

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: P333280

Luminaire Tested: **S125DIP-S1090D1035U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333280
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: S125DIP-S1090D1035U835-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8403.9 lumens
Efficiency: N/A
Efficacy: 138.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

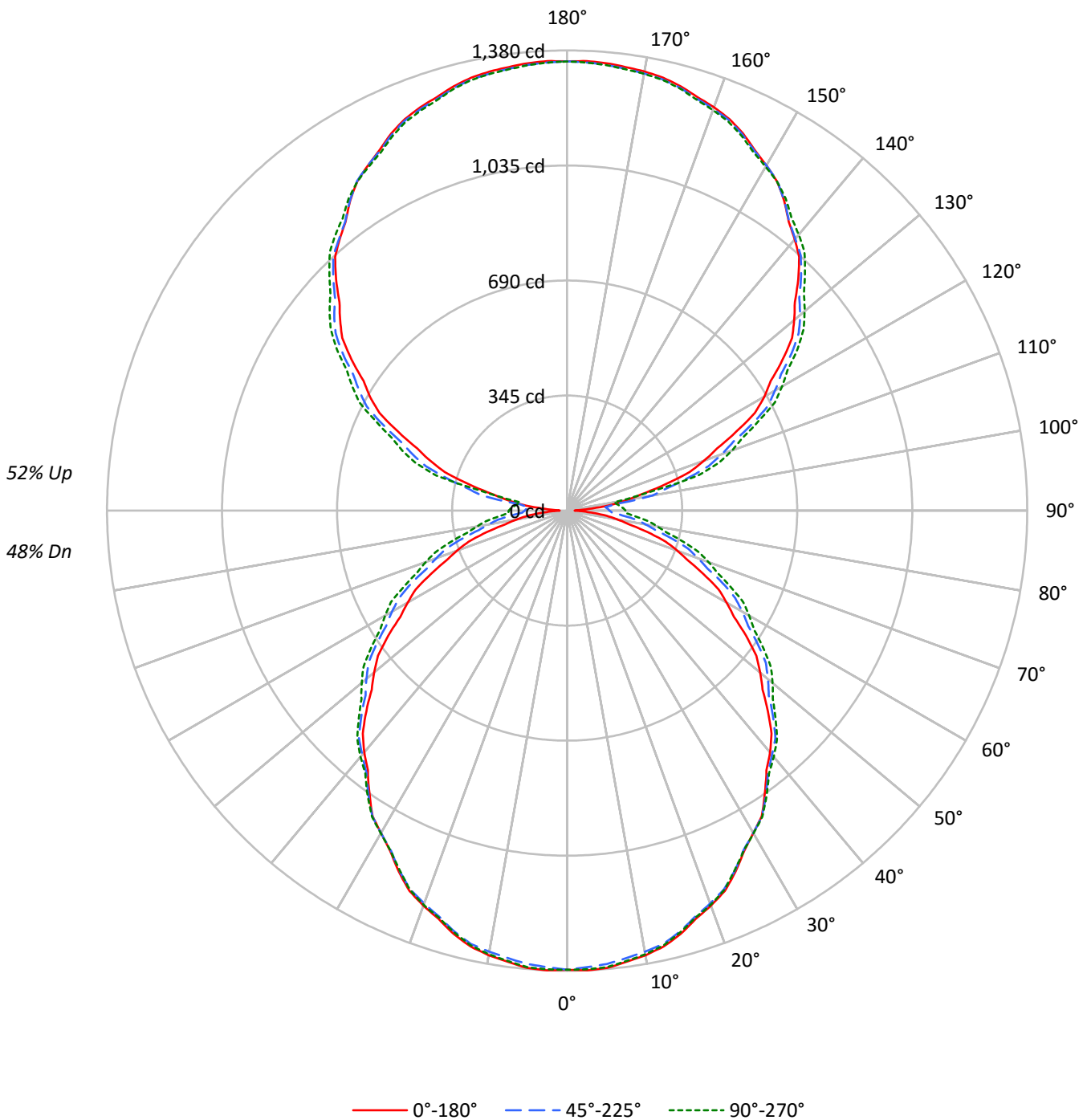
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333280

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Luminous Intensity Polar Plot





