

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: P273420

Luminaire Tested: **0.05-06W-830-5-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P273420  
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-830-5-STD-UNV-AN-3F0  
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 5 DEGREE OPTIC.  
HIGH OUTPUT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1141.7 lumens  
Efficiency: N/A  
Efficacy: 49.2 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

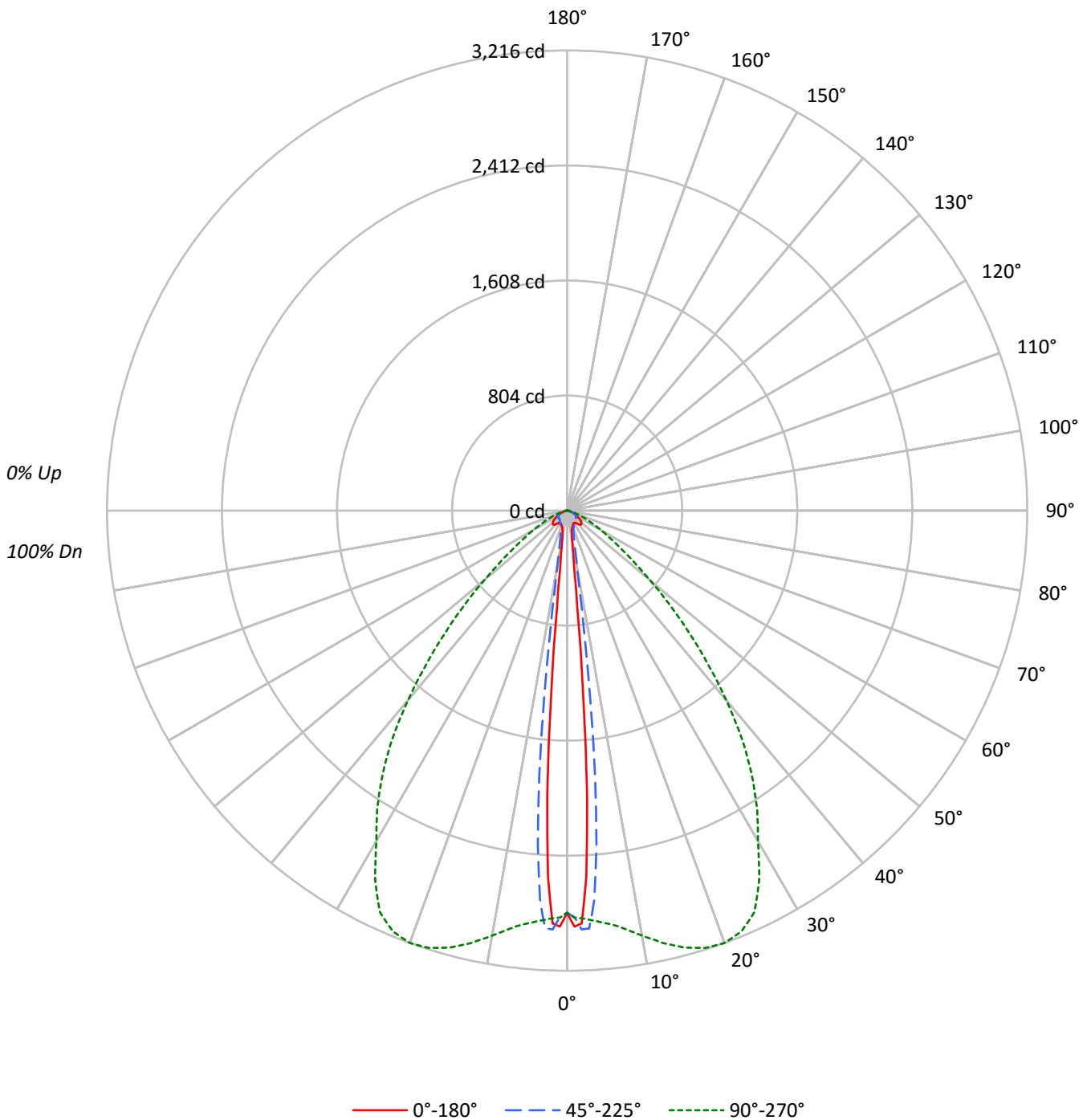
Input Watts (W): 23.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P273420

