

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: P333658-935

Luminaire Tested: **S125RDIW-S375D1560U935-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333658-935
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: S125RDIW-S375D1560U935-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1560 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6617.5 lumens
Efficiency: N/A
Efficacy: 123.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

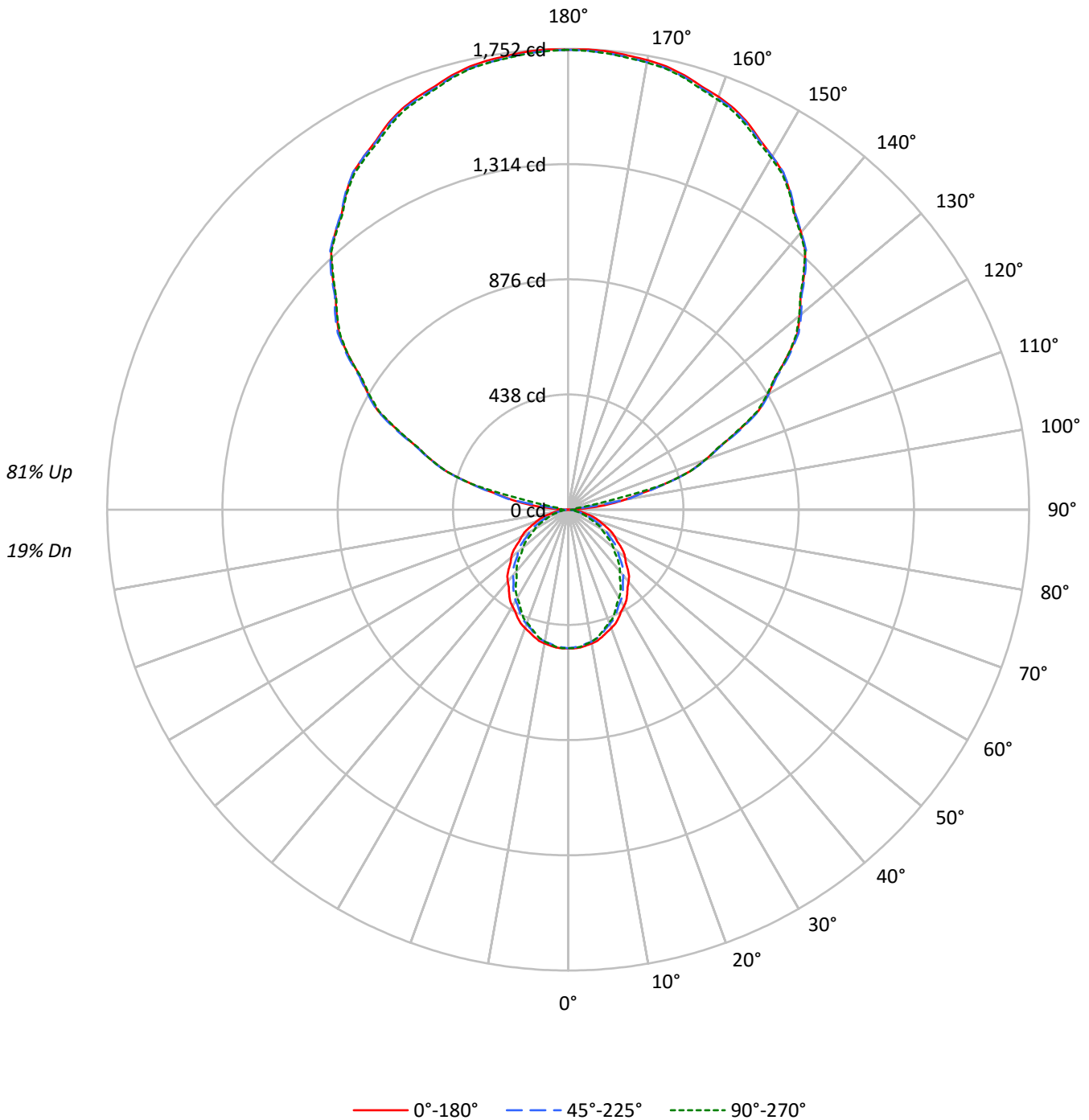
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	88	88	88	88	66	66	66	46	46	46	28	28	28	19
1	91	87	83	80	80	77	74	71	58	56	54	40	39	38	24	24	23	16
2	83	76	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20	14
3	75	67	60	54	66	59	53	49	45	41	38	31	29	27	19	18	17	12
4	69	59	51	46	61	52	46	41	40	35	32	28	25	23	17	16	15	10
5	63	52	45	39	55	46	40	35	35	31	27	25	22	20	15	14	13	9
6	58	47	39	34	51	41	35	30	32	27	24	23	20	17	14	12	11	8
7	54	42	34	29	47	37	31	26	29	24	21	20	17	15	13	11	10	7
8	49	38	31	26	44	34	27	23	26	21	18	19	16	14	12	10	9	6
9	46	34	27	23	40	31	25	20	24	19	16	17	14	12	11	9	8	6
10	43	31	25	20	38	28	22	18	22	17	14	16	13	11	10	8	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3402	3402	3402
5°	3411	3371	3392
10°	3385	3341	3341
15°	3344	3273	3245
20°	3293	3178	3140
25°	3233	3085	3017
30°	3157	2976	2882
35°	3080	2864	2730
40°	3010	2748	2580
45°	2922	2617	2417
50°	2834	2475	2247
55°	2733	2339	2066
60°	2631	2174	1870
65°	2512	1984	1647
70°	2374	1743	1420
75°	2186	1470	1183
80°	1923	1153	993
85°	1623	941	889



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.5	0.7
10°-20°	138.4	2.1
20°-30°	200.8	3.0
30°-40°	228.8	3.5
40°-50°	223.0	3.4
50°-60°	187.7	2.8
60°-70°	131.6	2.0
70°-80°	67.6	1.0
80°-90°	20.7	0.3
90°-100°	63.5	1.0
100°-110°	391.6	5.9
110°-120°	710.2	10.7
120°-130°	911.5	13.8
130°-140°	980.4	14.8
140°-150°	920.2	13.9
150°-160°	744.4	11.2
160°-170°	481.4	7.3
170°-180°	166.0	2.5
0°-30°	388.7	5.9
0°-40°	617.6	9.3
0°-60°	1028.3	15.5
0°-90°	1248.3	18.9
90°-120°	1165.3	17.6
90°-150°	3977.4	60.1
90°-180°	5369.0	81.1
