

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: P303575

Luminaire Tested: **WPLLED45**

Issue Date: 6/24/2020

Test Information

Test Method: LM-79-08
Report Number: P303575
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1906-360-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 6/24/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: WPLLED45
Description: LARGE LED WALL PACK - 120W, 4000K
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15523 lumens
Efficiency: N/A
Efficacy: 128.4 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.38' x L: 0.25' x H: 0.68')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U4 - G5

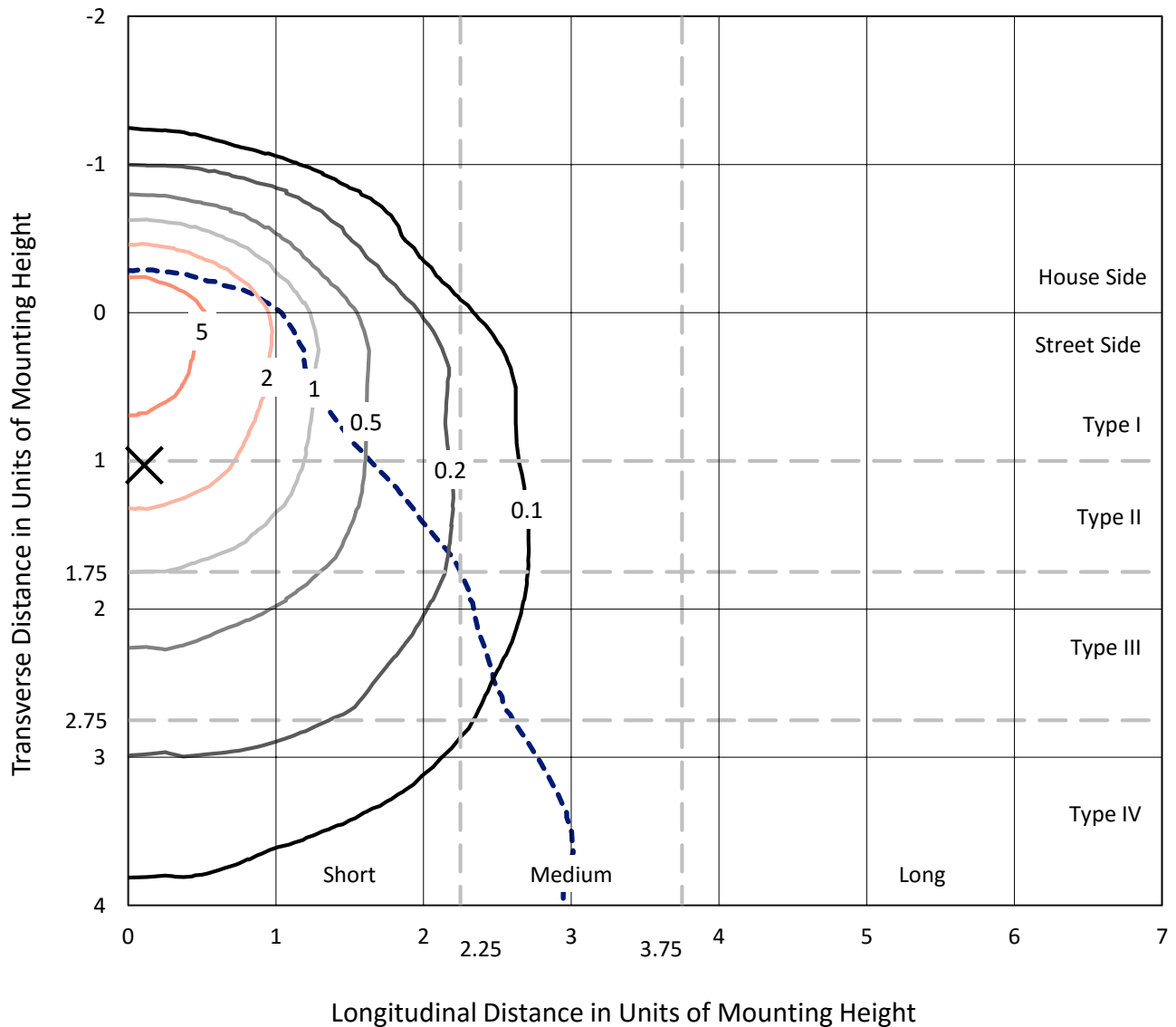
Input Watts (W): 120.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

