

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: P333396-935

Luminaire Tested: **S125DIW-S610D1560U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333396-935
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-S610D1560U935-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7439.6 lumens
Efficiency: N/A
Efficacy: 122.8 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

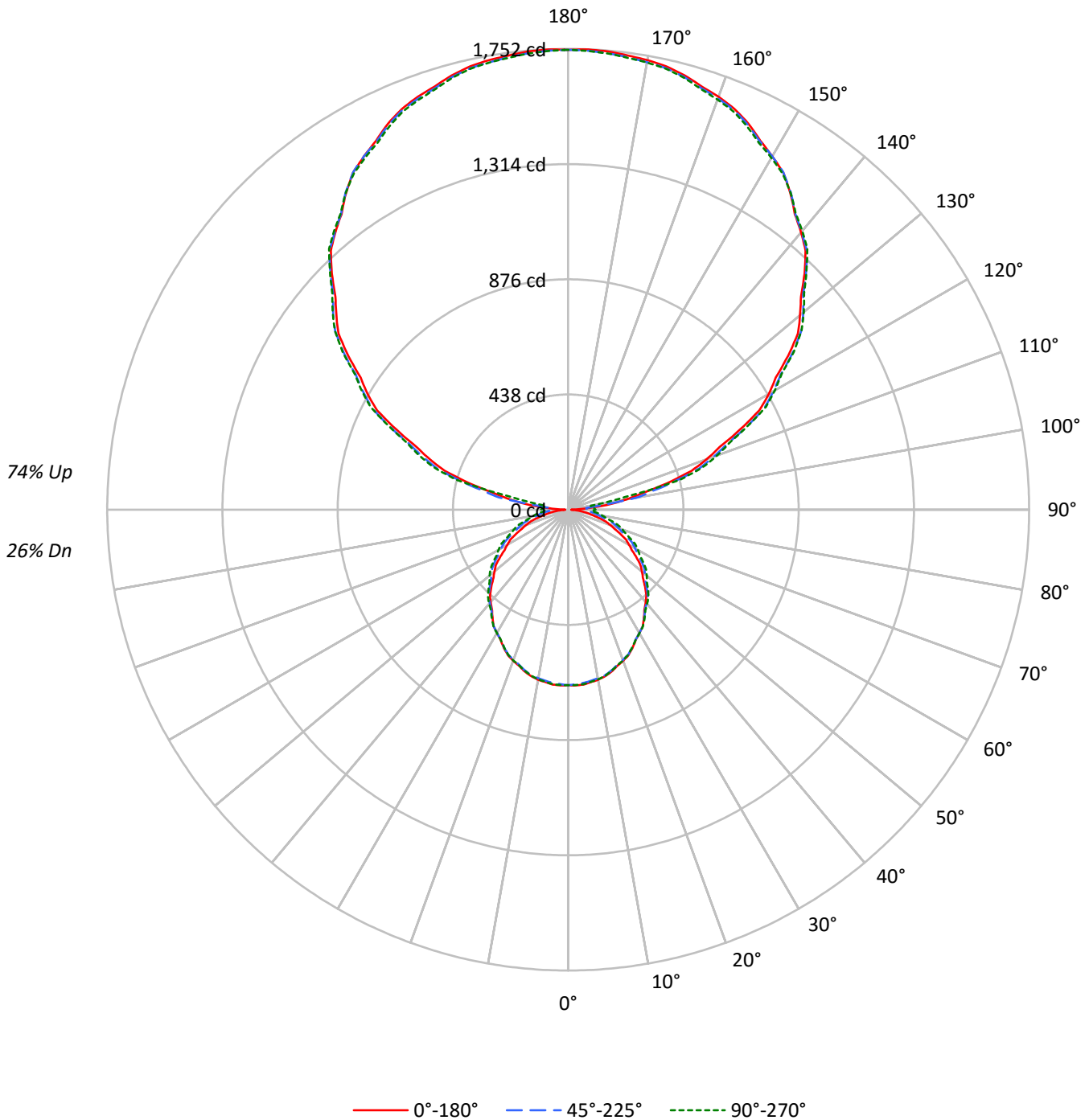
Input Watts (W): 60.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333396-935

CATALOG NUMBER: S125DIW-S610D1560U935-4F0-1E-UDD-D

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	101	101	101	101	91	91	91	91	70	70	70	51	51	51	34	34	34
1	92	88	84	80	82	78	75	72	61	58	56	44	43	42	30	29	28
2	84	76	70	65	74	68	63	59	53	49	46	39	37	35	26	24	23
3	76	67	60	54	68	60	54	49	46	42	39	34	31	29	23	21	20
4	69	59	51	45	62	53	46	41	41	36	33	30	27	25	20	18	17
5	64	52	44	39	56	47	40	35	37	32	28	27	24	21	18	16	15
6	58	47	39	33	52	42	35	30	33	28	24	24	21	18	16	14	13
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11
8	50	38	30	25	44	34	28	23	27	22	19	20	17	14	14	12	10
9	46	34	27	22	41	31	25	20	25	20	17	18	15	13	13	10	9
10	43	31	24	20	38	28	22	18	22	18	15	17	14	11	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4310	4310	4310
5°	4318	4229	4243
10°	4288	4154	4148
15°	4236	4064	4027
20°	4168	3952	3906
25°	4086	3833	3757
30°	3987	3701	3622
35°	3894	3580	3497
40°	3800	3452	3372
45°	3693	3344	3261
50°	3592	3225	3163
55°	3469	3114	3048
60°	3336	2986	2931
65°	3196	2854	2799
70°	3036	2672	2663
75°	2788	2496	2496
80°	2461	2284	2314
85°	2155	2142	2255



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	0.8
10°-20°	179.1	2.4
20°-30°	266.4	3.6
30°-40°	315.5	4.2
40°-50°	326.2	4.4
50°-60°	300.5	4.0
60°-70°	242.9	3.3
70°-80°	162.7	2.2
80°-90°	88.0	1.2
90°-100°	110.9	1.5
100°-110°	426.5	5.7
110°-120°	733.6	9.9
120°-130°	924.7	12.4
130°-140°	986.2	13.3
140°-150°	921.4	12.4
150°-160°	744.4	10.0
160°-170°	481.4	6.5
170°-180°	166.0	2.2
0°-30°	508.6	6.8
0°-40°	824.1	11.1
0°-60°	1450.8	19.5