CATALOG NUMBER: 0.05-06W-830-5-STD-UNV-AN-3F0

### Luminous Intensity Polar Plot





TEST NUMBER: P273420

CATALOG NUMBER: 0.05-06W-830-5-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°	49788	49788	49788
5°	22532	41813	51406
10°	3526	6983	54233
15°	2369	3206	57980
20°	2102	2460	60616
25°	1998	2193	60525
30°	2025	2058	54532
35°	2266	1940	48605
40°	2897	1894	39994
45°	3477	1972	30077
50°	3569	2180	20760
55°	3425	2431	13855
60°	2891	2484	9700
65°	2251	2452	6602
70°	1745	2279	4459
75°	1499	1978	2902
80°	1479	1775	1836
85°	1829	1951	1179



TEST NUMBER: P273420

CATALOG NUMBER: 0.05-06W-830-5-STD-UNV-AN-3F0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	168.2	14.7
10°-20°	202.6	17.7
20°-30°	192.5	16.9
30°-40°	172.9	15.1
40°-50°	157.0	13.8
50°-60°	125.0	10.9
60°-70°	75.4	6.6
70°-80°	33.6	2.9
80°-90°	10.8	0.9
90°-100°	2.9	0.3
100°-110°	0.8	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°	563.3	49.3
0°-40°	736.2	64.5
0°-60°	1018.1	89.2
0°-90°	1137.9	99.7
90°-120°	3.8	0.3
90°-150°	3.8	0.3
90°-180°	4.0	0.4
0°-180°	1141.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2811	2811	2811	2811	2811	
5°	1267	1592	2351	2938	2891	84
15°	129	135	175	709	3162	38
25°	102	103	112	216	3097	48
35°	105	96	90	169	2248	68
45°	139	122	79	159	1201	104
55°	111	107	79	130	449	97
65°	54	59	58	78	158	55
75°	22	24	29	37	42	24
85°	9	9	10	10	6	8
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: P273420

