

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: P333239-840

Luminaire Tested: **S125DIP-S850D1035U840-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333239-840
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-S850D1035U840-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7067.7 lumens
Efficiency: N/A
Efficacy: 135.9 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

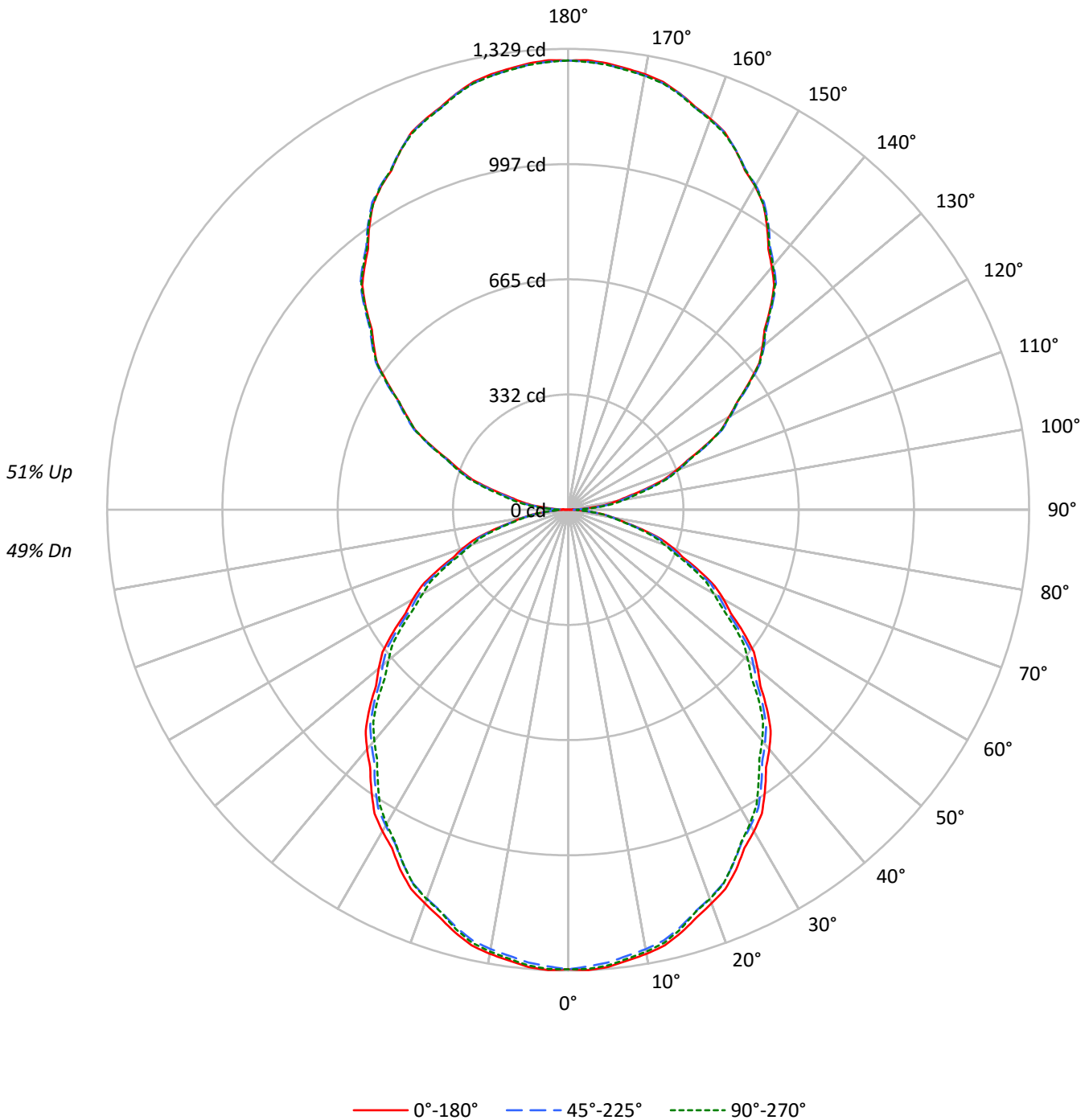
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46	41
2	89	81	75	70	81	75	70	65	63	59	56	53	50	47	43	41	39	34
3	81	71	64	58	74	66	60	54	56	51	47	47	43	40	38	35	33	29
4	74	63	55	49	68	58	52	46	50	44	40	41	37	34	34	31	29	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25	22
6	63	50	42	37	57	47	40	34	40	34	30	34	29	26	28	24	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	25	22	19	17
8	54	41	34	28	49	38	32	27	33	27	24	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8561	8561	8561
5°	8581	8499	8554
10°	8529	8439	8487
15°	8436	8338	8372
20°	8304	8195	8210
25°	8161	8027	8020
30°	7986	7845	7806
35°	7798	7649	7541
40°	7605	7436	7331
45°	7395	7242	7099
50°	7166	7007	6797
55°	6944	6742	6554
60°	6679	6475	6245
65°	6363	6154	5946
70°	6060	5784	5586
75°	5522	5340	5155
80°	4917	4839	4720
85°	4276	4357	4113



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.0	1.8
10°-20°	353.1	5.0
20°-30°	521.3	7.4
30°-40°	608.3	8.6
40°-50°	611.0	8.6
50°-60°	536.3	7.6
60°-70°	399.6	5.7
70°-80°	228.5	3.2
80°-90°	69.3	1.0
90°-100°	86.8	1.2
100°-110°	256.2	3.6
110°-120°	434.0	6.1
120°-130°	571.2	8.1
130°-140°	640.0	9.1
140°-150°	627.3	8.9
150°-160°	526.9	7.5
160°-170°	350.2	5.0
170°-180°	122.6	1.7
0°-30°	999.4	14.1
0°-40°	1607.8	22.7
0°-60°	2755.1	39.0
0°-90°	3452.5	48.8
90°-120°	777.0	11.0
90°-150°	2615.5	37.0
90°-180°	3615.0	51.1
0°-180°	7067.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1326	1326	1326	1326	1326	
5°	1324	1321	1311	1320	1319	125
15°	1262	1258	1247	1252	1252	355
25°	1145	1140	1126	1128	1125	527
35°	989	984	970	965	956	618
