

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: P333239-940

Luminaire Tested: **S125DIP-S850D1035U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333239-940
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-S850D1035U940-4F0-1E-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: 6240.7 lumens
Efficiency: N/A
Efficacy: 120.0 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

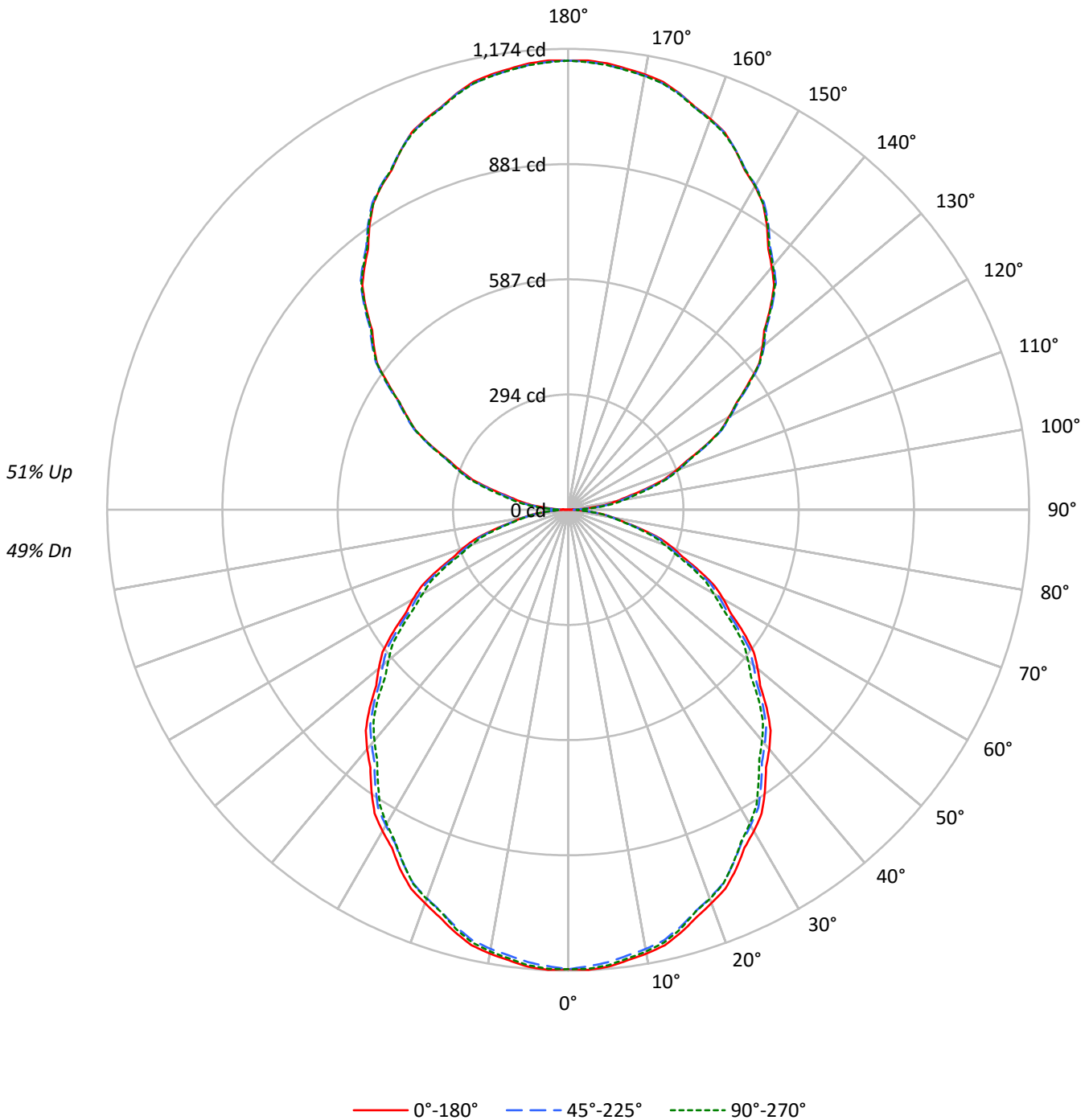
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7559	7559	7559
5°	7577	7505	7553
10°	7531	7452	7494
15°	7449	7362	7393
20°	7332	7236	7249
25°	7207	7088	7081
30°	7052	6927	6893
35°	6885	6754	6659
40°	6715	6566	6473
45°	6530	6395	6268
50°	6327	6187	6002
55°	6132	5954	5788
60°	5898	5717	5515
65°	5619	5434	5251
70°	5351	5108	4932
75°	4876	4716	4551
80°	4340	4273	4169
85°	3772	3846	3631



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.4	1.8
10°-20°	311.8	5.0
20°-30°	460.3	7.4
30°-40°	537.2	8.6
40°-50°	539.5	8.6
50°-60°	473.6	7.6
60°-70°	352.9	5.7
70°-80°	201.8	3.2
80°-90°	61.2	1.0
90°-100°	76.6	1.2
100°-110°	226.3	3.6
110°-120°	383.2	6.1
120°-130°	504.3	8.1
130°-140°	565.1	9.1
140°-150°	553.9	8.9
150°-160°	465.2	7.5
160°-170°	309.2	5.0
170°-180°	108.2	1.7
0°-30°	882.5	14.1
0°-40°	1419.6	22.7
0°-60°	2432.7	39.0
0°-90°	3048.6	48.8
90°-120°	686.1	11.0
90°-150°	2309.5	37.0
90°-180°	3192.0	51.1
0°-180°	6240.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1169	1166	1158	1165	1165	111
15°	1114	1111	1101	1106	1106	314
25°	1011	1006	995	996	994	465
35°	873	869	857	852	845	546
45°	715	711	700	690	686	551
55°	545	541	529	521	514	486
65°	368	365	356	348	344	365
75°	195	193	189	186	182	208
85°	51	52	52	51	49	57
90°	1	8	14	19	21	6
95°	58	60	69	75	77	62
105°	203	208	213	218	221	217
115°	384	387	389	388	387	379
125°	560	565	566	564	564	501
135°	728	733	734	734	731	561
145°	882	886	888	888	886	551
155°	1010	1010	1010	1014	1010	465
165°	1098	1096	1097	1100	1095	310
175°	1141	1138	1138	1142	1137	108
180°	1144	1144	1144	1144	1144	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5
2.5°	1173.6	1173.0	1172.6	1172.1	1171.5	1170.5	1168.9	1167.2	1165.6	1164.0	1165.6
5°	1168.8	1168.3	1167.9	1167.5	1167.1	1165.8	1163.8	1161.7	1159.7	1157.6	1159.5
7.5°	1158.0	1157.6	1157.2	1156.7	1156.4	1155.0	1152.7	1150.5	1148.3	1145.9	1147.7
