

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

Luminaire Tested: **S125DIW-S610D1340U835-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333390
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-S610D1340U835-4F0-1E-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: 7767.6 lumens
Efficiency: N/A
Efficacy: 144.4 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-Indirect

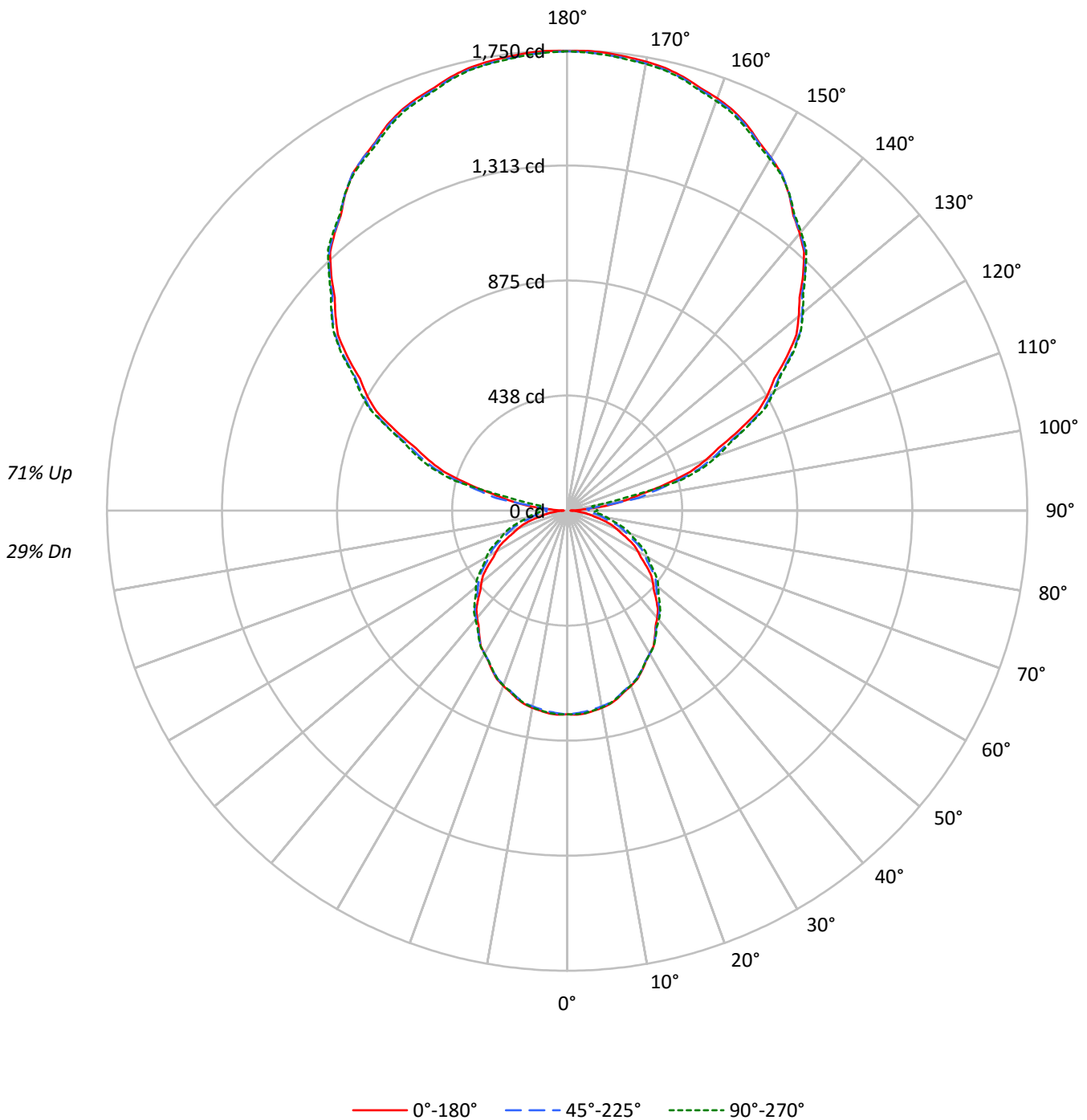
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: S125DIW-S610D1340U835-4F0-1E-UDD-D

Luminous Intensity Polar Plot





TEST NUMBER: P333390

CATALOG NUMBER: S125DIW-S610D1340U835-4F0-1E-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	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°	5005	5005	5005
5°	5015	4912	4928
10°	4980	4825	4817
15°	4920	4720	4677
20°	4840	4590	4536
25°	4745	4451	4363
30°	4630	4298	4206
35°	4523	4158	4062
40°	4413	4010	3916
45°	4289	3884	3788
50°	4172	3746	3674
55°	4029	3616	3540
60°	3875	3468	3404
65°	3713	3314	3250
70°	3527	3103	3093
75°	3237	2899	2899
80°	2857	2653	2687
85°	2502	2488	2620



