

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: P333462-935

Luminaire Tested: **S125DIW-S1270D470U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333462-935  
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-S1270D470U935-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 1270 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 470 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5855.7 lumens  
Efficiency: N/A  
Efficacy: 111.7 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

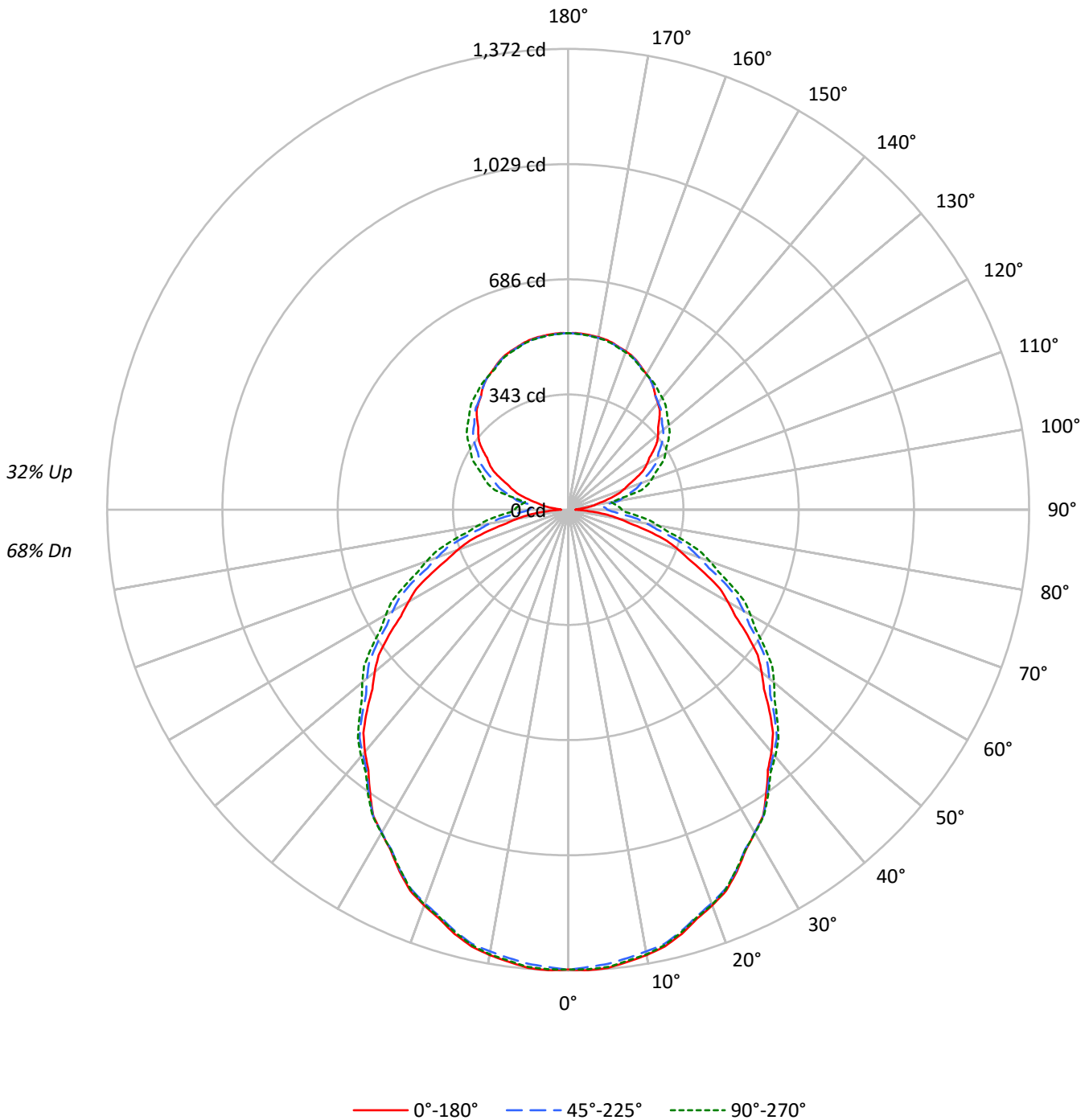
Input Watts (W): 52.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333462-935

CATALOG NUMBER: S125DIW-S1270D470U935-4F0-1E-UDD-D

### Luminous Intensity Polar Plot





TEST NUMBER: P333462-935

CATALOG NUMBER: S125DIW-S1270D470U935-4F0-1E-UDD-D

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																														
0	111	111	111	111	105	105	105	105	93	93	93	83	83	83	73	73	73	68																												
1	101	96	92	88	95	91	87	83	80	77	75	71	69	67	63	61	59	55																												
2	91	83	76	71	86	79	73	67	70	65	61	62	58	55	55	52	49	45																												
3	83	73	65	59	78	69	62	56	61	56	51	54	50	46	48	45	42	38																												
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	43	39	36	32																												
5	70	57	49	42	65	54	46	41	49	42	37	43	38	34	38	34	31	28																												
6	64	51	43	37	60	49	41	35	44	37	32	39	34	30	35	30	27	24																												
7	59	46	38	32	56	44	36	31	40	33	29	36	30	26	32	27	24	22																												
8	55	42	34	28	52	40	33	27	36	30	25	33	27	23	29	25	21	19																												
9	52	39	31	25	48	37	30	25	33	27	23	30	25	21	27	23	19	17																												
10	48	36	28	23	45	34	27	22	31	25	21	28	23	19	25	21	18	16																												

