

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: P333247-927

Luminaire Tested: **S125DIP-S850D1205U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333247-927
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-S850D1205U927-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6522.6 lumens
Efficiency: N/A
Efficacy: 114.6 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

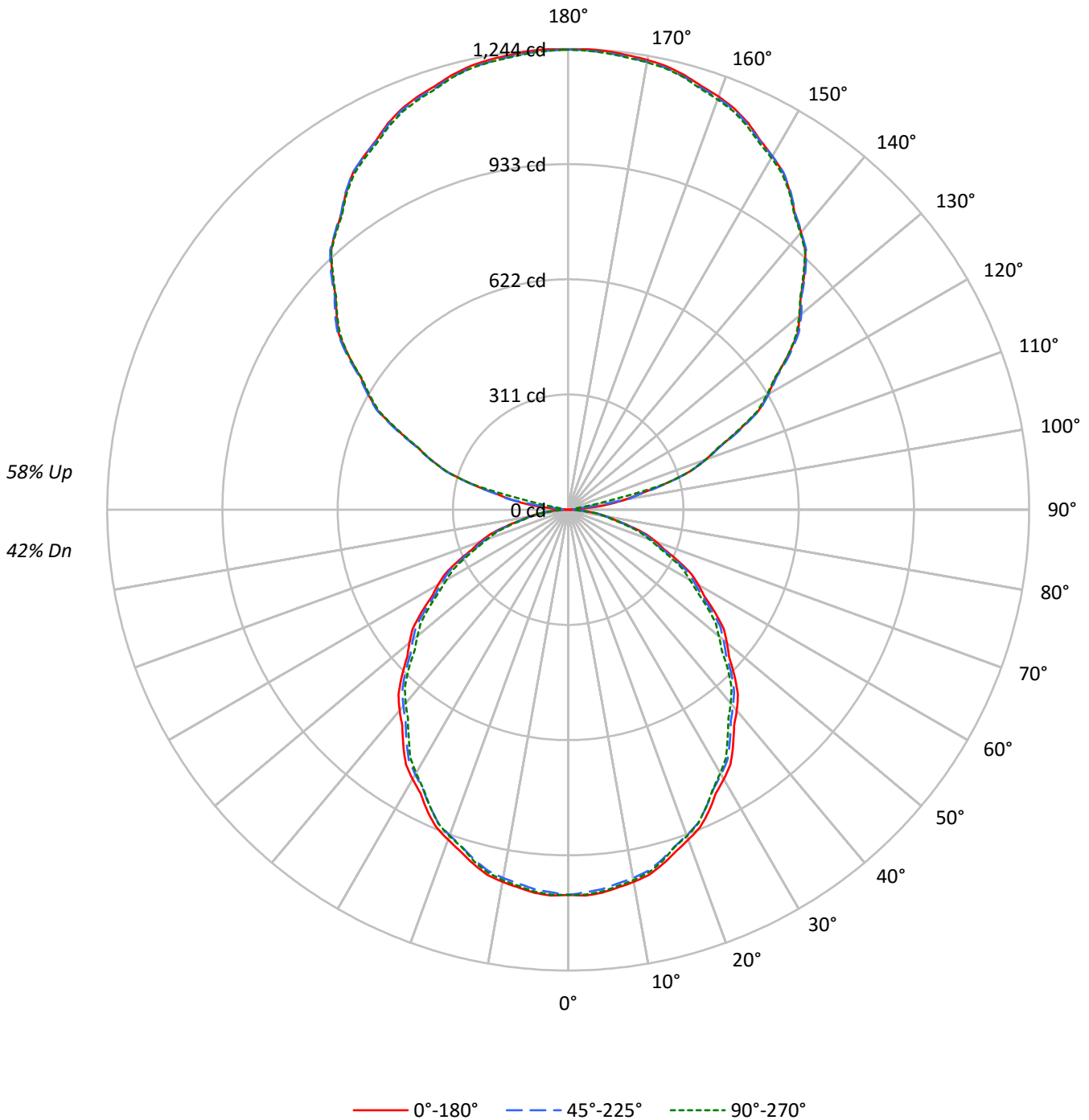
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	42
1	96	92	88	84	87	84	80	77	69	66	64	55	54	52	43	42	41	35
2	87	80	74	69	79	73	68	63	60	56	53	48	46	43	37	36	34	29
3	80	70	63	57	72	64	58	53	53	48	45	43	39	37	33	31	29	25
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	30	27	25	21
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	18
6	61	49	41	36	56	45	38	33	38	32	28	31	27	24	24	21	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	28	48	37	30	26	31	26	22	26	22	19	20	17	15	13
9	49	37	29	24	45	34	27	23	29	23	20	23	20	17	19	16	14	12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6716	6716	6716
5°	6731	6667	6710
10°	6690	6620	6658
15°	6618	6540	6568
20°	6514	6429	6441
25°	6402	6297	6291
30°	6264	6154	6123
35°	6117	6000	5916
40°	5966	5833	5751
45°	5802	5681	5569
50°	5621	5497	5332
55°	5447	5290	5141
60°	5239	5079	4899
65°	4991	4828	4664
70°	4755	4538	4381
75°	4332	4190	4045
80°	3857	3794	3704
85°	3349	3416	3231



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.1	1.5
10°-20°	277.0	4.2
20°-30°	409.0	6.3
30°-40°	477.2	7.3
40°-50°	479.3	7.3
50°-60°	420.7	6.5
60°-70°	313.5	4.8
70°-80°	179.3	2.7
80°-90°	54.7	0.8
90°-100°	45.1	0.7
100°-110°	278.2	4.3
110°-120°	504.5	7.7
120°-130°	647.4	9.9
130°-140°	696.4	10.7
140°-150°	653.6	10.0
150°-160°	528.7	8.1
160°-170°	342.0	5.2
170°-180°	117.9	1.8
0°-30°	784.0	12.0
0°-40°	1261.2	19.3
0°-60°	2161.2	33.1
0°-90°	2708.7	41.5
90°-120°	827.8	12.7
90°-150°	2825.2	43.3
90°-180°	3814.0	58.5
0°-180°	6522.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1040	1040	1040	1040	1040	
5°	1038	1036	1028	1035	1035	98
15°	990	987	978	982	982	279
25°	898	894	884	885	883	413
35°	776	772	761	757	750	485
45°	635	631	622	612	610	489
55°	484	481	470	462	457	432
65°	327	325	316	309	305	324
75°	174	172	168	165	162	185
85°	45	46	46	45	44	51
90°	1	8	15	19	22	5
95°	52	48	15	19	19	67
105°	271	274	274	274	274	287
115°	508	513	514	510	504	504
125°	723	729	729	726	723	645
135°	901	906	905	903	898	694
