

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: P333573

Luminaire Tested: **S125RDIP-S850D1035U835-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333573
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
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-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6964.4 lumens
Efficiency: N/A
Efficacy: 133.9 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

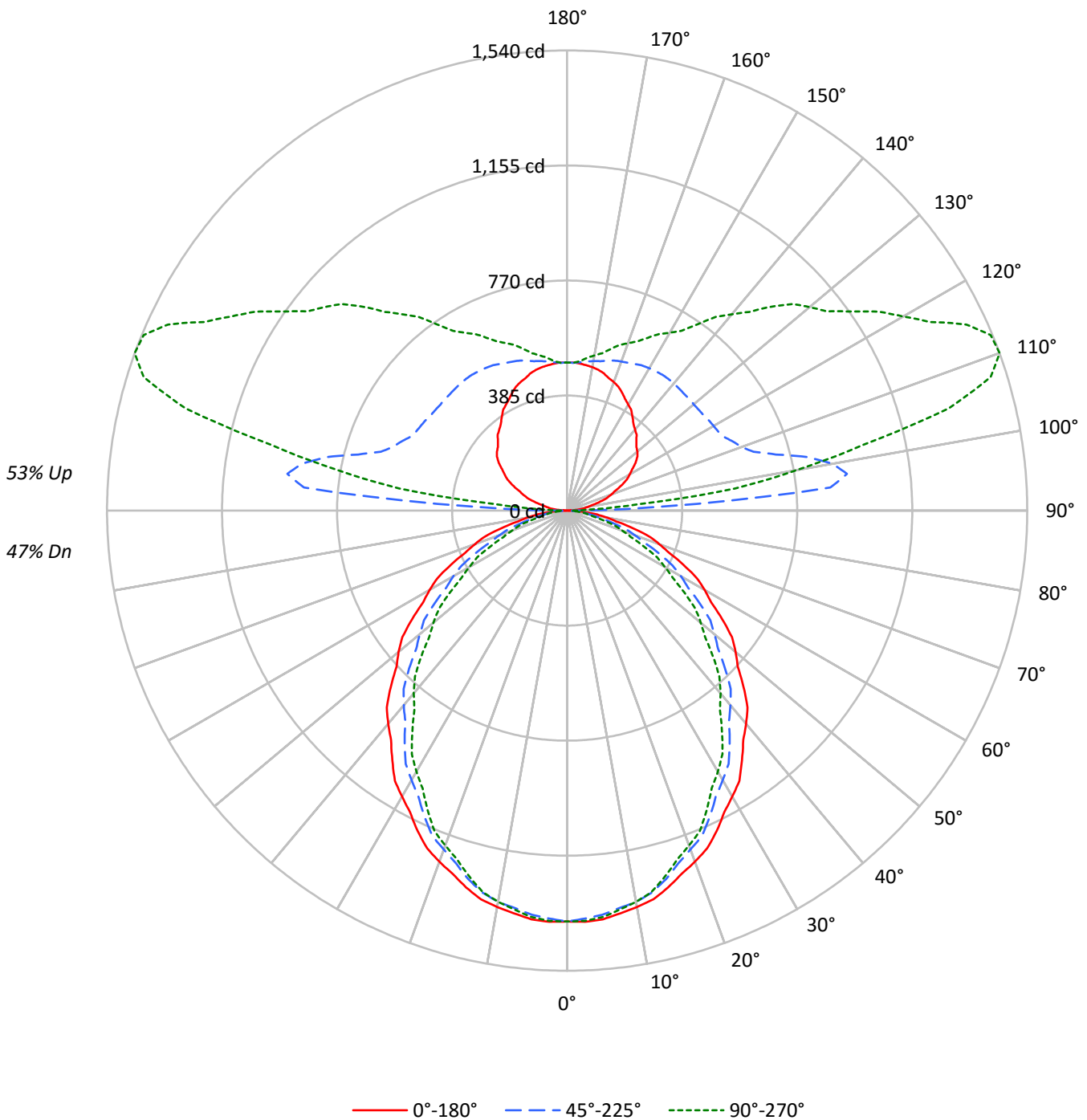
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	98	98	98	98	81	81	81	67	67	67	53	53	53	47						47														
1	97	93	89	86	89	86	82	79	72	69	67	59	57	56	47	46	45	40						40														
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	38	34						34														
3	81	72	65	59	74	66	60	55	56	51	47	46	43	40	37	35	33	29						29														
4	74	64	56	50	68	59	52	47	50	45	40	41	37	34	33	31	28	25						25														
5	68	57	49	43	62	52	45	40	44	39	35	37	33	30	30	27	25	22						22														
6	63	51	43	37	58	47	40	35	40	35	31	34	29	26	27	24	22	19						19														
7	58	46	38	33	53	43	36	31	36	31	27	31	26	23	25	22	20	17						17														
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18	15						15														
9	50	38	31	26	46	35	29	24	30	25	21	26	22	19	21	18	16	14						14														
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	14	13						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	5.2
20°-30°	524.0	7.5
30°-40°	597.2	8.6
40°-50°	582.1	8.4
50°-60°	490.0	7.0
60°-70°	343.5	4.9
70°-80°	176.6	2.5
80°-90°	47.4	0.7
90°-100°	358.9	5.2
100°-110°	771.5	11.1
110°-120°	724.1	10.4
120°-130°	586.8	8.4
130°-140°	470.9	6.8
140°-150°	355.4	5.1
150°-160°	250.1	3.6
160°-170°	147.4	2.1
170°-180°	48.0	0.7
0°-30°	1014.6	14.6
0°-40°	1611.8	23.1
0°-60°	2683.9	38.5
0°-90°	3251.3	46.7
90°-120°	1854.5	26.6
90°-150°	3267.6	46.9
90°-180°	3713.0	53.3
0°-180°	6964.4	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	23	5
95°	33	97	884	401	235	35
105°	113	158	724	1425	1323	119
115°	202	243	581	1252	1474	198
125°	280	327	557	996	1161	248
135°	327	394	553	835	964	254
145°	381	437	555	691	761	239
155°	435	468	541	611	638	200
165°	475	488	519	551	559	134
175°	494	494	498	504	502	47
180°	495	495	495	495	495	



