

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: P333281-940

Luminaire Tested: **S125DIP-S1090D1035U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333281-940  
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-S1090D1035U940-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1090 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: 6997.7 lumens  
Efficiency: N/A  
Efficacy: 115.7 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

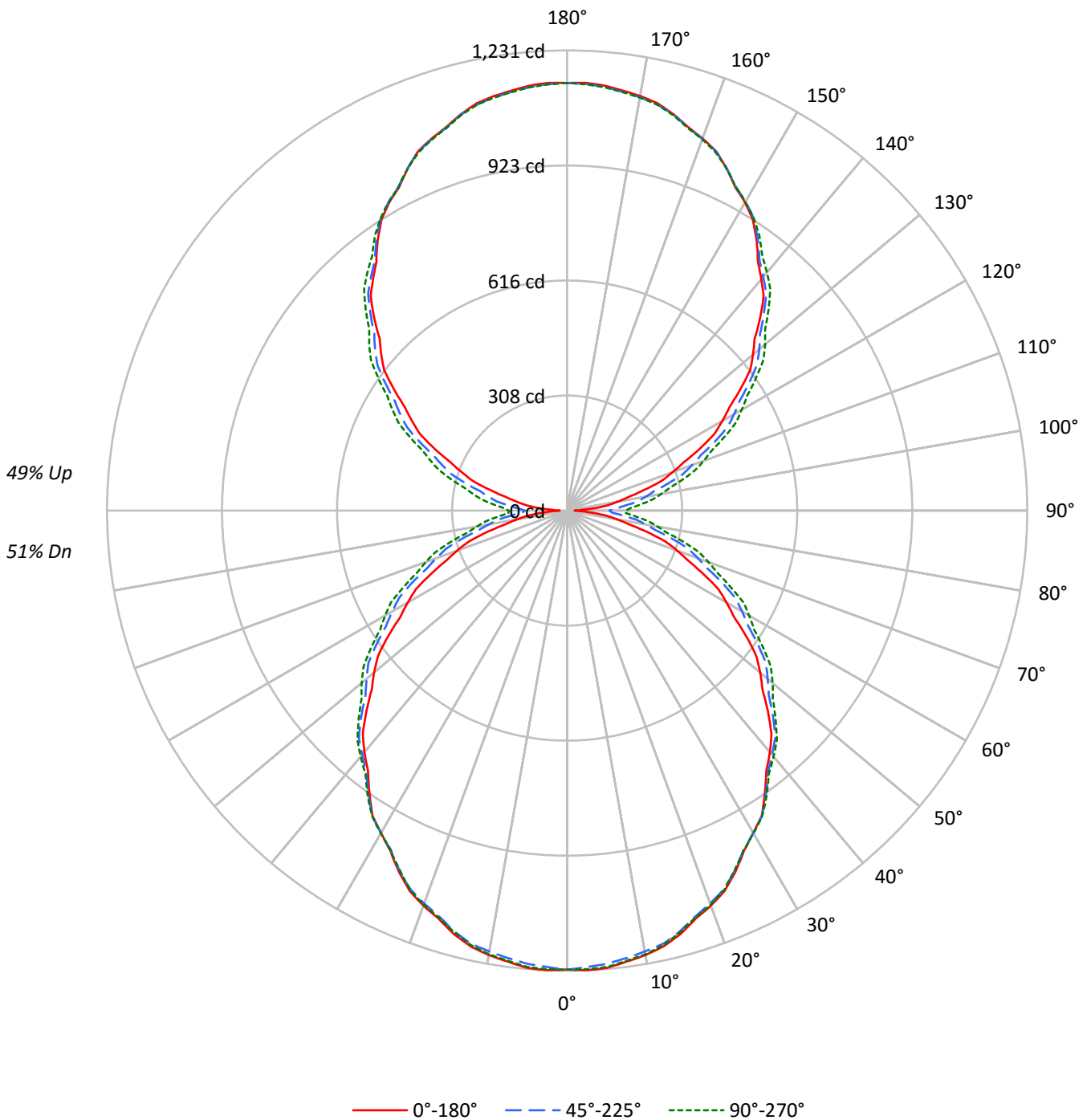
Input Watts (W): 60.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	97	93	88	85	90	86	82	79	72	70	67	60	58	57	49	48	47	41
2	88	80	74	69	81	74	69	64	63	59	55	53	49	47	43	41	39	34
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	38	35	33	29
4	73	62	54	48	67	58	50	45	49	43	39	41	37	33	34	31	28	24
5	67	55	47	41	62	51	44	38	44	38	34	37	32	29	30	27	24	21
6	62	50	41	35	57	46	39	33	39	34	29	33	29	25	27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26	30	26	22	25	21	19	16
8	53	41	33	27	49	38	31	26	32	27	23	28	23	20	23	19	17	14
9	49	37	29	24	46	34	28	23	30	24	20	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	20	16	14	12