45°	810	805	793	781	777	624
55°	617	613	599	590	582	550
65°	416	414	403	394	389	413
75°	221	219	214	211	207	236
85°	58	59	59	58	56	64
90°	1	9	16	21	24	7
95°	66	68	78	84	87	70
105°	230	235	241	247	250	245
115°	434	438	441	440	439	430
125°	634	640	641	639	638	568
135°	825	830	832	832	828	635
145°	999	1003	1006	1006	1003	624
155°	1143	1143	1144	1148	1143	526
165°	1243	1241	1242	1246	1240	351
175°	1292	1289	1288	1294	1288	123
180°	1296	1296	1296	1296	1296	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6
2.5°	1329.1	1328.5	1328.0	1327.4	1326.8	1325.5	1323.7	1321.9	1320.0	1318.2	1320.0
5°	1323.6	1323.1	1322.6	1322.2	1321.7	1320.3	1318.0	1315.7	1313.3	1311.0	1313.1
7.5°	1311.4	1311.0	1310.5	1310.0	1309.6	1308.1	1305.5	1302.9	1300.4	1297.8	1299.8
10°	1300.5	1300.1	1299.6	1299.1	1298.7	1297.2	1294.5	1292.0	1289.5	1286.9	1288.8
12.5°	1287.1	1286.3	1285.5	1284.5	1283.7	1282.1	1279.8	1277.4	1275.0	1272.6	1274.1
15°	1261.7	1261.0	1260.3	1259.6	1258.9	1257.3	1254.8	1252.1	1249.6	1247.0	1248.2
17.5°	1232.5	1231.5	1230.5	1229.5	1228.5	1226.6	1224.0	1221.3	1218.6	1216.0	1217.4
20°	1208.2	1207.8	1207.3	1206.8	1206.4	1204.6	1201.5	1198.5	1195.5	1192.4	1194.2
22.5°	1183.9	1183.1	1182.2	1181.3	1180.5	1178.7	1175.9	1173.0	1170.1	1167.3	1168.4
25°	1145.3	1144.2	1143.0	1141.8	1140.6	1138.5	1135.5	1132.5	1129.4	1126.4	1126.9
27.5°	1100.1	1099.5	1098.8	1098.1	1097.4	1095.5	1092.4	1089.2	1086.1	1083.0	1083.1
30°	1070.9	1070.2	1069.4	1068.7	1068.0	1065.9	1062.5	1058.9	1055.4	1052.0	1051.5
32.5°	1038.9	1037.8	1036.8	1035.7	1034.7	1032.6	1029.5	1026.3	1023.2	1020.1	1019.3
35°	989.1	988.1	987.1	986.2	985.3	983.2	980.0	976.6	973.4	970.2	969.0
37.5°	937.3	936.0	934.8	933.7	932.5	930.4	927.4	924.2	921.2	918.2	916.4
40°	902.0	900.8	899.7	898.5	897.3	895.1	891.8	888.6	885.3	882.0	880.0
42.5°	864.2	863.2	862.2	861.3	860.3	858.2	855.0	851.6	848.4	845.2	843.2
45°	809.7	808.7	807.8	806.9	806.0	804.1	801.3	798.5	795.7	792.9	790.1
47.5°	750.9	751.0	751.0	751.0	751.1	749.5	746.1	742.8	739.4	736.1	733.2
