

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: P333289-940

Luminaire Tested: **S125DIP-S1090D1205U940-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333289-940
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S1090D1205U940-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8099.0 lumens
Efficiency: N/A
Efficacy: 123.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

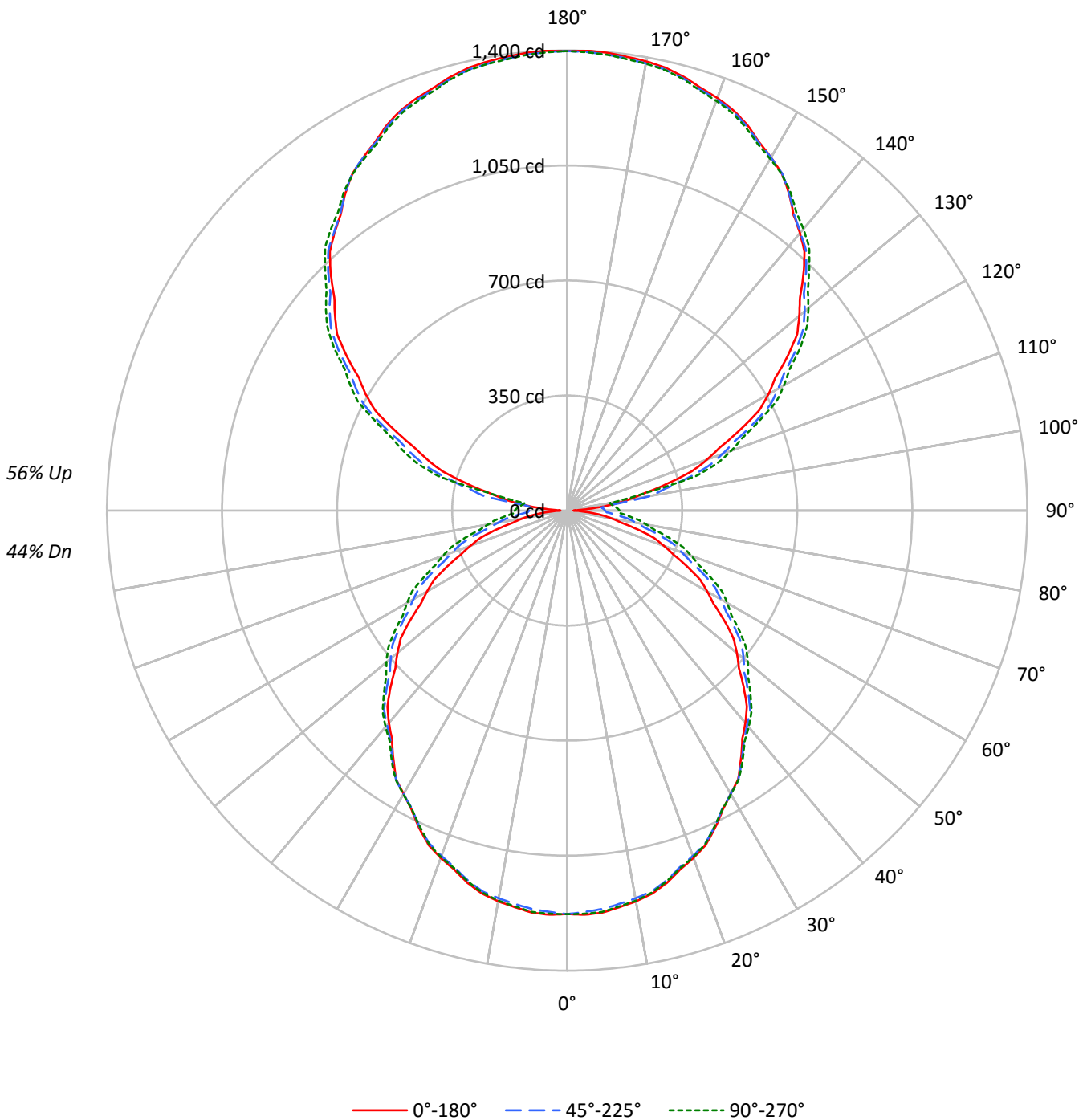
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333289-940

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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	106	106	106	106	97	97	97	97	80	80	80		65	65	65		51	51	51	44
1	96	91	87	83	87	84	80	77	69	67	64		56	54	53		44	43	42	36
2	87	79	73	68	79	73	67	63	60	56	53		49	46	43		38	36	34	29
3	79	69	62	56	72	64	57	52	53	48	44		43	39	36		34	31	29	25
4	72	61	53	47	66	56	49	44	47	42	37		38	34	31		30	27	25	21
5	66	54	46	40	60	50	43	37	42	36	32		34	30	27		27	24	22	18
6	61	49	41	35	55	45	38	32	38	32	28		31	26	23		24	21	19	16
7	56	44	36	30	51	41	33	28	34	28	24		28	24	21		22	19	17	14
8	52	40	32	27	48	37	30	25	31	25	22		25	21	18		20	17	15	12
9	49	36	29	24	44	34	27	22	28	23	19		23	19	16		19	16	13	11
10	45	33	26	21	41	31	24	20	26	21	17		22	18	15		17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7930	7930	7930
5°	7946	7783	7808
10°	7889	7644	7633
15°	7796	7478	7410
20°	7670	7273	7188
25°	7518	7053	6912
30°	7336	6810	6664
35°	7165	6588	6435
40°	6992	6353	6205
45°	6796	6152	6001
50°	6609	5935	5821
55°	6384	5729	5609
60°	6137	5495	5392
65°	5882	5250	5150
70°	5590	4914	4900
75°	5128	4592	4592
80°	4524	4201	4257
85°	3962	3938	4152



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.1	1.4
10°-20°	329.6	4.1
20°-30°	490.2	6.1
30°-40°	580.6	7.2
40°-50°	600.3	7.4
50°-60°	553.0	6.8
60°-70°	447.0	5.5
70°-80°	299.4	3.7
80°-90°	158.1	2.0
90°-100°	137.9	1.7
100°-110°	377.3	4.7
110°-120°	610.9	7.5
120°-130°	753.2	9.3
130°-140°	794.5	9.8
140°-150°	737.9	9.1
150°-160°	595.2	7.3
160°-170°	384.9	4.8
170°-180°	132.8	1.6
0°-30°	935.9	11.6
0°-40°	1516.5	18.7
0°-60°	2669.7	33.0
0°-90°	3574.2	44.1
