

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: LUMARK

Report Number: P511360

Luminaire Tested: **WPMLED20B**

Issue Date: 4/9/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P511360  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (UL-CCIC (Suzhou) Co.,Ltd)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: WPMLED20B  
Description: WALLPACK DEDICATED CCT  
Light Source: (240) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10399 lumens  
Efficiency: N/A  
Efficacy: 128.4 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.13m x L: 0.26m x H: 0.9m)  
IES Classification: Type IV - Short  
BUG Rating: B2 - U4 - G5

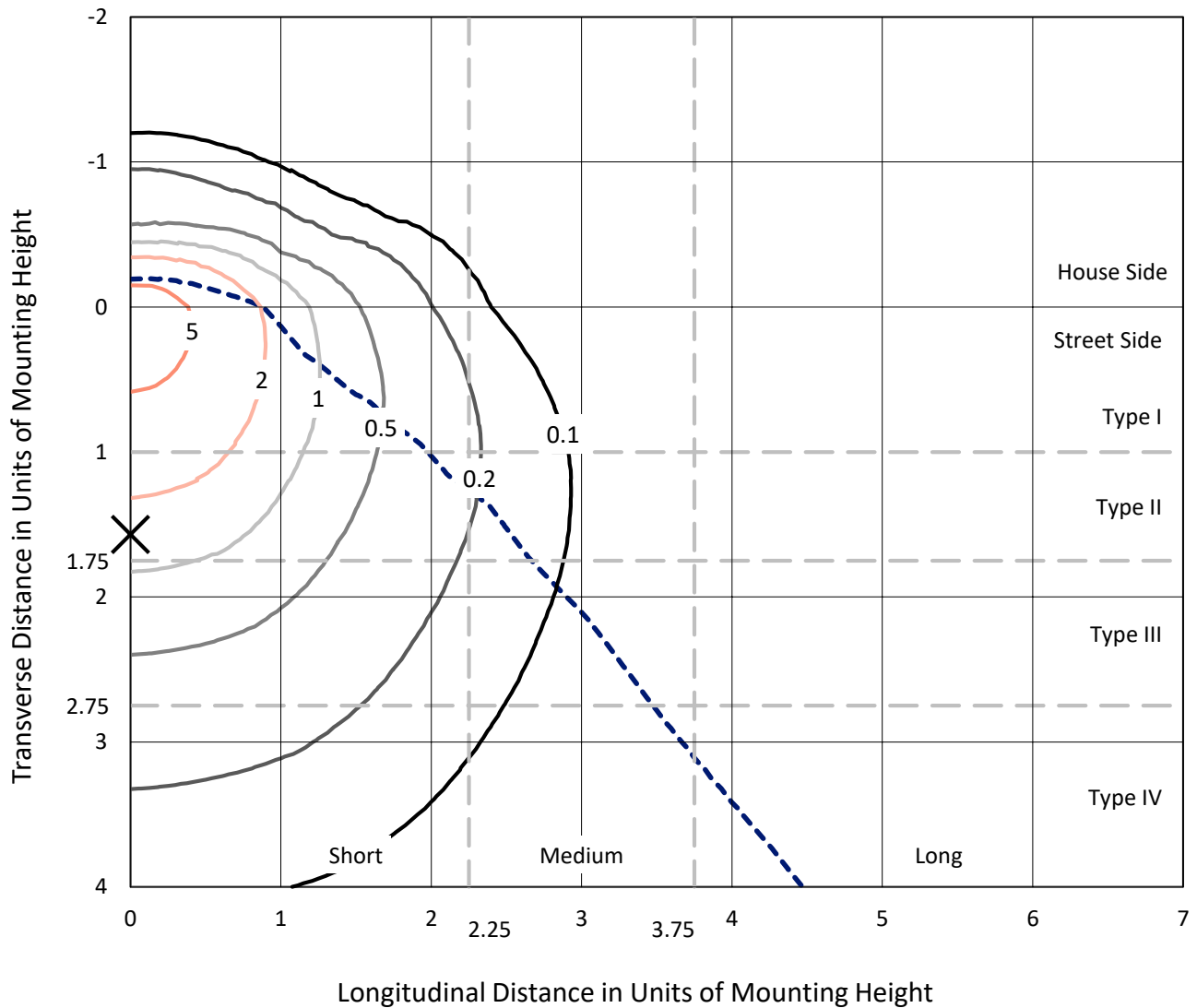
Input Watts (W): 81  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

