

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: P333369-935

Luminaire Tested: **S125DIW-S375D1560U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333369-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIW-S375D1560U935-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5968.6 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

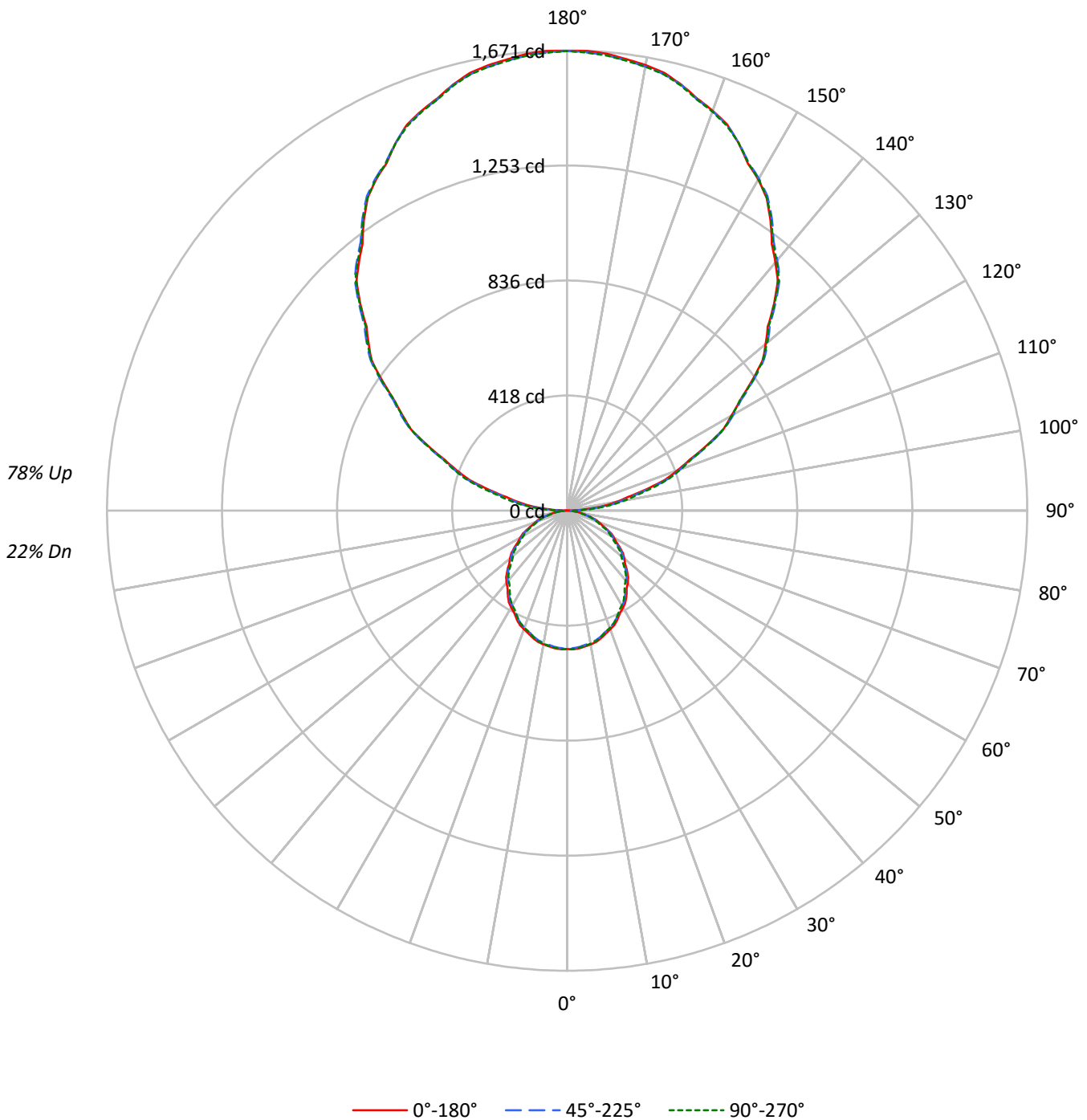
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22
1	91	87	84	80	81	78	74	72	59	57	55	42	41	40	27	26	26	18
2	83	76	70	65	74	68	63	59	52	48	46	37	35	33	23	22	21	15
3	76	67	60	54	67	59	54	49	46	42	38	33	30	28	21	19	18	13
4	69	59	51	46	61	53	46	41	40	36	32	29	26	24	19	17	16	11
5	63	52	45	39	56	47	40	35	36	31	28	26	23	21	17	15	14	10
6	58	47	39	34	51	42	35	30	32	28	24	23	20	18	15	13	12	9
7	54	42	34	29	47	38	31	26	29	24	21	21	18	16	14	12	11	8
8	50	38	31	26	44	34	28	23	26	22	19	19	16	14	13	11	9	7
9	46	35	27	23	41	31	25	20	24	20	16	18	15	12	12	10	8	6
10	43	31	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3249	3249	3249
5°	3255	3225	3245
10°	3236	3202	3220
15°	3201	3163	3177
20°	3151	3110	3115
25°	3096	3046	3043
30°	3030	2976	2961
35°	2958	2902	2861
40°	2885	2822	2780
45°	2806	2747	2693
50°	2719	2659	2579
55°	2634	2558	2486
60°	2533	2457	2370
65°	2415	2335	2257
70°	2298	2194	2119
75°	2094	2026	1956
80°	1863	1834	1789
85°	1623	1652	1564



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.4	0.8
10°-20°	134.0	2.2
20°-30°	197.8	3.3
30°-40°	230.8	3.9
40°-50°	231.8	3.9
50°-60°	203.5	3.4
60°-70°	151.6	2.5
70°-80°	86.7	1.5
80°-90°	28.9	0.5
90°-100°	111.8	1.9
100°-110°	330.0	5.5
110°-120°	559.0	9.4
120°-130°	735.7	12.3
130°-140°	824.3	13.8
140°-150°	807.9	13.5
150°-160°	678.6	11.4
160°-170°	451.1	7.6
170°-180°	157.9	2.6
0°-30°	379.2	6.4
0°-40°	610.0	10.2
0°-60°	1045.3	17.5
0°-90°	1312.5	22.0
90°-120°	1000.8	16.8
90°-150°	3368.6	56.4
90°-180°	4656.0	78.0
0°-180°	5968.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	503	503	503	503	503	
5°	502	501	497	501	501	48
