

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: P333293-930

Luminaire Tested: **S125DIP-S1090D1205U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333293-930
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-S1090D1205U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

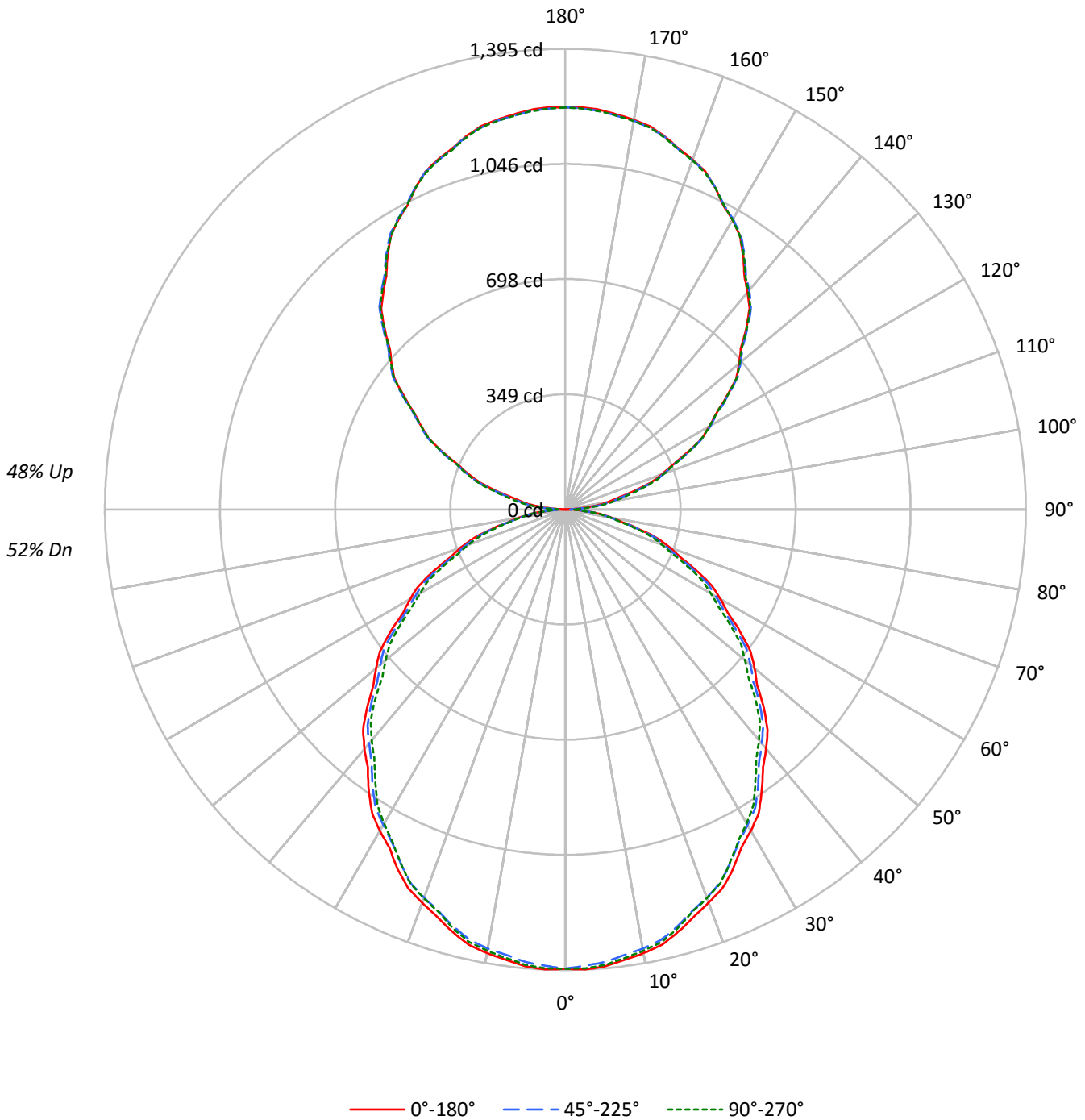
Lumens per Lamp: N/A
Luminaire Lumens: 7019.9 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 65.4
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