0°-90°	1944.4	26.1
90°-120°	1271.0	17.1
90°-150°	4103.3	55.2
90°-180°	5495.0	73.9
0°-180°	7439.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	667	666	661	666	666	63
15°	637	638	633	637	635	179
25°	579	581	577	579	576	266
35°	501	505	504	506	506	313
45°	413	420	423	428	428	318
55°	317	328	338	345	348	284
65°	218	234	249	259	262	217
75°	120	138	158	171	175	128
85°	36	58	80	94	100	38
90°	12	43	74	95	104	10
95°	82	93	68	88	94	101
105°	387	403	422	435	439	410
115°	719	731	749	755	752	713
125°	1020	1029	1042	1047	1046	911
135°	1270	1277	1279	1285	1281	979
145°	1472	1474	1474	1478	1473	920
155°	1620	1613	1615	1618	1608	746
165°	1710	1702	1703	1710	1700	483
175°	1748	1741	1742	1751	1741	166
180°	1748	1748	1748	1748	1748	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	668.8	668.6	668.4	668.1	667.9	667.4	666.6	665.7	665.0	664.1	665.0
5°	667.3	666.9	666.7	666.4	666.1	665.5	664.4	663.4	662.4	661.3	662.5
7.5°	661.3	661.2	661.2	661.0	660.9	660.3	659.3	658.2	657.2	656.2	657.1
10°	656.2	656.2	656.2	656.2	656.2	655.6	654.4	653.2	652.0	650.9	651.9
12.5°	648.8	648.9	649.0	649.2	649.3	648.8	647.9	647.0	646.1	645.1	645.9
15°	637.1	637.3	637.5	637.6	637.7	637.3	636.3	635.2	634.3	633.3	634.1
17.5°	622.0	622.2	622.6	622.8	623.2	622.8	621.8	620.8	619.7	618.7	619.4
20°	611.0	611.3	611.6	611.9	612.2	611.8	610.8	609.8	608.7	607.7	608.1
22.5°	598.5	599.0	599.5	600.0	600.5	600.2	599.1	598.0	596.8	595.7	596.2
25°	578.9	579.4	579.8	580.2	580.7	580.5	579.6	578.8	577.8	577.0	577.6
27.5°	557.2	557.8	558.5	559.1	559.8	559.6	558.6	557.7	556.6	555.7	556.0
30°	541.0	541.9	542.8	543.6	544.5	544.5	543.6	542.8	541.9	541.0	541.3
32.5°	526.3	527.1	527.9	528.7	529.3	529.4	528.8	528.1	527.5	526.8	527.2
35°	501.1	502.1	503.2	504.1	505.1	505.5	505.1	504.5	504.1	503.7	504.1
37.5°	475.9	476.8	477.7	478.6	479.6	479.9	479.8	479.7	479.5	479.4	479.9
40°	458.6	459.8	460.9	462.1	463.2	463.7	463.6	463.5	463.3	463.1	463.7
42.5°	439.7	441.3	442.7	444.3	445.8	446.7	447.0	447.4	447.6	448.0	448.7
45°	412.8	414.4	415.9	417.6	419.2	420.3	421.1	421.8	422.5	423.3	424.3