TEST NUMBER: P333280

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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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48
1	97	92	88	84	89	85	81	78	71	68	66	58	56	55	47	45	44	39
2	88	80	73	68	80	74	68	63	62	58	54	51	48	45	41	39	37	32
3	80	70	62	56	73	64	58	53	54	49	45	45	41	38	36	33	31	27
4	73	62	54	47	67	57	50	44	48	42	38	40	36	32	32	29	26	23
5	67	55	47	40	61	51	43	38	43	37	33	35	31	28	29	25	23	20
6	61	49	41	35	56	45	38	33	38	33	28	32	28	24	26	23	20	17
7	57	44	36	31	52	41	34	29	35	29	25	29	25	21	24	20	18	15
8	53	40	32	27	48	37	30	25	32	26	22	27	22	19	22	18	16	13
9	49	37	29	24	45	34	27	23	29	24	20	24	20	17	20	17	14	12
10	46	34	26	21	42	31	25	20	27	21	18	23	18	15	19	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8893	8893	8893
5°	8911	8729	8756
10°	8847	8573	8560
15°	8743	8387	8310
20°	8601	8156	8061
25°	8432	7909	7752
30°	8227	7637	7473
35°	8036	7388	7217
40°	7841	7125	6959
45°	7621	6900	6730
50°	7412	6656	6528
55°	7159	6425	6290
60°	6883	6162	6048
65°	6596	5888	5775
70°	6269	5512	5495
75°	5751	5151	5149
80°	5072	4712	4775
85°	4441	4417	4657



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	1.5
10°-20°	369.6	4.4
20°-30°	549.7	6.5
30°-40°	651.1	7.7
40°-50°	673.2	8.0
50°-60°	620.1	7.4
60°-70°	501.3	6.0
70°-80°	335.7	4.0
80°-90°	176.9	2.1
90°-100°	146.6	1.7
100°-110°	373.7	4.4
110°-120°	595.4	7.1
120°-130°	729.6	8.7
130°-140°	767.2	9.1
140°-150°	711.3	8.5
150°-160°	573.5	6.8
160°-170°	370.9	4.4
170°-180°	127.9	1.5
0°-30°	1049.5	12.5
0°-40°	1700.6	20.2
0°-60°	2994.0	35.6
0°-90°	4007.9	47.7
90°-120°	1115.7	13.3
90°-150°	3323.8	39.6
90°-180°	4396.0	52.3
0°-180°	8403.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1377	1377	1377	1377	1377	
5°	1377	1374	1365	1375	1374	131
15°	1315	1316	1307	1314	1310	370
25°	1195	1198	1191	1195	1189	550
35°	1034	1043	1040	1043	1044	647
45°	852	866	873	882	884	657
55°	655	676	698	712	718	585
65°	451	482	514	534	540	447
75°	248	284	327	353	360	263
85°	74	119	166	195	206	79
90°	23	74	127	161	175	17
95°	74	105	114	148	159	86
105°	306	332	372	398	407	324
115°	559	575	610	629	632	554
125°	789	796	822	839	843	704
135°	980	985	992	1007	1009	755
145°	1135	1135	1135	1142	1142	709
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	