90°-120°	1126.2	13.9
90°-150°	3411.9	42.1
90°-180°	4525.0	55.9
0°-180°	8099.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1228	1228	1228	1228	1228	
5°	1228	1225	1217	1226	1226	116
15°	1172	1173	1165	1172	1168	330
25°	1065	1068	1062	1066	1060	490
35°	922	930	927	930	930	577
45°	760	772	779	787	788	586
55°	584	603	622	635	640	522
65°	402	430	459	476	482	399
75°	222	253	291	314	321	235
85°	66	106	148	174	184	71
90°	20	67	115	147	160	15
95°	75	101	104	135	144	88
105°	316	340	375	398	406	334
115°	579	594	625	642	644	574
125°	818	825	848	863	866	730
135°	1017	1022	1028	1041	1042	784
145°	1177	1178	1178	1185	1184	736
155°	1295	1290	1291	1294	1286	597
165°	1367	1361	1362	1367	1360	386
175°	1398	1392	1393	1400	1392	133
180°	1398	1398	1398	1398	1398	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9
2.5°	1230.7	1230.3	1229.8	1229.5	1229.0	1228.1	1226.5	1225.0	1223.6	1222.1	1223.6
5°	1227.9	1227.4	1226.8	1226.3	1225.7	1224.5	1222.6	1220.8	1218.9	1217.0	1219.1
7.5°	1217.0	1216.8	1216.6	1216.4	1216.2	1215.1	1213.2	1211.2	1209.3	1207.4	1209.2
10°	1207.4	1207.4	1207.4	1207.4	1207.4	1206.3	1204.2	1202.0	1199.9	1197.7	1199.6
12.5°	1193.9	1194.1	1194.4	1194.5	1194.8	1194.0	1192.3	1190.6	1188.9	1187.1	1188.7
15°	1172.5	1172.8	1173.0	1173.3	1173.6	1172.8	1170.9	1169.0	1167.2	1165.3	1166.9
17.5°	1144.5	1145.0	1145.6	1146.1	1146.7	1146.0	1144.2	1142.3	1140.4	1138.5	1139.8
20°	1124.4	1124.9	1125.4	1126.0	1126.5	1125.8	1123.9	1122.0	1120.2	1118.3	1119.1
22.5°	1101.2	1102.2	1103.1	1104.1	1105.1	1104.5	1102.4	1100.4	1098.2	1096.2	1097.2
25°	1065.3	1066.1	1066.9	1067.7	1068.5	1068.2	1066.6	1065.0	1063.4	1061.8	1062.8
27.5°	1025.4	1026.5	1027.7	1028.9	1030.1	1029.7	1028.0	1026.1	1024.3	1022.5	1023.2
30°	995.5	997.1	998.7	1000.3	1001.9	1001.9	1000.3	998.7	997.1	995.5	996.0
32.5°	968.6	969.9	971.3	972.8	974.1	974.2	973.0	971.9	970.7	969.6	970.1
35°	922.1	924.0	925.9	927.7	929.6	930.1	929.3	928.5	927.7	926.9	927.7
37.5°	875.7	877.4	879.0	880.7	882.4	883.2	883.0	882.7	882.4	882.2	883.2
40°	843.8	846.0	848.1	850.2	852.4	853.4	853.1	852.8	852.6	852.3	853.4
42.5°	809.1	812.0	814.8	817.5	820.3	822.0	822.6	823.1	823.8	824.4	825.6
