

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: P333384-930

Luminaire Tested: **S125DIW-S610D1050U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333384-930
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-S610D1050U930-4F0-1E-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: 5375.2 lumens
Efficiency: N/A
Efficacy: 118.9 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

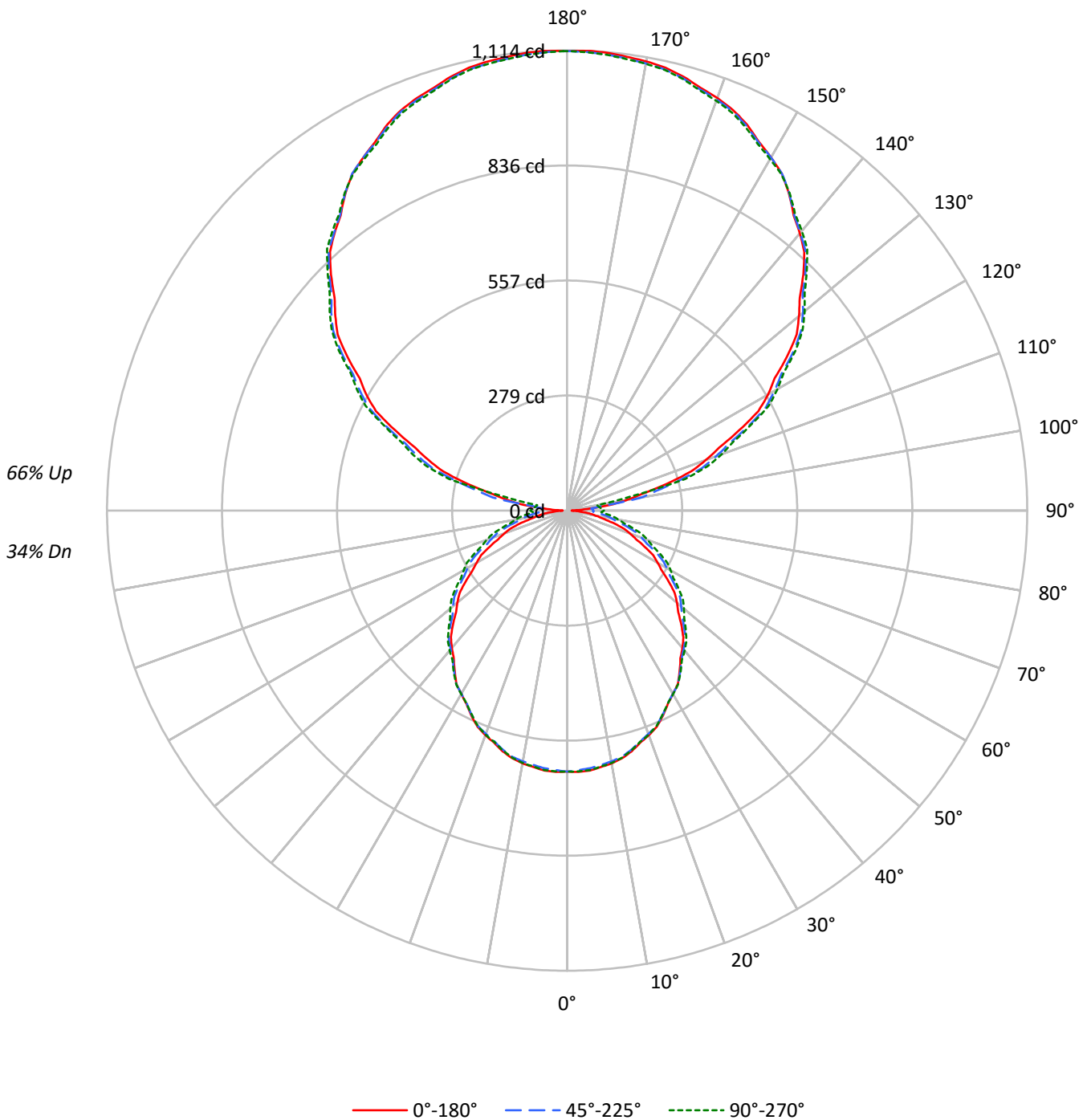
Input Watts (W): 45.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4081	4081	4081
5°	4089	4005	4018
10°	4060	3934	3927
15°	4011	3849	3813
20°	3946	3742	3698
25°	3869	3629	3558
30°	3775	3505	3429
35°	3687	3390	3311
40°	3598	3269	3193
45°	3497	3166	3089
50°	3401	3054	2996
55°	3285	2948	2886
60°	3159	2827	2775
65°	3027	2702	2650
70°	2876	2529	2521
75°	2639	2363	2363
80°	2328	2164	2190
85°	2041	2028	2136



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	1.1
10°-20°	169.6	3.2
20°-30°	252.2	4.7
30°-40°	298.8	5.6
40°-50°	308.9	5.7
50°-60°	284.6	5.3
60°-70°	230.0	4.3
70°-80°	154.0	2.9
80°-90°	82.2	1.5
90°-100°	85.2	1.6
100°-110°	282.2	5.2
110°-120°	474.0	8.8
120°-130°	592.4	11.0
130°-140°	629.2	11.7
140°-150°	586.5	10.9
150°-160°	473.6	8.8
160°-170°	306.3	5.7
170°-180°	105.6	2.0
0°-30°	481.6	9.0
0°-40°	780.4	14.5
0°-60°	1373.8	25.6
0°-90°	1840.1	34.2
90°-120°	841.4	15.7
90°-150°	2649.6	49.3
90°-180°	3535.0	65.8
0°-180°	5375.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	632	630	626	631	631	60
15°	603	604	600	603	601	170
25°	548	550	546	548	546	252
35°	474	478	477	479	479	297
45°	391	398	401	405	406	302
55°	300	310	320	327	330	268
65°	207	221	236	245	248	205
75°	114	130	150	162	165	121
85°	34	55	76	89	95	36
90°	11	37	64	82	89	9
95°	55	67	58	75	80	66
105°	248	262	280	292	296	263
115°	459	468	484	492	491	455
125°	650	655	667	674	675	580
135°	808	813	816	821	820	623
145°	936	937	938	941	939	585
155°	1031	1026	1027	1029	1023	475
165°	1088	1083	1084	1088	1082	307
175°	1112	1108	1108	1114	1107	106
180°	1112	1112	1112	1112	1112	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	633.3	633.1	632.9	632.7	632.4	631.9	631.2	630.4	629.7	628.8	629.7
5°	631.9	631.5	631.3	631.0	630.7	630.1	629.2	628.2	627.2	626.2	627.4
7.5°	626.2	626.1	626.1	625.9	625.8	625.3	624.3	623.3	622.3	621.3	622.2
