

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: P333307-935

Luminaire Tested: **S125DIP-S1270D590U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333307-935
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-S1270D590U935-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6277.3 lumens
Efficiency: N/A
Efficacy: 113.9 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: Semi-Direct

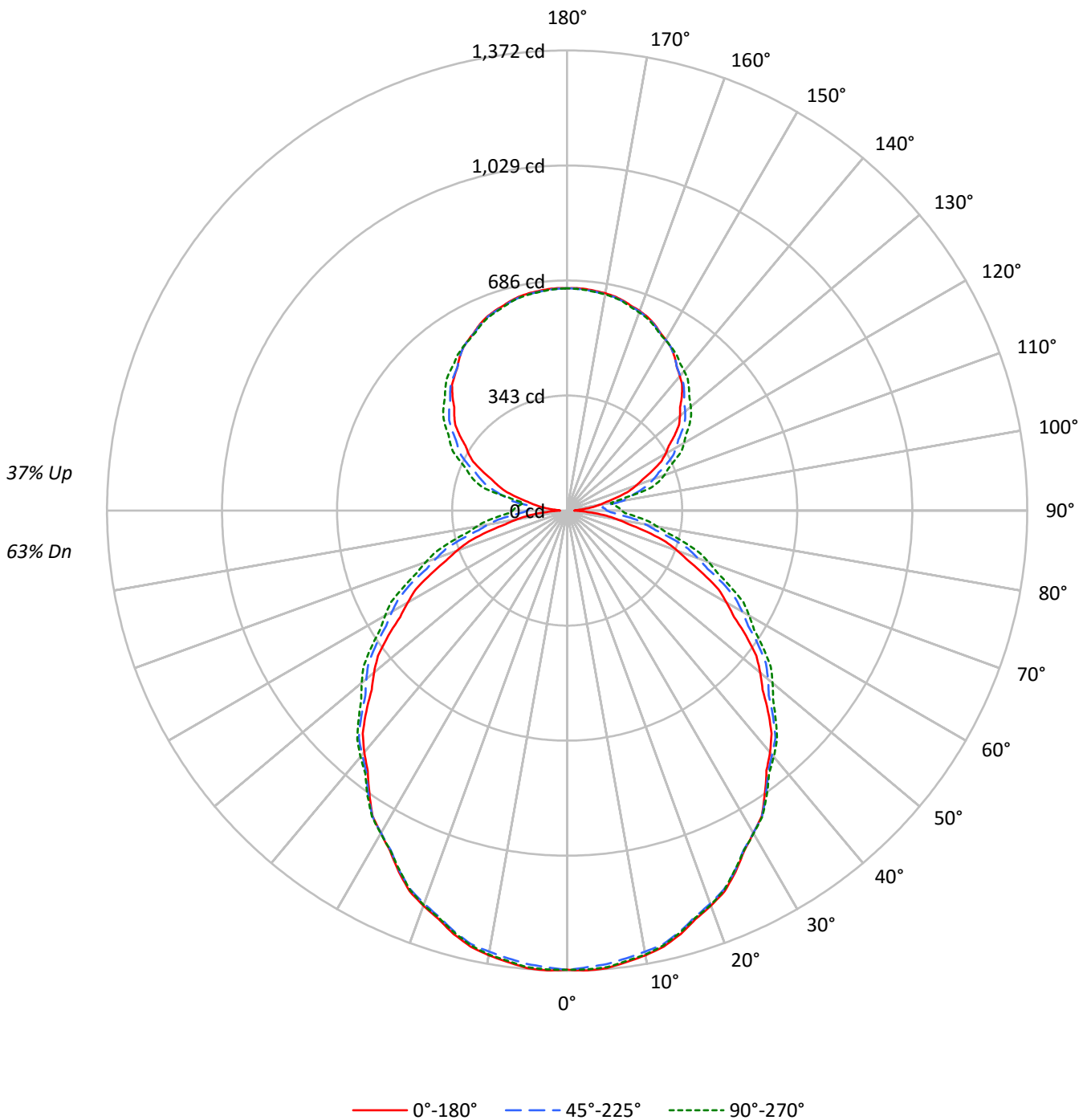
Input Watts (W): 55.1
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333307-935

CATALOG NUMBER: S125DIP-S1270D590U935-4F0-1E-UDD-D

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	110	110	110	110	104	104	104	104	91	91	91	79	79	79	68	68	68	63
1	100	95	91	87	93	89	85	82	78	75	73	68	66	64	59	57	56	52
2	91	82	76	70	85	77	72	67	68	63	60	59	56	53	51	49	46	42
3	82	72	64	58	77	68	61	55	60	54	50	52	48	44	45	42	39	35
4	75	64	55	49	70	60	52	47	53	47	42	46	42	38	40	37	33	30
5	69	57	48	42	64	54	46	40	47	41	36	42	37	33	36	32	29	26
6	64	51	42	36	59	48	40	35	43	36	32	38	32	28	33	29	25	23
7	59	46	38	32	55	43	36	30	39	32	28	34	29	25	30	26	23	20
8	55	42	34	28	51	40	32	27	35	29	25	31	26	22	27	23	20	18
9	51	38	30	25	48	36	29	24	32	26	22	29	24	20	25	21	18	16
10	48	35	28	23	45	33	26	22	30	24	20	27	22	18	24	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8843	8843	8843
5°	8860	8680	8707
10°	8797	8525	8512
15°	8694	8339	8263
20°	8552	8110	8015
25°	8384	7865	7709
30°	8181	7595	7431
35°	7991	7346	7176
40°	7797	7085	6920
45°	7579	6861	6693
50°	7370	6618	6491
55°	7119	6390	6255
60°	6846	6128	6014
65°	6558	5855	5742
70°	6233	5481	5463
75°	5719	5122	5121
80°	5046	4687	4749
85°	4423	4393	4630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.5	2.1
10°-20°	367.5	5.9
20°-30°	546.6	8.7
30°-40°	647.5	10.3
40°-50°	669.4	10.7
50°-60°	616.7	9.8
60°-70°	498.5	7.9
70°-80°	333.8	5.3
80°-90°	174.5	2.8
90°-100°	121.2	1.9
100°-110°	220.0	3.5
110°-120°	317.2	5.1
120°-130°	372.7	5.9
130°-140°	383.5	6.1
140°-150°	351.2	5.6
150°-160°	282.1	4.5
160°-170°	182.5	2.9
170°-180°	62.9	1.0
0°-30°	1043.6	16.6
0°-40°	1691.1	26.9
