

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: METALUX

Report Number: P237881

Luminaire Tested: **8VT2-LD5-16-DR-W-UNV-L835-CD2-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237881
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-14)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8VT2-LD5-16-DR-W-UNV-L835-CD2-WL-U
Description: METALUX VT2 LED LUMINAIRE
INTERNAL PRISMATIC LENS/15% DR HIGH IMPACT ADDITIVE WIDE DISTRIBUTION
8FT FIXTURE
Light Source: (448) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15236.0 lumens
Efficiency: N/A
Efficacy: 130.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.59 / 1.58
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 8.33' x H: 0.17')
CIE Type: Direct

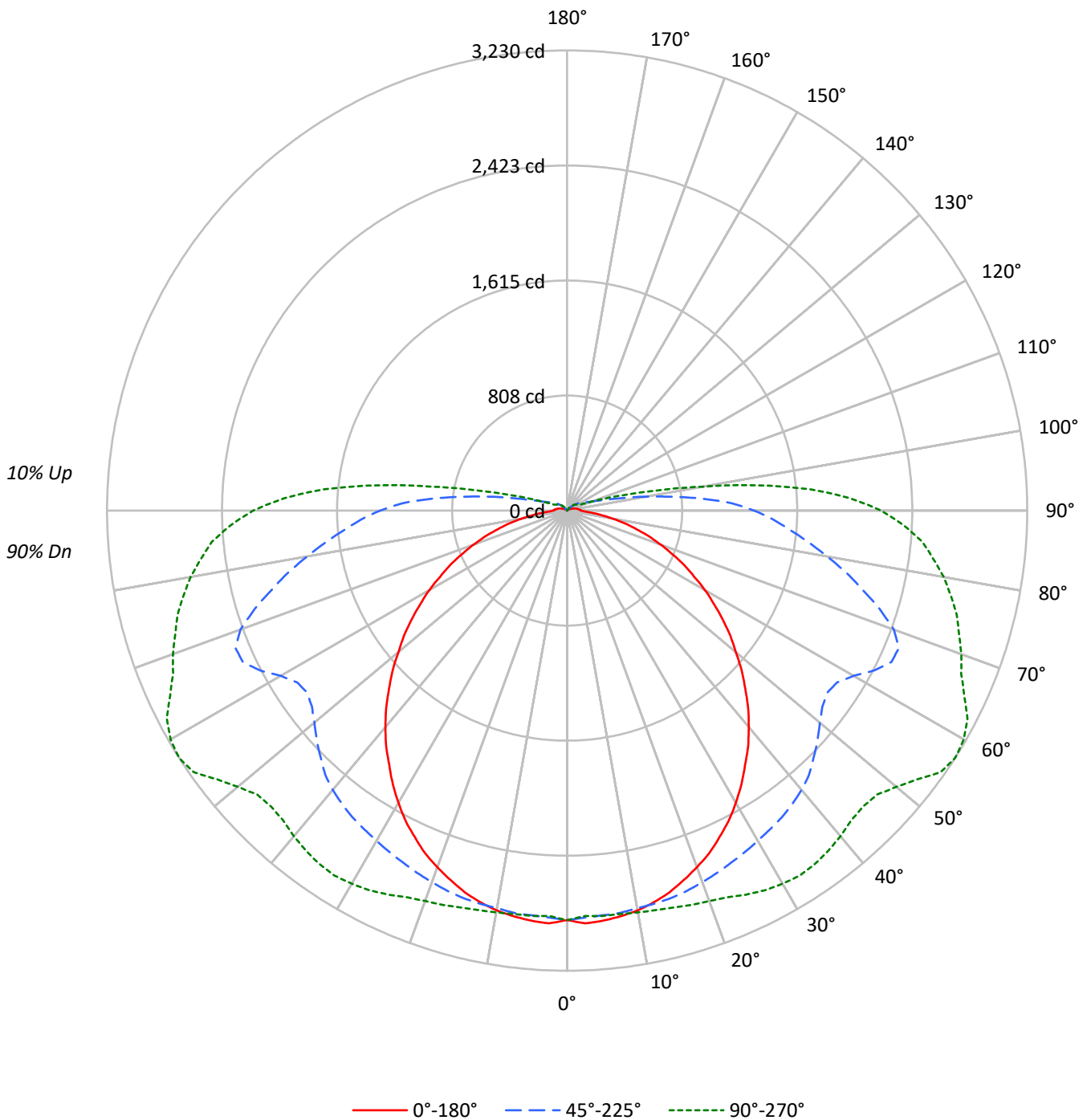
Input Watts (W): 117
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	90
1	101	94	88	83	97	91	85	80	85	80	76	79	75	72	74	71	68	65
2	90	79	71	63	86	77	69	62	71	64	59	66	61	56	62	57	53	50
3	81	68	58	50	77	66	57	49	61	53	47	57	50	45	53	47	43	40
4	73	59	49	41	70	57	48	40	53	45	39	50	43	37	46	40	35	33
5	67	52	42	35	64	51	41	34	47	39	33	44	37	31	41	35	30	27
6	62	47	37	30	59	45	36	29	42	34	28	40	32	27	37	31	26	23
7	57	42	33	26	55	41	32	25	38	30	24	36	29	24	34	27	23	20
8	53	38	29	23	51	37	28	22	35	27	22	33	26	21	31	25	20	18
9	49	35	26	20	47	34	26	20	32	24	19	30	23	19	28	22	18	16
10	46	32	24	18	44	31	23	18	30	22	17	28	21	17	26	20	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7425	7425	7425
5°	7482	7238	7197
10°	7450	7121	7096
15°	7380	7059	7081
20°	7271	6996	7149
25°	7145	6960	7337
30°	6983	6976	7565
35°	6774	7054	7748
40°	6581	7137	7864
45°	6333	7156	8051
50°	6069	7173	8675
55°	5833	7396	9765
60°	5583	8367	10528
65°	5310	9999	10965
70°	4998	10929	11607
75°	4663	11085	12597
80°	4302	11400	13815
85°	4101	12085	15419