10°	621.3	621.3	621.3	621.3	621.3	620.8	619.6	618.6	617.4	616.4	617.3
12.5°	614.4	614.5	614.6	614.7	614.8	614.4	613.5	612.7	611.8	610.9	611.6
15°	603.3	603.5	603.6	603.7	603.9	603.5	602.5	601.5	600.6	599.7	600.5
17.5°	589.0	589.2	589.5	589.8	590.1	589.7	588.8	587.8	586.9	585.9	586.5
20°	578.5	578.9	579.1	579.4	579.7	579.4	578.4	577.4	576.4	575.4	575.8
22.5°	566.7	567.2	567.7	568.2	568.7	568.3	567.3	566.2	565.2	564.1	564.6
25°	548.2	548.6	549.0	549.4	549.8	549.7	548.9	548.0	547.1	546.3	546.9
27.5°	527.7	528.2	528.9	529.5	530.1	529.9	529.0	528.1	527.1	526.2	526.5
30°	512.3	513.1	514.0	514.8	515.6	515.6	514.8	514.0	513.1	512.3	512.6
32.5°	498.4	499.1	499.9	500.6	501.2	501.3	500.8	500.1	499.5	498.9	499.2
35°	474.5	475.5	476.5	477.4	478.3	478.7	478.3	477.8	477.4	477.0	477.4
37.5°	450.6	451.5	452.3	453.2	454.1	454.4	454.4	454.2	454.0	454.0	454.4
40°	434.2	435.4	436.4	437.6	438.6	439.1	439.0	438.9	438.7	438.5	439.1
42.5°	416.4	417.8	419.2	420.7	422.2	423.0	423.3	423.6	423.9	424.2	424.9
45°	390.9	392.4	393.9	395.4	397.0	398.0	398.8	399.4	400.1	400.8	401.8
47.5°	364.8	366.2	367.5	368.9	370.4	371.6	372.8	374.0	375.2	376.3	377.8
50°	346.9	348.4	349.9	351.5	352.9	354.5	356.0	357.5	359.0	360.5	362.1
52.5°	328.1	329.9	331.7	333.6	335.4	337.3	339.2	341.0	342.8	344.6	346.3
55°	300.4	302.6	304.8	307.0	309.2	311.4	313.6	315.8	318.0	320.2	321.8
57.5°	272.2	274.8	277.4	280.1	282.7	285.4	287.9	290.4	292.9	295.5	297.2
60°	253.4	256.1	258.9	261.6	264.4	267.1	269.9	272.6	275.4	278.1	280.2
62.5°	235.1	237.7	240.5	243.3	246.1	248.9	251.8	254.9	257.8	260.8	263.1
65°	206.9	210.1	213.2	216.4	219.6	222.8	226.1	229.4	232.7	236.0	238.1
67.5°	180.4	183.4	186.5	189.6	192.6	195.8	199.2	202.5	205.9	209.3	211.7
70°	161.0	164.2	167.4	170.6	173.7	177.1	180.7	184.3	187.8	191.4	194.0
72.5°	142.2	145.5	148.8	152.1	155.3	158.9	162.8	166.7	170.6	174.6	177.4
75°	114.0	117.6	121.2	124.7	128.3	132.3	136.7	141.1	145.5	149.9	152.6
77.5°	86.8	91.0	95.1	99.2	103.4	107.5	111.8	116.0	120.3	124.5	127.5
80°	70.0	74.1	78.3	82.4	86.5	90.9	95.6	100.3	104.9	109.7	112.7
82.5°	54.6	58.9	63.3	67.7	72.1	76.6	81.4	86.2	91.0	95.8	98.7
85°	34.1	38.6	43.1	47.7	52.3	56.9	61.7	66.5	71.3	76.2	79.2
87.5°	19.5	24.2	28.9	33.6	38.3	43.1	48.0	53.0	57.9	62.9	66.2
