

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: P333248-930

Luminaire Tested: **S125DIP-S850D1205U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333248-930  
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-S850D1205U930-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

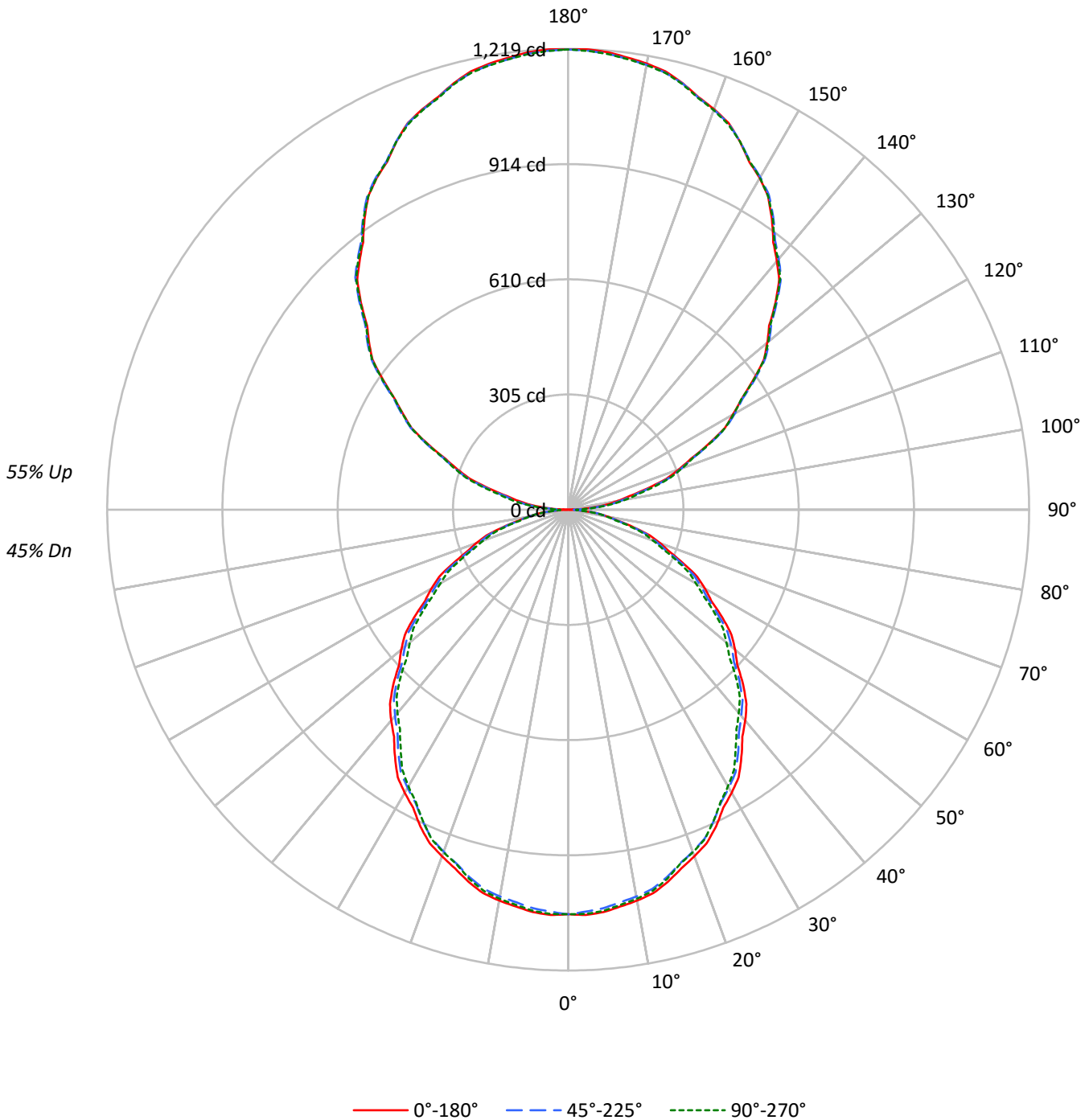
Lumens per Lamp: N/A  
Luminaire Lumens: 6184.9 lumens  
Efficiency: N/A  
Efficacy: 108.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: General Diffuse  
  
Input Watts (W): 56.9  
Input Voltage (V): 120  
Input Current (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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45
1	97	92	88	85	88	85	81	78	71	68	66	58	56	54	45	44	43	38
2	88	81	74	69	80	74	69	64	62	58	55	50	48	45	40	38	37	32
3	80	71	63	58	73	65	59	54	54	50	46	45	41	38	35	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	28	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18	15
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16	14
9	49	37	30	25	45	35	28	23	29	24	20	25	20	18	20	17	15	13
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	13	11

