

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: P303581

Luminaire Tested: **WPMLED25**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P303581
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1906-360-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: WPMLED25
Description: MEDIUM LED WALL PACK - 80W, 4000K
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10226.5 lumens
Efficiency: N/A
Efficacy: 127.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.03' x L: 0.25' x H: 0.69')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U3 - G4

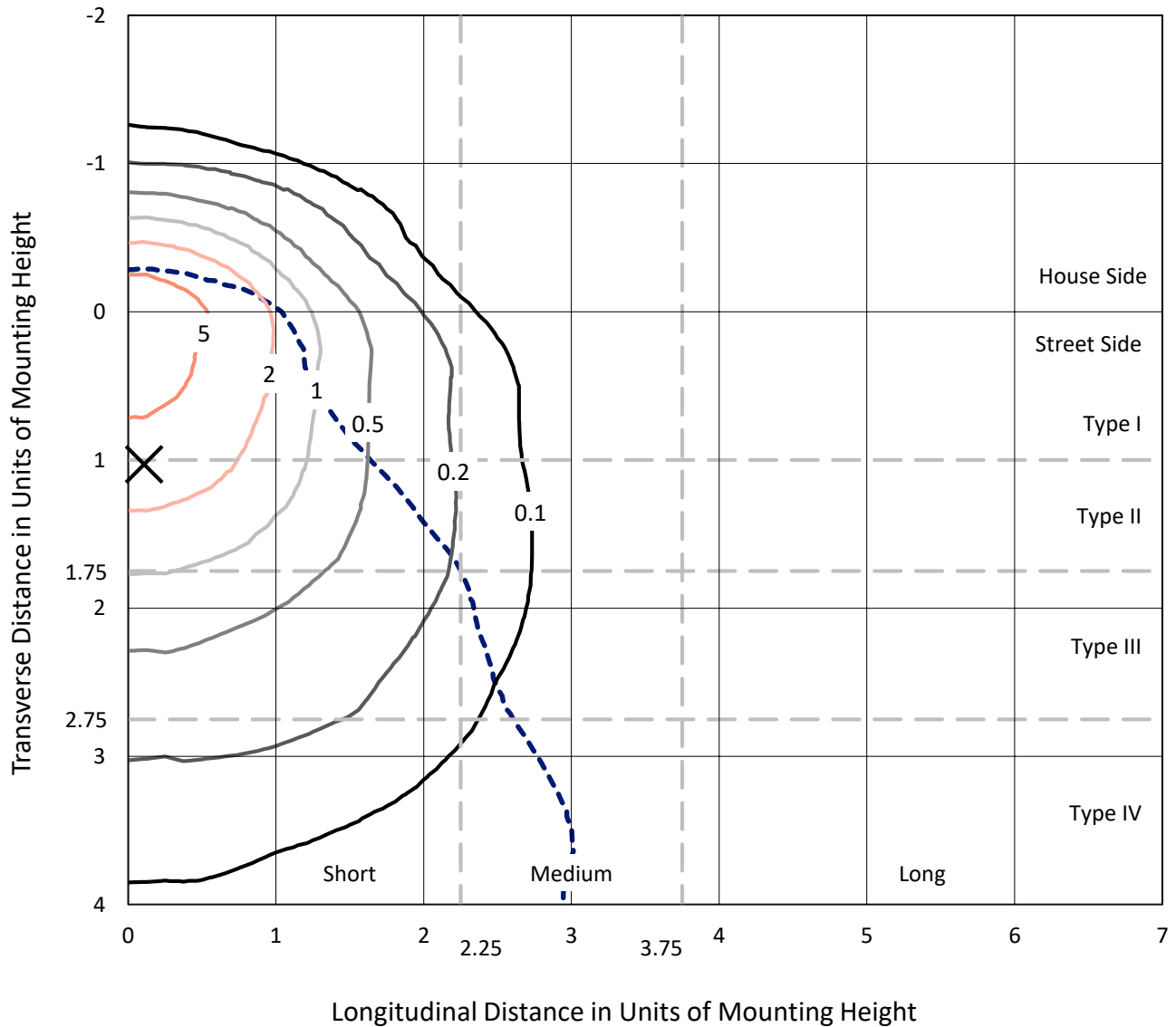
Input Watts (W): 80
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P303581
 CATALOG NUMBER: WPMLED25

