

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: P333398-927

Luminaire Tested: **S125DIW-S610D1560U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333398-927
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-S610D1560U927-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6923.1 lumens
Efficiency: N/A
Efficacy: 114.2 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

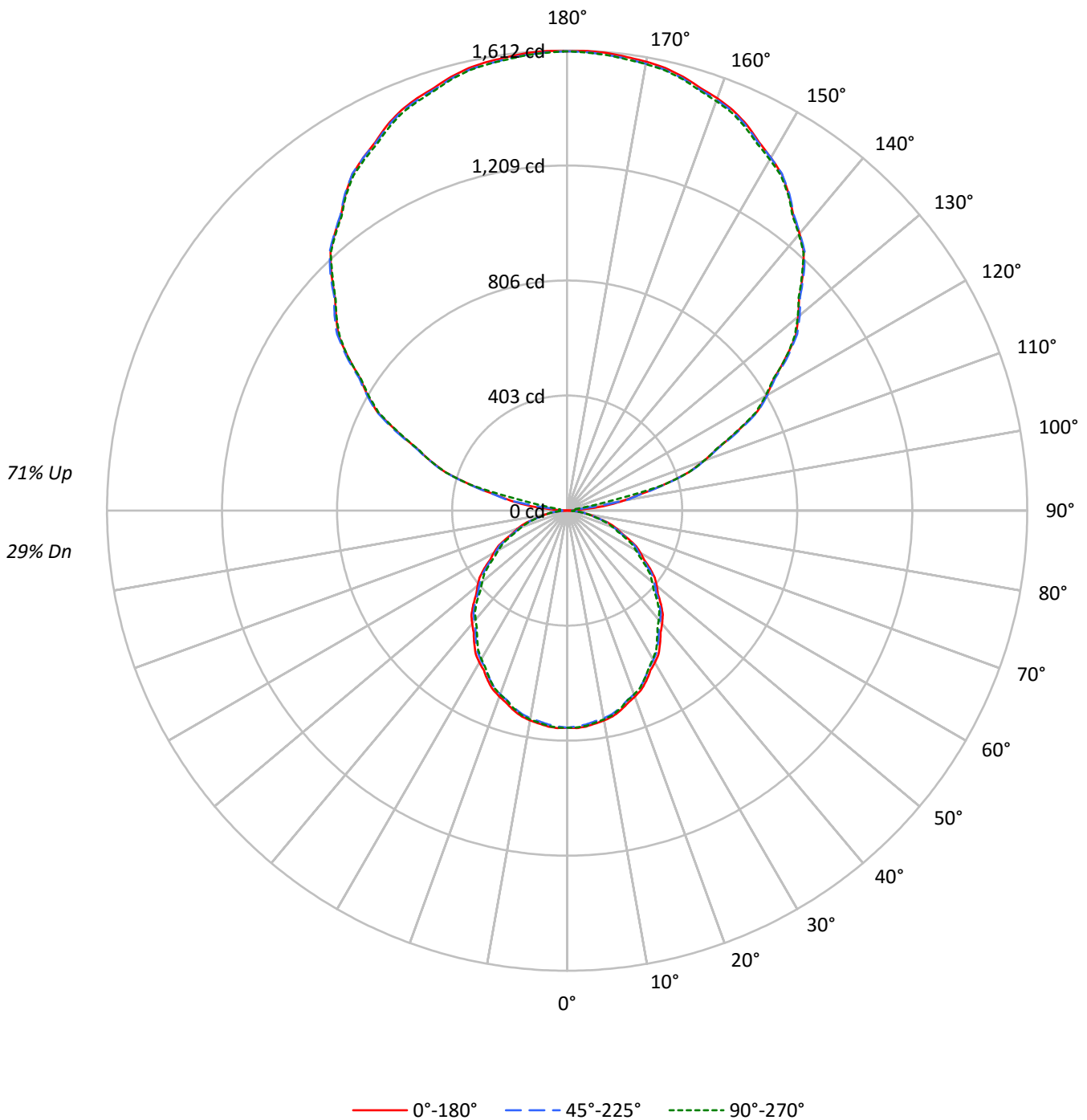
Input Watts (W): 60.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	91	91	91	91	71	71	71	53	53	53	37	37	37	29
1	93	89	85	82	83	80	76	74	62	60	58	47	45	44	32	31	31	24
2	85	77	71	67	75	70	65	60	55	51	48	41	39	37	28	27	26	20
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	25	23	22	17
4	70	60	52	47	63	54	48	42	43	38	34	32	29	26	22	20	19	15
5	65	53	46	40	58	48	41	36	38	33	29	29	25	23	20	18	16	13
6	59	48	40	34	53	43	36	31	34	29	26	26	23	20	18	16	14	11
7	55	43	35	30	49	39	32	27	31	26	22	23	20	18	17	14	13	10
8	51	39	31	26	45	35	29	24	28	23	20	21	18	16	15	13	11	9
9	47	35	28	23	42	32	26	21	26	21	18	20	16	14	14	12	10	8
10	44	32	25	21	39	29	23	19	24	19	16	18	15	12	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4914	4914	4914
5°	4924	4877	4909
10°	4894	4844	4871
15°	4841	4785	4805
20°	4766	4704	4712
25°	4684	4606	4603
30°	4583	4502	4480
35°	4475	4389	4328
40°	4364	4268	4207
45°	4244	4156	4074
50°	4112	4022	3900
55°	3985	3869	3762
60°	3834	3716	3584
65°	3651	3533	3412
70°	3478	3320	3206
75°	3169	3064	2959
80°	2819	2775	2708
85°	2453	2497	2364



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	1.0
10°-20°	202.6	2.9
20°-30°	299.2	4.3
30°-40°	349.1	5.0
40°-50°	350.6	5.1
50°-60°	307.8	4.4
60°-70°	229.3	3.3
70°-80°	131.1	1.9
80°-90°	41.5	0.6
90°-100°	58.5	0.8
100°-110°	360.3	5.2
110°-120°	653.4	9.4
120°-130°	838.6	12.1
130°-140°	902.0	13.0
140°-150°	846.7	12.2
150°-160°	684.9	9.9
160°-170°	442.9	6.4
170°-180°	152.8	2.2
0°-30°	573.6	8.3
0°-40°	922.7	13.3
0°-60°	1581.1	22.8
0°-90°	1983.0	28.6
90°-120°	1072.2	15.5
90°-150°	3659.5	52.9
90°-180°	4940.0	71.4