TEST NUMBER: P333293-930
CATALOG NUMBER: S125DIP-S1090D1205U930-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





TEST NUMBER: P333293-930

CATALOG NUMBER: S125DIP-S1090D1205U930-4F0-1E-UDD-F1

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	52		
1	98	94	90	86	91	87	83	80	74	71	69	62	60	58	51	50	49	43		
2	89	82	76	70	82	76	70	66	65	61	57	54	51	49	45	43	41	36		
3	81	72	64	59	75	67	60	55	57	52	48	48	44	41	40	37	35	31		
4	74	64	56	50	69	59	52	47	51	45	41	43	39	35	35	32	30	26		
5	68	57	48	42	63	53	45	40	45	40	35	38	34	31	32	29	26	23		
6	63	51	43	37	58	47	40	35	41	35	31	35	30	27	29	26	23	20		
7	58	46	38	32	54	43	36	31	37	31	27	31	27	24	26	23	20	18		
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18	16		
9	50	38	31	25	46	36	29	24	31	25	22	27	22	19	22	19	16	14		
10	47	35	28	23	43	33	26	22	28	23	19	25	20	17	21	17	15	13		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8985	8985	8985
5°	9005	8919	8976
10°	8950	8857	8907
15°	8852	8750	8787
20°	8715	8601	8616
25°	8565	8424	8416
30°	8380	8232	8192
35°	8183	8027	7914
40°	7981	7804	7692
45°	7761	7600	7448
50°	7519	7354	7133
55°	7287	7076	6877
60°	7009	6795	6554
65°	6677	6460	6240
70°	6360	6069	5861
75°	5794	5602	5410
80°	5159	5077	4950
85°	4483	4565	4320



TEST NUMBER: P333293-930

CATALOG NUMBER: S125DIP-S1090D1205U930-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.2	1.9
10°-20°	370.5	5.3
20°-30°	547.1	7.8
30°-40°	638.4	9.1
40°-50°	641.2	9.1
50°-60°	562.8	8.0
60°-70°	419.4	6.0
70°-80°	239.8	3.4
80°-90°	72.4	1.0
90°-100°	81.5	1.2
100°-110°	240.8	3.4
110°-120°	407.8	5.8
120°-130°	536.7	7.6
130°-140°	601.4	8.6
140°-150°	589.4	8.4
150°-160°	495.1	7.1
160°-170°	329.1	4.7
170°-180°	115.2	1.6
0°-30°	1048.8	14.9
0°-40°	1687.2	24.0
0°-60°	2891.2	41.2
0°-90°	3622.8	51.6
90°-120°	730.2	10.4
90°-150°	2457.8	35.0
90°-180°	3397.0	48.4
0°-180°	7019.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1391	1391	1391	1391	1391	
5°	1389	1386	1376	1385	1385	132
15°	1324	1320	1309	1314	1314	373
25°	1202	1196	1182	1184	1181	553
35°	1038	1033	1018	1012	1004	649
45°	850	845	832	819	816	655
55°	647	643	628	619	611	578
65°	437	434	423	413	408	433
75°	232	230	224	221	217	248
85°	60	62	62	60	58	68
90°	1	8	15	20	23	7
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	