0°-60°	2977.2	47.4
0°-90°	3984.0	63.5
90°-120°	658.4	10.5
90°-150°	1765.8	28.1
90°-180°	2293.0	36.5
0°-180°	6277.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1369	1369	1369	1369	1369	
5°	1369	1366	1357	1367	1367	130
15°	1308	1308	1299	1307	1302	368
25°	1188	1191	1184	1189	1183	547
35°	1028	1037	1034	1037	1038	643
45°	847	861	868	877	879	653
55°	651	672	694	708	714	582
65°	448	479	511	531	537	445
75°	247	282	325	351	358	262
85°	74	118	165	194	205	79
90°	22	69	118	150	162	15
95°	46	79	106	137	147	49
105°	156	181	220	246	256	166
115°	279	292	326	348	354	277
125°	391	394	420	439	445	349
135°	484	486	494	509	514	373
145°	559	558	558	565	568	349
155°	614	611	612	613	610	283
165°	648	645	646	648	644	183
175°	663	660	660	664	660	63
180°	663	663	663	663	663	



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CATALOG NUMBER: S125DIP-S1270D590U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2
2.5°	1372.4	1372.0	1371.5	1371.1	1370.5	1369.5	1367.8	1366.1	1364.5	1362.8	1364.5
5°	1369.2	1368.6	1368.0	1367.4	1366.8	1365.5	1363.4	1361.3	1359.3	1357.2	1359.5
7.5°	1357.2	1356.9	1356.7	1356.4	1356.2	1355.0	1352.9	1350.7	1348.6	1346.4	1348.5
10°	1346.4	1346.4	1346.4	1346.4	1346.4	1345.2	1342.8	1340.5	1338.1	1335.7	1337.7
12.5°	1331.4	1331.6	1331.9	1332.1	1332.3	1331.5	1329.6	1327.7	1325.8	1323.9	1325.5
15°	1307.5	1307.8	1308.1	1308.4	1308.7	1307.8	1305.7	1303.6	1301.6	1299.4	1301.2
17.5°	1276.3	1276.9	1277.6	1278.2	1278.8	1278.0	1275.9	1273.8	1271.7	1269.6	1271.0
20°	1253.8	1254.4	1255.0	1255.6	1256.2	1255.4	1253.4	1251.3	1249.1	1247.1	1248.0
22.5°	1228.0	1229.1	1230.2	1231.2	1232.3	1231.7	1229.3	1227.0	1224.7	1222.4	1223.5
25°	1188.0	1189.0	1189.8	1190.7	1191.6	1191.2	1189.4	1187.6	1185.8	1184.0	1185.2
27.5°	1143.5	1144.8	1146.1	1147.4	1148.7	1148.3	1146.3	1144.3	1142.3	1140.2	1141.1
30°	1110.2	1112.0	1113.7	1115.5	1117.3	1117.3	1115.5	1113.7	1112.0	1110.2	1110.8
32.5°	1080.1	1081.7	1083.2	1084.8	1086.3	1086.4	1085.1	1083.8	1082.4	1081.2	1081.8
35°	1028.3	1030.4	1032.4	1034.6	1036.6	1037.2	1036.3	1035.4	1034.6	1033.6	1034.6
