

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: P333230

Luminaire Tested: **S125DIP-S850D810U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333230
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: S125DIP-S850D810U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6222.1 lumens
Efficiency: N/A
Efficacy: 135.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

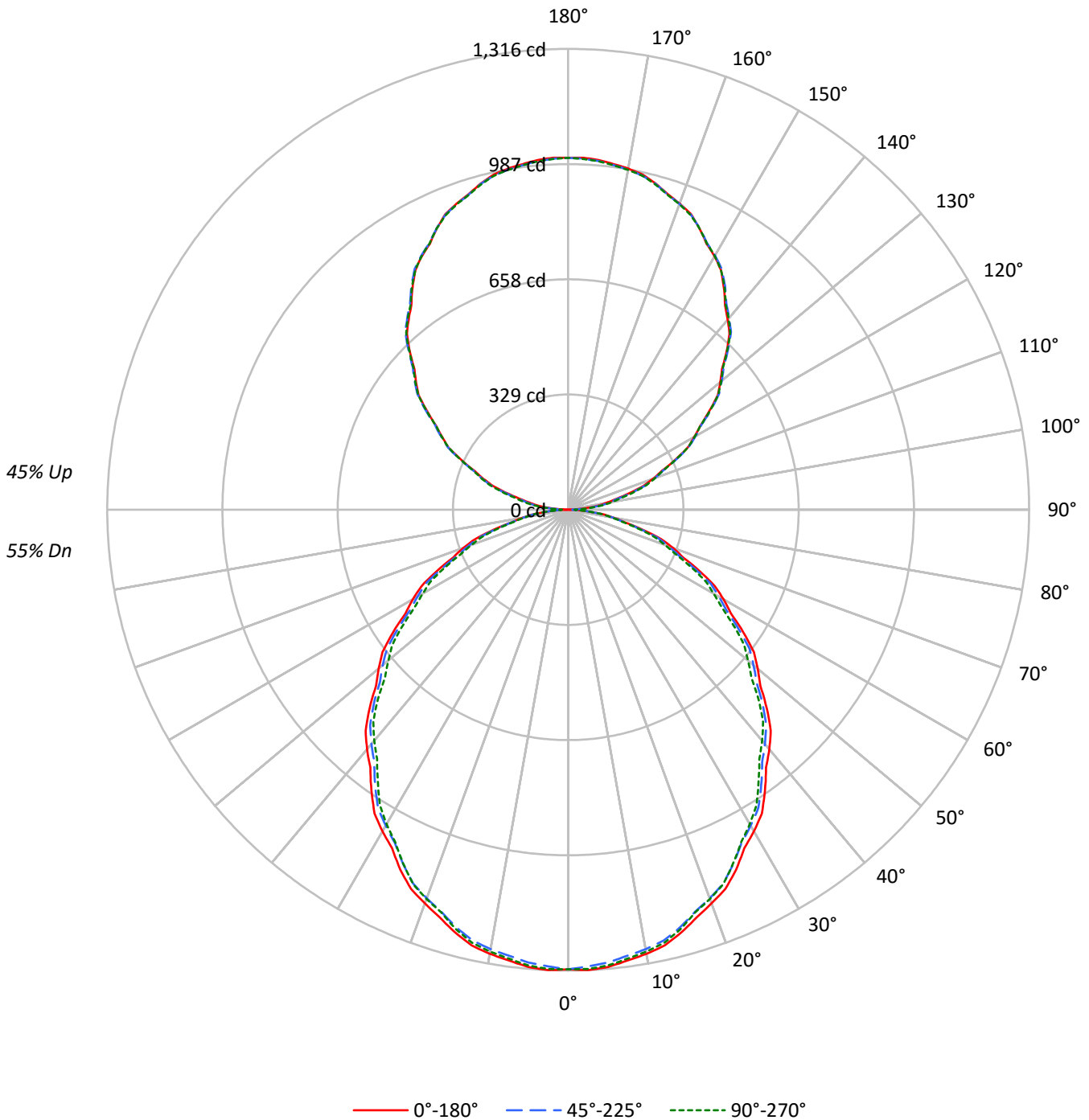
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55
1	99	94	90	87	92	88	84	81	75	73	71	64	62	61	54	52	51	46
2	90	82	76	71	83	77	71	67	66	62	58	56	53	51	47	45	43	39
3	82	72	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	31	28
5	69	57	49	43	64	53	46	41	46	41	36	40	35	32	34	30	27	24
6	64	51	43	37	59	48	41	35	42	36	31	36	31	28	30	27	24	21
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	21	19
8	55	42	34	29	51	39	32	27	35	29	25	30	25	22	26	22	19	17
9	51	38	31	26	47	36	29	25	32	26	22	28	23	20	24	20	17	15
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8478	8478	8478
5°	8497	8416	8470
10°	8445	8357	8405
15°	8354	8256	8291
20°	8223	8115	8130
25°	8082	7948	7941
30°	7908	7768	7730
35°	7722	7574	7468
40°	7530	7363	7259
45°	7323	7172	7029
50°	7095	6939	6731
55°	6876	6677	6490
60°	6613	6412	6185
65°	6301	6094	5888
70°	6001	5727	5531
75°	5467	5288	5105
80°	4868	4790	4675
85°	4231	4313	4076



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.8	2.0
10°-20°	349.6	5.6
20°-30°	516.2	8.3
30°-40°	602.4	9.7
40°-50°	605.0	9.7
50°-60°	531.1	8.5
60°-70°	395.7	6.4
70°-80°	226.3	3.6
80°-90°	68.0	1.1
90°-100°	67.3	1.1
100°-110°	198.7	3.2
110°-120°	336.6	5.4
120°-130°	443.0	7.1
130°-140°	496.4	8.0
140°-150°	486.5	7.8
150°-160°	408.6	6.6
160°-170°	271.6	4.4
170°-180°	95.1	1.5
0°-30°	989.7	15.9
0°-40°	1592.1	25.6
0°-60°	2728.2	43.8
0°-90°	3418.2	54.9
90°-120°	602.7	9.7
90°-150°	2028.6	32.6
90°-180°	2804.0	45.1
0°-180°	6222.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1313	1313	1313	1313	1313	
5°	1311	1308	1298	1307	1306	124
15°	1249	1246	1235	1240	1240	352
25°	1134	1128	1115	1117	1114	522
35°	979	975	961	955	947	612
45°	802	797	785	773	770	618
55°	611	607	593	584	576	545
65°	412	410	399	390	385	409
75°	219	217	212	209	205	234
85°	57	58	58	57	55	64
90°	1	7	12	16	19	6
95°	51	53	60	66	67	54
105°	178	182	187	191	194	190
115°	337	340	342	341	340	333
125°	492	496	497	496	495	440
135°	640	644	645	645	642	493
