

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

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332610
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-S795D1035U835-4F0-1E-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: 7370.4 lumens
Efficiency: N/A
Efficacy: 141.7 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

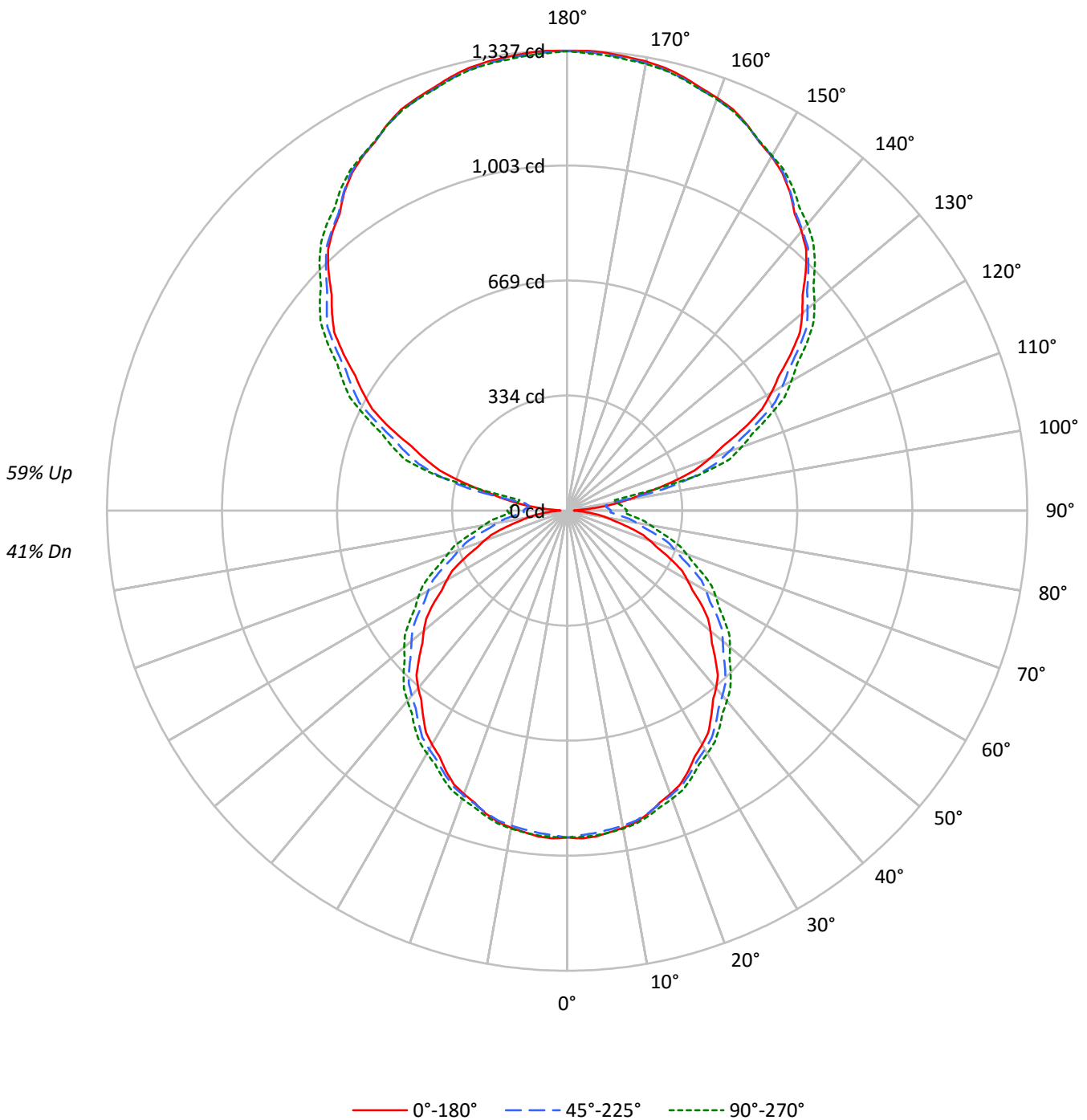
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P332610