Iso-Footcandle Lines of Horizontal Illumination

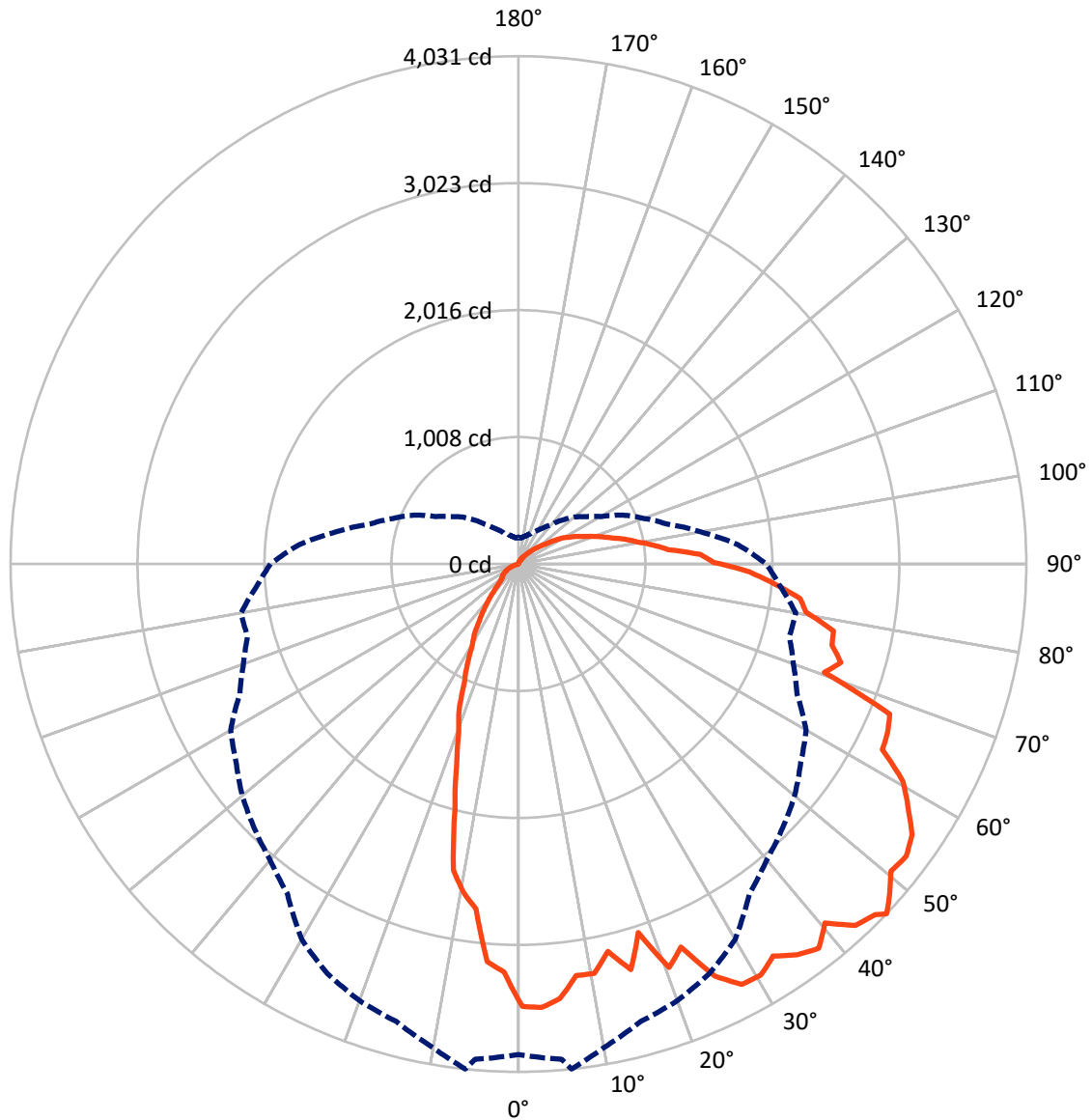
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.8 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P303581
CATALOG NUMBER: WPMLED25

Luminous Intensity Polar Plot



— Vertical Plane Through 6-Deg Lateral - - - Horizontal Cone Through 46-Deg Vertical

REPORT NUMBER: P303581
 CATALOG NUMBER: WPMLED25

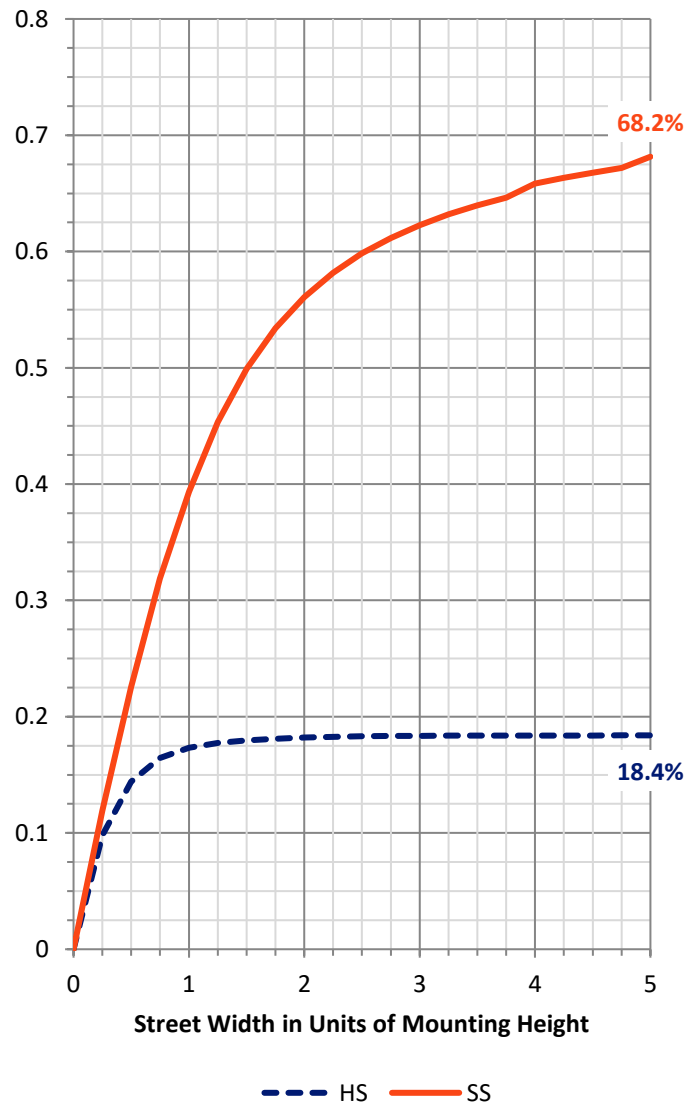
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1900.0	12.7	1912.7
	% Fixture	18.6	0.1	18.7
Street Side	Lumens	7444.4	869.3	8313.8
	% Fixture	72.8	8.5	81.3
Total	Lumens	9344.4	882.1	10226.5
	% Fixture	91.4	8.6	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.4	3.1
10°-20°	814.9	8.0
20°-30°	1139.9	11.1
30°-40°	1358.3	13.3
40°-50°	1443.2	14.1
50°-60°	1403.8	13.7
60°-70°	1234.0	12.1
70°-80°	958.5	9.4
80°-90°	679.4	6.6
90°-100°	398.4	3.9
100°-110°	230.6	2.3
110°-120°	135.3	1.3
120°-130°	70.2	0.7
130°-140°	31.2	0.3
140°-150°	11.8	0.1
150°-160°	3.8	0.0
160°-170°	0.8	0.0
170°-180°	0.0	0.0
0°-90°	9344.4	91.4
0°-180°	10226.5	100.0

