

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: P333387-935

Luminaire Tested: **S125DIW-S610D1050U935-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333387-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
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-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5282.4 lumens
Efficiency: N/A
Efficacy: 116.9 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: General Diffuse

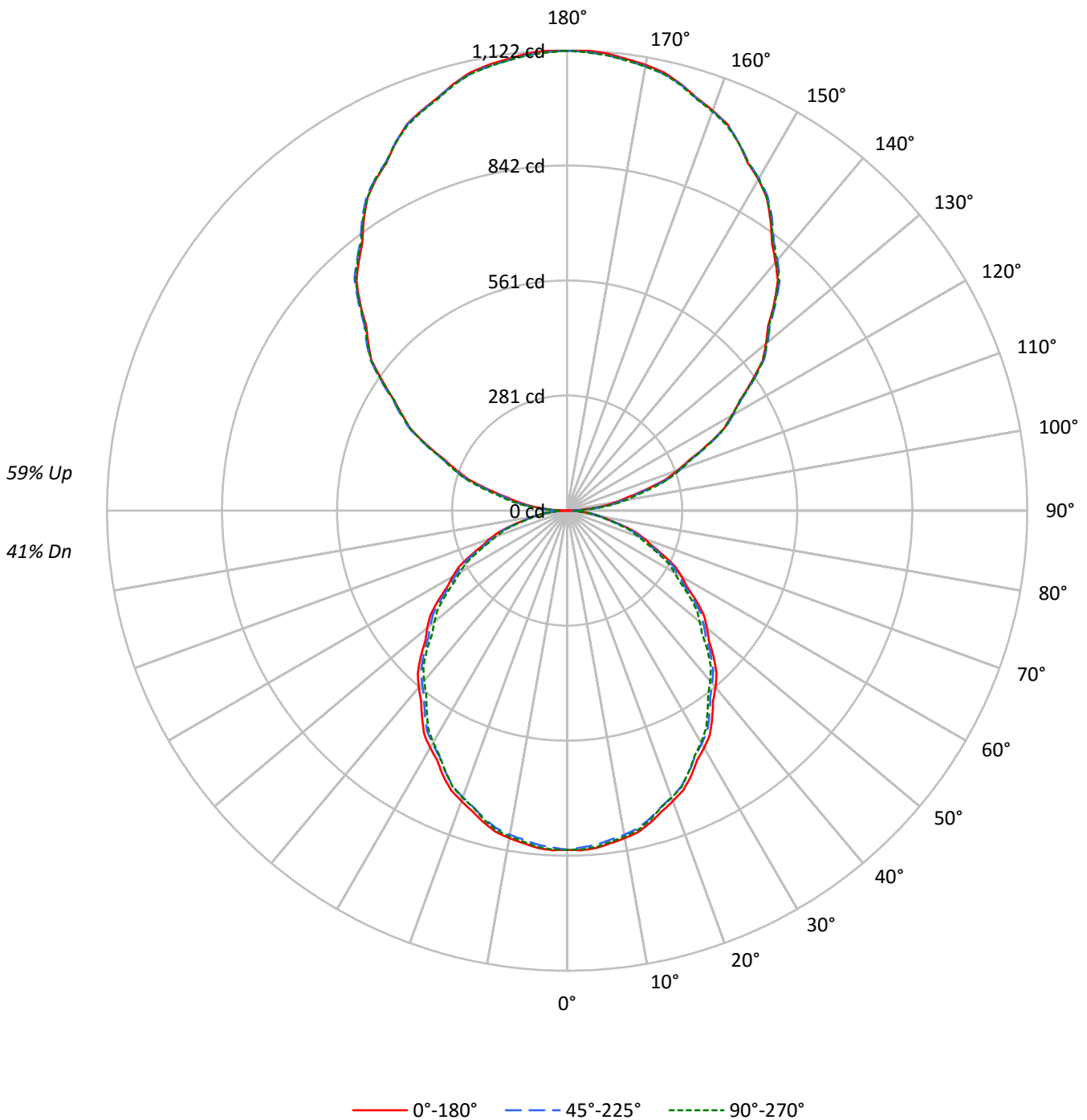
Input Watts (W): 45.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333387-935