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.2	1.8
10°-20°	799.7	5.2
20°-30°	1268.9	8.3
30°-40°	1641.9	10.8
40°-50°	1858.5	12.2
50°-60°	2040.6	13.4
60°-70°	2165.4	14.2
70°-80°	2030.0	13.3
80°-90°	1641.9	10.8
90°-100°	1017.2	6.7
100°-110°	319.1	2.1
110°-120°	101.5	0.7
120°-130°	52.7	0.3
130°-140°	22.1	0.1
140°-150°	3.4	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2341.8	15.4
0°-40°	3983.6	26.1
0°-60°	7882.7	51.7
0°-90°	13720.0	90.0
90°-120°	1437.8	9.4
90°-150°	1516.0	10.0
90°-180°	1516.0	10.0
0°-180°	15236.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2874	2874	2874	2874	2874	
5°	2890	2880	2852	2864	2856	274
15°	2774	2786	2816	2878	2884	782
25°	2530	2588	2726	2908	2974	1165
35°	2178	2318	2628	2940	3030	1365
45°	1768	1988	2448	2800	2938	1365
55°	1332	1624	2228	2970	3200	1192
65°	906	1292	2512	2996	3076	896
75°	502	1258	2146	2628	2832	535
85°	170	850	1572	2260	2502	172
90°	96	634	1312	1960	2204	55
95°	84	440	956	1496	1712	66
105°	56	156	300	396	430	60
115°	28	72	136	118	100	28
125°	10	24	84	84	72	10
135°	4	0	34	50	48	4
145°	2	0	0	10	10	1
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: P237881

