

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: P333290-940

Luminaire Tested: **S125DIP-S1090D1205U940-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333290-940
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-S1090D1205U940-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP 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: 7521.5 lumens
Efficiency: N/A
Efficacy: 115.0 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

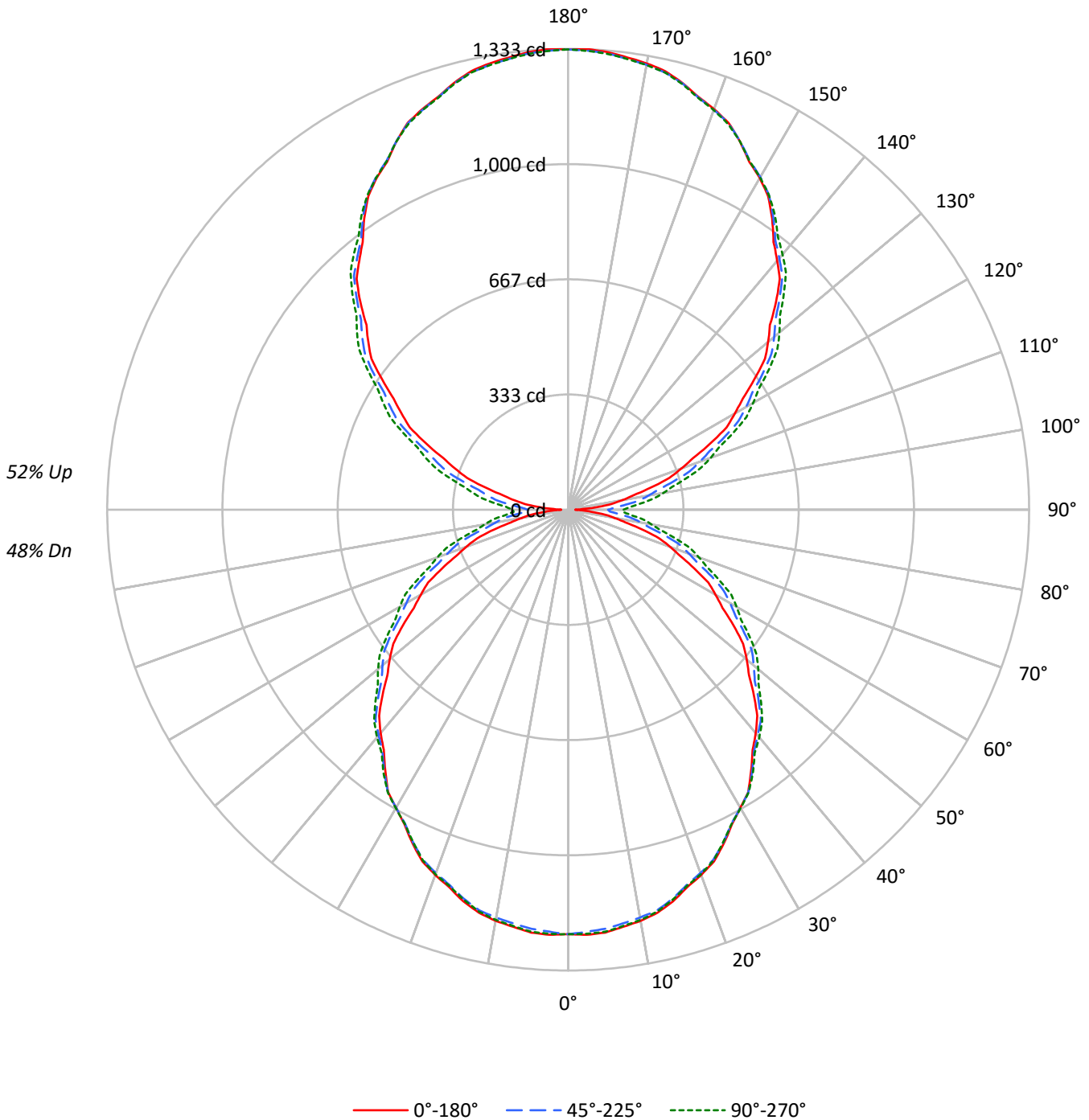
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333290-940

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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	88	85	81	78	71	68	66		58	56	55		46	45	44	39
2	88	80	73	68	80	73	68	63	62	57	54		51	48	45		40	38	37	32
3	80	70	62	56	73	64	58	52	54	49	45		45	41	38		36	33	31	27
4	73	62	54	47	67	57	50	44	48	42	38		40	35	32		32	29	26	23
5	67	55	47	40	61	51	43	38	43	37	33		35	31	28		28	25	23	19
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		26	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		22	18	15		18	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