CATALOG NUMBER: S125DIW-S610D1050U935-4F0-1E-UDD-F1

Luminous Intensity Polar Plot





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CATALOG NUMBER: S125DIW-S610D1050U935-4F0-1E-UDD-F1

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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41
1	96	91	88	84	87	83	80	77	68	66	64	55	53	52	42	41	40	34
2	87	80	74	69	79	73	68	63	60	56	53	48	45	43	37	35	34	29
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	33	31	29	24
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	25	21
5	67	55	47	41	60	51	43	38	42	37	33	34	30	27	26	24	21	18
6	61	49	41	36	56	45	38	33	38	32	28	31	27	24	24	21	19	16
7	57	44	37	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14
8	52	40	33	27	48	37	30	26	31	26	22	25	21	18	20	17	15	13
9	49	37	29	24	44	34	27	23	28	23	20	23	19	17	18	16	14	11
10	46	34	27	22	42	31	25	20	26	21	18	21	18	15	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5340	5340	5340
5°	5352	5301	5335
10°	5319	5264	5294
15°	5262	5201	5223
20°	5179	5112	5121
25°	5091	5007	5002
30°	4981	4894	4869
35°	4864	4771	4704
40°	4743	4639	4572
45°	4613	4517	4427
50°	4470	4372	4240
55°	4332	4206	4088
60°	4166	4039	3896
65°	3969	3839	3709
70°	3780	3609	3484
75°	3444	3331	3216
80°	3065	3016	2942
85°	2668	2712	2571



TEST NUMBER: P333387-935

CATALOG NUMBER: S125DIW-S610D1050U935-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.0	1.5
10°-20°	220.2	4.2
20°-30°	325.2	6.2
30°-40°	379.4	7.2
40°-50°	381.1	7.2
50°-60°	334.5	6.3
60°-70°	249.3	4.7
70°-80°	142.5	2.7
80°-90°	43.9	0.8
90°-100°	75.1	1.4
100°-110°	221.7	4.2
110°-120°	375.6	7.1
120°-130°	494.3	9.4
130°-140°	553.8	10.5
140°-150°	542.8	10.3
150°-160°	455.9	8.6
160°-170°	303.0	5.7
170°-180°	106.1	2.0
0°-30°	623.4	11.8
0°-40°	1002.8	19.0
0°-60°	1718.4	32.5
0°-90°	2154.1	40.8
90°-120°	672.4	12.7
90°-150°	2263.2	42.8
90°-180°	3128.0	59.2
0°-180°	5282.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	827	827	827	827	827	
5°	826	824	818	823	823	78
15°	787	785	778	781	781	222
25°	714	711	703	704	702	329
35°	617	614	605	602	597	386
45°	505	502	495	487	485	389
55°	385	382	374	368	363	343
65°	260	258	251	246	243	258
75°	138	137	134	131	129	147
85°	36	37	37	36	35	40
90°	1	8	14	18	21	5
95°	57	59	67	73	75	61
105°	199	203	208	214	216	212
115°	376	379	381	380	380	372
125°	549	554	555	553	552	491
135°	714	719	720	720	716	550
145°	864	868	871	870	868	540
155°	989	989	990	993	989	455
165°	1076	1074	1075	1078	1073	303
175°	1118	1115	1115	1120	1114	106
180°	1121	1121	1121	1121	1121	