45°	759.6	762.5	765.4	768.4	771.3	773.5	774.8	776.1	777.5	778.8	780.7
47.5°	708.8	711.5	714.3	716.9	719.7	722.2	724.5	726.8	729.2	731.4	734.1
50°	674.1	677.1	680.0	683.0	685.9	688.8	691.8	694.7	697.7	700.6	703.6
52.5°	637.5	641.1	644.7	648.3	651.8	655.4	659.1	662.6	666.2	669.8	673.0
55°	583.8	588.1	592.4	596.6	600.9	605.2	609.5	613.8	618.0	622.3	625.3
57.5°	529.0	534.0	539.2	544.4	549.5	554.6	559.5	564.4	569.3	574.2	577.6
60°	492.3	497.7	503.0	508.4	513.7	519.1	524.4	529.8	535.1	540.5	544.5
62.5°	456.7	462.1	467.4	472.8	478.1	483.7	489.5	495.3	501.1	506.8	511.2
65°	402.1	408.2	414.4	420.5	426.7	432.9	439.3	445.8	452.2	458.6	462.6
67.5°	350.5	356.5	362.4	368.4	374.3	380.5	387.1	393.6	400.1	406.6	411.5
70°	313.0	319.1	325.3	331.4	337.6	344.1	351.1	358.0	365.0	371.9	377.0
72.5°	276.4	282.8	289.1	295.5	301.8	308.8	316.5	324.0	331.6	339.2	344.7
75°	221.5	228.5	235.4	242.4	249.3	257.1	265.6	274.2	282.8	291.3	296.7
77.5°	168.8	176.8	184.9	192.9	200.9	209.0	217.2	225.5	233.7	241.9	247.8
80°	136.0	144.0	152.0	160.1	168.1	176.6	185.7	194.8	203.9	213.0	218.9
82.5°	106.2	114.6	123.1	131.5	140.0	148.8	158.2	167.5	176.8	186.1	191.8
85°	66.2	75.0	83.8	92.6	101.5	110.6	119.9	129.3	138.7	148.0	153.9
87.5°	37.8	46.7	55.6	64.6	73.5	82.7	92.1	101.5	110.9	120.3	126.7
90°	20.3	30.7	41.1	51.5	61.9	72.5	83.2	93.9	104.6	115.3	122.6
92.5°	33.3	39.9	46.5	53.1	59.8	68.5	79.2	90.0	100.7	111.5	118.5
95°	74.7	81.0	87.2	93.5	99.8	103.1	103.4	103.8	104.2	104.4	111.5
97.5°	137.5	145.0	152.6	160.1	167.6	167.0	158.5	149.9	141.4	132.9	132.0
100°	186.3	192.6	198.9	205.3	211.5	219.5	228.9	238.4	247.9	257.3	228.6
102.5°	235.9	242.0	248.1	254.1	260.2	267.7	276.5	285.4	294.4	303.3	302.2
105°	315.5	320.7	325.9	331.1	336.4	343.0	351.0	359.0	367.0	375.1	380.4
107.5°	398.2	401.9	405.5	409.1	412.8	418.7	426.9	435.0	443.2	451.3	456.6
110°	452.0	455.2	458.4	461.6	464.8	470.4	478.3	486.3	494.3	502.2	506.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	503.4	506.5	509.6	512.7	515.9	521.2	528.8	536.3	543.9	551.4	555.4
115°	579.3	582.3	585.3	588.4	591.4	596.5	603.7	610.8	618.0	625.2	629.1