10°	1148.3	1148.0	1147.5	1147.1	1146.7	1145.4	1143.1	1140.9	1138.6	1136.3	1138.0
12.5°	1136.5	1135.8	1135.1	1134.3	1133.5	1132.1	1130.1	1127.9	1125.8	1123.7	1125.1
15°	1114.1	1113.5	1112.9	1112.2	1111.6	1110.2	1108.0	1105.6	1103.4	1101.1	1102.2
17.5°	1088.3	1087.4	1086.5	1085.7	1084.8	1083.1	1080.8	1078.4	1076.0	1073.7	1075.0
20°	1066.8	1066.5	1066.0	1065.6	1065.2	1063.6	1061.0	1058.3	1055.6	1052.9	1054.4
22.5°	1045.4	1044.6	1043.9	1043.1	1042.4	1040.8	1038.3	1035.7	1033.2	1030.7	1031.7
25°	1011.3	1010.3	1009.2	1008.2	1007.2	1005.3	1002.6	1000.0	997.3	994.6	995.1
27.5°	971.4	970.9	970.3	969.6	969.0	967.3	964.6	961.8	959.0	956.3	956.4
30°	945.6	944.9	944.3	943.7	943.1	941.2	938.2	935.0	931.9	928.9	928.4
32.5°	917.4	916.4	915.5	914.5	913.6	911.8	909.0	906.2	903.5	900.7	900.0
35°	873.3	872.4	871.6	870.8	870.0	868.2	865.3	862.4	859.5	856.7	855.6
37.5°	827.6	826.5	825.5	824.5	823.4	821.5	818.9	816.1	813.4	810.7	809.1
40°	796.5	795.4	794.4	793.4	792.3	790.4	787.5	784.6	781.8	778.8	777.0
42.5°	763.1	762.2	761.3	760.5	759.6	757.8	754.9	752.0	749.1	746.3	744.6
45°	715.0	714.1	713.3	712.5	711.7	710.0	707.6	705.1	702.6	700.2	697.7
47.5°	663.1	663.2	663.2	663.2	663.3	661.8	658.8	655.9	652.9	650.0	647.4
50°	629.7	629.1	628.5	627.9	627.3	625.7	623.3	620.8	618.3	615.8	613.1
52.5°	595.7	595.2	594.8	594.3	593.9	592.3	589.7	587.0	584.4	581.8	579.4
55°	544.6	543.9	543.3	542.7	542.1	540.3	537.4	534.6	531.6	528.8	526.9
57.5°	490.6	490.4	490.0	489.6	489.4	487.9	485.5	483.1	480.6	478.2	475.8
60°	456.6	455.8	455.0	454.1	453.3	451.7	449.4	447.2	445.0	442.6	440.6
62.5°	421.0	420.4	419.7	419.0	418.4	417.1	415.2	413.2	411.3	409.3	407.2
65°	367.7	367.2	366.8	366.4	366.0	364.7	362.4	360.2	357.8	355.6	353.7
67.5°	316.0	315.1	314.2	313.3	312.5	311.2	309.6	307.9	306.2	304.5	302.9
70°	283.4	282.3	281.3	280.3	279.3	277.9	276.0	274.1	272.2	270.5	269.2
72.5°	247.8	247.1	246.4	245.8	245.0	244.1	242.9	241.7	240.5	239.3	237.9
75°	195.4	195.0	194.6	194.2	193.8	193.1	192.0	191.0	189.9	189.0	188.3
77.5°	147.0	146.9	146.8	146.6	146.4	146.1	145.4	144.9	144.3	143.7	143.4
80°	116.7	116.7	116.7	116.7	116.7	116.5	116.1	115.7	115.2	114.9	114.7
82.5°	90.0	89.7	89.3	89.0	88.7	88.5	88.4	88.4	88.3	88.2	87.8
85°	50.9	51.2	51.4	51.5	51.7	51.9	51.9	51.9	51.9	51.9	51.6
87.5°	20.2	20.5	20.8	21.1	21.5	21.7	21.8	21.8	22.0	22.1	22.3
