

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: P333334-940

Luminaire Tested: **S125DIP-S1270D1205U940-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333334-940  
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-S1270D1205U940-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 1270 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: 8688.2 lumens  
Efficiency: N/A  
Efficacy: 121.2 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

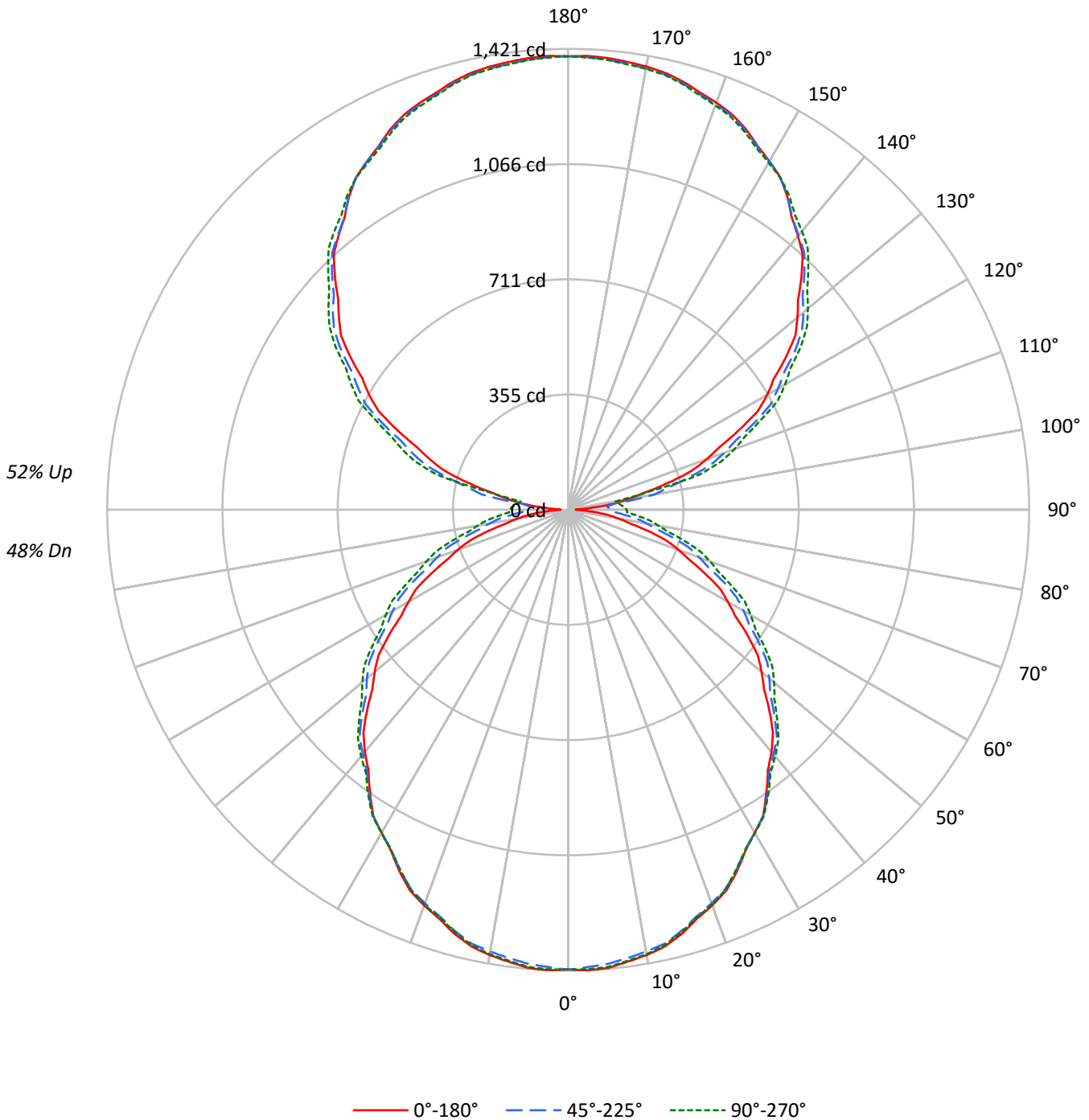
Input Watts (W): 71.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333334-940

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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°	9159	9159	9159
5°	9177	8990	9018
10°	9112	8829	8816
15°	9004	8637	8558
20°	8857	8400	8301
25°	8683	8145	7984
30°	8473	7865	7696
35°	8276	7608	7432
40°	8075	7338	7167
45°	7849	7106	6931
50°	7633	6854	6723
55°	7373	6618	6478
60°	7089	6346	6229
65°	6792	6064	5947
70°	6457	5677	5658
75°	5923	5304	5304
80°	5225	4854	4918
85°	4578	4550	4797



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.1	1.5
10°-20°	380.7	4.4
20°-30°	566.1	6.5
30°-40°	670.6	7.7
40°-50°	693.3	8.0
50°-60°	638.7	7.4
60°-70°	516.3	5.9
70°-80°	345.7	4.0
80°-90°	182.2	2.1
90°-100°	151.4	1.7
100°-110°	387.3	4.5
110°-120°	617.6	7.1
120°-130°	757.0	8.7
130°-140°	796.2	9.2
140°-150°	738.3	8.5
150°-160°	595.2	6.9
160°-170°	384.9	4.4
170°-180°	132.8	1.5
0°-30°	1080.9	12.4
0°-40°	1751.4	20.2
0°-60°	3083.4	35.5
0°-90°	4127.6	47.5
90°-120°	1156.3	13.3
90°-150°	3447.7	39.7
90°-180°	4561.0	52.5
0°-180°	8688.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1418	1418	1418	1418	1418	
5°	1418	1415	1406	1416	1415	134
15°	1354	1355	1346	1353	1348	381
25°	1230	1234	1226	1231	1225	566
35°	1065	1074	1070	1074	1075	666
45°	877	892	900	909	911	677
55°	674	696	719	734	740	603
65°	464	496	530	550	556	461
75°	256	292	336	363	371	271
85°	76	123	171	201	213	81
90°	23	76	130	166	181	17
95°	77	109	118	152	164	89
105°	317	344	385	412	422	336
115°	580	596	632	652	656	575
125°	819	826	853	870	875	731
