

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: P332611

Luminaire Tested: **S124DIP-S795D1035U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332611
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-10,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIP-S795D1035U835-4F0-1E-UDD-D1
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 795 LUMENS PER FOOT, DROP 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: 6822.5 lumens
Efficiency: N/A
Efficacy: 131.2 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

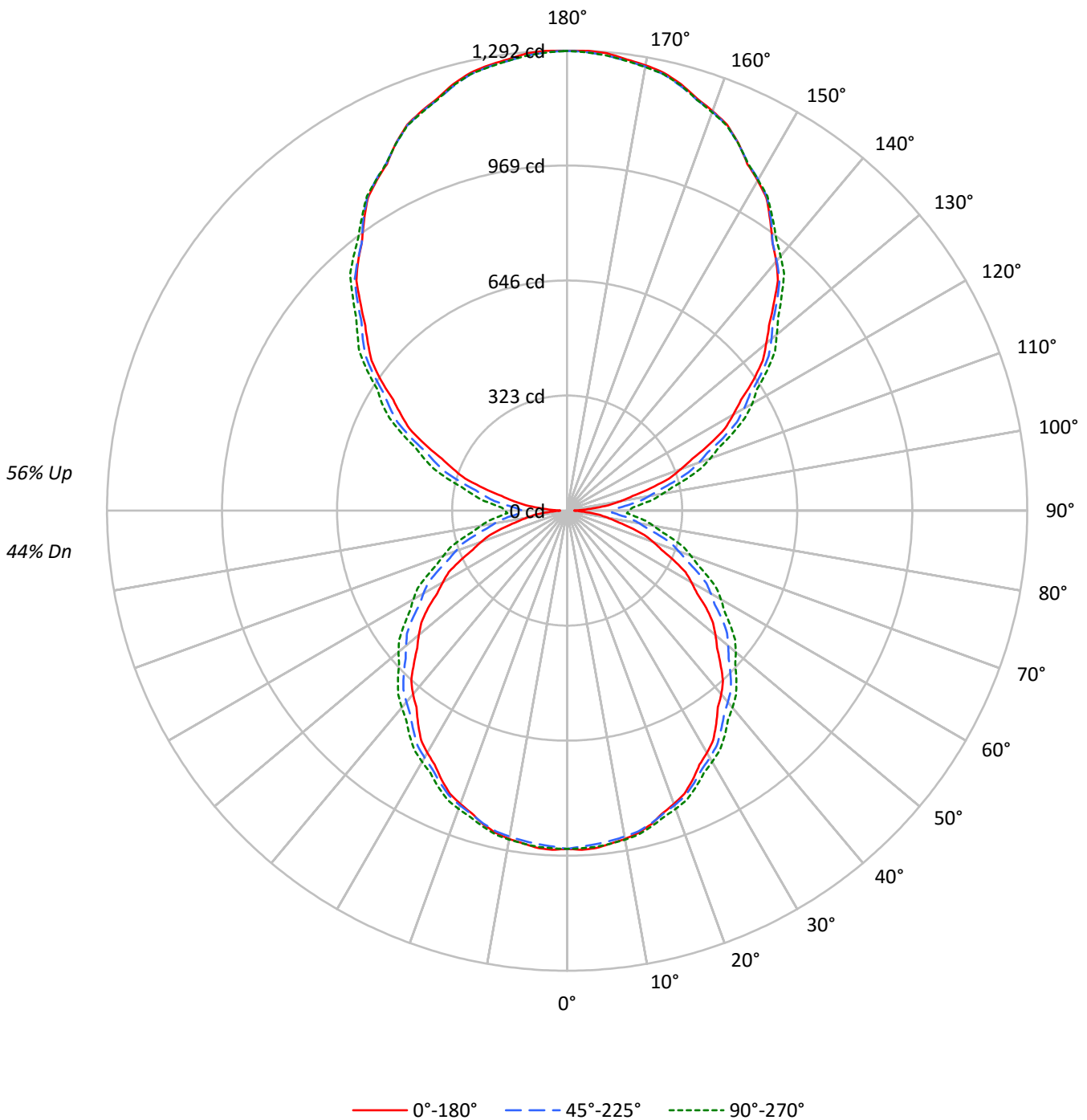
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
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	50	30	10	0														
RCR																																						
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44																				
1	96	91	87	83	87	83	80	76	69	66	64	55	54	52	43	42	41	35																				
2	87	79	72	67	79	72	67	62	60	56	52	48	45	43	38	35	34	29																				
3	79	69	61	55	72	63	57	51	52	47	43	42	39	36	33	30	28	24																				
4	72	61	53	46	65	56	49	43	46	41	37	37	33	30	29	26	24	20																				
5	66	54	46	39	60	50	42	37	41	36	31	33	29	26	26	23	21	17																				
6	61	48	40	34	55	44	37	32	37	31	27	30	26	23	24	21	18	15																				
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	22	18	16	13																				
8	52	39	31	26	47	36	29	24	30	25	21	25	21	18	20	17	14	12																				
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13	11																				
10	45	33	25	21	41	30	24	19	26	20	17	21	17	14	17	14	12	10																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7668	7668	7668
5°	7692	7494	7516
10°	7645	7371	7366
15°	7577	7230	7190
20°	7473	7073	7019
25°	7357	6898	6831
30°	7231	6723	6637
35°	7088	6544	6468
40°	6974	6374	6291
45°	6804	6217	6140
50°	6661	6036	5980
55°	6513	5866	5792
60°	6282	5649	5621
65°	6029	5415	5409
70°	5722	5149	5165
75°	5296	4857	4943
80°	4819	4575	4724
85°	4219	4325	4598



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.9	1.3
10°-20°	257.7	3.8
20°-30°	389.7	5.7
30°-40°	471.5	6.9
40°-50°	498.5	7.3