0°-180°	6923.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	761	761	761	761	761	
5°	760	758	752	757	757	72
15°	724	722	716	719	719	204
25°	657	654	646	648	646	302
35°	568	565	557	554	549	355
45°	465	462	455	448	446	358
55°	354	352	344	338	334	316
65°	239	237	231	226	223	237
75°	127	126	123	121	119	135
85°	33	34	34	33	32	37
90°	1	11	19	25	29	5
95°	68	62	19	25	25	87
105°	351	355	355	355	354	372
115°	658	664	665	661	654	652
125°	936	944	944	940	936	836
135°	1167	1174	1172	1170	1163	900
145°	1354	1356	1356	1357	1350	846
155°	1491	1484	1486	1489	1480	686
165°	1573	1566	1567	1573	1565	444
175°	1609	1602	1603	1611	1602	153
180°	1609	1609	1609	1609	1609	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8
2.5°	762.7	762.4	762.1	761.8	761.4	760.7	759.7	758.6	757.6	756.5	757.6
5°	759.6	759.3	759.1	758.8	758.5	757.7	756.4	755.0	753.7	752.3	753.6
7.5°	752.6	752.3	752.1	751.8	751.5	750.7	749.2	747.7	746.2	744.8	745.9
10°	746.3	746.1	745.8	745.5	745.3	744.4	742.9	741.5	740.0	738.6	739.6
12.5°	738.6	738.2	737.7	737.2	736.7	735.8	734.4	733.1	731.7	730.3	731.2
15°	724.1	723.7	723.3	722.9	722.5	721.5	720.1	718.6	717.1	715.7	716.3
17.5°	707.3	706.8	706.2	705.6	705.0	703.9	702.4	700.8	699.3	697.8	698.6
20°	693.4	693.1	692.8	692.6	692.3	691.3	689.6	687.9	686.1	684.4	685.3
22.5°	679.4	678.9	678.4	677.9	677.5	676.4	674.8	673.2	671.5	669.9	670.5
25°	657.3	656.6	655.9	655.3	654.6	653.4	651.6	649.9	648.2	646.4	646.7
27.5°	631.4	631.0	630.6	630.2	629.8	628.7	626.9	625.1	623.3	621.5	621.5
30°	614.5	614.1	613.7	613.3	612.9	611.7	609.7	607.7	605.7	603.7	603.4
32.5°	596.2	595.6	595.0	594.4	593.7	592.6	590.8	589.0	587.2	585.4	584.9
35°	567.6	567.0	566.5	566.0	565.5	564.3	562.4	560.5	558.6	556.7	556.1
37.5°	537.8	537.2	536.5	535.8	535.2	533.9	532.2	530.4	528.6	526.9	525.9
40°	517.6	517.0	516.3	515.6	514.9	513.7	511.8	509.9	508.0	506.2	505.0
42.5°	496.0	495.4	494.8	494.2	493.7	492.5	490.6	488.8	486.9	485.0	483.9
45°	464.7	464.1	463.6	463.0	462.6	461.4	459.9	458.3	456.6	455.0	453.4