50°	713.2	712.5	711.8	711.0	710.4	708.6	705.9	703.1	700.2	697.4	694.4
52.5°	674.6	674.1	673.6	673.1	672.6	670.8	667.8	664.8	661.9	658.8	656.2
55°	616.7	616.0	615.3	614.6	613.9	611.9	608.6	605.4	602.1	598.8	596.7
57.5°	555.6	555.3	554.9	554.5	554.2	552.6	549.9	547.1	544.3	541.6	538.9
60°	517.1	516.1	515.2	514.2	513.3	511.6	509.0	506.4	503.9	501.3	499.0
62.5°	476.8	476.1	475.3	474.5	473.8	472.3	470.2	468.0	465.7	463.5	461.1
65°	416.4	415.9	415.5	415.0	414.5	413.0	410.4	407.9	405.3	402.7	400.6
67.5°	357.9	356.9	355.9	354.9	354.0	352.4	350.6	348.7	346.8	344.9	343.1
70°	320.9	319.7	318.6	317.4	316.3	314.7	312.6	310.4	308.3	306.3	304.9
72.5°	280.6	279.8	279.0	278.3	277.5	276.4	275.1	273.7	272.4	271.0	269.4
75°	221.3	220.9	220.4	219.9	219.4	218.6	217.4	216.3	215.1	214.0	213.3
77.5°	166.5	166.3	166.2	166.0	165.8	165.4	164.7	164.1	163.4	162.8	162.4
80°	132.2	132.2	132.2	132.2	132.2	131.9	131.5	131.0	130.5	130.1	129.9
82.5°	101.9	101.6	101.2	100.8	100.5	100.2	100.1	100.1	100.0	99.9	99.5
85°	57.7	58.0	58.2	58.4	58.6	58.8	58.8	58.8	58.8	58.8	58.5
87.5°	22.8	23.2	23.5	23.9	24.3	24.5	24.6	24.7	24.9	25.0	25.2
90°	1.0	2.8	4.5	6.4	8.2	9.9	11.4	13.0	14.5	16.2	17.3
92.5°	24.4	25.7	26.9	28.2	29.4	31.0	32.9	34.8	36.8	38.7	40.2
95°	65.5	65.9	66.4	66.9	67.4	68.7	70.9	73.1	75.4	77.7	79.2
97.5°	108.9	109.1	109.3	109.5	109.6	111.3	114.3	117.4	120.5	123.6	125.1
100°	141.2	141.2	141.2	141.2	141.2	142.6	145.5	148.5	151.4	154.2	156.2
102.5°	175.8	176.7	177.6	178.5	179.5	180.6	182.1	183.6	185.0	186.5	188.7
105°	229.8	231.0	232.1	233.3	234.4	235.6	236.9	238.2	239.6	241.0	242.3
107.5°	289.5	290.6	291.8	293.0	294.1	295.1	296.1	297.2	298.2	299.2	299.9
110°	330.7	331.8	333.0	334.1	335.2	336.1	336.7	337.4	338.1	338.7	339.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	372.6	373.2	373.8	374.4	375.0	375.7	376.6	377.4	378.2	379.1	379.4
115°	434.5	435.5	436.4	437.3	438.1	438.8	439.2	439.7	440.1	440.6	440.4
117.5°	496.7	497.1	497.5	497.9	498.3	498.7	499.1	499.5	499.9	500.3	500.5
120°	535.3	536.4	537.6	538.8	539.9	540.5	540.7	541.0	541.2	541.4	541.4