50°-60°	469.1	6.9
60°-70°	389.2	5.7
70°-80°	273.4	4.0
80°-90°	158.4	2.3
90°-100°	176.9	2.6
100°-110°	320.1	4.7
110°-120°	473.6	6.9
120°-130°	590.1	8.6
130°-140°	644.9	9.5
140°-150°	625.1	9.2
150°-160°	523.8	7.7
160°-170°	348.5	5.1
170°-180°	122.0	1.8
0°-30°	737.4	10.8
0°-40°	1208.8	17.7
0°-60°	2176.4	31.9
0°-90°	2997.4	43.9
90°-120°	970.6	14.2
90°-150°	2830.6	41.5
90°-180°	3825.0	56.1
0°-180°	6822.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	950	950	950	950	950	
5°	951	948	940	948	948	90
15°	912	912	909	918	918	257
25°	834	840	844	855	856	384
35°	730	742	753	767	771	457
45°	608	629	649	666	672	470
55°	476	499	531	551	558	424
65°	330	364	400	426	435	327
75°	183	223	267	296	306	195
85°	56	101	149	180	192	60
90°	20	74	127	163	175	15
95°	74	118	168	199	210	78
105°	242	266	308	336	349	258
115°	442	452	483	505	512	436
125°	638	638	663	680	685	569
135°	820	826	833	847	851	634
145°	994	997	998	1003	1005	622
155°	1138	1138	1137	1140	1137	523
165°	1239	1236	1234	1239	1236	349
175°	1289	1284	1283	1289	1283	122
180°	1291	1291	1291	1291	1291	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	949.9	949.9	949.9	949.9	949.9	949.9	949.9	949.9	949.9	949.9	949.9
2.5°	953.3	952.7	952.1	951.6	951.0	950.0	948.4	946.9	945.4	943.9	945.2
5°	950.9	950.2	949.5	948.8	948.1	946.9	945.2	943.6	941.9	940.3	942.2
7.5°	942.8	942.4	942.0	941.6	941.1	940.2	938.9	937.5	936.1	934.8	936.9
10°	936.0	935.8	935.6	935.3	935.1	934.4	933.2	932.0	930.8	929.6	931.8
12.5°	926.7	926.6	926.6	926.5	926.5	926.1	925.3	924.4	923.6	922.8	924.8
15°	911.6	911.8	912.0	912.3	912.5	912.3	911.6	910.9	910.1	909.4	911.6
17.5°	890.9	891.6	892.3	893.1	893.8	894.0	893.9	893.8	893.6	893.5	895.7
20°	876.5	877.2	877.9	878.6	879.3	879.8	880.0	880.2	880.5	880.7	883.1
22.5°	860.3	861.2	862.1	863.0	863.9	864.6	865.0	865.4	865.8	866.3	868.6
25°	833.9	835.3	836.8	838.2	839.6	840.7	841.4	842.1	842.8	843.5	846.1
27.5°	804.6	806.6	808.7	810.8	812.9	814.5	815.6	816.6	817.7	818.8	821.2
30°	785.0	786.9	788.8	790.7	792.6	794.3	796.0	797.6	799.3	800.9	803.5
32.5°	763.7	766.0	768.3	770.5	772.8	774.8	776.7	778.5	780.4	782.2	785.2
