

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: P332610-935

Luminaire Tested: **S124DIP-S795D1035U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P332610-935  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-6,  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S124DIP-S795D1035U935-4F0-1E-UDD-D  
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 795 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1035 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6345.9 lumens  
Efficiency: N/A  
Efficacy: 122.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.08')  
CIE Type: General Diffuse

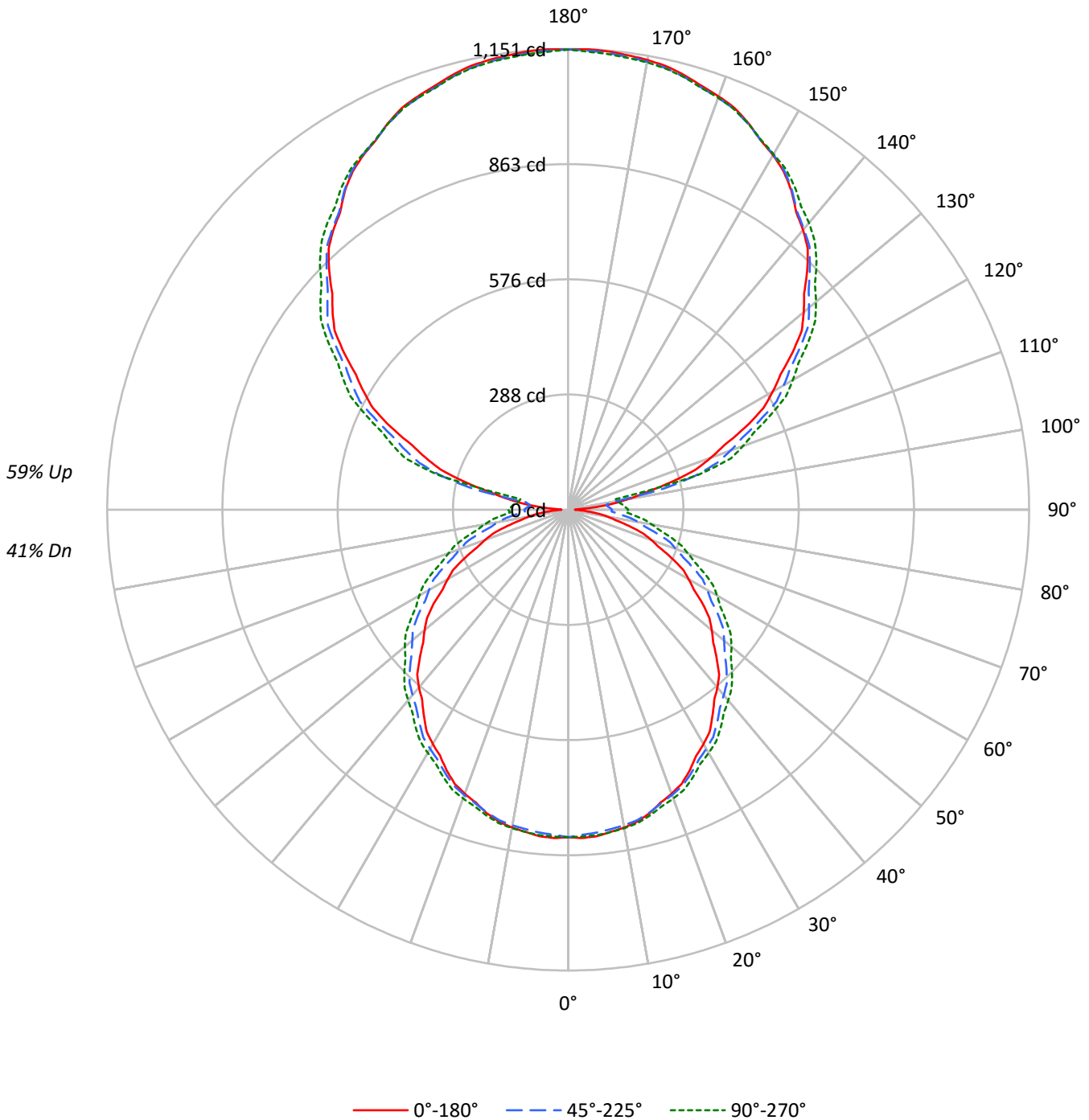
Input Watts (W): 52  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