145°	1045	1047	1047	1047	1042	653
155°	1151	1146	1147	1149	1143	530
165°	1214	1209	1210	1215	1208	343
175°	1242	1237	1237	1244	1236	118
180°	1242	1242	1242	1242	1242	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9
2.5°	1042.6	1042.1	1041.7	1041.2	1040.8	1039.8	1038.4	1037.0	1035.5	1034.0	1035.5
5°	1038.3	1037.9	1037.5	1037.2	1036.8	1035.7	1033.9	1032.1	1030.2	1028.4	1030.1
7.5°	1028.7	1028.4	1028.0	1027.6	1027.3	1026.1	1024.1	1022.1	1020.1	1018.0	1019.6
10°	1020.2	1019.9	1019.5	1019.1	1018.7	1017.6	1015.5	1013.5	1011.5	1009.5	1011.0
12.5°	1009.6	1009.0	1008.4	1007.7	1007.0	1005.8	1003.9	1002.0	1000.1	998.3	999.5
15°	989.8	989.2	988.6	988.1	987.5	986.3	984.3	982.2	980.2	978.2	979.1
17.5°	966.9	966.1	965.3	964.5	963.7	962.2	960.1	958.1	955.9	953.9	955.0
20°	947.8	947.5	947.1	946.7	946.3	944.9	942.5	940.2	937.8	935.4	936.8
22.5°	928.7	928.0	927.4	926.7	926.1	924.6	922.4	920.1	917.9	915.7	916.6
25°	898.4	897.5	896.6	895.6	894.8	893.1	890.7	888.4	886.0	883.6	884.0
27.5°	863.0	862.5	862.0	861.4	860.9	859.4	856.9	854.4	852.0	849.5	849.6
30°	840.0	839.5	838.9	838.4	837.8	836.1	833.5	830.7	827.9	825.2	824.8
32.5°	815.0	814.1	813.3	812.5	811.7	810.0	807.6	805.1	802.6	800.2	799.5
35°	775.9	775.1	774.4	773.6	772.9	771.3	768.7	766.1	763.6	761.0	760.1
37.5°	735.2	734.3	733.3	732.5	731.5	729.8	727.5	725.0	722.6	720.3	718.8
40°	707.6	706.6	705.8	704.8	703.9	702.2	699.6	697.0	694.5	691.9	690.3
42.5°	677.9	677.2	676.4	675.7	674.9	673.2	670.7	668.0	665.5	663.0	661.5
45°	635.2	634.4	633.7	633.0	632.2	630.7	628.6	626.4	624.2	622.0	619.8
47.5°	589.1	589.1	589.1	589.1	589.2	588.0	585.3	582.7	580.0	577.4	575.1
50°	559.4	558.9	558.3	557.8	557.3	555.9	553.7	551.5	549.3	547.1	544.7
52.5°	529.2	528.8	528.4	528.0	527.6	526.2	523.9	521.5	519.2	516.8	514.8
55°	483.8	483.2	482.7	482.1	481.6	480.0	477.4	474.9	472.3	469.8	468.1
57.5°	435.9	435.6	435.3	435.0	434.7	433.5	431.3	429.2	427.0	424.8	422.7
60°	405.6	404.9	404.2	403.4	402.7	401.3	399.3	397.3	395.3	393.2	391.4
62.5°	374.0	373.4	372.9	372.2	371.7	370.5	368.8	367.1	365.4	363.6	361.7
65°	326.6	326.2	325.9	325.5	325.2	324.0	321.9	320.0	317.9	315.9	314.3
67.5°	280.7	280.0	279.2	278.4	277.7	276.5	275.0	273.5	272.0	270.5	269.1
70°	251.8	250.8	249.9	249.0	248.1	246.8	245.2	243.5	241.9	240.3	239.2
72.5°	220.1	219.5	218.9	218.3	217.7	216.8	215.8	214.7	213.7	212.6	211.4
75°	173.6	173.3	172.9	172.5	172.1	171.5	170.6	169.7	168.7	167.9	167.3