0°-180°	6617.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	527	527	527	527	527	
5°	526	524	520	524	523	50
15°	500	498	490	489	485	141
25°	454	447	433	428	423	209
35°	391	381	363	352	346	245
45°	320	308	286	271	265	247
55°	243	230	208	190	184	217
65°	164	150	130	114	108	163
75°	88	75	59	50	47	93
85°	22	15	13	12	12	25
90°	1	12	21	27	31	4
95°	74	67	21	27	27	94
105°	381	386	386	386	385	404
115°	716	722	723	718	710	709
125°	1017	1026	1026	1021	1017	908
135°	1269	1276	1274	1271	1264	978
145°	1471	1474	1474	1474	1467	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°	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8
2.5°	527.8	527.6	527.4	527.2	526.9	526.5	525.8	525.0	524.3	523.7	524.3
5°	526.1	525.7	525.4	525.0	524.6	524.0	523.0	522.0	521.1	520.0	521.0
7.5°	520.9	520.6	520.2	519.9	519.5	518.8	517.6	516.4	515.3	514.1	514.7
10°	516.1	515.8	515.6	515.3	515.1	514.3	513.1	511.8	510.6	509.4	509.6
12.5°	510.7	510.3	510.1	509.7	509.4	508.3	506.7	505.1	503.3	501.7	501.9
15°	500.2	499.6	499.1	498.6	498.1	496.9	495.0	493.2	491.3	489.5	489.4
17.5°	488.4	487.5	486.7	485.9	485.1	483.5	481.1	478.8	476.5	474.2	473.7
20°	479.1	478.2	477.3	476.5	475.5	473.7	470.9	468.0	465.2	462.4	461.9
22.5°	468.9	468.0	467.2	466.2	465.4	463.5	460.5	457.5	454.5	451.6	450.7
25°	453.7	452.3	451.0	449.6	448.3	446.0	442.7	439.5	436.2	432.9	431.8
27.5°	436.1	434.5	432.9	431.3	429.6	427.1	423.6	420.1	416.6	413.1	411.5
30°	423.4	421.7	420.0	418.4	416.6	414.0	410.3	406.6	402.9	399.1	397.1
32.5°	411.0	409.0	407.1	405.1	403.1	400.3	396.5	392.7	388.9	385.1	382.9
35°	390.7	388.7	386.5	384.4	382.3	379.2	375.2	371.3	367.3	363.3	360.8
37.5°	370.9	368.3	365.8	363.2	360.6	357.2	353.2	349.0	345.0	340.9	337.8
40°	357.0	354.3	351.6	349.0	346.3	342.9	338.6	334.4	330.1	325.9	322.5
42.5°	342.2	339.6	336.8	334.2	331.4	327.9	323.5	319.1	314.7	310.3	307.1
45°	319.9	317.4	314.8	312.2	309.7	305.9	301.1	296.3	291.4	286.5	282.9
47.5°	296.8	294.0	291.4	288.6	285.9	282.1	277.2	272.3	267.4	262.5	258.9
50°	282.1	279.2	276.3	273.4	270.4	266.5	261.4	256.4	251.3	246.3	242.6
52.5°	266.2	263.2	260.2	257.3	254.3	250.4	245.6	240.8	236.1	231.4	227.4