117.5°	657.9	659.1	660.2	661.4	662.6	666.9	674.4	681.8	689.3	696.8	700.1
120°	707.6	708.2	708.7	709.4	709.9	713.6	720.4	727.3	734.1	741.0	745.1
122.5°	750.6	751.8	753.0	754.3	755.5	759.4	765.6	771.9	778.1	784.3	788.3
125°	818.3	819.7	821.0	822.3	823.7	827.1	832.4	837.8	843.1	848.5	851.9
127.5°	882.0	882.9	883.8	884.7	885.6	888.1	892.3	896.6	900.9	905.1	908.6
130°	921.8	922.7	923.5	924.4	925.3	927.7	931.7	935.7	939.7	943.7	946.7
132.5°	960.6	961.9	963.2	964.5	965.7	967.6	970.0	972.3	974.7	977.1	980.7
135°	1017.0	1018.1	1019.2	1020.3	1021.5	1022.7	1024.1	1025.6	1026.9	1028.3	1031.4
137.5°	1068.7	1069.8	1070.8	1071.7	1072.7	1073.4	1073.9	1074.4	1075.0	1075.4	1078.7
140°	1101.8	1102.2	1102.7	1103.1	1103.7	1103.8	1103.9	1103.9	1104.0	1104.0	1107.4
142.5°	1132.5	1132.6	1132.6	1132.7	1132.7	1132.9	1133.3	1133.7	1134.1	1134.4	1137.0
145°	1177.4	1177.6	1177.9	1178.0	1178.2	1178.3	1178.3	1178.3	1178.3	1178.3	1179.9
147.5°	1215.6	1215.5	1215.4	1215.3	1215.2	1215.3	1215.6	1215.8	1216.2	1216.5	1217.2
150°	1240.5	1240.0	1239.6	1239.1	1238.7	1238.7	1239.1	1239.6	1240.0	1240.5	1240.9
152.5°	1264.5	1263.6	1262.5	1261.5	1260.4	1260.2	1260.7	1261.1	1261.6	1262.0	1262.5
155°	1295.4	1294.1	1292.6	1291.3	1289.9	1289.4	1289.9	1290.3	1290.8	1291.3	1292.0
157.5°	1319.3	1318.4	1317.6	1316.8	1315.9	1315.5	1315.6	1315.6	1315.7	1315.7	1316.4
160°	1335.9	1334.4	1333.1	1331.7	1330.3	1329.7	1330.0	1330.2	1330.4	1330.6	1331.6
162.5°	1349.1	1347.7	1346.3	1345.0	1343.5	1343.0	1343.2	1343.5	1343.7	1343.9	1345.2
165°	1366.9	1365.6	1364.1	1362.8	1361.4	1360.8	1361.0	1361.3	1361.5	1361.7	1363.2
167.5°	1380.2	1378.8	1377.3	1375.9	1374.5	1373.9	1374.1	1374.3	1374.6	1374.8	1376.4
170°	1387.7	1386.1	1384.4	1382.8	1381.2	1380.5	1380.7	1381.0	1381.2	1381.4	1383.3
172.5°	1392.6	1391.0	1389.4	1387.8	1386.2	1385.5	1386.0	1386.4	1386.8	1387.2	1388.9
175°	1398.0	1396.6	1395.3	1393.8	1392.5	1391.9	1392.1	1392.4	1392.6	1392.9	1394.6
177.5°	1400.5	1399.4	1398.3	1397.2	1396.1	1395.6	1395.8	1396.0	1396.2	1396.3	1397.7
180°	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9	1227.9