37.5°	976.5	978.4	980.2	982.2	984.1	984.9	984.6	984.3	984.0	983.7	984.9
40°	941.0	943.4	945.8	948.2	950.5	951.6	951.3	951.0	950.7	950.5	951.6
42.5°	902.3	905.4	908.5	911.6	914.8	916.6	917.3	918.0	918.6	919.3	920.7
45°	847.1	850.3	853.6	856.9	860.1	862.5	864.1	865.6	867.0	868.5	870.6
47.5°	790.4	793.4	796.5	799.5	802.5	805.4	808.0	810.5	813.0	815.6	818.7
50°	751.7	755.0	758.3	761.6	764.9	768.2	771.5	774.7	778.0	781.3	784.5
52.5°	710.9	715.0	718.9	722.9	726.9	730.9	734.9	738.9	742.9	746.9	750.4
55°	651.1	655.8	660.6	665.4	670.1	674.9	679.7	684.5	689.2	694.1	697.3
57.5°	589.9	595.6	601.3	607.0	612.8	618.4	623.9	629.3	634.8	640.3	644.1
60°	549.1	555.0	560.9	567.0	572.9	578.9	584.9	590.8	596.8	602.7	607.2
62.5°	509.3	515.3	521.2	527.2	533.1	539.4	545.8	552.2	558.7	565.2	570.1
65°	448.3	455.2	462.1	469.0	475.8	482.8	490.0	497.1	504.3	511.4	515.9
67.5°	390.9	397.5	404.2	410.8	417.4	424.4	431.6	438.9	446.2	453.5	458.9
70°	349.0	355.9	362.7	369.6	376.4	383.7	391.5	399.3	407.1	414.8	420.5
72.5°	308.2	315.3	322.4	329.5	336.7	344.4	352.8	361.4	369.8	378.3	384.4
75°	247.0	254.8	262.5	270.3	278.0	286.7	296.2	305.7	315.3	324.9	330.8
77.5°	188.2	197.2	206.1	215.1	224.0	233.1	242.3	251.4	260.6	269.8	276.4
80°	151.7	160.7	169.6	178.6	187.5	197.0	207.2	217.3	227.5	237.6	244.2
82.5°	118.4	127.9	137.2	146.7	156.1	166.0	176.4	186.8	197.2	207.5	213.9
85°	73.9	83.7	93.5	103.4	113.2	123.4	133.8	144.2	154.6	165.1	171.7
87.5°	42.0	51.7	61.4	71.1	80.8	90.8	101.2	111.5	121.7	132.1	139.1
90°	22.0	32.4	42.8	53.2	63.6	74.3	85.2	96.1	107.0	118.0	125.4
92.5°	26.9	35.1	43.3	51.6	59.8	69.4	80.5	91.5	102.5	113.7	120.8
95°	45.5	52.9	60.3	67.8	75.2	81.9	87.9	93.8	99.9	105.8	113.0
97.5°	74.3	81.9	89.5	97.0	104.6	109.2	110.7	112.3	113.9	115.5	118.6
100°	96.8	103.4	109.9	116.6	123.2	131.5	141.5	151.4	161.4	171.4	161.4
102.5°	119.7	125.9	132.1	138.3	144.5	152.4	162.0	171.5	181.1	190.7	193.6
105°	156.5	161.7	166.9	172.1	177.4	184.4	193.4	202.3	211.3	220.2	226.2
107.5°	194.8	198.8	202.9	207.0	211.0	217.4	226.3	235.1	243.8	252.7	258.6