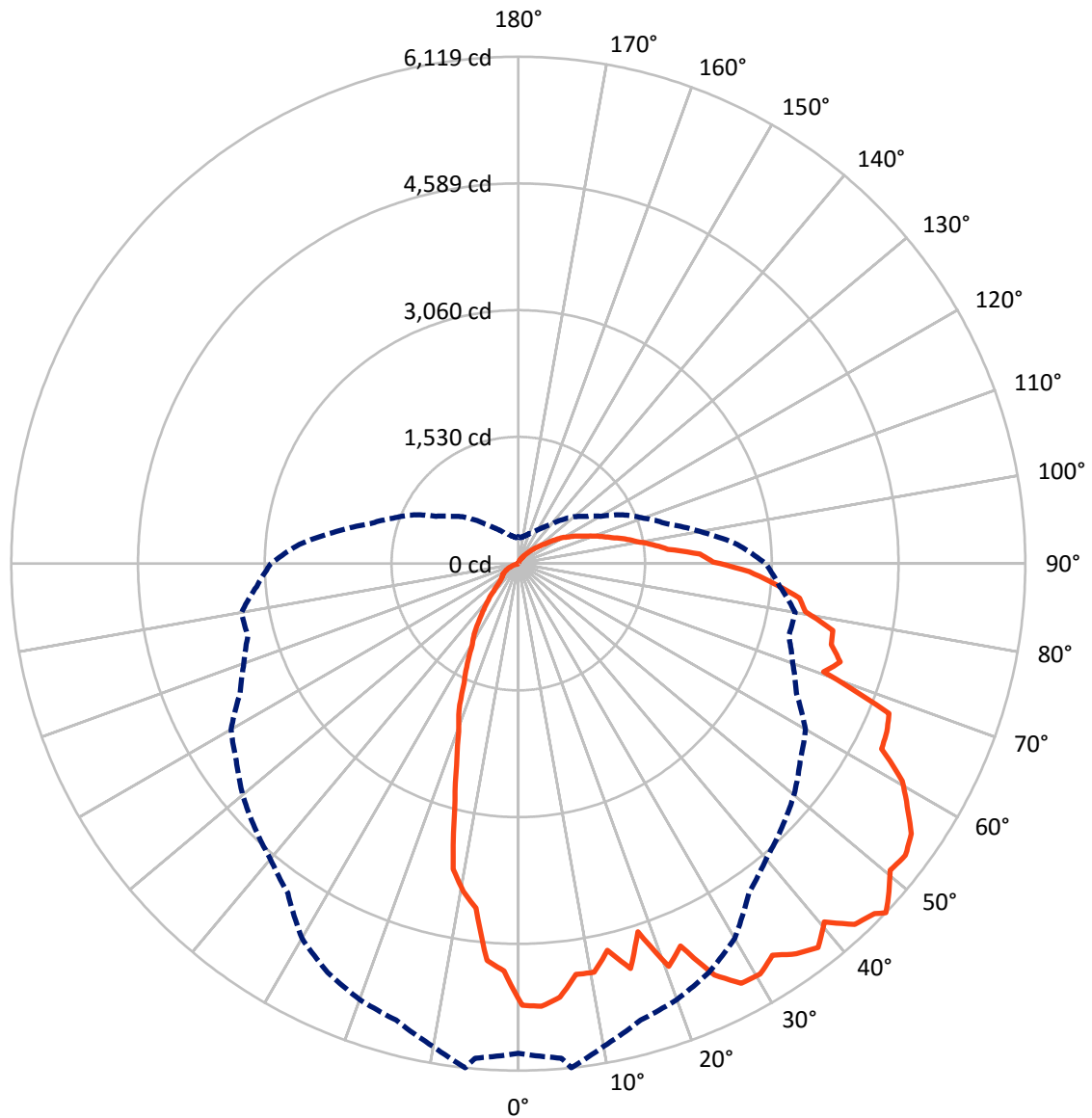
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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