47.5°	430.9	430.9	431.0	431.0	431.0	430.1	428.2	426.3	424.4	422.4	420.8
50°	409.3	408.8	408.4	408.1	407.7	406.7	405.0	403.5	401.9	400.3	398.5
52.5°	387.1	386.8	386.6	386.3	386.0	384.9	383.3	381.5	379.9	378.1	376.6
55°	353.9	353.5	353.1	352.7	352.3	351.2	349.3	347.5	345.5	343.6	342.5
57.5°	318.9	318.7	318.5	318.2	318.1	317.1	315.5	313.9	312.4	310.9	309.3
60°	296.8	296.2	295.6	295.1	294.6	293.6	292.2	290.7	289.1	287.7	286.4
62.5°	273.6	273.2	272.7	272.4	271.9	271.1	269.8	268.5	267.3	266.0	264.6
65°	238.9	238.7	238.4	238.1	237.9	237.0	235.5	234.1	232.6	231.2	229.9
67.5°	205.3	204.8	204.2	203.7	203.1	202.3	201.2	200.1	199.0	197.9	196.9
70°	184.2	183.5	182.8	182.2	181.5	180.5	179.4	178.2	177.0	175.8	174.9
72.5°	161.1	160.6	160.2	159.7	159.2	158.6	157.9	157.1	156.3	155.5	154.6
75°	127.0	126.7	126.4	126.2	126.0	125.5	124.8	124.1	123.4	122.8	122.4
77.5°	95.6	95.5	95.4	95.2	95.1	94.9	94.5	94.2	93.8	93.4	93.2
80°	75.8	75.8	75.8	75.8	75.8	75.7	75.4	75.2	74.9	74.6	74.5
82.5°	58.5	58.3	58.1	57.8	57.7	57.5	57.4	57.4	57.4	57.3	57.0
85°	33.1	33.3	33.4	33.5	33.7	33.7	33.7	33.7	33.7	33.7	33.6
87.5°	13.2	13.6	14.1	14.5	15.0	15.3	15.5	15.8	16.1	16.3	16.6
90°	1.2	3.3	5.5	7.5	9.7	11.6	13.5	15.4	17.2	19.1	20.4
92.5°	18.4	16.9	15.4	13.9	12.4	12.5	14.2	15.8	17.4	19.1	20.4
95°	68.0	67.2	66.4	65.6	64.8	59.3	49.3	39.2	29.2	19.1	20.4
97.5°	141.9	143.3	144.7	146.2	147.7	138.4	118.4	98.5	78.6	58.7	51.2
100°	199.2	199.9	200.7	201.5	202.3	203.3	204.3	205.4	206.4	207.5	168.0
102.5°	257.4	258.3	259.4	260.4	261.3	262.2	262.8	263.5	264.1	264.7	257.3
105°	350.6	351.6	352.8	353.8	354.8	355.4	355.4	355.4	355.4	355.4	355.4
107.5°	447.4	447.4	447.4	447.4	447.4	447.7	448.2	448.8	449.3	449.8	449.9
110°	510.4	510.4	510.4	510.4	510.4	510.6	511.2	511.7	512.2	512.8	512.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	569.6	570.2	570.8	571.5	572.1	572.6	572.9	573.2	573.5	573.9	572.8
115°	658.3	659.6	660.9	662.3	663.5	664.3	664.6	664.9	665.2	665.4	664.3
117.5°	750.1	750.0	750.0	750.0	749.9	750.4	751.4	752.3	753.4	754.4	753.0
120°	807.3	807.1	806.8	806.5	806.3	806.5	807.3	808.1	808.9	809.7	809.2
