

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: P333577

Luminaire Tested: **S125RDIP-S850D1205U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333577
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-S850D1205U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8066.2 lumens
Efficiency: N/A
Efficacy: 141.8 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

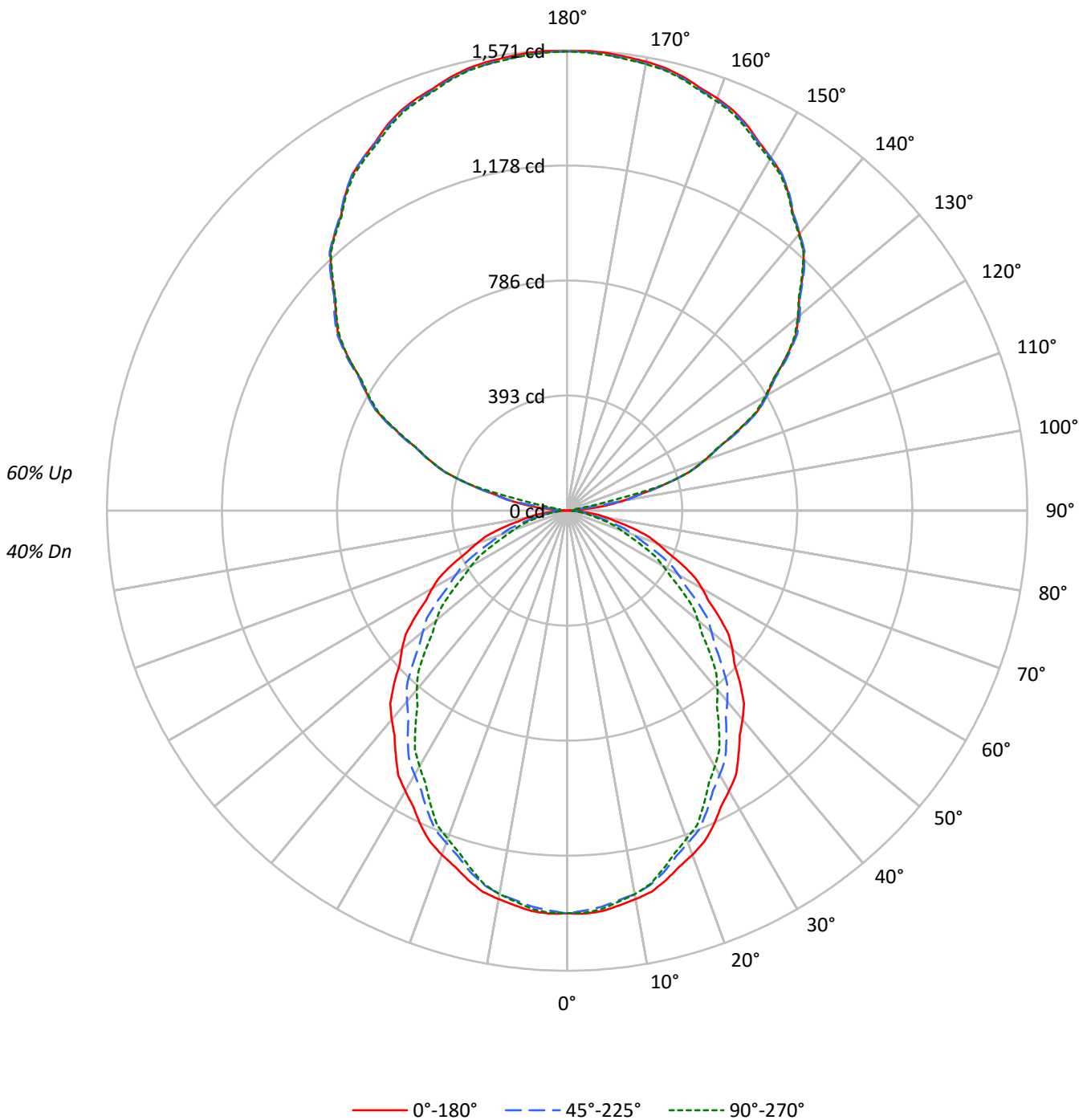
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40					40			
1	96	92	88	84	87	84	80	78	69	66	64	55	53	52	42	41	40	34					34			
2	87	80	74	69	79	73	68	64	60	57	53	48	46	44	37	36	34	29					29			
3	80	71	63	58	72	65	58	53	53	49	45	43	40	37	33	31	29	25					25			
4	73	62	55	49	66	57	51	45	47	42	38	38	35	32	30	27	25	21					21			
5	67	56	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19					19			
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	19	16					16			
7	57	45	37	32	52	41	35	30	35	29	26	28	24	21	22	19	17	15					15			
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	20	18	16	13					13			
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12					12			
10	46	34	27	22	42	32	25	21	27	22	18	22	18	16	17	15	13	11					11			

