

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: io LED

Report Number: P273432

Luminaire Tested: **0.05-06W-840-5-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273432
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-246-1)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 0.05-06W-840-5-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 5 DEGREE OPTIC.
HIGH OUTPUT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1210.2 lumens
Efficiency: N/A
Efficacy: 52.2 lumens/watt
Spacing Criteria (0/90/45): 0.17 / 1.31 / 0.22
Luminous Opening: Rectangular (W 2.92' x L: 0.21' x H: 0')
CIE Type: Direct

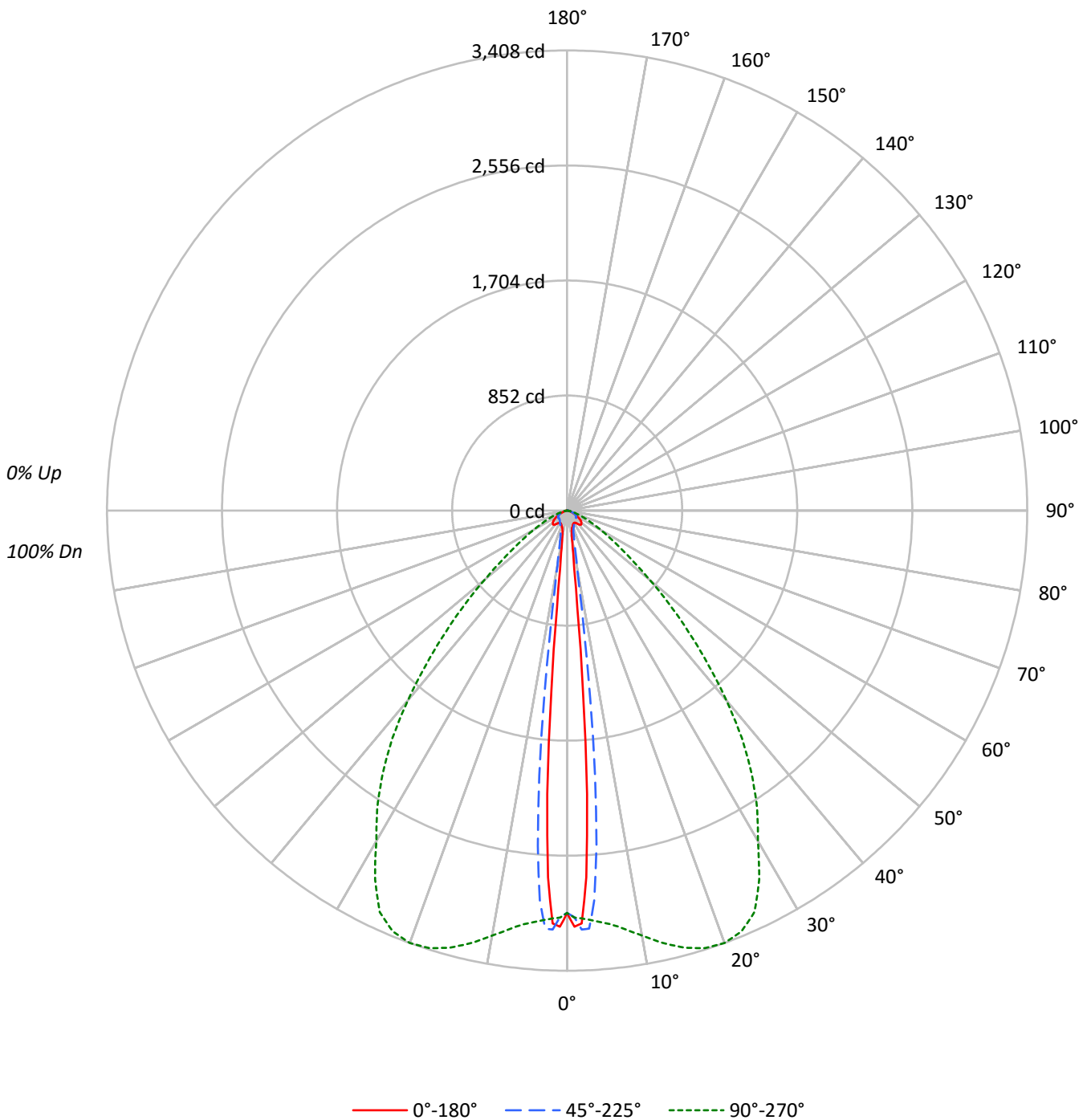
Input Watts (W): 23.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P273432