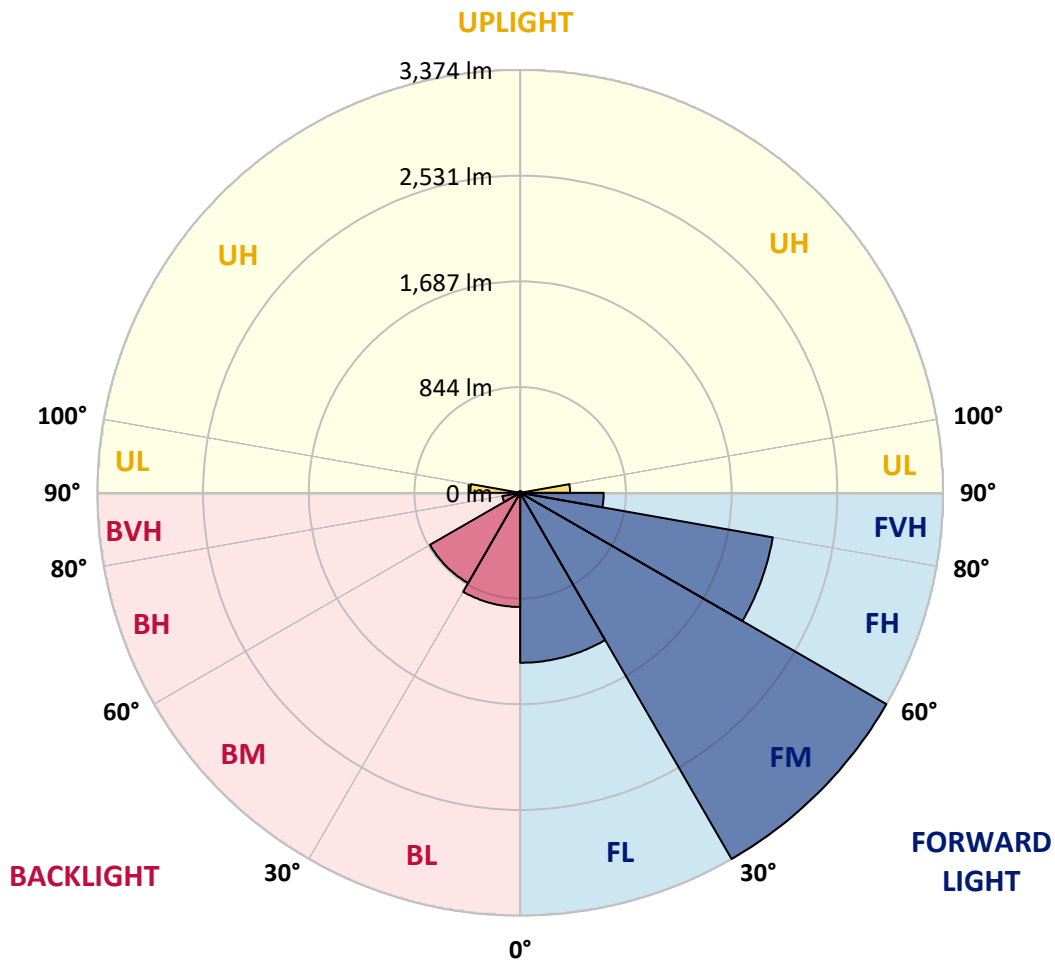


REPORT NUMBER: P303581
 CATALOG NUMBER: WPMLED25

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1356.3	13.3			
FM	(30°-60°)	3374.3	33.0			
FH	(60°-80°)	2047.4	20.0			G2/5000
FVH	(80°-90°)	666.5	6.5			G4/750
BL	(0°-30°)	911.0	8.9	B2/1000		
BM	(30°-60°)	831.0	8.1	B1/1000		
BH	(60°-80°)	145.0	1.4	B1/500		G1/500
BVH	(80°-90°)	13.0	0.1			G1/100
UL	(90°-100°)	398.4	3.9		U3/500	
UH	(100°-180°)	12.7	0.1		U2/50	

BUG Rating: B2-U3-G4
 Type IV Short





REPORT NUMBER: P303581
 CATALOG NUMBER: WPMLED25

CANDELA DISTRIBUTION (FULL):

