

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: P333239-930

Luminaire Tested: **S125DIP-S850D1035U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333239-930
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-S850D1035U930-4F0-1E-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: 5705.9 lumens
Efficiency: N/A
Efficacy: 109.7 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

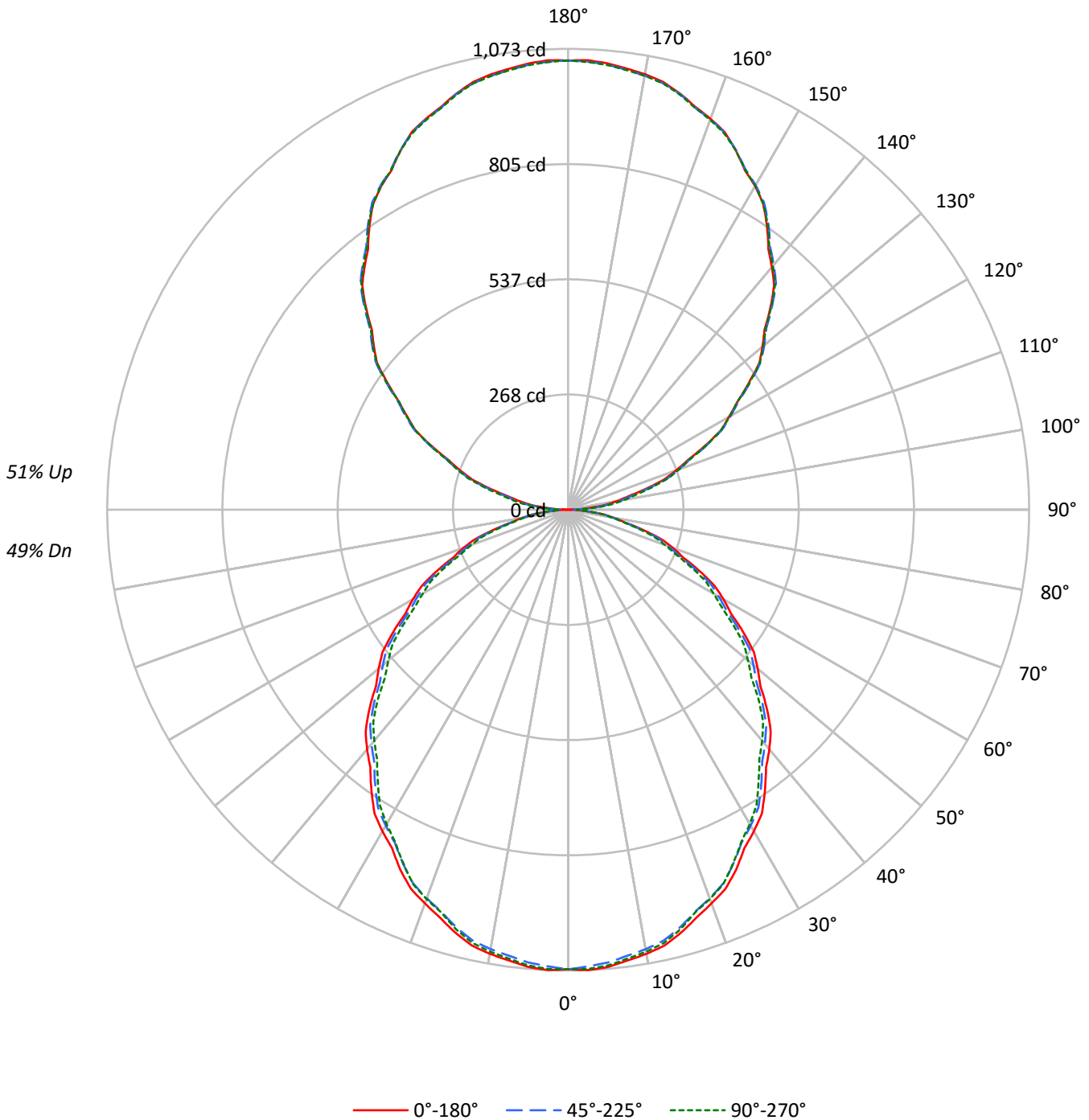
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	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	1.8
10°-20°	285.1	5.0
20°-30°	420.9	7.4
30°-40°	491.1	8.6
40°-50°	493.3	8.6
50°-60°	433.0	7.6
60°-70°	322.6	5.7
70°-80°	184.5	3.2
80°-90°	56.0	1.0
90°-100°	70.1	1.2
100°-110°	206.9	3.6
110°-120°	350.4	6.1
120°-130°	461.1	8.1
130°-140°	516.7	9.1
140°-150°	506.4	8.9
150°-160°	425.3	7.5
160°-170°	282.7	5.0
170°-180°	98.9	1.7
0°-30°	806.9	14.1
0°-40°	1298.0	22.7
0°-60°	2224.3	39.0
0°-90°	2787.3	48.8
90°-120°	627.3	11.0
90°-150°	2111.6	37.0
90°-180°	2919.0	51.2
0°-180°	5705.9	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	7	13	17	20	5
95°	53	55	63	68	70	56
105°	186	190	194	199	202	198
115°	351	354	356	355	354	347
125°	512	517	518	516	515	458
135°	666	670	672	671	668	513
145°	807	810	812	812	810	504
155°	923	923	924	927	923	425
165°	1004	1002	1003	1006	1001	283
175°	1044	1040	1040	1045	1039	99
180°	1046	1046	1046	1046	1046	