122.5°	857.9	858.9	859.9	860.9	861.9	862.6	863.0	863.3	863.7	864.1	863.6
125°	936.1	937.9	939.8	941.7	943.6	944.4	944.4	944.4	944.4	944.4	943.4
127.5°	1010.7	1012.1	1013.4	1014.8	1016.1	1016.7	1016.5	1016.4	1016.2	1016.1	1015.4
130°	1056.5	1057.9	1059.2	1060.6	1061.8	1062.6	1063.0	1063.2	1063.4	1063.7	1063.0
132.5°	1102.3	1103.9	1105.4	1107.0	1108.5	1109.0	1108.4	1107.8	1107.2	1106.7	1106.5
135°	1167.4	1169.0	1170.7	1172.3	1173.9	1174.3	1173.9	1173.3	1172.7	1172.3	1171.7
137.5°	1227.3	1228.7	1230.1	1231.4	1232.9	1233.3	1232.8	1232.3	1231.8	1231.4	1231.5
140°	1266.5	1267.0	1267.5	1268.0	1268.6	1268.7	1268.4	1268.2	1267.9	1267.7	1268.2
142.5°	1301.7	1302.0	1302.3	1302.7	1303.0	1303.4	1303.8	1304.1	1304.5	1304.9	1305.0
145°	1353.5	1354.0	1354.6	1355.1	1355.7	1355.9	1355.9	1355.9	1355.9	1355.9	1356.1
147.5°	1398.8	1398.7	1398.6	1398.5	1398.4	1398.5	1398.8	1399.2	1399.5	1399.8	1400.1
150°	1427.4	1426.9	1426.4	1425.8	1425.3	1425.3	1425.8	1426.4	1426.9	1427.4	1428.0
152.5°	1455.1	1454.0	1452.8	1451.6	1450.4	1450.1	1450.6	1451.2	1451.8	1452.2	1452.8
155°	1490.6	1489.1	1487.5	1485.9	1484.3	1483.8	1484.3	1484.8	1485.3	1485.9	1486.7
157.5°	1518.1	1517.1	1516.2	1515.2	1514.3	1513.8	1513.9	1513.9	1513.9	1514.0	1514.9
160°	1537.2	1535.6	1534.0	1532.4	1530.8	1530.1	1530.4	1530.7	1530.9	1531.2	1532.2
162.5°	1552.4	1550.9	1549.3	1547.6	1546.0	1545.4	1545.6	1545.9	1546.2	1546.4	1547.9
165°	1573.0	1571.4	1569.7	1568.1	1566.5	1565.9	1566.1	1566.5	1566.7	1566.9	1568.5
167.5°	1588.2	1586.6	1584.9	1583.3	1581.6	1581.0	1581.2	1581.4	1581.8	1582.0	1583.9
170°	1596.8	1594.9	1593.1	1591.2	1589.4	1588.6	1588.8	1589.1	1589.4	1589.6	1591.7
172.5°	1602.5	1600.7	1598.8	1597.0	1595.1	1594.4	1594.9	1595.4	1595.9	1596.3	1598.2
175°	1608.7	1607.1	1605.5	1603.9	1602.3	1601.7	1602.0	1602.2	1602.5	1602.7	1604.9
177.5°	1611.5	1610.3	1609.0	1607.7	1606.5	1605.9	1606.1	1606.4	1606.5	1606.8	1608.3
180°	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8
2.5°	758.6	759.7	760.7	761.2	761.1	761.0	760.9	760.8