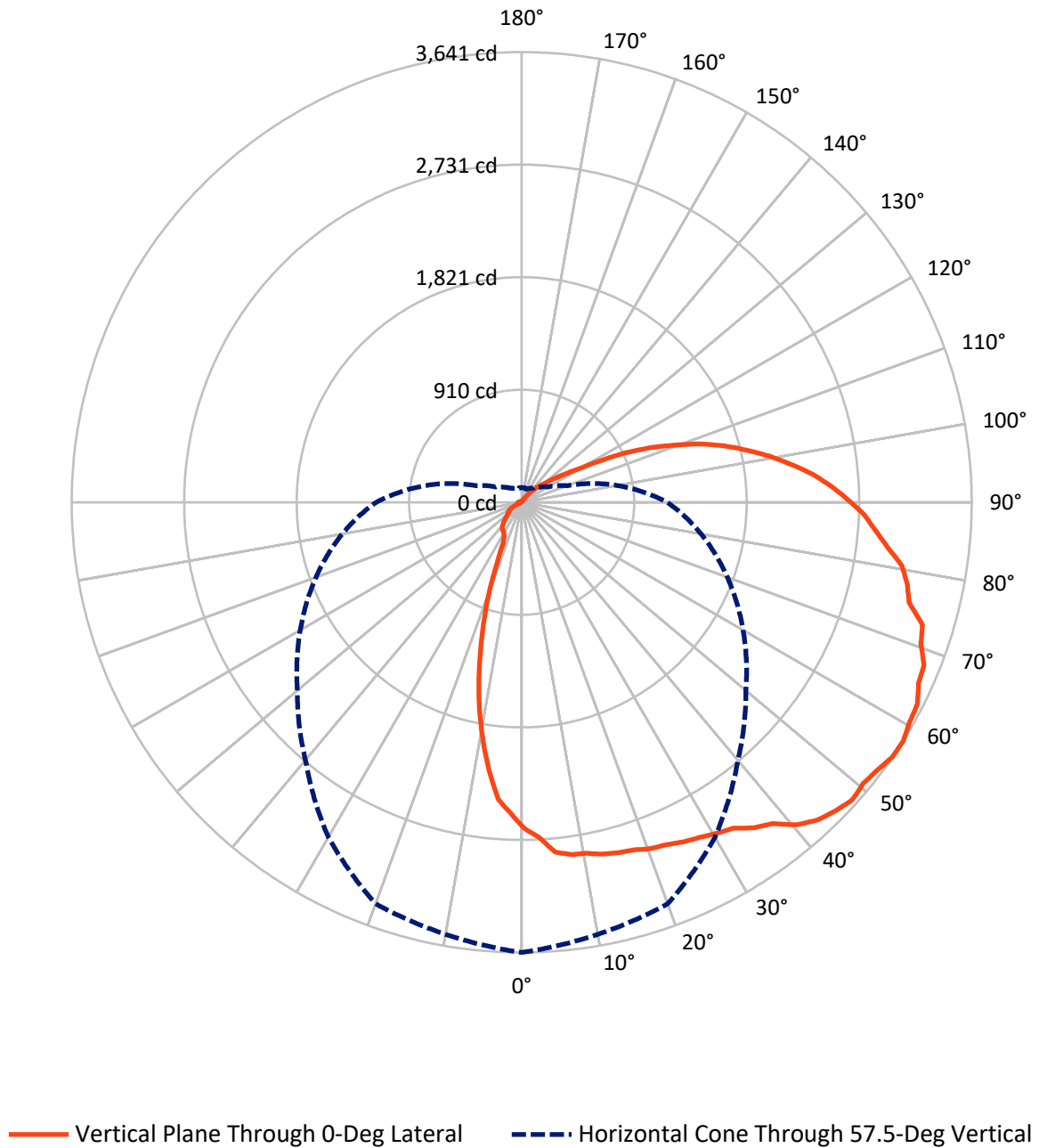
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