15°	479	477	473	475	475	135
25°	434	432	427	428	427	200
35°	375	373	368	366	363	235
45°	307	305	301	296	295	237
55°	234	232	227	224	221	209
65°	158	157	153	149	148	157
75°	84	83	81	80	78	89
85°	22	22	22	22	21	24
90°	1	12	21	27	31	6
95°	84	88	100	109	112	90
105°	296	303	310	318	322	316
115°	560	565	568	566	565	553
125°	817	824	826	823	822	731
135°	1062	1070	1071	1071	1066	818
145°	1287	1292	1296	1296	1292	804
155°	1473	1473	1474	1478	1473	678
165°	1601	1599	1600	1604	1597	451
175°	1665	1660	1660	1666	1658	158
180°	1669	1669	1669	1669	1669	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0
2.5°	504.2	504.0	503.9	503.6	503.4	502.9	502.2	501.5	500.8	500.1	500.8
5°	502.1	502.0	501.8	501.6	501.4	500.9	500.1	499.2	498.3	497.4	498.2
7.5°	497.6	497.4	497.2	497.1	496.9	496.3	495.3	494.3	493.4	492.4	493.2
10°	493.4	493.3	493.1	492.9	492.8	492.1	491.2	490.2	489.2	488.3	489.0
12.5°	488.4	488.0	487.7	487.4	487.1	486.5	485.5	484.7	483.7	482.8	483.4
15°	478.7	478.5	478.2	477.9	477.6	477.0	476.0	475.1	474.1	473.1	473.6
17.5°	467.6	467.3	466.8	466.5	466.1	465.4	464.3	463.4	462.4	461.3	461.9
20°	458.4	458.2	458.1	457.9	457.7	457.0	455.9	454.7	453.6	452.5	453.1
22.5°	449.2	448.8	448.5	448.2	447.9	447.2	446.1	445.1	443.9	442.9	443.3
25°	434.5	434.1	433.6	433.2	432.7	432.0	430.8	429.6	428.5	427.4	427.6
27.5°	417.4	417.2	416.9	416.6	416.4	415.6	414.5	413.3	412.1	410.9	411.0
30°	406.3	406.0	405.7	405.4	405.2	404.4	403.1	401.7	400.5	399.1	398.9
32.5°	394.2	393.7	393.4	393.0	392.5	391.8	390.5	389.3	388.2	387.0	386.7
35°	375.2	374.9	374.5	374.2	373.8	373.0	371.8	370.6	369.3	368.1	367.6
37.5°	355.6	355.2	354.7	354.2	353.8	353.0	351.8	350.7	349.5	348.4	347.7
40°	342.2	341.7	341.3	340.9	340.4	339.6	338.4	337.2	335.9	334.7	333.9
42.5°	327.9	327.5	327.2	326.7	326.4	325.6	324.3	323.1	321.8	320.6	319.9
45°	307.2	306.9	306.5	306.2	305.7	305.1	304.0	303.0	301.9	300.8	299.8
47.5°	284.9	284.9	284.9	285.0	285.0	284.4	283.1	281.8	280.5	279.2	278.2
50°	270.6	270.4	270.1	269.8	269.5	268.9	267.8	266.7	265.7	264.6	263.5
