

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: P333390-927

Luminaire Tested: **S125DIW-S610D1340U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333390-927  
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-S610D1340U927-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 1340 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6153.3 lumens  
Efficiency: N/A  
Efficacy: 114.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: Semi-Indirect

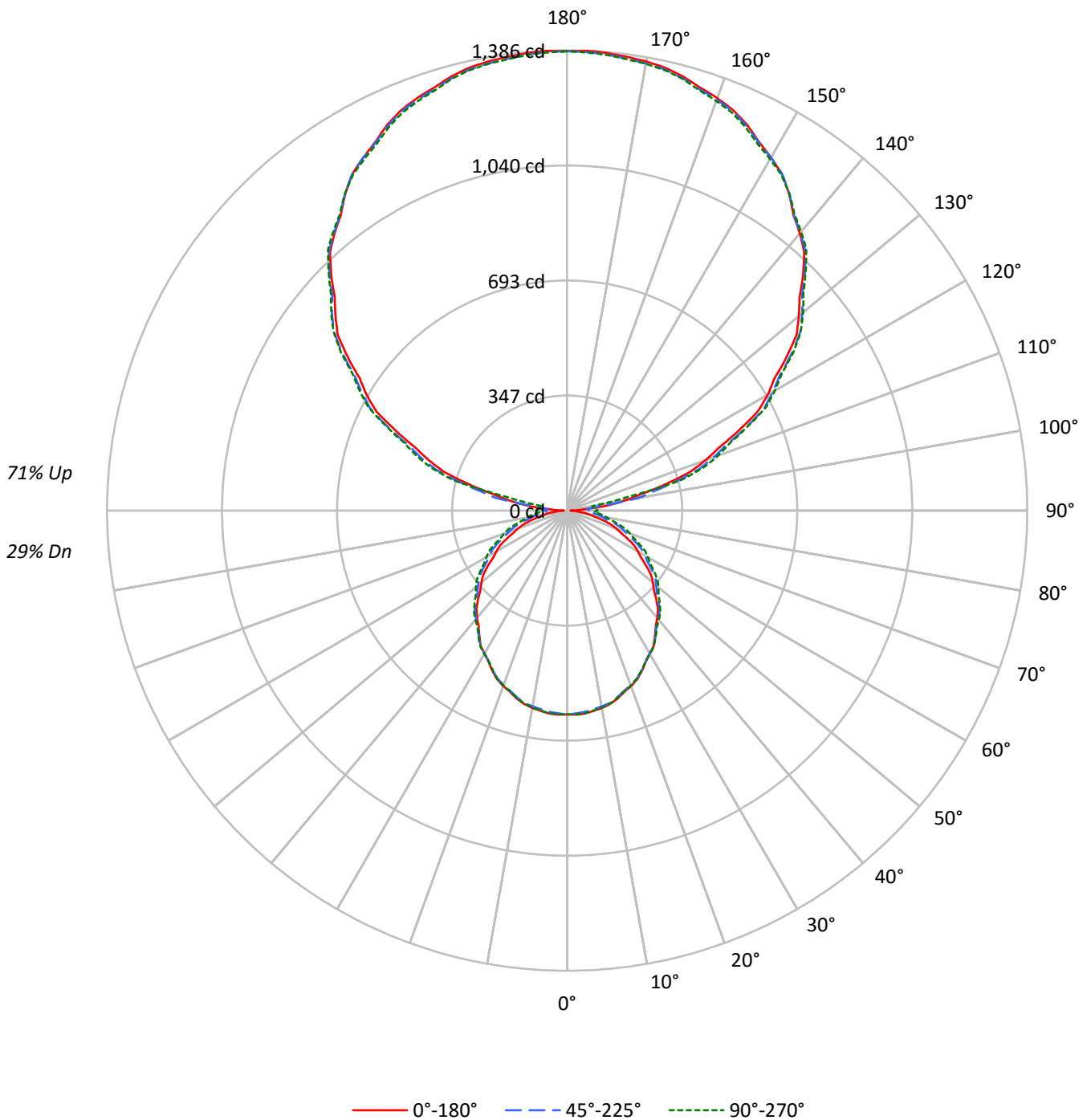
Input Watts (W): 53.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P333390-927