TEST NUMBER: P333387-935

CATALOG NUMBER: S125DIW-S610D1050U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9
2.5°	829.0	828.6	828.3	827.9	827.6	826.8	825.7	824.5	823.4	822.2	823.4
5°	825.6	825.3	825.0	824.7	824.4	823.5	822.1	820.6	819.2	817.7	819.1
7.5°	817.9	817.7	817.4	817.1	816.8	815.9	814.2	812.7	811.1	809.5	810.7
10°	811.1	810.9	810.6	810.3	810.0	809.1	807.4	805.9	804.3	802.7	803.8
12.5°	802.8	802.3	801.8	801.2	800.7	799.7	798.2	796.8	795.2	793.8	794.7
15°	787.0	786.5	786.1	785.7	785.2	784.2	782.6	781.0	779.4	777.8	778.5
17.5°	768.8	768.2	767.5	766.9	766.2	765.1	763.4	761.7	760.1	758.5	759.3
20°	753.6	753.3	753.0	752.8	752.4	751.4	749.5	747.6	745.7	743.8	744.9
22.5°	738.4	737.9	737.4	736.8	736.3	735.2	733.4	731.7	729.9	728.1	728.8
25°	714.4	713.6	712.9	712.2	711.4	710.2	708.3	706.4	704.5	702.6	702.9
27.5°	686.2	685.8	685.4	684.9	684.5	683.3	681.3	679.4	677.4	675.5	675.5
30°	667.9	667.4	667.0	666.6	666.2	664.9	662.7	660.5	658.3	656.2	655.8
32.5°	648.0	647.4	646.7	646.0	645.3	644.0	642.1	640.2	638.2	636.3	635.8
35°	616.9	616.3	615.7	615.2	614.6	613.3	611.2	609.2	607.2	605.1	604.4
37.5°	584.5	583.8	583.2	582.4	581.7	580.3	578.4	576.5	574.5	572.7	571.6
40°	562.6	561.9	561.1	560.4	559.6	558.3	556.3	554.2	552.2	550.2	548.9
42.5°	539.1	538.5	537.8	537.2	536.6	535.3	533.2	531.2	529.2	527.1	526.0
45°	505.1	504.5	503.9	503.3	502.7	501.5	499.8	498.1	496.3	494.6	492.8
47.5°	468.4	468.4	468.5	468.5	468.5	467.4	465.4	463.3	461.2	459.1	457.4
50°	444.9	444.4	443.9	443.5	443.1	442.0	440.2	438.5	436.8	435.1	433.2
52.5°	420.8	420.4	420.2	419.8	419.5	418.4	416.6	414.7	412.8	411.0	409.3
55°	384.7	384.2	383.7	383.3	382.9	381.7	379.6	377.6	375.6	373.5	372.2
57.5°	346.6	346.4	346.1	345.9	345.7	344.7	342.9	341.2	339.5	337.9	336.1
60°	322.5	321.9	321.3	320.7	320.2	319.1	317.5	315.9	314.3	312.7	311.3
62.5°	297.4	297.0	296.4	296.0	295.5	294.6	293.3	291.9	290.5	289.1	287.6
65°	259.7	259.4	259.2	258.8	258.6	257.6	256.0	254.4	252.8	251.2	249.9
67.5°	223.2	222.6	222.0	221.4	220.8	219.9	218.7	217.5	216.3	215.1	214.0
70°	200.2	199.5	198.7	198.0	197.3	196.2	194.9	193.6	192.3	191.1	190.1
72.5°	175.0	174.5	174.1	173.6	173.1	172.4	171.6	170.7	169.9	169.0	168.1
75°	138.0	137.8	137.4	137.2	136.9	136.4	135.6	134.9	134.1	133.5	133.0
77.5°	103.9	103.8	103.7	103.5	103.4	103.1	102.7	102.4	101.9	101.5	101.3
80°	82.4	82.4	82.4	82.4	82.4	82.3	82.0	81.7	81.5	81.1	80.9
82.5°	63.6	63.4	63.1	62.9	62.7	62.5	62.4	62.4	62.3	62.3	62.0
85°	36.0	36.2	36.2	36.4	36.6	36.6	36.6	36.6	36.6	36.6	36.5
87.5°	14.3	14.6	14.9	15.2	15.6	15.8	15.9	16.1	16.3	16.4	16.6
90°	0.9	2.4	4.0	5.5	7.1	8.5	9.9	11.3	12.6	13.9	14.9
92.5°	21.1	22.2	23.2	24.4	25.5	26.9	28.5	30.1	31.9	33.5	34.8
95°	56.7	57.1	57.5	57.9	58.3	59.4	61.4	63.3	65.3	67.2	68.5
97.5°	94.2	94.4	94.5	94.7	94.9	96.3	98.9	101.6	104.3	106.9	108.2
100°	122.2	122.2	122.2	122.2	122.2	123.4	125.9	128.5	131.0	133.5	135.3
102.5°	152.1	152.9	153.7	154.5	155.2	156.3	157.6	158.9	160.1	161.4	163.3
105°	198.9	199.8	200.9	201.8	202.8	203.9	205.0	206.2	207.3	208.5	209.7
107.5°	250.6	251.5	252.5	253.5	254.4	255.4	256.2	257.2	258.0	258.9	259.5
110°	286.1	287.1	288.1	289.0	290.1	290.8	291.4	292.0	292.6	293.2	293.7