TEST NUMBER: P333293-930

CATALOG NUMBER: S125DIP-S1090D1205U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2
2.5°	1394.7	1394.2	1393.5	1392.9	1392.4	1391.1	1389.1	1387.2	1385.2	1383.2	1385.2
5°	1389.0	1388.5	1388.0	1387.6	1387.1	1385.6	1383.2	1380.7	1378.3	1375.8	1378.0
7.5°	1376.2	1375.7	1375.2	1374.8	1374.3	1372.6	1369.9	1367.3	1364.6	1361.9	1364.1
10°	1364.8	1364.3	1363.8	1363.3	1362.9	1361.2	1358.5	1355.8	1353.2	1350.5	1352.4
12.5°	1350.7	1349.8	1348.9	1348.0	1347.2	1345.5	1343.0	1340.5	1338.0	1335.5	1337.1
15°	1324.0	1323.3	1322.6	1321.8	1321.1	1319.4	1316.7	1314.0	1311.3	1308.6	1309.9
17.5°	1293.5	1292.4	1291.3	1290.2	1289.2	1287.2	1284.4	1281.7	1278.9	1276.0	1277.6
20°	1268.0	1267.5	1267.0	1266.5	1266.0	1264.1	1260.9	1257.8	1254.6	1251.4	1253.1
22.5°	1242.4	1241.5	1240.6	1239.7	1238.8	1236.9	1234.0	1230.9	1228.0	1225.0	1226.1
25°	1201.9	1200.7	1199.5	1198.2	1197.0	1194.8	1191.6	1188.5	1185.3	1182.1	1182.6
27.5°	1154.5	1153.8	1153.1	1152.3	1151.6	1149.7	1146.3	1143.0	1139.8	1136.5	1136.6
30°	1123.7	1123.0	1122.3	1121.5	1120.8	1118.6	1114.9	1111.3	1107.6	1103.9	1103.4
32.5°	1090.3	1089.2	1088.0	1086.9	1085.8	1083.6	1080.3	1077.0	1073.7	1070.5	1069.6
35°	1037.9	1036.9	1035.9	1034.9	1034.0	1031.8	1028.3	1024.9	1021.5	1018.1	1016.8
37.5°	983.5	982.3	981.0	979.8	978.6	976.4	973.1	970.0	966.7	963.5	961.6
40°	946.6	945.3	944.1	942.9	941.7	939.3	935.9	932.5	929.0	925.6	923.4
42.5°	906.9	905.9	904.9	903.8	902.8	900.6	897.2	893.7	890.3	886.9	884.8
45°	849.7	848.7	847.7	846.8	845.8	843.8	840.9	838.0	835.0	832.1	829.2
47.5°	788.1	788.1	788.1	788.2	788.2	786.5	783.0	779.4	775.9	772.4	769.4
50°	748.4	747.7	747.0	746.2	745.5	743.6	740.7	737.8	734.8	731.9	728.7
52.5°	707.9	707.4	706.9	706.3	705.8	703.9	700.8	697.7	694.6	691.4	688.6
55°	647.2	646.5	645.7	645.0	644.2	642.1	638.7	635.3	631.9	628.4	626.2
57.5°	583.1	582.7	582.4	582.0	581.6	579.9	577.0	574.1	571.3	568.3	565.5
60°	542.6	541.6	540.6	539.6	538.7	536.9	534.2	531.5	528.8	526.1	523.7
62.5°	500.3	499.5	498.8	498.0	497.3	495.7	493.3	491.1	488.8	486.5	483.8
65°	436.9	436.4	435.9	435.5	435.0	433.4	430.7	428.0	425.3	422.7	420.4
67.5°	375.5	374.5	373.5	372.4	371.5	369.9	367.9	365.9	363.9	361.9	360.0
70°	336.8	335.6	334.4	333.1	331.9	330.2	328.0	325.8	323.6	321.4	319.9
72.5°	294.6	293.7	292.9	292.0	291.2	290.1	288.7	287.2	285.8	284.4	282.7
75°	232.2	231.7	231.2	230.7	230.2	229.4	228.2	227.0	225.8	224.5	223.8
77.5°	174.8	174.6	174.4	174.2	174.0	173.6	172.8	172.2	171.5	170.8	170.4
80°	138.7	138.7	138.7	138.7	138.7	138.4	137.9	137.5	137.0	136.5	136.2
82.5°	107.0	106.6	106.2	105.8	105.4	105.2	105.1	105.0	104.8	104.8	104.4
85°	60.5	60.7	61.0	61.2	61.5	61.6	61.6	61.6	61.6	61.6	61.4
87.5°	24.0	24.3	24.6	24.9	25.3	25.5	25.6	25.8	25.8	25.9	26.2
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