47.5°	385.2	386.7	388.1	389.6	391.2	392.4	393.7	394.9	396.2	397.4	399.0
50°	366.4	367.9	369.5	371.2	372.7	374.4	375.9	377.5	379.1	380.7	382.4
52.5°	346.5	348.4	350.3	352.3	354.2	356.2	358.2	360.1	362.1	363.9	365.7
55°	317.3	319.6	321.9	324.3	326.6	328.9	331.2	333.6	335.9	338.2	339.8
57.5°	287.5	290.2	293.0	295.8	298.6	301.4	304.0	306.7	309.4	312.0	313.8
60°	267.6	270.4	273.4	276.3	279.2	282.1	285.0	287.9	290.8	293.7	295.9
62.5°	248.2	251.1	254.0	256.9	259.8	262.9	266.0	269.1	272.2	275.4	277.8
65°	218.5	221.9	225.2	228.5	231.9	235.3	238.8	242.3	245.7	249.3	251.4
67.5°	190.5	193.7	196.9	200.2	203.4	206.8	210.3	213.9	217.4	221.0	223.6
70°	170.0	173.4	176.8	180.1	183.5	187.0	190.8	194.6	198.4	202.2	204.9
72.5°	150.2	153.7	157.1	160.6	164.0	167.8	171.9	176.1	180.2	184.3	187.4
75°	120.4	124.2	127.9	131.7	135.5	139.7	144.4	149.0	153.7	158.3	161.2
77.5°	91.7	96.1	100.5	104.8	109.2	113.6	118.0	122.5	127.0	131.5	134.7
80°	74.0	78.3	82.7	87.0	91.4	96.0	101.0	105.9	110.8	115.8	119.0
82.5°	57.7	62.3	66.9	71.5	76.1	80.9	85.9	91.0	96.1	101.2	104.2
85°	36.0	40.8	45.5	50.4	55.2	60.1	65.2	70.3	75.3	80.5	83.7
87.5°	20.7	25.7	30.9	36.0	41.2	46.3	51.7	57.1	62.4	67.8	71.4
90°	11.8	18.7	25.7	32.6	39.6	46.6	53.5	60.4	67.4	74.4	79.1
92.5°	29.4	32.0	34.8	37.5	40.1	44.9	51.7	58.6	65.4	72.3	77.0
95°	82.4	85.3	88.3	91.1	94.0	92.5	86.5	80.5	74.5	68.5	73.1
97.5°	162.0	166.9	171.9	176.8	181.8	175.8	158.9	142.1	125.1	108.2	103.1
100°	223.7	227.6	231.5	235.4	239.3	244.2	249.9	255.8	261.6	267.4	227.6
102.5°	286.4	290.3	294.2	298.1	302.0	306.6	311.9	317.0	322.3	327.5	322.4
105°	386.9	390.5	393.9	397.4	400.9	404.8	409.1	413.5	417.8	422.2	425.2
107.5°	491.4	493.4	495.3	497.3	499.3	502.7	507.5	512.2	516.9	521.8	524.7
110°	559.3	561.0	562.8	564.6	566.3	569.5	574.1	578.8	583.4	588.1	590.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	623.6	625.7	627.8	629.8	632.0	635.2	639.5	643.8	648.1	652.4	653.9
115°	719.4	721.9	724.3	726.8	729.2	732.5	736.5	740.6	744.7	748.7	750.2
117.5°	818.6	819.2	819.8	820.4	821.0	823.6	828.3	832.9	837.6	842.3	843.3
