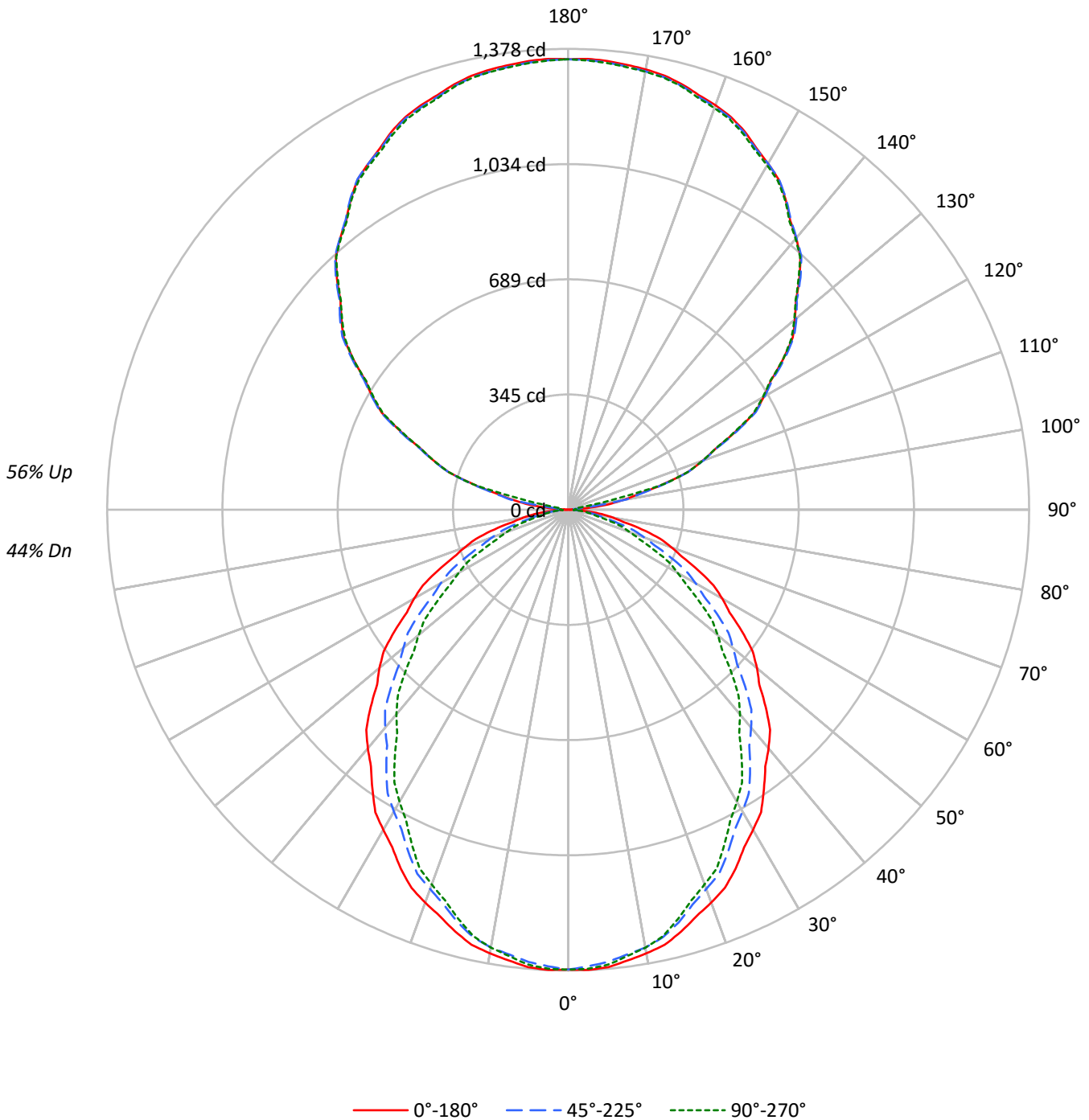
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	0		
RCR																										
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44					44			
1	97	92	89	85	88	85	82	79	70	68	66	57	56	54	45	44	43	37					37			
2	88	81	75	70	80	74	69	65	62	58	55	50	48	46	40	38	37	32					32			
3	80	71	64	58	73	66	59	54	55	50	46	45	41	39	35	33	31	27					27			
4	74	63	55	49	67	58	51	46	49	44	40	40	36	33	32	29	27	23					23			
5	68	56	48	42	62	52	45	40	44	38	34	36	32	29	29	26	24	20					20			
6	62	50	43	37	57	47	40	34	39	34	30	32	28	25	26	23	21	18					18			
7	58	46	38	32	53	42	35	30	36	30	26	30	26	22	24	21	19	16					16			
8	53	41	34	29	49	38	32	27	33	27	23	27	23	20	22	19	17	14					14			
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	20	17	15	13					13			
10	46	35	28	23	43	32	26	21	27	22	19	23	19	16	19	16	14	12					12			