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### Luminous Intensity Polar Plot





TEST NUMBER: P333390-927

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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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	24
2	84	77	71	66	75	69	64	59	54	51	47	40	38	36	28	26	25	19
3	77	67	60	54	68	60	54	49	48	43	40	36	33	30	24	23	21	16
4	70	59	52	46	62	53	47	42	42	37	34	32	28	26	22	20	18	14
5	64	53	45	39	57	47	41	35	37	32	29	28	25	22	20	17	16	12
6	59	47	39	33	52	42	36	31	34	29	25	25	22	19	18	15	14	10
7	54	42	35	29	48	38	31	27	30	25	22	23	19	17	16	14	12	9
8	50	38	31	26	45	35	28	23	28	23	19	21	17	15	15	12	11	8
9	47	35	27	23	42	31	25	21	25	20	17	19	16	13	14	11	10	7
10	43	32	25	20	39	29	23	18	23	18	15	18	14	12	13	10	9	7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3965	3965	3965
5°	3973	3892	3904
10°	3945	3822	3817
15°	3898	3740	3705
20°	3834	3636	3593
25°	3759	3526	3457
30°	3667	3405	3332
35°	3583	3293	3217
40°	3496	3176	3103
45°	3398	3076	3001
50°	3305	2967	2910
55°	3192	2865	2804
60°	3069	2747	2697
65°	2942	2625	2574
70°	2795	2458	2451
75°	2563	2297	2296
80°	2262	2101	2129
85°	1981	1972	2077



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.1	0.9
10°-20°	164.8	2.7
20°-30°	245.1	4.0
30°-40°	290.3	4.7
40°-50°	300.2	4.9
50°-60°	276.5	4.5
60°-70°	223.5	3.6
70°-80°	149.7	2.4
80°-90°	80.5	1.3
90°-100°	93.8	1.5
100°-110°	342.0	5.6
110°-120°	583.5	9.5
120°-130°	733.5	11.9
130°-140°	781.1	12.7
140°-150°	729.3	11.9
150°-160°	589.1	9.6
160°-170°	381.0	6.2
170°-180°	131.4	2.1
0°-30°	467.9	7.6
0°-40°	758.2	12.3
0°-60°	1334.9	21.7
0°-90°	1788.6	29.1
90°-120°	1019.4	16.6
90°-150°	3263.3	53.0
90°-180°	4365.0	70.9
0°-180°	6153.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	614	613	608	613	613	58
15°	586	587	583	586	584	165
25°	533	534	531	533	530	245
35°	461	465	463	465	465	288
45°	380	386	389	393	394	293
55°	292	302	311	318	320	261
65°	201	215	229	238	241	199
75°	111	127	146	157	161	117
85°	33	53	74	87	92	35
90°	11	38	66	84	92	9
95°	66	77	60	78	83	81
105°	307	321	339	350	354	325
115°	570	580	596	602	600	565
125°	808	814	826	831	832	721
135°	1005	1011	1013	1018	1016	775
145°	1165	1166	1166	1170	1166	728
155°	1282	1276	1278	1280	1273	590
165°	1353	1347	1348	1353	1346	382
175°	1384	1378	1378	1386	1377	132
180°	1384	1384	1384	1384	1384	