120°	880.7	880.9	881.1	881.1	881.3	883.5	887.7	891.9	896.1	900.3	902.2
122.5°	935.1	936.4	937.8	939.1	940.4	942.8	946.5	950.1	953.7	957.3	959.2
125°	1020.0	1021.9	1023.8	1025.7	1027.5	1029.9	1032.9	1035.8	1038.6	1041.6	1042.8
127.5°	1100.5	1101.8	1103.1	1104.4	1105.7	1107.5	1109.7	1111.9	1114.1	1116.3	1117.8
130°	1150.3	1151.6	1152.9	1154.2	1155.5	1157.3	1159.6	1161.9	1164.2	1166.6	1167.8
132.5°	1199.5	1201.2	1202.8	1204.5	1206.1	1207.4	1208.3	1209.3	1210.2	1211.2	1213.1
135°	1270.2	1271.8	1273.3	1275.0	1276.5	1277.6	1278.0	1278.4	1278.8	1279.3	1280.7
137.5°	1335.2	1336.5	1337.9	1339.3	1340.7	1341.4	1341.4	1341.3	1341.3	1341.3	1343.1
140°	1377.1	1377.7	1378.3	1378.9	1379.4	1379.7	1379.5	1379.3	1379.2	1379.1	1381.2
142.5°	1415.5	1415.7	1415.9	1416.2	1416.4	1416.8	1417.2	1417.6	1418.1	1418.5	1420.0
145°	1471.7	1472.1	1472.6	1473.0	1473.4	1473.7	1473.7	1473.7	1473.7	1473.7	1474.7
147.5°	1520.4	1520.2	1520.1	1520.0	1519.8	1520.0	1520.4	1520.7	1521.0	1521.4	1522.0
150°	1551.4	1550.8	1550.3	1549.7	1549.1	1549.1	1549.7	1550.3	1550.8	1551.4	1552.0
152.5°	1581.5	1580.3	1579.0	1577.7	1576.4	1576.1	1576.7	1577.3	1577.9	1578.4	1579.0
155°	1620.1	1618.4	1616.7	1615.0	1613.3	1612.7	1613.3	1613.8	1614.4	1615.0	1615.8
157.5°	1649.9	1648.9	1647.9	1646.8	1645.8	1645.3	1645.4	1645.5	1645.5	1645.5	1646.5
160°	1670.7	1669.0	1667.2	1665.5	1663.8	1663.0	1663.4	1663.6	1663.9	1664.2	1665.3
162.5°	1687.3	1685.6	1683.9	1682.0	1680.3	1679.6	1679.9	1680.2	1680.5	1680.8	1682.4
165°	1709.6	1707.9	1706.1	1704.3	1702.6	1701.9	1702.2	1702.5	1702.8	1703.1	1704.8
167.5°	1726.1	1724.4	1722.6	1720.8	1719.0	1718.3	1718.6	1718.8	1719.2	1719.4	1721.5
170°	1735.5	1733.5	1731.5	1729.4	1727.4	1726.6	1726.8	1727.2	1727.4	1727.7	1730.0
172.5°	1741.7	1739.7	1737.7	1735.7	1733.6	1732.9	1733.5	1734.0	1734.5	1735.0	1737.1
175°	1748.4	1746.7	1745.0	1743.3	1741.5	1740.9	1741.1	1741.4	1741.7	1742.0	1744.3
177.5°	1751.5	1750.2	1748.8	1747.4	1746.0	1745.4	1745.7	1745.9	1746.1	1746.4	1748.0
180°	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	665.7	666.6	667.4	667.7	667.6	667.5	667.4	667.3