CATALOG NUMBER: 0.05-06W-840-5-STD-UNV-AN-3F0

Luminous Intensity Polar Plot





TEST NUMBER: P273432

CATALOG NUMBER: 0.05-06W-840-5-STD-UNV-AN-3F0

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	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	108	104	101	109	105	102	100	101	99	96	97	95	93	94	92	91	89					89			
2	104	97	92	87	101	95	91	86	92	88	84	89	85	82	86	83	81	79					79			
3	97	88	82	77	94	87	81	76	84	79	75	81	77	74	79	75	72	70					70			
4	91	81	74	69	88	80	73	68	77	72	67	75	70	66	73	69	66	64					64			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	63	60	58					58			
6	80	69	62	57	78	68	61	56	67	61	56	65	60	56	64	59	55	53					53			
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	49					49			
8	72	60	53	49	70	60	53	48	59	53	48	57	52	48	56	51	48	46					46			
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43					43			
10	65	54	47	43	64	53	47	43	52	47	43	52	46	42	51	46	42	41					41			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	52775	52775	52775
5°	23883	44322	54491
10°	3738	7402	57487
15°	2511	3398	61458
20°	2228	2607	64253
25°	2117	2324	64157
30°	2146	2180	57803
35°	2400	2054	51520
40°	3071	2010	42394
45°	3688	2092	31881
50°	3784	2309	22006
55°	3629	2579	14685
60°	3065	2632	10281
65°	2385	2599	6996
70°	1854	2419	4729
75°	1588	2101	3080
80°	1561	1877	1948
85°	1931	2073	1240



TEST NUMBER: P273432

CATALOG NUMBER: 0.05-06W-840-5-STD-UNV-AN-3F0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.3	14.7
10°-20°	214.7	17.7
20°-30°	204.0	16.9
30°-40°	183.2	15.1
40°-50°	166.4	13.8
50°-60°	132.5	10.9
60°-70°	79.9	6.6
70°-80°	35.6	2.9
80°-90°	11.4	0.9
90°-100°	3.1	0.3
100°-110°	0.9	0.1
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	597.1	49.3
0°-40°	780.3	64.5
0°-60°	1079.2	89.2
0°-90°	1206.1	99.7
90°-120°	4.1	0.3
90°-150°	4.1	0.3
90°-180°	4.0	0.3
0°-180°	1210.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2979	2979	2979	2979	2979	
5°	1343	1687	2492	3114	3064	89
15°	137	143	185	751	3351	40
25°	108	109	119	229	3282	50
35°	111	102	95	180	2382	72
45°	147	129	84	168	1273	110
55°	118	114	84	138	476	103
65°	57	62	62	82	167	58
75°	23	26	31	39	45	25
85°	10	10	10	11	6	9
90°	6	6	6	4	0	3
95°	4	4	3	1	0	3
105°	1	2	1	0	0	2
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P273432