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6912	6912	6912
5°	6928	6862	6906
10°	6885	6813	6852
15°	6811	6731	6760
20°	6704	6616	6628
25°	6589	6480	6475
30°	6447	6334	6302
35°	6296	6176	6089
40°	6139	6004	5918
45°	5971	5847	5731
50°	5785	5657	5488
55°	5606	5444	5291
60°	5391	5227	5043
65°	5136	4968	4800
70°	4893	4670	4509
75°	4457	4312	4162
80°	3968	3905	3812
85°	3453	3520	3320



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.9	1.6
10°-20°	285.1	4.6
20°-30°	420.9	6.8
30°-40°	491.1	7.9
40°-50°	493.3	8.0
50°-60°	433.0	7.0
60°-70°	322.6	5.2
70°-80°	184.5	3.0
80°-90°	56.3	0.9
90°-100°	81.5	1.3
100°-110°	240.8	3.9
110°-120°	407.8	6.6
120°-130°	536.7	8.7
130°-140°	601.4	9.7
140°-150°	589.4	9.5
150°-160°	495.1	8.0
160°-170°	329.1	5.3
170°-180°	115.2	1.9
0°-30°	806.9	13.0
0°-40°	1298.0	21.0
0°-60°	2224.3	36.0
0°-90°	2787.7	45.1
90°-120°	730.2	11.8
90°-150°	2457.8	39.7
90°-180°	3397.0	54.9
0°-180°	6184.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1069	1066	1058	1066	1065	101
15°	1019	1016	1007	1011	1011	287
25°	925	920	909	911	909	425
35°	798	795	783	779	772	499
45°	654	650	640	630	628	504
55°	498	495	484	476	470	444
65°	336	334	325	318	314	333
75°	179	177	173	170	167	190
85°	47	47	48	46	45	52
90°	1	8	15	20	23	6
95°	62	64	73	79	81	66
105°	216	221	226	232	235	231
115°	408	412	414	413	412	404
125°	596	601	603	601	600	533
135°	775	780	782	781	778	597
145°	939	943	946	945	943	587
155°	1074	1074	1075	1079	1074	495
165°	1168	1166	1167	1170	1165	329
175°	1215	1211	1211	1216	1210	115
180°	1217	1217	1217	1217	1217	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2
2.5°	1073.0	1072.5	1072.1	1071.6	1071.1	1070.2	1068.7	1067.2	1065.7	1064.2	1065.7
5°	1068.6	1068.2	1067.8	1067.5	1067.1	1065.9	1064.0	1062.2	1060.3	1058.4	1060.1
7.5°	1058.7	1058.4	1058.0	1057.6	1057.3	1056.1	1053.9	1051.9	1049.9	1047.7	1049.4
10°	1049.9	1049.6	1049.2	1048.8	1048.5	1047.3	1045.1	1043.1	1041.1	1038.9	1040.5
12.5°	1039.1	1038.4	1037.8	1037.1	1036.4	1035.1	1033.2	1031.3	1029.3	1027.4	1028.7
15°	1018.6	1018.1	1017.5	1016.9	1016.4	1015.0	1013.0	1010.9	1008.9	1006.7	1007.7
17.5°	995.1	994.3	993.4	992.6	991.8	990.3	988.1	986.0	983.8	981.7	982.8
20°	975.4	975.1	974.7	974.3	974.0	972.5	970.0	967.6	965.2	962.7	964.1
22.5°	955.8	955.1	954.5	953.7	953.1	951.6	949.3	947.0	944.7	942.4	943.3
25°	924.6	923.7	922.8	921.8	920.9	919.2	916.7	914.3	911.8	909.4	909.8
27.5°	888.2	887.7	887.1	886.6	886.0	884.4	881.9	879.4	876.9	874.3	874.4
30°	864.5	864.0	863.4	862.8	862.3	860.5	857.8	854.9	852.1	849.3	848.9
32.5°	838.8	837.9	837.1	836.2	835.4	833.6	831.1	828.6	826.1	823.5	822.9
35°	798.5	797.7	797.0	796.2	795.5	793.8	791.2	788.5	785.9	783.3	782.3
37.5°	756.7	755.7	754.7	753.8	752.8	751.1	748.7	746.2	743.7	741.3	739.8
40°	728.2	727.2	726.4	725.4	724.4	722.7	720.0	717.4	714.8	712.1	710.5
42.5°	697.7	696.9	696.1	695.4	694.6	692.8	690.2	687.5	684.9	682.3	680.8
45°	653.7	652.9	652.2	651.4	650.7	649.1	646.9	644.7	642.4	640.2	637.9
47.5°	606.3	606.3	606.3	606.3	606.4	605.1	602.3	599.7	597.0	594.3	591.9
50°	575.8	575.2	574.6	574.1	573.6	572.1	569.9	567.6	565.3	563.0	560.6