2.5°	1225.0	1226.5	1228.1	1228.7	1228.5	1228.2	1228.1	1227.9
5°	1221.3	1223.4	1225.6	1226.5	1226.3	1226.0	1225.7	1225.5
7.5°	1211.1	1213.0	1214.9	1215.7	1215.4	1215.1	1214.9	1214.6
10°	1201.5	1203.4	1205.2	1206.0	1205.8	1205.5	1205.2	1205.0
12.5°	1190.1	1191.5	1192.9	1193.3	1192.7	1191.9	1191.2	1190.5
15°	1168.5	1170.1	1171.7	1172.0	1170.9	1169.8	1168.8	1167.7
17.5°	1141.0	1142.2	1143.4	1143.7	1143.1	1142.5	1141.8	1141.2
20°	1119.9	1120.7	1121.5	1122.0	1122.0	1122.0	1122.0	1122.0
22.5°	1098.2	1099.2	1100.2	1100.4	1099.7	1099.1	1098.5	1097.9
25°	1063.9	1065.0	1066.0	1065.9	1064.5	1063.2	1061.8	1060.5
27.5°	1024.0	1024.8	1025.5	1025.6	1025.1	1024.7	1024.1	1023.7
30°	996.6	997.1	997.6	997.8	997.6	997.3	997.0	996.8
32.5°	970.6	971.2	971.7	971.8	971.5	971.3	971.0	970.7
35°	928.5	929.3	930.1	930.5	930.5	930.5	930.5	930.5
37.5°	884.3	885.4	886.4	886.9	886.8	886.7	886.5	886.4
40°	854.4	855.5	856.6	857.4	857.9	858.4	859.0	859.5
42.5°	826.9	828.2	829.5	830.2	830.3	830.4	830.5	830.6
45°	782.6	784.4	786.3	787.4	787.6	787.9	788.2	788.5
47.5°	736.9	739.6	742.3	744.0	744.6	745.2	745.7	746.4
50°	706.5	709.4	712.4	714.3	715.1	715.9	716.7	717.5
52.5°	676.1	679.2	682.4	684.3	684.8	685.5	686.1	686.6
55°	628.2	631.2	634.1	636.1	637.2	638.3	639.4	640.4
57.5°	580.9	584.3	587.7	589.8	590.6	591.4	592.2	593.0
60°	548.5	552.5	556.5	558.9	559.7	560.5	561.3	562.1
62.5°	515.7	520.1	524.6	527.3	528.3	529.3	530.3	531.4
65°	466.6	470.6	474.7	477.2	478.3	479.4	480.5	481.5
67.5°	416.3	421.2	426.1	429.3	430.6	432.0	433.4	434.8
70°	382.1	387.2	392.3	395.7	397.3	398.9	400.5	402.1
72.5°	350.3	355.8	361.2	364.6	365.8	366.9	368.1	369.3
75°	302.0	307.4	312.7	316.0	317.4	318.7	320.0	321.4
77.5°	253.7	259.6	265.5	268.9	270.0	271.1	272.2	273.2
80°	224.8	230.7	236.6	240.0	241.1	242.2	243.3	244.3
82.5°	197.4	203.1	208.7	212.6	214.5	216.4	218.4	220.3
85°	159.8	165.7	171.6	175.6	177.7	179.9	182.0	184.1
87.5°	133.1	139.5	145.9	150.1	152.0	154.1	156.0	158.1
90°	129.9	137.2	144.5	149.5	152.0	154.5	157.1	159.7
92.5°	125.6	132.7	139.8	144.5	146.6	148.8	151.1	153.2
95°	118.5	125.6	132.6	137.1	138.9	140.8	142.7	144.5
