

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: P333280-940

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333280-940  
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-S1090D1035U940-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1090 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: 7493.8 lumens  
Efficiency: N/A  
Efficacy: 123.9 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

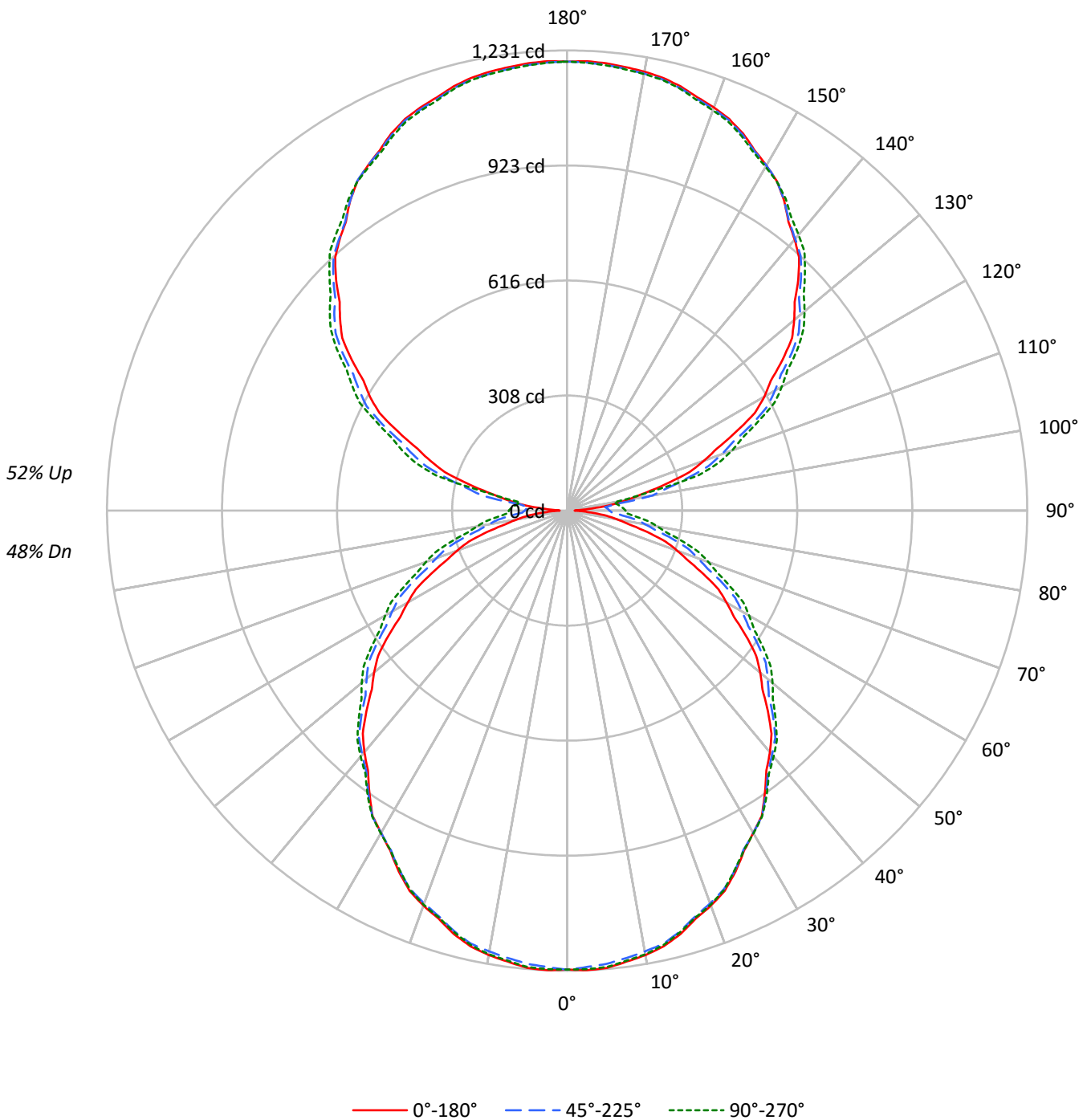
Input Watts (W): 60.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	98	98	98	82	82	82		67	67	67		54	54	54	48
1	97	92	88	84	89	85	81	78	71	68	66		58	56	55		47	45	44	39
2	88	80	73	68	80	74	68	63	62	58	54		51	48	45		41	39	37	32
3	80	70	62	56	73	64	58	53	54	49	45		45	41	38		36	33	31	27
4	73	62	54	47	67	57	50	44	48	42	38		40	36	32		32	29	26	23
5	67	55	47	40	61	51	43	38	43	37	33		35	31	28		29	25	23	20
6	61	49	41	35	56	45	38	33	38	33	28		32	28	24		26	23	20	17
7	57	44	36	31	52	41	34	29	35	29	25		29	25	21		24	20	18	15
8	53	40	32	27	48	37	30	25	32	26	22		27	22	19		22	18	16	13
9	49	37	29	24	45	34	27	23	29	24	20		24	20	17		20	17	14	12
10	46	34	26	21	42	31	25	20	27	21	18		23	18	15		19	15	13	11