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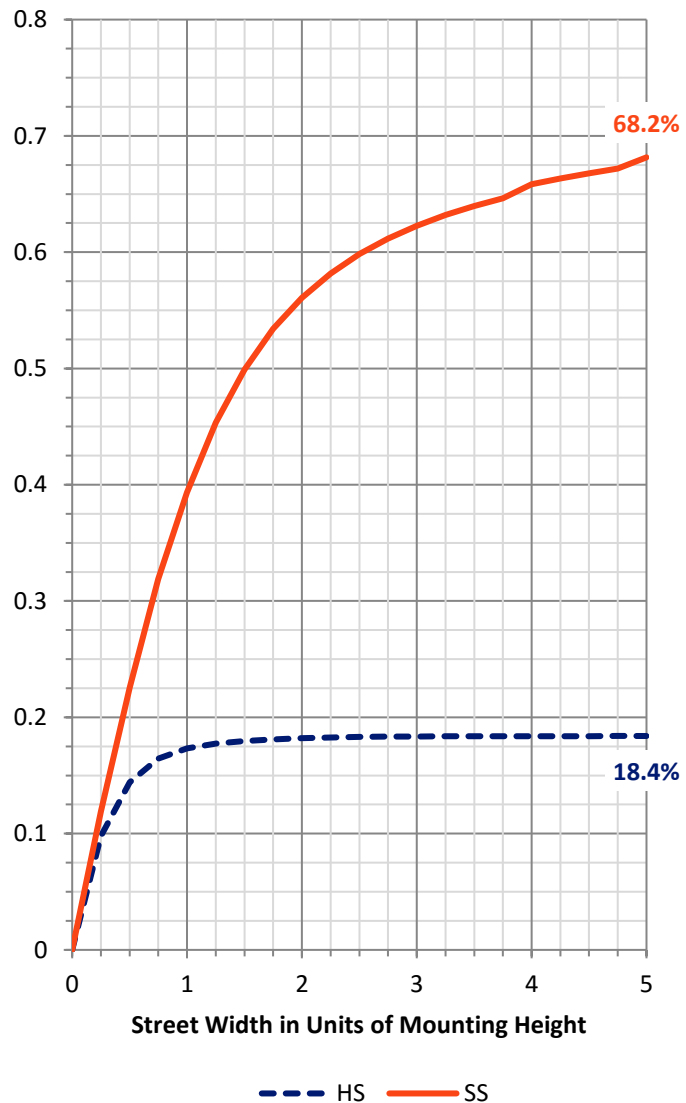
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2884.0	19.4	2903.4
	% Fixture	18.6	0.1	18.7
Street Side	Lumens	11300.0	1319.6	12619.6
	% Fixture	72.8	8.5	81.3
Total	Lumens	14184.1	1338.9	15523.0
	% Fixture	91.4	8.6	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	474.3	3.1
10°-20°	1236.9	8.0
20°-30°	1730.3	11.1
30°-40°	2061.9	13.3
40°-50°	2190.6	14.1
50°-60°	2130.8	13.7
60°-70°	1873.1	12.1
70°-80°	1454.9	9.4
80°-90°	1031.3	6.6
90°-100°	604.7	3.9
100°-110°	350.0	2.3
110°-120°	205.4	1.3
120°-130°	106.6	0.7
130°-140°	47.3	0.3
140°-150°	18.0	0.1
150°-160°	5.8	0.0
160°-170°	1.2	0.0
170°-180°	0.0	0.0
0°-90°	14184.1	91.4
0°-180°	15523.0	100.0