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	1.8
10°-20°	361.3	4.9
20°-30°	524.0	7.1
30°-40°	597.2	8.1
40°-50°	582.1	7.9
50°-60°	490.0	6.6
60°-70°	343.5	4.6
70°-80°	176.6	2.4
80°-90°	47.4	0.6
90°-100°	49.0	0.7
100°-110°	301.7	4.1
110°-120°	547.1	7.4
120°-130°	702.2	9.5
130°-140°	755.2	10.2
140°-150°	708.9	9.6
150°-160°	573.4	7.8
160°-170°	370.9	5.0
170°-180°	127.9	1.7
0°-30°	1014.6	13.7
0°-40°	1611.8	21.8
0°-60°	2683.9	36.3
0°-90°	3251.3	44.0
90°-120°	897.7	12.2
90°-150°	3064.0	41.5
90°-180°	4136.0	56.0
0°-180°	7387.5	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	5
95°	57	52	16	21	21	73
105°	294	297	298	297	296	311
115°	551	556	557	553	547	546
125°	784	790	791	787	784	700
135°	978	983	982	979	974	753
145°	1133	1135	1135	1136	1130	708
155°	1248	1243	1244	1246	1239	575
165°	1317	1311	1312	1317	1310	372
175°	1347	1341	1342	1349	1341	128
180°	1347	1347	1347	1347	1347	



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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°	15.4	14.1	12.9	11.6	10.4	10.5	11.8	13.2	14.6	16.0	17.1
95°	56.9	56.2	55.6	54.9	54.3	49.7	41.3	32.8	24.4	16.0	17.1
97.5°	118.8	120.0	121.2	122.4	123.6	115.9	99.2	82.5	65.8	49.1	42.9
100°	166.7	167.4	168.1	168.7	169.4	170.2	171.1	172.0	172.8	173.7	140.7
102.5°	215.5	216.3	217.2	218.0	218.8	219.5	220.1	220.6	221.1	221.7	215.4
105°	293.5	294.4	295.3	296.2	297.1	297.5	297.5	297.5	297.5	297.5	297.5
107.5°	374.6	374.6	374.6	374.6	374.6	374.8	375.3	375.7	376.2	376.6	376.7
110°	427.3	427.3	427.3	427.3	427.3	427.6	428.0	428.5	428.9	429.3	428.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	476.9	477.4	477.9	478.5	479.0	479.4	479.7	479.9	480.2	480.5	479.6
115°	551.2	552.3	553.4	554.5	555.6	556.3	556.5	556.7	556.9	557.1	556.3
117.5°	628.0	628.0	627.9	627.9	627.9	628.3	629.1	629.9	630.8	631.6	630.5
120°	676.0	675.7	675.5	675.3	675.1	675.3	676.0	676.6	677.3	678.0	677.5
122.5°	718.3	719.1	720.0	720.8	721.7	722.2	722.6	722.9	723.2	723.5	723.0
125°	783.8	785.3	786.9	788.5	790.0	790.8	790.8	790.8	790.8	790.8	789.9
127.5°	846.3	847.4	848.5	849.6	850.7	851.2	851.1	851.0	850.8	850.7	850.2
130°	884.6	885.8	886.9	888.0	889.1	889.7	890.0	890.2	890.4	890.6	890.0
132.5°	923.0	924.3	925.6	926.8	928.1	928.5	928.0	927.6	927.1	926.6	926.4
135°	977.5	978.8	980.2	981.5	982.8	983.3	982.8	982.4	981.9	981.5	981.0
137.5°	1027.6	1028.8	1029.9	1031.1	1032.2	1032.6	1032.2	1031.8	1031.4	1031.0	1031.1
140°	1060.4	1060.8	1061.3	1061.7	1062.1	1062.3	1062.0	1061.8	1061.6	1061.4	1061.8
142.5°	1089.9	1090.2	1090.5	1090.7	1091.0	1091.3	1091.6	1091.9	1092.2	1092.5	1092.6
145°	1133.3	1133.7	1134.1	1134.6	1135.0	1135.3	1135.3	1135.3	1135.3	1135.3	1135.5
147.5°	1171.2	1171.1	1171.0	1170.9	1170.8	1170.9	1171.2	1171.5	1171.7	1172.0	1172.3
150°	1195.2	1194.7	1194.3	1193.8	1193.4	1193.4	1193.8	1194.3	1194.7	1195.2	1195.6
152.5°	1218.3	1217.4	1216.4	1215.4	1214.4	1214.2	1214.6	1215.0	1215.5	1215.9	1216.4
155°	1248.1	1246.8	1245.4	1244.1	1242.8	1242.3	1242.8	1243.2	1243.6	1244.1	1244.8
157.5°	1271.0	1270.2	1269.5	1268.7	1267.9	1267.5	1267.5	1267.6	1267.6	1267.7	1268.4
160°	1287.0	1285.7	1284.4	1283.0	1281.7	1281.1	1281.4	1281.6	1281.8	1282.0	1282.9
162.5°	1299.8	1298.5	1297.1	1295.8	1294.5	1293.9	1294.1	1294.4	1294.6	1294.8	1296.1
165°	1317.0	1315.6	1314.3	1313.0	1311.7	1311.1	1311.3	1311.5	1311.8	1312.0	1313.3
167.5°	1329.8	1328.4	1327.0	1325.6	1324.3	1323.7	1323.9	1324.1	1324.3	1324.6	1326.2
170°	1336.9	1335.4	1333.8	1332.3	1330.7	1330.1	1330.3	1330.5	1330.7	1331.0	1332.7
172.5°	1341.7	1340.2	1338.6	1337.1	1335.5	1335.0	1335.3	1335.7	1336.1	1336.5	1338.1
175°	1346.9	1345.6	1344.3	1342.9	1341.6	1341.1	1341.3	1341.5	1341.7	1341.9	1343.7
177.5°	1349.3	1348.3	1347.2	1346.1	1345.1	1344.6	1344.8	1345.0	1345.2	1345.3	1346.6
180°	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9