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	1.6
10°-20°	361.3	4.5
20°-30°	524.0	6.5
30°-40°	597.2	7.4
40°-50°	582.1	7.2
50°-60°	490.0	6.1
60°-70°	343.5	4.3
70°-80°	176.6	2.2
80°-90°	47.9	0.6
90°-100°	57.0	0.7
100°-110°	351.1	4.4
110°-120°	636.8	7.9
120°-130°	817.3	10.1
130°-140°	879.1	10.9
140°-150°	825.1	10.2
150°-160°	667.5	8.3
160°-170°	431.7	5.4
170°-180°	148.9	1.8
0°-30°	1014.6	12.6
0°-40°	1611.8	20.0
0°-60°	2683.9	33.3
0°-90°	3251.8	40.3
90°-120°	1044.9	13.0
90°-150°	3566.4	44.2
90°-180°	4814.0	59.7
0°-180°	8066.2	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	10	19	24	28	5
95°	66	60	19	24	24	84
105°	342	346	346	346	345	362
115°	642	647	648	644	637	636
125°	912	920	920	916	912	815
135°	1138	1144	1142	1140	1133	877
145°	1319	1321	1321	1322	1316	825
155°	1453	1446	1448	1451	1442	669
165°	1533	1526	1527	1533	1525	433
175°	1568	1561	1562	1570	1561	149
180°	1568	1568	1568	1568	1568	



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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	18.5	17.6	16.7	15.8	15.5	15.7	15.8	16.0	16.2	16.4
90°	1.2	3.2	5.3	7.4	9.4	11.4	13.2	15.0	16.8	18.6	19.9
92.5°	17.9	16.5	15.0	13.6	12.1	12.2	13.8	15.4	17.0	18.6	19.9
95°	66.2	65.5	64.7	63.9	63.1	57.9	48.0	38.2	28.4	18.6	19.9
97.5°	138.3	139.7	141.1	142.5	143.9	134.9	115.4	96.0	76.6	57.2	49.9
100°	194.1	194.9	195.6	196.4	197.2	198.1	199.1	200.2	201.2	202.2	163.7
102.5°	250.8	251.8	252.8	253.7	254.7	255.5	256.1	256.8	257.4	258.0	250.7
105°	341.7	342.7	343.7	344.8	345.8	346.3	346.3	346.3	346.3	346.3	346.3
107.5°	436.1	436.1	436.1	436.1	436.1	436.3	436.8	437.3	437.9	438.4	438.4
110°	497.4	497.4	497.4	497.4	497.4	497.7	498.2	498.7	499.2	499.7	499.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	555.1	555.7	556.3	556.9	557.5	558.0	558.3	558.6	558.9	559.2	558.3
115°	641.5	642.8	644.1	645.4	646.7	647.5	647.7	648.0	648.2	648.5	647.5
117.5°	731.0	731.0	730.9	730.9	730.8	731.3	732.3	733.2	734.2	735.2	733.9
120°	786.8	786.5	786.3	786.0	785.8	786.0	786.8	787.6	788.3	789.1	788.6
122.5°	836.1	837.1	838.0	839.0	840.0	840.7	841.0	841.4	841.8	842.1	841.6
125°	912.3	914.1	915.9	917.7	919.5	920.4	920.4	920.4	920.4	920.4	919.4
127.5°	985.1	986.4	987.6	988.9	990.2	990.8	990.6	990.5	990.3	990.2	989.6
130°	1029.7	1031.0	1032.3	1033.6	1034.9	1035.6	1035.9	1036.2	1036.4	1036.7	1035.9
132.5°	1074.3	1075.8	1077.3	1078.8	1080.3	1080.8	1080.2	1079.6	1079.1	1078.5	1078.4
135°	1137.8	1139.3	1140.9	1142.4	1144.0	1144.5	1144.0	1143.5	1142.9	1142.4	1141.9
137.5°	1196.1	1197.5	1198.8	1200.1	1201.5	1201.9	1201.5	1201.0	1200.5	1200.1	1200.2
140°	1234.2	1234.8	1235.3	1235.8	1236.3	1236.4	1236.2	1235.9	1235.7	1235.4	1235.9
142.5°	1268.6	1268.9	1269.3	1269.6	1269.9	1270.2	1270.6	1270.9	1271.3	1271.7	1271.8
145°	1319.1	1319.6	1320.1	1320.6	1321.1	1321.4	1321.4	1321.4	1321.4	1321.4	1321.7
147.5°	1363.2	1363.1	1363.0	1362.9	1362.8	1362.9	1363.2	1363.5	1363.9	1364.2	1364.5
150°	1391.1	1390.6	1390.1	1389.6	1389.1	1389.1	1389.6	1390.1	1390.6	1391.1	1391.6
152.5°	1418.1	1417.0	1415.8	1414.7	1413.5	1413.2	1413.8	1414.3	1414.8	1415.3	1415.8
155°	1452.7	1451.2	1449.6	1448.1	1446.5	1446.0	1446.5	1447.0	1447.6	1448.1	1448.9
157.5°	1479.5	1478.5	1477.6	1476.7	1475.7	1475.3	1475.4	1475.4	1475.5	1475.5	1476.3
160°	1498.1	1496.5	1495.0	1493.4	1491.9	1491.2	1491.5	1491.7	1492.0	1492.2	1493.3
162.5°	1512.9	1511.4	1509.8	1508.3	1506.7	1506.1	1506.3	1506.6	1506.9	1507.1	1508.6
165°	1532.9	1531.4	1529.8	1528.3	1526.7	1526.1	1526.3	1526.6	1526.8	1527.1	1528.7
167.5°	1547.8	1546.2	1544.6	1543.0	1541.4	1540.7	1541.0	1541.2	1541.5	1541.8	1543.6
170°	1556.2	1554.4	1552.5	1550.7	1548.9	1548.2	1548.4	1548.7	1548.9	1549.2	1551.3
172.5°	1561.7	1559.9	1558.1	1556.3	1554.5	1553.8	1554.3	1554.8	1555.2	1555.7	1557.6
175°	1567.8	1566.2	1564.7	1563.1	1561.6	1560.9	1561.2	1561.5	1561.7	1562.0	1564.0
177.5°	1570.6	1569.3	1568.1	1566.9	1565.6	1565.1	1565.3	1565.5	1565.7	1565.9	1567.4
180°	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8