145°	775	778	780	780	778	484
155°	887	887	888	890	887	408
165°	964	963	963	966	962	272
175°	1002	1000	999	1003	999	95
180°	1005	1005	1005	1005	1005	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7
2.5°	1316.1	1315.5	1315.0	1314.4	1313.8	1312.6	1310.8	1309.0	1307.1	1305.3	1307.1
5°	1310.7	1310.2	1309.7	1309.3	1308.8	1307.4	1305.1	1302.8	1300.5	1298.2	1300.3
7.5°	1298.6	1298.2	1297.7	1297.2	1296.8	1295.3	1292.7	1290.2	1287.7	1285.1	1287.1
10°	1287.8	1287.4	1286.9	1286.4	1286.0	1284.5	1281.9	1279.4	1276.9	1274.3	1276.2
12.5°	1274.5	1273.7	1272.9	1272.0	1271.2	1269.6	1267.3	1264.9	1262.5	1260.2	1261.7
15°	1249.4	1248.7	1248.0	1247.3	1246.6	1245.0	1242.5	1239.9	1237.4	1234.8	1236.0
17.5°	1220.5	1219.5	1218.5	1217.5	1216.5	1214.6	1212.0	1209.4	1206.7	1204.1	1205.5
20°	1196.4	1196.0	1195.5	1195.0	1194.6	1192.8	1189.8	1186.8	1183.8	1180.8	1182.5
22.5°	1172.3	1171.5	1170.7	1169.8	1169.0	1167.2	1164.4	1161.5	1158.7	1155.9	1157.0
25°	1134.1	1133.0	1131.8	1130.6	1129.5	1127.4	1124.4	1121.4	1118.4	1115.4	1115.9
27.5°	1089.4	1088.8	1088.1	1087.4	1086.7	1084.8	1081.7	1078.6	1075.5	1072.4	1072.5
30°	1060.4	1059.7	1059.0	1058.3	1057.6	1055.5	1052.1	1048.6	1045.1	1041.7	1041.2
32.5°	1028.8	1027.7	1026.7	1025.6	1024.6	1022.5	1019.4	1016.3	1013.2	1010.1	1009.3
35°	979.4	978.4	977.5	976.6	975.7	973.6	970.4	967.1	963.9	960.7	959.5
37.5°	928.1	926.9	925.7	924.6	923.4	921.3	918.3	915.2	912.2	909.2	907.4
40°	893.2	892.0	890.9	889.7	888.5	886.4	883.1	879.9	876.7	873.4	871.4
42.5°	855.8	854.8	853.8	852.9	851.9	849.8	846.6	843.3	840.1	836.9	835.0
45°	801.8	800.8	799.9	799.0	798.1	796.2	793.5	790.7	787.9	785.2	782.4
47.5°	743.6	743.7	743.7	743.7	743.8	742.2	738.8	735.5	732.2	728.9	726.0
50°	706.2	705.5	704.8	704.1	703.5	701.7	699.0	696.2	693.4	690.6	687.6
52.5°	668.0	667.5	667.0	666.5	666.0	664.2	661.3	658.3	655.4	652.4	649.8
55°	610.7	610.0	609.3	608.6	607.9	605.9	602.7	599.5	596.2	593.0	590.9
57.5°	550.2	549.9	549.5	549.1	548.8	547.2	544.5	541.8	539.0	536.3	533.6
60°	512.0	511.1	510.2	509.2	508.3	506.6	504.0	501.5	499.0	496.4	494.1
62.5°	472.1	471.4	470.7	469.9	469.2	467.7	465.6	463.4	461.2	459.0	456.6
65°	412.3	411.8	411.4	410.9	410.5	409.0	406.4	403.9	401.3	398.8	396.7
67.5°	354.4	353.4	352.4	351.4	350.5	349.0	347.2	345.3	343.4	341.5	339.7
70°	317.8	316.6	315.5	314.3	313.2	311.6	309.5	307.4	305.3	303.3	301.9
72.5°	277.9	277.1	276.3	275.6	274.8	273.7	272.4	271.0	269.7	268.4	266.8