122.5°	577.3	577.7	578.1	578.6	579.0	579.4	580.0	580.6	581.2	581.7	581.6
125°	634.2	635.5	636.8	638.2	639.5	640.4	640.6	640.8	641.0	641.3	640.8
127.5°	694.7	695.4	696.2	696.9	697.7	698.2	698.5	698.7	699.0	699.3	699.0
130°	730.9	732.1	733.2	734.3	735.4	736.2	736.7	737.1	737.5	738.0	737.8
132.5°	767.2	769.1	770.9	772.7	774.6	775.5	775.4	775.3	775.2	775.1	774.9
135°	824.8	826.1	827.4	828.7	830.1	830.9	831.1	831.3	831.5	831.7	831.7
137.5°	878.8	880.0	881.3	882.6	883.9	884.8	885.3	885.9	886.4	886.8	887.1
140°	913.4	914.5	915.6	916.8	917.9	918.8	919.5	920.2	920.8	921.5	921.9
142.5°	948.1	949.1	950.0	950.9	951.9	952.8	953.6	954.5	955.3	956.1	956.4
145°	999.2	1000.1	1000.9	1001.8	1002.7	1003.5	1004.2	1004.8	1005.5	1006.2	1006.2
147.5°	1046.3	1046.8	1047.3	1047.8	1048.2	1048.8	1049.4	1049.9	1050.4	1051.0	1051.5
150°	1077.7	1077.5	1077.3	1077.1	1076.9	1077.2	1078.1	1079.0	1079.8	1080.8	1080.8
152.5°	1103.6	1103.9	1104.2	1104.5	1104.8	1105.2	1105.5	1105.9	1106.2	1106.6	1107.1
155°	1143.3	1143.3	1143.3	1143.3	1143.3	1143.4	1143.7	1143.9	1144.1	1144.3	1145.2
157.5°	1178.8	1178.3	1177.8	1177.3	1176.8	1176.7	1176.9	1177.1	1177.4	1177.6	1178.5
160°	1199.7	1199.1	1198.4	1197.7	1197.1	1196.9	1197.1	1197.3	1197.5	1197.7	1198.6
162.5°	1218.3	1217.8	1217.3	1216.8	1216.4	1216.1	1216.2	1216.2	1216.3	1216.3	1217.4
165°	1243.1	1242.6	1242.2	1241.7	1241.3	1241.2	1241.4	1241.6	1241.8	1242.1	1243.0
167.5°	1264.0	1263.1	1262.3	1261.4	1260.5	1260.0	1260.0	1260.0	1260.0	1260.0	1261.4
170°	1275.4	1274.4	1273.5	1272.7	1271.8	1271.3	1271.3	1271.3	1271.3	1271.3	1272.7
172.5°	1283.4	1282.5	1281.6	1280.7	1279.9	1279.4	1279.4	1279.4	1279.4	1279.4	1280.7
175°	1292.5	1291.6	1290.7	1289.8	1288.9	1288.5	1288.5	1288.5	1288.5	1288.5	1289.8
177.5°	1297.2	1296.5	1295.8	1294.9	1294.2	1293.8	1293.6	1293.4	1293.3	1293.1	1294.2
180°	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6	1325.6
2.5°	1321.9	1323.7	1325.5	1326.5	1326.3	1326.1	1325.9	1325.6
5°	1315.2	1317.3	1319.4	1320.3	1320.1	1319.9	1319.6	1319.4