110°	219.6	223.3	226.8	230.4	233.9	240.0	248.6	257.2	265.8	274.3	279.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	244.0	247.1	250.3	253.4	256.5	262.2	270.4	278.7	287.0	295.2	300.2
115°	279.2	281.9	284.5	287.1	289.7	295.0	302.9	310.7	318.6	326.5	331.4
117.5°	315.7	317.0	318.4	319.8	321.1	325.6	333.4	341.1	348.9	356.6	361.2
120°	339.3	340.1	340.9	341.6	342.4	346.4	353.6	360.8	368.0	375.1	380.0
122.5°	359.0	359.9	360.7	361.5	362.4	366.2	372.9	379.7	386.5	393.3	397.9
125°	391.0	391.5	391.9	392.4	392.9	396.1	402.0	408.0	414.0	419.9	424.3
127.5°	420.4	420.7	420.9	421.1	421.4	424.0	428.8	433.6	438.4	443.2	447.4
130°	439.3	439.5	439.7	440.0	440.2	442.6	446.8	451.1	455.4	459.7	463.5
132.5°	457.0	457.6	458.2	458.7	459.3	461.2	464.1	467.1	470.1	473.0	477.2
135°	483.6	484.0	484.3	484.7	485.0	486.1	488.0	489.9	491.7	493.6	497.3
137.5°	508.0	508.3	508.7	509.0	509.3	509.9	510.7	511.5	512.3	513.2	516.7
140°	523.1	523.2	523.5	523.7	523.9	524.1	524.3	524.5	524.7	524.9	528.4
142.5°	537.6	537.4	537.4	537.3	537.2	537.2	537.4	537.6	537.9	538.0	540.9
145°	558.9	558.8	558.7	558.6	558.5	558.5	558.5	558.5	558.5	558.5	560.2
147.5°	576.2	576.2	576.1	576.1	576.0	576.1	576.2	576.4	576.4	576.6	577.2
150°	588.0	587.8	587.5	587.4	587.1	587.1	587.4	587.5	587.8	588.0	588.2
152.5°	599.4	598.9	598.5	598.0	597.4	597.4	597.5	597.8	598.0	598.2	598.5
155°	614.1	613.4	612.8	612.1	611.4	611.2	611.4	611.7	611.8	612.1	612.4
157.5°	625.3	624.9	624.6	624.1	623.8	623.6	623.6	623.6	623.6	623.7	624.1
160°	633.2	632.6	631.9	631.2	630.6	630.3	630.4	630.5	630.6	630.8	631.2
162.5°	639.5	638.9	638.2	637.5	636.9	636.6	636.7	636.8	636.9	637.1	637.7
165°	647.9	647.3	646.6	646.0	645.3	645.1	645.1	645.2	645.4	645.5	646.1
167.5°	654.2	653.6	652.9	652.2	651.5	651.3	651.3	651.4	651.5	651.7	652.5
170°	657.8	657.0	656.3	655.5	654.7	654.4	654.4	654.6	654.7	654.8	655.7
172.5°	660.1	659.4	658.6	657.8	657.0	656.8	656.9	657.2	657.4	657.5	658.3
175°	662.7	662.0	661.3	660.7	660.0	659.8	659.9	660.0	660.1	660.2	661.1
177.5°	663.8	663.3	662.8	662.3	661.8	661.5	661.6	661.7	661.8	661.9	662.5
180°	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2	1369.2