90°	0.9	2.5	4.0	5.6	7.2	8.7	10.1	11.5	12.8	14.3	15.2
92.5°	21.6	22.6	23.7	24.9	25.9	27.4	29.1	30.8	32.5	34.2	35.5
95°	57.9	58.2	58.7	59.0	59.5	60.6	62.6	64.6	66.6	68.6	69.9
97.5°	96.1	96.3	96.5	96.7	96.8	98.3	100.9	103.7	106.4	109.1	110.5
100°	124.7	124.7	124.7	124.7	124.7	125.9	128.5	131.1	133.7	136.2	137.9
102.5°	155.2	156.0	156.9	157.7	158.5	159.4	160.8	162.1	163.4	164.7	166.7
105°	203.0	203.9	204.9	206.0	207.0	208.0	209.2	210.4	211.6	212.8	213.9
107.5°	255.7	256.6	257.6	258.7	259.7	260.6	261.4	262.4	263.3	264.2	264.8
110°	292.0	293.0	294.0	295.0	296.0	296.8	297.3	297.9	298.5	299.1	299.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	329.0	329.6	330.0	330.6	331.1	331.7	332.5	333.2	333.9	334.7	335.0
115°	383.7	384.5	385.3	386.1	386.8	387.4	387.8	388.3	388.6	389.1	388.9
117.5°	438.5	438.9	439.3	439.6	440.0	440.3	440.7	441.0	441.4	441.8	441.9
120°	472.7	473.7	474.7	475.7	476.7	477.2	477.4	477.7	477.9	478.0	478.0
122.5°	509.8	510.1	510.5	510.9	511.2	511.6	512.1	512.6	513.2	513.6	513.5
125°	560.0	561.2	562.3	563.6	564.7	565.4	565.6	565.8	566.0	566.2	565.8
127.5°	613.4	614.0	614.7	615.4	616.1	616.5	616.8	617.0	617.2	617.5	617.2
130°	645.4	646.4	647.4	648.4	649.3	650.1	650.5	650.9	651.2	651.7	651.5
132.5°	677.4	679.1	680.7	682.3	683.9	684.7	684.7	684.6	684.5	684.4	684.2
135°	728.3	729.4	730.6	731.7	733.0	733.7	733.9	734.1	734.2	734.4	734.4
137.5°	776.0	777.0	778.2	779.4	780.5	781.3	781.8	782.2	782.7	783.0	783.3
140°	806.6	807.5	808.5	809.5	810.5	811.3	811.9	812.5	813.1	813.7	814.0
142.5°	837.1	838.0	838.8	839.6	840.5	841.3	842.0	842.8	843.6	844.3	844.5
145°	882.3	883.1	883.8	884.6	885.4	886.1	886.7	887.3	887.9	888.5	888.5
147.5°	923.9	924.3	924.8	925.2	925.6	926.1	926.6	927.0	927.5	928.0	928.4
150°	951.6	951.5	951.3	951.1	950.9	951.2	952.0	952.8	953.5	954.3	954.3
152.5°	974.5	974.7	975.0	975.3	975.5	975.9	976.2	976.5	976.8	977.1	977.6
155°	1009.5	1009.5	1009.5	1009.5	1009.5	1009.6	1009.9	1010.0	1010.2	1010.4	1011.2
157.5°	1040.9	1040.4	1040.0	1039.6	1039.1	1039.0	1039.2	1039.4	1039.6	1039.8	1040.6
160°	1059.4	1058.8	1058.2	1057.6	1057.0	1056.9	1057.0	1057.2	1057.4	1057.6	1058.4
162.5°	1075.8	1075.3	1074.9	1074.4	1074.1	1073.8	1073.9	1073.9	1074.0	1074.0	1075.0
165°	1097.7	1097.3	1096.9	1096.4	1096.1	1096.0	1096.2	1096.4	1096.5	1096.8	1097.6