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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°	16.7	17.0	17.2	17.3	17.3	17.3	17.2	17.2
90°	21.2	22.5	23.8	24.8	25.6	26.3	27.1	27.9
92.5°	21.2	22.5	23.8	24.6	24.9	25.3	25.7	26.0
95°	21.2	22.5	23.8	24.4	24.4	24.4	24.4	24.4
97.5°	42.6	35.3	28.0	24.4	24.4	24.4	24.4	24.4
100°	125.3	86.8	48.3	28.5	27.5	26.5	25.4	24.4
102.5°	243.4	236.2	228.9	216.5	198.9	181.3	163.8	146.2
105°	346.3	346.3	346.3	346.2	345.9	345.7	345.4	345.2
107.5°	438.5	438.5	438.6	438.2	437.4	436.7	435.9	435.1
110°	498.2	497.4	496.6	496.4	496.6	496.9	497.2	497.4



TEST NUMBER: P333577

CATALOG NUMBER: S125RDIP-S850D1205U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	557.3	556.3	555.3	554.6	554.3	553.9	553.6	553.2
115°	646.4	645.4	644.4	643.1	641.5	640.0	638.4	636.9
117.5°	732.5	731.2	729.8	728.8	728.1	727.5	726.8	726.1
120°	788.1	787.6	787.1	786.2	784.9	783.6	782.3	781.0
122.5°	841.1	840.6	840.1	839.0	837.5	836.0	834.6	833.1
125°	918.4	917.3	916.3	915.4	914.6	913.9	913.1	912.3
127.5°	989.0	988.5	987.9	986.7	984.8	982.8	980.9	979.0
130°	1035.1	1034.3	1033.6	1032.5	1031.2	1030.0	1028.7	1027.4
132.5°	1078.2	1078.0	1077.9	1077.2	1075.9	1074.6	1073.3	1072.0
135°	1141.4	1140.9	1140.4	1139.3	1137.8	1136.2	1134.7	1133.1
137.5°	1200.3	1200.4	1200.5	1199.9	1198.5	1197.2	1195.8	1194.5
140°	1236.4	1236.9	1237.5	1236.9	1235.4	1233.9	1232.3	1230.8
142.5°	1271.9	1272.0	1272.1	1271.4	1269.8	1268.3	1266.7	1265.2
145°	1321.9	1322.2	1322.4	1321.8	1320.2	1318.7	1317.1	1315.6
147.5°	1364.8	1365.1	1365.4	1364.6	1362.8	1360.9	1359.1	1357.2
150°	1392.2	1392.7	1393.2	1392.4	1390.4	1388.3	1386.2	1384.2
152.5°	1416.3	1416.9	1417.4	1416.7	1414.8	1413.0	1411.1	1409.3
155°	1449.6	1450.4	1451.2	1450.5	1448.5	1446.4	1444.3	1442.3
157.5°	1477.2	1478.0	1478.8	1478.2	1476.1	1474.1	1472.0	1469.9
160°	1494.3	1495.3	1496.4	1495.9	1493.8	1491.7	1489.7	1487.6
162.5°	1510.0	1511.5	1512.9	1512.5	1510.2	1507.9	1505.7	1503.4
165°	1530.2	1531.8	1533.3	1533.0	1531.0	1528.9	1526.8	1524.8
167.5°	1545.5	1547.3	1549.2	1549.0	1546.6	1544.3	1542.0	1539.7
170°	1553.3	1555.4	1557.5	1557.3	1555.0	1552.7	1550.4	1548.0
172.5°	1559.4	1561.3	1563.1	1562.9	1560.6	1558.3	1555.9	1553.6
175°	1566.1	1568.2	1570.2	1570.1	1567.8	1565.5	1563.1	1560.8
177.5°	1568.8	1570.3	1571.7	1571.6	1570.0	1568.3	1566.6	1565.0
180°	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8	1567.8

(END OF REPORT)