TEST NUMBER: P332610-935

CATALOG NUMBER: S124DIP-S795D1035U935-4F0-1E-UDD-D

**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	78	78	78	62	62	62	48	48	48	41
1	95	90	86	82	86	82	79	75	67	65	62	53	52	50	41	40	38	33
2	86	78	72	67	78	71	66	61	58	54	51	46	44	41	35	33	32	27
3	78	68	61	55	71	62	56	51	51	46	42	41	37	34	31	29	27	22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	28	25	23	19
5	65	54	45	39	59	49	42	36	40	35	31	32	28	25	25	22	20	16
6	60	48	40	34	54	44	37	31	36	31	27	29	25	22	22	19	17	14
7	55	43	35	29	50	40	32	27	33	27	23	26	22	19	20	17	15	12
8	51	39	31	26	47	36	29	24	30	24	20	24	20	17	19	16	13	11
9	48	36	28	23	43	33	26	21	27	22	18	22	18	15	17	14	12	10
10	45	32	25	20	40	30	23	19	25	20	16	20	16	14	16	13	11	9

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

	0°	45°	90°
0°	6603	6603	6603
5°	6622	6453	6471
10°	6582	6347	6342
15°	6524	6225	6190
20°	6435	6090	6044
25°	6334	5939	5882
30°	6226	5788	5714
35°	6103	5635	5569
40°	6004	5488	5417
45°	5858	5352	5286
50°	5735	5197	5149
55°	5608	5051	4987
60°	5409	4863	4840
65°	5191	4662	4657
70°	4927	4433	4447
75°	4561	4182	4255
80°	4149	3940	4067
85°	3636	3724	3960



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.4	1.2
10°-20°	221.9	3.5
20°-30°	335.5	5.3
30°-40°	405.9	6.4
40°-50°	429.2	6.8
50°-60°	403.9	6.4
60°-70°	335.1	5.3
70°-80°	235.4	3.7
80°-90°	136.4	2.1
90°-100°	118.3	1.9
100°-110°	309.1	4.9
110°-120°	518.7	8.2
120°-130°	630.7	9.9
130°-140°	660.7	10.4
140°-150°	610.8	9.6
150°-160°	491.0	7.7
160°-170°	316.7	5.0
170°-180°	109.2	1.7
0°-30°	634.9	10.0
0°-40°	1040.8	16.4
0°-60°	1873.9	29.5
0°-90°	2580.8	40.7
90°-120°	946.1	14.9
90°-150°	2848.3	44.9
90°-180°	3765.0	59.3
0°-180°	6345.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	818	818	818	818	818	
5°	819	816	810	816	816	78
15°	785	786	783	791	790	221
25°	718	723	726	736	737	331
35°	628	639	648	661	664	393
45°	524	541	559	574	579	405
55°	410	430	457	475	481	365
65°	284	313	344	366	374	281
75°	158	192	230	255	264	168
85°	49	87	128	155	165	52
90°	17	63	110	140	150	12
95°	59	62	99	127	138	70
105°	267	291	329	356	336	280
115°	488	500	528	549	556	481
125°	683	686	706	726	733	609
135°	844	844	853	869	877	650
145°	972	974	974	980	986	607
155°	1065	1066	1063	1066	1064	491
165°	1123	1119	1119	1125	1118	317
175°	1149	1144	1145	1152	1142	109
180°	1149	1149	1149	1149	1149	