52.5°	544.6	544.2	543.8	543.4	543.0	541.5	539.2	536.7	534.3	531.9	529.8
55°	497.9	497.3	496.8	496.2	495.6	494.0	491.4	488.8	486.1	483.5	481.8
57.5°	448.6	448.3	448.0	447.7	447.4	446.1	443.9	441.7	439.4	437.2	435.0
60°	417.4	416.7	416.0	415.2	414.4	413.0	410.9	408.9	406.8	404.7	402.8
62.5°	384.9	384.3	383.8	383.1	382.5	381.3	379.6	377.8	376.0	374.2	372.3
65°	336.1	335.7	335.4	335.0	334.7	333.5	331.3	329.3	327.2	325.1	323.4
67.5°	288.9	288.1	287.3	286.5	285.8	284.5	283.1	281.5	280.0	278.4	277.0
70°	259.1	258.1	257.2	256.2	255.4	254.0	252.3	250.6	248.9	247.3	246.1
72.5°	226.6	225.9	225.3	224.7	224.0	223.1	222.1	220.9	219.9	218.8	217.5
75°	178.6	178.3	177.9	177.6	177.2	176.5	175.5	174.6	173.7	172.8	172.2
77.5°	134.4	134.3	134.2	134.0	133.9	133.5	133.0	132.5	131.9	131.4	131.1
80°	106.7	106.7	106.7	106.7	106.7	106.5	106.2	105.7	105.3	105.0	104.8
82.5°	82.3	82.0	81.7	81.4	81.1	80.9	80.8	80.8	80.7	80.6	80.3
85°	46.6	46.8	47.0	47.1	47.3	47.5	47.5	47.5	47.5	47.5	47.2
87.5°	18.5	18.8	19.2	19.5	19.8	20.1	20.2	20.4	20.5	20.6	20.9
90°	1.0	2.6	4.3	6.0	7.7	9.3	10.8	12.2	13.7	15.2	16.2
92.5°	22.9	24.1	25.3	26.5	27.6	29.1	31.0	32.8	34.6	36.4	37.7
95°	61.6	62.0	62.5	62.9	63.3	64.5	66.6	68.7	70.8	73.0	74.4
97.5°	102.3	102.5	102.6	102.8	103.0	104.5	107.5	110.3	113.2	116.2	117.6
100°	132.6	132.6	132.6	132.6	132.6	134.0	136.7	139.5	142.2	145.0	146.8
102.5°	165.3	166.1	166.9	167.8	168.6	169.7	171.1	172.5	173.9	175.3	177.3
105°	216.0	217.0	218.1	219.2	220.2	221.4	222.7	223.9	225.2	226.4	227.7
107.5°	272.1	273.1	274.2	275.2	276.3	277.3	278.3	279.2	280.2	281.2	281.8
110°	310.8	311.8	312.8	313.9	315.0	315.8	316.4	317.1	317.7	318.3	318.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	350.2	350.7	351.2	351.8	352.4	353.0	353.8	354.7	355.4	356.2	356.5
115°	408.3	409.2	410.0	410.8	411.7	412.3	412.8	413.2	413.6	414.0	413.8
117.5°	466.7	467.1	467.5	467.8	468.2	468.6	469.0	469.4	469.7	470.1	470.3
120°	503.0	504.1	505.2	506.2	507.3	507.9	508.1	508.3	508.6	508.7	508.7
122.5°	542.5	542.9	543.2	543.6	544.0	544.5	545.0	545.6	546.1	546.7	546.5
125°	595.9	597.2	598.4	599.7	601.0	601.7	601.9	602.1	602.3	602.6	602.1
127.5°	652.8	653.5	654.2	654.9	655.7	656.2	656.4	656.6	656.9	657.1	656.9
130°	686.9	687.9	689.0	690.1	691.0	691.9	692.3	692.7	693.1	693.5	693.3
132.5°	721.0	722.7	724.5	726.2	727.9	728.7	728.6	728.6	728.5	728.4	728.1
135°	775.0	776.2	777.6	778.8	780.1	780.8	781.0	781.2	781.4	781.6	781.6
137.5°	825.7	827.0	828.2	829.4	830.6	831.5	831.9	832.4	832.9	833.3	833.6
140°	858.3	859.4	860.5	861.5	862.6	863.4	864.1	864.7	865.3	865.9	866.3
142.5°	891.0	891.9	892.8	893.6	894.5	895.4	896.1	896.9	897.7	898.5	898.8
145°	938.9	939.7	940.6	941.4	942.2	943.0	943.6	944.3	944.9	945.5	945.5
147.5°	983.3	983.7	984.1	984.6	985.0	985.5	986.1	986.6	987.1	987.6	988.1
150°	1012.8	1012.6	1012.4	1012.2	1011.9	1012.3	1013.1	1013.9	1014.8	1015.6	1015.6
152.5°	1037.1	1037.3	1037.6	1038.0	1038.2	1038.5	1038.9	1039.2	1039.6	1039.9	1040.4
155°	1074.4	1074.4	1074.4	1074.4	1074.4	1074.5	1074.7	1074.9	1075.1	1075.3	1076.2
157.5°	1107.7	1107.3	1106.8	1106.4	1105.9	1105.7	1106.0	1106.2	1106.4	1106.6	1107.4