5°	754.8	756.0	757.2	757.7	757.6	757.5	757.3	757.2
7.5°	747.1	748.3	749.5	750.0	749.9	749.7	749.6	749.5
10°	740.7	741.7	742.8	743.3	743.1	743.0	742.8	742.8
12.5°	732.1	732.9	733.7	734.2	734.1	734.1	734.1	734.0
15°	717.0	717.6	718.4	718.7	718.7	718.7	718.7	718.7
17.5°	699.5	700.3	701.2	701.2	700.5	699.9	699.3	698.5
20°	686.2	687.1	688.1	688.2	687.5	686.9	686.2	685.6
22.5°	671.1	671.8	672.4	672.5	672.0	671.5	671.1	670.7
25°	647.0	647.2	647.5	647.5	647.1	646.7	646.3	645.9
27.5°	621.6	621.7	621.7	621.5	621.2	620.8	620.4	620.0
30°	603.2	602.9	602.6	602.3	601.9	601.5	601.1	600.7
32.5°	584.5	583.9	583.4	582.9	582.2	581.5	580.7	580.0
35°	555.4	554.8	554.1	553.2	552.2	551.0	550.0	548.9
37.5°	524.9	523.9	522.9	522.1	521.5	520.9	520.3	519.7
40°	503.7	502.6	501.4	500.6	500.2	499.8	499.4	499.0
42.5°	482.8	481.7	480.6	479.7	479.1	478.6	477.9	477.3
45°	451.8	450.2	448.6	447.6	447.2	446.8	446.4	446.0
47.5°	419.1	417.5	415.9	414.6	413.7	412.7	411.8	410.8
50°	396.8	395.1	393.3	392.0	391.0	390.1	389.1	388.2
52.5°	375.0	373.5	372.0	370.7	369.7	368.6	367.6	366.5
55°	341.3	340.1	338.9	337.8	336.8	335.9	335.0	334.1
57.5°	307.7	306.2	304.6	303.6	303.1	302.5	302.1	301.6
60°	285.0	283.7	282.3	281.2	280.3	279.3	278.4	277.5
62.5°	263.2	261.7	260.2	259.2	258.5	257.7	257.0	256.3
65°	228.7	227.5	226.3	225.5	224.9	224.3	223.9	223.3
67.5°	195.9	194.9	193.8	193.1	192.8	192.5	192.2	191.9
70°	174.1	173.3	172.5	171.9	171.3	170.8	170.2	169.8
72.5°	153.7	152.8	151.9	151.1	150.6	150.1	149.6	149.0
75°	122.0	121.6	121.2	120.7	120.2	119.6	119.1	118.6
77.5°	92.9	92.7	92.4	92.1	91.7	91.4	91.0	90.6
80°	74.4	74.2	74.1	73.9	73.6	73.4	73.1	72.8
82.5°	56.8	56.6	56.3	56.2	56.2	56.1	56.0	56.0
85°	33.4	33.3	33.2	33.0	32.7	32.4	32.2	31.9
87.5°	16.9	17.1	17.4	17.5	17.4	17.4	17.3	17.3
90°	21.7	23.1	24.4	25.4	26.2	27.0	27.8	28.6
92.5°	21.7	23.1	24.4	25.2	25.6	26.0	26.4	26.7
95°	21.7	23.1	24.4	25.0	25.0	25.0	25.0	25.0
97.5°	43.7	36.3	28.8	25.0	25.0	25.0	25.0	25.0
100°	128.5	89.0	49.6	29.3	28.2	27.2	26.1	25.0