52.5°	256.0	255.7	255.5	255.4	255.2	254.5	253.4	252.3	251.1	249.9	249.0
55°	233.9	233.7	233.4	233.2	232.9	232.1	230.9	229.7	228.4	227.2	226.4
57.5°	210.9	210.7	210.5	210.4	210.3	209.7	208.6	207.6	206.6	205.5	204.5
60°	196.1	195.8	195.4	195.1	194.8	194.1	193.1	192.2	191.1	190.2	189.3
62.5°	180.9	180.6	180.3	180.0	179.8	179.2	178.4	177.5	176.7	175.9	175.0
65°	158.0	157.8	157.6	157.5	157.3	156.7	155.8	154.7	153.8	152.8	152.0
67.5°	135.8	135.4	135.0	134.7	134.3	133.7	133.0	132.2	131.6	130.9	130.2
70°	121.7	121.3	120.9	120.5	120.0	119.3	118.6	117.8	117.0	116.2	115.6
72.5°	106.5	106.2	105.9	105.6	105.3	104.9	104.4	103.8	103.3	102.8	102.2
75°	83.9	83.8	83.6	83.4	83.3	82.9	82.5	82.1	81.6	81.2	80.9
77.5°	63.2	63.1	63.0	62.9	62.9	62.8	62.5	62.3	62.0	61.7	61.6
80°	50.1	50.1	50.1	50.1	50.1	50.0	49.9	49.7	49.5	49.3	49.2
82.5°	38.7	38.6	38.4	38.2	38.1	38.1	38.0	38.0	37.9	37.9	37.7
85°	21.9	22.0	22.0	22.1	22.2	22.3	22.3	22.3	22.3	22.3	22.2
87.5°	8.9	9.3	9.8	10.2	10.7	11.1	11.5	11.8	12.1	12.4	12.7
90°	1.3	3.6	5.9	8.3	10.5	12.7	14.7	16.7	18.8	20.8	22.2
92.5°	31.4	33.1	34.7	36.2	37.9	40.0	42.4	44.9	47.4	49.9	51.7
95°	84.4	85.0	85.6	86.1	86.7	88.4	91.4	94.2	97.1	100.0	102.0
97.5°	140.3	140.4	140.7	140.9	141.2	143.3	147.2	151.3	155.2	159.2	161.1
100°	181.8	181.8	181.8	181.8	181.8	183.7	187.4	191.1	194.9	198.6	201.3
102.5°	226.4	227.6	228.8	229.9	231.1	232.6	234.5	236.4	238.3	240.2	243.1
105°	296.1	297.5	298.9	300.4	301.9	303.4	305.1	306.9	308.6	310.4	312.1
107.5°	372.9	374.4	375.8	377.3	378.7	380.1	381.4	382.7	384.1	385.4	386.2
110°	425.9	427.4	428.8	430.2	431.7	432.8	433.7	434.5	435.4	436.3	437.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	479.9	480.7	481.5	482.2	482.9	483.9	484.9	486.0	487.2	488.3	488.6
115°	559.6	560.9	562.0	563.1	564.3	565.2	565.8	566.3	566.9	567.5	567.1
117.5°	639.6	640.2	640.7	641.2	641.7	642.2	642.7	643.3	643.8	644.4	644.5
120°	689.5	691.0	692.4	693.9	695.3	696.1	696.5	696.7	697.0	697.3	697.3
122.5°	743.6	744.1	744.6	745.1	745.6	746.2	747.0	747.8	748.5	749.2	749.0