35°	729.7	732.5	735.4	738.2	741.0	743.6	746.0	748.4	750.7	753.1	756.4
37.5°	695.4	698.7	702.0	705.2	708.5	711.6	714.5	717.4	720.4	723.3	726.7
40°	673.3	676.4	679.4	682.5	685.6	688.8	692.1	695.4	698.7	702.0	705.6
42.5°	647.8	651.2	654.7	658.1	661.6	665.2	669.1	673.0	676.9	680.7	684.7
45°	608.4	612.9	617.4	621.9	626.4	630.9	635.4	639.9	644.3	648.8	652.9
47.5°	570.8	575.4	580.0	584.7	589.3	594.2	599.4	604.6	609.8	615.0	619.2
50°	543.5	548.7	553.9	559.1	564.3	569.5	574.7	579.9	585.1	590.3	595.1
52.5°	516.3	521.5	526.7	531.9	537.1	542.7	548.6	554.6	560.6	566.5	571.2
55°	476.5	481.5	486.5	491.4	496.4	502.4	509.5	516.6	523.7	530.8	535.5
57.5°	432.1	438.2	444.4	450.5	456.6	463.2	470.3	477.3	484.4	491.4	497.0
60°	403.1	409.3	415.4	421.6	427.7	434.7	442.5	450.3	458.1	465.9	471.3
62.5°	375.0	381.8	388.5	395.2	401.9	409.2	417.0	424.8	432.6	440.4	445.8
65°	329.7	337.3	344.9	352.4	360.0	367.8	375.8	383.9	391.9	399.9	405.8
67.5°	286.1	294.2	302.2	310.2	318.3	326.6	335.2	343.8	352.4	361.0	367.0
70°	256.3	264.4	272.4	280.5	288.5	297.0	306.0	315.0	323.9	332.9	339.3
72.5°	227.4	235.6	243.9	252.1	260.3	269.2	278.8	288.3	297.9	307.4	313.6
75°	183.0	191.7	200.4	209.2	217.9	227.3	237.2	247.1	257.1	267.0	273.6
77.5°	141.5	150.7	160.0	169.3	178.5	188.4	198.8	209.2	219.6	230.0	236.7
80°	115.9	125.4	134.8	144.3	153.8	163.7	174.1	184.5	194.9	205.3	212.4
82.5°	90.4	100.2	110.1	119.9	129.7	139.9	150.3	160.7	171.1	181.5	188.7
85°	56.4	66.3	76.2	86.2	96.1	106.4	117.0	127.6	138.3	148.9	156.0
87.5°	32.1	42.2	52.3	62.5	72.6	83.0	93.7	104.4	115.2	125.9	133.0
90°	20.0	31.9	43.8	55.7	67.6	79.5	91.4	103.4	115.3	127.3	135.4
92.5°	37.5	48.8	60.1	71.4	82.7	94.1	105.5	116.9	128.3	139.7	147.2
95°	73.7	83.5	93.3	103.1	112.9	123.4	134.7	145.9	157.2	168.4	175.4
97.5°	117.2	125.5	133.8	142.1	150.4	160.3	171.7	183.1	194.5	205.9	212.9
100°	151.4	158.5	165.5	172.5	179.6	188.7	199.9	211.1	222.3	233.6	240.4
102.5°	188.2	193.9	199.7	205.4	211.1	219.4	230.3	241.1	252.0	262.8	269.7
105°	242.1	247.1	252.0	257.0	261.9	269.2	278.9	288.5	298.1	307.8	314.3
107.5°	300.8	305.0	309.1	313.2	317.4	323.7	332.1	340.5	348.9	357.3	363.7
