

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: P333212-940

Luminaire Tested: **S125DIP-S850D365U940-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333212-940
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-S850D365U940-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4177.1 lumens
Efficiency: N/A
Efficacy: 119.3 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: Semi-Direct

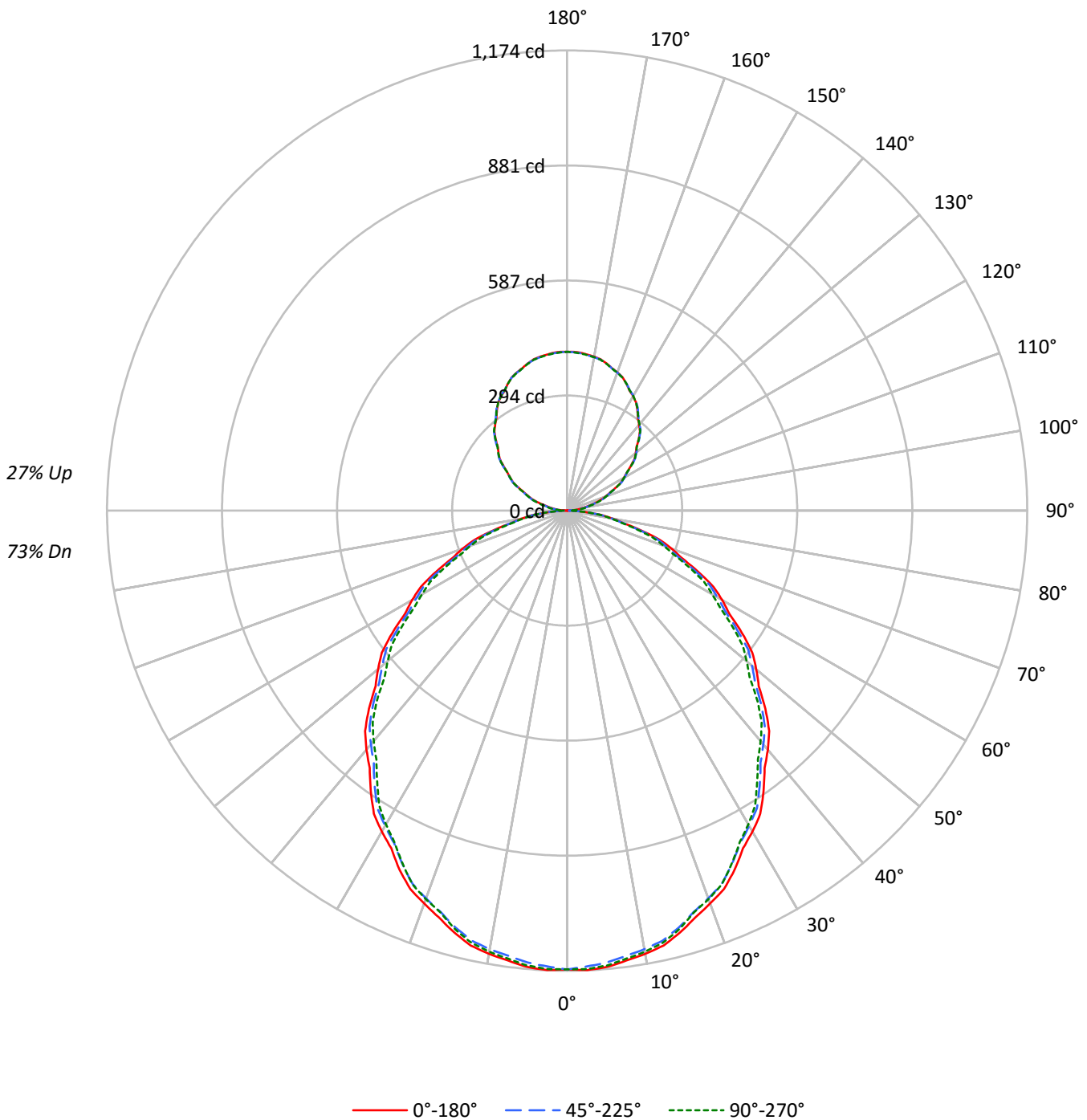
Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333212-940

CATALOG NUMBER: S125DIP-S850D365U940-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333212-940

CATALOG NUMBER: S125DIP-S850D365U940-4F0-1E-UDD-F1

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	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	73
1	103	98	94	91	97	93	90	87	84	82	79	76	74	72	68	67	65	61
2	94	86	79	74	89	82	76	71	74	69	65	67	63	60	60	57	55	51
3	85	75	68	62	81	72	65	59	65	60	55	59	54	51	53	50	47	43
4	78	67	59	52	74	64	56	50	58	52	47	52	48	43	47	43	40	37
5	72	60	51	45	68	57	49	43	52	46	41	47	42	38	43	38	35	32
6	66	54	45	39	63	51	44	38	47	40	36	43	37	33	39	34	31	28
7	61	49	40	35	58	47	39	33	43	36	31	39	33	29	35	31	27	25
8	57	44	36	31	54	42	35	30	39	33	28	36	30	26	33	28	25	22
9	53	41	33	28	51	39	32	27	36	30	25	33	28	24	30	26	22	20
10	50	37	30	25	47	36	29	24	33	27	23	30	25	22	28	23	20	18