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	0.9
10°-20°	208.0	2.7
20°-30°	309.4	4.0
30°-40°	366.5	4.7
40°-50°	378.9	4.9
50°-60°	349.0	4.5
60°-70°	282.1	3.6
70°-80°	189.0	2.4
80°-90°	101.6	1.3
90°-100°	118.5	1.5
100°-110°	431.7	5.6
110°-120°	736.6	9.5
120°-130°	925.9	11.9
130°-140°	986.1	12.7
140°-150°	920.6	11.9
150°-160°	743.6	9.6
160°-170°	480.9	6.2
170°-180°	165.9	2.1
0°-30°	590.7	7.6
0°-40°	957.1	12.3
0°-60°	1685.1	21.7
0°-90°	2257.8	29.1
90°-120°	1286.8	16.6
90°-150°	4119.4	53.0
90°-180°	5510.0	70.9
0°-180°	7767.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	775	773	768	774	774	73
15°	740	740	736	740	737	208
25°	672	674	670	673	669	309
35°	582	587	585	587	587	364
45°	479	488	492	497	498	370
55°	368	381	393	401	404	329
65°	254	271	290	300	304	252
75°	140	160	184	198	203	148
85°	42	67	94	110	116	45
90°	14	48	83	106	116	11
95°	84	97	76	98	105	102
105°	388	405	428	442	447	411
115°	719	732	752	760	757	713
125°	1019	1028	1043	1050	1050	910
135°	1269	1276	1279	1286	1282	978
145°	1470	1472	1472	1477	1472	919
155°	1618	1611	1613	1616	1607	745
165°	1708	1700	1701	1708	1699	482
175°	1747	1739	1740	1749	1739	166
180°	1747	1747	1747	1747	1747	