	0°	5°	6°	10°	15°	20°	25°	30°	35°	40°	45°
0°	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0
2.5°	3618.3	3571.0	3524.4	3495.2	3416.8	3340.9	3408.3	3390.2	3421.9	3398.6	3517.2
5°	3584.6	3523.7	3462.8	3441.4	3436.8	3480.3	3602.1	3569.7	3585.3	3567.8	3701.3
7.5°	3429.7	3351.3	3298.8	3308.5	3337.0	3245.6	3289.1	3337.0	3324.7	3237.2	3444.0
10°	3406.4	3341.6	3305.3	3373.3	3299.4	3272.8	3385.0	3261.2	3311.7	3250.2	3317.6
12.5°	3224.9	3167.2	3154.9	3188.6	3095.2	3132.2	3155.5	3208.0	3207.4	3343.5	3351.9
15°	3359.1	3306.6	3340.9	3317.6	3303.3	3224.9	3239.1	3086.8	3077.1	3123.1	3236.5
17.5°	3110.1	3075.1	3077.1	2996.7	2952.6	2952.0	3060.2	3173.7	3305.9	3106.3	3105.0
20°	3386.9	3401.8	3418.1	3381.7	3303.3	3191.2	3152.3	2991.5	2952.0	3087.5	3327.9
22.5°	3311.1	3316.9	3303.3	3242.4	3125.1	3112.7	3237.8	3311.1	3152.9	2909.2	3023.3
25°	3588.5	3597.0	3624.2	3591.8	3489.4	3391.5	3283.2	3119.2	3118.6	3226.8	3029.8
27.5°	3767.4	3731.1	3778.5	3641.0	3482.2	3394.1	3456.3	3436.2	3181.5	3020.0	3199.0
30°	3727.9	3737.0	3788.8	3740.2	3685.8	3641.7	3593.1	3405.7	3327.3	3239.8	3021.3
32.5°	3640.4	3655.9	3711.7	3633.9	3573.0	3520.5	3562.6	3538.6	3386.3	3233.3	3213.2
35°	3738.3	3749.9	3810.9	3709.7	3592.4	3503.0	3505.6	3453.7	3329.9	3296.8	3178.2
37.5°	3745.4	3775.2	3872.5	3785.6	3694.2	3615.1	3540.6	3416.1	3291.0	3210.6	3203.5
40°	3626.1	3660.5	3747.3	3633.3	3524.4	3512.0	3536.0	3447.9	3248.2	3175.6	3104.3
42.5°	3806.3	3835.5	3921.7	3751.9	3576.2	3491.9	3477.0	3403.1	3215.8	3120.5	3036.9
45°	3855.6	3899.7	3971.0	3826.4	3707.8	3630.0	3560.0	3383.7	3193.8	3085.5	2988.9
46°	3893.2	3947.0	4031.3	3898.4	3757.7	3688.4	3586.6	3440.7	3196.4	3066.7	2964.9
47.5°	3821.9	3879.6	3960.6	3860.8	3773.3	3716.9	3670.9	3498.4	3250.8	3062.2	2917.0
50°	3705.2	3747.3	3832.3	3743.5	3643.6	3626.8	3643.0	3565.2	3308.5	3123.1	2882.0
52.5°	3723.4	3763.5	3854.9	3788.2	3689.7	3651.4	3578.8	3454.4	3261.8	3144.5	2905.3
55°	3722.1	3723.4	3792.1	3643.0	3419.3	3420.0	3483.5	3452.4	3254.1	3108.9	2861.2
57.5°	3507.5	3533.4	3647.5	3615.8	3486.8	3460.8	3461.5	3382.4	3192.5	3056.3	2819.7
60°	3414.2	3401.2	3508.8	3466.0	3335.1	3349.3	3333.1	3195.7	3042.7	3003.8	2780.9
62.5°	3148.4	3134.1	3243.0	3230.7	3180.8	3196.4	3212.6	3226.2	3045.3	2874.8	2655.7
65°	3136.7	3114.0	3221.6	3151.6	3027.8	2999.3	3000.6	2948.1	2859.9	2831.4	2583.1
67.5°	3081.6	3082.9	3178.9	3152.3	3034.3	2981.2	2928.6	2854.7	2718.0	2641.5	2464.5
70°	2508.0	2483.3	2576.0	2605.2	2676.5	2797.1	2740.0	2640.8	2572.8	2511.2	2331.6
72.5°	2623.3	2592.2	2677.1	2692.7	2741.3	2748.4	2763.4	2827.5	2525.5	2290.8	2084.7
75°	2518.3	2507.3	2570.2	2510.5	2399.1	2387.4	2374.4	2361.5	2259.7	2153.4	1899.9
77.5°	2519.0	2498.9	2556.6	2479.4	2357.6	2314.8	2245.4	2139.8	2027.6	2010.8	1857.8
80°	2259.7	2273.9	2314.1	2313.5	2320.0	2382.2	2290.8	2122.9	1942.1	1821.5	1675.6
82.5°	2238.3	2222.1	2252.6	2214.3	2143.0	2104.8	2003.0	1985.5	1896.0	1723.6	1485.7
85°	2028.9	2020.5	2043.2	2034.8	1999.1	2041.2	1969.3	1820.8	1677.6	1551.8	1360.6
87.5°	1822.1	1818.9	1837.7	1792.3	1739.8	1709.3	1636.1	1597.2	1523.3	1404.0	1216.1
90°	1544.7	1537.6	1547.3	1519.4	1483.8	1471.5	1452.0	1430.6	1309.4	1188.2	1038.4
92.5°	1448.8	1477.3	1445.5	1443.6	1411.8	1383.3	1304.9	1183.0	1081.9	997.0	900.4
95°	1192.1	1192.1	1194.0	1180.4	1153.8	1133.1	1097.4	1037.1	959.4	902.3	798.0
97.5°	1085.8	1086.4	1079.9	1069.6	1038.4	1013.2	978.8	929.5	867.3	795.4	681.3
100°	962.0	965.2	960.7	965.8	945.7	938.0	902.3	837.5	759.1	678.7	577.6
102.5°	880.3	877.0	871.2	863.4	838.1	810.3	774.0	726.0	668.3	593.8	495.9
105°	780.5	784.3	771.4	771.4	753.9	733.8	702.7	651.5	587.9	512.1	434.3
107.5°	711.1	709.8	697.5	694.2	680.0	652.1	624.2	571.7	514.7	452.5	377.3



REPORT NUMBER: P303581
 CATALOG NUMBER: WPMLED25

CANDELA DISTRIBUTION (continued):