135°	1017	1022	1030	1045	1047	784
145°	1178	1178	1178	1186	1186	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°	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1
2.5°	1421.4	1420.9	1420.4	1420.0	1419.4	1418.4	1416.6	1414.9	1413.2	1411.4	1413.2
5°	1418.1	1417.5	1416.8	1416.2	1415.6	1414.3	1412.0	1409.9	1407.7	1405.6	1408.0
7.5°	1405.6	1405.3	1405.1	1404.8	1404.6	1403.4	1401.1	1398.9	1396.7	1394.5	1396.6
10°	1394.5	1394.5	1394.5	1394.5	1394.5	1393.2	1390.7	1388.3	1385.8	1383.3	1385.5
12.5°	1378.9	1379.1	1379.4	1379.7	1379.8	1379.0	1377.1	1375.0	1373.1	1371.1	1372.8
15°	1354.2	1354.4	1354.8	1355.0	1355.4	1354.4	1352.3	1350.1	1348.0	1345.8	1347.6
17.5°	1321.9	1322.5	1323.1	1323.7	1324.4	1323.6	1321.4	1319.3	1317.1	1314.9	1316.3
20°	1298.5	1299.1	1299.8	1300.4	1301.0	1300.2	1298.1	1295.9	1293.7	1291.6	1292.5
22.5°	1271.8	1272.9	1274.1	1275.1	1276.3	1275.6	1273.2	1270.8	1268.4	1266.0	1267.1
25°	1230.4	1231.4	1232.3	1233.1	1234.1	1233.7	1231.8	1229.9	1228.1	1226.2	1227.4
27.5°	1184.3	1185.6	1187.0	1188.3	1189.7	1189.3	1187.2	1185.1	1183.0	1180.9	1181.8
30°	1149.8	1151.6	1153.4	1155.3	1157.2	1157.2	1155.3	1153.4	1151.6	1149.8	1150.4
32.5°	1118.7	1120.3	1121.9	1123.5	1125.1	1125.2	1123.8	1122.5	1121.1	1119.7	1120.3
35°	1065.0	1067.1	1069.3	1071.5	1073.6	1074.2	1073.3	1072.4	1071.5	1070.5	1071.5
37.5°	1011.3	1013.3	1015.2	1017.3	1019.2	1020.0	1019.8	1019.4	1019.1	1018.8	1020.0
40°	974.6	977.0	979.5	982.0	984.4	985.5	985.3	984.9	984.6	984.4	985.5
42.5°	934.5	937.7	940.9	944.1	947.4	949.3	950.0	950.7	951.4	952.1	953.5
45°	877.3	880.7	884.0	887.4	890.8	893.3	894.9	896.4	898.0	899.5	901.7
47.5°	818.6	821.7	824.9	828.0	831.2	834.1	836.8	839.5	842.0	844.7	847.9
50°	778.6	781.9	785.3	788.7	792.2	795.6	799.0	802.4	805.7	809.1	812.5
52.5°	736.3	740.5	744.6	748.7	752.9	757.0	761.2	765.3	769.4	773.6	777.2
55°	674.3	679.2	684.2	689.1	694.0	699.0	703.9	708.9	713.8	718.8	722.2
57.5°	610.9	616.8	622.8	628.7	634.6	640.4	646.1	651.8	657.5	663.2	667.1
60°	568.6	574.8	580.9	587.2	593.3	599.5	605.7	611.9	618.0	624.2	628.8