7.5°	1301.9	1303.9	1306.0	1306.9	1306.7	1306.5	1306.2	1306.0
10°	1290.6	1292.5	1294.3	1295.2	1294.9	1294.6	1294.4	1294.2
12.5°	1275.6	1277.1	1278.6	1279.3	1279.3	1279.2	1279.2	1279.1
15°	1249.4	1250.5	1251.7	1252.2	1252.2	1252.2	1252.2	1252.2
17.5°	1218.9	1220.3	1221.7	1221.9	1220.7	1219.6	1218.4	1217.3
20°	1195.8	1197.4	1199.0	1199.2	1198.1	1196.9	1195.8	1194.6
22.5°	1169.4	1170.5	1171.6	1171.7	1170.9	1170.1	1169.3	1168.6
25°	1127.3	1127.8	1128.3	1128.1	1127.5	1126.8	1126.1	1125.4
27.5°	1083.2	1083.3	1083.4	1083.1	1082.4	1081.7	1081.0	1080.3
30°	1051.1	1050.6	1050.1	1049.6	1048.8	1048.1	1047.4	1046.7
32.5°	1018.3	1017.5	1016.7	1015.6	1014.4	1013.1	1011.9	1010.7
35°	967.9	966.6	965.5	964.0	962.1	960.3	958.4	956.5
37.5°	914.6	912.9	911.2	909.8	908.8	907.7	906.7	905.5
40°	877.9	875.8	873.6	872.2	871.5	870.9	870.2	869.5
42.5°	841.3	839.4	837.5	836.0	835.0	833.8	832.7	831.7
45°	787.3	784.5	781.7	779.9	779.3	778.6	777.9	777.2
47.5°	730.3	727.5	724.7	722.5	720.8	719.2	717.5	715.9
50°	691.4	688.3	685.3	683.0	681.4	679.7	678.1	676.5
52.5°	653.6	650.9	648.2	646.0	644.2	642.4	640.6	638.7
55°	594.7	592.6	590.5	588.7	586.9	585.3	583.7	582.1
57.5°	536.2	533.5	530.8	529.0	528.1	527.3	526.3	525.4
60°	496.7	494.3	492.0	490.0	488.4	486.8	485.1	483.5
62.5°	458.6	456.1	453.5	451.6	450.4	449.1	447.9	446.6
65°	398.6	396.5	394.4	392.8	391.9	391.0	390.0	389.1
67.5°	341.3	339.5	337.8	336.6	336.1	335.5	334.9	334.4
70°	303.5	302.1	300.6	299.5	298.5	297.6	296.7	295.8
72.5°	267.8	266.3	264.7	263.4	262.5	261.6	260.6	259.6
75°	212.6	211.9	211.2	210.4	209.4	208.4	207.5	206.6
77.5°	162.0	161.5	161.1	160.6	159.9	159.3	158.6	157.9
80°	129.6	129.4	129.2	128.8	128.4	127.8	127.3	126.9
82.5°	99.0	98.6	98.2	98.0	97.9	97.8	97.7	97.6
85°	58.3	58.1	57.8	57.5	57.0	56.6	56.0	55.5
87.5°	25.4	25.8	26.0	26.0	25.7	25.4	25.2	24.9
90°	18.4	19.5	20.6	21.5	22.2	22.8	23.5	24.2
92.5°	41.7	43.1	44.6	45.6	46.2	46.6	47.1	47.6
95°	80.8	82.3	83.9	84.9	85.3	85.8	86.2	86.7
97.5°	126.5	128.1	129.6	130.4	130.7	131.0	131.2	131.5