**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	1.7
10°-20°	329.6	4.7
20°-30°	490.2	7.0
30°-40°	580.6	8.3
40°-50°	600.3	8.6
50°-60°	553.0	7.9
60°-70°	447.0	6.4
70°-80°	299.4	4.3
80°-90°	157.7	2.3
90°-100°	163.7	2.3
100°-110°	290.5	4.2
110°-120°	426.3	6.1
120°-130°	528.8	7.6
130°-140°	575.8	8.2
140°-150°	556.1	7.9
150°-160°	465.2	6.6
160°-170°	309.2	4.4
170°-180°	108.2	1.5
0°-30°	935.9	13.4
0°-40°	1516.5	21.7
0°-60°	2669.7	38.2
0°-90°	3573.8	51.1
90°-120°	880.5	12.6
90°-150°	2541.1	36.3
90°-180°	3424.0	48.9
0°-180°	6997.7	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	66	113	144	156	16
95°	74	108	156	188	199	74
105°	214	238	279	307	320	228
115°	391	404	436	456	463	386
125°	565	570	594	611	616	505
135°	731	735	744	759	762	563
145°	883	886	888	894	897	552
155°	1010	1010	1010	1014	1010	465
165°	1098	1096	1097	1100	1095	310
175°	1141	1138	1138	1142	1137	108
180°	1144	1144	1144	1144	1144	



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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°	37.7	46.6	55.5	64.4	73.2	82.4	91.8	101.1	110.5	119.8	126.2
90°	20.2	30.3	40.4	50.6	60.7	71.1	81.5	92.0	102.5	113.0	120.1
92.5°	38.9	47.9	56.9	66.0	75.0	85.0	96.0	107.0	118.1	129.0	136.3
95°	73.5	80.9	88.2	95.6	102.9	112.1	123.2	134.3	145.3	156.4	163.7
97.5°	110.4	116.7	123.1	129.6	136.0	145.0	156.5	168.0	179.5	191.0	198.0
100°	137.9	143.5	149.1	154.7	160.3	168.7	179.9	191.0	202.2	213.2	220.6
102.5°	167.6	173.5	179.5	185.5	191.5	199.3	208.9	218.6	228.2	237.9	245.2
105°	213.8	219.1	224.4	229.6	234.9	242.1	251.4	260.6	269.7	279.0	285.5
107.5°	265.1	269.7	274.3	278.9	283.6	290.2	298.8	307.5	316.0	324.7	330.6
110°	300.4	304.6	308.8	313.0	317.2	323.3	331.4	339.6	347.6	355.7	361.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	337.4	340.5	343.7	346.7	349.8	355.3	363.4	371.4	379.4	387.4	392.6
115°	390.9	393.6	396.3	399.0	401.5	406.6	413.9	421.2	428.6	436.0	440.6
117.5°	444.5	446.1	447.7	449.3	450.9	455.1	462.1	469.0	476.0	483.0	487.6
120°	478.8	480.5	482.3	484.1	485.9	490.0	496.3	502.7	509.0	515.4	520.0
122.5°	514.8	515.5	516.3	517.0	517.7	521.3	527.8	534.2	540.6	547.2	551.3
125°	564.8	565.7	566.6	567.6	568.5	571.7	577.2	582.8	588.4	593.9	597.8
127.5°	617.0	617.4	617.8	618.2	618.6	621.2	625.7	630.4	635.0	639.6	643.4
130°	649.1	649.8	650.5	651.2	651.9	654.3	658.5	662.6	666.7	670.9	674.5
132.5°	680.1	681.7	683.2	684.8	686.4	688.6	691.4	694.2	697.1	699.8	703.4
135°	730.7	731.6	732.5	733.3	734.3	735.8	737.9	739.9	742.0	744.0	747.5
137.5°	778.1	779.0	780.0	780.9	781.9	783.0	784.3	785.7	787.0	788.4	791.8
140°	807.8	808.8	809.8	810.7	811.7	812.6	813.5	814.4	815.2	816.1	819.4
142.5°	838.4	839.0	839.6	840.3	840.9	841.6	842.4	843.2	844.0	844.8	847.6
145°	883.4	884.0	884.5	885.0	885.6	886.1	886.7	887.3	887.9	888.5	889.8
147.5°	923.9	924.3	924.8	925.2	925.6	926.1	926.6	927.0	927.5	928.0	928.9
150°	951.6	951.5	951.3	951.1	950.9	951.2	952.0	952.8	953.5	954.3	954.3
152.5°	974.5	974.7	975.0	975.3	975.5	975.9	976.2	976.5	976.8	977.1	977.6
155°	1009.5	1009.5	1009.5	1009.5	1009.5	1009.6	1009.9	1010.0	1010.2	1010.4	1011.2
157.5°	1040.9	1040.4	1040.0	1039.6	1039.1	1039.0	1039.2	1039.4	1039.6	1039.8	1040.6
160°	1059.4	1058.8	1058.2	1057.6	1057.0	1056.9	1057.0	1057.2	1057.4	1057.6	1058.4
162.5°	1075.8	1075.3	1074.9	1074.4	1074.1	1073.8	1073.9	1073.9	1074.0	1074.0	1075.0
165°	1097.7	1097.3	1096.9	1096.4	1096.1	1096.0	1096.2	1096.4	1096.5	1096.8	1097.6
167.5°	1116.2	1115.4	1114.6	1113.8	1113.0	1112.6	1112.6	1112.6	1112.6	1112.6	1113.8
170°	1126.1	1125.3	1124.5	1123.8	1123.0	1122.6	1122.6	1122.6	1122.6	1122.6	1123.8
172.5°	1133.3	1132.5	1131.7	1130.9	1130.2	1129.7	1129.7	1129.7	1129.7	1129.7	1130.9
175°	1141.3	1140.5	1139.7	1138.9	1138.1	1137.7	1137.7	1137.7	1137.7	1137.7	1138.9
177.5°	1145.4	1144.8	1144.2	1143.4	1142.8	1142.5	1142.3	1142.1	1142.0	1141.8	1142.8
180°	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0