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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	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°	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	1.2
10°-20°	257.7	3.5
20°-30°	389.7	5.3
30°-40°	471.5	6.4
40°-50°	498.5	6.8
50°-60°	469.1	6.4
60°-70°	389.2	5.3
70°-80°	273.4	3.7
80°-90°	158.4	2.1
90°-100°	137.4	1.9
100°-110°	359.0	4.9
110°-120°	602.4	8.2
120°-130°	732.5	9.9
130°-140°	767.3	10.4
140°-150°	709.4	9.6
150°-160°	570.3	7.7
160°-170°	367.8	5.0
170°-180°	126.8	1.7
0°-30°	737.4	10.0
0°-40°	1208.8	16.4
0°-60°	2176.4	29.5
0°-90°	2997.4	40.7
90°-120°	1098.8	14.9
90°-150°	3308.1	44.9
90°-180°	4373.0	59.3
0°-180°	7370.4	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	14
95°	69	72	114	148	160	82
105°	310	338	382	414	390	325
115°	567	581	613	637	646	559
125°	793	797	820	843	851	708
135°	980	980	991	1009	1018	755
145°	1129	1131	1131	1138	1145	705
155°	1237	1238	1235	1238	1236	570
165°	1305	1300	1300	1307	1299	369
175°	1335	1329	1330	1338	1327	127
180°	1335	1335	1335	1335	1335	



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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	135.5
92.5°	28.7	37.4	46.0	54.7	63.3	73.6	85.5	97.5	109.4	121.4	129.4
95°	68.7	69.0	69.2	69.5	69.8	74.8	84.8	94.7	104.6	114.5	122.2
97.5°	129.1	140.6	152.0	163.4	174.8	172.9	157.8	142.6	127.5	112.3	118.6
100°	175.4	185.6	195.7	205.8	216.0	210.3	188.9	167.6	146.2	124.8	127.4
102.5°	228.1	236.4	244.8	253.1	261.4	268.1	273.1	278.1	283.2	288.2	253.7
105°	310.1	316.1	322.2	328.2	334.3	342.2	352.1	362.0	371.8	381.7	389.6
107.5°	387.9	392.4	397.0	401.5	406.1	413.2	423.0	432.8	442.6	452.4	459.2
110°	439.8	443.7	447.7	451.7	455.7	462.5	472.1	481.7	491.3	500.9	506.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	490.0	494.2	498.3	502.4	506.5	512.9	521.4	529.9	538.4	546.9	552.1
115°	567.4	570.2	573.0	575.8	578.6	583.6	591.0	598.3	605.7	613.0	618.7
117.5°	638.1	640.2	642.4	644.6	646.7	651.6	659.1	666.6	674.2	681.7	686.5
120°	685.1	686.7	688.3	689.9	691.5	695.6	702.3	708.9	715.5	722.2	727.3
122.5°	729.9	730.5	731.2	731.9	732.6	736.3	743.1	749.9	756.7	763.4	768.4
125°	792.9	793.5	794.2	794.8	795.5	798.5	804.0	809.5	814.9	820.4	825.6
127.5°	853.4	853.4	853.3	853.3	853.3	856.1	861.6	867.2	872.8	878.3	882.4
130°	891.7	891.6	891.6	891.6	891.6	893.8	898.3	902.7	907.2	911.6	916.1
132.5°	927.6	927.8	927.9	928.1	928.2	930.3	934.1	938.0	941.9	945.7	950.0
135°	980.4	980.2	980.0	979.8	979.5	980.7	983.2	985.8	988.3	990.9	995.1
137.5°	1028.1	1028.0	1027.9	1027.7	1027.6	1028.4	1030.2	1031.9	1033.7	1035.5	1039.4
140°	1059.3	1059.5	1059.7	1059.9	1060.1	1060.6	1061.2	1061.9	1062.6	1063.3	1067.0
142.5°	1086.4	1087.1	1087.9	1088.6	1089.4	1089.8	1090.0	1090.1	1090.2	1090.3	1093.5
145°	1129.1	1129.5	1130.0	1130.4	1130.8	1131.0	1131.0	1131.0	1131.0	1131.0	1132.7
147.5°	1163.2	1164.3	1165.3	1166.3	1167.3	1167.7	1167.4	1167.2	1167.0	1166.8	1167.1
150°	1188.0	1188.7	1189.3	1190.0	1190.6	1190.8	1190.6	1190.4	1190.2	1189.9	1189.9
152.5°	1207.9	1208.6	1209.2	1209.9	1210.6	1210.7	1210.3	1209.9	1209.5	1209.1	1209.5
155°	1236.9	1237.1	1237.3	1237.5	1237.7	1237.5	1236.9	1236.2	1235.5	1234.9	1235.7
157.5°	1261.4	1261.3	1261.1	1261.0	1260.9	1260.4	1259.7	1258.9	1258.2	1257.4	1258.6
160°	1275.8	1275.1	1274.5	1273.8	1273.1	1272.7	1272.5	1272.2	1272.0	1271.8	1273.1
162.5°	1288.6	1287.7	1286.9	1286.0	1285.2	1284.7	1284.4	1284.2	1284.0	1283.8	1285.1
165°	1304.7	1303.6	1302.5	1301.4	1300.3	1299.7	1299.7	1299.7	1299.7	1299.7	1301.5
167.5°	1317.5	1316.4	1315.2	1314.1	1312.9	1312.3	1312.1	1312.0	1311.9	1311.7	1313.7
170°	1324.7	1323.4	1322.0	1320.7	1319.4	1318.8	1319.0	1319.3	1319.5	1319.7	1321.5
172.5°	1329.5	1328.2	1326.8	1325.5	1324.2	1323.6	1323.8	1324.1	1324.3	1324.5	1326.3
175°	1334.7	1333.4	1332.0	1330.7	1329.4	1328.8	1329.0	1329.3	1329.5	1329.7	1331.7
177.5°	1337.1	1335.8	1334.6	1333.4	1332.1	1331.7	1332.0	1332.4	1332.7	1333.1	1334.5
180°	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7