	0°	5°	6°	10°	15°	20°	25°	30°	35°	40°	45°
110°	637.8	641.1	628.1	626.8	608.7	583.4	553.6	504.3	450.5	392.8	330.6
112.5°	570.4	572.4	558.8	558.1	542.6	518.6	495.9	450.5	403.8	350.7	297.5
115°	521.2	523.8	508.9	508.9	493.9	467.4	442.7	394.8	350.7	303.4	257.3
117.5°	466.1	463.5	451.8	452.5	436.9	409.7	390.2	348.1	306.6	265.1	225.6
120°	419.4	420.7	407.1	405.8	388.3	364.3	341.0	306.0	271.6	236.0	199.7
122.5°	357.8	357.8	344.9	344.9	329.3	306.6	287.2	252.2	226.2	198.4	169.8
125°	294.3	295.6	282.6	283.3	269.7	250.9	239.8	215.2	194.5	171.1	148.4
127.5°	250.9	253.5	243.1	245.0	234.7	218.4	209.4	186.0	169.2	145.8	126.4
130°	213.3	213.9	206.8	206.8	198.4	186.0	178.3	160.1	144.6	126.4	107.0
132.5°	183.4	183.4	175.7	176.3	167.9	156.2	150.4	134.2	121.2	105.7	92.0
135°	153.0	153.0	147.1	147.1	139.4	129.0	124.5	111.5	100.5	89.5	76.5
137.5°	124.5	125.1	119.3	119.9	114.7	107.0	103.7	92.7	84.3	73.2	62.9
140°	103.1	101.8	98.5	98.5	94.0	87.5	86.2	77.1	70.0	60.3	52.5
142.5°	84.3	84.3	81.0	82.3	77.8	72.0	70.7	63.5	57.0	50.6	43.4
145°	68.7	68.7	66.8	66.8	63.5	58.3	57.7	51.9	47.3	40.8	36.3
147.5°	56.4	56.4	54.5	55.1	51.9	48.6	47.3	42.1	38.2	33.7	29.8
150°	47.3	46.0	44.7	44.7	42.1	38.9	38.9	34.4	31.8	27.9	24.0
152.5°	38.2	37.6	36.9	36.9	34.4	32.4	31.1	28.5	25.9	22.0	18.8
155°	30.5	30.5	29.8	29.2	27.9	25.3	24.6	22.0	19.4	16.9	13.6
157.5°	24.0	24.0	23.3	23.3	21.4	19.4	19.4	16.9	14.3	11.7	9.7
160°	18.8	18.2	17.5	17.5	16.2	14.3	13.6	11.7	9.7	7.8	5.8
162.5°	13.6	13.0	13.0	12.3	11.0	9.7	9.1	7.1	5.8	4.5	3.9
165°	7.8	7.8	7.8	7.1	6.5	5.2	5.2	3.9	2.6	2.6	3.2
167.5°	3.2	3.2	3.2	2.6	1.9	1.9	2.6	2.6	2.6	2.6	3.2
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