100°	158.2	160.3	162.3	163.6	164.0	164.4	164.9	165.3
102.5°	190.9	193.1	195.3	196.7	197.3	197.9	198.6	199.2
105°	243.7	245.0	246.3	247.3	248.0	248.7	249.3	250.0
107.5°	300.5	301.2	301.9	302.3	302.2	302.2	302.2	302.1
110°	340.1	340.7	341.4	341.6	341.4	341.2	341.0	340.7



TEST NUMBER: P333239-840

CATALOG NUMBER: S125DIP-S850D1035U840-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	379.7	380.0	380.3	380.3	379.9	379.5	379.1	378.7
115°	440.1	439.9	439.7	439.5	439.2	439.0	438.8	438.6
117.5°	500.6	500.8	501.0	500.6	499.7	498.9	498.0	497.1
120°	541.4	541.4	541.4	541.0	540.1	539.2	538.3	537.3
122.5°	581.4	581.2	581.0	580.6	579.9	579.2	578.5	577.7
125°	640.4	639.9	639.4	639.0	638.8	638.6	638.4	638.2
127.5°	698.8	698.6	698.4	698.0	697.6	697.1	696.7	696.3
130°	737.5	737.3	737.1	736.8	736.3	735.9	735.4	735.0
132.5°	774.7	774.5	774.2	773.8	773.2	772.5	771.9	771.2
135°	831.7	831.7	831.7	831.3	830.4	829.5	828.6	827.7
137.5°	887.4	887.6	887.9	887.5	886.4	885.2	884.1	883.0
140°	922.4	922.8	923.3	922.9	921.8	920.7	919.6	918.5
142.5°	956.7	956.9	957.3	956.8	955.7	954.6	953.5	952.3
145°	1006.2	1006.2	1006.2	1005.8	1005.2	1004.5	1003.8	1003.2
147.5°	1052.0	1052.6	1053.1	1052.6	1051.1	1049.6	1048.0	1046.5
150°	1080.8	1080.8	1080.8	1080.6	1080.2	1079.6	1079.2	1078.7
152.5°	1107.7	1108.2	1108.7	1108.6	1107.8	1107.0	1106.2	1105.4
155°	1146.1	1147.0	1147.9	1147.8	1146.7	1145.5	1144.4	1143.3
157.5°	1179.3	1180.2	1181.1	1180.8	1179.4	1177.9	1176.4	1175.0
160°	1199.5	1200.4	1201.3	1201.2	1200.1	1199.0	1197.9	1196.7
162.5°	1218.4	1219.5	1220.6	1220.5	1219.2	1217.9	1216.6	1215.3
165°	1243.9	1244.8	1245.7	1245.5	1244.2	1242.7	1241.4	1240.1
167.5°	1262.7	1264.0	1265.5	1265.4	1264.0	1262.6	1261.2	1259.8
170°	1274.0	1275.4	1276.7	1276.6	1275.1	1273.4	1271.9	1270.3
172.5°	1282.1	1283.4	1284.8	1284.8	1283.3	1282.0	1280.6	1279.2
175°	1291.2	1292.5	1293.8	1293.7	1292.2	1290.6	1289.0	1287.5
177.5°	1295.3	1296.4	1297.4	1297.4	1296.1	1294.8	1293.5	1292.3
180°	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6	1295.6

(END OF REPORT)