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CATALOG NUMBER: S124DIP-S795D1035U935-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9
2.5°	820.8	820.3	819.8	819.3	818.8	817.9	816.6	815.3	814.0	812.7	813.8
5°	818.7	818.1	817.5	816.9	816.3	815.3	813.8	812.4	811.0	809.6	811.2
7.5°	811.8	811.4	811.1	810.7	810.3	809.5	808.4	807.2	806.0	804.9	806.7
10°	805.9	805.7	805.6	805.3	805.1	804.5	803.5	802.5	801.4	800.4	802.3
12.5°	797.9	797.8	797.8	797.7	797.7	797.4	796.7	795.9	795.2	794.5	796.3
15°	784.9	785.1	785.2	785.5	785.7	785.5	784.9	784.3	783.6	783.0	784.9
17.5°	767.1	767.7	768.3	769.0	769.6	769.7	769.6	769.6	769.4	769.3	771.2
20°	754.7	755.3	755.9	756.5	757.1	757.5	757.7	757.9	758.1	758.3	760.3
22.5°	740.7	741.5	742.3	743.0	743.8	744.4	744.8	745.1	745.5	745.9	747.9
25°	718.0	719.2	720.5	721.7	722.9	723.8	724.4	725.0	725.7	726.3	728.5
27.5°	692.8	694.5	696.3	698.1	699.9	701.3	702.2	703.1	704.0	705.0	707.1
30°	675.9	677.5	679.2	680.8	682.4	683.9	685.4	686.7	688.2	689.6	691.8
32.5°	657.5	659.5	661.5	663.4	665.4	667.1	668.7	670.3	671.9	673.5	676.1
35°	628.3	630.7	633.2	635.6	638.0	640.2	642.3	644.4	646.4	648.4	651.3
37.5°	598.7	601.6	604.4	607.2	610.0	612.7	615.2	617.7	620.3	622.8	625.7
40°	579.7	582.4	585.0	587.6	590.3	593.1	595.9	598.7	601.6	604.4	607.5
42.5°	557.8	560.7	563.7	566.6	569.6	572.7	576.1	579.5	582.8	586.1	589.5
45°	523.8	527.7	531.6	535.5	539.3	543.2	547.1	551.0	554.7	558.6	562.1
47.5°	491.5	495.4	499.4	503.4	507.4	511.6	516.1	520.6	525.0	529.5	533.1
50°	468.0	472.4	476.9	481.4	485.9	490.3	494.8	499.3	503.8	508.2	512.4
52.5°	444.5	449.0	453.5	458.0	462.4	467.3	472.3	477.5	482.7	487.8	491.8
55°	410.3	414.6	418.9	423.1	427.4	432.6	438.7	444.8	450.9	457.0	461.1
57.5°	372.0	377.3	382.6	387.9	393.1	398.8	404.9	411.0	417.1	423.1	427.9
60°	347.1	352.4	357.7	363.0	368.2	374.3	381.0	387.7	394.4	401.1	405.8
62.5°	322.9	328.7	334.5	340.3	346.0	352.3	359.0	365.8	372.5	379.2	383.8
65°	283.9	290.4	297.0	303.4	310.0	316.7	323.6	330.5	337.4	344.3	349.4
67.5°	246.3	253.3	260.2	267.1	274.1	281.2	288.6	296.0	303.4	310.8	316.0
70°	220.7	227.6	234.5	241.5	248.4	255.7	263.5	271.2	278.9	286.6	292.1
72.5°	195.8	202.9	210.0	217.1	224.1	231.8	240.0	248.2	256.5	264.7	270.0
75°	157.6	165.1	172.5	180.1	187.6	195.7	204.2	212.8	221.4	229.9	235.6
77.5°	121.8	129.8	137.8	145.8	153.7	162.2	171.2	180.1	189.1	198.0	203.8
80°	99.8	108.0	116.1	124.2	132.4	140.9	149.9	158.9	167.8	176.8	182.9
82.5°	77.8	86.3	94.8	103.2	111.7	120.5	129.4	138.4	147.3	156.3	162.5
85°	48.6	57.1	65.6	74.2	82.7	91.6	100.7	109.9	119.1	128.2	134.3
87.5°	27.6	36.3	45.0	53.8	62.5	71.5	80.7	89.9	99.2	108.4	114.5