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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°	18.4	18.8	19.0	19.3	19.6	19.8	19.9	20.0	20.1	20.2	20.4
90°	0.8	2.3	3.7	5.1	6.6	8.0	9.2	10.5	11.7	13.0	13.9
92.5°	19.7	20.7	21.7	22.7	23.7	25.0	26.6	28.1	29.7	31.2	32.4
95°	52.9	53.2	53.6	54.0	54.4	55.4	57.2	59.0	60.9	62.7	63.9
97.5°	87.9	88.1	88.2	88.4	88.5	89.8	92.3	94.8	97.3	99.8	101.0
100°	114.0	114.0	114.0	114.0	114.0	115.1	117.5	119.8	122.2	124.5	126.1
102.5°	141.9	142.7	143.4	144.1	144.9	145.8	147.0	148.2	149.4	150.6	152.4
105°	185.6	186.5	187.4	188.3	189.2	190.2	191.3	192.3	193.5	194.5	195.6
107.5°	233.7	234.6	235.5	236.5	237.4	238.2	239.0	239.9	240.8	241.6	242.1
110°	267.0	267.9	268.8	269.7	270.6	271.3	271.8	272.4	273.0	273.5	274.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	300.8	301.3	301.7	302.2	302.7	303.3	304.0	304.7	305.3	306.1	306.3
115°	350.8	351.6	352.3	353.0	353.7	354.2	354.6	355.0	355.3	355.7	355.6
117.5°	401.0	401.3	401.6	401.9	402.3	402.6	402.9	403.2	403.6	403.9	404.1
120°	432.2	433.1	434.0	435.0	435.9	436.3	436.5	436.8	436.9	437.1	437.1
122.5°	466.1	466.4	466.8	467.1	467.4	467.7	468.2	468.7	469.2	469.6	469.5
125°	512.0	513.1	514.1	515.3	516.3	517.0	517.1	517.3	517.5	517.7	517.3
127.5°	560.8	561.4	562.1	562.6	563.3	563.7	563.9	564.1	564.4	564.6	564.4
130°	590.1	591.0	591.9	592.8	593.7	594.4	594.8	595.1	595.4	595.8	595.7
132.5°	619.4	620.9	622.4	623.9	625.3	626.1	626.0	625.9	625.8	625.7	625.6
135°	665.9	666.9	668.0	669.0	670.2	670.8	671.0	671.2	671.3	671.5	671.5
137.5°	709.5	710.5	711.5	712.6	713.6	714.4	714.8	715.2	715.6	715.9	716.2
140°	737.4	738.3	739.2	740.1	741.0	741.8	742.3	742.9	743.4	744.0	744.3
142.5°	765.4	766.2	767.0	767.7	768.5	769.2	769.9	770.6	771.3	771.9	772.2
145°	806.7	807.4	808.0	808.8	809.5	810.2	810.7	811.2	811.8	812.4	812.4
147.5°	844.7	845.1	845.5	846.0	846.3	846.8	847.2	847.6	848.0	848.5	848.9
150°	870.1	869.9	869.8	869.6	869.4	869.7	870.4	871.1	871.8	872.5	872.5
152.5°	891.0	891.2	891.4	891.7	891.9	892.3	892.5	892.8	893.1	893.4	893.8
155°	923.0	923.0	923.0	923.0	923.0	923.1	923.3	923.5	923.7	923.8	924.5
157.5°	951.7	951.3	950.9	950.5	950.1	950.0	950.1	950.3	950.6	950.7	951.5
160°	968.6	968.1	967.5	966.9	966.5	966.3	966.5	966.6	966.8	966.9	967.7
162.5°	983.6	983.2	982.8	982.4	982.0	981.8	981.9	981.9	981.9	981.9	982.8
165°	1003.6	1003.2	1002.9	1002.5	1002.2	1002.1	1002.2	1002.4	1002.6	1002.8	1003.6
167.5°	1020.5	1019.8	1019.1	1018.4	1017.7	1017.2	1017.2	1017.2	1017.2	1017.2	1018.4
170°	1029.6	1028.9	1028.2	1027.5	1026.8	1026.4	1026.4	1026.4	1026.4	1026.4	1027.5
172.5°	1036.2	1035.4	1034.7	1034.0	1033.3	1032.9	1032.9	1032.9	1032.9	1032.9	1034.0
175°	1043.5	1042.8	1042.0	1041.3	1040.6	1040.2	1040.2	1040.2	1040.2	1040.2	1041.3
177.5°	1047.3	1046.7	1046.1	1045.5	1044.9	1044.6	1044.4	1044.2	1044.2	1044.0	1044.9
180°	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9