55°	242.7	239.9	237.0	234.3	231.4	227.6	222.6	217.6	212.7	207.7	203.7
57.5°	219.0	216.0	212.9	209.9	206.9	203.0	198.2	193.5	188.7	183.9	180.0
60°	203.7	200.6	197.5	194.4	191.3	187.4	182.6	177.9	173.1	168.3	164.5
62.5°	187.5	184.5	181.6	178.7	175.6	171.8	166.9	162.1	157.2	152.4	148.8
65°	164.4	161.4	158.3	155.3	152.3	148.4	143.8	139.1	134.4	129.8	126.2
67.5°	141.4	138.4	135.3	132.3	129.3	125.5	121.1	116.6	112.1	107.6	104.4
70°	125.7	122.8	119.8	116.8	113.7	110.0	105.6	101.2	96.8	92.3	89.5
72.5°	110.5	107.5	104.6	101.7	98.8	95.1	91.0	86.9	82.7	78.6	76.1
75°	87.6	84.9	82.2	79.6	77.0	73.8	70.0	66.3	62.6	58.9	56.9
77.5°	64.7	62.7	60.5	58.4	56.3	53.7	50.8	47.8	44.9	41.8	40.5
80°	51.7	49.6	47.5	45.4	43.2	41.0	38.5	36.0	33.5	31.0	30.2
82.5°	39.0	37.1	35.2	33.2	31.3	29.5	27.9	26.2	24.5	22.7	22.4
85°	21.9	20.3	18.7	17.1	15.5	14.5	14.0	13.6	13.2	12.7	12.7
87.5°	7.6	7.6	7.5	7.5	7.4	7.6	7.9	8.3	8.6	9.0	9.2
90°	1.3	3.6	5.9	8.2	10.5	12.7	14.7	16.7	18.7	20.8	22.2
92.5°	20.0	18.3	16.7	15.2	13.5	13.6	15.4	17.1	18.9	20.8	22.2
95°	73.9	73.0	72.2	71.3	70.4	64.5	53.6	42.6	31.7	20.8	22.2
97.5°	154.2	155.8	157.3	158.9	160.5	150.4	128.7	107.1	85.4	63.8	55.6
100°	216.5	217.3	218.2	219.0	219.9	220.9	222.1	223.3	224.4	225.5	182.6
102.5°	279.7	280.8	281.9	283.0	284.0	285.0	285.7	286.4	287.1	287.7	279.7
105°	381.1	382.2	383.4	384.5	385.6	386.2	386.2	386.2	386.2	386.2	386.2
107.5°	486.3	486.3	486.3	486.3	486.3	486.6	487.2	487.8	488.4	488.9	489.0
110°	554.7	554.7	554.7	554.7	554.7	555.0	555.6	556.2	556.7	557.3	556.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	619.1	619.7	620.4	621.1	621.8	622.3	622.7	623.0	623.4	623.7	622.6
115°	715.5	716.9	718.3	719.8	721.2	722.0	722.4	722.6	723.0	723.2	722.0
117.5°	815.3	815.2	815.1	815.1	815.0	815.5	816.7	817.7	818.8	819.9	818.4
120°	877.4	877.2	876.9	876.6	876.3	876.6	877.4	878.3	879.2	880.0	879.5
122.5°	932.5	933.5	934.6	935.7	936.8	937.5	938.0	938.3	938.7	939.2	938.6
125°	1017.4	1019.4	1021.5	1023.5	1025.5	1026.5	1026.5	1026.5	1026.5	1026.5	1025.4
127.5°	1098.5	1100.0	1101.5	1102.9	1104.3	1105.0	1104.8	1104.7	1104.5	1104.3	1103.6