90°	10.8	16.6	22.5	28.4	34.2	40.1	46.1	52.1	58.0	64.0	68.1
92.5°	21.6	24.7	27.7	30.7	33.8	38.3	44.2	50.1	56.1	62.0	66.0
95°	55.0	58.0	61.1	64.2	67.2	67.5	65.2	62.9	60.7	58.4	62.4
97.5°	105.4	109.7	113.8	118.1	122.3	119.8	110.5	101.3	92.0	82.7	80.4
100°	144.6	148.0	151.4	154.8	158.2	162.6	167.7	172.8	178.0	183.1	158.7
102.5°	184.3	187.6	191.0	194.4	197.7	201.8	206.5	211.2	216.0	220.7	218.3
105°	248.0	250.9	253.9	256.8	259.8	263.3	267.4	271.5	275.7	279.8	282.6
107.5°	314.2	316.1	318.0	319.8	321.7	324.8	329.1	333.5	337.8	342.1	344.9
110°	357.3	358.9	360.5	362.2	363.9	366.8	371.0	375.2	379.4	383.7	385.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	398.2	399.9	401.7	403.4	405.2	408.1	412.1	416.0	420.0	424.0	425.7
115°	458.9	460.7	462.6	464.6	466.4	469.2	473.0	476.7	480.5	484.3	486.0
117.5°	521.8	522.4	522.9	523.5	524.2	526.4	530.6	534.7	538.7	542.8	544.2
120°	561.3	561.6	561.8	562.0	562.2	564.2	567.9	571.7	575.4	579.1	581.1
122.5°	595.8	596.7	597.6	598.4	599.3	601.4	604.8	608.1	611.4	614.7	616.5
125°	649.8	650.9	652.1	653.2	654.4	656.3	659.1	661.8	664.6	667.3	668.8
127.5°	700.7	701.6	702.3	703.1	703.8	705.3	707.5	709.6	711.8	714.0	715.6
130°	732.5	733.2	734.0	734.7	735.6	736.9	739.1	741.2	743.3	745.4	746.8
132.5°	763.6	764.7	765.6	766.7	767.8	768.8	769.9	770.9	772.1	773.1	774.9
135°	808.5	809.4	810.4	811.4	812.4	813.1	813.8	814.3	814.9	815.5	816.9
137.5°	849.8	850.6	851.4	852.3	853.1	853.6	853.8	853.9	854.0	854.2	855.9
140°	876.3	876.7	877.0	877.4	877.8	877.9	877.9	877.8	877.8	877.8	879.6
142.5°	900.7	900.8	900.9	901.1	901.2	901.4	901.6	902.0	902.2	902.5	903.8
145°	936.5	936.7	936.9	937.2	937.4	937.5	937.5	937.5	937.5	937.5	938.4
147.5°	967.2	967.2	967.1	967.0	966.9	967.0	967.2	967.4	967.7	967.8	968.3
150°	987.0	986.7	986.3	985.9	985.5	985.5	985.9	986.3	986.7	987.0	987.4
152.5°	1006.2	1005.3	1004.5	1003.7	1002.9	1002.7	1003.1	1003.5	1003.8	1004.1	1004.5
155°	1030.7	1029.6	1028.5	1027.4	1026.3	1026.0	1026.3	1026.7	1027.0	1027.4	1027.9
157.5°	1049.7	1049.0	1048.4	1047.7	1047.0	1046.8	1046.8	1046.8	1046.8	1046.8	1047.5
160°	1062.9	1061.8	1060.7	1059.6	1058.5	1058.0	1058.2	1058.4	1058.6	1058.7	1059.5
162.5°	1073.4	1072.4	1071.2	1070.2	1069.0	1068.5	1068.8	1068.9	1069.1	1069.3	1070.3
165°	1087.6	1086.5	1085.4	1084.3	1083.2	1082.7	1083.0	1083.1	1083.3	1083.5	1084.6