CATALOG NUMBER: 0.05-06W-830-5-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6
1°	2908.0	2859.8	2856.9	2857.8	2866.5	2871.6	2881.0	2895.8	2860.4	2841.1	2837.9
2°	2886.8	2899.0	2903.1	2910.5	2931.7	2936.2	2944.3	2949.4	2944.6	2929.2	2918.6
3°	2564.4	2616.8	2642.5	2664.7	2723.2	2751.1	2788.7	2826.0	2888.7	2924.7	2939.1
4°	1985.3	2051.5	2082.1	2120.0	2218.7	2278.1	2370.3	2468.7	2609.4	2727.4	2805.1
5°	1267.1	1332.0	1367.4	1423.0	1542.5	1641.2	1781.9	1933.3	2154.1	2351.4	2514.9
6°	682.9	731.7	758.1	799.2	892.1	985.0	1140.5	1325.0	1581.1	1861.3	2121.9
7°	410.4	430.9	444.4	465.3	513.2	568.5	666.2	781.9	1024.2	1317.9	1645.7
8°	298.2	304.0	311.7	322.6	344.2	371.8	423.9	488.1	630.5	846.1	1155.0
9°	234.3	238.8	243.9	251.6	265.4	282.5	307.2	347.1	420.7	547.3	765.2
10°	196.0	198.9	202.8	208.2	217.9	230.1	248.1	274.8	317.8	388.2	504.5
12.5°	147.2	147.5	148.5	151.4	156.2	162.3	173.5	185.4	206.3	235.9	278.6
15°	129.2	129.8	130.1	131.4	133.7	136.3	140.8	146.9	156.8	174.8	198.0
17.5°	120.2	120.5	120.5	121.8	123.4	125.0	126.6	130.5	135.6	144.9	158.8
20°	111.5	111.2	111.5	111.8	114.1	115.7	117.9	121.2	124.7	130.5	138.5
22.5°	106.4	106.0	106.0	106.0	106.7	107.3	108.9	111.5	116.0	121.5	128.2
25°	102.2	101.9	101.5	101.5	102.2	103.5	104.1	104.8	107.3	112.2	119.5
27.5°	98.7	99.0	98.3	97.7	98.0	98.7	99.6	101.5	102.5	104.8	110.9
30°	99.0	98.7	97.7	96.7	95.4	94.8	95.1	95.8	98.0	100.6	103.8
32.5°	100.3	99.6	98.3	97.0	96.1	94.5	92.2	91.6	92.2	95.4	99.0
35°	104.8	104.1	101.9	99.3	97.0	94.5	91.9	89.7	88.1	89.7	93.8
37.5°	114.4	113.1	110.2	106.0	101.2	96.7	92.2	88.1	85.8	84.8	87.4
40°	125.3	124.4	120.8	116.0	109.9	102.5	94.5	88.4	83.9	81.9	82.9
42.5°	134.6	134.0	130.8	125.7	118.9	110.9	100.6	91.3	84.2	79.7	79.4
45°	138.8	137.5	135.3	131.4	125.7	117.6	107.3	95.8	85.2	78.7	76.2
47.5°	135.6	135.0	133.4	130.8	126.6	120.8	111.5	100.3	88.1	78.7	73.6
50°	129.5	129.2	127.9	125.3	122.4	118.3	111.8	102.5	90.9	79.1	72.0
52.5°	121.5	121.2	120.8	118.6	116.0	112.8	107.7	100.6	90.9	80.0	70.7
55°	110.9	110.9	110.5	110.5	108.6	105.7	101.2	95.4	88.1	78.7	69.4
57.5°	97.4	98.0	97.7	98.3	99.0	97.4	93.8	89.3	83.2	74.9	66.8
60°	81.6	82.3	82.6	83.6	85.5	86.8	85.2	81.9	76.8	70.1	62.7
62.5°	67.2	67.8	68.1	69.4	70.7	73.3	74.6	73.6	70.1	64.6	57.8
65°	53.7	54.6	55.0	55.9	57.8	60.1	62.3	64.0	62.0	58.5	53.0
67.5°	42.7	42.7	43.7	45.0	46.6	48.8	51.1	53.3	53.7	51.7	47.6
70°	33.7	34.4	34.7	35.7	37.3	38.9	40.5	43.1	44.7	44.0	42.1
72.5°	27.0	27.6	28.0	28.6	29.6	31.2	32.5	34.1	36.0	36.6	35.7
75°	21.9	22.2	22.2	22.8	23.8	24.7	25.7	26.7	28.0	28.9	29.2
77.5°	18.0	18.0	18.0	18.0	19.0	19.3	20.2	20.9	21.5	22.8	23.8
80°	14.5	14.5	14.5	14.1	14.8	15.1	15.4	15.7	16.4	17.4	18.6
82.5°	11.2	11.2	11.2	11.2	11.6	11.9	11.9	11.9	12.5	12.9	14.1
85°	9.0	9.0	9.0	9.0	9.0	9.3	9.3	9.3	9.3	9.6	10.3
87.5°	7.1	7.1	7.1	7.1	7.4	7.4	7.4	7.4	7.4	7.4	7.4
90°	5.8	5.5	5.5	5.5	5.8	5.8	5.8	5.5	5.5	5.5	5.5
92.5°	4.5	4.5	4.5	4.5	4.5	5.1	4.5	4.5	4.5	4.5	3.9
95°	3.9	3.9	3.9	3.9	3.9	4.2	3.9	3.9	3.2	3.2	3.2



TEST NUMBER: P273420

CATALOG NUMBER: 0.05-06W-830-5-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
97.5°	3.2	3.2	3.2	3.2	3.2	3.5	3.2	3.2	2.6	2.6	1.9
100°	2.6	2.6	2.6	2.6	2.6	2.9	2.6	2.6	1.9	1.9	1.3
102.5°	1.9	1.9	1.9	1.9	1.9	2.6	1.9	1.9	1.3	1.3	0.6
105°	1.3	1.3	1.3	1.3	1.9	1.9	1.9	1.3	0.6	0.6	0.0
107.5°	1.0	1.3	1.3	1.3	1.3	1.3	1.3	0.6	0.6	0.0	0.0
110°	0.6	0.6	0.6	0.6	1.0	1.3	1.0	0.6	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: P273420