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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°	137.4	145.4	153.3	158.3	160.3	162.3	164.3	166.3
95°	129.9	137.6	145.4	150.4	152.7	155.1	157.4	159.8
97.5°	125.0	131.3	137.6	141.9	144.1	146.4	148.7	150.9
100°	130.0	132.6	135.2	137.4	139.3	141.2	143.1	145.0
102.5°	219.2	184.7	150.2	133.9	135.8	137.7	139.6	141.5
105°	397.5	405.4	413.3	414.2	408.1	402.0	395.9	389.8
107.5°	465.9	472.7	479.5	484.2	486.7	489.3	491.8	494.4
110°	512.6	518.5	524.4	528.6	531.2	533.7	536.3	538.8



TEST NUMBER: P332610

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

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	557.2	562.4	567.6	571.5	574.2	577.0	579.7	582.4
115°	624.3	629.9	635.6	639.2	640.9	642.6	644.2	645.9
117.5°	691.4	696.2	701.0	704.3	706.1	707.9	709.7	711.5
120°	732.5	737.7	742.9	746.2	747.6	749.1	750.5	752.0
122.5°	773.4	778.4	783.4	786.5	787.8	789.1	790.3	791.6
125°	830.7	835.9	841.0	844.4	846.1	847.7	849.4	851.0
127.5°	886.6	890.7	894.8	897.6	899.0	900.4	901.9	903.3
130°	920.6	925.0	929.5	932.5	933.9	935.3	936.7	938.1
132.5°	954.3	958.6	962.9	965.6	966.9	968.1	969.4	970.6
135°	999.3	1003.5	1007.8	1010.8	1012.7	1014.5	1016.4	1018.3
137.5°	1043.4	1047.3	1051.2	1053.7	1054.8	1055.8	1056.9	1057.9
140°	1070.8	1074.5	1078.2	1080.8	1082.2	1083.6	1085.0	1086.4
142.5°	1096.7	1099.9	1103.1	1105.2	1106.2	1107.3	1108.3	1109.3
145°	1134.3	1136.0	1137.6	1139.1	1140.5	1141.9	1143.3	1144.7
147.5°	1167.5	1167.9	1168.2	1168.9	1169.9	1170.9	1171.9	1172.8
150°	1189.9	1189.9	1189.9	1190.0	1190.3	1190.5	1190.7	1190.9
152.5°	1209.8	1210.2	1210.5	1210.6	1210.5	1210.4	1210.2	1210.1
155°	1236.6	1237.5	1238.4	1238.5	1237.9	1237.2	1236.5	1235.9
157.5°	1259.7	1260.9	1262.0	1262.0	1260.9	1259.7	1258.6	1257.4
160°	1274.5	1275.8	1277.1	1277.1	1275.8	1274.5	1273.1	1271.8
162.5°	1286.4	1287.8	1289.1	1289.0	1287.5	1286.0	1284.5	1283.0
165°	1303.3	1305.1	1306.8	1306.7	1304.7	1302.7	1300.7	1298.7
167.5°	1315.6	1317.6	1319.5	1319.4	1317.2	1315.0	1312.7	1310.5
170°	1323.3	1325.0	1326.8	1326.6	1324.4	1322.2	1319.9	1317.7
172.5°	1328.1	1329.8	1331.6	1331.3	1328.9	1326.5	1324.1	1321.7
175°	1333.7	1335.7	1337.7	1337.3	1334.7	1332.0	1329.4	1326.7
177.5°	1335.9	1337.3	1338.8	1338.4	1336.3	1334.2	1332.0	1329.9
180°	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7	1334.7

(END OF REPORT)