TEST NUMBER: P333280

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0
2.5°	1380.2	1379.7	1379.2	1378.8	1378.3	1377.2	1375.5	1373.8	1372.2	1370.5	1372.2
5°	1377.0	1376.4	1375.8	1375.2	1374.6	1373.2	1371.1	1369.0	1366.9	1364.8	1367.2
7.5°	1364.8	1364.6	1364.3	1364.1	1363.9	1362.7	1360.5	1358.3	1356.2	1354.0	1356.1
10°	1354.0	1354.0	1354.0	1354.0	1354.0	1352.8	1350.4	1348.0	1345.6	1343.2	1345.3
12.5°	1338.9	1339.1	1339.4	1339.6	1339.9	1339.0	1337.1	1335.2	1333.3	1331.3	1333.0
15°	1314.9	1315.2	1315.5	1315.8	1316.1	1315.2	1313.1	1311.0	1308.9	1306.8	1308.6
17.5°	1283.5	1284.1	1284.7	1285.3	1285.9	1285.2	1283.1	1281.0	1278.9	1276.8	1278.2
20°	1260.9	1261.5	1262.1	1262.7	1263.3	1262.5	1260.4	1258.3	1256.2	1254.1	1255.0
22.5°	1234.9	1236.0	1237.1	1238.2	1239.3	1238.6	1236.3	1234.0	1231.6	1229.3	1230.4
25°	1194.7	1195.6	1196.5	1197.4	1198.3	1197.9	1196.1	1194.3	1192.5	1190.7	1191.9
27.5°	1149.9	1151.2	1152.5	1153.9	1155.2	1154.8	1152.8	1150.7	1148.7	1146.7	1147.5
30°	1116.4	1118.2	1120.0	1121.8	1123.6	1123.6	1121.8	1120.0	1118.2	1116.4	1117.0
32.5°	1086.2	1087.7	1089.3	1090.9	1092.4	1092.5	1091.2	1089.9	1088.6	1087.3	1087.9
35°	1034.1	1036.2	1038.3	1040.4	1042.5	1043.1	1042.2	1041.3	1040.4	1039.5	1040.4
37.5°	982.0	983.9	985.8	987.7	989.6	990.5	990.2	989.9	989.6	989.3	990.5
40°	946.3	948.7	951.1	953.5	955.9	957.0	956.7	956.4	956.1	955.8	957.0
42.5°	907.4	910.6	913.7	916.8	919.9	921.8	922.5	923.1	923.8	924.5	925.9
45°	851.8	855.1	858.4	861.7	865.0	867.4	868.9	870.4	871.9	873.4	875.5
47.5°	794.9	797.9	801.0	804.0	807.1	809.9	812.5	815.1	817.7	820.2	823.3
50°	756.0	759.3	762.6	765.9	769.2	772.5	775.8	779.1	782.4	785.7	789.0
52.5°	714.9	719.0	723.0	727.0	731.0	735.0	739.1	743.1	747.1	751.1	754.7
55°	654.7	659.5	664.3	669.1	673.9	678.7	683.5	688.3	693.1	697.9	701.2
57.5°	593.2	598.9	604.7	610.5	616.2	621.9	627.4	632.9	638.4	643.9	647.7
60°	552.1	558.1	564.1	570.1	576.1	582.1	588.1	594.1	600.1	606.1	610.6
62.5°	512.2	518.2	524.2	530.2	536.2	542.4	548.9	555.4	561.9	568.3	573.3
65°	450.9	457.8	464.7	471.6	478.5	485.5	492.7	499.9	507.1	514.3	518.8
67.5°	393.1	399.8	406.4	413.1	419.7	426.7	434.1	441.4	448.7	456.0	461.5
70°	351.0	357.9	364.8	371.7	378.6	385.9	393.7	401.5	409.3	417.1	422.8
72.5°	310.0	317.1	324.2	331.4	338.5	346.3	354.9	363.4	371.9	380.4	386.6
75°	248.4	256.2	264.0	271.8	279.6	288.3	297.9	307.5	317.1	326.7	332.7
77.5°	189.3	198.3	207.3	216.3	225.3	234.4	243.6	252.9	262.1	271.3	277.9
80°	152.5	161.5	170.5	179.5	188.5	198.1	208.3	218.5	228.7	238.9	245.5
82.5°	119.1	128.5	138.0	147.5	157.0	166.9	177.4	187.8	198.3	208.7	215.1
85°	74.2	84.1	94.0	103.9	113.8	124.0	134.5	145.0	155.5	166.0	172.6
87.5°	42.3	52.3	62.2	72.2	82.1	92.4	102.9	113.4	123.9	134.4	141.5
90°	22.6	34.0	45.3	56.7	68.1	79.7	91.4	103.2	114.9	126.7	134.7
92.5°	34.8	42.5	50.1	57.7	65.4	75.1	86.9	98.7	110.5	122.4	130.1
95°	74.5	81.6	88.7	95.9	103.0	107.4	109.2	111.0	112.8	114.5	122.2
97.5°	134.7	143.0	151.2	159.4	167.6	168.3	161.5	154.6	147.8	140.9	141.0
100°	181.6	188.6	195.5	202.5	209.5	218.2	228.7	239.2	249.6	260.1	233.4
102.5°	229.2	235.9	242.6	249.2	255.9	264.2	274.1	284.0	293.8	303.7	303.5
105°	305.7	311.4	317.1	322.8	328.4	335.8	344.8	353.8	362.8	371.8	377.8
107.5°	385.2	389.2	393.3	397.4	401.5	408.1	417.1	426.2	435.3	444.4	450.4
110°	436.8	440.4	444.0	447.6	451.2	457.4	466.3	475.1	483.9	492.8	497.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	486.3	489.7	493.1	496.6	500.0	505.9	514.3	522.7	531.2	539.6	544.2
115°	559.3	562.5	565.7	568.9	572.1	577.7	585.7	593.7	601.8	609.8	614.3