125°	816.7	818.5	820.3	822.0	823.7	824.8	825.0	825.3	825.6	825.9	825.3
127.5°	894.7	895.7	896.6	897.6	898.6	899.3	899.7	900.0	900.3	900.7	900.3
130°	941.4	942.9	944.3	945.7	947.2	948.2	948.8	949.3	949.9	950.5	950.2
132.5°	988.2	990.6	992.9	995.3	997.6	998.8	998.7	998.5	998.4	998.3	998.0
135°	1062.2	1063.9	1065.7	1067.4	1069.1	1070.1	1070.4	1070.7	1071.0	1071.3	1071.3
137.5°	1131.8	1133.5	1135.1	1136.8	1138.5	1139.6	1140.3	1140.9	1141.5	1142.2	1142.5
140°	1176.5	1177.9	1179.3	1180.8	1182.2	1183.4	1184.2	1185.2	1186.0	1186.9	1187.4
142.5°	1221.2	1222.4	1223.6	1224.8	1226.0	1227.1	1228.2	1229.3	1230.5	1231.5	1231.8
145°	1286.9	1288.0	1289.2	1290.3	1291.5	1292.4	1293.3	1294.2	1295.0	1295.9	1295.9
147.5°	1347.6	1348.2	1348.8	1349.5	1350.1	1350.8	1351.5	1352.2	1352.9	1353.6	1354.3
150°	1388.1	1387.8	1387.6	1387.2	1387.0	1387.4	1388.5	1389.7	1390.9	1392.1	1392.1
152.5°	1421.3	1421.8	1422.2	1422.5	1423.0	1423.4	1423.9	1424.4	1424.8	1425.3	1426.0
155°	1472.6	1472.6	1472.6	1472.6	1472.6	1472.7	1473.0	1473.3	1473.5	1473.9	1475.0
157.5°	1518.2	1517.6	1517.0	1516.3	1515.7	1515.5	1515.8	1516.1	1516.4	1516.7	1517.9
160°	1545.2	1544.4	1543.5	1542.7	1541.8	1541.5	1541.8	1542.1	1542.4	1542.7	1543.8
162.5°	1569.2	1568.5	1567.9	1567.3	1566.6	1566.3	1566.3	1566.4	1566.5	1566.5	1568.0
165°	1601.1	1600.5	1599.9	1599.4	1598.8	1598.6	1599.0	1599.2	1599.5	1599.8	1600.9
167.5°	1628.1	1626.9	1625.8	1624.6	1623.5	1622.9	1622.9	1622.9	1622.9	1622.9	1624.6
170°	1642.6	1641.5	1640.3	1639.2	1638.1	1637.4	1637.4	1637.4	1637.4	1637.4	1639.2
172.5°	1653.0	1651.9	1650.7	1649.6	1648.4	1647.9	1647.9	1647.9	1647.9	1647.9	1649.6
175°	1664.7	1663.5	1662.4	1661.2	1660.1	1659.5	1659.5	1659.5	1659.5	1659.5	1661.2
177.5°	1670.7	1669.7	1668.9	1667.9	1667.0	1666.4	1666.2	1665.9	1665.7	1665.5	1666.9
180°	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	503.0	503.0	503.0	503.0	503.0	503.0	503.0	503.0
2.5°	501.5	502.2	502.9	503.3	503.2	503.1	503.1	503.0
