

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: P333384-935

Luminaire Tested: **S125DIW-S610D1050U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333384-935
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-S610D1050U935-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5676.5 lumens
Efficiency: N/A
Efficacy: 125.6 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

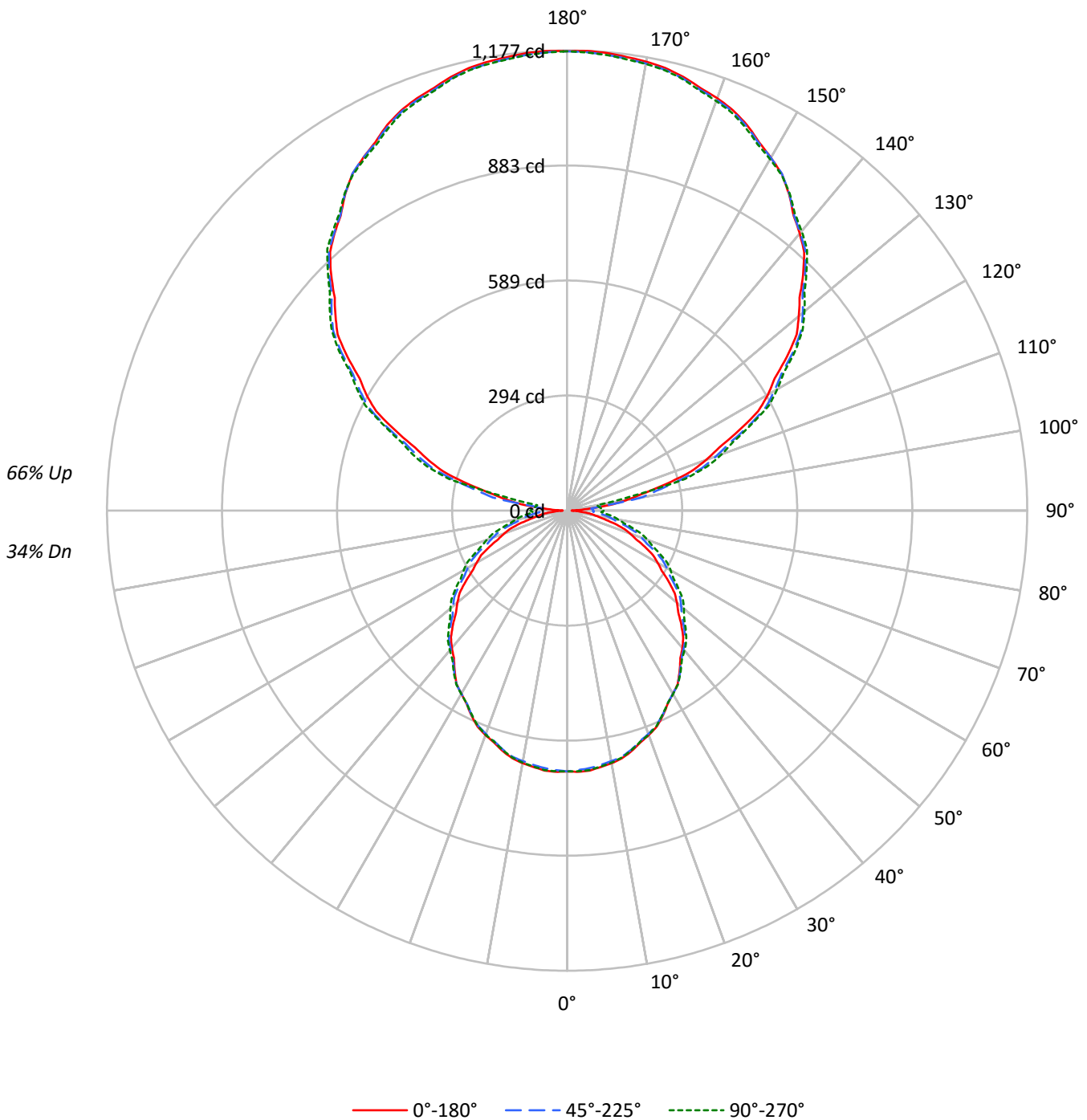
Input Watts (W): 45.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	75	75	75	57	57	57	42	42	42	34
1	94	89	85	82	84	81	77	74	64	62	60	50	48	47	36	35	34	28
2	85	78	71	66	76	70	65	60	56	52	49	43	41	39	31	30	28	23
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19
4	71	60	52	46	63	54	48	42	44	39	35	34	30	28	25	22	20	16
5	65	53	45	39	58	48	41	36	39	34	30	30	27	24	22	20	18	14
6	60	48	40	34	53	43	36	31	35	30	26	27	23	21	20	17	15	12
7	55	43	35	30	49	39	32	27	32	26	23	25	21	18	18	16	14	11
8	51	39	31	26	46	35	29	24	29	24	20	22	19	16	17	14	12	10
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	15	13	11	9
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	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	1.1
10°-20°	179.1	3.2
20°-30°	266.4	4.7
30°-40°	315.5	5.6
40°-50°	326.2	5.7
50°-60°	300.5	5.3
60°-70°	242.9	4.3
70°-80°	162.7	2.9
80°-90°	86.8	1.5
90°-100°	90.0	1.6
100°-110°	298.0	5.2
110°-120°	500.5	8.8
120°-130°	625.7	11.0
130°-140°	664.5	11.7
140°-150°	619.4	10.9
150°-160°	500.1	8.8
160°-170°	323.4	5.7
170°-180°	111.6	2.0
0°-30°	508.6	9.0
0°-40°	824.1	14.5
0°-60°	1450.8	25.6
0°-90°	1943.3	34.2
90°-120°	888.6	15.7
90°-150°	2798.1	49.3
90°-180°	3733.0	65.8
0°-180°	5676.5	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°	11	39	68	86	94	9
95°	58	71	62	80	85	70
105°	262	276	296	308	312	278
115°	485	494	511	519	518	480
125°	686	692	705	711	712	613
135°	854	858	861	868	866	658
145°	989	990	990	994	992	618
155°	1088	1084	1085	1087	1081	501
165°	1149	1144	1144	1149	1142	324
175°	1175	1170	1170	1177	1170	112
180°	1175	1175	1175	1175	1175	