62.5°	527.4	533.7	539.8	546.0	552.1	558.7	565.3	571.9	578.6	585.3	590.4
65°	464.3	471.4	478.6	485.7	492.8	500.1	507.5	514.9	522.3	529.7	534.3
67.5°	404.8	411.7	418.6	425.4	432.3	439.5	447.0	454.6	462.1	469.7	475.3
70°	361.5	368.5	375.7	382.8	389.9	397.4	405.5	413.6	421.6	429.6	435.5
72.5°	319.2	326.5	333.9	341.3	348.7	356.7	365.4	374.3	383.0	391.8	398.1
75°	255.8	263.9	271.9	279.9	287.9	296.9	306.7	316.6	326.5	336.4	342.6
77.5°	194.9	204.2	213.5	222.7	232.0	241.4	250.9	260.4	269.9	279.5	286.2
80°	157.1	166.4	175.7	184.9	194.2	204.0	214.5	225.1	235.6	246.1	252.9
82.5°	122.6	132.4	142.1	151.9	161.7	171.9	182.7	193.4	204.2	214.9	221.5
85°	76.5	86.7	96.8	107.1	117.3	127.8	138.6	149.4	160.2	171.0	177.8
87.5°	43.6	53.9	64.1	74.4	84.6	95.1	105.9	116.8	127.6	138.5	145.8
90°	23.3	35.0	46.7	58.5	70.2	82.1	94.3	106.4	118.5	130.5	138.8
92.5°	35.9	43.9	51.7	59.6	67.4	77.4	89.6	101.7	114.0	126.2	134.1
95°	77.1	84.4	91.8	99.2	106.5	111.0	112.8	114.6	116.3	118.1	126.0
97.5°	139.7	148.2	156.7	165.1	173.6	174.2	167.1	159.9	152.8	145.5	145.5
100°	188.3	195.6	202.7	209.9	217.0	226.0	236.8	247.7	258.5	269.3	241.5
102.5°	237.8	244.7	251.6	258.4	265.3	273.8	284.0	294.2	304.4	314.6	314.3
105°	317.2	323.1	329.0	334.7	340.6	348.2	357.5	366.8	376.0	385.3	391.5
107.5°	399.7	403.9	408.0	412.2	416.5	423.3	432.7	442.0	451.3	460.7	466.9
110°	453.3	457.0	460.7	464.4	468.1	474.5	483.7	492.8	501.9	511.0	516.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	504.7	508.2	511.8	515.2	518.8	524.9	533.5	542.2	550.9	559.5	564.4
115°	580.4	583.7	587.0	590.3	593.6	599.4	607.7	616.0	624.2	632.5	637.1
117.5°	658.8	660.2	661.6	662.9	664.3	669.2	677.7	686.2	694.6	703.1	707.2
120°	708.6	709.3	710.0	710.6	711.3	715.6	723.4	731.2	739.0	746.8	751.5
122.5°	751.4	752.7	754.0	755.3	756.6	760.8	768.0	775.3	782.4	789.6	794.2
125°	819.0	820.4	821.7	823.0	824.3	828.0	834.2	840.3	846.6	852.7	856.8
127.5°	882.5	883.4	884.2	885.1	885.9	888.9	893.8	898.7	903.6	908.6	912.6
130°	922.4	923.2	924.1	924.9	925.8	928.4	933.0	937.5	942.1	946.6	950.3
132.5°	961.1	962.3	963.6	964.8	966.2	968.2	971.0	973.8	976.7	979.5	983.7