**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	2.2
10°-20°	367.5	6.3
20°-30°	546.6	9.3
30°-40°	647.5	11.1
40°-50°	669.4	11.4
50°-60°	616.7	10.5
60°-70°	498.5	8.5
70°-80°	333.8	5.7
80°-90°	174.2	3.0
90°-100°	116.2	2.0
100°-110°	189.3	3.2
110°-120°	261.4	4.5
120°-130°	301.2	5.1
130°-140°	306.5	5.2
140°-150°	279.0	4.8
150°-160°	223.7	3.8
160°-170°	144.7	2.5
170°-180°	49.9	0.9
0°-30°	1043.6	17.8
0°-40°	1691.1	28.9
0°-60°	2977.2	50.8
0°-90°	3983.7	68.0
90°-120°	567.0	9.7
90°-150°	1453.7	24.8
90°-180°	1872.0	32.0
0°-180°	5855.7	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	68	116	148	160	15
95°	40	73	104	134	145	42
105°	127	151	190	216	226	134
115°	223	236	270	291	298	221
125°	311	314	339	358	365	278
135°	384	385	394	410	415	296
145°	443	443	443	450	453	277
155°	487	485	485	486	483	224
165°	514	512	512	514	511	145
175°	526	523	524	526	523	50
180°	526	526	526	526	526	



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CATALOG NUMBER: S125DIW-S1270D470U935-4F0-1E-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°	41.9	51.7	61.3	71.0	80.7	90.7	100.9	111.2	121.5	131.7	138.7
90°	21.9	32.1	42.4	52.6	62.9	73.4	84.0	94.8	105.6	116.3	123.6
92.5°	25.3	33.7	42.0	50.4	58.7	68.4	79.3	90.1	101.1	112.0	119.1
95°	39.7	47.2	54.7	62.2	69.7	76.8	83.7	90.5	97.4	104.3	111.2
97.5°	62.2	69.7	77.1	84.6	92.0	97.4	100.7	103.9	107.2	110.5	114.3
100°	79.8	86.4	92.9	99.4	105.9	114.1	124.0	133.9	143.8	153.7	147.1
102.5°	97.7	103.8	109.9	116.1	122.2	130.0	139.6	149.0	158.6	168.1	171.7
105°	126.6	131.7	136.8	142.0	147.1	154.1	163.1	172.0	181.0	189.9	195.9
107.5°	156.6	160.7	164.7	168.8	172.8	179.3	188.0	196.8	205.5	214.3	220.2
110°	176.1	179.7	183.3	186.8	190.5	196.5	205.0	213.5	222.1	230.6	236.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	195.4	198.5	201.6	204.7	207.7	213.4	221.5	229.8	238.0	246.2	251.3
115°	223.1	225.6	228.1	230.7	233.2	238.3	246.2	254.0	261.8	269.7	274.7
117.5°	251.8	253.0	254.4	255.8	257.1	261.7	269.3	277.0	284.6	292.3	297.0
120°	270.4	271.2	272.0	272.9	273.6	277.6	284.7	291.9	298.9	306.1	311.0
122.5°	285.9	286.6	287.3	288.1	288.9	292.6	299.4	306.1	312.8	319.5	324.3
125°	311.2	311.4	311.8	312.0	312.4	315.5	321.5	327.4	333.4	339.4	343.8
127.5°	334.2	334.3	334.4	334.6	334.8	337.2	342.1	346.9	351.7	356.5	360.8
130°	349.1	349.3	349.4	349.6	349.7	351.9	356.1	360.4	364.6	368.9	372.8
132.5°	363.0	363.4	363.9	364.4	364.8	366.5	369.5	372.6	375.7	378.7	382.8
135°	384.0	384.3	384.4	384.7	384.9	386.0	387.9	389.8	391.8	393.6	397.4
137.5°	403.3	403.6	403.7	403.9	404.2	404.7	405.5	406.4	407.3	408.1	411.6
140°	415.0	415.2	415.3	415.5	415.7	415.9	416.1	416.3	416.6	416.7	420.2
142.5°	426.5	426.4	426.3	426.1	426.0	426.0	426.2	426.4	426.5	426.7	429.6
145°	443.4	443.3	443.2	443.1	442.9	442.9	442.9	442.9	442.9	442.9	444.4
147.5°	456.9	456.8	456.8	456.8	456.8	456.8	456.9	457.0	457.1	457.2	457.8
150°	466.2	466.1	465.9	465.7	465.5	465.5	465.7	465.9	466.1	466.2	466.4
152.5°	475.3	474.9	474.5	474.2	473.7	473.6	473.8	474.0	474.2	474.3	474.5
155°	486.9	486.4	485.9	485.3	484.8	484.7	484.8	485.0	485.2	485.3	485.6
157.5°	495.8	495.5	495.2	494.9	494.6	494.5	494.5	494.5	494.5	494.6	494.8
160°	502.0	501.5	501.0	500.5	500.0	499.8	499.9	500.0	500.1	500.2	500.5
162.5°	507.0	506.5	506.0	505.5	505.0	504.8	504.9	505.0	505.1	505.1	505.6
165°	513.8	513.2	512.7	512.2	511.7	511.4	511.5	511.6	511.7	511.8	512.3
167.5°	518.8	518.2	517.7	517.1	516.6	516.3	516.4	516.5	516.6	516.7	517.4
170°	521.6	521.0	520.3	519.7	519.1	518.8	518.9	519.0	519.1	519.2	519.9
172.5°	523.4	522.8	522.2	521.6	521.0	520.8	520.9	521.1	521.2	521.4	522.0
175°	525.5	525.0	524.4	523.9	523.4	523.1	523.2	523.3	523.4	523.5	524.2
177.5°	526.4	526.0	525.6	525.1	524.7	524.5	524.6	524.7	524.8	524.9	525.3
180°	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5