TEST NUMBER: P333384-935

CATALOG NUMBER: S125DIW-S610D1050U935-4F0-1E-UDD-D

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°	20.6	25.6	30.5	35.5	40.5	45.5	50.7	56.0	61.1	66.4	69.9
90°	11.4	17.6	23.8	30.0	36.2	42.4	48.6	55.0	61.3	67.6	71.9
92.5°	22.8	26.1	29.3	32.5	35.7	40.5	46.7	53.0	59.2	65.5	69.7
95°	58.1	61.3	64.6	67.8	70.9	71.3	68.9	66.5	64.1	61.6	65.9
97.5°	111.3	115.8	120.2	124.7	129.2	126.5	116.7	106.9	97.1	87.3	84.9
100°	152.7	156.3	159.9	163.5	167.1	171.7	177.1	182.5	188.0	193.4	167.6
102.5°	194.6	198.1	201.7	205.3	208.8	213.1	218.1	223.1	228.1	233.1	230.6
105°	261.9	265.0	268.1	271.2	274.3	278.0	282.4	286.7	291.1	295.5	298.4
107.5°	331.8	333.8	335.8	337.8	339.8	343.0	347.6	352.1	356.7	361.3	364.2
110°	377.3	379.0	380.7	382.5	384.3	387.4	391.8	396.2	400.7	405.2	407.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	420.5	422.3	424.2	426.0	427.9	430.9	435.1	439.3	443.5	447.7	449.6
115°	484.6	486.6	488.5	490.6	492.6	495.5	499.5	503.4	507.5	511.4	513.2
117.5°	551.0	551.6	552.2	552.8	553.5	555.9	560.3	564.6	568.9	573.3	574.7
120°	592.8	593.1	593.3	593.5	593.7	595.8	599.8	603.7	607.6	611.6	613.6
122.5°	629.2	630.2	631.1	632.0	632.9	635.2	638.7	642.1	645.7	649.2	651.1
125°	686.2	687.4	688.6	689.8	691.0	693.1	696.0	698.9	701.8	704.7	706.3
127.5°	740.0	740.9	741.7	742.5	743.3	744.9	747.2	749.4	751.7	754.0	755.7
130°	773.5	774.3	775.2	775.9	776.8	778.3	780.5	782.7	785.0	787.2	788.7
132.5°	806.4	807.5	808.6	809.7	810.8	811.9	813.0	814.2	815.4	816.5	818.4
135°	853.9	854.8	855.8	856.9	857.9	858.7	859.4	860.0	860.6	861.3	862.7
137.5°	897.4	898.3	899.1	900.1	901.0	901.5	901.6	901.7	901.9	902.1	903.9
140°	925.4	925.8	926.2	926.6	927.0	927.1	927.1	927.0	927.0	927.0	928.9
142.5°	951.2	951.3	951.4	951.6	951.7	951.9	952.2	952.5	952.8	953.0	954.5
145°	989.0	989.2	989.5	989.7	990.0	990.1	990.1	990.1	990.1	990.1	991.0
147.5°	1021.4	1021.4	1021.3	1021.2	1021.1	1021.2	1021.4	1021.7	1021.9	1022.1	1022.6
150°	1042.3	1042.0	1041.6	1041.2	1040.8	1040.8	1041.2	1041.6	1042.0	1042.3	1042.8
152.5°	1062.6	1061.7	1060.8	1060.0	1059.1	1058.9	1059.3	1059.7	1060.1	1060.4	1060.8
155°	1088.5	1087.4	1086.2	1085.0	1083.8	1083.5	1083.8	1084.3	1084.6	1085.0	1085.5
157.5°	1108.5	1107.8	1107.2	1106.5	1105.7	1105.4	1105.4	1105.4	1105.5	1105.5	1106.2
160°	1122.5	1121.3	1120.2	1119.0	1117.8	1117.3	1117.5	1117.8	1117.9	1118.1	1118.9
162.5°	1133.6	1132.5	1131.3	1130.1	1128.9	1128.4	1128.7	1128.9	1129.0	1129.2	1130.3
165°	1148.6	1147.5	1146.2	1145.1	1143.9	1143.4	1143.7	1143.8	1144.0	1144.2	1145.4
167.5°	1159.7	1158.6	1157.4	1156.2	1154.9	1154.4	1154.6	1154.8	1155.0	1155.2	1156.6
170°	1166.0	1164.7	1163.3	1161.9	1160.5	1160.0	1160.2	1160.4	1160.5	1160.8	1162.4
172.5°	1170.2	1168.8	1167.4	1166.1	1164.8	1164.2	1164.6	1164.9	1165.3	1165.6	1167.0
175°	1174.7	1173.5	1172.3	1171.2	1170.0	1169.6	1169.8	1169.9	1170.2	1170.4	1171.9
177.5°	1176.8	1175.9	1174.9	1174.0	1173.1	1172.7	1172.9	1173.0	1173.1	1173.3	1174.4
180°	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7