160°	1127.4	1126.8	1126.2	1125.5	1124.9	1124.7	1124.9	1125.1	1125.4	1125.5	1126.3
162.5°	1144.8	1144.4	1143.9	1143.5	1143.0	1142.8	1142.8	1142.9	1142.9	1143.0	1143.9
165°	1168.2	1167.8	1167.3	1166.9	1166.4	1166.4	1166.6	1166.8	1167.0	1167.2	1168.1
167.5°	1187.9	1187.0	1186.2	1185.4	1184.5	1184.1	1184.1	1184.1	1184.1	1184.1	1185.4
170°	1198.5	1197.7	1196.8	1196.0	1195.1	1194.7	1194.7	1194.7	1194.7	1194.7	1196.0
172.5°	1206.1	1205.3	1204.4	1203.5	1202.7	1202.2	1202.2	1202.2	1202.2	1202.2	1203.5
175°	1214.6	1213.7	1212.9	1212.0	1211.2	1210.8	1210.8	1210.8	1210.8	1210.8	1212.0
177.5°	1219.0	1218.3	1217.6	1216.9	1216.3	1215.9	1215.7	1215.5	1215.3	1215.1	1216.2
180°	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2	1070.2
2.5°	1067.2	1068.7	1070.2	1070.9	1070.7	1070.6	1070.4	1070.2
5°	1061.8	1063.5	1065.2	1065.9	1065.8	1065.6	1065.4	1065.2
7.5°	1051.1	1052.7	1054.3	1055.1	1054.9	1054.8	1054.5	1054.3
10°	1042.0	1043.5	1045.0	1045.6	1045.5	1045.2	1045.1	1044.9
12.5°	1029.8	1031.0	1032.3	1032.8	1032.8	1032.7	1032.7	1032.7
15°	1008.7	1009.6	1010.6	1011.0	1011.0	1011.0	1011.0	1011.0
17.5°	984.1	985.2	986.3	986.5	985.5	984.6	983.7	982.8
20°	965.4	966.7	968.0	968.2	967.3	966.3	965.4	964.4
22.5°	944.1	945.0	945.9	946.0	945.3	944.7	944.0	943.5
25°	910.1	910.5	910.9	910.8	910.3	909.7	909.1	908.6
27.5°	874.5	874.6	874.7	874.4	873.8	873.3	872.7	872.1
30°	848.6	848.2	847.7	847.3	846.8	846.2	845.6	845.1
32.5°	822.1	821.5	820.8	819.9	819.0	817.9	816.9	816.0
35°	781.4	780.4	779.5	778.3	776.7	775.3	773.7	772.3
37.5°	738.4	737.0	735.6	734.5	733.7	732.8	732.0	731.1
40°	708.7	707.0	705.3	704.2	703.6	703.1	702.5	702.0
42.5°	679.2	677.7	676.1	674.9	674.1	673.2	672.3	671.5
45°	635.6	633.3	631.1	629.7	629.2	628.6	628.0	627.5
47.5°	589.6	587.3	585.1	583.3	582.0	580.7	579.3	578.0
50°	558.2	555.7	553.3	551.4	550.1	548.8	547.5	546.2
52.5°	527.7	525.5	523.3	521.5	520.1	518.6	517.1	515.7
55°	480.1	478.4	476.7	475.2	473.9	472.5	471.2	469.9
57.5°	432.9	430.7	428.5	427.1	426.3	425.7	424.9	424.2
60°	401.0	399.1	397.2	395.6	394.3	393.0	391.7	390.4
62.5°	370.2	368.2	366.2	364.6	363.6	362.6	361.6	360.5
65°	321.8	320.1	318.4	317.2	316.4	315.7	314.9	314.1
67.5°	275.6	274.1	272.7	271.7	271.3	270.8	270.4	269.9
70°	245.0	243.9	242.7	241.8	241.0	240.3	239.5	238.8
72.5°	216.2	215.0	213.7	212.6	211.9	211.2	210.4	209.6
75°	171.6	171.0	170.5	169.8	169.1	168.3	167.5	166.8
77.5°	130.8	130.4	130.0	129.6	129.1	128.6	128.1	127.5
80°	104.6	104.4	104.3	104.0	103.6	103.2	102.8	102.5
82.5°	79.9	79.6	79.2	79.1	79.0	78.9	78.8	78.8
85°	47.0	46.9	46.6	46.4	46.0	45.7	45.2	44.8
87.5°	21.0	21.3	21.5	21.5	21.4	21.1	21.0	20.8
90°	17.3	18.3	19.4	20.2	20.9	21.4	22.1	22.7
92.5°	39.1	40.5	41.9	42.9	43.3	43.8	44.3	44.7
95°	75.9	77.4	78.8	79.8	80.2	80.6	81.0	81.4
97.5°	119.0	120.3	121.7	122.5	122.8	123.0	123.3	123.5
100°	148.7	150.7	152.5	153.7	154.1	154.5	155.0	155.4
102.5°	179.4	181.5	183.5	184.8	185.5	186.1	186.6	187.2
105°	228.9	230.2	231.5	232.4	233.1	233.7	234.3	235.0
107.5°	282.4	283.1	283.7	284.1	284.0	284.0	283.9	283.8
110°	319.6	320.2	320.8	321.1	320.8	320.7	320.4	320.2