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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°	20.5	20.8	21.0	21.0	20.7	20.5	20.4	20.1
90°	14.8	15.7	16.6	17.4	17.9	18.4	19.0	19.6
92.5°	33.7	34.8	36.0	36.9	37.3	37.6	38.0	38.4
95°	65.2	66.4	67.8	68.6	68.9	69.3	69.6	70.0
97.5°	102.2	103.4	104.6	105.3	105.5	105.7	105.9	106.2
100°	127.8	129.4	131.0	132.1	132.4	132.7	133.1	133.5
102.5°	154.1	155.9	157.7	158.8	159.3	159.8	160.4	160.9
105°	196.7	197.8	198.9	199.7	200.2	200.8	201.3	201.9
107.5°	242.6	243.2	243.8	244.0	243.9	243.9	243.9	243.9
110°	274.6	275.1	275.7	275.8	275.7	275.5	275.3	275.1



TEST NUMBER: P333239-930

CATALOG NUMBER: S125DIP-S850D1035U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	306.6	306.8	307.0	307.0	306.7	306.4	306.1	305.7
115°	355.3	355.1	355.0	354.8	354.6	354.4	354.2	354.1
117.5°	404.1	404.3	404.5	404.1	403.4	402.8	402.0	401.3
120°	437.1	437.1	437.1	436.8	436.0	435.3	434.6	433.8
122.5°	469.4	469.2	469.0	468.7	468.1	467.6	467.0	466.4
125°	517.0	516.6	516.2	515.9	515.8	515.6	515.4	515.3
127.5°	564.2	564.0	563.9	563.5	563.2	562.8	562.5	562.1
130°	595.4	595.3	595.1	594.8	594.4	594.1	593.7	593.4
132.5°	625.4	625.3	625.0	624.7	624.2	623.7	623.2	622.6
135°	671.5	671.5	671.5	671.2	670.4	669.7	669.0	668.2
137.5°	716.4	716.6	716.8	716.5	715.6	714.7	713.8	712.9
140°	744.7	745.0	745.4	745.1	744.2	743.3	742.4	741.5
142.5°	772.4	772.6	772.8	772.5	771.6	770.7	769.8	768.8
145°	812.4	812.4	812.4	812.0	811.5	811.0	810.4	809.9
147.5°	849.3	849.8	850.2	849.8	848.6	847.3	846.1	844.9
150°	872.5	872.5	872.5	872.4	872.0	871.6	871.3	870.9
152.5°	894.3	894.7	895.1	895.0	894.4	893.7	893.1	892.4
155°	925.3	926.0	926.8	926.7	925.8	924.8	923.9	923.0
157.5°	952.1	952.8	953.6	953.3	952.2	951.0	949.7	948.6
160°	968.4	969.1	969.9	969.8	968.9	968.0	967.1	966.1
162.5°	983.7	984.6	985.5	985.4	984.3	983.3	982.2	981.1
165°	1004.2	1004.9	1005.7	1005.5	1004.4	1003.3	1002.2	1001.2
167.5°	1019.5	1020.5	1021.7	1021.6	1020.5	1019.4	1018.2	1017.1
170°	1028.6	1029.6	1030.7	1030.6	1029.4	1028.1	1026.9	1025.6
172.5°	1035.1	1036.2	1037.2	1037.2	1036.1	1035.0	1033.9	1032.7
175°	1042.4	1043.5	1044.6	1044.5	1043.3	1042.0	1040.6	1039.4
177.5°	1045.7	1046.6	1047.4	1047.4	1046.4	1045.4	1044.3	1043.3
180°	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9	1045.9

(END OF REPORT)