TEST NUMBER: P333390-927

CATALOG NUMBER: S125DIW-S610D1340U927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	615.4	615.1	615.0	614.7	614.5	614.0	613.3	612.5	611.8	611.0	611.8
5°	613.9	613.6	613.4	613.1	612.8	612.3	611.3	610.4	609.4	608.5	609.6
7.5°	608.5	608.4	608.3	608.2	608.1	607.5	606.6	605.6	604.7	603.7	604.6
10°	603.7	603.7	603.7	603.7	603.7	603.2	602.1	601.0	599.9	598.9	599.8
12.5°	597.0	597.1	597.1	597.3	597.4	597.0	596.1	595.3	594.5	593.6	594.3
15°	586.2	586.4	586.5	586.6	586.8	586.4	585.4	584.5	583.6	582.7	583.4
17.5°	572.3	572.5	572.8	573.1	573.4	573.0	572.1	571.2	570.2	569.3	569.9
20°	562.1	562.4	562.7	563.0	563.2	562.9	562.0	561.0	560.1	559.1	559.5
22.5°	550.6	551.1	551.6	552.1	552.5	552.2	551.2	550.2	549.1	548.1	548.6
25°	532.7	533.1	533.5	533.9	534.2	534.1	533.3	532.5	531.6	530.8	531.4
27.5°	512.7	513.3	513.9	514.4	515.1	514.9	514.0	513.1	512.1	511.3	511.6
30°	497.7	498.6	499.4	500.2	501.0	501.0	500.2	499.4	498.6	497.7	498.0
32.5°	484.3	485.0	485.7	486.4	487.0	487.1	486.6	485.9	485.4	484.7	485.1
35°	461.1	462.0	463.0	463.8	464.8	465.1	464.7	464.2	463.8	463.4	463.8
37.5°	437.8	438.7	439.5	440.4	441.2	441.6	441.5	441.3	441.2	441.1	441.6
40°	421.9	423.0	424.1	425.2	426.2	426.7	426.5	426.4	426.3	426.1	426.7
42.5°	404.6	406.0	407.3	408.8	410.2	411.0	411.3	411.6	411.9	412.2	412.8
45°	379.8	381.3	382.7	384.2	385.7	386.7	387.5	388.1	388.7	389.4	390.4
47.5°	354.4	355.8	357.1	358.5	359.9	361.1	362.3	363.4	364.6	365.7	367.1
50°	337.1	338.5	340.0	341.5	342.9	344.4	345.9	347.4	348.8	350.3	351.8
52.5°	318.8	320.5	322.3	324.2	325.9	327.7	329.5	331.3	333.1	334.9	336.4
55°	291.9	294.1	296.2	298.3	300.5	302.6	304.8	306.9	309.0	311.2	312.7
57.5°	264.5	267.0	269.6	272.2	274.7	277.3	279.7	282.2	284.6	287.1	288.8
60°	246.2	248.8	251.5	254.2	256.9	259.5	262.2	264.9	267.6	270.2	272.3
62.5°	228.4	231.0	233.7	236.4	239.1	241.9	244.7	247.6	250.5	253.4	255.6
65°	201.1	204.1	207.2	210.2	213.3	216.5	219.7	222.9	226.1	229.3	231.3
67.5°	175.3	178.2	181.2	184.2	187.1	190.3	193.5	196.8	200.0	203.4	205.7
70°	156.5	159.5	162.6	165.7	168.8	172.1	175.5	179.0	182.5	186.0	188.5
72.5°	138.2	141.4	144.6	147.7	150.9	154.4	158.2	162.0	165.8	169.6	172.4
75°	110.7	114.2	117.7	121.2	124.7	128.6	132.8	137.1	141.4	145.7	148.3
77.5°	84.4	88.4	92.4	96.4	100.4	104.5	108.6	112.7	116.8	121.0	123.9
80°	68.0	72.0	76.0	80.1	84.1	88.3	92.9	97.4	102.0	106.5	109.5
82.5°	53.1	57.3	61.6	65.8	70.0	74.5	79.1	83.7	88.4	93.1	95.9
85°	33.1	37.5	41.9	46.3	50.8	55.3	60.0	64.6	69.3	74.1	77.0
87.5°	19.0	23.6	28.3	33.0	37.5	42.3	47.2	52.0	57.0	61.8	65.1
