

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: P333285-930

Luminaire Tested: **S125DIP-S1090D1035U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333285-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S1090D1035U930-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

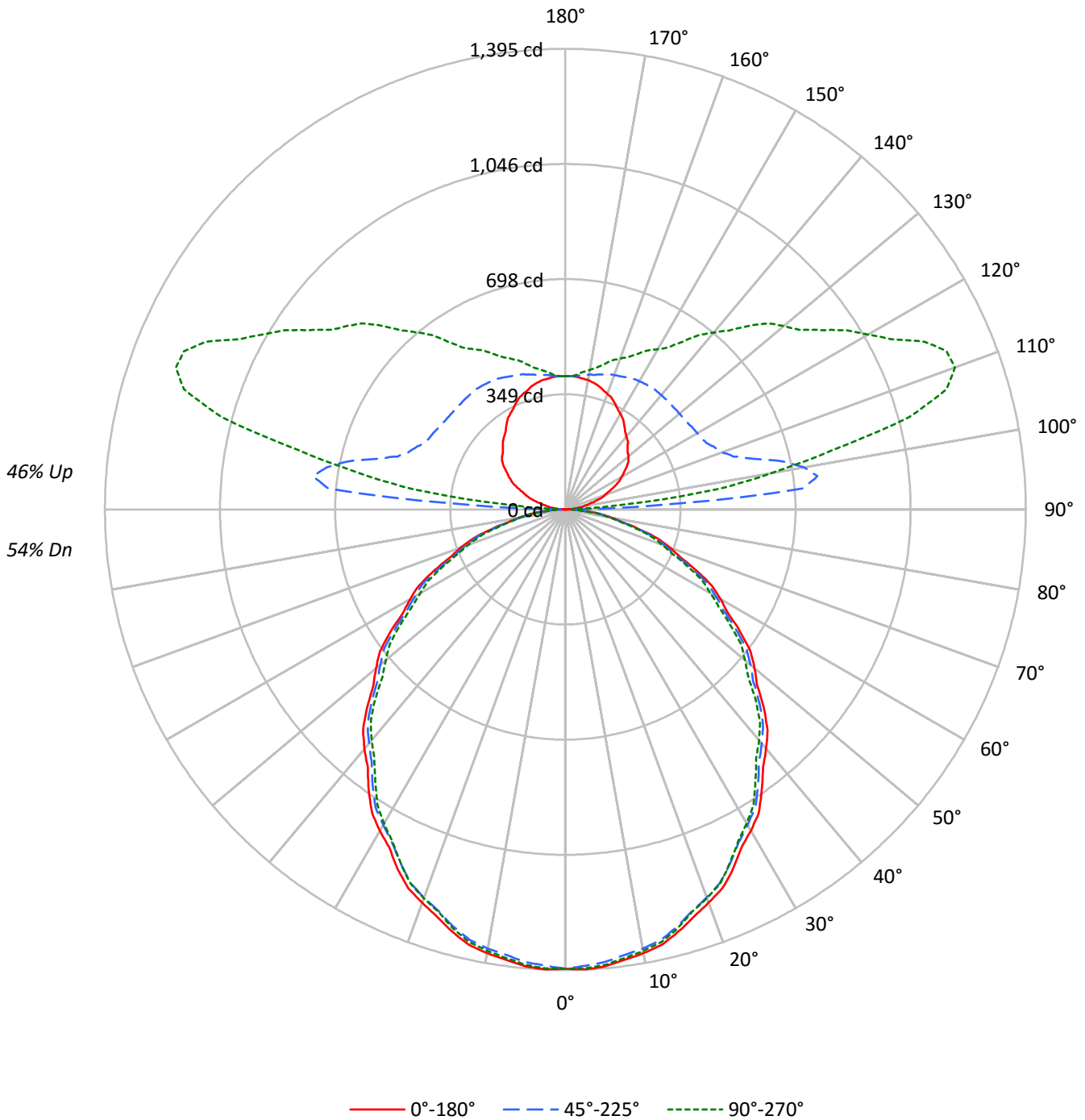
Lumens per Lamp: N/A
Luminaire Lumens: 6649.7 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 60.5
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: P333285-930
CATALOG NUMBER: S125DIP-S1090D1035U930-4F0-1E-UDD-F4

Luminous Intensity Polar Plot





TEST NUMBER: P333285-930

CATALOG NUMBER: S125DIP-S1090D1035U930-4F0-1E-UDD-F4

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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54				
1	99	94	90	87	91	88	84	81	75	73	70	64	62	60	53	52	51	46				
2	90	82	76	71	83	77	71	67	66	62	58	56	53	50	47	45	43	38				
3	82	72	65	59	76	67	61	56	58	53	49	49	46	42	41	39	36	32				
4	75	64	56	50	69	60	53	47	52	46	42	44	40	36	37	34	31	28				
5	69	57	49	43	64	53	46	40	46	40	36	40	35	32	33	30	27	24				
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	30	27	24	21				
7	59	46	38	33	54	43	36	31	38	32	28	32	28	24	28	24	21	19				
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	25	22	19	17				
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	23	20	17	15				
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14				