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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°	73.4	77.0	80.5	82.8	83.9	85.2	86.3	87.4
90°	76.2	80.5	84.8	87.7	89.4	91.0	92.6	94.2
92.5°	73.9	78.1	82.2	85.0	86.3	87.6	88.9	90.1
95°	70.0	74.2	78.4	80.9	82.0	83.0	84.0	85.0
97.5°	82.5	80.1	77.7	77.0	78.0	79.0	80.0	80.9
100°	141.8	116.1	90.2	77.4	77.5	77.7	77.7	77.8
102.5°	228.1	225.5	223.0	215.6	203.3	191.1	178.7	166.4
105°	301.3	304.2	307.1	309.0	309.8	310.6	311.4	312.3
107.5°	367.1	370.1	373.0	374.6	374.9	375.2	375.6	375.9
110°	409.6	411.7	413.9	415.6	416.8	418.0	419.2	420.4



TEST NUMBER: P333384-935

CATALOG NUMBER: S125DIW-S610D1050U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	451.5	453.4	455.3	456.7	457.4	458.1	458.9	459.6
115°	515.1	516.9	518.8	519.5	519.3	519.0	518.7	518.4
117.5°	576.2	577.6	579.1	580.1	580.6	581.0	581.5	582.0
120°	615.7	617.8	619.9	620.9	620.8	620.7	620.6	620.5
122.5°	653.1	655.0	657.0	657.9	657.6	657.4	657.1	656.9
125°	707.8	709.4	710.9	711.8	711.9	712.0	712.2	712.4
127.5°	757.4	759.1	760.9	761.4	760.9	760.3	759.7	759.1
130°	790.1	791.6	793.1	793.7	793.4	793.2	792.9	792.6
132.5°	820.3	822.3	824.1	824.9	824.6	824.2	823.9	823.5
135°	864.2	865.7	867.2	867.8	867.4	866.9	866.4	866.0
137.5°	905.7	907.4	909.2	909.9	909.5	909.0	908.6	908.2
140°	930.9	932.9	934.9	935.6	935.0	934.4	933.8	933.3
142.5°	956.0	957.4	958.9	959.3	958.7	958.1	957.5	957.0
145°	992.0	992.8	993.8	993.9	993.3	992.8	992.2	991.6
147.5°	1023.0	1023.6	1024.0	1023.6	1022.5	1021.4	1020.3	1019.2
150°	1043.1	1043.5	1043.9	1043.4	1042.0	1040.6	1039.1	1037.8
152.5°	1061.2	1061.6	1062.0	1061.5	1060.1	1058.8	1057.4	1056.0
155°	1086.2	1086.8	1087.4	1086.8	1085.3	1083.7	1082.2	1080.6
157.5°	1106.8	1107.4	1108.0	1107.6	1106.0	1104.5	1102.9	1101.4
160°	1119.6	1120.4	1121.2	1120.8	1119.3	1117.8	1116.2	1114.7
162.5°	1131.4	1132.5	1133.6	1133.2	1131.5	1129.9	1128.2	1126.4
165°	1146.5	1147.7	1148.8	1148.7	1147.1	1145.6	1144.0	1142.5
167.5°	1158.0	1159.3	1160.8	1160.6	1158.8	1157.1	1155.4	1153.7
170°	1163.9	1165.4	1167.0	1166.8	1165.1	1163.4	1161.7	1159.9
172.5°	1168.5	1169.8	1171.2	1171.0	1169.3	1167.5	1165.8	1164.1
175°	1173.5	1175.0	1176.6	1176.5	1174.7	1172.9	1171.2	1169.5
177.5°	1175.4	1176.6	1177.7	1177.6	1176.3	1175.1	1173.9	1172.6
180°	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7	1174.7

(END OF REPORT)