90°	10.7	16.8	22.9	29.0	35.1	41.2	47.4	53.5	59.7	65.8	69.9
92.5°	24.5	27.2	29.9	32.5	35.2	39.5	45.6	51.7	57.8	63.8	68.0
95°	66.3	69.1	71.9	74.7	77.5	76.8	72.7	68.6	64.5	60.4	64.4
97.5°	129.1	133.5	137.8	142.3	146.6	142.4	129.7	116.9	104.2	91.4	87.8
100°	177.9	181.4	184.9	188.4	191.9	196.2	201.5	206.6	211.8	217.0	185.8
102.5°	227.5	230.9	234.4	237.9	241.3	245.4	250.2	254.8	259.6	264.3	260.5
105°	307.0	310.0	313.1	316.2	319.2	322.7	326.7	330.7	334.8	338.7	341.4
107.5°	389.5	391.3	393.2	395.0	396.8	399.9	404.2	408.4	412.8	417.1	419.8
110°	443.2	444.8	446.4	448.0	449.6	452.5	456.7	460.9	465.1	469.4	471.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	494.1	495.9	497.7	499.6	501.4	504.3	508.2	512.1	516.0	519.9	521.5
115°	569.8	571.9	573.9	576.0	578.1	581.0	584.7	588.4	592.1	595.8	597.3
117.5°	648.2	648.7	649.3	649.9	650.5	652.8	657.0	661.1	665.3	669.4	670.5
120°	697.4	697.6	697.8	697.9	698.1	700.1	703.8	707.6	711.3	715.1	716.9
122.5°	740.4	741.5	742.5	743.5	744.7	746.8	750.0	753.4	756.6	759.9	761.7
125°	807.6	809.1	810.5	812.0	813.4	815.5	818.2	820.9	823.5	826.2	827.4
127.5°	871.2	872.2	873.1	874.2	875.2	876.7	878.8	880.8	882.9	884.9	886.5
130°	910.5	911.6	912.6	913.5	914.6	916.2	918.2	920.4	922.4	924.6	925.7
132.5°	949.4	950.8	952.0	953.3	954.7	955.8	956.7	957.7	958.6	959.5	961.2
135°	1005.4	1006.5	1007.8	1009.0	1010.3	1011.1	1011.6	1012.1	1012.6	1013.0	1014.3
137.5°	1056.7	1057.8	1058.8	1059.9	1061.0	1061.6	1061.6	1061.7	1061.7	1061.8	1063.4
140°	1089.9	1090.4	1090.8	1091.2	1091.7	1091.9	1091.8	1091.7	1091.6	1091.5	1093.4
142.5°	1120.2	1120.4	1120.5	1120.7	1120.9	1121.2	1121.5	1121.8	1122.2	1122.5	1123.9
145°	1164.7	1165.1	1165.4	1165.7	1166.0	1166.2	1166.2	1166.2	1166.2	1166.2	1167.1
147.5°	1203.1	1203.0	1202.9	1202.8	1202.8	1202.8	1203.1	1203.4	1203.6	1204.0	1204.4
150°	1227.7	1227.2	1226.9	1226.4	1225.9	1225.9	1226.4	1226.9	1227.2	1227.7	1228.2
152.5°	1251.5	1250.5	1249.5	1248.6	1247.5	1247.2	1247.7	1248.2	1248.6	1249.0	1249.5
155°	1282.1	1280.7	1279.4	1278.0	1276.6	1276.2	1276.6	1277.1	1277.6	1278.0	1278.7
157.5°	1305.7	1304.9	1304.0	1303.2	1302.4	1302.0	1302.0	1302.1	1302.2	1302.2	1302.9
160°	1322.1	1320.7	1319.4	1318.0	1316.6	1316.1	1316.3	1316.5	1316.8	1317.0	1317.9
162.5°	1335.2	1333.9	1332.5	1331.1	1329.8	1329.2	1329.4	1329.7	1329.8	1330.1	1331.3
165°	1352.9	1351.5	1350.1	1348.8	1347.4	1346.8	1347.0	1347.3	1347.5	1347.7	1349.1
167.5°	1366.0	1364.6	1363.2	1361.8	1360.3	1359.8	1359.9	1360.2	1360.4	1360.7	1362.3
170°	1373.4	1371.8	1370.2	1368.6	1367.0	1366.3	1366.5	1366.8	1367.0	1367.2	1369.0
172.5°	1378.3	1376.7	1375.1	1373.5	1371.9	1371.3	1371.7	1372.1	1372.5	1372.9	1374.6