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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	18.2	17.3	16.4	15.5	15.2	15.2	15.4	15.4	15.7	15.9
90°	1.0	2.0	4.0	6.0	8.0	10.0	11.0	13.0	14.0	16.0	17.0
92.5°	12.2	14.8	23.2	35.5	52.7	81.9	136.4	227.8	327.0	321.8	260.5
95°	32.9	33.9	41.9	52.9	74.9	119.8	226.6	446.2	721.8	884.5	865.5
97.5°	54.7	55.9	61.5	72.5	92.2	124.6	195.3	356.2	644.5	944.6	1095.1
100°	69.9	71.9	75.9	86.8	105.8	135.8	193.7	323.4	575.0	901.4	1151.0
102.5°	86.7	87.8	91.0	102.8	120.2	149.3	200.9	309.9	522.3	825.6	1117.5
105°	112.8	112.8	117.8	127.8	143.8	171.7	215.6	304.5	471.2	723.7	1010.3
107.5°	138.4	140.4	145.1	153.3	169.9	195.1	237.6	313.7	449.6	653.7	900.8
110°	156.7	158.7	162.7	171.7	186.7	212.6	253.6	322.4	443.2	620.9	838.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	175.1	177.1	180.3	189.3	204.2	229.4	268.7	333.6	443.2	601.8	792.2
115°	201.7	203.6	206.6	215.6	230.6	255.6	292.5	350.4	446.2	581.0	741.7
117.5°	225.6	228.6	231.8	240.8	257.8	281.9	316.9	369.6	452.8	570.8	711.6
120°	241.6	244.6	248.6	257.6	274.5	299.5	334.4	382.3	459.2	566.0	694.8
122.5°	258.4	260.5	263.7	272.7	291.3	316.3	351.2	396.7	464.8	562.0	680.4
125°	279.5	281.5	286.5	295.5	314.5	340.4	373.4	416.3	474.2	557.0	660.9
127.5°	296.1	299.1	305.5	316.9	337.0	363.0	394.7	434.2	484.8	554.6	642.9
130°	306.5	309.5	317.5	330.4	351.4	377.3	408.3	446.2	491.2	553.0	630.9
132.5°	314.5	318.2	327.8	342.4	364.2	390.1	421.1	456.6	498.3	553.0	621.3
135°	327.4	331.4	343.4	359.4	380.3	407.3	438.2	471.2	508.1	553.0	609.9
137.5°	343.8	346.8	358.0	374.0	394.5	422.3	450.4	482.0	517.1	554.2	599.8
140°	353.4	356.4	368.4	384.3	403.3	430.3	459.2	489.2	521.1	555.0	595.0
142.5°	364.6	366.8	377.9	393.9	412.1	437.4	464.8	493.1	523.5	555.8	591.0
145°	381.3	383.3	393.3	407.3	425.3	448.2	474.2	499.1	526.1	555.0	585.0
147.5°	398.9	400.1	408.7	421.7	437.2	457.4	480.2	502.7	527.1	552.4	578.8
150°	409.3	411.3	418.3	431.3	445.2	462.2	484.2	505.1	527.1	550.0	574.0
152.5°	420.5	421.7	427.9	439.2	452.4	467.8	488.2	506.7	526.3	546.9	568.4
155°	435.2	435.2	441.2	451.2	461.2	475.2	492.1	508.1	524.1	541.1	559.0
157.5°	448.4	448.2	453.0	461.6	470.4	481.0	495.5	509.1	521.5	535.1	550.2
160°	457.2	456.2	460.2	467.2	475.2	484.2	497.1	509.1	519.1	531.1	543.1
162.5°	464.4	463.4	467.4	473.6	480.0	487.4	498.7	508.3	516.7	526.3	536.7
165°	475.2	473.2	476.2	481.2	485.2	491.2	499.1	507.1	513.1	519.1	527.1
167.5°	482.4	481.4	483.2	486.0	488.8	492.5	499.1	504.7	507.5	512.1	517.7
170°	487.2	486.2	487.2	489.2	491.2	494.1	499.1	503.1	505.1	508.1	512.1
172.5°	490.4	488.6	489.6	491.5	492.7	494.1	498.3	501.5	501.9	503.3	506.5
175°	494.1	492.1	493.1	494.1	494.1	494.1	497.1	499.1	498.1	498.1	499.1
177.5°	495.9	494.3	494.3	495.1	494.3	494.3	495.9	496.7	495.1	495.1	495.9
180°	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1