90°	17.2	27.5	37.7	48.0	58.2	68.4	78.7	89.0	99.3	109.6	116.7
92.5°	24.7	32.2	39.6	47.1	54.5	63.4	73.6	83.9	94.2	104.5	111.4
95°	59.2	59.4	59.6	59.8	60.1	64.4	73.0	81.5	90.1	98.6	105.2
97.5°	111.2	121.1	130.9	140.7	150.5	148.9	135.9	122.8	109.8	96.7	102.1
100°	151.0	159.8	168.5	177.2	186.0	181.1	162.6	144.3	125.9	107.5	109.7
102.5°	196.4	203.5	210.8	217.9	225.1	230.8	235.1	239.4	243.8	248.1	218.4
105°	267.0	272.2	277.4	282.6	287.8	294.6	303.2	311.7	320.1	328.6	335.4
107.5°	334.0	337.9	341.8	345.7	349.7	355.8	364.2	372.6	381.1	389.5	395.4
110°	378.7	382.0	385.5	388.9	392.4	398.2	406.5	414.7	423.0	431.3	436.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	421.9	425.5	429.0	432.6	436.1	441.6	448.9	456.2	463.6	470.9	475.4
115°	488.5	490.9	493.4	495.8	498.2	502.5	508.9	515.1	521.5	527.8	532.7
117.5°	549.4	551.2	553.1	555.0	556.8	561.0	567.5	573.9	580.5	586.9	591.1
120°	589.9	591.2	592.6	594.0	595.4	598.9	604.7	610.4	616.0	621.8	626.2
122.5°	628.4	629.0	629.6	630.2	630.8	634.0	639.8	645.7	651.5	657.3	661.6
125°	682.7	683.2	683.8	684.3	684.9	687.5	692.2	697.0	701.6	706.4	710.8
127.5°	734.8	734.8	734.7	734.7	734.7	737.1	741.8	746.7	751.5	756.2	759.7
130°	767.8	767.7	767.7	767.7	767.7	769.6	773.4	777.2	781.1	784.9	788.8
132.5°	798.7	798.8	798.9	799.1	799.2	801.0	804.3	807.6	811.0	814.2	817.9
135°	844.1	844.0	843.8	843.6	843.3	844.4	846.5	848.8	850.9	853.2	856.8
137.5°	885.2	885.1	885.0	884.8	884.8	885.5	887.0	888.5	890.0	891.6	894.9
140°	912.1	912.2	912.4	912.6	912.7	913.2	913.7	914.3	914.9	915.5	918.7
142.5°	935.4	936.0	936.7	937.3	938.0	938.3	938.5	938.6	938.7	938.7	941.5
145°	972.2	972.5	972.9	973.3	973.6	973.8	973.8	973.8	973.8	973.8	975.3
147.5°	1001.5	1002.5	1003.3	1004.2	1005.0	1005.4	1005.1	1005.0	1004.8	1004.6	1004.9
150°	1022.9	1023.5	1024.0	1024.6	1025.1	1025.3	1025.1	1024.9	1024.8	1024.5	1024.5
152.5°	1040.0	1040.6	1041.1	1041.7	1042.3	1042.4	1042.1	1041.7	1041.4	1041.0	1041.4
155°	1065.0	1065.1	1065.3	1065.5	1065.7	1065.5	1065.0	1064.4	1063.8	1063.2	1063.9
157.5°	1086.1	1086.0	1085.8	1085.7	1085.6	1085.2	1084.6	1083.9	1083.3	1082.6	1083.7
160°	1098.5	1097.9	1097.3	1096.7	1096.1	1095.8	1095.6	1095.4	1095.2	1095.0	1096.1
162.5°	1109.5	1108.7	1108.0	1107.2	1106.6	1106.1	1105.9	1105.7	1105.5	1105.4	1106.5
165°	1123.3	1122.4	1121.5	1120.5	1119.6	1119.0	1119.0	1119.0	1119.0	1119.0	1120.6
167.5°	1134.4	1133.4	1132.4	1131.4	1130.4	1129.9	1129.7	1129.6	1129.5	1129.4	1131.1
170°	1140.6	1139.4	1138.2	1137.1	1136.0	1135.5	1135.7	1135.9	1136.1	1136.3	1137.8
172.5°	1144.7	1143.6	1142.4	1141.3	1140.1	1139.6	1139.8	1140.1	1140.2	1140.4	1141.9
175°	1149.2	1148.1	1146.9	1145.7	1144.6	1144.1	1144.3	1144.5	1144.7	1144.9	1146.6