TEST NUMBER: P333290-940

CATALOG NUMBER: S125DIP-S1090D1205U940-4F0-1E-UDD-D1

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	5.9
70°-80°	299.4	4.0
80°-90°	158.1	2.1
90°-100°	176.3	2.3
100°-110°	327.6	4.4
110°-120°	489.1	6.5
120°-130°	611.5	8.1
130°-140°	668.5	8.9
140°-150°	646.9	8.6
150°-160°	541.5	7.2
160°-170°	359.9	4.8
170°-180°	126.0	1.7
0°-30°	935.9	12.4
0°-40°	1516.5	20.2
0°-60°	2669.7	35.5
0°-90°	3574.2	47.5
90°-120°	993.0	13.2
90°-150°	2919.8	38.8
90°-180°	3947.0	52.5
0°-180°	7521.5	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	17
95°	83	117	168	200	212	84
105°	247	273	314	343	356	264
115°	454	468	500	520	527	449
125°	657	663	687	703	709	588
135°	850	855	864	879	882	655
145°	1028	1031	1034	1040	1042	642
155°	1175	1175	1176	1180	1175	541
165°	1278	1276	1277	1280	1274	360
175°	1328	1324	1324	1330	1323	126
180°	1332	1332	1332	1332	1332	



TEST NUMBER: P333290-940

CATALOG NUMBER: S125DIP-S1090D1205U940-4F0-1E-UDD-D1

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°	42.4	51.6	60.8	70.0	79.3	89.5	100.8	112.1	123.3	134.6	142.1
95°	83.0	90.4	97.8	105.2	112.6	122.1	133.5	144.9	156.2	167.6	175.1
97.5°	126.1	132.6	139.0	145.4	151.9	161.1	173.1	185.0	197.0	208.9	216.1
100°	158.3	163.9	169.5	175.1	180.7	189.4	200.9	212.5	224.0	235.6	243.3
102.5°	193.0	199.1	205.2	211.3	217.4	225.4	235.3	245.1	255.0	264.9	272.5
105°	247.1	252.5	258.0	263.4	268.9	276.3	285.6	295.1	304.4	313.9	320.6
107.5°	307.0	311.7	316.6	321.4	326.2	333.0	341.7	350.4	359.2	368.0	374.0
110°	348.3	352.7	357.0	361.4	365.8	372.0	380.2	388.3	396.5	404.7	410.5



TEST NUMBER: P333290-940

CATALOG NUMBER: S125DIP-S1090D1205U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	391.4	394.6	397.7	400.9	404.0	409.7	417.9	426.1	434.2	442.4	447.5
115°	453.8	456.6	459.4	462.2	465.0	470.1	477.5	484.9	492.3	499.8	504.4
117.5°	516.5	518.1	519.8	521.4	523.1	527.4	534.3	541.4	548.3	555.4	560.1
120°	556.2	558.2	560.2	562.1	564.1	568.2	574.6	581.0	587.4	593.8	598.3
122.5°	598.4	599.1	599.9	600.7	601.5	605.2	611.7	618.3	624.8	631.3	635.5
125°	656.6	657.7	658.8	660.0	661.0	664.4	669.9	675.6	681.2	686.7	690.5
127.5°	717.6	718.1	718.6	719.1	719.6	722.2	726.8	731.6	736.2	740.8	744.6
130°	754.8	755.7	756.6	757.5	758.4	761.0	765.2	769.4	773.6	777.8	781.3
132.5°	791.2	793.0	794.9	796.7	798.5	800.8	803.7	806.5	809.2	812.1	815.6
135°	850.1	851.1	852.3	853.4	854.5	856.1	858.2	860.3	862.4	864.5	868.0
137.5°	905.4	906.4	907.6	908.7	909.8	911.1	912.5	913.9	915.3	916.8	920.2
140°	940.0	941.2	942.3	943.4	944.6	945.7	946.6	947.6	948.5	949.5	952.9
142.5°	975.6	976.4	977.1	977.9	978.7	979.5	980.4	981.3	982.3	983.2	986.1
145°	1028.1	1028.8	1029.4	1030.0	1030.7	1031.4	1032.1	1032.8	1033.4	1034.1	1035.5
147.5°	1075.4	1075.8	1076.4	1076.9	1077.4	1077.9	1078.5	1079.1	1079.6	1080.1	1081.1
150°	1107.7	1107.5	1107.2	1107.1	1106.8	1107.1	1108.0	1108.9	1109.9	1110.8	1110.8
152.5°	1134.3	1134.5	1134.9	1135.2	1135.5	1135.9	1136.2	1136.6	1137.0	1137.4	1137.9
155°	1175.1	1175.1	1175.1	1175.1	1175.1	1175.2	1175.5	1175.6	1175.9	1176.1	1177.1
157.5°	1211.6	1211.0	1210.5	1210.1	1209.5	1209.3	1209.6	1209.9	1210.1	1210.3	1211.2
160°	1233.1	1232.4	1231.7	1231.0	1230.3	1230.1	1230.3	1230.6	1230.8	1231.0	1231.9
162.5°	1252.1	1251.7	1251.2	1250.6	1250.1	1249.9	1249.9	1250.0	1250.0	1250.1	1251.2
165°	1277.6	1277.2	1276.8	1276.3	1275.8	1275.7	1275.9	1276.1	1276.4	1276.6	1277.6
167.5°	1299.2	1298.2	1297.4	1296.5	1295.5	1295.0	1295.0	1295.0	1295.0	1295.0	1296.5
170°	1310.8	1309.9	1308.9	1308.1	1307.2	1306.6	1306.6	1306.6	1306.6	1306.6	1308.1
172.5°	1319.1	1318.2	1317.2	1316.3	1315.5	1314.9	1314.9	1314.9	1314.9	1314.9	1316.3
175°	1328.4	1327.5	1326.6	1325.6	1324.7	1324.3	1324.3	1324.3	1324.3	1324.3	1325.6
177.5°	1333.2	1332.5	1331.7	1331.0	1330.3	1329.8	1329.6	1329.5	1329.2	1329.0	1330.2
180°	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5