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1
2.5°	2900.1	2896.1	2890.1	2888.1	2886.1	2886.1	2888.1	2884.1	2878.1	2868.1	2860.1
5°	2890.1	2886.1	2880.1	2876.1	2880.1	2880.1	2882.1	2878.1	2870.1	2862.1	2852.1
7.5°	2872.1	2868.1	2862.1	2862.1	2860.1	2862.1	2862.1	2862.1	2858.1	2854.1	2848.1
10°	2850.1	2844.1	2842.1	2840.1	2842.1	2846.1	2846.1	2848.1	2844.1	2838.1	2834.1
12.5°	2816.1	2814.1	2808.1	2810.1	2812.1	2818.1	2822.1	2826.1	2828.1	2826.1	2826.1
15°	2774.1	2770.1	2768.1	2772.1	2784.1	2786.1	2790.1	2800.1	2804.1	2812.1	2816.1
17.5°	2720.1	2720.1	2720.1	2728.1	2742.1	2746.1	2754.1	2764.1	2774.1	2784.1	2798.1
20°	2664.1	2664.1	2664.1	2674.1	2690.1	2702.1	2710.1	2724.1	2740.1	2762.1	2776.1
22.5°	2604.1	2600.1	2600.1	2610.1	2634.1	2640.1	2656.1	2684.1	2708.1	2734.1	2752.1
25°	2530.1	2526.1	2532.1	2546.1	2574.1	2588.1	2606.1	2638.1	2662.1	2698.1	2726.1
27.5°	2456.1	2450.1	2458.1	2476.1	2514.1	2530.1	2552.1	2590.1	2618.1	2658.1	2702.1
30°	2368.1	2368.1	2378.1	2402.1	2440.1	2462.1	2486.1	2532.1	2570.1	2620.1	2676.1
32.5°	2278.1	2274.1	2292.1	2318.1	2368.1	2394.1	2420.1	2472.1	2520.1	2584.1	2652.1
35°	2178.1	2180.1	2198.1	2232.1	2292.1	2318.1	2346.1	2406.1	2470.1	2548.1	2628.1
37.5°	2086.1	2082.1	2106.1	2152.1	2210.1	2240.1	2270.1	2344.1	2416.1	2504.1	2596.1
40°	1984.1	1986.1	2008.1	2060.1	2120.1	2154.1	2188.1	2274.1	2360.1	2454.1	2560.1
42.5°	1880.1	1882.1	1912.1	1968.1	2034.1	2072.1	2114.1	2204.1	2302.1	2406.1	2514.1
45°	1768.1	1772.1	1808.1	1874.1	1940.1	1988.1	2034.1	2132.1	2242.1	2346.1	2448.1
47.5°	1662.1	1668.1	1714.1	1774.1	1850.1	1900.1	1950.1	2062.1	2170.1	2276.1	2384.1
50°	1546.1	1564.1	1604.1	1672.1	1758.1	1806.1	1862.1	1978.1	2092.1	2206.1	2316.1
52.5°	1444.1	1452.1	1502.1	1568.1	1660.1	1716.1	1768.1	1892.1	2012.1	2130.1	2258.1
55°	1332.1	1344.1	1398.1	1466.1	1562.1	1624.1	1682.1	1806.1	1938.1	2070.1	2228.1
57.5°	1222.0	1236.0	1294.0	1364.1	1470.1	1526.1	1594.1	1724.1	1868.1	2038.1	2246.1
60°	1118.0	1128.0	1182.0	1262.0	1372.1	1436.1	1506.1	1656.1	1832.1	2060.1	2320.1
62.5°	1006.0	1024.0	1074.0	1164.0	1290.0	1356.1	1436.1	1612.1	1846.1	2132.1	2430.1
65°	906.0	920.0	976.0	1076.0	1210.0	1292.0	1384.1	1614.1	1912.1	2228.1	2512.1
67.5°	800.0	824.0	882.0	992.0	1150.0	1248.0	1366.1	1656.1	1994.1	2298.1	2520.1
70°	698.0	722.0	796.0	926.0	1114.0	1238.0	1380.1	1720.1	2046.1	2288.1	2440.1
72.5°	602.0	626.0	720.0	872.0	1102.0	1248.0	1410.1	1750.1	2016.1	2178.1	2300.1
75°	502.0	536.0	652.0	836.0	1100.0	1258.0	1422.1	1700.1	1894.1	2030.1	2146.1
77.5°	416.0	458.0	592.0	802.0	1084.0	1228.0	1354.1	1570.1	1736.1	1870.1	2004.1
80°	322.0	380.0	538.0	758.0	1010.0	1124.0	1228.0	1404.1	1568.1	1710.1	1852.1
82.5°	240.0	312.0	474.0	686.0	892.0	988.0	1084.0	1248.0	1402.1	1550.1	1710.1
85°	170.0	244.0	406.0	588.0	766.0	850.0	936.0	1096.0	1248.0	1406.1	1572.1
87.5°	120.0	190.0	334.0	496.0	656.0	726.0	806.0	958.0	1118.0	1274.0	1448.1
90°	96.0	152.0	278.0	418.0	560.0	634.0	706.0	852.0	998.0	1150.0	1312.0
92.5°	92.0	126.0	230.0	352.0	476.0	540.0	604.0	736.0	870.0	1006.0	1160.0
95°	84.0	102.0	178.0	282.0	386.0	440.0	496.0	602.0	718.0	832.0	956.0
97.5°	78.0	84.0	138.0	220.0	304.0	342.0	384.0	474.0	556.0	644.0	740.0
100°	70.0	72.0	104.0	164.0	232.0	266.0	302.0	362.0	424.0	494.0	560.0
102.5°	64.0	64.0	82.0	124.0	174.0	200.0	226.0	278.0	322.0	368.0	406.0
105°	56.0	56.0	66.0	94.0	134.0	156.0	176.0	212.0	248.0	278.0	300.0
107.5°	50.0	48.0	52.0	76.0	108.0	124.0	142.0	170.0	196.0	216.0	234.0
110°	42.0	42.0	42.0	62.0	88.0	102.0	116.0	140.0	162.0	176.0	184.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	34.0	34.0	34.0	50.0	72.0	86.0	98.0	120.0	138.0	150.0	156.0
115°	28.0	28.0	26.0	38.0	60.0	72.0	82.0	104.0	120.0	130.0	136.0
117.5°	22.0	22.0	22.0	28.0	48.0	58.0	70.0	88.0	106.0	116.0	122.0
120°	18.0	18.0	16.0	18.0	36.0	46.0	56.0	76.0	92.0	102.0	108.0
122.5°	14.0	14.0	12.0	12.0	26.0	34.0	44.0	62.0	78.0	88.0	96.0