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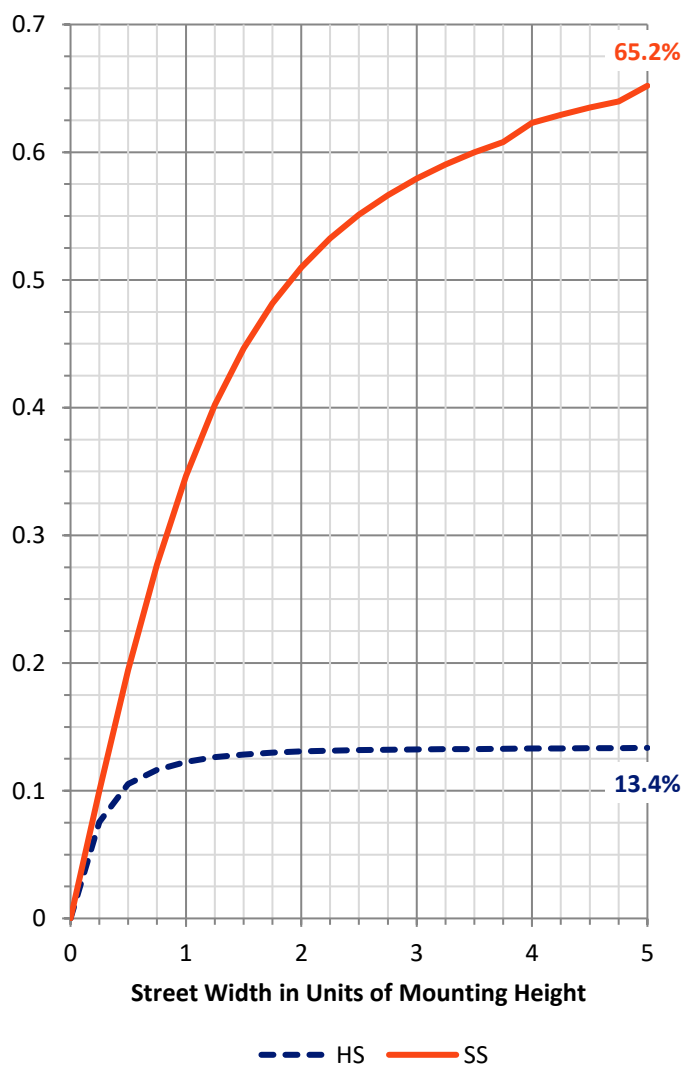
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1414.8	53.4	1468.2
	% Fixture	13.6	0.5	14.1
<b>Street Side</b>	Lumens	7450.6	1480.2	8930.8
	% Fixture	71.6	14.2	85.9
<b>Total</b>	Lumens	8865.4	1533.6	10399.0
	% Fixture	85.3	14.7	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	249.8	2.4
10°-20°	664.6	6.4
20°-30°	906.3	8.7
30°-40°	1083.1	10.4
40°-50°	1230.5	11.8
50°-60°	1306.0	12.6
60°-70°	1299.2	12.5
70°-80°	1163.3	11.2
80°-90°	962.5	9.3
90°-100°	712.5	6.9
100°-110°	451.6	4.3
110°-120°	219.7	2.1
120°-130°	91.2	0.9
130°-140°	38.9	0.4
140°-150°	12.0	0.1
150°-160°	4.3	0.0
160°-170°	2.4	0.0
170°-180°	1.0	0.0
0°-90°	8865.4	85.3
0°-180°	10399.0	100.0