TEST NUMBER: P333387-935

CATALOG NUMBER: S125DIW-S610D1050U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	322.4	323.0	323.5	324.0	324.4	325.1	325.8	326.6	327.3	328.0	328.3
115°	376.0	376.8	377.5	378.3	379.1	379.7	380.0	380.5	380.8	381.3	381.1
117.5°	429.7	430.1	430.4	430.8	431.2	431.5	431.9	432.2	432.6	432.9	433.1
120°	463.2	464.3	465.2	466.1	467.1	467.7	467.9	468.1	468.3	468.5	468.5
122.5°	499.6	499.9	500.2	500.6	500.9	501.4	501.9	502.4	502.9	503.4	503.3
125°	548.7	549.9	551.0	552.2	553.4	554.1	554.3	554.5	554.7	554.8	554.5
127.5°	601.1	601.8	602.4	603.0	603.7	604.2	604.4	604.7	604.9	605.1	604.9
130°	632.5	633.4	634.5	635.4	636.4	637.1	637.5	637.8	638.3	638.6	638.4
132.5°	663.9	665.5	667.1	668.7	670.3	671.1	671.0	670.9	670.8	670.7	670.5
135°	713.6	714.8	715.9	717.1	718.3	718.9	719.2	719.4	719.5	719.7	719.7
137.5°	760.4	761.6	762.7	763.8	764.9	765.7	766.1	766.5	767.0	767.4	767.6
140°	790.4	791.3	792.4	793.3	794.3	795.0	795.7	796.3	796.8	797.4	797.8
142.5°	820.4	821.2	822.1	822.9	823.7	824.5	825.2	826.0	826.6	827.4	827.6
145°	864.5	865.3	866.1	866.9	867.6	868.3	868.9	869.5	870.1	870.6	870.6
147.5°	905.4	905.9	906.3	906.6	907.1	907.6	908.0	908.4	909.0	909.4	909.9
150°	932.6	932.5	932.2	932.0	931.9	932.1	932.9	933.7	934.4	935.2	935.2
152.5°	954.9	955.2	955.5	955.8	956.1	956.3	956.7	956.9	957.3	957.6	958.0
155°	989.3	989.3	989.3	989.3	989.3	989.4	989.6	989.8	990.0	990.2	991.0
157.5°	1020.0	1019.6	1019.2	1018.7	1018.3	1018.2	1018.4	1018.6	1018.8	1019.0	1019.8
160°	1038.2	1037.6	1037.0	1036.5	1035.9	1035.7	1035.9	1036.0	1036.2	1036.5	1037.2
162.5°	1054.2	1053.8	1053.3	1052.9	1052.5	1052.3	1052.4	1052.4	1052.5	1052.5	1053.4
165°	1075.7	1075.3	1074.9	1074.5	1074.1	1074.0	1074.3	1074.4	1074.6	1074.8	1075.6
167.5°	1093.8	1093.0	1092.3	1091.5	1090.7	1090.4	1090.4	1090.4	1090.4	1090.4	1091.5
170°	1103.6	1102.9	1102.1	1101.3	1100.5	1100.1	1100.1	1100.1	1100.1	1100.1	1101.3
172.5°	1110.6	1109.8	1109.1	1108.3	1107.5	1107.1	1107.1	1107.1	1107.1	1107.1	1108.3
175°	1118.4	1117.7	1116.9	1116.1	1115.3	1114.9	1114.9	1114.9	1114.9	1114.9	1116.1
177.5°	1122.5	1121.8	1121.2	1120.6	1120.0	1119.6	1119.4	1119.3	1119.1	1119.0	1119.9
180°	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0