77.5°	130.6	130.5	130.4	130.2	130.1	129.8	129.2	128.7	128.2	127.7	127.4
80°	103.7	103.7	103.7	103.7	103.7	103.5	103.1	102.7	102.3	102.0	101.9
82.5°	79.9	79.7	79.4	79.1	78.8	78.6	78.5	78.5	78.4	78.3	78.0
85°	45.2	45.5	45.6	45.8	45.9	46.1	46.1	46.1	46.1	46.1	45.9
87.5°	18.0	18.3	18.6	18.9	19.3	19.5	19.6	19.8	19.9	20.0	20.3
90°	1.0	2.5	4.2	5.9	7.4	9.0	10.5	11.9	13.3	14.7	15.8
92.5°	14.2	13.1	11.9	10.8	9.6	9.7	10.9	12.2	13.5	14.7	15.8
95°	52.4	51.9	51.3	50.6	50.0	45.9	38.0	30.3	22.5	14.7	15.8
97.5°	109.6	110.7	111.8	112.9	114.0	106.9	91.4	76.0	60.7	45.3	39.5
100°	153.8	154.4	155.0	155.6	156.2	156.9	157.7	158.6	159.4	160.2	129.7
102.5°	198.7	199.5	200.3	201.0	201.8	202.4	202.9	203.4	203.9	204.4	198.6
105°	270.7	271.5	272.3	273.1	273.9	274.3	274.3	274.3	274.3	274.3	274.3
107.5°	345.5	345.5	345.5	345.5	345.5	345.6	346.0	346.4	346.9	347.3	347.3
110°	394.0	394.0	394.0	394.0	394.0	394.3	394.7	395.1	395.5	395.9	395.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	439.7	440.2	440.7	441.2	441.6	442.0	442.3	442.5	442.8	443.0	442.3
115°	508.2	509.2	510.2	511.3	512.3	512.9	513.1	513.3	513.5	513.7	512.9
117.5°	579.1	579.1	579.0	579.0	578.9	579.3	580.1	580.8	581.6	582.4	581.4
120°	623.3	623.1	622.9	622.7	622.5	622.7	623.3	623.9	624.5	625.1	624.7
122.5°	662.3	663.1	663.8	664.6	665.4	666.0	666.2	666.5	666.9	667.1	666.7
125°	722.7	724.1	725.6	727.0	728.4	729.1	729.1	729.1	729.1	729.1	728.3
127.5°	780.4	781.4	782.4	783.4	784.4	784.9	784.7	784.7	784.5	784.4	783.9
130°	815.7	816.7	817.8	818.8	819.8	820.4	820.6	820.9	821.0	821.3	820.6
132.5°	851.0	852.2	853.4	854.6	855.8	856.2	855.7	855.2	854.8	854.4	854.3
135°	901.3	902.5	903.8	905.0	906.3	906.7	906.3	905.9	905.4	905.0	904.6
137.5°	947.5	948.6	949.7	950.7	951.8	952.1	951.8	951.4	951.0	950.7	950.8
140°	977.7	978.2	978.6	979.0	979.4	979.5	979.3	979.1	978.9	978.7	979.1
142.5°	1005.0	1005.2	1005.5	1005.8	1006.0	1006.2	1006.5	1006.8	1007.1	1007.4	1007.5
145°	1045.0	1045.4	1045.8	1046.2	1046.6	1046.8	1046.8	1046.8	1046.8	1046.8	1047.0
147.5°	1079.9	1079.8	1079.7	1079.7	1079.6	1079.7	1079.9	1080.1	1080.5	1080.7	1080.9
150°	1102.0	1101.6	1101.2	1100.8	1100.4	1100.4	1100.8	1101.2	1101.6	1102.0	1102.4
152.5°	1123.4	1122.5	1121.6	1120.7	1119.7	1119.5	1120.0	1120.4	1120.8	1121.2	1121.6
155°	1150.8	1149.6	1148.3	1147.2	1145.9	1145.5	1145.9	1146.3	1146.8	1147.2	1147.8
157.5°	1172.0	1171.2	1170.5	1169.8	1169.0	1168.7	1168.8	1168.8	1168.9	1168.9	1169.5