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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	16.8	16.6	16.4	16.4	16.2
90°	18.0	19.0	20.0	22.0	22.0	22.0	23.0	23.0
92.5°	176.9	128.4	96.6	81.9	69.1	66.7	65.3	63.7
95°	717.8	566.0	443.2	359.4	288.5	258.6	250.6	234.6
97.5°	1069.0	962.5	842.9	726.3	664.7	608.7	579.8	567.0
100°	1227.9	1179.0	1076.1	972.3	903.4	831.6	794.6	778.7
102.5°	1281.4	1311.5	1262.2	1191.9	1118.3	1067.2	1027.0	1015.0
105°	1249.8	1386.6	1430.5	1419.5	1387.6	1354.7	1334.7	1322.7
107.5°	1137.2	1319.7	1432.5	1484.6	1500.8	1500.6	1494.0	1486.0
110°	1054.2	1243.8	1384.6	1469.5	1514.4	1533.3	1540.3	1540.3



TEST NUMBER: P333573

CATALOG NUMBER: S125RDIP-S850D1035U835-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	988.7	1168.8	1311.1	1411.2	1476.8	1509.4	1526.8	1533.9
115°	906.4	1061.2	1197.9	1306.7	1384.6	1432.5	1460.5	1473.5
117.5°	853.3	986.7	1104.5	1204.3	1282.2	1331.7	1359.4	1367.4
120°	824.6	944.4	1054.2	1142.0	1215.9	1263.8	1290.8	1298.8
122.5°	803.0	914.0	1011.8	1094.1	1160.0	1203.9	1230.9	1238.1
125°	771.7	873.5	960.3	1032.2	1088.1	1129.0	1151.0	1161.0
127.5°	739.7	834.8	915.8	983.1	1033.8	1069.9	1090.7	1095.1
130°	719.8	807.6	885.5	950.4	1000.3	1033.2	1053.2	1059.2
132.5°	699.8	782.0	852.7	915.2	965.1	998.1	1016.4	1023.2
135°	673.8	742.7	806.6	863.5	907.4	940.4	958.3	964.3
137.5°	651.9	707.6	760.7	809.0	848.3	878.3	894.9	901.4
140°	639.9	686.8	732.7	774.7	811.6	837.6	852.5	857.5
142.5°	629.5	669.2	708.8	745.1	776.5	798.4	812.6	816.8
145°	615.9	646.9	677.8	704.8	728.7	745.7	756.7	760.7
147.5°	603.2	628.3	652.1	672.4	691.4	705.0	711.4	713.2
150°	596.0	617.9	636.9	654.9	669.8	681.8	685.8	686.8
152.5°	588.0	607.5	624.9	638.9	651.5	661.1	665.0	666.0
155°	576.0	592.0	606.0	616.9	626.9	633.9	636.9	637.9
157.5°	564.0	577.2	588.0	596.6	604.4	610.1	612.9	612.7
160°	556.0	566.0	576.0	583.0	590.0	595.0	597.0	596.0
162.5°	547.3	556.4	564.8	571.0	576.4	580.6	581.0	580.8
165°	535.1	542.1	548.1	553.0	557.0	559.0	559.0	559.0
167.5°	523.5	528.1	532.7	536.3	538.3	540.1	539.3	539.1
170°	517.1	520.1	523.1	525.1	527.1	528.1	528.1	527.1
172.5°	509.9	512.9	515.1	516.3	516.7	518.5	516.9	515.9
175°	502.1	502.1	504.1	504.1	504.1	505.1	503.1	502.1
177.5°	496.7	497.5	497.5	497.5	496.7	497.5	495.1	495.1
180°	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1

(END OF REPORT)