135°	1017.4	1018.4	1019.5	1020.6	1021.6	1023.1	1024.8	1026.4	1028.1	1029.8	1033.4
137.5°	1069.1	1070.1	1071.0	1071.9	1072.9	1073.7	1074.3	1075.0	1075.6	1076.2	1080.0
140°	1102.0	1102.4	1102.9	1103.3	1103.8	1104.1	1104.2	1104.2	1104.3	1104.4	1108.2
142.5°	1132.7	1132.7	1132.7	1132.7	1132.7	1133.0	1133.4	1133.7	1134.2	1134.5	1137.5
145°	1177.6	1177.8	1177.9	1178.0	1178.2	1178.3	1178.3	1178.3	1178.3	1178.3	1180.1
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°	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1	1418.1
2.5°	1414.9	1416.6	1418.4	1419.1	1418.8	1418.6	1418.4	1418.1
5°	1410.5	1413.0	1415.5	1416.6	1416.2	1415.9	1415.6	1415.3
7.5°	1398.7	1401.0	1403.1	1404.0	1403.7	1403.4	1403.1	1402.8
10°	1387.7	1389.8	1392.0	1392.9	1392.6	1392.3	1392.0	1391.7
12.5°	1374.4	1376.1	1377.8	1378.2	1377.4	1376.6	1375.8	1375.0
15°	1349.5	1351.4	1353.2	1353.5	1352.3	1351.0	1349.8	1348.5
17.5°	1317.8	1319.2	1320.6	1321.0	1320.2	1319.5	1318.8	1317.9
20°	1293.4	1294.3	1295.3	1295.7	1295.7	1295.7	1295.7	1295.7
22.5°	1268.4	1269.5	1270.7	1270.9	1270.2	1269.4	1268.6	1267.9
25°	1228.7	1229.9	1231.2	1231.0	1229.5	1227.9	1226.4	1224.9
27.5°	1182.7	1183.5	1184.4	1184.5	1183.9	1183.4	1182.9	1182.3
30°	1151.0	1151.6	1152.3	1152.4	1152.1	1151.7	1151.5	1151.1
32.5°	1121.0	1121.6	1122.2	1122.4	1122.0	1121.8	1121.4	1121.1
35°	1072.4	1073.3	1074.2	1074.7	1074.7	1074.7	1074.7	1074.7
37.5°	1021.3	1022.5	1023.8	1024.3	1024.1	1024.0	1024.0	1023.8
40°	986.8	988.0	989.3	990.2	990.8	991.4	992.0	992.7
42.5°	955.0	956.5	958.0	958.8	958.9	959.0	959.2	959.3
45°	903.8	906.0	908.1	909.4	909.7	910.0	910.3	910.6
47.5°	851.0	854.2	857.4	859.3	860.0	860.6	861.3	862.0
50°	815.9	819.3	822.8	824.9	825.8	826.8	827.7	828.6
52.5°	780.9	784.5	788.1	790.3	790.9	791.7	792.4	793.0
55°	725.6	729.0	732.4	734.7	735.9	737.2	738.4	739.7
57.5°	670.9	674.8	678.8	681.2	682.1	683.0	683.9	684.8
60°	633.5	638.1	642.7	645.5	646.5	647.4	648.4	649.3
62.5°	595.6	600.7	605.8	608.9	610.1	611.4	612.5	613.7
65°	539.0	543.6	548.2	551.2	552.4	553.7	554.9	556.1
67.5°	480.9	486.5	492.1	495.7	497.3	498.9	500.6	502.2