110°	339.9	343.6	347.4	351.1	354.9	360.8	368.9	376.9	385.0	393.0	398.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	380.6	383.6	386.6	389.6	392.6	397.9	405.4	412.9	420.4	427.9	433.0
115°	441.6	443.7	445.8	448.0	450.1	454.7	461.8	468.9	476.1	483.2	488.2
117.5°	500.0	501.5	503.0	504.4	505.9	510.0	516.7	523.4	530.2	536.9	541.1
120°	538.3	539.9	541.5	543.1	544.7	548.6	554.8	561.0	567.2	573.4	577.0
122.5°	579.0	579.5	580.0	580.5	581.0	584.4	590.5	596.7	602.9	609.0	613.0
125°	638.1	637.8	637.6	637.4	637.1	639.9	645.5	651.2	656.9	662.6	666.6
127.5°	692.4	692.8	693.2	693.6	694.1	696.4	700.6	704.7	708.9	713.1	716.9
130°	729.8	730.3	730.7	731.1	731.6	733.7	737.4	741.2	745.0	748.8	752.6
132.5°	769.0	769.2	769.5	769.7	770.0	771.5	774.4	777.2	780.1	782.9	786.5
135°	819.6	820.9	822.3	823.6	824.9	826.4	828.1	829.7	831.4	833.0	836.4
137.5°	875.9	876.3	876.7	877.1	877.4	878.2	879.4	880.5	881.7	882.8	885.7
140°	913.4	913.6	913.8	914.0	914.3	914.5	914.7	914.9	915.2	915.4	918.3
142.5°	946.9	947.3	947.7	948.1	948.5	948.5	948.2	947.9	947.6	947.3	949.9
145°	994.2	994.9	995.5	996.2	996.8	997.2	997.5	997.7	997.9	998.1	999.3
147.5°	1041.3	1042.1	1043.0	1043.8	1044.6	1045.0	1044.8	1044.6	1044.4	1044.3	1044.3
150°	1070.1	1070.7	1071.4	1072.0	1072.7	1073.0	1073.0	1073.0	1073.0	1073.0	1073.0
152.5°	1096.4	1096.9	1097.3	1097.8	1098.3	1098.6	1098.8	1099.0	1099.2	1099.3	1099.9
155°	1137.9	1137.9	1137.9	1137.9	1137.9	1137.8	1137.5	1137.3	1137.1	1136.9	1137.8
157.5°	1173.0	1172.6	1172.2	1171.8	1171.4	1171.2	1171.1	1171.1	1171.1	1171.0	1171.7
160°	1193.8	1193.5	1193.3	1193.1	1192.9	1192.7	1192.4	1192.2	1192.0	1191.8	1192.4
162.5°	1212.9	1212.4	1211.8	1211.2	1210.6	1210.2	1210.0	1209.8	1209.6	1209.3	1210.5
165°	1238.7	1238.0	1237.4	1236.7	1236.0	1235.5	1235.0	1234.6	1234.1	1233.7	1235.0
167.5°	1258.5	1257.5	1256.6	1255.7	1254.7	1254.3	1254.3	1254.4	1254.4	1254.5	1255.8
170°	1269.6	1268.5	1267.4	1266.3	1265.2	1264.7	1265.0	1265.2	1265.4	1265.6	1267.0
172.5°	1277.6	1276.7	1275.8	1274.8	1273.9	1273.4	1273.5	1273.5	1273.6	1273.6	1275.1
175°	1288.6	1287.5	1286.4	1285.3	1284.2	1283.5	1283.3	1283.0	1282.8	1282.6	1284.2