CATALOG NUMBER: 0.05-06W-840-5-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2979.2	2979.2	2979.2	2979.2	2979.2	2979.2	2979.2	2979.2	2979.2	2979.2	2979.2
1°	3082.4	3031.3	3028.3	3029.3	3038.5	3043.9	3053.8	3069.5	3032.0	3011.6	3008.2
2°	3060.0	3072.9	3077.3	3085.2	3107.6	3112.4	3120.9	3126.4	3121.3	3104.9	3093.7
3°	2718.3	2773.8	2801.1	2824.6	2886.6	2916.2	2956.1	2995.6	3062.0	3100.2	3115.5
4°	2104.5	2174.6	2207.0	2247.2	2351.8	2414.8	2512.6	2616.8	2766.0	2891.0	2973.4
5°	1343.1	1411.9	1449.4	1508.3	1635.1	1739.6	1888.8	2049.3	2283.3	2492.5	2665.8
6°	723.9	775.6	803.6	847.2	945.6	1044.1	1208.9	1404.5	1675.9	1973.0	2249.2
7°	435.0	456.8	471.1	493.2	544.0	602.6	706.1	828.8	1085.6	1397.0	1744.4
8°	316.1	322.2	330.4	342.0	364.8	394.1	449.3	517.4	668.3	896.9	1224.3
9°	248.3	253.1	258.5	266.7	281.4	299.4	325.7	367.9	445.9	580.1	811.1
10°	207.8	210.9	214.9	220.7	231.0	243.9	263.0	291.2	336.9	411.5	534.8
12.5°	156.0	156.4	157.4	160.4	165.6	172.0	183.9	196.5	218.7	250.0	295.3
15°	136.9	137.6	138.0	139.3	141.7	144.4	149.2	155.7	166.2	185.3	209.8
17.5°	127.4	127.7	127.7	129.1	130.8	132.5	134.2	138.3	143.7	153.6	168.3
20°	118.2	117.9	118.2	118.5	120.9	122.6	125.0	128.4	132.2	138.3	146.8
22.5°	112.8	112.4	112.4	112.4	113.1	113.8	115.5	118.2	123.0	128.8	135.9
25°	108.3	108.0	107.6	107.6	108.3	109.7	110.4	111.0	113.8	118.9	126.7
27.5°	104.6	104.9	104.2	103.6	103.9	104.6	105.6	107.6	108.7	111.0	117.5
30°	104.9	104.6	103.6	102.5	101.2	100.5	100.8	101.5	103.9	106.6	110.0
32.5°	106.3	105.6	104.2	102.9	101.9	100.1	97.8	97.1	97.8	101.2	104.9
35°	111.0	110.4	108.0	105.3	102.9	100.1	97.4	95.0	93.3	95.0	99.5
37.5°	121.3	119.9	116.8	112.4	107.3	102.5	97.8	93.3	91.0	89.9	92.7
40°	132.8	131.8	128.1	123.0	116.5	108.7	100.1	93.7	88.9	86.9	87.9
42.5°	142.7	142.0	138.6	133.2	126.0	117.5	106.6	96.7	89.2	84.5	84.1
45°	147.2	145.8	143.4	139.3	133.2	124.7	113.8	101.5	90.3	83.5	80.7
47.5°	143.7	143.1	141.4	138.6	134.2	128.1	118.2	106.3	93.3	83.5	78.0
50°	137.3	136.9	135.6	132.8	129.8	125.4	118.5	108.7	96.4	83.8	76.3
52.5°	128.8	128.4	128.1	125.7	123.0	119.6	114.1	106.6	96.4	84.8	74.9
55°	117.5	117.5	117.2	117.2	115.1	112.1	107.3	101.2	93.3	83.5	73.6
57.5°	103.2	103.9	103.6	104.2	104.9	103.2	99.5	94.7	88.2	79.4	70.9
60°	86.5	87.2	87.5	88.6	90.6	92.0	90.3	86.9	81.4	74.3	66.4
62.5°	71.2	71.9	72.2	73.6	74.9	77.7	79.0	78.0	74.3	68.5	61.3
65°	56.9	57.9	58.2	59.3	61.3	63.7	66.1	67.8	65.7	62.0	56.2
67.5°	45.3	45.3	46.3	47.7	49.4	51.8	54.2	56.5	56.9	54.8	50.4
70°	35.8	36.4	36.8	37.8	39.5	41.2	42.9	45.6	47.3	46.7	44.6
72.5°	28.6	29.3	29.6	30.3	31.3	33.0	34.4	36.1	38.2	38.8	37.8
75°	23.2	23.5	23.5	24.2	25.2	26.2	27.3	28.3	29.6	30.7	31.0
77.5°	19.1	19.1	19.1	19.1	20.1	20.4	21.5	22.1	22.8	24.2	25.2
80°	15.3	15.3	15.3	15.0	15.7	16.0	16.4	16.7	17.4	18.4	19.8
82.5°	11.9	11.9	11.9	11.9	12.3	12.6	12.6	12.6	13.3	13.6	15.0
85°	9.5	9.5	9.5	9.5	9.5	9.9	9.9	9.9	9.9	10.2	10.9
87.5°	7.5	7.5	7.5	7.5	7.8	7.8	7.8	7.8	7.8	7.8	7.8
90°	6.1	5.8	5.8	5.8	6.1	6.1	6.1	5.8	5.8	5.8	5.8
92.5°	4.8	4.8	4.8	4.8	4.8	5.5	4.8	4.8	4.8	4.8	4.1
95°	4.1	4.1	4.1	4.1	4.1	4.4	4.1	4.1	3.4	3.4	3.4



TEST NUMBER: P273432

CATALOG NUMBER: 0.05-06W-840-5-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
97.5°	3.4	3.4	3.4	3.4	3.4	3.7	3.4	3.4	2.7	2.7	2.0
100°	2.7	2.7	2.7	2.7	2.7	3.1	2.7	2.7	2.0	2.0	1.4
102.5°	2.0	2.0	2.0	2.0	2.0	2.7	2.0	2.0	1.4	1.4	0.7
105°	1.4	1.4	1.4	1.4	2.0	2.0	2.0	1.4	0.7	0.7	0.0
107.5°	1.0	1.4	1.4	1.4	1.4	1.4	1.4	0.7	0.7	0.0	0.0
110°	0.7	0.7	0.7	0.7	1.0	1.4	1.0	0.7	0.3	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P273432