**Coefficient of Utilization**

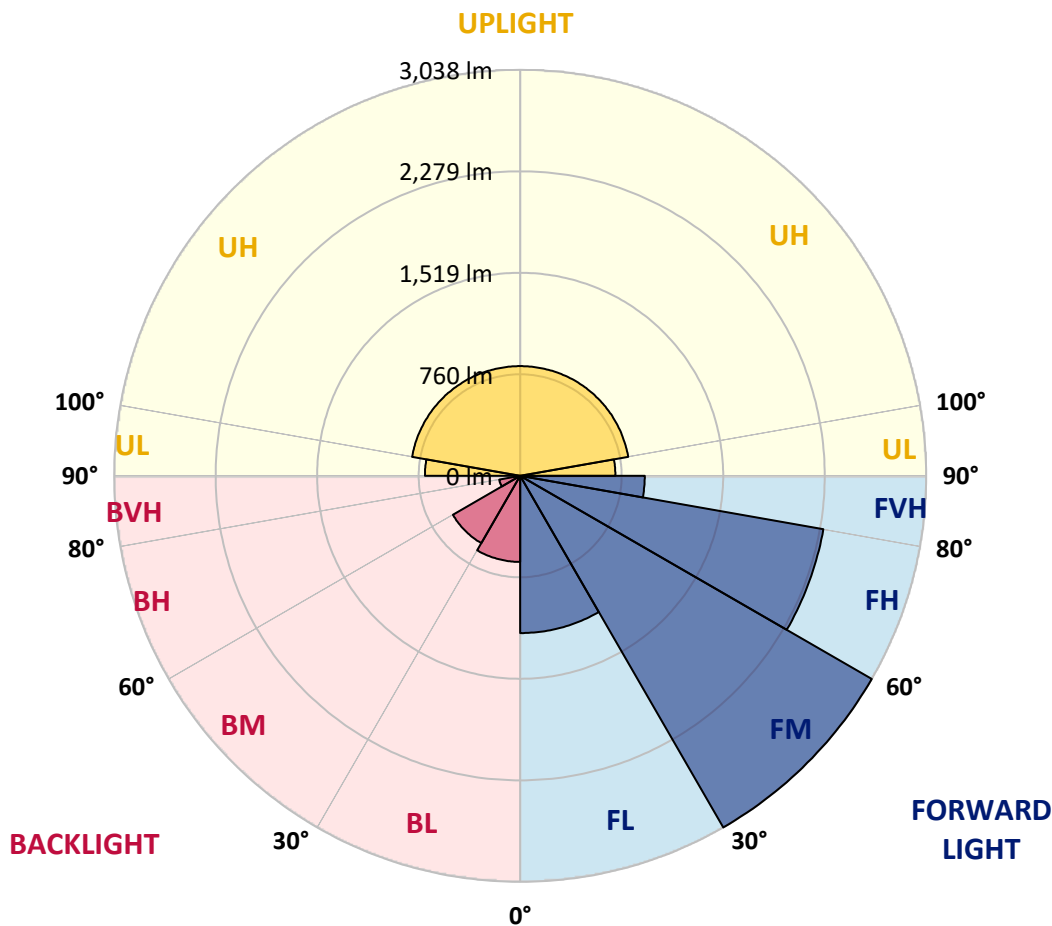


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1176.7	11.3			
FM (30°-60°)	3038.1	29.2			
FH (60°-80°)	2303.5	22.2			G2/5000
FVH (80°-90°)	932.3	9.0			G5
BL (0°-30°)	644.1	6.2	B2/1000		
BM (30°-60°)	581.5	5.6	B1/1000		
BH (60°-80°)	159.0	1.5	B1/500		G1/500
BVH (80°-90°)	30.2	0.3			G1/100
UL (90°-100°)	712.5	6.9		U4/1000	
UH (100°-180°)	821.0	7.9		U4/1000	