REPORT NUMBER: P303581
 CATALOG NUMBER: WPMLED25

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0
2.5°	3431.7	3429.7	3368.8	3335.1	3346.1	3364.2	3373.3	3396.0	3449.2	3513.3	3515.9
5°	3606.7	3576.9	3474.4	3390.8	3333.8	3289.1	3292.9	3330.5	3425.2	3525.7	3457.6
7.5°	3538.0	3674.1	3609.9	3455.0	3399.9	3348.0	3314.3	3331.2	3465.4	3548.3	3350.0
10°	3344.2	3355.2	3418.1	3542.5	3517.9	3444.6	3354.5	3305.9	3484.2	3504.9	3285.8
12.5°	3289.1	3291.0	3223.6	3339.6	3621.6	3455.6	3330.5	3213.2	3437.5	3341.6	3121.8
15°	3343.5	3294.2	3183.4	3202.8	3388.9	3511.4	3309.1	3167.2	3410.3	3238.5	2983.7
17.5°	3126.4	3255.3	3233.3	3150.3	3191.8	3482.9	3283.9	3126.4	3379.2	3119.2	2928.6
20°	3033.7	3049.9	3178.2	3141.3	3081.6	3306.6	3291.6	3061.5	3300.7	2976.6	2917.0
22.5°	3219.0	3011.6	2953.3	3184.7	3009.0	3132.2	3295.5	2976.6	3191.2	2866.4	2883.9
25°	2906.6	3132.8	2863.2	2938.4	3065.4	2996.1	3248.2	2902.1	3079.0	2782.8	2708.9
27.5°	2974.7	2844.4	3014.2	2743.9	3062.8	2866.4	3160.7	2827.5	2949.4	2727.7	2532.6
30°	3096.5	2828.8	2885.2	2765.9	2881.3	2824.3	3046.6	2742.0	2789.9	2640.2	2390.0
32.5°	2946.1	2991.5	2708.3	2822.3	2681.7	2799.7	2915.7	2662.9	2663.5	2520.3	2283.7
35°	3093.9	2873.5	2808.7	2736.1	2613.0	2728.3	2836.6	2614.3	2561.8	2423.7	2204.6
37.5°	3072.6	2914.4	2871.6	2621.4	2622.7	2664.8	2734.2	2543.0	2482.7	2305.7	2082.1
40°	3081.6	2922.8	2775.0	2611.7	2566.3	2546.2	2622.7	2439.2	2362.1	2180.6	1928.4
42.5°	2999.9	2903.4	2735.5	2586.4	2483.3	2428.2	2480.1	2312.2	2221.4	2019.2	1743.7
45°	2897.5	2802.2	2672.0	2480.1	2369.2	2278.5	2306.4	2157.3	2043.8	1824.7	1549.2
46°	2861.9	2736.8	2636.9	2439.9	2322.6	2226.0	2235.1	2088.6	1966.7	1748.9	1468.9
47.5°	2788.6	2652.5	2557.9	2366.0	2243.5	2154.0	2156.6	1989.4	1871.4	1630.3	1367.1
50°	2740.7	2544.9	2406.2	2259.0	2103.5	2008.8	1996.5	1819.5	1684.7	1441.0	1188.2
52.5°	2686.9	2454.2	2316.1	2139.8	1960.2	1859.7	1843.5	1680.8	1539.5	1293.2	1031.3
55°	2631.8	2405.5	2173.5	2006.9	1840.9	1735.9	1702.9	1544.1	1398.9	1133.1	882.2
57.5°	2594.8	2310.9	2080.1	1898.0	1725.6	1609.5	1591.4	1437.7	1266.6	1003.4	749.3
60°	2539.1	2241.5	1984.2	1774.8	1606.9	1472.7	1441.0	1282.8	1092.9	803.1	614.5
62.5°	2430.2	2159.2	1899.3	1647.1	1472.1	1356.1	1313.3	1144.8	919.2	664.4	506.9
65°	2349.8	2094.4	1803.3	1524.0	1337.3	1236.2	1201.1	1030.7	775.9	532.2	430.4
67.5°	2232.5	1959.6	1739.2	1433.9	1214.1	1114.9	1067.6	888.1	635.3	429.1	373.4
70°	2156.0	1862.3	1583.6	1338.6	1095.5	983.3	910.7	722.8	488.8	359.1	324.8
72.5°	1901.9	1695.7	1445.5	1205.0	984.0	844.0	756.5	566.5	368.8	294.9	280.7
75°	1771.6	1563.5	1324.3	1100.7	888.1	718.9	610.6	424.6	286.5	243.7	237.2
77.5°	1640.6	1422.2	1205.0	991.8	772.0	606.1	477.7	318.3	220.4	199.7	189.3
80°	1533.7	1297.7	1062.4	866.7	676.7	495.2	371.4	234.7	167.9	158.2	147.1
82.5°	1326.3	1143.5	937.3	739.6	564.6	406.4	283.9	176.3	129.0	121.2	110.2
85°	1186.9	989.8	790.2	627.5	461.5	324.8	217.8	131.6	95.9	90.1	79.1
87.5°	1036.5	860.2	678.7	514.7	385.0	259.9	168.5	99.8	70.7	66.1	58.3
90°	899.7	743.5	589.2	433.7	313.1	217.2	131.6	74.5	54.5	49.9	46.0
92.5°	793.4	650.8	508.2	368.2	269.0	178.3	107.0	59.0	44.7	40.2	36.9
95°	683.9	577.6	444.0	320.2	228.2	148.4	87.5	48.6	38.2	34.4	31.8
97.5°	582.1	487.5	379.9	270.3	189.9	121.2	73.2	42.8	35.0	32.4	27.9
100°	490.1	401.2	311.1	226.2	156.2	101.1	62.2	39.5	34.4	31.1	25.9
102.5°	410.3	336.4	255.4	180.9	129.0	84.9	54.5	36.9	34.4	29.8	23.3
105°	360.4	287.2	216.5	149.7	107.6	72.6	48.6	35.7	34.4	29.2	21.4
107.5°	312.4	252.2	186.7	129.6	94.0	64.2	44.7	34.4	33.1	27.9	19.4



REPORT NUMBER: P303581
 CATALOG NUMBER: WPMLED25

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
110°	273.5	218.4	164.0	116.0	84.9	57.7	41.5	33.7	32.4	26.6	18.2
112.5°	243.7	190.6	143.9	104.4	76.5	51.2	38.9	32.4	30.5	24.6	16.2
115°	212.0	167.9	127.1	93.3	68.7	44.7	36.3	30.5	28.5	22.7	14.9
117.5°	187.3	148.4	114.1	83.0	59.0	39.5	33.1	28.5	25.9	20.7	13.6
120°	163.4	127.1	98.5	71.3	48.6	35.0	29.2	25.3	22.7	18.2	11.7
122.5°	140.7	111.5	87.5	62.2	41.5	31.1	25.3	22.7	20.7	16.2	10.4
125°	124.5	98.5	77.1	51.9	36.3	27.2	22.0	20.1	18.2	14.3	9.1
127.5°	105.0	84.3	64.2	44.1	30.5	23.3	18.8	17.5	15.6	12.3	7.8
130°	89.5	70.7	53.2	36.9	27.2	20.1	16.2	14.3	13.0	10.4	6.5
132.5°	77.1	60.3	45.4	31.8	23.3	16.2	13.0	11.7	10.4	8.4	5.2
135°	63.5	51.2	38.9	27.2	19.4	13.0	10.4	9.7	8.4	6.5	4.5
137.5°	53.2	42.1	32.4	23.3	16.2	10.4	8.4	7.8	6.5	5.2	3.9
140°	44.1	34.4	27.2	18.8	12.3	7.1	7.1	5.8	5.2	4.5	3.2
142.5°	36.9	28.5	22.7	15.6	9.7	5.8	5.8	4.5	4.5	3.9	3.2
145°	30.5	24.0	18.8	11.7	6.5	4.5	5.2	4.5	3.9	3.9	3.2
147.5°	24.6	18.8	14.3	8.4	4.5	4.5	4.5	3.9	3.9	3.2	2.6
150°	19.4	14.3	10.4	5.8	3.9	3.9	3.9	3.2	3.2	3.2	2.6
152.5°	14.9	10.4	6.5	3.9	3.9	3.9	3.9	3.2	3.2	2.6	1.9
155°	10.4	7.1	4.5	3.2	3.2	3.2	3.2	3.2	2.6	2.6	1.9
157.5°	7.1	4.5	3.2	3.2	3.2	3.2	3.2	2.6	2.6	2.6	1.9
160°	4.5	3.2	3.2	3.2	3.2	3.2	3.2	2.6	2.6	2.6	1.9
162.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	2.6	2.6	2.6	1.9
165°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	2.6	2.6	2.6
167.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	2.6	2.6	1.9
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