TEST NUMBER: P333387-935

CATALOG NUMBER: S125DIW-S610D1050U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	826.9	826.9	826.9	826.9	826.9	826.9	826.9	826.9
2.5°	824.5	825.7	826.8	827.3	827.2	827.1	827.0	826.9
5°	820.4	821.7	822.9	823.5	823.4	823.3	823.1	822.9
7.5°	812.0	813.3	814.6	815.2	815.0	814.9	814.8	814.6
10°	805.0	806.2	807.4	807.9	807.7	807.5	807.4	807.3
12.5°	795.7	796.6	797.5	798.0	797.9	797.9	797.9	797.8
15°	779.3	780.0	780.8	781.1	781.1	781.1	781.1	781.1
17.5°	760.3	761.1	762.1	762.2	761.4	760.7	760.0	759.2
20°	745.8	746.8	747.9	748.0	747.3	746.6	745.8	745.1
22.5°	729.4	730.1	730.8	730.9	730.4	729.9	729.4	728.9
25°	703.2	703.4	703.8	703.7	703.3	702.8	702.4	702.0
27.5°	675.6	675.7	675.7	675.5	675.1	674.7	674.2	673.8
30°	655.6	655.3	655.0	654.6	654.2	653.8	653.3	652.9
32.5°	635.2	634.6	634.1	633.5	632.7	632.0	631.1	630.3
35°	603.6	603.0	602.2	601.2	600.1	598.9	597.8	596.6
37.5°	570.5	569.5	568.3	567.5	566.8	566.2	565.5	564.8
40°	547.5	546.2	544.9	544.1	543.6	543.2	542.8	542.3
42.5°	524.8	523.6	522.4	521.4	520.7	520.1	519.4	518.8
45°	491.0	489.3	487.6	486.5	486.0	485.6	485.2	484.7
47.5°	455.6	453.7	452.0	450.6	449.6	448.6	447.5	446.5
50°	431.3	429.4	427.5	426.0	425.0	424.0	422.9	422.0
52.5°	407.6	406.0	404.3	402.9	401.8	400.6	399.5	398.4
55°	370.9	369.6	368.3	367.1	366.1	365.1	364.1	363.1
57.5°	334.4	332.8	331.1	329.9	329.4	328.8	328.3	327.8
60°	309.8	308.3	306.9	305.7	304.6	303.6	302.6	301.6
62.5°	286.0	284.5	282.8	281.7	280.9	280.1	279.3	278.5
65°	248.6	247.3	246.0	245.0	244.4	243.8	243.3	242.7
67.5°	212.9	211.8	210.7	209.9	209.6	209.2	208.9	208.5
70°	189.2	188.4	187.5	186.8	186.2	185.6	185.0	184.5
72.5°	167.0	166.1	165.1	164.3	163.7	163.2	162.6	162.0
75°	132.6	132.2	131.7	131.2	130.6	130.0	129.5	128.9
77.5°	101.0	100.7	100.5	100.1	99.7	99.4	98.9	98.5
80°	80.8	80.7	80.5	80.3	80.0	79.7	79.5	79.1
82.5°	61.7	61.5	61.2	61.0	61.0	61.0	60.9	60.9
85°	36.3	36.2	36.1	35.8	35.6	35.2	35.0	34.7
87.5°	16.8	17.0	17.1	17.2	17.1	17.0	16.9	16.8
90°	15.9	16.9	17.8	18.6	19.2	19.8	20.3	20.9
92.5°	36.1	37.4	38.7	39.4	39.9	40.3	40.7	41.2
95°	69.9	71.2	72.6	73.4	73.9	74.2	74.6	75.0
97.5°	109.5	110.8	112.1	112.8	113.0	113.3	113.6	113.7
100°	137.0	138.7	140.4	141.5	141.9	142.3	142.7	143.1
102.5°	165.2	167.1	169.0	170.2	170.7	171.3	171.9	172.4
105°	210.9	212.0	213.2	214.0	214.6	215.2	215.8	216.4
107.5°	260.1	260.7	261.2	261.6	261.5	261.5	261.4	261.4
110°	294.3	294.9	295.5	295.7	295.5	295.2	295.1	294.9