130°	1148.3	1149.8	1151.2	1152.7	1154.1	1154.9	1155.3	1155.5	1155.8	1156.2	1155.3
132.5°	1198.1	1199.8	1201.4	1203.2	1204.8	1205.3	1204.7	1204.0	1203.4	1202.8	1202.6
135°	1268.9	1270.6	1272.4	1274.1	1275.8	1276.3	1275.8	1275.2	1274.6	1274.1	1273.5
137.5°	1333.9	1335.4	1337.0	1338.4	1340.0	1340.4	1339.9	1339.4	1338.9	1338.3	1338.5
140°	1376.5	1377.1	1377.6	1378.2	1378.8	1378.9	1378.6	1378.4	1378.0	1377.8	1378.4
142.5°	1414.8	1415.1	1415.5	1415.8	1416.2	1416.6	1417.0	1417.4	1417.8	1418.2	1418.3
145°	1471.1	1471.6	1472.2	1472.8	1473.4	1473.7	1473.7	1473.7	1473.7	1473.7	1473.9
147.5°	1520.4	1520.2	1520.1	1520.0	1519.8	1520.0	1520.4	1520.7	1521.0	1521.4	1521.7
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°	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8
2.5°	525.0	525.8	526.5	526.8	526.8	526.7	526.6	526.5
5°	521.9	522.7	523.6	524.0	523.8	523.6	523.4	523.2
7.5°	515.3	516.0	516.6	516.8	516.6	516.4	516.3	516.0
10°	509.9	510.1	510.4	510.4	510.1	509.9	509.6	509.4
12.5°	502.0	502.3	502.5	502.4	502.0	501.5	501.2	500.8
15°	489.2	489.1	489.0	488.6	487.8	487.1	486.3	485.4
17.5°	473.3	472.9	472.4	471.8	471.2	470.5	469.8	469.2
20°	461.5	461.1	460.6	460.0	459.2	458.4	457.6	456.8
22.5°	449.8	448.9	448.1	447.3	446.7	446.0	445.4	444.7
25°	430.7	429.5	428.3	427.3	426.3	425.3	424.4	423.4
27.5°	409.9	408.3	406.7	405.4	404.5	403.6	402.6	401.7
30°	395.0	393.0	391.0	389.6	388.7	388.0	387.2	386.4
32.5°	380.6	378.4	376.1	374.5	373.5	372.5	371.4	370.5
35°	358.2	355.6	353.0	351.1	349.9	348.7	347.4	346.2
37.5°	334.7	331.7	328.6	326.4	325.2	324.0	322.8	321.6
40°	319.2	315.8	312.5	310.2	309.2	308.2	307.0	306.0
42.5°	303.8	300.7	297.4	295.1	293.5	291.9	290.3	288.8
45°	279.4	275.9	272.3	269.9	268.6	267.3	266.0	264.6
47.5°	255.3	251.6	248.0	245.4	243.9	242.5	241.0	239.5
50°	238.8	235.1	231.4	228.9	227.6	226.3	225.0	223.6
52.5°	223.3	219.4	215.3	212.7	211.4	210.1	208.7	207.4
55°	199.8	195.8	191.8	189.1	187.7	186.2	184.9	183.5
57.5°	176.2	172.3	168.3	165.7	164.5	163.2	162.0	160.7
60°	160.6	156.6	152.7	150.2	148.8	147.5	146.2	144.8
62.5°	145.2	141.5	137.9	135.5	134.1	132.9	131.6	130.2