177.5°	1292.2	1291.3	1290.4	1289.5	1288.6	1288.2	1288.2	1288.2	1288.2	1288.2	1289.4
180°	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	949.9	949.9	949.9	949.9	949.9	949.9	949.9	949.9
2.5°	946.5	947.9	949.2	949.8	949.6	949.4	949.2	949.0
5°	944.1	946.0	947.8	948.7	948.4	948.2	948.0	947.7
7.5°	939.0	941.1	943.3	944.2	944.0	943.7	943.5	943.3
10°	933.9	936.0	938.2	939.1	938.9	938.6	938.4	938.2
12.5°	926.7	928.7	930.6	931.5	931.5	931.4	931.4	931.3
15°	913.7	915.8	917.9	918.9	918.7	918.4	918.2	917.9
17.5°	897.8	900.0	902.2	903.2	903.0	902.8	902.6	902.4
20°	885.4	887.8	890.2	891.4	891.4	891.4	891.4	891.4
22.5°	871.0	873.3	875.7	877.1	877.5	877.8	878.2	878.6
25°	848.7	851.3	853.9	855.3	855.5	855.8	856.0	856.3
27.5°	823.6	826.0	828.5	829.8	830.1	830.4	830.7	830.9
30°	806.1	808.7	811.3	812.9	813.4	813.8	814.3	814.8
32.5°	788.2	791.2	794.1	795.9	796.3	796.8	797.3	797.8
35°	759.7	763.0	766.3	768.3	769.0	769.7	770.5	771.2
37.5°	730.0	733.4	736.7	738.8	739.5	740.3	741.0	741.8
40°	709.1	712.7	716.2	718.4	719.4	720.3	721.3	722.2
42.5°	688.6	692.5	696.4	698.8	699.5	700.3	701.1	701.8
45°	656.9	660.9	664.9	667.5	668.7	669.9	671.1	672.2
47.5°	623.3	627.5	631.7	634.4	635.9	637.3	638.7	640.1
50°	599.8	604.5	609.2	612.3	613.7	615.2	616.6	618.0
52.5°	576.0	580.7	585.4	588.5	589.9	591.3	592.7	594.2
55°	540.2	545.0	549.7	552.8	554.2	555.6	557.0	558.4
57.5°	502.7	508.3	513.9	517.4	518.7	520.0	521.4	522.7
60°	476.8	482.2	487.6	491.3	493.2	495.1	497.0	498.9
62.5°	451.2	456.7	462.1	465.8	467.7	469.6	471.4	473.3
65°	411.8	417.7	423.6	427.5	429.4	431.3	433.1	435.0
67.5°	373.0	379.0	385.0	388.9	390.8	392.6	394.5	396.3
70°	345.7	352.1	358.5	362.5	364.1	365.8	367.4	369.1
72.5°	319.8	326.0	332.2	336.2	338.0	339.9	341.7	343.6
75°	280.2	286.8	293.5	297.8	300.0	302.1	304.2	306.3
77.5°	243.4	250.1	256.8	261.3	263.6	265.8	268.1	270.4
80°	219.5	226.6	233.7	238.1	240.0	241.9	243.8	245.7
82.5°	196.0	203.3	210.6	215.3	217.3	219.4	221.5	223.6
85°	163.1	170.2	177.3	182.0	184.4	186.7	189.1	191.5
87.5°	140.1	147.2	154.3	159.0	161.2	163.3	165.5	167.7
90°	143.6	151.8	160.0	165.3	167.6	169.9	172.3	174.6
92.5°	154.7	162.1	169.6	174.4	176.5	178.7	180.9	183.0