TEST NUMBER: P333290-940

CATALOG NUMBER: S125DIP-S1090D1205U940-4F0-1E-UDD-D1

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°	149.5	157.0	164.5	169.4	171.7	174.2	176.6	178.9
95°	182.6	190.1	197.7	202.6	204.9	207.2	209.6	211.9
97.5°	223.2	230.3	237.5	242.1	244.2	246.3	248.3	250.5
100°	250.9	258.7	266.4	271.3	273.3	275.4	277.4	279.5
102.5°	280.2	287.8	295.5	300.5	302.7	305.0	307.2	309.5
105°	327.3	334.0	340.8	345.4	348.0	350.5	353.1	355.7
107.5°	380.0	385.9	391.9	395.7	397.3	399.0	400.6	402.2
110°	416.3	422.0	427.8	431.6	433.2	434.8	436.5	438.1



TEST NUMBER: P333290-940

CATALOG NUMBER: S125DIP-S1090D1205U940-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	452.7	457.9	463.1	466.5	467.9	469.3	470.8	472.3
115°	508.9	513.5	518.1	521.1	522.5	523.9	525.2	526.6
117.5°	564.8	569.5	574.3	577.1	578.0	578.9	579.8	580.7
120°	602.9	607.4	612.0	614.6	615.3	615.9	616.6	617.3
122.5°	639.6	643.8	647.9	650.5	651.3	652.2	653.1	654.0
125°	694.4	698.2	702.0	704.5	705.5	706.7	707.8	708.9
127.5°	748.3	752.1	755.8	758.2	759.3	760.4	761.4	762.6
130°	784.8	788.3	791.8	794.0	794.9	795.8	796.7	797.5
132.5°	819.0	822.6	826.1	828.1	828.6	829.0	829.6	830.0
135°	871.5	874.9	878.4	880.4	880.7	881.2	881.6	882.0
137.5°	923.6	927.0	930.5	932.2	932.1	932.0	931.9	931.8
140°	956.3	959.7	963.1	964.7	964.7	964.7	964.6	964.5
142.5°	988.8	991.6	994.3	995.8	995.7	995.6	995.5	995.4
145°	1036.8	1038.1	1039.5	1040.4	1040.7	1041.1	1041.5	1041.9
147.5°	1082.1	1083.1	1084.1	1084.1	1082.9	1081.8	1080.8	1079.7
150°	1110.8	1110.8	1110.8	1110.7	1110.5	1110.4	1110.2	1109.9
152.5°	1138.4	1139.0	1139.5	1139.4	1138.6	1137.9	1137.1	1136.3
155°	1177.9	1178.8	1179.8	1179.6	1178.5	1177.3	1176.3	1175.1
157.5°	1212.1	1213.1	1214.0	1213.7	1212.2	1210.7	1209.2	1207.6
160°	1232.9	1233.8	1234.7	1234.6	1233.4	1232.3	1231.1	1230.0
162.5°	1252.3	1253.4	1254.5	1254.4	1253.0	1251.7	1250.4	1249.0
165°	1278.4	1279.3	1280.3	1280.1	1278.7	1277.3	1275.9	1274.5
167.5°	1297.8	1299.2	1300.6	1300.6	1299.1	1297.7	1296.3	1294.9
170°	1309.4	1310.8	1312.2	1312.1	1310.5	1308.9	1307.2	1305.6
172.5°	1317.7	1319.1	1320.4	1320.4	1319.0	1317.6	1316.2	1314.7
175°	1327.0	1328.4	1329.8	1329.7	1328.1	1326.5	1324.8	1323.2
177.5°	1331.2	1332.4	1333.5	1333.4	1332.1	1330.8	1329.5	1328.2
180°	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5	1331.5

(END OF REPORT)