125°	10.0	10.0	10.0	8.0	16.0	24.0	34.0	50.0	64.0	76.0	84.0
127.5°	8.0	8.0	8.0	6.0	8.0	14.0	22.0	38.0	52.0	62.0	70.0
130°	6.0	6.0	6.0	4.0	4.0	8.0	14.0	26.0	38.0	48.0	58.0
132.5°	6.0	6.0	4.0	4.0	2.0	2.0	6.0	16.0	28.0	36.0	44.0
135°	4.0	4.0	4.0	2.0	2.0	0.0	0.0	8.0	18.0	26.0	34.0
137.5°	4.0	4.0	2.0	2.0	0.0	0.0	0.0	2.0	10.0	16.0	22.0
140°	4.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	2.0	8.0	14.0
142.5°	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
145°	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	2.0	2.0	2.0	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1	2874.1
2.5°	2856.1	2858.1	2862.1	2862.1	2860.1	2860.1	2858.1	2856.1	2852.1	2848.1
5°	2852.1	2856.1	2862.1	2864.1	2864.1	2862.1	2862.1	2862.1	2860.1	2856.1
7.5°	2850.1	2856.1	2862.1	2864.1	2866.1	2866.1	2864.1	2862.1	2858.1	2856.1
10°	2840.1	2852.1	2858.1	2864.1	2868.1	2868.1	2870.1	2870.1	2866.1	2864.1
12.5°	2836.1	2850.1	2860.1	2868.1	2874.1	2874.1	2878.1	2882.1	2870.1	2872.1
15°	2828.1	2848.1	2864.1	2874.1	2878.1	2880.1	2884.1	2886.1	2882.1	2884.1
17.5°	2818.1	2844.1	2860.1	2874.1	2876.1	2882.1	2894.1	2900.1	2900.1	2902.1
20°	2804.1	2834.1	2856.1	2878.1	2886.1	2892.1	2904.1	2916.1	2912.1	2916.1
22.5°	2788.1	2822.1	2854.1	2880.1	2890.1	2902.1	2922.1	2934.1	2940.1	2938.1
25°	2774.1	2818.1	2856.1	2896.1	2908.1	2924.1	2948.1	2964.1	2970.1	2974.1
27.5°	2758.1	2812.1	2864.1	2908.1	2928.1	2948.1	2978.1	2996.1	3002.1	3004.1
30°	2746.1	2814.1	2868.1	2920.1	2942.1	2964.1	2996.1	3014.1	3022.1	3024.1
32.5°	2734.1	2806.1	2868.1	2924.1	2946.1	2966.1	3004.1	3032.1	3038.1	3038.1
35°	2718.1	2790.1	2860.1	2918.1	2940.1	2962.1	3004.1	3026.1	3032.1	3030.1
37.5°	2690.1	2770.1	2842.1	2894.1	2916.1	2936.1	2978.1	3002.1	3012.1	3010.1
40°	2650.1	2732.1	2802.1	2860.1	2880.1	2902.1	2946.1	2966.1	2980.1	2984.1
42.5°	2602.1	2684.1	2754.1	2812.1	2838.1	2864.1	2908.1	2930.1	2946.1	2950.1
45°	2542.1	2626.1	2702.1	2770.1	2800.1	2826.1	2880.1	2918.1	2934.1	2938.1
47.5°	2480.1	2576.1	2662.1	2744.1	2782.1	2822.1	2882.1	2930.1	2952.1	2950.1
50°	2422.1	2538.1	2646.1	2754.1	2804.1	2850.1	2926.1	2978.1	3004.1	3016.1
52.5°	2394.1	2538.1	2682.1	2810.1	2868.1	2918.1	3008.1	3068.1	3098.1	3098.1
55°	2408.1	2594.1	2760.1	2908.1	2970.1	3024.1	3102.1	3160.1	3186.1	3200.1
57.5°	2472.1	2688.1	2866.1	3006.1	3064.1	3110.1	3182.1	3210.1	3238.1	3230.1
60°	2580.1	2786.1	2944.1	3066.1	3106.1	3130.1	3176.1	3200.1	3214.1	3214.1
62.5°	2670.1	2856.1	2966.1	3038.1	3074.1	3094.1	3132.1	3150.1	3168.1	3168.1
65°	2710.1	2832.1	2916.1	2980.1	2996.1	3020.1	3046.1	3064.1	3080.1	3076.1
67.5°	2662.1	2750.1	2816.1	2874.1	2894.1	2918.1	2950.1	2976.1	2990.1	2994.1
70°	2542.1	2626.1	2688.1	2760.1	2790.1	2820.1	2876.1	2914.1	2936.1	2944.1
72.5°	2402.1	2490.1	2586.1	2668.1	2714.1	2748.1	2810.1	2850.1	2880.1	2884.1
75°	2258.1	2368.1	2478.1	2582.1	2628.1	2676.1	2746.1	2792.1	2826.1	2832.1
77.5°	2128.1	2254.1	2390.1	2502.1	2558.1	2600.1	2676.1	2720.1	2756.1	2758.1
80°	1998.1	2146.1	2284.1	2400.1	2456.1	2510.1	2582.1	2640.1	2670.1	2684.1
82.5°	1872.1	2024.1	2172.1	2306.1	2356.1	2408.1	2490.1	2546.1	2580.1	2592.1
85°	1748.1	1914.1	2068.1	2198.1	2260.1	2312.1	2400.1	2452.1	2492.1	2502.1
87.5°	1618.1	1780.1	1934.1	2062.1	2126.1	2172.1	2262.1	2316.1	2356.1	2364.1
90°	1478.1	1630.1	1780.1	1900.1	1960.1	2010.1	2106.1	2156.1	2186.1	2204.1
92.5°	1304.0	1450.1	1588.1	1706.1	1768.1	1804.1	1894.1	1948.1	1980.1	1988.1
95°	1088.0	1212.0	1336.1	1442.1	1496.1	1550.1	1610.1	1662.1	1706.1	1712.1
97.5°	840.0	944.0	1046.0	1150.0	1184.0	1216.0	1266.0	1320.1	1360.1	1358.1
100°	626.0	686.0	758.0	812.0	838.0	874.0	922.0	954.0	958.0	970.0
102.5°	450.0	492.0	522.0	562.0	574.0	606.0	622.0	644.0	648.0	658.0
105°	326.0	348.0	370.0	386.0	396.0	398.0	410.0	426.0	430.0	430.0
107.5°	244.0	256.0	258.0	264.0	268.0	270.0	278.0	280.0	282.0	282.0
110°	192.0	194.0	190.0	190.0	188.0	188.0	186.0	184.0	182.0	182.0