167.5°	1098.1	1097.1	1095.9	1094.8	1093.6	1093.2	1093.3	1093.5	1093.7	1093.9	1095.2
170°	1104.1	1102.9	1101.6	1100.2	1098.9	1098.5	1098.6	1098.8	1098.9	1099.2	1100.7
172.5°	1108.1	1106.8	1105.5	1104.2	1102.9	1102.4	1102.8	1103.1	1103.4	1103.8	1105.1
175°	1112.3	1111.3	1110.1	1109.1	1107.9	1107.5	1107.7	1107.8	1108.1	1108.2	1109.7
177.5°	1114.4	1113.5	1112.6	1111.7	1110.8	1110.4	1110.6	1110.8	1110.8	1111.0	1112.1
180°	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	630.4	631.2	631.9	632.3	632.2	632.1	631.9	631.9
5°	628.4	629.6	630.6	631.1	631.0	630.9	630.7	630.6
7.5°	623.2	624.2	625.2	625.6	625.4	625.3	625.2	625.0
10°	618.3	619.2	620.2	620.6	620.5	620.4	620.2	620.0
12.5°	612.4	613.1	613.9	614.1	613.7	613.3	613.0	612.6
15°	601.3	602.1	602.9	603.1	602.5	601.9	601.4	600.9
17.5°	587.2	587.7	588.4	588.6	588.2	587.9	587.6	587.3
20°	576.3	576.7	577.2	577.3	577.3	577.3	577.3	577.3
22.5°	565.1	565.7	566.1	566.2	565.9	565.6	565.2	564.9
25°	547.5	548.0	548.5	548.5	547.8	547.1	546.4	545.8
27.5°	526.9	527.3	527.7	527.7	527.5	527.3	527.0	526.8
30°	512.8	513.1	513.4	513.5	513.3	513.1	513.1	512.9
32.5°	499.5	499.7	500.0	500.1	499.9	499.8	499.7	499.5
35°	477.8	478.3	478.7	478.8	478.8	478.8	478.8	478.8
37.5°	455.0	455.6	456.2	456.4	456.3	456.2	456.2	456.2
40°	439.7	440.3	440.8	441.2	441.5	441.7	442.1	442.3
42.5°	425.5	426.2	426.8	427.2	427.3	427.3	427.4	427.5
45°	402.7	403.7	404.6	405.2	405.4	405.4	405.6	405.8
47.5°	379.2	380.6	382.0	382.9	383.2	383.4	383.8	384.1
50°	363.5	365.1	366.6	367.5	367.9	368.4	368.8	369.2
52.5°	347.9	349.5	351.1	352.1	352.5	352.7	353.0	353.4
55°	323.3	324.8	326.3	327.3	327.9	328.5	329.0	329.5
57.5°	299.0	300.7	302.4	303.5	303.9	304.4	304.8	305.2
60°	282.3	284.3	286.4	287.6	288.0	288.5	288.9	289.3
62.5°	265.4	267.7	269.9	271.3	271.8	272.4	272.9	273.5
65°	240.1	242.2	244.3	245.6	246.1	246.7	247.2	247.8
67.5°	214.3	216.8	219.2	220.9	221.6	222.3	223.1	223.7
70°	196.7	199.3	201.9	203.6	204.4	205.2	206.1	206.9
72.5°	180.3	183.0	185.9	187.6	188.3	188.8	189.5	190.0
75°	155.4	158.2	160.9	162.7	163.3	164.0	164.7	165.4
77.5°	130.5	133.6	136.6	138.4	138.9	139.5	140.1	140.6
80°	115.7	118.7	121.7	123.5	124.1	124.7	125.2	125.7
82.5°	101.6	104.5	107.5	109.4	110.4	111.4	112.3	113.3