70°	441.3	447.2	453.1	456.9	458.8	460.7	462.5	464.3
72.5°	404.5	410.9	417.2	421.1	422.5	423.8	425.2	426.5
75°	348.8	355.0	361.1	365.1	366.6	368.1	369.7	371.2
77.5°	293.0	299.8	306.7	310.7	311.9	313.1	314.3	315.6
80°	259.7	266.4	273.3	277.3	278.5	279.7	281.0	282.2
82.5°	228.0	234.6	241.1	245.5	247.7	249.9	252.2	254.4
85°	184.6	191.4	198.2	202.9	205.3	207.8	210.3	212.7
87.5°	153.1	160.4	167.8	172.6	175.0	177.2	179.5	181.8
90°	147.1	155.3	163.6	169.2	172.0	174.9	177.7	180.6
92.5°	142.1	150.2	158.2	163.5	165.9	168.4	170.9	173.3
95°	133.9	142.0	149.9	154.9	157.1	159.3	161.4	163.5
97.5°	145.5	145.5	145.5	146.5	148.6	150.8	152.8	155.0
100°	213.7	185.8	158.0	144.5	145.4	146.4	147.3	148.3
102.5°	314.1	313.8	313.6	306.6	292.7	278.9	265.1	251.3
105°	397.6	403.9	410.0	414.0	416.0	417.9	419.8	421.8
107.5°	473.1	479.2	485.4	489.0	490.3	491.5	492.8	493.9
110°	521.3	526.5	531.6	535.5	537.9	540.3	542.6	545.0





TEST NUMBER: P333334-940

CATALOG NUMBER: S125DIP-S1270D1205U940-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	569.1	573.8	578.5	581.8	583.7	585.6	587.4	589.2
115°	641.8	646.4	651.0	653.6	654.1	654.5	655.1	655.5
117.5°	711.2	715.3	719.3	722.1	723.6	725.1	726.7	728.2
120°	756.3	761.2	765.9	768.7	769.4	770.1	770.8	771.5
122.5°	798.7	803.2	807.7	810.3	810.8	811.3	811.8	812.3
125°	860.8	864.8	868.9	871.3	872.1	873.0	873.9	874.7
127.5°	916.7	920.7	924.8	926.8	926.9	927.0	927.1	927.2
130°	954.0	957.5	961.2	963.2	963.6	964.0	964.4	964.7
132.5°	987.9	992.0	996.2	998.4	998.5	998.7	998.9	999.0
135°	1037.0	1040.5	1044.0	1045.9	1046.1	1046.2	1046.4	1046.6
137.5°	1083.7	1087.4	1091.2	1093.1	1093.1	1093.1	1093.1	1093.2
140°	1112.1	1116.0	1119.8	1121.7	1121.5	1121.4	1121.2	1121.1
142.5°	1140.5	1143.5	1146.5	1147.9	1147.8	1147.6	1147.5	1147.4
145°	1181.9	1183.7	1185.4	1186.2	1186.1	1185.9	1185.8	1185.6
147.5°	1218.0	1218.8	1219.5	1219.3	1218.3	1217.2	1216.0	1215.0
150°	1241.4	1241.9	1242.3	1241.8	1240.3	1238.8	1237.2	1235.6
152.5°	1262.9	1263.5	1263.9	1263.3	1261.7	1260.2	1258.6	1257.0
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)