TEST NUMBER: P333390

CATALOG NUMBER: S125DIW-S610D1340U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	776.8	776.5	776.3	776.0	775.7	775.1	774.2	773.2	772.3	771.3	772.3
5°	775.0	774.6	774.3	774.0	773.6	772.9	771.7	770.5	769.3	768.1	769.5
7.5°	768.1	768.0	767.9	767.7	767.6	766.9	765.7	764.5	763.3	762.1	763.2
10°	762.1	762.1	762.1	762.1	762.1	761.4	760.0	758.7	757.3	756.0	757.2
12.5°	753.6	753.7	753.8	754.0	754.1	753.6	752.5	751.5	750.4	749.3	750.2
15°	740.0	740.2	740.4	740.5	740.7	740.2	739.0	737.8	736.7	735.5	736.5
17.5°	722.4	722.7	723.1	723.4	723.8	723.3	722.2	721.0	719.8	718.6	719.4
20°	709.6	710.0	710.3	710.7	711.0	710.6	709.4	708.2	707.0	705.8	706.3
22.5°	695.1	695.7	696.3	696.9	697.5	697.1	695.8	694.5	693.2	691.9	692.5
25°	672.4	672.9	673.4	673.9	674.4	674.2	673.2	672.2	671.1	670.1	670.8
27.5°	647.2	647.9	648.7	649.4	650.2	650.0	648.8	647.7	646.5	645.4	645.8
30°	628.3	629.4	630.4	631.4	632.4	632.4	631.4	630.4	629.4	628.3	628.7
32.5°	611.3	612.2	613.1	614.0	614.8	614.9	614.2	613.4	612.7	611.9	612.3
35°	582.0	583.2	584.4	585.5	586.7	587.1	586.6	586.0	585.5	585.0	585.5
37.5°	552.7	553.8	554.8	555.9	557.0	557.4	557.3	557.1	556.9	556.8	557.4
40°	532.6	534.0	535.3	536.7	538.0	538.6	538.4	538.3	538.1	537.9	538.6
42.5°	510.7	512.5	514.2	516.0	517.8	518.8	519.2	519.6	519.9	520.3	521.1
45°	479.4	481.3	483.1	485.0	486.9	488.2	489.1	489.9	490.7	491.6	492.8
47.5°	447.4	449.1	450.8	452.5	454.3	455.8	457.3	458.7	460.2	461.6	463.4
50°	425.5	427.3	429.2	431.1	432.9	434.8	436.6	438.5	440.3	442.2	444.1
52.5°	402.4	404.6	406.9	409.2	411.4	413.7	416.0	418.2	420.5	422.7	424.7
55°	368.5	371.2	373.9	376.6	379.3	382.0	384.7	387.4	390.1	392.8	394.7
57.5°	333.9	337.1	340.3	343.6	346.8	350.0	353.1	356.2	359.3	362.4	364.5
60°	310.8	314.1	317.5	320.9	324.3	327.6	331.0	334.4	337.8	341.1	343.7
62.5°	288.3	291.6	295.0	298.4	301.8	305.3	308.9	312.6	316.2	319.9	322.7
65°	253.8	257.7	261.5	265.4	269.3	273.3	277.3	281.4	285.4	289.5	292.0
67.5°	221.3	225.0	228.7	232.5	236.2	240.2	244.3	248.4	252.5	256.7	259.7
70°	197.5	201.4	205.3	209.2	213.1	217.2	221.6	226.0	230.4	234.8	238.0
72.5°	174.4	178.5	182.5	186.5	190.5	194.9	199.7	204.5	209.3	214.1	217.6
75°	139.8	144.2	148.6	153.0	157.4	162.3	167.7	173.1	178.5	183.9	187.2
77.5°	106.5	111.6	116.7	121.7	126.8	131.9	137.1	142.3	147.5	152.7	156.4
80°	85.9	90.9	96.0	101.1	106.1	111.5	117.3	123.0	128.7	134.5	138.2
82.5°	67.0	72.3	77.7	83.0	88.4	94.0	99.8	105.7	111.6	117.5	121.0
85°	41.8	47.4	52.9	58.5	64.1	69.8	75.7	81.6	87.5	93.5	97.2
87.5°	24.0	29.8	35.7	41.6	47.4	53.4	59.6	65.7	71.9	78.0	82.2
90°	13.5	21.2	28.9	36.6	44.3	52.0	59.8	67.5	75.3	83.0	88.3
92.5°	30.9	34.3	37.7	41.0	44.4	49.9	57.6	65.3	72.9	80.6	85.8
95°	83.7	87.2	90.7	94.3	97.8	97.0	91.8	86.6	81.4	76.2	81.3
97.5°	163.0	168.5	174.0	179.6	185.1	179.8	163.7	147.6	131.5	115.4	110.8
100°	224.6	229.0	233.4	237.8	242.2	247.7	254.3	260.8	267.4	273.9	234.6
102.5°	287.2	291.5	295.9	300.3	304.6	309.8	315.8	321.7	327.7	333.6	328.9
105°	387.5	391.3	395.2	399.1	402.9	407.4	412.4	417.5	422.6	427.6	431.0
107.5°	491.7	494.0	496.3	498.6	500.9	504.8	510.2	515.6	521.1	526.5	529.9
110°	559.5	561.5	563.5	565.5	567.6	571.2	576.5	581.8	587.1	592.5	594.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	623.7	626.0	628.3	630.6	632.9	636.6	641.5	646.4	651.4	656.3	658.3
115°	719.3	721.9	724.5	727.1	729.7	733.4	738.1	742.7	747.4	752.1	754.0
117.5°	818.2	818.9	819.6	820.4	821.1	824.1	829.3	834.5	839.8	845.0	846.4
120°	880.3	880.6	880.8	881.0	881.2	883.7	888.4	893.2	897.9	902.7	905.0
122.5°	934.6	936.0	937.3	938.6	940.0	942.7	946.8	951.0	955.1	959.3	961.5
125°	1019.4	1021.3	1023.1	1025.0	1026.8	1029.4	1032.8	1036.2	1039.5	1042.9	1044.5
127.5°	1099.7	1101.0	1102.2	1103.5	1104.8	1106.7	1109.3	1111.9	1114.5	1117.1	1119.0
130°	1149.4	1150.7	1152.0	1153.2	1154.5	1156.5	1159.1	1161.8	1164.4	1167.1	1168.6
132.5°	1198.5	1200.2	1201.8	1203.4	1205.1	1206.5	1207.7	1208.9	1210.1	1211.2	1213.4