5°	498.9	499.8	500.6	500.9	500.8	500.8	500.7	500.6
7.5°	494.0	494.7	495.5	495.8	495.8	495.7	495.6	495.5
10°	489.7	490.3	491.1	491.4	491.3	491.2	491.1	491.0
12.5°	484.0	484.6	485.1	485.3	485.3	485.3	485.3	485.3
15°	474.0	474.4	474.9	475.1	475.1	475.1	475.1	475.1
17.5°	462.4	463.0	463.6	463.6	463.1	462.7	462.3	461.8
20°	453.7	454.3	454.9	455.0	454.5	454.1	453.7	453.2
22.5°	443.7	444.1	444.5	444.5	444.3	443.9	443.7	443.3
25°	427.7	427.9	428.1	428.0	427.7	427.5	427.2	427.0
27.5°	411.0	411.0	411.0	411.0	410.6	410.4	410.1	409.8
30°	398.7	398.6	398.4	398.2	398.0	397.7	397.4	397.1
32.5°	386.4	386.1	385.7	385.4	384.9	384.4	383.9	383.4
35°	367.2	366.8	366.3	365.8	365.1	364.3	363.6	362.9
37.5°	347.1	346.4	345.7	345.2	344.7	344.4	344.0	343.5
40°	333.0	332.3	331.5	331.0	330.7	330.4	330.1	329.8
42.5°	319.2	318.5	317.7	317.2	316.8	316.3	316.0	315.6
45°	298.7	297.6	296.6	295.9	295.7	295.4	295.2	294.9
47.5°	277.1	276.0	274.9	274.1	273.5	272.9	272.2	271.6
50°	262.3	261.1	260.0	259.2	258.5	257.9	257.3	256.7
52.5°	248.0	246.9	245.9	245.1	244.4	243.7	243.1	242.4
55°	225.6	224.8	224.0	223.3	222.7	222.1	221.4	220.8
57.5°	203.5	202.4	201.4	200.7	200.4	200.0	199.7	199.3
60°	188.5	187.5	186.7	185.9	185.3	184.7	184.1	183.5
62.5°	174.0	173.0	172.0	171.3	170.9	170.4	169.9	169.4
65°	151.2	150.4	149.6	149.0	148.7	148.4	148.0	147.7
67.5°	129.5	128.8	128.1	127.7	127.5	127.3	127.1	126.8
70°	115.1	114.6	114.1	113.7	113.3	113.0	112.5	112.2
72.5°	101.6	101.0	100.4	100.0	99.6	99.3	98.8	98.5
75°	80.7	80.4	80.1	79.8	79.5	79.1	78.8	78.4
77.5°	61.5	61.3	61.1	61.0	60.7	60.4	60.2	59.9
80°	49.2	49.1	49.0	48.8	48.6	48.5	48.3	48.1
82.5°	37.5	37.4	37.3	37.1	37.1	37.1	37.0	37.0
85°	22.1	22.0	22.0	21.8	21.6	21.4	21.3	21.1
87.5°	13.0	13.3	13.6	13.8	13.8	13.8	13.9	13.9
90°	23.7	25.1	26.5	27.7	28.6	29.4	30.3	31.2
92.5°	53.6	55.5	57.5	58.7	59.4	60.0	60.6	61.3
95°	104.0	106.1	108.1	109.3	109.9	110.6	111.1	111.7
97.5°	163.0	164.9	166.8	168.0	168.3	168.7	169.0	169.4
100°	203.9	206.5	209.1	210.7	211.2	211.8	212.4	212.9