117.5°	634.8	636.1	637.5	638.8	640.1	644.9	653.1	661.4	669.6	677.8	681.7
120°	682.7	683.4	684.1	684.7	685.4	689.5	697.1	704.7	712.2	719.8	724.5
122.5°	724.0	725.2	726.5	727.8	729.0	733.1	740.1	747.1	754.0	761.0	765.4
125°	789.2	790.4	791.7	793.0	794.2	797.8	803.8	809.8	815.8	821.8	825.7
127.5°	850.4	851.2	852.0	852.8	853.6	856.4	861.2	866.0	870.7	875.5	879.5
130°	888.7	889.5	890.3	891.1	891.9	894.5	899.0	903.4	907.8	912.2	915.8
132.5°	926.0	927.2	928.4	929.6	930.9	932.8	935.6	938.4	941.1	943.9	947.9
135°	980.2	981.2	982.3	983.3	984.3	985.7	987.3	989.0	990.6	992.3	995.7
137.5°	1030.1	1031.0	1031.9	1032.8	1033.7	1034.5	1035.1	1035.7	1036.3	1037.0	1040.6
140°	1061.7	1062.2	1062.6	1063.1	1063.5	1063.8	1063.8	1063.9	1064.0	1064.1	1067.8
142.5°	1091.3	1091.3	1091.3	1091.4	1091.4	1091.6	1092.0	1092.3	1092.7	1093.1	1096.0
145°	1134.6	1134.8	1134.9	1135.0	1135.2	1135.3	1135.3	1135.3	1135.3	1135.3	1137.0
147.5°	1171.2	1171.1	1171.0	1170.9	1170.8	1170.9	1171.2	1171.5	1171.7	1172.0	1172.7
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°	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0	1377.0
2.5°	1373.8	1375.5	1377.2	1377.9	1377.7	1377.4	1377.2	1377.0
5°	1369.6	1372.0	1374.4	1375.5	1375.2	1374.9	1374.6	1374.3
7.5°	1358.2	1360.3	1362.4	1363.3	1363.0	1362.7	1362.4	1362.1
10°	1347.4	1349.5	1351.6	1352.5	1352.2	1351.9	1351.6	1351.3
12.5°	1334.6	1336.2	1337.8	1338.2	1337.5	1336.7	1335.9	1335.1
15°	1310.4	1312.2	1314.0	1314.3	1313.1	1311.9	1310.7	1309.5
17.5°	1279.6	1280.9	1282.3	1282.6	1281.9	1281.2	1280.5	1279.8
20°	1255.9	1256.8	1257.7	1258.2	1258.2	1258.2	1258.2	1258.2
22.5°	1231.6	1232.7	1233.8	1234.0	1233.3	1232.6	1231.9	1231.2
25°	1193.1	1194.3	1195.5	1195.3	1193.8	1192.3	1190.8	1189.3
27.5°	1148.3	1149.2	1150.0	1150.2	1149.6	1149.1	1148.5	1148.0
30°	1117.6	1118.2	1118.8	1119.0	1118.7	1118.4	1118.1	1117.8
32.5°	1088.5	1089.1	1089.7	1089.8	1089.5	1089.2	1088.9	1088.6
35°	1041.3	1042.2	1043.1	1043.5	1043.5	1043.5	1043.5	1043.5
37.5°	991.7	992.9	994.1	994.6	994.5	994.4	994.2	994.1
40°	958.2	959.4	960.6	961.5	962.1	962.7	963.3	963.9
42.5°	927.3	928.8	930.2	931.0	931.1	931.2	931.4	931.5
45°	877.6	879.7	881.8	883.0	883.3	883.6	883.9	884.2
47.5°	826.4	829.4	832.5	834.3	835.0	835.7	836.3	837.0
50°	792.3	795.6	798.9	801.0	801.9	802.8	803.7	804.6
52.5°	758.2	761.7	765.3	767.4	768.0	768.7	769.4	770.0
55°	704.5	707.8	711.1	713.4	714.6	715.8	717.0	718.2
57.5°	651.5	655.3	659.1	661.4	662.3	663.2	664.1	665.0
60°	615.1	619.6	624.1	626.8	627.7	628.6	629.5	630.4
62.5°	578.3	583.3	588.3	591.3	592.5	593.6	594.7	595.9
65°	523.3	527.8	532.3	535.2	536.4	537.6	538.8	540.0
67.5°	466.9	472.4	477.9	481.4	482.9	484.5	486.0	487.6
70°	428.5	434.2	439.9	443.7	445.5	447.3	449.1	450.9
72.5°	392.8	399.0	405.1	408.9	410.2	411.5	412.8	414.2
75°	338.7	344.7	350.7	354.4	355.9	357.4	358.9	360.4
77.5°	284.5	291.1	297.7	301.6	302.8	304.0	305.2	306.4
80°	252.1	258.7	265.3	269.2	270.4	271.6	272.8	274.0
82.5°	221.4	227.8	234.1	238.4	240.6	242.7	244.9	247.0
85°	179.2	185.8	192.4	196.9	199.3	201.7	204.1	206.5
87.5°	148.7	155.8	162.9	167.6	169.8	172.0	174.3	176.5
90°	142.7	150.7	158.7	164.1	166.9	169.6	172.4	175.2
92.5°	137.9	145.7	153.4	158.5	160.9	163.3	165.8	168.2
95°	129.9	137.7	145.4	150.3	152.4	154.5	156.6	158.7
97.5°	141.0	141.1	141.1	142.1	144.2	146.2	148.3	150.3
100°	206.6	179.8	153.1	140.2	141.1	142.0	142.9	143.8
102.5°	303.3	303.1	302.9	296.2	282.9	269.6	256.3	243.1
105°	383.8	389.8	395.8	399.7	401.6	403.5	405.4	407.2
107.5°	456.4	462.3	468.3	471.9	473.1	474.3	475.5	476.7
110°	502.9	507.9	512.9	516.6	518.9	521.2	523.6	525.9