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



TEST NUMBER: P333212-940

CATALOG NUMBER: S125DIP-S850D365U940-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.4	2.6
10°-20°	311.8	7.5
20°-30°	460.3	11.0
30°-40°	537.2	12.9
40°-50°	539.5	12.9
50°-60°	473.6	11.3
60°-70°	352.9	8.4
70°-80°	201.8	4.8
80°-90°	59.6	1.4
90°-100°	27.1	0.6
100°-110°	80.1	1.9
110°-120°	135.7	3.2
120°-130°	178.6	4.3
130°-140°	200.1	4.8
140°-150°	196.1	4.7
150°-160°	164.7	3.9
160°-170°	109.5	2.6
170°-180°	38.3	0.9
0°-30°	882.5	21.1
0°-40°	1419.6	34.0
0°-60°	2432.7	58.2
0°-90°	3047.0	72.9
90°-120°	242.9	5.8
90°-150°	817.6	19.6
90°-180°	1130.0	27.1
0°-180°	4177.1	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°	0	3	5	7	8	4
95°	20	21	24	26	27	22
105°	72	74	75	77	78	77
115°	136	137	138	137	137	134
125°	198	200	200	200	200	177
135°	258	260	260	260	259	199
145°	312	314	314	314	314	195
155°	357	357	358	359	357	165
165°	389	388	388	389	388	110
175°	404	403	403	404	402	38
180°	405	405	405	405	405	



TEST NUMBER: P333212-940

CATALOG NUMBER: S125DIP-S850D365U940-4F0-1E-UDD-F1

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°	20.1	20.2	20.3	20.4	20.5	20.5	20.5	20.4	20.3	20.2	20.3
90°	0.4	0.9	1.4	2.0	2.6	3.1	3.6	4.1	4.5	5.1	5.4
92.5°	7.7	8.0	8.4	8.8	9.2	9.7	10.3	10.9	11.5	12.1	12.6
95°	20.5	20.6	20.8	20.9	21.0	21.5	22.2	22.8	23.5	24.3	24.8
97.5°	34.1	34.1	34.2	34.2	34.2	34.8	35.8	36.7	37.6	38.6	39.1
100°	44.1	44.1	44.1	44.1	44.1	44.6	45.5	46.4	47.3	48.2	48.9
102.5°	54.9	55.3	55.6	55.8	56.1	56.4	56.9	57.3	57.9	58.3	59.0
105°	71.9	72.2	72.6	72.9	73.3	73.7	74.1	74.5	74.9	75.3	75.7
107.5°	90.5	90.9	91.2	91.6	91.9	92.3	92.6	92.9	93.2	93.5	93.7
110°	103.3	103.7	104.1	104.4	104.8	105.0	105.2	105.5	105.7	105.9	106.1



TEST NUMBER: P333212-940

CATALOG NUMBER: S125DIP-S850D365U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	116.5	116.6	116.8	117.0	117.2	117.4	117.7	118.0	118.2	118.5	118.6
115°	135.8	136.1	136.4	136.7	137.0	137.1	137.3	137.4	137.6	137.8	137.7
117.5°	155.2	155.3	155.5	155.6	155.8	155.9	156.0	156.1	156.2	156.4	156.4
120°	167.4	167.7	168.1	168.4	168.7	169.0	169.1	169.1	169.2	169.2	169.2
122.5°	180.5	180.6	180.7	180.8	180.9	181.1	181.3	181.5	181.6	181.8	181.8
125°	198.2	198.7	199.1	199.5	199.9	200.2	200.3	200.3	200.4	200.5	200.3
127.5°	217.1	217.4	217.7	217.8	218.1	218.3	218.4	218.5	218.6	218.6	218.6
130°	228.5	228.8	229.2	229.5	229.9	230.2	230.2	230.4	230.6	230.7	230.6
132.5°	239.9	240.4	241.0	241.6	242.1	242.5	242.4	242.4	242.4	242.3	242.2
135°	257.8	258.2	258.7	259.0	259.5	259.8	259.8	259.8	259.9	260.0	260.0
137.5°	274.7	275.1	275.5	275.9	276.3	276.6	276.8	276.9	277.1	277.2	277.3
140°	285.5	285.9	286.2	286.6	287.0	287.2	287.4	287.7	287.8	288.0	288.2
142.5°	296.4	296.7	296.9	297.3	297.6	297.8	298.1	298.4	298.6	298.9	299.0
145°	312.4	312.6	312.9	313.2	313.4	313.7	313.9	314.1	314.3	314.5	314.5
147.5°	327.1	327.3	327.3	327.5	327.7	327.9	328.1	328.2	328.3	328.5	328.7
150°	336.9	336.9	336.8	336.7	336.6	336.7	337.0	337.3	337.6	337.9	337.9
152.5°	345.0	345.1	345.2	345.3	345.4	345.4	345.6	345.7	345.8	345.9	346.1
155°	357.4	357.4	357.4	357.4	357.4	357.4	357.5	357.6	357.7	357.8	358.0
157.5°	368.5	368.4	368.2	368.0	367.9	367.8	367.9	368.0	368.0	368.1	368.4
160°	375.1	374.9	374.6	374.4	374.3	374.2	374.3	374.3	374.3	374.4	374.7
162.5°	380.8	380.7	380.6	380.4	380.2	380.1	380.1	380.2	380.2	380.2	380.6
165°	388.6	388.4	388.3	388.2	388.1	388.0	388.1	388.2	388.3	388.3	388.6
167.5°	395.1	394.8	394.6	394.3	394.0	393.9	393.9	393.9	393.9	393.9	394.3
170°	398.7	398.4	398.1	397.9	397.5	397.4	397.4	397.4	397.4	397.4	397.9
172.5°	401.2	400.9	400.6	400.4	400.1	399.9	399.9	399.9	399.9	399.9	400.4
175°	404.0	403.8	403.5	403.2	403.0	402.8	402.8	402.8	402.8	402.8	403.2
177.5°	405.5	405.3	405.0	404.8	404.6	404.5	404.4	404.4	404.3	404.2	404.6
180°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0