**BUG Rating: B2-U4-G5**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
0°	2639.0	2639.0	2639.0	2639.0	2639.0	2639.0	2639.0	2639.0	2639.0	2639.0	2639.0
2.5°	2714.1	2726.6	2739.1	2743.6	2745.5	2737.1	2718.4	2703.1	2698.1	2693.1	2663.7
5°	2841.8	2858.3	2874.9	2854.6	2822.1	2793.9	2770.1	2741.5	2698.7	2655.8	2617.9
7.5°	2876.4	2887.1	2897.9	2880.8	2854.5	2824.7	2791.5	2755.7	2711.9	2668.2	2605.0
10°	2887.8	2891.2	2894.5	2896.9	2898.9	2884.8	2854.6	2811.0	2726.8	2642.7	2567.5
12.5°	2920.5	2907.7	2894.9	2881.0	2866.7	2847.7	2823.7	2784.8	2700.5	2616.3	2514.4
15°	2939.7	2938.5	2937.3	2911.1	2876.7	2850.1	2831.3	2788.9	2676.1	2563.2	2439.7
17.5°	2955.8	2959.7	2963.7	2932.3	2888.9	2843.6	2796.4	2735.7	2633.9	2532.1	2364.9
20°	2989.2	2978.3	2967.5	2929.6	2882.7	2830.6	2773.3	2702.9	2593.3	2483.7	2282.3
22.5°	3007.1	2986.6	2966.1	2916.4	2856.9	2790.1	2715.9	2632.7	2522.3	2411.8	2168.4
25°	3043.5	3022.9	3002.2	2932.6	2846.6	2756.1	2661.0	2564.6	2464.5	2364.4	2081.1
27.5°	3069.0	3045.9	3023.0	2935.8	2827.3	2721.0	2617.0	2513.8	2413.1	2312.5	1978.1
30°	3106.5	3067.7	3029.0	2928.2	2806.7	2690.7	2579.8	2469.0	2358.4	2247.6	1885.4
32.5°	3143.2	3101.9	3060.7	2940.1	2793.1	2653.6	2521.5	2392.3	2272.2	2152.1	1762.9
35°	3233.3	3180.2	3127.1	2972.5	2783.9	2619.5	2479.1	2338.5	2197.2	2055.9	1642.5
37.5°	3297.9	3246.8	3195.7	3007.5	2773.5	2578.4	2422.1	2268.9	2125.3	1981.6	1531.2
40°	3429.6	3347.6	3265.5	3045.6	2779.7	2557.7	2379.6	2204.8	2040.5	1876.2	1411.6
42.5°	3511.8	3414.2	3316.6	3077.9	2792.0	2544.0	2333.9	2132.0	1954.8	1777.6	1299.9
45°	3559.6	3461.0	3362.5	3103.5	2791.2	2518.2	2284.9	2062.8	1874.3	1685.8	1201.5
47.5°	3599.0	3499.3	3399.5	3139.3	2825.7	2530.2	2253.0	1993.2	1785.9	1578.6	1098.7
50°	3579.7	3487.0	3394.3	3116.1	2776.1	2464.2	2180.6	1914.9	1703.3	1491.7	1013.0
52.5°	3600.5	3502.7	3404.9	3114.5	2759.7	2442.1	2161.6	1888.4	1636.9	1385.3	929.9
55°	3638.3	3534.5	3430.7	3115.7	2730.1	2396.4	2114.4	1834.4	1560.7	1287.0	857.8
57.5°	3641.0	3548.1	3455.3	3127.5	2721.4	2368.6	2068.9	1770.1	1473.4	1176.9	784.0
60°	3606.4	3529.8	3453.1	3105.0	2666.3	2311.3	2039.9	1751.3	1410.9	1070.5	717.6
62.5°	3593.4	3522.5	3451.5	3104.2	2664.7	2290.9	1982.8	1663.6	1311.1	958.6	645.0
65°	3528.6	3462.8	3397.2	3050.8	2611.0	2243.7	1948.7	1627.5	1227.6	827.7	563.9
67.5°	3510.7	3426.7	3342.7	2990.6	2549.2	2172.1	1859.7	1521.5	1106.3	691.1	478.0
70°	3426.8	3358.0	3289.1	2934.7	2485.2	2115.5	1825.5	1491.7	1026.5	561.3	396.4
72.5°	3390.4	3292.2	3194.2	2838.4	2396.8	2025.2	1723.4	1379.1	907.6	436.2	314.8
75°	3236.8	3167.2	3097.6	2760.3	2333.8	1965.8	1656.3	1302.9	818.0	333.0	248.6
77.5°	3189.4	3108.3	3027.2	2678.2	2240.0	1862.8	1546.6	1192.1	723.0	254.0	196.6
80°	3118.8	3030.1	2941.4	2592.9	2157.8	1773.4	1439.9	1079.6	639.0	198.4	157.2
82.5°	2981.8	2897.6	2813.5	2470.7	2041.6	1660.6	1327.7	976.5	570.8	165.2	133.3
85°	2868.2	2780.9	2693.5	2351.9	1925.3	1543.7	1207.1	863.3	498.0	132.6	108.2
87.5°	2768.8	2672.6	2576.3	2235.6	1813.4	1432.9	1094.0	758.7	434.0	109.3	92.1
90°	2637.4	2539.5	2441.6	2107.6	1694.9	1318.8	979.4	653.6	368.9	84.1	73.9
92.5°	2505.9	2401.5	2297.2	1969.6	1567.5	1198.0	860.9	548.9	311.3	73.9	66.1
95°	2364.9	2259.5	2154.0	1836.5	1448.2	1086.4	751.0	451.3	259.1	66.8	60.0
97.5°	2202.6	2092.8	1983.0	1682.4	1318.4	974.1	649.7	368.1	215.0	61.9	53.5
100°	2040.6	1929.8	1819.1	1531.4	1184.7	859.5	555.7	298.0	178.8	59.7	50.5
102.5°	1870.7	1758.1	1645.6	1375.8	1053.6	752.4	472.2	239.5	149.0	58.4	48.9
105°	1704.3	1583.1	1461.9	1211.4	917.7	648.4	403.3	201.3	128.5	55.7	46.6
107.5°	1525.9	1404.0	1282.2	1052.2	786.2	548.1	337.8	166.1	110.2	54.4	42.9
110°	1319.0	1208.8	1098.5	893.7	657.3	453.6	282.6	143.0	97.6	52.3	41.2