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: P333285-930

CATALOG NUMBER: S125DIP-S1090D1035U930-4F0-1E-UDD-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.2	2.0
10°-20°	370.5	5.6
20°-30°	547.1	8.2
30°-40°	638.4	9.6
40°-50°	641.2	9.6
50°-60°	562.8	8.5
60°-70°	419.4	6.3
70°-80°	239.8	3.6
80°-90°	72.0	1.1
90°-100°	292.6	4.4
100°-110°	629.0	9.5
110°-120°	590.3	8.9
120°-130°	478.4	7.2
130°-140°	383.9	5.8
140°-150°	289.7	4.4
150°-160°	203.9	3.1
160°-170°	120.2	1.8
170°-180°	39.1	0.6
0°-30°	1048.8	15.8
0°-40°	1687.2	25.4
0°-60°	2891.2	43.5
0°-90°	3622.4	54.5
90°-120°	1512.0	22.7
90°-150°	2664.1	40.1
90°-180°	3027.0	45.5
0°-180°	6649.7	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	7	13	17	19	5
95°	27	79	721	327	191	29
105°	92	129	590	1162	1078	97
115°	164	198	474	1021	1201	162
125°	228	267	454	812	947	202
135°	267	321	451	681	786	207
145°	311	356	452	564	620	195
155°	355	382	441	499	520	163
165°	387	398	423	449	456	109
175°	403	403	406	411	409	38
180°	404	404	404	404	404	



TEST NUMBER: P333285-930

CATALOG NUMBER: S125DIP-S1090D1035U930-4F0-1E-UDD-F4

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	24.1	24.5	24.8	25.1	25.3	25.3	25.4	25.4	25.5	25.7
90°	0.8	1.6	3.3	4.9	6.5	8.2	9.0	10.6	11.4	13.0	13.9
92.5°	9.9	12.1	18.9	28.9	43.0	66.8	111.2	185.7	266.6	262.4	212.4
95°	26.8	27.6	34.2	43.1	61.1	97.7	184.7	363.8	588.5	721.1	705.6
97.5°	44.6	45.6	50.1	59.1	75.2	101.6	159.2	290.4	525.5	770.1	892.8
100°	57.0	58.6	61.9	70.8	86.3	110.7	157.9	263.7	468.8	734.9	938.4
102.5°	70.7	71.6	74.2	83.8	98.0	121.7	163.8	252.7	425.8	673.1	911.1
105°	92.0	92.0	96.0	104.2	117.2	140.0	175.8	248.3	384.2	590.0	823.7
107.5°	112.8	114.5	118.3	125.0	138.5	159.1	193.7	255.8	366.6	533.0	734.4
110°	127.8	129.4	132.6	140.0	152.2	173.3	206.8	262.9	361.3	506.2	683.6



TEST NUMBER: P333285-930

CATALOG NUMBER: S125DIP-S1090D1035U930-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	142.8	144.4	147.0	154.3	166.5	187.0	219.1	272.0	361.3	490.6	645.9
115°	164.4	166.0	168.4	175.8	188.0	208.4	238.5	285.7	363.8	473.7	604.7
117.5°	183.9	186.4	189.0	196.3	210.2	229.8	258.4	301.3	369.2	465.4	580.2
120°	197.0	199.4	202.7	210.0	223.8	244.2	272.6	311.7	374.4	461.5	566.5
122.5°	210.7	212.4	215.0	222.3	237.5	257.9	286.3	323.4	379.0	458.2	554.7
125°	227.9	229.5	233.6	240.9	256.4	277.5	304.4	339.4	386.6	454.1	538.8
127.5°	241.4	243.9	249.1	258.4	274.8	296.0	321.8	354.0	395.3	452.2	524.2
130°	249.9	252.3	258.9	269.4	286.5	307.6	332.9	363.8	400.5	450.9	514.4
132.5°	256.4	259.4	267.3	279.2	296.9	318.0	343.3	372.3	406.3	450.9	506.5
135°	266.9	270.2	280.0	293.0	310.1	332.1	357.3	384.2	414.3	450.9	497.3
137.5°	280.3	282.7	291.9	304.9	321.6	344.3	367.2	393.0	421.6	451.8	489.0
140°	288.1	290.6	300.4	313.3	328.8	350.8	374.4	398.8	424.9	452.5	485.1
142.5°	297.3	299.1	308.1	321.1	336.0	356.6	379.0	402.0	426.8	453.1	481.8
145°	310.9	312.5	320.7	332.1	346.7	365.4	386.6	406.9	428.9	452.5	477.0
147.5°	325.2	326.2	333.2	343.8	356.4	372.9	391.5	409.9	429.7	450.4	471.9
150°	333.7	335.3	341.0	351.6	363.0	376.8	394.8	411.8	429.7	448.4	468.0
152.5°	342.8	343.8	348.9	358.1	368.8	381.4	398.0	413.1	429.1	445.9	463.4
155°	354.8	354.8	359.7	367.9	376.0	387.4	401.2	414.3	427.3	441.2	455.8
157.5°	365.6	365.4	369.3	376.3	383.5	392.2	404.0	415.1	425.2	436.3	448.6
160°	372.8	371.9	375.2	380.9	387.4	394.8	405.3	415.1	423.2	433.0	442.8
162.5°	378.6	377.8	381.1	386.1	391.3	397.4	406.6	414.4	421.3	429.1	437.6
165°	387.4	385.8	388.2	392.3	395.6	400.5	406.9	413.4	418.3	423.2	429.7
167.5°	393.3	392.5	394.0	396.2	398.5	401.5	406.9	411.5	413.8	417.5	422.1
170°	397.2	396.4	397.2	398.8	400.5	402.8	406.9	410.2	411.8	414.3	417.5
172.5°	399.8	398.4	399.2	400.7	401.7	402.8	406.3	408.9	409.2	410.3	412.9
175°	402.8	401.2	402.0	402.8	402.8	402.8	405.3	406.9	406.1	406.1	406.9
177.5°	404.3	403.0	403.0	403.7	403.0	403.0	404.3	405.0	403.7	403.7	404.3
180°	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7



