

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: P333468-935

Luminaire Tested: **S125DIW-S1270D770U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333468-935  
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: S125DIW-S1270D770U935-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 770 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6885.6 lumens  
Efficiency: N/A  
Efficacy: 115.1 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

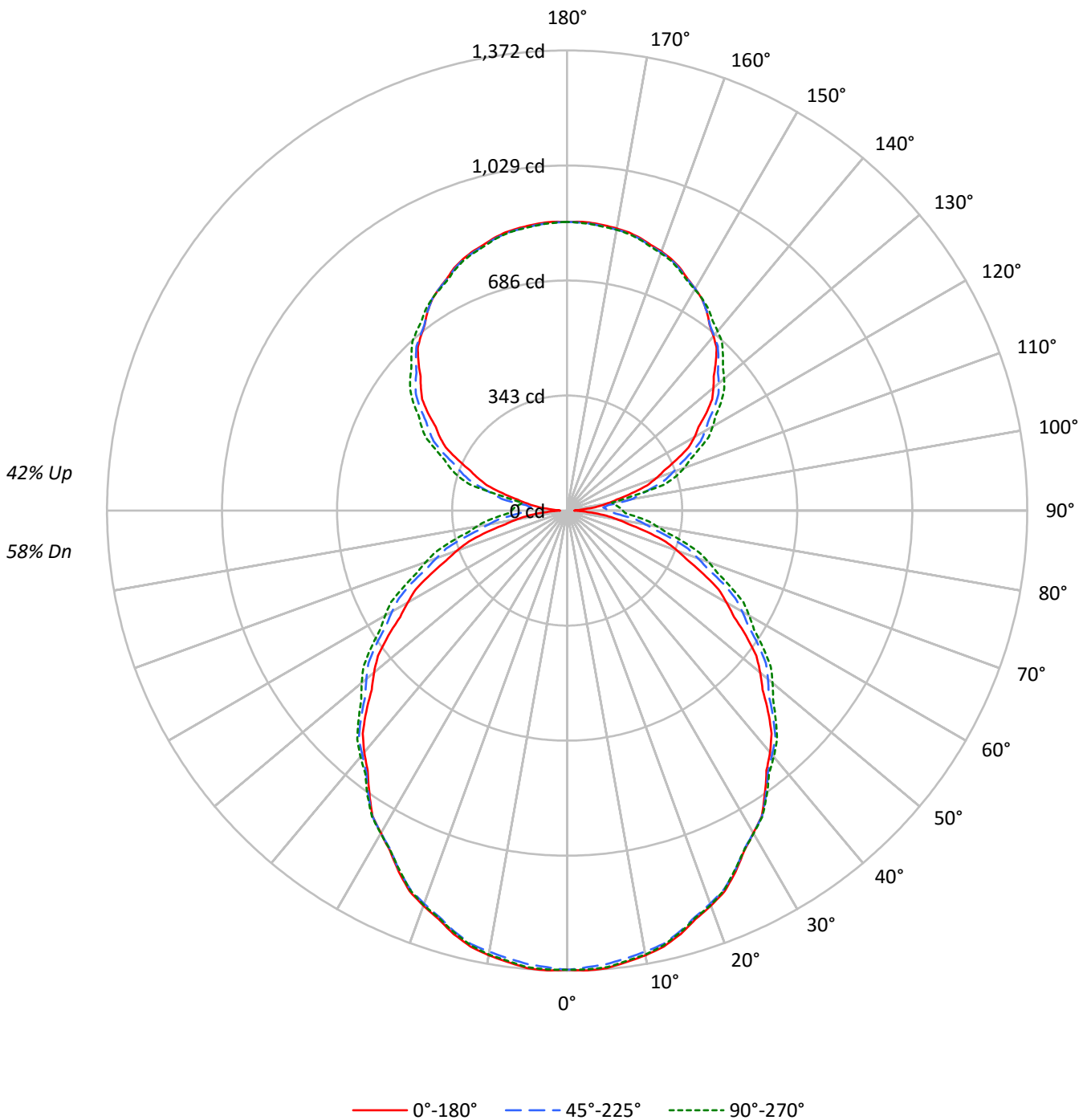
Input Watts (W): 59.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333468-935

CATALOG NUMBER: S125DIW-S1270D770U935-4F0-1E-UDD-D

### Luminous Intensity Polar Plot





TEST NUMBER: P333468-935

CATALOG NUMBER: S125DIW-S1270D770U935-4F0-1E-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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63	58
1	99	94	90	86	92	88	84	80	76	73	70	65	63	61	55	53	52	47
2	90	82	75	69	83	76	70	65	66	61	58	56	53	50	48	45	43	39
3	81	71	64	57	75	67	60	54	58	52	48	50	45	42	42	39	36	32
4	74	63	55	48	69	59	52	46	51	45	41	44	39	36	37	34	31	28
5	68	56	48	41	63	53	45	39	46	40	35	39	35	31	34	30	27	24
6	63	50	42	36	58	47	40	34	41	35	30	36	31	27	30	27	24	21
7	58	45	37	31	54	43	35	30	37	31	27	32	27	24	28	24	21	18
8	54	41	33	28	50	39	31	26	34	28	24	30	25	21	25	22	19	16
9	50	38	30	25	47	35	28	24	31	25	21	27	22	19	23	20	17	15
10	47	35	27	22	44	33	26	21	29	23	19	25	21	17	22	18	15	13