95°	182.5	189.5	196.6	201.2	203.3	205.4	207.6	209.7
97.5°	219.9	226.9	233.9	238.4	240.4	242.5	244.5	246.5
100°	247.2	254.0	260.9	265.1	266.8	268.4	270.1	271.7
102.5°	276.5	283.3	290.1	294.5	296.5	298.6	300.6	302.6
105°	320.9	327.5	334.1	338.6	341.2	343.7	346.3	348.8
107.5°	370.2	376.6	383.0	387.1	388.7	390.4	392.0	393.7
110°	403.0	408.0	413.0	416.8	419.3	421.9	424.4	427.0



TEST NUMBER: P332611

CATALOG NUMBER: S124DIP-S795D1035U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	438.2	443.4	448.5	452.1	454.1	456.2	458.2	460.2
115°	493.1	498.1	503.1	506.3	507.7	509.2	510.6	512.0
117.5°	545.2	549.4	553.5	556.3	557.8	559.2	560.7	562.1
120°	580.6	584.2	587.8	590.8	593.1	595.5	597.8	600.1
122.5°	617.0	620.9	624.9	627.4	628.3	629.2	630.1	631.0
125°	670.7	674.7	678.8	681.3	682.3	683.3	684.2	685.2
127.5°	720.7	724.5	728.4	730.9	732.1	733.4	734.6	735.9
130°	756.4	760.2	764.0	766.2	766.7	767.3	767.8	768.3
132.5°	790.2	793.8	797.4	799.7	800.8	801.9	802.9	804.0
135°	839.7	843.1	846.4	848.4	849.2	849.9	850.7	851.4
137.5°	888.6	891.5	894.3	896.4	897.7	899.1	900.4	901.7
140°	921.1	924.0	926.8	928.7	929.7	930.7	931.6	932.6
142.5°	952.6	955.2	957.9	959.7	960.6	961.6	962.5	963.5
145°	1000.5	1001.7	1002.9	1003.7	1003.9	1004.2	1004.5	1004.8
147.5°	1044.3	1044.3	1044.3	1044.6	1045.1	1045.6	1046.2	1046.7
150°	1073.0	1073.0	1073.0	1072.9	1072.7	1072.4	1072.2	1072.0
152.5°	1100.4	1100.9	1101.5	1101.5	1100.9	1100.3	1099.7	1099.1
155°	1138.7	1139.5	1140.4	1140.4	1139.5	1138.7	1137.8	1136.9
157.5°	1172.3	1173.0	1173.7	1173.6	1172.9	1172.1	1171.4	1170.6
160°	1193.1	1193.8	1194.4	1194.2	1193.1	1192.0	1190.9	1189.8
162.5°	1211.7	1212.9	1214.1	1214.2	1213.1	1212.0	1210.9	1209.7
165°	1236.4	1237.7	1239.0	1239.2	1238.4	1237.5	1236.6	1235.7
167.5°	1257.1	1258.5	1259.8	1259.8	1258.4	1257.0	1255.6	1254.3
170°	1268.3	1269.6	1271.0	1270.8	1269.3	1267.7	1266.2	1264.6
172.5°	1276.6	1278.1	1279.7	1279.6	1278.1	1276.5	1275.0	1273.4
175°	1285.7	1287.3	1288.8	1288.8	1287.3	1285.7	1284.2	1282.6
177.5°	1290.7	1291.9	1293.2	1293.1	1291.7	1290.2	1288.8	1287.4
180°	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6	1290.6

(END OF REPORT)