102.5°	245.9	248.7	251.5	253.4	254.2	254.9	255.8	256.6
105°	313.8	315.6	317.3	318.6	319.4	320.3	321.2	322.0
107.5°	387.1	388.0	388.8	389.3	389.2	389.2	389.1	389.0
110°	438.1	438.9	439.8	440.1	439.8	439.5	439.2	438.9



TEST NUMBER: P333369-935

CATALOG NUMBER: S125DIW-S375D1560U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	489.0	489.5	489.8	489.8	489.3	488.8	488.3	487.8
115°	566.9	566.6	566.3	566.0	565.8	565.4	565.2	564.9
117.5°	644.8	645.1	645.2	644.8	643.6	642.5	641.4	640.2
120°	697.3	697.3	697.3	696.7	695.6	694.4	693.3	692.2
122.5°	748.8	748.6	748.3	747.8	746.8	745.9	744.9	744.1
125°	824.8	824.1	823.5	823.1	822.9	822.5	822.3	822.0
127.5°	900.1	899.8	899.5	899.1	898.5	897.9	897.3	896.7
130°	949.9	949.7	949.3	948.9	948.4	947.8	947.2	946.7
132.5°	997.7	997.5	997.1	996.6	995.8	995.0	994.2	993.3
135°	1071.3	1071.3	1071.3	1070.7	1069.5	1068.4	1067.2	1066.1
137.5°	1142.9	1143.2	1143.6	1143.1	1141.6	1140.1	1138.7	1137.2
140°	1188.0	1188.6	1189.1	1188.7	1187.3	1185.9	1184.4	1182.9
142.5°	1232.2	1232.5	1233.0	1232.3	1230.9	1229.5	1228.0	1226.6
145°	1295.9	1295.9	1295.9	1295.5	1294.6	1293.7	1292.9	1292.0
147.5°	1355.0	1355.6	1356.3	1355.7	1353.8	1351.8	1349.9	1347.9
150°	1392.1	1392.1	1392.1	1391.7	1391.1	1390.6	1390.0	1389.4
152.5°	1426.7	1427.4	1428.1	1427.9	1426.8	1425.8	1424.8	1423.7
155°	1476.1	1477.3	1478.4	1478.3	1476.9	1475.4	1473.9	1472.6
157.5°	1519.0	1520.2	1521.3	1521.0	1519.0	1517.1	1515.2	1513.3
160°	1545.0	1546.1	1547.3	1547.1	1545.7	1544.2	1542.8	1541.4
162.5°	1569.3	1570.7	1572.1	1571.9	1570.3	1568.6	1566.9	1565.2
165°	1602.1	1603.3	1604.4	1604.1	1602.4	1600.7	1599.0	1597.2
167.5°	1626.3	1628.1	1629.8	1629.8	1628.0	1626.3	1624.4	1622.6
170°	1640.9	1642.6	1644.3	1644.3	1642.2	1640.2	1638.1	1636.2
172.5°	1651.3	1653.0	1654.8	1654.8	1652.9	1651.1	1649.3	1647.6
175°	1663.0	1664.7	1666.5	1666.3	1664.3	1662.2	1660.3	1658.2
177.5°	1668.3	1669.7	1671.0	1670.9	1669.3	1667.7	1666.0	1664.5
180°	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6	1668.6

(END OF REPORT)