TEST NUMBER: P333387-935

CATALOG NUMBER: S125DIW-S610D1050U935-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	328.6	328.8	329.1	329.1	328.7	328.4	328.0	327.7
115°	380.8	380.6	380.5	380.3	380.0	379.9	379.7	379.5
117.5°	433.2	433.3	433.5	433.2	432.4	431.6	430.8	430.1
120°	468.5	468.5	468.5	468.1	467.4	466.6	465.8	465.0
122.5°	503.1	502.9	502.7	502.4	501.8	501.1	500.5	499.9
125°	554.1	553.7	553.3	553.0	552.8	552.6	552.4	552.2
127.5°	604.7	604.5	604.3	604.1	603.6	603.3	602.9	602.5
130°	638.3	638.0	637.8	637.6	637.1	636.8	636.4	636.0
132.5°	670.3	670.1	669.9	669.6	669.0	668.5	668.0	667.4
135°	719.7	719.7	719.7	719.4	718.6	717.8	717.0	716.3
137.5°	767.8	768.1	768.3	767.9	767.0	766.0	765.0	764.1
140°	798.1	798.6	798.9	798.7	797.7	796.7	795.7	794.8
142.5°	827.9	828.1	828.4	827.9	827.0	826.0	825.1	824.1
145°	870.6	870.6	870.6	870.4	869.8	869.2	868.7	868.1
147.5°	910.3	910.8	911.3	910.9	909.6	908.2	906.9	905.6
150°	935.2	935.2	935.2	935.0	934.6	934.3	933.8	933.5
152.5°	958.5	959.0	959.4	959.3	958.6	957.9	957.2	956.5
155°	991.8	992.6	993.3	993.2	992.2	991.3	990.3	989.3
157.5°	1020.5	1021.3	1022.1	1021.8	1020.5	1019.3	1018.0	1016.8
160°	1038.0	1038.8	1039.6	1039.4	1038.5	1037.5	1036.6	1035.5
162.5°	1054.4	1055.2	1056.2	1056.1	1055.0	1053.9	1052.7	1051.6
165°	1076.3	1077.1	1077.9	1077.7	1076.6	1075.4	1074.3	1073.1
167.5°	1092.7	1093.8	1095.0	1095.0	1093.8	1092.6	1091.4	1090.2
170°	1102.4	1103.6	1104.7	1104.7	1103.3	1102.0	1100.6	1099.2
172.5°	1109.4	1110.6	1111.7	1111.7	1110.5	1109.3	1108.1	1106.9
175°	1117.2	1118.4	1119.6	1119.5	1118.2	1116.8	1115.4	1114.0
177.5°	1120.8	1121.8	1122.7	1122.6	1121.5	1120.4	1119.4	1118.3
180°	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0	1121.0

(END OF REPORT)