**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	1.9
10°-20°	367.5	5.3
20°-30°	546.6	7.9
30°-40°	647.5	9.4
40°-50°	669.4	9.7
50°-60°	616.7	9.0
60°-70°	498.5	7.2
70°-80°	333.8	4.8
80°-90°	174.9	2.5
90°-100°	128.4	1.9
100°-110°	264.4	3.8
110°-120°	397.6	5.8
120°-130°	475.9	6.9
130°-140°	494.5	7.2
140°-150°	455.4	6.6
150°-160°	366.4	5.3
160°-170°	237.0	3.4
170°-180°	81.7	1.2
0°-30°	1043.6	15.2
0°-40°	1691.1	24.6
0°-60°	2977.2	43.2
0°-90°	3984.4	57.9
90°-120°	790.4	11.5
90°-150°	2216.1	32.2
90°-180°	2901.0	42.1
0°-180°	6885.6	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	70	120	153	166	16
95°	54	86	108	140	150	60
105°	200	225	264	290	300	212
115°	360	374	408	429	434	357
125°	506	511	536	554	560	452
135°	627	630	638	653	657	483
145°	726	725	725	732	734	453
155°	798	794	795	796	792	367
165°	842	838	838	842	837	238
175°	861	857	858	862	857	82
180°	861	861	861	861	861	



TEST NUMBER: P333468-935

CATALOG NUMBER: S125DIW-S1270D770U935-4F0-1E-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	61.6	71.3	81.1	91.2	101.5	111.8	122.2	132.5	139.6
90°	22.1	32.8	43.5	54.2	64.8	75.8	86.9	98.0	109.2	120.3	127.9
92.5°	29.2	37.2	45.2	53.3	61.3	70.9	82.2	93.5	104.7	116.0	123.3
95°	53.8	61.1	68.4	75.8	83.2	89.2	93.9	98.7	103.4	108.2	115.5
97.5°	91.8	99.5	107.3	115.0	122.8	126.1	125.3	124.4	123.6	122.7	124.9
100°	121.3	128.0	134.7	141.4	148.1	156.4	166.6	176.7	186.8	196.9	182.1
102.5°	151.4	157.7	164.0	170.3	176.7	184.7	194.3	204.0	213.6	223.3	225.2
105°	199.7	205.0	210.3	215.7	221.0	228.2	237.1	246.1	255.0	264.0	269.9
107.5°	249.9	253.9	258.0	262.0	266.0	272.5	281.4	290.2	299.2	308.1	314.0
110°	282.4	286.0	289.6	293.2	296.8	302.9	311.5	320.1	328.8	337.4	342.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	314.1	317.3	320.5	323.7	326.9	332.7	341.0	349.2	357.5	365.8	370.7
115°	360.2	363.0	365.8	368.6	371.4	376.8	384.6	392.5	400.5	408.4	413.1
117.5°	408.0	409.3	410.7	412.0	413.4	418.0	425.9	433.8	441.6	449.5	453.8
120°	438.6	439.4	440.1	440.9	441.6	445.7	453.0	460.2	467.5	474.8	479.6
122.5°	464.6	465.5	466.5	467.4	468.4	472.3	479.1	485.9	492.8	499.6	504.1
125°	506.2	506.9	507.6	508.2	508.9	512.3	518.2	524.2	530.2	536.1	540.4
127.5°	544.8	545.2	545.6	546.0	546.4	549.1	553.8	558.6	563.4	568.3	572.4
130°	569.3	569.6	570.1	570.5	570.9	573.3	577.6	581.9	586.3	590.6	594.3
132.5°	592.7	593.5	594.2	595.0	595.7	597.6	600.5	603.4	606.3	609.2	613.3
135°	627.2	627.8	628.4	628.9	629.5	630.7	632.5	634.2	636.0	637.8	641.4
137.5°	659.0	659.5	660.0	660.5	661.0	661.7	662.4	663.1	663.9	664.7	668.2
140°	678.9	679.2	679.4	679.8	680.0	680.2	680.4	680.5	680.7	680.9	684.4
142.5°	697.8	697.7	697.6	697.6	697.5	697.6	697.8	698.1	698.4	698.6	701.5
145°	725.5	725.4	725.4	725.4	725.4	725.4	725.4	725.4	725.4	725.4	727.0
147.5°	748.4	748.3	748.2	748.2	748.1	748.2	748.4	748.5	748.6	748.8	749.5
150°	763.6	763.4	763.1	762.8	762.5	762.5	762.8	763.1	763.4	763.6	764.0
152.5°	778.4	777.8	777.2	776.6	775.9	775.8	776.1	776.4	776.6	776.9	777.2
155°	797.5	796.6	795.7	794.9	794.1	793.8	794.1	794.4	794.6	794.9	795.3
157.5°	812.1	811.7	811.1	810.6	810.1	809.9	809.9	809.9	809.9	809.9	810.5
160°	822.3	821.5	820.6	819.8	819.0	818.6	818.7	818.9	819.0	819.2	819.8
162.5°	830.5	829.7	828.8	827.9	827.1	826.7	826.9	827.1	827.2	827.3	828.1
165°	841.5	840.6	839.8	839.0	838.1	837.8	837.8	838.0	838.2	838.3	839.1
167.5°	849.6	848.8	847.9	847.1	846.1	845.8	845.9	846.0	846.2	846.4	847.3
170°	854.3	853.3	852.2	851.3	850.2	849.8	850.0	850.2	850.2	850.4	851.5
172.5°	857.3	856.4	855.3	854.3	853.3	853.0	853.3	853.5	853.8	854.0	855.0
175°	860.7	859.8	858.9	858.1	857.2	856.9	857.0	857.1	857.3	857.5	858.6
177.5°	862.1	861.4	860.8	860.1	859.5	859.1	859.3	859.4	859.5	859.6	860.4
180°	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7