75°	219.1	218.7	218.2	217.8	217.3	216.5	215.3	214.2	213.0	211.9	211.2
77.5°	164.9	164.7	164.6	164.4	164.2	163.8	163.1	162.5	161.8	161.2	160.8
80°	130.9	130.9	130.9	130.9	130.9	130.6	130.2	129.7	129.2	128.8	128.6
82.5°	100.9	100.6	100.2	99.8	99.5	99.2	99.1	99.1	99.0	98.9	98.5
85°	57.1	57.4	57.6	57.8	58.0	58.2	58.2	58.2	58.2	58.2	57.9
87.5°	22.6	22.9	23.1	23.4	23.7	23.9	23.9	24.0	24.0	24.1	24.3
90°	0.8	2.2	3.6	5.0	6.3	7.6	8.9	10.1	11.3	12.5	13.4
92.5°	18.9	19.9	20.9	21.8	22.8	24.0	25.5	27.0	28.5	30.0	31.2
95°	50.8	51.2	51.5	51.9	52.2	53.3	55.0	56.7	58.5	60.2	61.4
97.5°	84.5	84.6	84.7	84.9	85.0	86.3	88.7	91.1	93.5	95.9	97.0
100°	109.5	109.5	109.5	109.5	109.5	110.6	112.9	115.1	117.4	119.6	121.2
102.5°	136.4	137.1	137.8	138.5	139.2	140.1	141.2	142.4	143.5	144.7	146.4
105°	178.3	179.2	180.0	180.9	181.8	182.7	183.8	184.8	185.8	186.9	187.9
107.5°	224.6	225.4	226.3	227.2	228.1	228.9	229.7	230.5	231.3	232.1	232.6
110°	256.5	257.4	258.2	259.1	260.0	260.7	261.2	261.7	262.2	262.7	263.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	289.0	289.5	289.9	290.4	290.8	291.4	292.0	292.7	293.4	294.0	294.3
115°	337.0	337.7	338.4	339.1	339.8	340.3	340.7	341.0	341.4	341.7	341.5
117.5°	385.2	385.5	385.8	386.1	386.4	386.8	387.1	387.4	387.7	388.0	388.1
120°	415.2	416.1	417.0	417.8	418.7	419.2	419.4	419.6	419.7	419.9	419.9
122.5°	447.7	448.1	448.4	448.7	449.0	449.4	449.8	450.3	450.7	451.2	451.0
125°	491.8	492.9	493.9	495.0	496.0	496.6	496.8	497.0	497.1	497.3	497.0
127.5°	538.8	539.4	539.9	540.5	541.1	541.5	541.7	541.9	542.2	542.4	542.2
130°	566.9	567.8	568.7	569.5	570.4	571.0	571.3	571.7	572.0	572.4	572.2
132.5°	595.1	596.5	597.9	599.3	600.8	601.4	601.4	601.3	601.2	601.2	601.0
135°	639.6	640.7	641.7	642.8	643.8	644.4	644.6	644.8	644.9	645.1	645.1
137.5°	681.6	682.6	683.6	684.6	685.6	686.3	686.7	687.0	687.4	687.8	688.0
140°	708.5	709.3	710.2	711.1	711.9	712.6	713.1	713.7	714.2	714.7	715.1
142.5°	735.4	736.1	736.8	737.5	738.3	739.0	739.6	740.3	740.9	741.6	741.8
145°	774.9	775.6	776.3	777.0	777.7	778.3	778.8	779.3	779.9	780.4	780.4
147.5°	811.5	811.9	812.3	812.7	813.0	813.4	813.9	814.3	814.7	815.1	815.5
150°	835.9	835.7	835.6	835.4	835.2	835.5	836.2	836.9	837.6	838.3	838.3
152.5°	855.9	856.2	856.4	856.7	856.9	857.2	857.4	857.7	858.0	858.3	858.7
155°	886.7	886.7	886.7	886.7	886.7	886.8	887.0	887.2	887.3	887.5	888.2