**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	1.5
10°-20°	329.6	4.4
20°-30°	490.2	6.5
30°-40°	580.6	7.7
40°-50°	600.3	8.0
50°-60°	553.0	7.4
60°-70°	447.0	6.0
70°-80°	299.4	4.0
80°-90°	157.7	2.1
90°-100°	130.8	1.7
100°-110°	333.2	4.4
110°-120°	530.9	7.1
120°-130°	650.6	8.7
130°-140°	684.1	9.1
140°-150°	634.3	8.5
150°-160°	511.4	6.8
160°-170°	330.7	4.4
170°-180°	114.1	1.5
0°-30°	935.9	12.5
0°-40°	1516.5	20.2
0°-60°	2669.7	35.6
0°-90°	3573.8	47.7
90°-120°	994.9	13.3
90°-150°	2963.9	39.6
90°-180°	3920.0	52.3
0°-180°	7493.8	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	15
95°	66	94	102	132	142	77
105°	273	296	332	355	363	289
115°	499	513	544	561	564	494
125°	704	710	733	748	752	628
135°	874	878	885	898	899	674
145°	1012	1012	1012	1019	1019	632
155°	1113	1108	1109	1112	1105	513
165°	1174	1169	1170	1175	1168	332
175°	1201	1196	1197	1203	1196	114
180°	1201	1201	1201	1201	1201	



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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°	31.0	37.9	44.7	51.5	58.3	67.0	77.5	88.0	98.5	109.1	116.0
95°	66.4	72.8	79.1	85.5	91.8	95.8	97.4	99.0	100.6	102.1	109.0
97.5°	120.1	127.5	134.8	142.1	149.5	150.1	144.0	137.9	131.8	125.6	125.7
100°	161.9	168.2	174.3	180.6	186.8	194.6	203.9	213.3	222.6	231.9	208.1
102.5°	204.4	210.4	216.3	222.2	228.2	235.6	244.4	253.2	262.0	270.8	270.6
105°	272.6	277.7	282.8	287.8	292.8	299.4	307.5	315.5	323.5	331.5	336.9
107.5°	343.5	347.1	350.7	354.4	358.0	363.9	371.9	380.0	388.2	396.3	401.6
110°	389.5	392.7	395.9	399.1	402.3	407.9	415.8	423.7	431.5	439.4	443.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	433.6	436.7	439.7	442.8	445.9	451.1	458.6	466.1	473.7	481.2	485.3
115°	498.7	501.6	504.4	507.3	510.1	515.1	522.3	529.4	536.6	543.8	547.8
117.5°	566.1	567.2	568.5	569.6	570.8	575.1	582.4	589.8	597.1	604.4	607.9
120°	608.8	609.4	610.0	610.6	611.2	614.8	621.6	628.4	635.1	641.9	646.0
122.5°	645.6	646.7	647.8	649.0	650.1	653.7	660.0	666.2	672.3	678.6	682.5
125°	703.7	704.8	706.0	707.1	708.2	711.4	716.8	722.1	727.5	732.8	736.3
127.5°	758.3	759.0	759.7	760.5	761.2	763.7	767.9	772.2	776.4	780.7	784.3
130°	792.5	793.2	793.9	794.6	795.3	797.6	801.6	805.6	809.5	813.4	816.6
132.5°	825.7	826.8	827.9	828.9	830.1	831.8	834.3	836.8	839.2	841.7	845.3
135°	874.1	874.9	875.9	876.8	877.7	879.0	880.4	881.9	883.3	884.8	887.9
137.5°	918.6	919.4	920.2	921.0	921.8	922.5	923.0	923.5	924.1	924.7	927.9
140°	946.7	947.2	947.5	948.0	948.3	948.6	948.6	948.7	948.8	948.9	952.2
142.5°	973.1	973.1	973.1	973.2	973.2	973.4	973.7	974.0	974.4	974.7	977.3
145°	1011.7	1011.9	1012.0	1012.1	1012.3	1012.4	1012.4	1012.4	1012.4	1012.4	1013.9
147.5°	1044.4	1044.3	1044.2	1044.1	1044.0	1044.1	1044.4	1044.6	1044.8	1045.1	1045.7
150°	1065.8	1065.3	1065.0	1064.5	1064.2	1064.2	1064.5	1065.0	1065.3	1065.8	1066.1
152.5°	1086.4	1085.6	1084.7	1083.8	1082.9	1082.7	1083.1	1083.4	1083.9	1084.2	1084.7
155°	1112.9	1111.8	1110.5	1109.4	1108.2	1107.8	1108.2	1108.6	1108.9	1109.4	1110.0
157.5°	1133.4	1132.7	1132.0	1131.3	1130.6	1130.2	1130.2	1130.3	1130.3	1130.4	1131.0
160°	1147.6	1146.5	1145.3	1144.1	1142.9	1142.4	1142.6	1142.8	1143.0	1143.2	1144.0
162.5°	1159.0	1157.9	1156.6	1155.5	1154.3	1153.8	1154.0	1154.2	1154.4	1154.6	1155.7
165°	1174.4	1173.1	1172.0	1170.8	1169.7	1169.1	1169.3	1169.5	1169.7	1169.9	1171.1
167.5°	1185.8	1184.5	1183.3	1182.1	1180.9	1180.4	1180.5	1180.7	1180.9	1181.2	1182.6
170°	1192.1	1190.8	1189.4	1188.0	1186.6	1186.1	1186.2	1186.4	1186.6	1186.9	1188.4
172.5°	1196.4	1195.1	1193.6	1192.3	1190.9	1190.4	1190.7	1191.1	1191.4	1191.8	1193.2
175°	1201.0	1199.9	1198.7	1197.5	1196.3	1195.9	1196.1	1196.2	1196.4	1196.6	1198.2
177.5°	1203.2	1202.3	1201.3	1200.3	1199.4	1199.0	1199.2	1199.4	1199.5	1199.6	1200.8
180°	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0