TEST NUMBER: P333248-930

CATALOG NUMBER: S125DIP-S850D1205U930-4F0-1E-UDD-F1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	356.9	357.1	357.4	357.3	357.0	356.6	356.2	355.9
115°	413.6	413.4	413.2	412.9	412.8	412.5	412.3	412.1
117.5°	470.4	470.6	470.8	470.4	469.6	468.8	467.9	467.1
120°	508.7	508.7	508.7	508.3	507.5	506.6	505.8	505.0
122.5°	546.3	546.2	546.0	545.6	544.9	544.2	543.6	542.9
125°	601.7	601.3	600.9	600.5	600.4	600.1	599.9	599.7
127.5°	656.7	656.5	656.3	656.0	655.6	655.1	654.7	654.3
130°	693.1	692.8	692.7	692.4	691.9	691.5	691.0	690.6
132.5°	728.0	727.7	727.5	727.2	726.5	725.9	725.4	724.8
135°	781.6	781.6	781.6	781.2	780.3	779.5	778.7	777.8
137.5°	833.9	834.1	834.4	834.0	832.9	831.8	830.8	829.7
140°	866.7	867.2	867.6	867.3	866.3	865.2	864.1	863.1
142.5°	899.0	899.3	899.5	899.1	898.1	897.1	896.0	895.0
145°	945.5	945.5	945.5	945.2	944.6	944.0	943.3	942.6
147.5°	988.6	989.1	989.6	989.1	987.7	986.3	984.9	983.4
150°	1015.6	1015.6	1015.6	1015.5	1015.0	1014.6	1014.2	1013.7
152.5°	1040.9	1041.4	1041.9	1041.8	1041.1	1040.2	1039.5	1038.8
155°	1077.0	1077.8	1078.7	1078.6	1077.5	1076.4	1075.5	1074.4
157.5°	1108.2	1109.1	1109.9	1109.7	1108.3	1106.9	1105.5	1104.2
160°	1127.2	1128.0	1128.9	1128.8	1127.7	1126.7	1125.6	1124.6
162.5°	1145.0	1146.0	1147.0	1146.9	1145.7	1144.4	1143.2	1142.0
165°	1168.9	1169.7	1170.6	1170.4	1169.1	1167.8	1166.6	1165.3
167.5°	1186.6	1187.9	1189.1	1189.1	1187.8	1186.5	1185.2	1183.9
170°	1197.2	1198.5	1199.7	1199.6	1198.2	1196.7	1195.2	1193.8
172.5°	1204.8	1206.1	1207.3	1207.3	1206.0	1204.7	1203.4	1202.1
175°	1213.3	1214.6	1215.9	1215.8	1214.3	1212.8	1211.3	1209.8
177.5°	1217.2	1218.2	1219.2	1219.1	1218.0	1216.8	1215.6	1214.4
180°	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4	1217.4

(END OF REPORT)