157.5°	914.3	913.9	913.5	913.1	912.7	912.6	912.8	913.0	913.1	913.3	914.0
160°	930.5	930.0	929.5	929.0	928.4	928.3	928.4	928.6	928.8	929.0	929.7
162.5°	944.9	944.5	944.1	943.8	943.4	943.2	943.2	943.3	943.3	943.4	944.2
165°	964.2	963.8	963.5	963.1	962.8	962.7	962.8	963.0	963.2	963.4	964.1
167.5°	980.4	979.7	979.0	978.3	977.6	977.3	977.3	977.3	977.3	977.3	978.3
170°	989.2	988.5	987.8	987.1	986.4	986.0	986.0	986.0	986.0	986.0	987.1
172.5°	995.4	994.7	994.0	993.3	992.6	992.3	992.3	992.3	992.3	992.3	993.3
175°	1002.5	1001.8	1001.1	1000.4	999.7	999.3	999.3	999.3	999.3	999.3	1000.4
177.5°	1006.1	1005.5	1005.0	1004.4	1003.8	1003.5	1003.4	1003.2	1003.1	1002.9	1003.8
180°	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7	1312.7
2.5°	1309.0	1310.8	1312.6	1313.5	1313.3	1313.1	1312.9	1312.7
5°	1302.4	1304.4	1306.5	1307.4	1307.2	1307.0	1306.7	1306.5
7.5°	1289.2	1291.2	1293.2	1294.1	1293.9	1293.7	1293.4	1293.2
10°	1278.0	1279.9	1281.7	1282.5	1282.3	1282.0	1281.8	1281.6
12.5°	1263.1	1264.6	1266.1	1266.8	1266.8	1266.7	1266.7	1266.6
15°	1237.2	1238.3	1239.5	1240.0	1240.0	1240.0	1240.0	1240.0
17.5°	1207.0	1208.4	1209.8	1210.0	1208.8	1207.7	1206.5	1205.4
20°	1184.1	1185.7	1187.3	1187.5	1186.4	1185.2	1184.1	1182.9
22.5°	1158.0	1159.1	1160.2	1160.3	1159.5	1158.7	1157.9	1157.2
25°	1116.3	1116.8	1117.3	1117.1	1116.5	1115.8	1115.1	1114.4
27.5°	1072.6	1072.7	1072.8	1072.5	1071.8	1071.1	1070.4	1069.7
30°	1040.8	1040.3	1039.8	1039.3	1038.6	1037.9	1037.2	1036.5
32.5°	1008.4	1007.6	1006.8	1005.7	1004.5	1003.2	1002.0	1000.8
35°	958.4	957.2	956.1	954.6	952.7	950.9	949.0	947.2
37.5°	905.7	904.0	902.3	900.9	899.9	898.8	897.8	896.7
40°	869.3	867.2	865.1	863.7	863.0	862.4	861.7	861.0
42.5°	833.1	831.2	829.3	827.8	826.8	825.7	824.6	823.6
45°	779.6	776.8	774.1	772.3	771.7	771.0	770.3	769.6
47.5°	723.2	720.4	717.6	715.4	713.8	712.2	710.5	708.9
50°	684.6	681.6	678.6	676.3	674.7	673.1	671.5	669.9
52.5°	647.2	644.5	641.9	639.7	637.9	636.1	634.3	632.5
55°	588.9	586.8	584.7	582.9	581.2	579.6	578.0	576.4
57.5°	531.0	528.3	525.6	523.8	522.9	522.1	521.2	520.3
60°	491.8	489.5	487.2	485.2	483.6	482.0	480.4	478.8
62.5°	454.1	451.6	449.1	447.2	446.0	444.7	443.5	442.2
65°	394.7	392.6	390.5	389.0	388.1	387.2	386.2	385.3
67.5°	338.0	336.2	334.5	333.3	332.8	332.2	331.6	331.1
70°	300.5	299.1	297.7	296.6	295.6	294.7	293.8	292.9
72.5°	265.2	263.7	262.1	260.8	259.9	259.0	258.1	257.1
75°	210.5	209.8	209.1	208.3	207.4	206.4	205.5	204.6