2.5°	1366.1	1367.8	1369.5	1370.2	1369.9	1369.8	1369.5	1369.2
5°	1361.9	1364.3	1366.8	1367.8	1367.4	1367.2	1366.8	1366.6
7.5°	1350.6	1352.7	1354.8	1355.6	1355.4	1355.0	1354.8	1354.4
10°	1339.9	1342.0	1344.0	1345.0	1344.6	1344.4	1344.0	1343.8
12.5°	1327.1	1328.7	1330.3	1330.8	1330.0	1329.2	1328.4	1327.7
15°	1303.0	1304.8	1306.6	1306.9	1305.7	1304.5	1303.3	1302.1
17.5°	1272.4	1273.8	1275.1	1275.5	1274.7	1274.0	1273.3	1272.6
20°	1248.9	1249.7	1250.7	1251.1	1251.1	1251.1	1251.1	1251.1
22.5°	1224.7	1225.8	1226.9	1227.1	1226.4	1225.7	1224.9	1224.3
25°	1186.4	1187.6	1188.8	1188.6	1187.1	1185.6	1184.1	1182.7
27.5°	1141.9	1142.7	1143.6	1143.8	1143.1	1142.6	1142.1	1141.6
30°	1111.4	1112.0	1112.6	1112.7	1112.4	1112.1	1111.8	1111.5
32.5°	1082.4	1083.0	1083.6	1083.7	1083.4	1083.1	1082.8	1082.5
35°	1035.4	1036.3	1037.2	1037.7	1037.7	1037.7	1037.7	1037.7
37.5°	986.1	987.3	988.5	989.0	988.9	988.8	988.7	988.5
40°	952.8	954.0	955.2	956.1	956.7	957.3	957.9	958.5
42.5°	922.1	923.6	925.0	925.7	925.9	926.0	926.2	926.3
45°	872.7	874.8	876.8	878.0	878.4	878.7	879.0	879.3
47.5°	821.7	824.8	827.9	829.7	830.3	831.0	831.6	832.3
50°	787.8	791.1	794.4	796.5	797.4	798.3	799.2	800.0
52.5°	754.0	757.5	761.0	763.1	763.7	764.4	765.1	765.7
55°	700.6	703.9	707.1	709.4	710.6	711.8	713.0	714.2
57.5°	647.8	651.6	655.4	657.7	658.6	659.4	660.4	661.2
60°	611.7	616.1	620.6	623.3	624.2	625.1	626.0	626.9
62.5°	575.1	580.0	585.0	588.0	589.1	590.3	591.4	592.5
65°	520.4	524.9	529.3	532.2	533.4	534.6	535.8	536.9
67.5°	464.3	469.8	475.2	478.6	480.2	481.7	483.4	484.9
70°	426.1	431.8	437.5	441.2	443.0	444.8	446.6	448.3
72.5°	390.5	396.7	402.9	406.6	407.9	409.2	410.5	411.8
75°	336.8	342.8	348.7	352.5	354.0	355.4	357.0	358.4
77.5°	282.9	289.5	296.1	300.0	301.2	302.3	303.5	304.7
80°	250.7	257.3	263.9	267.8	268.9	270.1	271.3	272.5
82.5°	220.2	226.5	232.8	237.0	239.2	241.3	243.5	245.6
85°	178.2	184.8	191.4	195.9	198.2	200.6	203.0	205.3
87.5°	146.0	153.0	160.0	164.5	166.7	168.8	171.0	173.1
90°	132.8	140.2	147.6	152.5	154.9	157.3	159.7	162.1