REPORT NUMBER: P303581
 CATALOG NUMBER: WPMLED25

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0	3512.0
2.5°	3635.2	3539.3	3498.4	3439.4	3543.2	3401.2	3383.0	3379.2	3346.1	3316.9	3251.5
5°	3460.8	3320.8	3274.1	3189.9	3265.1	3101.1	3055.0	3046.6	3079.0	3153.6	3202.8
7.5°	3341.6	3158.8	3035.6	3007.1	3221.6	3173.0	3053.1	2987.0	2958.5	2909.2	2792.5
10°	3214.5	3033.0	3077.1	3058.9	3057.0	2840.5	2716.7	2821.7	2907.3	2895.6	2844.4
12.5°	3081.6	3141.9	2995.4	2756.2	2786.0	2860.6	2784.7	2729.6	2531.3	2458.0	2370.5
15°	3073.2	2995.4	2737.4	2710.8	2843.1	2619.4	2401.6	2414.0	2460.6	2439.9	2277.8
17.5°	3053.1	2736.8	2706.3	2655.7	2498.2	2357.6	2393.2	2224.7	2084.0	2021.1	1946.6
20°	2817.2	2644.7	2624.0	2360.2	2390.6	2244.1	2044.5	1968.6	1844.8	1669.2	1590.1
22.5°	2627.9	2622.0	2362.8	2248.0	2172.8	1968.0	1826.7	1606.3	1555.1	1472.7	1375.5
25°	2546.2	2405.5	2216.3	2065.2	1929.1	1712.6	1491.5	1479.9	1338.6	1238.1	1247.2
27.5°	2464.5	2220.8	2084.0	1829.9	1694.4	1431.9	1402.7	1233.6	1223.8	1122.7	1009.3
30°	2267.5	2081.4	1859.7	1639.3	1428.0	1364.5	1172.6	1169.4	1009.3	980.1	879.6
32.5°	2063.3	1940.8	1654.9	1406.6	1363.2	1155.1	1103.3	958.1	893.2	820.6	752.6
35°	1923.9	1739.2	1488.3	1269.9	1181.7	1076.7	929.5	842.0	770.7	702.0	670.9
37.5°	1811.1	1579.7	1318.5	1193.4	1051.4	921.1	813.5	733.8	657.3	623.6	561.4
40°	1654.9	1435.8	1216.1	1067.6	956.1	817.4	712.4	632.0	573.0	524.4	460.2
42.5°	1484.4	1271.2	1089.7	935.4	807.0	692.9	611.9	540.6	478.4	416.2	376.0
45°	1291.2	1120.1	983.3	820.6	698.1	612.6	534.8	451.2	377.3	343.6	296.9
46°	1222.5	1058.5	917.2	753.2	655.3	579.5	493.9	411.6	352.0	310.5	271.6
47.5°	1114.9	961.3	843.3	670.9	608.0	532.8	441.4	361.1	307.9	269.0	237.9
50°	963.3	837.5	702.0	593.8	525.7	453.1	359.8	294.9	248.9	223.6	200.3
52.5°	820.0	711.7	600.2	506.9	447.3	360.4	294.3	241.1	208.7	189.9	175.0
55°	697.5	604.8	514.0	440.1	362.4	296.9	243.1	200.9	178.9	165.3	154.3
57.5°	597.0	523.8	450.5	378.6	296.9	245.0	200.3	170.5	152.3	143.3	135.5
60°	501.7	458.3	392.2	304.7	241.1	200.9	163.4	143.9	131.6	122.5	118.6
62.5°	423.3	398.7	330.6	248.9	197.1	163.4	132.2	119.3	110.2	103.1	101.8
65°	367.5	342.9	270.3	202.9	160.1	129.6	107.0	97.2	90.1	86.2	83.6
67.5°	323.5	287.2	221.0	164.6	127.1	99.8	84.3	75.2	69.4	67.4	64.8
70°	282.6	238.5	182.1	130.9	98.5	77.1	64.8	56.4	51.9	47.3	46.7
72.5°	239.2	193.8	145.2	105.7	76.5	59.6	46.0	38.2	33.7	29.8	28.5
75°	194.5	153.6	112.1	81.0	56.4	42.1	28.5	20.1	13.6	3.2	0.6
77.5°	152.3	119.9	84.3	59.0	37.6	24.0	11.0	1.3	0.0	0.0	0.0
80°	114.7	88.8	62.9	40.8	22.7	10.4	2.6	0.0	0.0	0.0	0.0
82.5°	86.2	64.8	44.1	28.5	15.6	7.1	1.3	0.0	0.0	0.0	0.0
85°	63.5	48.0	32.4	20.7	11.0	4.5	0.6	0.0	0.0	0.0	0.0
87.5°	46.0	35.7	24.6	15.6	7.8	3.2	0.6	0.0	0.0	0.0	0.0
90°	36.3	28.5	19.4	12.3	6.5	2.6	0.6	0.0	0.0	0.0	0.0
92.5°	30.5	23.3	16.2	11.0	5.2	2.6	0.6	0.0	0.0	0.0	0.0
95°	26.6	20.1	13.6	8.4	4.5	2.6	0.6	0.0	0.0	0.0	0.0
97.5°	22.0	16.9	11.7	7.1	3.2	1.9	0.6	0.0	0.0	0.0	0.0
100°	19.4	14.3	9.7	5.8	2.6	1.3	0.6	0.0	0.0	0.0	0.0
102.5°	17.5	13.0	8.4	4.5	1.9	1.3	0.0	0.0	0.0	0.0	0.0
105°	14.9	11.0	7.1	3.9	1.9	1.3	0.0	0.0	0.0	0.0	0.0
107.5°	13.6	9.7	5.8	3.2	1.9	1.3	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P303581
 CATALOG NUMBER: WPMLED25