175°	1383.6	1382.3	1380.9	1379.5	1378.2	1377.6	1377.8	1378.1	1378.3	1378.5	1380.3
177.5°	1386.1	1385.0	1383.9	1382.8	1381.7	1381.2	1381.5	1381.6	1381.8	1382.0	1383.3
180°	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	613.9	613.9	613.9	613.9	613.9	613.9	613.9	613.9
2.5°	612.5	613.3	614.0	614.3	614.3	614.2	614.0	613.9
5°	610.6	611.7	612.8	613.2	613.1	613.0	612.8	612.8
7.5°	605.5	606.5	607.4	607.8	607.7	607.6	607.4	607.3
10°	600.8	601.7	602.6	603.0	602.9	602.8	602.6	602.5
12.5°	595.0	595.7	596.5	596.7	596.3	596.0	595.6	595.2
15°	584.2	585.0	585.8	586.0	585.4	584.9	584.4	583.8
17.5°	570.5	571.1	571.7	571.9	571.6	571.2	570.9	570.6
20°	560.0	560.4	560.8	560.9	560.9	560.9	560.9	560.9
22.5°	549.1	549.6	550.1	550.2	549.9	549.5	549.2	548.9
25°	532.0	532.5	533.0	533.0	532.3	531.6	530.9	530.3
27.5°	512.0	512.4	512.8	512.8	512.5	512.3	512.1	511.8
30°	498.3	498.6	498.8	498.9	498.8	498.6	498.5	498.4
32.5°	485.3	485.5	485.8	485.9	485.8	485.6	485.5	485.4
35°	464.2	464.7	465.1	465.2	465.2	465.2	465.2	465.2
37.5°	442.1	442.7	443.2	443.5	443.4	443.3	443.3	443.2
40°	427.2	427.8	428.3	428.6	429.0	429.2	429.5	429.8
42.5°	413.4	414.1	414.7	415.1	415.2	415.2	415.3	415.3
45°	391.3	392.2	393.2	393.7	393.9	394.0	394.1	394.3
47.5°	368.4	369.8	371.1	372.0	372.3	372.6	372.9	373.2
50°	353.2	354.7	356.2	357.1	357.5	357.9	358.3	358.7
52.5°	338.0	339.6	341.2	342.1	342.5	342.7	343.0	343.3
55°	314.1	315.6	317.0	318.1	318.6	319.2	319.6	320.2
57.5°	290.5	292.2	293.8	294.9	295.3	295.7	296.1	296.5
60°	274.3	276.2	278.3	279.5	279.9	280.3	280.7	281.1
62.5°	257.9	260.1	262.3	263.6	264.1	264.7	265.1	265.7
65°	233.3	235.4	237.3	238.6	239.2	239.7	240.2	240.7
67.5°	208.2	210.6	213.0	214.6	215.3	216.0	216.7	217.4
70°	191.1	193.6	196.1	197.8	198.6	199.4	200.3	201.1
72.5°	175.2	177.8	180.6	182.3	182.9	183.5	184.1	184.7
75°	151.0	153.7	156.4	158.0	158.7	159.4	160.0	160.7
77.5°	126.8	129.8	132.8	134.5	135.0	135.5	136.1	136.7
80°	112.4	115.3	118.3	120.0	120.6	121.1	121.7	122.2
82.5°	98.7	101.6	104.4	106.3	107.3	108.2	109.2	110.1
85°	79.9	82.9	85.8	87.8	88.9	89.9	91.0	92.1
87.5°	68.4	71.7	75.0	77.2	78.3	79.4	80.4	81.5
90°	74.2	78.4	82.6	85.6	87.1	88.8	90.4	92.1
92.5°	72.1	76.1	80.2	82.9	84.2	85.5	86.7	88.0
95°	68.5	72.6	76.7	79.2	80.1	81.0	82.0	82.9
97.5°	84.1	80.6	76.9	75.6	76.4	77.4	78.3	79.2
100°	154.7	123.5	92.4	76.8	76.6	76.5	76.4	76.3
102.5°	256.8	253.1	249.4	240.2	225.5	210.8	196.1	181.4
105°	344.1	346.8	349.4	351.2	351.9	352.6	353.2	353.9
107.5°	422.5	425.2	427.9	429.3	429.4	429.6	429.8	429.8
110°	473.0	474.9	476.7	478.2	479.4	480.6	481.7	482.9