167.5°	1116.2	1115.4	1114.6	1113.8	1113.0	1112.6	1112.6	1112.6	1112.6	1112.6	1113.8
170°	1126.1	1125.3	1124.5	1123.8	1123.0	1122.6	1122.6	1122.6	1122.6	1122.6	1123.8
172.5°	1133.3	1132.5	1131.7	1130.9	1130.2	1129.7	1129.7	1129.7	1129.7	1129.7	1130.9
175°	1141.3	1140.5	1139.7	1138.9	1138.1	1137.7	1137.7	1137.7	1137.7	1137.7	1138.9
177.5°	1145.4	1144.8	1144.2	1143.4	1142.8	1142.5	1142.3	1142.1	1142.0	1141.8	1142.8
180°	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5	1170.5
2.5°	1167.2	1168.9	1170.5	1171.3	1171.1	1170.9	1170.7	1170.5
5°	1161.4	1163.1	1165.0	1165.8	1165.6	1165.5	1165.2	1165.0
7.5°	1149.6	1151.4	1153.2	1154.0	1153.8	1153.6	1153.3	1153.2
10°	1139.6	1141.3	1142.9	1143.6	1143.4	1143.2	1143.0	1142.8
12.5°	1126.3	1127.7	1129.0	1129.6	1129.6	1129.5	1129.5	1129.4
15°	1103.2	1104.2	1105.3	1105.7	1105.7	1105.7	1105.7	1105.7
17.5°	1076.3	1077.5	1078.8	1079.0	1077.9	1076.9	1075.8	1074.9
20°	1055.9	1057.3	1058.7	1058.9	1057.9	1056.9	1055.9	1054.8
22.5°	1032.6	1033.6	1034.6	1034.7	1033.9	1033.2	1032.5	1031.9
25°	995.4	995.9	996.3	996.1	995.6	995.0	994.3	993.7
27.5°	956.4	956.5	956.6	956.4	955.7	955.1	954.5	953.9
30°	928.1	927.6	927.2	926.8	926.1	925.5	924.9	924.3
32.5°	899.2	898.5	897.8	896.8	895.7	894.6	893.5	892.4
35°	854.6	853.5	852.6	851.2	849.5	847.9	846.2	844.6
37.5°	807.6	806.1	804.6	803.3	802.5	801.5	800.6	799.6
40°	775.2	773.3	771.4	770.2	769.5	769.0	768.4	767.8
42.5°	742.9	741.2	739.5	738.2	737.3	736.3	735.3	734.4
45°	695.2	692.7	690.3	688.7	688.1	687.5	686.9	686.3
47.5°	644.9	642.4	639.9	637.9	636.5	635.1	633.6	632.1
50°	610.5	607.8	605.1	603.1	601.6	600.2	598.8	597.4
52.5°	577.1	574.7	572.4	570.4	568.8	567.2	565.6	564.0
55°	525.1	523.3	521.4	519.8	518.3	516.8	515.4	514.0
57.5°	473.5	471.1	468.7	467.1	466.3	465.6	464.8	464.0
60°	438.5	436.5	434.4	432.7	431.2	429.8	428.4	427.0
62.5°	404.9	402.7	400.5	398.8	397.7	396.5	395.5	394.3
65°	352.0	350.1	348.2	346.9	346.1	345.3	344.4	343.6
67.5°	301.4	299.8	298.3	297.2	296.8	296.2	295.7	295.2
70°	268.0	266.7	265.5	264.5	263.6	262.8	262.0	261.2
72.5°	236.5	235.1	233.7	232.6	231.8	231.0	230.2	229.3
75°	187.7	187.1	186.5	185.7	184.9	184.0	183.2	182.4
77.5°	143.0	142.6	142.2	141.8	141.2	140.6	140.1	139.5
80°	114.4	114.2	114.0	113.7	113.3	112.9	112.4	112.1
82.5°	87.4	87.0	86.7	86.5	86.4	86.3	86.2	86.1