160°	1186.8	1185.5	1184.3	1183.0	1181.9	1181.3	1181.5	1181.7	1181.9	1182.1	1183.0
162.5°	1198.5	1197.3	1196.0	1194.8	1193.6	1193.1	1193.3	1193.5	1193.7	1193.9	1195.1
165°	1214.3	1213.1	1211.9	1210.7	1209.4	1208.9	1209.1	1209.3	1209.5	1209.7	1211.0
167.5°	1226.1	1224.9	1223.6	1222.3	1221.1	1220.5	1220.8	1220.9	1221.1	1221.4	1222.8
170°	1232.8	1231.4	1229.9	1228.4	1227.0	1226.5	1226.6	1226.9	1227.0	1227.2	1228.9
172.5°	1237.2	1235.7	1234.3	1232.9	1231.4	1230.9	1231.3	1231.7	1232.0	1232.4	1233.9
175°	1242.0	1240.7	1239.5	1238.3	1237.1	1236.5	1236.8	1237.0	1237.2	1237.4	1239.0
177.5°	1244.2	1243.2	1242.2	1241.3	1240.2	1239.8	1240.0	1240.2	1240.3	1240.5	1241.7
180°	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9
2.5°	1037.0	1038.4	1039.8	1040.5	1040.4	1040.2	1040.1	1039.9
5°	1031.7	1033.3	1035.0	1035.7	1035.5	1035.4	1035.1	1035.0
7.5°	1021.3	1022.9	1024.5	1025.2	1025.0	1024.8	1024.6	1024.5
10°	1012.4	1013.9	1015.3	1016.0	1015.8	1015.6	1015.4	1015.3
12.5°	1000.6	1001.8	1003.0	1003.5	1003.5	1003.5	1003.5	1003.4
15°	980.1	981.0	981.9	982.3	982.3	982.3	982.3	982.3
17.5°	956.2	957.3	958.4	958.5	957.6	956.7	955.8	954.9
20°	938.0	939.3	940.6	940.7	939.8	938.9	938.0	937.1
22.5°	917.3	918.2	919.1	919.2	918.5	917.9	917.3	916.7
25°	884.3	884.7	885.1	884.9	884.5	883.9	883.4	882.8
27.5°	849.7	849.8	849.9	849.6	849.1	848.5	848.0	847.4
30°	824.5	824.1	823.7	823.3	822.8	822.2	821.7	821.1
32.5°	798.8	798.2	797.6	796.7	795.7	794.7	793.8	792.8
35°	759.2	758.3	757.4	756.2	754.7	753.3	751.8	750.4
37.5°	717.5	716.1	714.8	713.7	712.9	712.0	711.2	710.3
40°	688.6	687.0	685.3	684.2	683.7	683.2	682.6	682.1
42.5°	660.0	658.5	657.0	655.8	655.0	654.1	653.2	652.4
45°	617.6	615.4	613.2	611.8	611.3	610.8	610.2	609.7
47.5°	572.9	570.7	568.5	566.7	565.5	564.2	562.8	561.6
50°	542.3	540.0	537.6	535.8	534.5	533.2	532.0	530.7
52.5°	512.7	510.6	508.5	506.8	505.3	503.9	502.5	501.1
55°	466.5	464.9	463.2	461.8	460.4	459.1	457.9	456.6
57.5°	420.6	418.5	416.4	414.9	414.2	413.6	412.9	412.2
60°	389.6	387.8	386.0	384.4	383.1	381.8	380.6	379.3
62.5°	359.7	357.7	355.8	354.3	353.3	352.3	351.3	350.3
65°	312.7	311.0	309.3	308.2	307.4	306.7	305.9	305.2
67.5°	267.8	266.3	265.0	264.0	263.6	263.2	262.7	262.3
70°	238.1	236.9	235.8	235.0	234.2	233.5	232.7	232.0
72.5°	210.1	208.9	207.6	206.6	205.9	205.2	204.5	203.7
75°	166.8	166.2	165.6	165.0	164.3	163.5	162.8	162.1
77.5°	127.1	126.7	126.4	126.0	125.4	124.9	124.5	123.9