92.5°	127.9	135.2	142.3	147.1	149.3	151.5	153.8	156.0
95°	120.1	127.2	134.3	138.9	140.9	143.1	145.2	147.2
97.5°	121.8	125.0	128.2	130.8	132.9	134.8	136.9	138.9
100°	151.4	141.4	131.4	127.1	128.4	129.8	131.1	132.5
102.5°	196.6	199.5	202.4	201.1	195.4	189.9	184.3	178.6
105°	232.1	238.2	244.1	248.1	250.0	252.0	254.0	256.0
107.5°	264.5	270.4	276.4	280.1	281.6	283.2	284.6	286.2
110°	285.0	290.3	295.7	299.5	301.6	303.8	306.1	308.2



TEST NUMBER: P333307-935

CATALOG NUMBER: S125DIP-S1270D590U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	305.2	310.2	315.2	318.7	320.6	322.6	324.5	326.5
115°	336.3	341.3	346.2	349.2	350.3	351.5	352.7	353.8
117.5°	365.7	370.1	374.7	377.8	379.5	381.3	383.1	384.8
120°	384.9	389.7	394.6	397.6	398.9	400.1	401.3	402.6
122.5°	402.5	407.1	411.7	414.6	415.8	416.9	418.1	419.2
125°	428.6	432.9	437.3	440.1	441.2	442.4	443.5	444.7
127.5°	451.6	455.7	459.9	462.4	463.4	464.3	465.3	466.1
130°	467.4	471.2	475.0	477.4	478.4	479.3	480.3	481.2
132.5°	481.3	485.3	489.5	491.9	492.6	493.4	494.0	494.7
135°	500.9	504.6	508.2	510.5	511.3	512.2	513.0	513.8
137.5°	520.3	523.8	527.4	529.5	530.1	530.7	531.4	532.0
140°	531.8	535.4	538.9	540.9	541.4	542.0	542.5	543.0
142.5°	543.7	546.6	549.4	551.1	551.6	552.2	552.8	553.3
145°	561.7	563.4	564.9	566.0	566.5	567.1	567.7	568.2
147.5°	577.8	578.4	579.0	579.2	578.9	578.8	578.5	578.2
150°	588.4	588.7	588.8	588.7	588.1	587.5	586.9	586.4
152.5°	598.7	598.9	599.1	598.8	598.1	597.4	596.7	595.9
155°	612.8	613.0	613.4	613.1	612.3	611.4	610.5	609.6
157.5°	624.4	624.7	625.1	624.8	624.0	623.0	622.2	621.3
160°	631.6	632.1	632.5	632.2	631.4	630.5	629.6	628.8
162.5°	638.3	638.9	639.5	639.3	638.3	637.4	636.5	635.4
165°	646.8	647.5	648.1	648.0	647.1	646.3	645.4	644.5
167.5°	653.2	654.0	654.8	654.7	653.8	652.7	651.8	650.7
170°	656.6	657.5	658.3	658.2	657.3	656.3	655.3	654.4
172.5°	659.1	660.0	660.7	660.6	659.6	658.7	657.6	656.7
175°	661.9	662.8	663.7	663.7	662.7	661.7	660.7	659.7
177.5°	663.1	663.7	664.3	664.3	663.6	662.9	662.2	661.5
180°	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7

(END OF REPORT)