102.5°	249.8	242.3	234.9	222.1	204.1	186.1	168.0	150.0
105°	355.4	355.4	355.4	355.2	355.0	354.7	354.4	354.2
107.5°	450.0	450.0	450.0	449.6	448.9	448.1	447.3	446.5
110°	511.2	510.4	509.6	509.4	509.6	509.8	510.2	510.4



TEST NUMBER: P333398-927

CATALOG NUMBER: S125DIW-S610D1560U927-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	571.8	570.8	569.8	569.1	568.8	568.4	568.0	567.6
115°	663.3	662.3	661.2	659.9	658.3	656.6	655.1	653.5
117.5°	751.6	750.3	748.8	747.8	747.2	746.5	745.8	745.0
120°	808.7	808.1	807.6	806.7	805.3	804.0	802.7	801.4
122.5°	863.0	862.5	862.0	860.9	859.4	857.9	856.3	854.8
125°	942.4	941.3	940.2	939.3	938.5	937.7	936.9	936.1
127.5°	1014.9	1014.3	1013.7	1012.4	1010.4	1008.5	1006.5	1004.6
130°	1062.2	1061.4	1060.6	1059.5	1058.2	1056.9	1055.5	1054.2
132.5°	1106.4	1106.2	1106.0	1105.3	1104.0	1102.6	1101.3	1099.9
135°	1171.2	1170.7	1170.1	1169.0	1167.4	1165.9	1164.3	1162.7
137.5°	1231.6	1231.7	1231.8	1231.2	1229.8	1228.4	1227.0	1225.7
140°	1268.7	1269.2	1269.8	1269.2	1267.7	1266.1	1264.5	1262.9
142.5°	1305.0	1305.2	1305.3	1304.6	1302.9	1301.3	1299.7	1298.1
145°	1356.5	1356.7	1356.9	1356.3	1354.7	1353.1	1351.5	1350.0
147.5°	1400.4	1400.7	1401.1	1400.3	1398.4	1396.5	1394.6	1392.7
150°	1428.5	1429.0	1429.6	1428.8	1426.6	1424.5	1422.4	1420.3
152.5°	1453.3	1453.8	1454.4	1453.7	1451.8	1449.9	1448.0	1446.0
155°	1487.5	1488.3	1489.1	1488.4	1486.3	1484.2	1482.0	1479.9
157.5°	1515.7	1516.6	1517.4	1516.8	1514.7	1512.5	1510.4	1508.3
160°	1533.3	1534.4	1535.4	1534.9	1532.8	1530.7	1528.5	1526.5
162.5°	1549.4	1550.9	1552.4	1552.0	1549.7	1547.3	1545.0	1542.6
165°	1570.1	1571.8	1573.4	1573.0	1571.0	1568.8	1566.7	1564.6
167.5°	1585.8	1587.7	1589.6	1589.4	1587.0	1584.6	1582.2	1579.8
170°	1593.9	1596.0	1598.1	1598.0	1595.6	1593.2	1590.8	1588.4
172.5°	1600.1	1602.0	1603.9	1603.7	1601.3	1598.9	1596.6	1594.2
175°	1606.9	1609.1	1611.2	1611.1	1608.7	1606.3	1603.9	1601.6
177.5°	1609.8	1611.2	1612.7	1612.6	1610.9	1609.2	1607.5	1605.8
180°	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7	1608.7

(END OF REPORT)