177.5°	1151.2	1150.1	1149.1	1148.1	1146.9	1146.6	1146.9	1147.2	1147.5	1147.8	1149.0
180°	1149.2	1149.2	1149.2	1149.2	1149.2	1149.2	1149.2	1149.2	1149.2	1149.2	1149.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	817.9	817.9	817.9	817.9	817.9	817.9	817.9	817.9
2.5°	814.9	816.1	817.3	817.8	817.6	817.4	817.3	817.1
5°	812.9	814.5	816.1	816.8	816.6	816.4	816.2	816.0
7.5°	808.5	810.3	812.2	813.0	812.8	812.5	812.4	812.2
10°	804.1	805.9	807.8	808.6	808.4	808.1	808.0	807.8
12.5°	797.9	799.6	801.2	802.0	802.0	801.9	801.9	801.8
15°	786.7	788.5	790.3	791.2	791.0	790.7	790.6	790.3
17.5°	773.0	774.9	776.8	777.7	777.5	777.3	777.1	777.0
20°	762.3	764.4	766.5	767.5	767.5	767.5	767.5	767.5
22.5°	749.9	751.9	754.0	755.2	755.5	755.8	756.1	756.5
25°	730.7	733.0	735.2	736.4	736.6	736.8	737.0	737.3
27.5°	709.1	711.2	713.3	714.5	714.7	715.0	715.2	715.4
30°	694.1	696.3	698.5	699.9	700.3	700.7	701.1	701.5
32.5°	678.6	681.2	683.7	685.3	685.6	686.0	686.5	686.9
35°	654.1	656.9	659.8	661.5	662.1	662.7	663.4	664.0
37.5°	628.5	631.5	634.3	636.1	636.7	637.4	638.0	638.7
40°	610.5	613.6	616.6	618.5	619.4	620.2	621.0	621.8
42.5°	592.9	596.2	599.6	601.7	602.3	603.0	603.6	604.2
45°	565.6	569.0	572.5	574.7	575.8	576.8	577.8	578.8
47.5°	536.7	540.3	543.9	546.2	547.5	548.7	549.9	551.1
50°	516.4	520.5	524.5	527.2	528.4	529.7	530.9	532.1
52.5°	495.9	500.0	504.0	506.7	507.9	509.1	510.3	511.6
55°	465.1	469.2	473.3	476.0	477.2	478.4	479.6	480.8
57.5°	432.8	437.6	442.5	445.5	446.6	447.7	448.9	450.0
60°	410.5	415.2	419.8	423.0	424.6	426.3	427.9	429.6
62.5°	388.5	393.2	397.9	401.1	402.7	404.3	405.9	407.5
65°	354.6	359.6	364.7	368.1	369.7	371.3	372.9	374.5
67.5°	321.2	326.3	331.5	334.8	336.5	338.0	339.7	341.2
70°	297.6	303.2	308.7	312.1	313.5	315.0	316.3	317.8
72.5°	275.3	280.7	286.0	289.5	291.0	292.7	294.2	295.8
75°	241.3	246.9	252.7	256.4	258.3	260.1	261.9	263.7
77.5°	209.6	215.3	221.1	225.0	227.0	228.9	230.8	232.8
80°	189.0	195.1	201.2	205.0	206.6	208.3	209.9	211.5
82.5°	168.8	175.0	181.3	185.4	187.1	188.9	190.7	192.5
85°	140.4	146.5	152.7	156.7	158.8	160.7	162.8	164.9
87.5°	120.6	126.7	132.9	136.9	138.8	140.6	142.5	144.4
90°	123.6	130.7	137.8	142.3	144.3	146.3	148.4	150.3
92.5°	118.3	125.2	132.0	136.3	138.0	139.7	141.5	143.2
95°	111.8	118.5	125.2	129.5	131.5	133.5	135.5	137.6
97.5°	107.6	113.0	118.5	122.2	124.1	126.1	128.0	129.9
100°	111.9	114.2	116.4	118.3	119.9	121.6	123.2	124.8
102.5°	188.7	159.0	129.3	115.3	116.9	118.6	120.2	121.8
105°	342.2	349.0	355.9	356.6	351.4	346.1	340.9	335.6
107.5°	401.1	407.0	412.8	416.9	419.0	421.3	423.4	425.7
110°	441.3	446.4	451.5	455.1	457.4	459.5	461.8	463.9