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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°	123.0	129.9	136.8	141.3	143.5	145.6	147.8	150.0
95°	115.8	122.8	129.7	134.0	135.9	137.8	139.6	141.5
97.5°	125.7	125.8	125.8	126.7	128.6	130.4	132.2	134.0
100°	184.2	160.3	136.5	125.0	125.8	126.6	127.4	128.2
102.5°	270.5	270.3	270.1	264.1	252.3	240.4	228.5	216.8
105°	342.2	347.6	352.9	356.4	358.1	359.8	361.5	363.1
107.5°	407.0	412.2	417.6	420.8	421.9	422.9	424.0	425.1
110°	448.4	452.9	457.4	460.7	462.7	464.8	466.9	469.0





TEST NUMBER: P333280-940

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

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	489.4	493.5	497.7	500.5	502.0	503.6	505.2	506.8
115°	551.8	555.8	559.8	562.0	562.5	562.9	563.3	563.7
117.5°	611.4	614.9	618.5	620.9	622.2	623.5	624.8	626.1
120°	650.1	654.3	658.4	660.8	661.5	662.1	662.7	663.3
122.5°	686.5	690.5	694.4	696.5	697.1	697.5	697.9	698.4
125°	739.9	743.3	746.8	748.9	749.7	750.4	751.2	751.9
127.5°	787.7	791.3	794.8	796.7	796.7	796.8	796.9	797.0
130°	819.7	822.9	826.1	827.8	828.1	828.5	828.8	829.2
132.5°	848.9	852.6	856.1	858.0	858.2	858.3	858.4	858.5
135°	891.0	894.1	897.2	898.8	898.9	899.1	899.2	899.4
137.5°	931.1	934.3	937.6	939.2	939.3	939.3	939.3	939.4
140°	955.6	958.9	962.2	963.9	963.7	963.6	963.5	963.3
142.5°	979.9	982.5	985.1	986.3	986.2	986.1	986.0	985.9
145°	1015.4	1016.9	1018.4	1019.1	1019.0	1019.0	1018.8	1018.7
147.5°	1046.4	1047.0	1047.8	1047.6	1046.7	1045.7	1044.8	1043.8
150°	1066.6	1066.9	1067.3	1066.8	1065.5	1064.3	1062.9	1061.6
152.5°	1085.0	1085.5	1085.8	1085.4	1084.0	1082.6	1081.2	1079.9
155°	1110.5	1111.2	1111.8	1111.3	1109.6	1108.0	1106.5	1104.9
157.5°	1131.7	1132.3	1132.9	1132.5	1130.9	1129.3	1127.7	1126.1
160°	1144.8	1145.6	1146.4	1145.9	1144.4	1142.8	1141.2	1139.6
162.5°	1156.8	1157.9	1159.0	1158.7	1157.0	1155.2	1153.5	1151.7
165°	1172.2	1173.5	1174.7	1174.5	1172.9	1171.3	1169.7	1168.1
167.5°	1184.0	1185.4	1186.9	1186.7	1184.9	1183.1	1181.3	1179.6
170°	1190.0	1191.6	1193.2	1193.0	1191.2	1189.5	1187.8	1186.0
172.5°	1194.6	1196.1	1197.5	1197.3	1195.5	1193.7	1191.9	1190.3
175°	1199.8	1201.4	1202.9	1202.8	1201.0	1199.3	1197.5	1195.7
177.5°	1201.8	1203.0	1204.1	1204.0	1202.7	1201.5	1200.2	1198.9
180°	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0	1201.0

(END OF REPORT)