TEST NUMBER: P333285-930

CATALOG NUMBER: S125DIP-S1090D1035U930-4F0-1E-UDD-F4

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°	25.8	26.0	26.2	26.3	25.9	25.5	25.3	24.9
90°	14.7	15.5	16.3	17.9	17.9	17.9	18.8	18.8
92.5°	144.2	104.7	78.8	66.8	56.3	54.4	53.2	51.9
95°	585.2	461.5	361.3	293.0	235.2	210.8	204.3	191.3
97.5°	871.6	784.7	687.2	592.2	541.9	496.3	472.7	462.3
100°	1001.1	961.2	877.3	792.7	736.5	678.0	647.8	634.9
102.5°	1044.7	1069.3	1029.1	971.8	911.7	870.1	837.3	827.5
105°	1019.0	1130.5	1166.3	1157.3	1131.3	1104.5	1088.2	1078.4
107.5°	927.2	1076.0	1167.9	1210.4	1223.6	1223.4	1218.1	1211.5
110°	859.5	1014.1	1128.9	1198.1	1234.7	1250.1	1255.8	1255.8



TEST NUMBER: P333285-930

CATALOG NUMBER: S125DIP-S1090D1035U930-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	806.1	952.9	1068.9	1150.6	1204.0	1230.6	1244.8	1250.6
115°	739.0	865.2	976.6	1065.4	1128.9	1167.9	1190.7	1201.3
117.5°	695.7	804.5	900.5	981.9	1045.4	1085.7	1108.3	1114.8
120°	672.3	770.0	859.5	931.1	991.3	1030.4	1052.4	1058.9
122.5°	654.7	745.2	824.9	892.0	945.7	981.5	1003.6	1009.4
125°	629.2	712.2	782.9	841.6	887.1	920.5	938.4	946.6
127.5°	603.1	680.6	746.7	801.5	842.9	872.3	889.2	892.8
130°	586.9	658.4	721.9	774.9	815.5	842.4	858.7	863.6
132.5°	570.5	637.6	695.2	746.2	786.8	813.8	828.7	834.2
135°	549.3	605.5	657.6	704.0	739.8	766.7	781.3	786.2
137.5°	531.5	576.9	620.2	659.6	691.6	716.1	729.6	734.9
140°	521.7	559.9	597.4	631.6	661.7	682.9	695.0	699.1
142.5°	513.2	545.6	577.9	607.5	633.1	650.9	662.5	665.9
145°	502.1	527.4	552.6	574.6	594.1	608.0	616.9	620.2
147.5°	491.8	512.3	531.7	548.2	563.7	574.8	580.0	581.5
150°	485.9	503.8	519.3	533.9	546.1	555.9	559.1	559.9
152.5°	479.4	495.3	509.5	520.9	531.2	539.0	542.2	543.0
155°	469.6	482.7	494.1	503.0	511.1	516.8	519.3	520.1
157.5°	459.8	470.6	479.4	486.4	492.8	497.4	499.7	499.5
160°	453.3	461.5	469.6	475.3	481.0	485.1	486.7	485.9
162.5°	446.2	453.6	460.5	465.5	469.9	473.4	473.7	473.5
165°	436.3	442.0	446.9	450.9	454.1	455.8	455.8	455.8
167.5°	426.8	430.6	434.3	437.2	438.9	440.3	439.7	439.5
170°	421.6	424.0	426.5	428.1	429.7	430.6	430.6	429.7
172.5°	415.7	418.2	420.0	420.9	421.3	422.7	421.4	420.6
175°	409.4	409.4	411.0	411.0	411.0	411.8	410.2	409.4
177.5°	405.0	405.6	405.6	405.6	405.0	405.6	403.7	403.7
180°	403.7	403.7	403.7	403.7	403.7	403.7	403.7	403.7

(END OF REPORT)