TEST NUMBER: P333390-927

CATALOG NUMBER: S125DIW-S610D1340U927-4F0-1E-UDD-D

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	523.1	524.6	526.2	527.3	527.9	528.5	529.1	529.7
115°	598.8	600.3	601.8	602.2	601.7	601.1	600.6	600.0
117.5°	671.6	672.7	673.8	674.5	674.8	675.1	675.4	675.7
120°	718.7	720.6	722.4	723.1	722.8	722.4	722.1	721.8
122.5°	763.3	765.1	766.8	767.4	766.8	766.4	765.8	765.3
125°	828.6	829.9	831.1	831.7	831.7	831.6	831.6	831.6
127.5°	887.9	889.4	890.9	891.1	890.3	889.3	888.4	887.5
130°	926.9	928.1	929.3	929.6	929.2	928.7	928.2	927.7
132.5°	963.0	964.7	966.5	967.0	966.5	965.9	965.4	964.7
135°	1015.7	1016.9	1018.2	1018.5	1017.8	1017.1	1016.4	1015.7
137.5°	1065.1	1066.8	1068.4	1069.0	1068.3	1067.6	1067.0	1066.4
140°	1095.4	1097.3	1099.2	1099.8	1098.9	1098.1	1097.3	1096.5
142.5°	1125.2	1126.6	1127.9	1128.1	1127.4	1126.5	1125.7	1124.8
145°	1168.0	1168.9	1169.8	1169.8	1168.9	1168.2	1167.3	1166.5
147.5°	1204.9	1205.4	1205.9	1205.5	1204.0	1202.6	1201.3	1199.8
150°	1228.7	1229.1	1229.5	1228.9	1227.2	1225.6	1223.8	1222.2
152.5°	1250.0	1250.5	1250.9	1250.3	1248.7	1247.1	1245.5	1243.9
155°	1279.4	1280.0	1280.7	1280.2	1278.3	1276.5	1274.7	1272.9
157.5°	1303.7	1304.4	1305.1	1304.6	1302.7	1300.9	1299.1	1297.3
160°	1318.8	1319.7	1320.6	1320.2	1318.3	1316.5	1314.7	1312.9
162.5°	1332.6	1334.0	1335.2	1334.8	1332.8	1330.8	1328.8	1326.8
165°	1350.4	1351.9	1353.2	1353.0	1351.1	1349.3	1347.5	1345.7
167.5°	1364.0	1365.6	1367.2	1367.0	1364.9	1362.9	1360.9	1358.8
170°	1370.9	1372.7	1374.5	1374.4	1372.4	1370.3	1368.3	1366.2
172.5°	1376.3	1377.9	1379.5	1379.3	1377.3	1375.2	1373.2	1371.1
175°	1382.1	1383.9	1385.8	1385.7	1383.6	1381.6	1379.5	1377.4
177.5°	1384.6	1385.8	1387.1	1387.0	1385.5	1384.1	1382.6	1381.2
180°	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6	1383.6

(END OF REPORT)