135°	1269.1	1270.6	1272.2	1273.7	1275.3	1276.4	1277.0	1277.6	1278.2	1278.8	1280.4
137.5°	1333.9	1335.3	1336.6	1338.0	1339.4	1340.1	1340.1	1340.2	1340.2	1340.3	1342.4
140°	1375.8	1376.4	1376.9	1377.5	1378.1	1378.3	1378.2	1378.1	1378.0	1377.8	1380.3
142.5°	1414.1	1414.3	1414.5	1414.7	1414.9	1415.3	1415.7	1416.1	1416.6	1417.0	1418.7
145°	1470.3	1470.7	1471.1	1471.5	1471.9	1472.1	1472.1	1472.1	1472.1	1472.1	1473.3
147.5°	1518.7	1518.6	1518.5	1518.4	1518.3	1518.4	1518.7	1519.1	1519.4	1519.8	1520.4
150°	1549.8	1549.2	1548.7	1548.1	1547.5	1547.5	1548.1	1548.7	1549.2	1549.8	1550.4
152.5°	1579.8	1578.6	1577.3	1576.1	1574.8	1574.4	1575.0	1575.6	1576.2	1576.7	1577.3
155°	1618.4	1616.7	1615.0	1613.3	1611.5	1611.0	1611.5	1612.1	1612.7	1613.3	1614.1
157.5°	1648.2	1647.2	1646.1	1645.1	1644.1	1643.6	1643.6	1643.7	1643.8	1643.8	1644.7
160°	1668.9	1667.2	1665.5	1663.7	1662.0	1661.3	1661.6	1661.9	1662.2	1662.5	1663.6
162.5°	1685.5	1683.8	1682.0	1680.3	1678.6	1677.9	1678.2	1678.5	1678.7	1679.0	1680.6
165°	1707.8	1706.0	1704.3	1702.6	1700.9	1700.1	1700.4	1700.7	1701.0	1701.3	1703.0
167.5°	1724.3	1722.6	1720.8	1719.0	1717.2	1716.5	1716.7	1717.0	1717.3	1717.6	1719.7
170°	1733.7	1731.7	1729.6	1727.6	1725.6	1724.7	1725.0	1725.3	1725.6	1725.9	1728.2
172.5°	1739.9	1737.9	1735.9	1733.8	1731.8	1731.1	1731.6	1732.1	1732.6	1733.1	1735.2
175°	1746.6	1744.9	1743.2	1741.4	1739.7	1739.0	1739.3	1739.6	1739.9	1740.1	1742.4
177.5°	1749.7	1748.3	1747.0	1745.6	1744.2	1743.6	1743.9	1744.1	1744.3	1744.5	1746.2
180°	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	773.2	774.2	775.1	775.5	775.4	775.3	775.1	775.0
5°	770.8	772.2	773.5	774.1	774.0	773.8	773.6	773.5
7.5°	764.4	765.6	766.8	767.3	767.1	767.0	766.8	766.6
10°	758.4	759.5	760.7	761.2	761.1	760.9	760.7	760.5
12.5°	751.1	752.0	753.0	753.2	752.7	752.3	751.9	751.4
15°	737.5	738.5	739.5	739.7	739.0	738.3	737.7	737.0
17.5°	720.2	720.9	721.7	721.9	721.5	721.1	720.7	720.3
20°	706.9	707.4	707.9	708.1	708.1	708.1	708.1	708.1
22.5°	693.1	693.8	694.4	694.5	694.1	693.7	693.3	692.9
25°	671.5	672.2	672.8	672.8	671.9	671.1	670.2	669.4
27.5°	646.3	646.8	647.3	647.3	647.0	646.7	646.4	646.1
30°	629.0	629.4	629.7	629.8	629.6	629.4	629.3	629.1
32.5°	612.6	612.9	613.3	613.4	613.2	613.0	612.9	612.7
35°	586.0	586.6	587.1	587.3	587.3	587.3	587.3	587.3
37.5°	558.1	558.8	559.5	559.8	559.7	559.6	559.6	559.5
40°	539.3	540.0	540.6	541.1	541.5	541.8	542.2	542.5
42.5°	521.9	522.7	523.5	524.0	524.1	524.1	524.2	524.3
45°	493.9	495.1	496.3	497.0	497.2	497.3	497.5	497.7
47.5°	465.1	466.8	468.5	469.6	470.0	470.3	470.7	471.1
50°	445.9	447.8	449.6	450.8	451.3	451.8	452.3	452.8
52.5°	426.7	428.7	430.7	431.9	432.3	432.6	433.0	433.4
55°	396.5	398.4	400.2	401.5	402.2	402.9	403.5	404.2
57.5°	366.7	368.8	370.9	372.2	372.8	373.3	373.8	374.3
60°	346.2	348.7	351.3	352.8	353.3	353.8	354.3	354.8
62.5°	325.5	328.3	331.1	332.8	333.4	334.1	334.7	335.4
65°	294.5	297.1	299.6	301.2	301.9	302.6	303.2	303.9
67.5°	262.8	265.9	268.9	270.9	271.8	272.7	273.6	274.4
70°	241.2	244.4	247.6	249.7	250.7	251.7	252.8	253.8
72.5°	221.1	224.5	228.0	230.1	230.9	231.6	232.4	233.1
75°	190.6	194.0	197.4	199.5	200.3	201.2	202.0	202.9
77.5°	160.1	163.9	167.6	169.8	170.4	171.1	171.8	172.5
80°	141.9	145.6	149.3	151.5	152.2	152.9	153.6	154.2
82.5°	124.6	128.2	131.8	134.2	135.4	136.6	137.8	139.0
85°	100.9	104.6	108.3	110.8	112.2	113.5	114.9	116.2
87.5°	86.3	90.5	94.7	97.4	98.8	100.2	101.5	102.9
90°	93.7	99.0	104.3	108.0	110.0	112.1	114.1	116.2
92.5°	91.0	96.1	101.3	104.7	106.3	107.9	109.5	111.1
95°	86.5	91.6	96.8	100.0	101.1	102.3	103.5	104.7
97.5°	106.2	101.7	97.1	95.4	96.5	97.7	98.8	100.0
100°	195.3	155.9	116.6	96.9	96.7	96.6	96.5	96.3
102.5°	324.2	319.5	314.8	303.2	284.6	266.1	247.5	229.0
105°	434.4	437.8	441.1	443.3	444.2	445.1	445.9	446.8
107.5°	533.3	536.7	540.1	541.9	542.1	542.3	542.5	542.6
110°	597.1	599.5	601.8	603.7	605.2	606.7	608.1	609.6