97.5°	131.1	130.2	129.3	129.8	131.6	133.5	135.3	137.1
100°	200.0	171.3	142.6	128.6	129.3	129.9	130.6	131.3
102.5°	301.0	300.0	298.9	291.3	277.2	263.2	249.1	235.1
105°	385.8	391.1	396.5	399.9	401.5	403.2	404.8	406.5
107.5°	462.0	467.3	472.7	475.8	476.8	477.8	478.8	479.7
110°	511.0	515.4	519.8	523.0	525.1	527.2	529.3	531.5



TEST NUMBER: P333289-940

CATALOG NUMBER: S125DIP-S1090D1205U940-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	559.4	563.4	567.4	570.2	571.7	573.3	574.8	576.3
115°	633.0	636.9	640.8	642.8	643.1	643.3	643.5	643.7
117.5°	703.5	706.8	710.2	712.5	713.6	714.9	716.1	717.3
120°	749.1	753.2	757.3	759.6	760.1	760.5	761.0	761.4
122.5°	792.1	796.0	799.9	801.9	802.2	802.5	802.7	803.1
125°	855.2	858.5	861.9	863.9	864.5	865.2	865.9	866.5
127.5°	912.0	915.4	918.9	920.6	920.4	920.2	920.1	920.0
130°	949.8	952.8	955.9	957.5	957.7	957.9	958.1	958.2
132.5°	984.4	987.9	991.6	993.4	993.3	993.3	993.3	993.2
135°	1034.4	1037.4	1040.4	1041.9	1041.9	1041.8	1041.8	1041.7
137.5°	1081.9	1085.1	1088.4	1089.9	1089.8	1089.7	1089.6	1089.5
140°	1110.8	1114.2	1117.7	1119.2	1118.8	1118.6	1118.3	1117.9
142.5°	1139.6	1142.3	1144.9	1146.0	1145.7	1145.4	1145.0	1144.8
145°	1181.4	1183.0	1184.5	1185.2	1184.9	1184.5	1184.3	1183.9
147.5°	1217.8	1218.5	1219.2	1219.1	1217.8	1216.7	1215.5	1214.3
150°	1241.4	1241.9	1242.3	1241.8	1240.2	1238.6	1237.1	1235.5
152.5°	1262.9	1263.5	1263.9	1263.3	1261.7	1260.1	1258.5	1256.9
155°	1292.6	1293.3	1294.1	1293.4	1291.6	1289.8	1287.9	1286.1
157.5°	1317.2	1317.9	1318.7	1318.1	1316.3	1314.5	1312.6	1310.7
160°	1332.5	1333.4	1334.4	1333.9	1332.0	1330.2	1328.4	1326.5
162.5°	1346.5	1347.8	1349.1	1348.7	1346.7	1344.6	1342.6	1340.6
165°	1364.5	1365.9	1367.3	1367.0	1365.2	1363.3	1361.5	1359.7
167.5°	1378.1	1379.7	1381.4	1381.3	1379.1	1377.1	1375.0	1373.0
170°	1385.1	1387.0	1388.8	1388.7	1386.6	1384.6	1382.5	1380.4
172.5°	1390.5	1392.2	1393.8	1393.7	1391.6	1389.6	1387.4	1385.4
175°	1396.5	1398.4	1400.2	1400.1	1398.0	1396.0	1393.8	1391.8
177.5°	1398.9	1400.3	1401.5	1401.4	1400.0	1398.5	1397.0	1395.5
180°	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0	1398.0

(END OF REPORT)