TEST NUMBER: P332610-935

CATALOG NUMBER: S124DIP-S795D1035U935-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	479.7	484.2	488.7	492.1	494.4	496.8	499.1	501.4
115°	537.5	542.3	547.3	550.4	551.8	553.3	554.7	556.1
117.5°	595.3	599.4	603.6	606.4	608.0	609.5	611.1	612.6
120°	630.7	635.2	639.6	642.5	643.7	645.0	646.2	647.5
122.5°	665.9	670.2	674.5	677.2	678.3	679.4	680.4	681.6
125°	715.2	719.7	724.1	727.0	728.5	729.9	731.3	732.7
127.5°	763.4	766.9	770.4	772.8	774.0	775.2	776.5	777.7
130°	792.6	796.4	800.3	802.9	804.1	805.3	806.5	807.7
132.5°	821.7	825.4	829.1	831.4	832.5	833.5	834.7	835.7
135°	860.4	864.0	867.7	870.3	871.9	873.5	875.1	876.8
137.5°	898.4	901.7	905.1	907.2	908.2	909.0	910.0	910.9
140°	922.0	925.1	928.3	930.6	931.8	933.0	934.2	935.4
142.5°	944.3	947.0	949.8	951.6	952.4	953.4	954.2	955.1
145°	976.6	978.1	979.5	980.8	982.0	983.2	984.4	985.6
147.5°	1005.2	1005.6	1005.8	1006.4	1007.3	1008.1	1009.0	1009.8
150°	1024.5	1024.5	1024.5	1024.6	1024.8	1025.0	1025.2	1025.4
152.5°	1041.6	1042.0	1042.2	1042.3	1042.2	1042.2	1042.0	1041.9
155°	1064.7	1065.5	1066.3	1066.3	1065.8	1065.2	1064.6	1064.1
157.5°	1084.6	1085.6	1086.6	1086.6	1085.6	1084.6	1083.7	1082.6
160°	1097.3	1098.5	1099.6	1099.6	1098.5	1097.3	1096.1	1095.0
162.5°	1107.6	1108.8	1109.9	1109.8	1108.5	1107.2	1106.0	1104.7
165°	1122.1	1123.7	1125.2	1125.1	1123.3	1121.6	1119.9	1118.2
167.5°	1132.7	1134.5	1136.1	1136.0	1134.1	1132.2	1130.2	1128.3
170°	1139.4	1140.8	1142.4	1142.2	1140.3	1138.4	1136.4	1134.5
172.5°	1143.5	1145.0	1146.5	1146.2	1144.2	1142.1	1140.1	1138.0
175°	1148.3	1150.0	1151.8	1151.4	1149.2	1146.9	1144.6	1142.3
177.5°	1150.2	1151.4	1152.7	1152.4	1150.6	1148.7	1146.9	1145.0
180°	1149.2	1149.2	1149.2	1149.2	1149.2	1149.2	1149.2	1149.2

(END OF REPORT)