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	100°
112.5°	1129.1	1020.0	911.0	734.0	534.5	368.0	234.7	125.5	88.5	51.5	39.2
115°	922.1	827.0	731.9	588.1	428.1	297.5	196.2	112.2	79.9	47.7	35.5
117.5°	699.2	634.7	570.1	464.7	345.8	245.7	164.6	97.0	70.2	43.3	30.9
120°	523.6	488.9	454.3	378.4	288.7	210.9	144.8	89.2	64.6	40.1	28.5
122.5°	421.2	398.7	376.1	316.2	243.7	180.7	127.1	81.2	58.0	34.8	24.6
125°	341.5	330.4	319.2	270.2	208.6	155.3	110.3	71.3	50.0	28.7	20.3
127.5°	276.4	271.5	266.5	226.0	173.8	129.4	92.9	60.9	42.5	24.1	18.1
130°	227.6	226.2	224.7	189.1	142.0	105.1	78.7	54.7	38.5	22.4	17.1
132.5°	189.7	191.7	193.5	162.9	121.5	89.2	65.8	45.0	32.2	19.3	14.2
135°	159.7	154.8	149.9	127.3	98.8	75.0	55.8	38.8	28.1	17.4	13.7
137.5°	116.5	114.5	112.7	98.2	79.6	62.4	46.4	32.2	23.2	14.2	11.2
140°	79.1	80.3	81.6	71.7	58.0	46.1	35.7	26.2	19.5	12.8	11.2
142.5°	56.1	58.4	60.7	53.0	42.0	33.2	26.7	20.9	17.1	13.4	11.0
145°	39.6	41.0	42.5	37.8	31.2	24.9	18.9	13.8	11.6	9.5	9.0
147.5°	29.4	29.1	29.0	27.0	24.3	20.8	16.4	12.6	11.0	9.4	8.0
150°	18.6	18.1	17.7	17.3	17.1	15.7	13.2	11.2	10.4	9.7	8.0
152.5°	10.0	11.4	12.8	13.2	13.5	12.8	11.3	9.7	7.8	5.9	7.1
155°	13.3	13.4	13.6	12.2	10.4	9.1	8.5	7.9	7.4	6.8	7.5
157.5°	8.3	9.4	10.4	10.0	9.2	8.4	7.9	7.3	6.9	6.5	6.7
160°	10.0	10.4	10.8	9.0	6.5	5.8	6.7	7.5	7.3	7.2	7.6
162.5°	7.3	7.6	8.0	7.8	7.3	7.0	6.8	6.8	7.3	7.9	7.0
165°	7.2	8.3	9.5	9.0	7.9	7.8	8.3	8.7	8.3	7.9	7.9
167.5°	8.9	8.3	7.7	7.8	8.1	8.1	7.8	7.6	8.1	8.6	8.6
170°	8.5	9.5	10.5	10.0	8.9	8.4	8.4	8.5	8.9	9.3	8.8
172.5°	8.7	9.0	9.3	9.2	9.1	9.2	9.6	9.9	9.5	9.1	9.6
175°	9.5	9.1	8.7	8.7	8.9	9.3	10.0	10.8	11.8	12.8	11.2
177.5°	9.9	10.7	11.5	11.7	11.9	11.2	9.6	8.7	9.5	10.3	10.4
180°	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1