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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°	132.6	138.9	145.3	149.5	151.4	153.4	155.4	157.4
90°	127.2	134.4	141.5	146.3	148.8	151.2	153.7	156.2
92.5°	143.6	150.8	158.0	162.8	165.1	167.4	169.7	172.0
95°	170.9	178.3	185.5	190.3	192.5	194.8	197.1	199.4
97.5°	204.8	211.8	218.7	223.2	225.2	227.3	229.3	231.4
100°	228.0	235.4	242.8	247.5	249.5	251.6	253.5	255.6
102.5°	252.5	259.9	267.2	272.0	274.2	276.3	278.5	280.6
105°	292.0	298.5	305.1	309.6	312.1	314.6	317.0	319.5
107.5°	336.4	342.3	348.2	352.0	353.6	355.2	356.9	358.5
110°	367.0	372.7	378.4	382.1	383.8	385.4	387.1	388.8





TEST NUMBER: P333281-940

CATALOG NUMBER: S125DIP-S1090D1035U940-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	397.7	402.9	408.0	411.3	412.9	414.4	415.9	417.4
115°	445.2	449.9	454.4	457.4	458.9	460.3	461.7	463.1
117.5°	492.3	497.0	501.8	504.6	505.6	506.7	507.7	508.7
120°	524.5	529.1	533.6	536.3	537.1	537.9	538.7	539.5
122.5°	555.4	559.6	563.8	566.4	567.4	568.4	569.4	570.3
125°	601.6	605.6	609.4	611.9	613.1	614.2	615.4	616.5
127.5°	647.1	650.9	654.7	657.1	658.3	659.4	660.6	661.7
130°	678.0	681.5	685.1	687.3	688.3	689.2	690.2	691.1
132.5°	706.9	710.4	714.0	716.0	716.7	717.2	717.7	718.4
135°	751.0	754.5	758.0	760.0	760.5	761.1	761.6	762.1
137.5°	795.1	798.5	801.9	803.7	803.8	803.8	803.9	804.0
140°	822.8	826.1	829.5	831.2	831.3	831.3	831.4	831.4
142.5°	850.2	853.0	855.8	857.2	857.3	857.4	857.5	857.6
145°	891.2	892.5	893.9	894.7	895.2	895.6	896.2	896.6
147.5°	929.8	930.7	931.6	931.7	930.8	929.9	929.0	928.2
150°	954.3	954.3	954.3	954.3	954.1	954.0	953.9	953.8
152.5°	978.1	978.6	979.0	978.9	978.3	977.6	977.0	976.3
155°	1012.0	1012.8	1013.6	1013.5	1012.5	1011.5	1010.5	1009.5
157.5°	1041.3	1042.1	1042.9	1042.7	1041.4	1040.1	1038.8	1037.5
160°	1059.2	1060.0	1060.8	1060.7	1059.7	1058.7	1057.7	1056.7
162.5°	1075.8	1076.8	1077.8	1077.7	1076.6	1075.4	1074.2	1073.1
165°	1098.3	1099.1	1099.9	1099.7	1098.6	1097.3	1096.2	1095.0
167.5°	1115.0	1116.2	1117.4	1117.3	1116.2	1114.9	1113.7	1112.4
170°	1125.0	1126.1	1127.3	1127.2	1125.9	1124.4	1123.1	1121.7
172.5°	1132.1	1133.3	1134.4	1134.4	1133.2	1132.0	1130.8	1129.5
175°	1140.1	1141.3	1142.5	1142.4	1141.0	1139.6	1138.2	1136.8
177.5°	1143.7	1144.7	1145.6	1145.6	1144.4	1143.4	1142.2	1141.1
180°	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0	1144.0

(END OF REPORT)