TEST NUMBER: P333212-940

CATALOG NUMBER: S125DIP-S850D365U940-4F0-1E-UDD-F1

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°	20.4	20.5	20.5	20.4	20.2	19.9	19.6	19.3
90°	5.7	6.1	6.4	6.7	7.0	7.1	7.3	7.6
92.5°	13.0	13.5	13.9	14.3	14.4	14.5	14.7	14.9
95°	25.2	25.8	26.2	26.6	26.7	26.8	26.9	27.1
97.5°	39.6	40.0	40.5	40.8	40.8	40.9	41.0	41.1
100°	49.5	50.1	50.7	51.1	51.3	51.5	51.5	51.7
102.5°	59.7	60.4	61.1	61.5	61.7	61.9	62.1	62.2
105°	76.2	76.6	77.0	77.3	77.5	77.8	77.9	78.2
107.5°	94.0	94.2	94.3	94.5	94.4	94.4	94.4	94.4
110°	106.3	106.6	106.7	106.8	106.7	106.6	106.6	106.6



TEST NUMBER: P333212-940

CATALOG NUMBER: S125DIP-S850D365U940-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	118.7	118.8	118.9	118.9	118.8	118.6	118.5	118.4
115°	137.6	137.5	137.4	137.4	137.3	137.2	137.1	137.1
117.5°	156.5	156.6	156.6	156.5	156.2	156.0	155.7	155.3
120°	169.2	169.2	169.2	169.1	168.8	168.5	168.3	168.0
122.5°	181.7	181.6	181.6	181.5	181.3	181.0	180.8	180.6
125°	200.2	200.0	199.9	199.7	199.7	199.7	199.6	199.5
127.5°	218.5	218.4	218.3	218.2	218.1	217.9	217.8	217.7
130°	230.6	230.5	230.4	230.3	230.2	230.1	229.9	229.8
132.5°	242.2	242.1	242.0	241.9	241.7	241.5	241.3	241.1
135°	260.0	260.0	260.0	259.8	259.6	259.3	259.0	258.8
137.5°	277.4	277.5	277.6	277.4	277.1	276.7	276.3	276.0
140°	288.4	288.5	288.6	288.6	288.2	287.8	287.5	287.1
142.5°	299.1	299.2	299.3	299.1	298.7	298.4	298.1	297.7
145°	314.5	314.5	314.5	314.4	314.2	314.0	313.8	313.6
147.5°	328.9	329.0	329.2	329.0	328.6	328.1	327.6	327.2
150°	337.9	337.9	337.9	337.8	337.7	337.5	337.3	337.2
152.5°	346.3	346.4	346.6	346.5	346.3	346.1	345.8	345.5
155°	358.3	358.6	358.8	358.8	358.5	358.1	357.8	357.4
157.5°	368.6	369.0	369.3	369.2	368.7	368.2	367.7	367.3
160°	375.0	375.2	375.5	375.5	375.1	374.8	374.4	374.1
162.5°	380.8	381.2	381.6	381.6	381.1	380.7	380.3	379.9
165°	388.9	389.1	389.4	389.3	388.9	388.5	388.1	387.6
167.5°	394.8	395.1	395.6	395.6	395.1	394.7	394.2	393.9
170°	398.2	398.7	399.1	399.0	398.6	398.1	397.6	397.1
172.5°	400.8	401.2	401.6	401.6	401.2	400.7	400.3	399.8
175°	403.6	404.0	404.5	404.4	403.9	403.4	403.0	402.4
177.5°	404.9	405.3	405.6	405.6	405.2	404.7	404.4	403.9
180°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0

(END OF REPORT)