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**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°
0°	2639.0	2639.0	2639.0	2639.0	2639.0	2639.0	2639.0	2639.0
2.5°	2634.3	2616.9	2603.5	2586.7	2566.6	2547.8	2532.6	2517.4
5°	2580.1	2556.6	2537.9	2511.8	2478.4	2448.4	2428.9	2409.3
7.5°	2541.8	2478.5	2415.2	2359.3	2310.9	2263.9	2220.9	2178.0
10°	2492.2	2394.6	2289.6	2191.6	2100.9	2020.5	1971.1	1921.6
12.5°	2412.5	2277.8	2132.0	1995.7	1869.0	1760.8	1708.2	1655.7
15°	2316.3	2137.2	1939.7	1764.2	1610.8	1480.7	1420.2	1359.9
17.5°	2197.7	1980.9	1747.5	1538.8	1354.9	1200.7	1135.6	1070.4
20°	2080.8	1823.1	1546.7	1311.8	1118.3	955.0	882.2	809.3
22.5°	1924.9	1636.4	1332.8	1077.3	870.1	694.1	612.1	530.2
25°	1797.9	1470.7	1128.9	850.3	635.0	460.8	409.7	358.5
27.5°	1643.8	1292.6	935.8	667.8	488.7	349.6	330.5	311.4
30°	1523.0	1150.1	773.6	524.3	402.1	308.4	299.9	291.3
32.5°	1373.7	1003.6	640.0	421.6	348.3	291.5	284.5	277.3
35°	1229.1	875.6	542.2	354.1	311.3	278.4	275.2	271.9
37.5°	1080.8	754.3	469.0	313.0	286.2	265.8	264.5	263.0
40°	947.1	654.2	418.7	289.9	268.1	250.7	246.6	242.4
42.5°	822.2	560.9	371.5	266.8	246.7	229.8	222.9	216.0
45°	717.2	484.2	335.0	249.1	226.7	208.0	200.4	192.8
47.5°	618.8	412.6	297.5	228.2	204.5	185.0	178.1	171.3
50°	534.2	349.6	263.2	209.3	187.8	169.0	158.4	147.8
52.5°	474.4	308.1	237.9	190.6	166.1	146.5	141.3	136.2
55°	428.6	274.3	211.7	168.6	145.0	127.2	126.7	126.3
57.5°	391.1	248.4	189.2	149.5	129.2	114.7	117.2	119.6
60°	364.6	230.6	169.7	129.7	110.8	97.3	99.9	102.6
62.5°	331.4	209.6	151.6	113.3	94.4	79.9	78.1	76.3
65°	300.2	191.0	133.5	95.7	77.6	63.1	59.1	55.1
67.5°	265.0	169.7	113.7	77.5	61.2	47.9	44.2	40.5
70°	231.6	150.7	97.8	61.6	42.1	25.8	18.9	11.9
72.5°	193.4	127.8	80.7	47.8	29.1	15.5	17.3	19.1
75°	164.1	110.8	67.7	40.3	28.3	19.8	21.3	22.8
77.5°	139.1	96.9	59.6	37.2	29.5	23.9	24.6	25.1
80°	116.0	83.2	53.3	35.3	29.1	25.0	26.7	28.5
82.5°	101.5	73.6	47.1	32.1	28.7	26.2	27.4	28.5
85°	83.7	61.7	40.6	29.1	27.0	26.2	28.7	31.3
87.5°	75.0	56.1	36.6	26.5	25.8	25.6	27.0	28.4
90°	63.8	49.4	33.5	24.9	23.6	23.3	25.7	28.2
92.5°	58.4	44.7	29.0	21.4	22.0	22.8	24.5	26.2
95°	53.2	41.3	27.5	20.7	20.8	21.3	23.2	25.1
97.5°	44.9	34.2	22.6	17.3	18.5	19.7	21.2	22.6
100°	41.3	30.9	20.1	15.5	17.0	18.5	20.2	21.8
102.5°	39.4	29.2	18.7	14.4	16.2	17.8	18.8	19.7
105°	37.4	27.6	17.6	13.0	13.7	14.7	16.2	17.8
107.5°	31.4	23.0	15.7	12.4	12.8	13.4	14.5	15.7
110°	30.1	21.8	14.3	10.9	11.6	12.0	11.8	11.5