TEST NUMBER: P333293-930

CATALOG NUMBER: S125DIP-S1090D1205U930-4F0-1E-UDD-F1

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



TEST NUMBER: P333293-930

CATALOG NUMBER: S125DIP-S1090D1205U930-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2	1391.2
2.5°	1387.2	1389.1	1391.1	1392.0	1391.8	1391.6	1391.4	1391.2
5°	1380.2	1382.4	1384.6	1385.6	1385.4	1385.1	1384.9	1384.6
7.5°	1366.2	1368.4	1370.5	1371.5	1371.3	1371.0	1370.8	1370.5
10°	1354.4	1356.3	1358.3	1359.2	1358.9	1358.7	1358.5	1358.2
12.5°	1338.6	1340.2	1341.7	1342.6	1342.5	1342.4	1342.4	1342.3
15°	1311.1	1312.3	1313.5	1314.2	1314.2	1314.2	1314.2	1314.2
17.5°	1279.1	1280.6	1282.1	1282.3	1281.1	1279.9	1278.6	1277.4
20°	1254.8	1256.5	1258.3	1258.5	1257.3	1256.1	1254.8	1253.6
22.5°	1227.3	1228.4	1229.5	1229.6	1228.8	1228.0	1227.2	1226.3
25°	1183.1	1183.6	1184.1	1183.9	1183.2	1182.4	1181.7	1181.0
27.5°	1136.7	1136.8	1136.9	1136.6	1135.9	1135.1	1134.4	1133.7
30°	1102.9	1102.4	1102.0	1101.4	1100.7	1099.9	1099.2	1098.5
32.5°	1068.7	1067.8	1067.0	1065.8	1064.5	1063.2	1061.8	1060.5
35°	1015.6	1014.4	1013.2	1011.6	1009.7	1007.7	1005.8	1003.8
37.5°	959.9	958.1	956.3	954.8	953.7	952.5	951.4	950.3
40°	921.2	919.0	916.8	915.3	914.6	913.9	913.1	912.4
42.5°	882.9	880.8	878.9	877.3	876.2	875.1	873.9	872.8
45°	826.2	823.3	820.4	818.5	817.7	817.0	816.3	815.5
47.5°	766.5	763.4	760.5	758.1	756.4	754.7	753.0	751.3
50°	725.5	722.4	719.2	716.7	715.0	713.3	711.6	709.9
52.5°	685.8	683.1	680.3	677.9	676.0	674.1	672.2	670.3
55°	624.0	621.8	619.6	617.7	616.0	614.2	612.5	610.8
57.5°	562.7	559.9	557.0	555.1	554.2	553.3	552.4	551.4
60°	521.2	518.8	516.3	514.2	512.5	510.8	509.1	507.4
62.5°	481.2	478.6	475.9	473.9	472.6	471.3	469.9	468.6
65°	418.2	416.0	413.8	412.2	411.2	410.3	409.3	408.3
67.5°	358.2	356.3	354.4	353.2	352.6	352.0	351.5	350.9
70°	318.5	317.0	315.5	314.3	313.3	312.3	311.4	310.4
72.5°	281.1	279.4	277.8	276.5	275.5	274.5	273.5	272.6
75°	223.1	222.3	221.6	220.7	219.7	218.7	217.8	216.8
77.5°	169.9	169.5	169.1	168.5	167.8	167.1	166.4	165.8
80°	136.0	135.7	135.5	135.1	134.6	134.1	133.6	133.1
82.5°	103.9	103.5	103.1	102.7	102.6	102.6	102.5	102.3
85°	61.1	60.9	60.7	60.3	59.8	59.3	58.8	58.3
87.5°	26.3	26.6	26.7	26.7	26.5	26.2	25.9	25.7
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: P333293-930

CATALOG NUMBER: S125DIP-S1090D1205U930-4F0-1E-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)