CATALOG NUMBER: 0.05-06W-840-5-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2979.2	2979.2	2979.2	2979.2	2979.2	2979.2	2979.2	2979.2
1°	3006.8	2992.9	2986.7	2989.4	2989.1	2995.2	3005.8	3014.7
2°	3079.0	3052.5	3035.8	3023.5	3010.9	3006.8	3015.7	3022.1
3°	3119.2	3111.1	3096.7	3073.6	3047.7	3030.0	3031.0	3034.4
4°	3044.3	3103.2	3129.8	3118.9	3089.6	3059.6	3050.4	3048.0
5°	2833.8	2991.8	3091.0	3136.6	3126.4	3094.0	3070.2	3064.4
6°	2501.7	2776.5	2970.0	3101.5	3146.5	3126.7	3092.3	3081.4
7°	2086.1	2468.9	2775.2	3013.6	3141.4	3155.3	3118.2	3103.2
8°	1623.1	2104.1	2511.5	2874.3	3104.2	3180.2	3149.9	3133.2
9°	1162.3	1697.4	2201.2	2681.8	3032.7	3195.2	3185.7	3164.5
10°	797.8	1284.5	1854.4	2448.5	2925.1	3190.8	3221.8	3195.9
12.5°	374.7	555.9	980.0	1735.6	2521.4	3081.8	3290.6	3280.4
15°	251.4	326.0	496.3	1006.6	1965.1	2837.5	3316.8	3351.2
17.5°	195.5	238.8	326.0	562.7	1358.1	2496.2	3266.4	3397.5
20°	162.8	195.2	253.1	384.9	849.9	2076.2	3138.0	3408.4
22.5°	146.1	167.9	212.6	310.7	582.2	1649.0	2944.5	3373.7
25°	136.3	151.6	187.7	269.4	466.3	1249.1	2700.9	3282.4
27.5°	127.1	141.4	171.7	243.6	413.2	936.4	2372.9	3080.7
30°	118.5	131.8	159.4	228.6	385.3	746.7	2017.3	2825.9
32.5°	110.7	123.7	150.9	219.7	371.3	654.4	1717.8	2618.8
35°	104.9	116.5	143.7	215.3	363.5	594.1	1431.7	2382.4
37.5°	100.1	110.7	138.0	211.9	356.0	544.3	1213.4	2125.6
40°	93.7	105.9	134.2	210.2	345.7	493.9	1028.4	1833.3
42.5°	88.2	100.1	130.8	209.8	331.4	446.2	903.7	1545.8
45°	83.5	94.7	128.4	208.5	311.7	401.6	797.1	1272.6
47.5°	79.0	89.9	125.0	203.0	286.1	358.7	707.2	1023.3
50°	74.9	85.5	121.3	193.8	258.2	317.8	623.0	798.5
52.5°	71.9	80.7	116.5	180.9	227.5	281.0	539.2	614.5
55°	69.1	77.3	111.4	164.5	198.9	247.3	470.1	475.5
57.5°	65.7	73.2	105.3	145.8	173.0	214.6	399.6	370.6
60°	62.0	68.8	97.1	125.7	148.2	183.3	327.4	290.2
62.5°	57.2	64.0	87.5	105.6	124.3	152.6	253.1	220.7
65°	52.1	57.9	76.3	88.2	102.9	129.8	193.8	166.9
67.5°	47.0	52.1	65.4	74.6	85.2	108.3	144.1	125.4
70°	41.9	45.0	54.8	62.7	70.2	86.9	103.2	91.3
72.5°	36.4	38.2	44.6	51.8	55.9	67.1	72.9	64.7
75°	30.3	31.3	36.1	41.9	43.6	50.8	50.1	45.0
77.5°	25.2	25.2	27.9	32.4	33.7	36.1	33.0	30.0
80°	20.1	19.8	20.4	23.2	24.5	23.5	21.1	19.1
82.5°	15.7	15.7	15.3	16.0	16.0	14.6	12.6	11.6
85°	11.6	11.6	11.2	10.2	9.5	7.8	6.1	6.1
87.5°	8.5	8.5	7.5	6.1	5.1	3.4	2.0	2.0
90°	5.8	5.5	4.8	3.4	2.0	1.0	0.0	0.0
92.5°	4.1	3.4	2.7	2.0	0.7	0.0	0.0	0.0
95°	2.7	2.0	1.4	0.7	0.0	0.0	0.0	0.0



TEST NUMBER: P273432

CATALOG NUMBER: 0.05-06W-840-5-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
97.5°	2.0	1.4	0.7	0.0	0.0	0.0	0.0	0.0
100°	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)