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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°	146.5	153.5	160.6	165.1	167.3	169.4	171.7	173.8
90°	135.4	143.0	150.6	155.6	158.1	160.7	163.2	165.7
92.5°	130.6	138.0	145.3	150.2	152.4	154.7	157.0	159.3
95°	122.8	130.0	137.3	142.0	144.0	146.1	148.3	150.3
97.5°	127.2	129.5	131.7	133.9	136.0	137.9	140.0	142.0
100°	167.2	152.3	137.5	130.7	131.9	133.1	134.3	135.5
102.5°	227.3	229.4	231.4	228.4	220.6	212.8	204.9	197.1
105°	275.9	281.8	287.8	291.8	293.7	295.7	297.6	299.5
107.5°	319.9	325.8	331.7	335.4	336.9	338.3	339.8	341.1
110°	347.9	353.2	358.3	362.1	364.4	366.6	368.9	371.0





TEST NUMBER: P333468-935

CATALOG NUMBER: S125DIW-S1270D770U935-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	375.6	380.5	385.4	388.7	390.6	392.5	394.4	396.3
115°	417.9	422.8	427.6	430.4	431.4	432.3	433.3	434.2
117.5°	458.1	462.5	466.8	469.8	471.5	473.1	474.8	476.5
120°	484.4	489.1	494.0	496.9	498.0	499.0	500.2	501.2
122.5°	508.7	513.2	517.8	520.6	521.5	522.5	523.5	524.4
125°	544.6	548.8	552.9	555.6	556.6	557.8	558.8	559.9
127.5°	576.4	580.6	584.7	587.0	587.7	588.4	589.1	589.8
130°	598.1	601.8	605.5	607.8	608.6	609.4	610.2	611.0
132.5°	617.4	621.5	625.6	627.9	628.4	629.0	629.6	630.1
135°	645.1	648.7	652.2	654.4	655.0	655.7	656.3	656.9
137.5°	671.8	675.4	679.0	681.0	681.5	681.9	682.3	682.9
140°	687.9	691.6	695.1	697.1	697.4	697.8	698.1	698.4
142.5°	704.3	707.2	710.1	711.6	712.0	712.3	712.6	713.0
145°	728.7	730.3	731.9	732.9	733.2	733.6	733.9	734.3
147.5°	750.1	750.8	751.5	751.5	751.1	750.5	750.1	749.6
150°	764.2	764.5	764.8	764.5	763.7	762.8	762.0	761.1
152.5°	777.5	777.7	778.1	777.7	776.8	775.8	774.8	773.9
155°	795.7	796.2	796.6	796.3	795.1	794.0	792.9	791.7
157.5°	810.9	811.3	811.8	811.4	810.3	809.2	808.0	806.9
160°	820.3	820.9	821.4	821.1	820.0	818.9	817.8	816.6
162.5°	828.9	829.7	830.5	830.3	829.1	827.8	826.6	825.3
165°	840.0	840.9	841.7	841.5	840.4	839.3	838.2	837.0
167.5°	848.3	849.4	850.4	850.3	849.0	847.7	846.4	845.2
170°	852.6	853.9	855.0	854.9	853.6	852.3	851.0	849.8
172.5°	856.0	857.0	858.1	857.9	856.7	855.4	854.1	852.8
175°	859.7	860.8	861.9	861.9	860.7	859.4	858.1	856.8
177.5°	861.2	861.9	862.8	862.7	861.8	860.9	860.0	859.1
180°	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7

(END OF REPORT)