CATALOG NUMBER: 0.05-06W-830-5-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6	2810.6
1°	2836.6	2823.4	2817.7	2820.2	2819.9	2825.7	2835.7	2844.0
2°	2904.7	2879.7	2863.9	2852.4	2840.5	2836.6	2845.0	2851.1
3°	2942.7	2935.0	2921.5	2899.6	2875.2	2858.5	2859.4	2862.7
4°	2872.0	2927.6	2952.6	2942.3	2914.7	2886.4	2877.8	2875.5
5°	2673.4	2822.5	2916.0	2959.1	2949.4	2918.9	2896.4	2890.9
6°	2360.0	2619.4	2801.9	2926.0	2968.4	2949.7	2917.3	2907.0
7°	1968.0	2329.2	2618.1	2843.0	2963.6	2976.7	2941.7	2927.6
8°	1531.3	1985.0	2369.4	2711.6	2928.5	3000.2	2971.6	2955.8
9°	1096.5	1601.3	2076.6	2530.0	2861.0	3014.3	3005.3	2985.4
10°	752.6	1211.8	1749.5	2309.9	2759.5	3010.2	3039.4	3015.0
12.5°	353.5	524.5	924.5	1637.3	2378.7	2907.3	3104.3	3094.7
15°	237.2	307.5	468.2	949.6	1853.9	2676.9	3129.1	3161.5
17.5°	184.5	225.3	307.5	530.9	1281.3	2354.9	3081.5	3205.2
20°	153.6	184.1	238.8	363.1	801.8	1958.7	2960.3	3215.5
22.5°	137.9	158.4	200.5	293.1	549.2	1555.7	2777.8	3182.7
25°	128.5	143.0	177.1	254.2	439.9	1178.4	2548.0	3096.6
27.5°	119.9	133.4	162.0	229.8	389.8	883.4	2238.6	2906.4
30°	111.8	124.4	150.4	215.6	363.5	704.4	1903.1	2666.0
32.5°	104.4	116.7	142.4	207.3	350.3	617.3	1620.6	2470.6
35°	99.0	109.9	135.6	203.1	342.9	560.4	1350.7	2247.6
37.5°	94.5	104.4	130.1	199.9	335.8	513.5	1144.7	2005.3
40°	88.4	99.9	126.6	198.3	326.2	466.0	970.2	1729.5
42.5°	83.2	94.5	123.4	198.0	312.7	421.0	852.6	1458.3
45°	78.7	89.3	121.2	196.7	294.0	378.9	752.0	1200.6
47.5°	74.6	84.8	117.9	191.5	269.9	338.4	667.1	965.4
50°	70.7	80.7	114.4	182.9	243.6	299.8	587.8	753.3
52.5°	67.8	76.2	109.9	170.6	214.7	265.1	508.7	579.7
55°	65.2	72.9	105.1	155.2	187.7	233.3	443.5	448.6
57.5°	62.0	69.1	99.3	137.5	163.2	202.5	377.0	349.6
60°	58.5	64.9	91.6	118.6	139.8	172.9	308.8	273.8
62.5°	54.0	60.4	82.6	99.6	117.3	144.0	238.8	208.2
65°	49.2	54.6	72.0	83.2	97.0	122.4	182.9	157.5
67.5°	44.3	49.2	61.7	70.4	80.3	102.2	135.9	118.3
70°	39.5	42.4	51.7	59.1	66.2	81.9	97.4	86.1
72.5°	34.4	36.0	42.1	48.8	52.7	63.3	68.8	61.1
75°	28.6	29.6	34.1	39.5	41.1	47.9	47.2	42.4
77.5°	23.8	23.8	26.4	30.5	31.8	34.1	31.2	28.3
80°	19.0	18.6	19.3	21.9	23.1	22.2	19.9	18.0
82.5°	14.8	14.8	14.5	15.1	15.1	13.8	11.9	10.9
85°	10.9	10.9	10.6	9.6	9.0	7.4	5.8	5.8
87.5°	8.0	8.0	7.1	5.8	4.8	3.2	1.9	1.9
90°	5.5	5.1	4.5	3.2	1.9	1.0	0.0	0.0
92.5°	3.9	3.2	2.6	1.9	0.6	0.0	0.0	0.0
95°	2.6	1.9	1.3	0.6	0.0	0.0	0.0	0.0





TEST NUMBER: P273420

CATALOG NUMBER: 0.05-06W-830-5-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
97.5°	1.9	1.3	0.6	0.0	0.0	0.0	0.0	0.0
100°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.6	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)