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	12.3	8.4	5.2	2.6	1.3	0.6	0.0	0.0	0.0	0.0	0.0	0°
112.5°	11.0	7.1	3.9	2.6	1.3	0.6	0.0	0.0	0.0	0.0	0.0	2.5°
115°	9.7	5.8	3.2	1.9	1.3	0.6	0.0	0.0	0.0	0.0	0.0	5°
117.5°	9.1	5.2	3.2	1.9	1.3	0.6	0.0	0.0	0.0	0.0	0.0	7.5°
120°	7.8	4.5	2.6	1.9	1.3	0.6	0.0	0.0	0.0	0.0	0.0	10°
122.5°	6.5	3.9	2.6	1.9	1.3	0.6	0.0	0.0	0.0	0.0	0.0	12.5°
125°	5.8	3.2	2.6	1.9	0.6	0.6	0.0	0.0	0.0	0.0	0.0	15°
127.5°	4.5	3.2	2.6	1.9	0.6	0.6	0.0	0.0	0.0	0.0	0.0	17.5°
130°	3.9	3.2	1.9	1.3	0.6	0.6	0.0	0.0	0.0	0.0	0.0	20°
132.5°	3.9	2.6	1.9	1.3	0.6	0.6	0.0	0.0	0.0	0.0	0.0	22.5°
135°	3.2	2.6	1.9	1.3	0.6	0.6	0.0	0.0	0.0	0.0	0.0	25°
137.5°	3.2	2.6	1.9	1.3	0.6	0.6	0.0	0.0	0.0	0.0	0.0	27.5°
140°	3.2	2.6	1.9	1.3	0.6	0.6	0.0	0.0	0.0	0.0	0.0	30°
142.5°	2.6	1.9	1.9	1.3	0.6	0.6	0.6	0.0	0.0	0.0	0.0	32.5°
145°	2.6	1.9	1.3	1.3	0.6	0.6	0.6	0.0	0.0	0.0	0.0	35°
147.5°	2.6	1.9	1.3	1.3	0.6	0.6	0.6	0.0	0.0	0.0	0.0	37.5°
150°	1.9	1.9	1.3	1.3	0.6	0.6	0.6	0.0	0.0	0.0	0.0	40°
152.5°	1.9	1.3	1.3	1.3	0.6	0.6	0.6	0.0	0.0	0.0	0.0	42.5°
155°	1.9	1.9	1.3	1.3	0.6	0.6	0.6	0.0	0.0	0.0	0.0	45°
157.5°	1.9	1.3	1.3	1.3	0.6	0.6	0.6	0.0	0.0	0.0	0.0	46°
160°	1.9	1.9	1.3	1.3	0.6	0.6	0.6	0.0	0.0	0.0	0.0	47.5°
162.5°	1.9	1.9	1.9	1.3	0.6	0.6	0.6	0.6	0.0	0.0	0.0	50°
165°	2.6	1.9	1.9	1.3	1.3	0.6	0.6	0.6	0.6	0.0	0.0	52.5°
167.5°	1.9	1.9	1.9	1.3	0.6	0.6	0.6	0.6	0.0	0.0	0.0	55°
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°

NUMBER: P303581
 NUMBER: WPMLED25

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

160°	165°	170°	175°	180°
3512.0	3512.0	3512.0	3512.0	3512.0
3258.6	3276.7	3333.1	3218.4	3263.8
3234.0	3205.4	3232.7	3148.4	3175.0
2799.7	2820.4	2821.0	2744.6	2782.8
2769.2	2757.5	2719.3	2622.0	2613.6
2463.9	2480.1	2551.4	2468.4	2474.9
2131.3	2094.4	2093.1	1993.9	2005.6
1908.4	1839.6	1778.1	1653.0	1669.2
1575.2	1512.3	1468.2	1406.0	1422.8
1286.1	1262.7	1274.4	1256.9	1278.9
1188.8	1133.1	1090.3	1023.5	1037.1
973.0	989.8	932.8	880.9	879.6
833.0	809.6	780.5	730.5	738.3
709.8	709.8	688.4	655.3	654.1
632.7	602.2	568.5	543.2	551.6
528.9	495.2	469.3	450.5	457.0
433.0	403.2	389.6	372.7	378.6
357.8	335.1	306.0	287.8	289.1
274.2	258.0	237.9	224.3	230.8
252.8	232.1	218.4	206.8	213.3
223.0	210.0	197.1	188.0	191.9
192.5	185.4	175.7	170.5	173.7
171.1	164.6	160.1	157.5	162.1
152.3	150.4	151.7	151.7	157.5
137.4	139.4	141.3	138.7	143.3
123.2	123.2	119.9	118.0	121.2
104.4	103.7	105.0	107.0	110.8
86.2	90.1	90.8	90.1	92.0
69.4	71.3	70.0	69.4	70.7
51.2	49.3	49.9	49.9	50.6
27.9	25.3	22.0	16.9	14.9
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0

CANDELA DISTRIBUTION:

	160°
110°	0.0
112.5°	0.0
115°	0.0
117.5°	0.0
120°	0.0
122.5°	0.0
125°	0.0
127.5°	0.0
130°	0.0
132.5°	0.0
135°	0.0
137.5°	0.0
140°	0.0
142.5°	0.0
145°	0.0
147.5°	0.0
150°	0.0
152.5°	0.0
155°	0.0
157.5°	0.0
160°	0.0
162.5°	0.0
165°	0.0
167.5°	0.0
170°	0.0
172.5°	0.0
175°	0.0
177.5°	0.0
180°	0.0

'303581
WPMLED25

TION (continued):

165°	170°	175°	180°
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0

(END OF REPORT)