5°	663.7	664.9	666.0	666.5	666.4	666.2	666.1	666.0
7.5°	658.1	659.2	660.2	660.6	660.5	660.4	660.2	660.0
10°	653.0	653.9	655.0	655.4	655.3	655.1	655.0	654.8
12.5°	646.7	647.5	648.3	648.5	648.1	647.7	647.4	647.0
15°	635.0	635.8	636.7	636.9	636.3	635.7	635.2	634.6
17.5°	620.1	620.7	621.4	621.6	621.2	620.9	620.5	620.2
20°	608.6	609.1	609.5	609.7	609.7	609.7	609.7	609.7
22.5°	596.8	597.4	597.9	598.0	597.6	597.3	596.9	596.6
25°	578.2	578.8	579.3	579.3	578.5	577.8	577.0	576.4
27.5°	556.5	556.9	557.3	557.3	557.1	556.8	556.6	556.3
30°	541.6	541.9	542.2	542.3	542.1	541.9	541.8	541.7
32.5°	527.4	527.7	528.1	528.1	528.0	527.8	527.7	527.5
35°	504.5	505.1	505.5	505.7	505.7	505.7	505.7	505.7
37.5°	480.5	481.1	481.7	482.0	481.9	481.8	481.8	481.7
40°	464.3	464.9	465.5	465.9	466.2	466.5	466.8	467.1
42.5°	449.4	450.0	450.7	451.2	451.3	451.3	451.3	451.4
45°	425.2	426.3	427.3	427.9	428.1	428.2	428.3	428.5
47.5°	400.5	401.9	403.4	404.3	404.7	404.9	405.3	405.6
50°	383.9	385.6	387.1	388.1	388.6	389.0	389.4	389.9
52.5°	367.4	369.1	370.8	371.9	372.2	372.5	372.8	373.2
55°	341.4	343.0	344.6	345.7	346.3	346.9	347.4	348.0
57.5°	315.7	317.5	319.3	320.5	321.0	321.4	321.8	322.3
60°	298.1	300.2	302.5	303.8	304.2	304.6	305.1	305.5
62.5°	280.3	282.7	285.1	286.5	287.1	287.7	288.2	288.8
65°	253.6	255.8	258.0	259.3	259.9	260.5	261.1	261.7
67.5°	226.3	228.9	231.5	233.2	234.0	234.8	235.6	236.3
70°	207.7	210.4	213.2	215.0	215.9	216.7	217.7	218.5
72.5°	190.4	193.3	196.3	198.1	198.8	199.4	200.1	200.7
75°	164.1	167.0	170.0	171.8	172.5	173.2	173.9	174.7
77.5°	137.8	141.1	144.3	146.2	146.7	147.3	147.9	148.5
80°	122.2	125.4	128.5	130.4	131.0	131.6	132.2	132.8
82.5°	107.3	110.4	113.5	115.5	116.6	117.6	118.6	119.7
85°	86.9	90.1	93.2	95.4	96.6	97.7	98.9	100.0
87.5°	75.0	78.6	82.2	84.6	85.8	87.0	88.3	89.5
90°	83.9	88.8	93.5	96.9	98.8	100.7	102.5	104.4
92.5°	81.6	86.3	90.9	94.0	95.4	96.9	98.2	99.7
95°	77.7	82.4	87.0	89.9	90.9	91.9	92.9	93.9
97.5°	98.2	93.1	88.0	85.9	87.0	87.9	88.9	89.9
100°	187.7	147.8	108.0	87.9	87.6	87.3	87.0	86.8