TEST NUMBER: P237881

CATALOG NUMBER: 8VT2-LD5-16-DR-W-UNV-L835-CD2-WL-U

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	156.0	156.0	152.0	146.0	142.0	140.0	134.0	130.0	128.0	128.0
115°	136.0	132.0	128.0	122.0	118.0	116.0	110.0	106.0	102.0	100.0
117.5°	122.0	120.0	114.0	110.0	106.0	104.0	98.0	92.0	90.0	88.0
120°	110.0	108.0	106.0	100.0	98.0	96.0	90.0	86.0	82.0	82.0
122.5°	98.0	98.0	96.0	92.0	90.0	88.0	84.0	80.0	78.0	76.0
125°	88.0	88.0	88.0	86.0	84.0	82.0	78.0	76.0	74.0	72.0
127.5°	74.0	78.0	78.0	78.0	76.0	76.0	74.0	70.0	68.0	68.0
130°	62.0	66.0	68.0	68.0	68.0	68.0	66.0	64.0	62.0	62.0
132.5°	50.0	56.0	58.0	60.0	60.0	60.0	58.0	58.0	56.0	56.0
135°	40.0	44.0	48.0	50.0	50.0	50.0	50.0	50.0	48.0	48.0
137.5°	30.0	32.0	36.0	38.0	40.0	40.0	40.0	40.0	40.0	40.0
140°	18.0	22.0	26.0	28.0	30.0	30.0	30.0	30.0	30.0	30.0
142.5°	10.0	12.0	16.0	18.0	20.0	20.0	20.0	20.0	20.0	20.0
145°	2.0	4.0	8.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
147.5°	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
150°	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
155°	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
160°	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
165°	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
170°	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
175°	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
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)