TEST NUMBER: P333280

CATALOG NUMBER: S125DIP-S1090D1035U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	548.8	553.4	558.1	561.3	563.0	564.8	566.6	568.4
115°	618.8	623.3	627.8	630.3	630.8	631.3	631.7	632.2
117.5°	685.7	689.6	693.6	696.3	697.8	699.2	700.7	702.1
120°	729.1	733.8	738.4	741.1	741.8	742.5	743.2	743.9
122.5°	769.9	774.3	778.7	781.1	781.7	782.2	782.7	783.2
125°	829.7	833.6	837.5	839.9	840.7	841.5	842.4	843.2
127.5°	883.4	887.4	891.3	893.4	893.5	893.6	893.7	893.8
130°	919.3	922.8	926.4	928.3	928.7	929.1	929.5	929.9
132.5°	952.0	956.1	960.1	962.2	962.4	962.5	962.7	962.8
135°	999.2	1002.7	1006.1	1007.9	1008.1	1008.3	1008.4	1008.6
137.5°	1044.2	1047.8	1051.5	1053.3	1053.4	1053.4	1053.4	1053.5
140°	1071.6	1075.3	1079.0	1080.9	1080.7	1080.6	1080.5	1080.3
142.5°	1098.9	1101.8	1104.7	1106.1	1106.0	1105.8	1105.7	1105.6
145°	1138.7	1140.4	1142.1	1142.9	1142.8	1142.7	1142.5	1142.4
147.5°	1173.5	1174.2	1175.0	1174.8	1173.8	1172.7	1171.7	1170.6
150°	1196.1	1196.5	1196.9	1196.4	1194.9	1193.5	1192.0	1190.5
152.5°	1216.8	1217.3	1217.7	1217.2	1215.6	1214.1	1212.5	1211.0
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)