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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°	18.2	19.3	20.4	21.1	21.4	21.7	22.1	22.4
95°	18.2	19.3	20.4	21.0	21.0	21.0	21.0	21.0
97.5°	36.6	30.4	24.1	21.0	21.0	21.0	21.0	21.0
100°	107.6	74.6	41.5	24.5	23.6	22.7	21.9	21.0
102.5°	209.1	202.9	196.6	186.0	170.9	155.8	140.7	125.6
105°	297.5	297.5	297.5	297.4	297.2	297.0	296.8	296.5
107.5°	376.7	376.8	376.8	376.5	375.8	375.2	374.5	373.8
110°	428.0	427.3	426.7	426.5	426.7	426.9	427.1	427.3



TEST NUMBER: P333571

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	478.8	477.9	477.1	476.5	476.2	475.9	475.6	475.3
115°	555.4	554.5	553.6	552.5	551.2	549.8	548.5	547.2
117.5°	629.3	628.2	627.0	626.1	625.6	625.0	624.4	623.8
120°	677.1	676.6	676.2	675.4	674.3	673.2	672.1	671.0
122.5°	722.6	722.2	721.7	720.8	719.6	718.3	717.0	715.7
125°	789.0	788.1	787.2	786.5	785.8	785.1	784.5	783.8
127.5°	849.7	849.2	848.7	847.7	846.0	844.4	842.8	841.1
130°	889.3	888.6	888.0	887.1	886.0	884.9	883.8	882.6
132.5°	926.3	926.2	926.0	925.4	924.3	923.2	922.1	921.0
135°	980.6	980.2	979.7	978.8	977.5	976.2	974.8	973.5
137.5°	1031.2	1031.3	1031.4	1030.8	1029.7	1028.5	1027.4	1026.2
140°	1062.3	1062.7	1063.1	1062.7	1061.4	1060.0	1058.7	1057.4
142.5°	1092.7	1092.8	1092.9	1092.3	1090.9	1089.6	1088.3	1086.9
145°	1135.7	1135.9	1136.1	1135.6	1134.3	1132.9	1131.6	1130.3
147.5°	1172.5	1172.8	1173.1	1172.4	1170.8	1169.2	1167.6	1166.0
150°	1196.1	1196.5	1196.9	1196.3	1194.5	1192.7	1190.9	1189.2
152.5°	1216.8	1217.3	1217.7	1217.1	1215.5	1213.9	1212.3	1210.7
155°	1245.4	1246.1	1246.8	1246.2	1244.4	1242.6	1240.9	1239.1
157.5°	1269.1	1269.8	1270.5	1270.0	1268.2	1266.4	1264.6	1262.9
160°	1283.8	1284.7	1285.6	1285.1	1283.4	1281.6	1279.8	1278.0
162.5°	1297.3	1298.5	1299.8	1299.4	1297.5	1295.5	1293.6	1291.6
165°	1314.6	1316.0	1317.3	1317.1	1315.3	1313.5	1311.8	1310.0
167.5°	1327.8	1329.4	1331.0	1330.8	1328.8	1326.8	1324.8	1322.8
170°	1334.5	1336.3	1338.1	1337.9	1335.9	1334.0	1332.0	1330.0
172.5°	1339.7	1341.3	1342.9	1342.7	1340.7	1338.7	1336.7	1334.8
175°	1345.5	1347.3	1349.0	1348.9	1346.9	1344.9	1342.9	1340.9
177.5°	1347.8	1349.1	1350.3	1350.2	1348.8	1347.4	1346.0	1344.5
180°	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9

(END OF REPORT)