102.5°	317.1	311.9	306.8	294.8	276.1	257.4	238.7	220.0
105°	428.0	430.9	433.9	435.7	436.4	437.1	437.8	438.6
107.5°	527.6	530.5	533.5	534.9	535.0	535.0	535.1	535.1
110°	591.9	593.7	595.6	597.3	598.6	599.9	601.2	602.5



TEST NUMBER: P333396-935

CATALOG NUMBER: S125DIW-S610D1560U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	655.5	657.0	658.6	659.6	660.2	660.8	661.5	662.1
115°	751.7	753.1	754.6	754.9	754.1	753.2	752.3	751.5
117.5°	844.2	845.2	846.2	846.8	847.1	847.3	847.5	847.7
120°	904.1	906.0	907.9	908.6	908.0	907.4	906.9	906.3
122.5°	960.9	962.7	964.5	964.9	964.1	963.4	962.6	961.7
125°	1043.9	1045.1	1046.3	1046.8	1046.6	1046.5	1046.4	1046.2
127.5°	1119.4	1120.8	1122.4	1122.5	1121.2	1119.9	1118.6	1117.3
130°	1169.0	1170.1	1171.3	1171.5	1170.8	1170.1	1169.4	1168.6
132.5°	1214.9	1216.8	1218.6	1219.1	1218.3	1217.5	1216.7	1215.8
135°	1281.9	1283.2	1284.5	1284.7	1283.8	1282.7	1281.7	1280.7
137.5°	1344.9	1346.7	1348.6	1349.0	1348.1	1347.2	1346.3	1345.3
140°	1383.5	1385.6	1387.8	1388.3	1387.2	1386.0	1384.8	1383.7
142.5°	1421.4	1422.9	1424.4	1424.5	1423.4	1422.3	1421.1	1420.0
145°	1475.7	1476.7	1477.7	1477.6	1476.5	1475.4	1474.2	1473.1
147.5°	1522.5	1523.1	1523.7	1523.1	1521.2	1519.4	1517.6	1515.8
150°	1552.6	1553.2	1553.8	1553.0	1550.8	1548.7	1546.4	1544.3
152.5°	1579.6	1580.1	1580.7	1579.9	1578.0	1575.9	1573.8	1571.8
155°	1616.7	1617.6	1618.4	1617.6	1615.4	1613.1	1610.8	1608.4
157.5°	1647.4	1648.3	1649.2	1648.6	1646.2	1643.9	1641.6	1639.3
160°	1666.5	1667.7	1668.8	1668.3	1665.9	1663.6	1661.3	1659.1
162.5°	1684.0	1685.7	1687.2	1686.8	1684.3	1681.7	1679.2	1676.6
165°	1706.5	1708.3	1710.0	1709.7	1707.4	1705.1	1702.8	1700.5
167.5°	1723.5	1725.6	1727.7	1727.4	1724.8	1722.3	1719.7	1717.1
170°	1732.3	1734.7	1736.9	1736.8	1734.2	1731.6	1729.0	1726.4
172.5°	1739.1	1741.2	1743.3	1743.0	1740.4	1737.8	1735.3	1732.7
175°	1746.5	1748.9	1751.2	1751.0	1748.4	1745.8	1743.3	1740.7
177.5°	1749.6	1751.2	1752.8	1752.7	1750.8	1749.0	1747.1	1745.3
180°	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4	1748.4

(END OF REPORT)