65°	122.6	119.1	115.5	113.1	111.8	110.5	109.2	107.8
67.5°	101.1	97.9	94.6	92.5	91.4	90.4	89.3	88.3
70°	86.9	84.1	81.4	79.5	78.4	77.3	76.3	75.2
72.5°	73.5	71.0	68.5	66.9	66.2	65.5	64.7	64.1
75°	55.0	53.0	51.1	49.9	49.2	48.6	48.0	47.4
77.5°	39.2	37.8	36.4	35.5	35.0	34.6	34.1	33.7
80°	29.4	28.7	27.9	27.4	27.2	27.0	26.9	26.7
82.5°	22.0	21.6	21.3	21.0	20.9	20.8	20.8	20.6
85°	12.6	12.5	12.4	12.3	12.2	12.1	12.1	12.0
87.5°	9.5	9.8	10.1	10.2	10.3	10.5	10.6	10.7
90°	23.6	25.1	26.5	27.6	28.5	29.4	30.2	31.1
92.5°	23.6	25.1	26.5	27.4	27.8	28.2	28.7	29.0
95°	23.6	25.1	26.5	27.2	27.2	27.2	27.2	27.2
97.5°	47.5	39.4	31.3	27.2	27.2	27.2	27.2	27.2
100°	139.7	96.8	53.9	31.9	30.7	29.5	28.4	27.2
102.5°	271.5	263.4	255.3	241.4	221.8	202.2	182.6	163.1
105°	386.2	386.2	386.2	386.1	385.8	385.6	385.2	385.0
107.5°	489.0	489.0	489.1	488.7	487.8	487.0	486.1	485.3
110°	555.6	554.7	553.9	553.6	553.9	554.1	554.5	554.7



TEST NUMBER: P333658-935

CATALOG NUMBER: S125RDIW-S375D1560U935-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	621.5	620.4	619.3	618.5	618.2	617.8	617.3	616.9
115°	720.9	719.8	718.6	717.2	715.5	713.7	712.0	710.2
117.5°	816.9	815.5	813.9	812.8	812.1	811.3	810.5	809.8
120°	878.9	878.3	877.8	876.8	875.3	873.8	872.5	871.0
122.5°	938.0	937.5	936.9	935.7	934.1	932.4	930.7	929.0
125°	1024.2	1023.0	1021.9	1020.9	1020.0	1019.2	1018.3	1017.4
127.5°	1103.0	1102.4	1101.7	1100.4	1098.2	1096.1	1094.0	1091.8
130°	1154.4	1153.6	1152.7	1151.5	1150.1	1148.7	1147.2	1145.7
132.5°	1202.5	1202.3	1202.1	1201.3	1199.9	1198.4	1197.0	1195.5
135°	1272.9	1272.4	1271.8	1270.6	1268.9	1267.1	1265.4	1263.7
137.5°	1338.6	1338.7	1338.9	1338.2	1336.6	1335.2	1333.6	1332.1
140°	1378.9	1379.5	1380.1	1379.5	1377.8	1376.1	1374.3	1372.6
142.5°	1418.4	1418.6	1418.7	1417.9	1416.1	1414.4	1412.6	1410.9
145°	1474.3	1474.5	1474.8	1474.1	1472.4	1470.7	1469.0	1467.2
147.5°	1522.1	1522.4	1522.8	1521.9	1519.8	1517.8	1515.7	1513.6
150°	1552.6	1553.2	1553.8	1552.9	1550.6	1548.3	1546.0	1543.7
152.5°	1579.6	1580.1	1580.7	1579.9	1577.9	1575.8	1573.7	1571.7
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)