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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°	145.6	152.6	159.5	164.0	166.2	168.3	170.5	172.6
90°	130.9	138.2	145.5	150.3	152.7	155.0	157.4	159.7
92.5°	126.1	133.2	140.3	144.9	147.1	149.3	151.5	153.7
95°	118.2	125.2	132.2	136.7	138.9	140.9	143.0	145.1
97.5°	118.1	121.9	125.7	128.6	130.7	132.8	134.7	136.8
100°	140.4	133.8	127.2	124.6	126.0	127.4	128.9	130.4
102.5°	175.3	178.8	182.4	182.2	178.1	174.0	169.9	165.8
105°	201.8	207.8	213.8	217.7	219.7	221.8	223.8	225.8
107.5°	226.2	232.1	238.0	241.8	243.3	245.0	246.5	248.1
110°	241.4	246.8	252.2	256.0	258.2	260.4	262.5	264.7





TEST NUMBER: P333462-935

CATALOG NUMBER: S125DIW-S1270D470U935-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	256.4	261.6	266.7	270.2	272.2	274.1	276.0	278.0
115°	279.7	284.7	289.8	292.9	294.2	295.5	296.8	298.0
117.5°	301.5	306.2	310.8	314.0	315.8	317.6	319.4	321.2
120°	315.9	320.8	325.7	328.8	330.2	331.5	332.9	334.2
122.5°	328.9	333.6	338.2	341.1	342.4	343.7	345.0	346.3
125°	348.2	352.7	357.1	359.9	361.1	362.4	363.6	364.8
127.5°	365.0	369.2	373.5	376.1	377.2	378.3	379.4	380.5
130°	376.8	380.6	384.6	387.1	388.1	389.2	390.3	391.3
132.5°	386.9	391.0	395.1	397.6	398.5	399.2	400.1	400.9
135°	401.1	404.8	408.5	410.8	411.7	412.8	413.7	414.7
137.5°	415.3	418.8	422.3	424.5	425.2	425.9	426.7	427.5
140°	423.6	427.1	430.6	432.7	433.3	433.9	434.6	435.3
142.5°	432.4	435.2	438.1	439.9	440.5	441.2	441.9	442.6
145°	446.0	447.6	449.2	450.3	451.0	451.7	452.4	453.0
147.5°	458.4	458.9	459.5	459.8	459.7	459.6	459.5	459.4
150°	466.6	466.7	466.9	466.8	466.4	466.1	465.6	465.3
152.5°	474.7	474.8	475.0	474.8	474.2	473.7	473.1	472.6
155°	485.9	486.1	486.4	486.1	485.4	484.7	484.1	483.4
157.5°	495.1	495.3	495.6	495.4	494.7	494.0	493.4	492.7
160°	500.8	501.2	501.5	501.4	500.7	500.0	499.3	498.6
162.5°	506.1	506.6	507.0	507.0	506.2	505.4	504.6	503.9
165°	512.9	513.4	513.9	513.8	513.2	512.4	511.7	511.0
167.5°	518.0	518.6	519.2	519.2	518.3	517.5	516.8	516.0
170°	520.6	521.3	522.0	521.9	521.2	520.4	519.6	518.8
172.5°	522.6	523.2	523.9	523.8	523.1	522.3	521.5	520.7
175°	524.9	525.6	526.2	526.2	525.5	524.7	523.9	523.1
177.5°	525.8	526.2	526.8	526.8	526.2	525.6	525.0	524.5
180°	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5

(END OF REPORT)