85°	51.5	51.3	51.0	50.7	50.3	49.9	49.5	49.0
87.5°	22.5	22.7	22.9	22.9	22.6	22.5	22.3	22.0
90°	16.2	17.2	18.2	19.0	19.6	20.2	20.8	21.4
92.5°	36.8	38.1	39.4	40.3	40.8	41.1	41.6	42.0
95°	71.3	72.7	74.1	75.0	75.3	75.8	76.2	76.6
97.5°	111.7	113.1	114.4	115.1	115.4	115.7	115.8	116.1
100°	139.7	141.5	143.3	144.5	144.8	145.2	145.6	146.0
102.5°	168.5	170.5	172.5	173.7	174.2	174.8	175.4	175.9
105°	215.2	216.3	217.5	218.4	219.0	219.6	220.2	220.8
107.5°	265.4	266.0	266.6	266.9	266.8	266.8	266.8	266.7
110°	300.3	300.9	301.5	301.7	301.5	301.3	301.1	300.9



TEST NUMBER: P333239-940

CATALOG NUMBER: S125DIP-S850D1035U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	335.3	335.6	335.8	335.8	335.5	335.1	334.7	334.4
115°	388.6	388.4	388.3	388.1	387.8	387.6	387.4	387.3
117.5°	442.0	442.2	442.4	442.0	441.2	440.5	439.7	438.9
120°	478.0	478.0	478.0	477.7	476.9	476.1	475.3	474.5
122.5°	513.4	513.2	513.0	512.6	512.0	511.4	510.8	510.1
125°	565.4	565.0	564.6	564.3	564.1	563.9	563.7	563.6
127.5°	617.1	616.9	616.7	616.4	616.0	615.5	615.2	614.8
130°	651.2	651.0	650.9	650.6	650.1	649.8	649.3	649.0
132.5°	684.0	683.9	683.6	683.2	682.7	682.2	681.6	681.0
135°	734.4	734.4	734.4	734.1	733.3	732.5	731.6	730.8
137.5°	783.5	783.7	784.0	783.6	782.7	781.7	780.7	779.7
140°	814.5	814.8	815.3	814.9	814.0	813.0	812.0	811.0
142.5°	844.8	845.0	845.3	844.9	843.9	842.9	842.0	840.9
145°	888.5	888.5	888.5	888.1	887.6	887.0	886.4	885.8
147.5°	928.9	929.4	929.9	929.4	928.1	926.8	925.4	924.1
150°	954.3	954.3	954.3	954.1	953.8	953.3	953.0	952.5
152.5°	978.1	978.6	979.0	978.9	978.2	977.5	976.8	976.1
155°	1012.0	1012.8	1013.6	1013.5	1012.5	1011.5	1010.5	1009.5
157.5°	1041.3	1042.1	1042.9	1042.7	1041.4	1040.1	1038.8	1037.5
160°	1059.2	1060.0	1060.8	1060.7	1059.7	1058.7	1057.7	1056.7
162.5°	1075.8	1076.8	1077.8	1077.7	1076.6	1075.4	1074.2	1073.1
165°	1098.3	1099.1	1099.9	1099.7	1098.6	1097.3	1096.2	1095.0
167.5°	1115.0	1116.2	1117.4	1117.3	1116.2	1114.9	1113.7	1112.4
170°	1125.0	1126.1	1127.3	1127.2	1125.9	1124.4	1123.1	1121.7
172.5°	1132.1	1133.3	1134.4	1134.4	1133.2	1132.0	1130.8	1129.5
175°	1140.1	1141.3	1142.5	1142.4	1141.0	1139.6	1138.2	1136.8
177.5°	1143.7	1144.7	1145.6	1145.6	1144.4	1143.4	1142.2	1141.1
180°	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0

(END OF REPORT)