85°	82.3	85.3	88.3	90.3	91.5	92.5	93.7	94.7
87.5°	69.5	72.9	76.2	78.4	79.5	80.6	81.7	82.8
90°	72.2	76.2	80.3	83.1	84.6	86.2	87.6	89.2
92.5°	70.0	73.9	77.9	80.5	81.7	82.9	84.1	85.4
95°	66.3	70.3	74.2	76.6	77.6	78.6	79.6	80.5
97.5°	78.1	75.8	73.6	72.9	73.9	74.8	75.7	76.6
100°	134.3	109.9	85.4	73.3	73.4	73.5	73.6	73.7
102.5°	216.0	213.5	211.2	204.2	192.5	180.9	169.3	157.6
105°	285.3	288.0	290.8	292.6	293.3	294.2	294.9	295.7
107.5°	347.6	350.4	353.2	354.7	355.0	355.3	355.6	356.0
110°	387.8	389.9	391.9	393.5	394.7	395.8	397.0	398.1



TEST NUMBER: P333384-930

CATALOG NUMBER: S125DIW-S610D1050U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	427.5	429.3	431.1	432.4	433.1	433.8	434.6	435.2
115°	487.8	489.5	491.2	492.0	491.7	491.5	491.1	490.9
117.5°	545.6	547.0	548.4	549.3	549.8	550.2	550.7	551.1
120°	583.0	585.0	587.0	587.9	587.8	587.7	587.7	587.6
122.5°	618.4	620.3	622.2	623.0	622.7	622.5	622.2	622.0
125°	670.3	671.7	673.2	674.0	674.1	674.3	674.4	674.6
127.5°	717.2	718.8	720.5	721.0	720.5	719.9	719.3	718.8
130°	748.2	749.6	751.0	751.5	751.3	751.1	750.8	750.6
132.5°	776.7	778.6	780.4	781.1	780.8	780.5	780.2	779.8
135°	818.3	819.8	821.2	821.7	821.3	820.9	820.4	820.0
137.5°	857.6	859.2	861.0	861.6	861.2	860.8	860.4	860.0
140°	881.5	883.4	885.3	886.0	885.4	884.8	884.3	883.8
142.5°	905.2	906.6	908.0	908.4	907.8	907.3	906.7	906.2
145°	939.3	940.1	941.0	941.2	940.6	940.1	939.6	939.0
147.5°	968.7	969.2	969.6	969.3	968.2	967.2	966.1	965.1
150°	987.7	988.1	988.5	988.0	986.7	985.4	984.0	982.7
152.5°	1004.9	1005.3	1005.6	1005.2	1003.9	1002.6	1001.3	1000.0
155°	1028.5	1029.1	1029.6	1029.2	1027.7	1026.2	1024.7	1023.3
157.5°	1048.1	1048.6	1049.2	1048.8	1047.3	1045.9	1044.4	1042.9
160°	1060.2	1060.9	1061.7	1061.3	1059.9	1058.4	1057.0	1055.5
162.5°	1071.4	1072.4	1073.4	1073.1	1071.5	1069.9	1068.3	1066.7
165°	1085.7	1086.8	1087.9	1087.7	1086.2	1084.8	1083.3	1081.8
167.5°	1096.5	1097.8	1099.2	1099.0	1097.3	1095.7	1094.1	1092.4
170°	1102.1	1103.6	1105.1	1104.9	1103.3	1101.6	1100.0	1098.3
172.5°	1106.4	1107.7	1109.1	1108.9	1107.3	1105.5	1103.9	1102.3
175°	1111.2	1112.6	1114.1	1114.0	1112.3	1110.7	1109.1	1107.4
177.5°	1113.0	1114.1	1115.2	1115.1	1113.9	1112.7	1111.6	1110.4
180°	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3	1112.3

(END OF REPORT)