REPORT NUMBER: P511360  
 CATALOG NUMBER: WPMLD20B

**CANDELA DISTRIBUTION (continued):**

	110°	120°	130°	140°	150°	160°	170°	180°
112.5°	27.0	19.1	12.7	9.9	10.7	11.1	10.3	9.5
115°	23.2	16.0	10.4	7.6	7.7	7.5	6.7	5.9
117.5°	18.5	12.2	8.0	5.5	4.9	4.7	5.8	6.9
120°	16.9	11.0	7.1	5.5	6.1	6.6	6.5	6.5
122.5°	14.5	9.3	5.8	4.5	5.5	6.3	6.7	7.0
125°	11.9	8.3	6.2	4.5	3.3	2.6	3.8	4.9
127.5°	12.2	7.9	4.3	3.4	5.1	6.4	6.4	6.4
130°	11.8	8.7	6.4	5.3	5.5	5.7	6.2	6.7
132.5°	9.1	6.4	4.5	3.9	4.3	5.1	6.5	8.0
135°	10.0	7.9	6.4	6.4	7.8	8.7	8.0	7.4
137.5°	8.2	6.6	5.5	5.5	6.7	7.5	7.0	6.5
140°	9.7	8.1	6.6	6.3	7.2	7.8	7.2	6.6
142.5°	8.6	7.3	6.3	6.2	6.7	7.2	7.5	7.6
145°	8.5	7.5	6.3	5.9	6.6	7.1	7.3	7.5
147.5°	6.7	6.0	5.6	5.3	5.0	5.1	6.2	7.4
150°	6.3	5.9	5.9	6.0	6.1	6.7	8.4	10.2
152.5°	8.2	7.9	7.1	7.5	9.1	10.0	9.4	8.7
155°	8.3	8.2	7.8	7.7	7.9	8.2	9.0	9.9
157.5°	7.0	7.6	8.4	8.7	8.3	8.3	9.2	10.0
160°	8.1	8.6	9.2	9.1	8.5	8.3	9.3	10.3
162.5°	6.1	7.2	9.1	10.3	10.8	11.0	10.3	9.6
165°	8.0	8.6	9.4	10.3	11.3	11.6	10.0	8.3
167.5°	8.5	8.6	8.7	9.2	10.1	10.7	10.0	9.4
170°	8.3	9.6	11.2	12.0	12.0	11.7	11.1	10.4
172.5°	10.0	11.0	12.1	12.2	11.2	10.4	10.8	11.1
175°	9.6	9.6	10.1	10.8	11.6	12.0	11.2	10.5
177.5°	10.7	11.5	12.5	12.9	12.6	12.0	10.6	9.2
180°	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1

(END OF REPORT)