80°	101.6	101.5	101.3	101.0	100.7	100.3	99.9	99.6
82.5°	77.6	77.3	77.0	76.8	76.8	76.7	76.6	76.5
85°	45.7	45.6	45.3	45.1	44.7	44.4	44.0	43.6
87.5°	20.4	20.7	20.9	20.9	20.8	20.5	20.4	20.2
90°	16.8	17.8	18.9	19.6	20.3	20.8	21.5	22.1
92.5°	16.8	17.8	18.9	19.5	19.7	20.0	20.4	20.6
95°	16.8	17.8	18.9	19.3	19.3	19.3	19.3	19.3
97.5°	33.7	28.0	22.2	19.3	19.3	19.3	19.3	19.3
100°	99.3	68.8	38.3	22.6	21.8	21.0	20.1	19.3
102.5°	192.8	187.1	181.3	171.5	157.6	143.6	129.8	115.8
105°	274.3	274.3	274.3	274.3	274.0	273.9	273.6	273.5
107.5°	347.4	347.4	347.5	347.1	346.5	345.9	345.3	344.7
110°	394.7	394.0	393.4	393.2	393.4	393.6	393.9	394.0



TEST NUMBER: P333247-927

CATALOG NUMBER: S125DIP-S850D1205U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	441.5	440.7	439.9	439.3	439.1	438.8	438.6	438.2
115°	512.1	511.3	510.5	509.5	508.2	507.0	505.7	504.5
117.5°	580.3	579.2	578.1	577.3	576.8	576.3	575.8	575.2
120°	624.3	623.9	623.5	622.8	621.8	620.8	619.7	618.7
122.5°	666.3	665.9	665.5	664.6	663.5	662.3	661.2	660.0
125°	727.5	726.7	725.9	725.2	724.5	724.0	723.3	722.7
127.5°	783.5	783.1	782.6	781.6	780.1	778.6	777.1	775.5
130°	820.0	819.4	818.8	817.9	816.9	815.9	814.9	813.9
132.5°	854.1	854.0	853.9	853.3	852.3	851.3	850.2	849.2
135°	904.2	903.8	903.4	902.5	901.3	900.1	898.9	897.6
137.5°	950.9	950.9	951.0	950.5	949.4	948.4	947.3	946.3
140°	979.5	979.9	980.3	979.9	978.7	977.5	976.2	975.0
142.5°	1007.6	1007.7	1007.7	1007.2	1005.9	1004.7	1003.5	1002.3
145°	1047.2	1047.4	1047.6	1047.1	1045.8	1044.7	1043.4	1042.2
147.5°	1081.2	1081.4	1081.6	1081.0	1079.6	1078.1	1076.7	1075.1
150°	1102.9	1103.3	1103.7	1103.0	1101.5	1099.8	1098.1	1096.5
152.5°	1122.0	1122.4	1122.8	1122.3	1120.8	1119.4	1117.8	1116.4
155°	1148.3	1149.0	1149.6	1149.1	1147.5	1145.8	1144.1	1142.6
157.5°	1170.2	1170.8	1171.5	1171.0	1169.3	1167.8	1166.1	1164.4
160°	1183.8	1184.6	1185.4	1185.0	1183.4	1181.7	1180.1	1178.5
162.5°	1196.2	1197.4	1198.5	1198.2	1196.4	1194.5	1192.8	1191.0
165°	1212.2	1213.5	1214.7	1214.4	1212.8	1211.2	1209.5	1207.9
167.5°	1224.3	1225.7	1227.2	1227.1	1225.2	1223.4	1221.5	1219.7
170°	1230.5	1232.2	1233.8	1233.7	1231.8	1230.0	1228.2	1226.3
172.5°	1235.3	1236.8	1238.3	1238.1	1236.3	1234.5	1232.6	1230.7
175°	1240.6	1242.3	1243.9	1243.8	1242.0	1240.2	1238.3	1236.4
177.5°	1242.8	1244.0	1245.1	1245.0	1243.7	1242.4	1241.0	1239.8
180°	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0

(END OF REPORT)