TEST NUMBER: P333390

CATALOG NUMBER: S125DIW-S610D1340U835-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	660.3	662.2	664.2	665.6	666.4	667.2	667.9	668.7
115°	755.9	757.8	759.7	760.2	759.5	758.8	758.1	757.4
117.5°	847.8	849.2	850.5	851.4	851.8	852.2	852.6	853.0
120°	907.3	909.6	911.9	912.8	912.4	911.9	911.5	911.1
122.5°	963.6	965.8	967.9	968.7	968.0	967.4	966.7	966.1
125°	1046.0	1047.6	1049.1	1049.9	1049.9	1049.8	1049.8	1049.8
127.5°	1120.8	1122.7	1124.6	1124.9	1123.8	1122.6	1121.5	1120.3
130°	1170.1	1171.6	1173.1	1173.5	1172.9	1172.3	1171.7	1171.1
132.5°	1215.6	1217.8	1220.0	1220.7	1220.0	1219.3	1218.6	1217.8
135°	1282.1	1283.7	1285.3	1285.7	1284.8	1283.9	1283.0	1282.1
137.5°	1344.5	1346.6	1348.7	1349.4	1348.6	1347.7	1346.9	1346.1
140°	1382.7	1385.1	1387.6	1388.3	1387.2	1386.2	1385.1	1384.1
142.5°	1420.4	1422.1	1423.8	1424.1	1423.1	1422.0	1421.0	1419.9
145°	1474.4	1475.5	1476.7	1476.7	1475.6	1474.6	1473.5	1472.5
147.5°	1521.0	1521.6	1522.2	1521.7	1519.9	1518.1	1516.4	1514.6
150°	1551.0	1551.5	1552.1	1551.3	1549.2	1547.1	1544.9	1542.8
152.5°	1577.9	1578.5	1579.0	1578.3	1576.3	1574.2	1572.2	1570.2
155°	1615.0	1615.8	1616.7	1616.0	1613.7	1611.4	1609.1	1606.8
157.5°	1645.7	1646.6	1647.5	1646.8	1644.5	1642.2	1639.9	1637.6
160°	1664.8	1665.9	1667.1	1666.5	1664.2	1661.9	1659.6	1657.3
162.5°	1682.2	1683.9	1685.5	1685.0	1682.5	1679.9	1677.4	1674.9
165°	1704.7	1706.5	1708.2	1707.9	1705.6	1703.3	1701.0	1698.7
167.5°	1721.8	1723.8	1725.9	1725.6	1723.0	1720.5	1717.9	1715.3
170°	1730.5	1732.8	1735.1	1735.0	1732.4	1729.8	1727.2	1724.6
172.5°	1737.3	1739.4	1741.4	1741.2	1738.6	1736.0	1733.4	1730.8
175°	1744.7	1747.0	1749.3	1749.2	1746.6	1744.0	1741.4	1738.8
177.5°	1747.8	1749.4	1751.0	1750.9	1749.0	1747.2	1745.3	1743.5
180°	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6	1746.6

(END OF REPORT)