77.5°	160.4	159.9	159.5	159.0	158.3	157.7	157.1	156.4
80°	128.3	128.1	127.9	127.5	127.1	126.6	126.1	125.7
82.5°	98.0	97.6	97.2	97.0	96.9	96.8	96.7	96.6
85°	57.7	57.5	57.2	56.9	56.4	56.0	55.5	55.0
87.5°	24.5	24.6	24.8	24.8	24.5	24.2	24.0	23.7
90°	14.2	15.1	16.0	16.7	17.2	17.7	18.2	18.8
92.5°	32.3	33.5	34.6	35.4	35.8	36.1	36.5	36.9
95°	62.6	63.9	65.1	65.9	66.2	66.6	66.9	67.2
97.5°	98.2	99.3	100.5	101.1	101.3	101.5	101.8	102.0
100°	122.8	124.3	125.9	126.9	127.2	127.5	127.9	128.2
102.5°	148.1	149.8	151.5	152.6	153.1	153.5	154.0	154.5
105°	189.0	190.0	191.1	191.8	192.4	192.9	193.4	193.9
107.5°	233.1	233.6	234.2	234.4	234.4	234.3	234.3	234.3
110°	263.8	264.3	264.8	265.0	264.8	264.6	264.5	264.3



TEST NUMBER: P333230

CATALOG NUMBER: S125DIP-S850D810U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	294.5	294.7	295.0	295.0	294.6	294.3	294.0	293.7
115°	341.4	341.2	341.0	340.8	340.7	340.5	340.3	340.2
117.5°	388.3	388.4	388.6	388.3	387.6	386.9	386.2	385.5
120°	419.9	419.9	419.9	419.6	418.9	418.2	417.5	416.8
122.5°	450.9	450.8	450.6	450.3	449.7	449.2	448.6	448.1
125°	496.6	496.3	495.9	495.7	495.5	495.3	495.2	495.0
127.5°	542.0	541.8	541.7	541.4	541.1	540.7	540.4	540.0
130°	572.0	571.9	571.7	571.4	571.1	570.7	570.4	570.0
132.5°	600.8	600.6	600.5	600.1	599.7	599.2	598.7	598.2
135°	645.1	645.1	645.1	644.8	644.1	643.4	642.7	642.0
137.5°	688.2	688.4	688.6	688.3	687.4	686.6	685.7	684.8
140°	715.4	715.7	716.1	715.8	715.0	714.1	713.2	712.4
142.5°	742.0	742.2	742.4	742.1	741.2	740.4	739.5	738.6
145°	780.4	780.4	780.4	780.1	779.6	779.1	778.6	778.0
147.5°	815.9	816.4	816.8	816.4	815.2	814.0	812.9	811.7
150°	838.3	838.3	838.3	838.1	837.7	837.4	837.0	836.7
152.5°	859.1	859.5	859.9	859.8	859.2	858.6	858.0	857.3
155°	888.9	889.6	890.3	890.2	889.3	888.5	887.6	886.7
157.5°	914.7	915.4	916.1	915.9	914.7	913.6	912.4	911.3
160°	930.4	931.0	931.7	931.7	930.8	929.9	929.0	928.2
162.5°	945.0	945.9	946.7	946.6	945.6	944.6	943.6	942.6
165°	964.8	965.5	966.1	966.0	964.9	963.9	962.8	961.8
167.5°	979.4	980.4	981.5	981.4	980.4	979.3	978.2	977.1
170°	988.1	989.2	990.2	990.1	988.9	987.7	986.5	985.3
172.5°	994.4	995.4	996.5	996.5	995.4	994.3	993.2	992.1
175°	1001.4	1002.5	1003.5	1003.4	1002.2	1001.0	999.8	998.6
177.5°	1004.6	1005.4	1006.3	1006.2	1005.2	1004.3	1003.3	1002.3
180°	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8

(END OF REPORT)