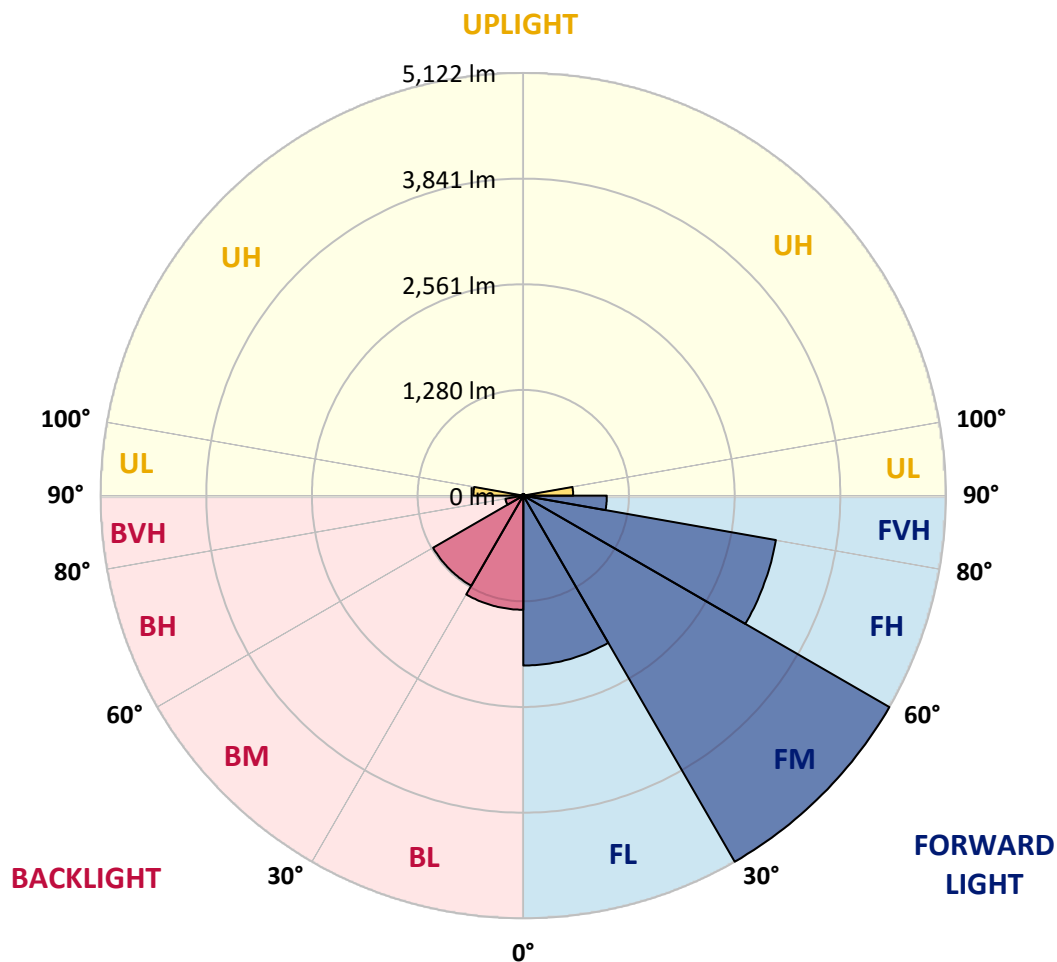
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2058.7	13.3			
FM	(30°-60°)	5121.9	33.0			
FH	(60°-80°)	3107.8	20.0			G2/5000
FVH	(80°-90°)	1011.6	6.5			G5
BL	(0°-30°)	1382.8	8.9	B3/2500		
BM	(30°-60°)	1261.4	8.1	B2/2500		
BH	(60°-80°)	220.2	1.4	B1/500		G1/500
BVH	(80°-90°)	19.7	0.1			G1/100
UL	(90°-100°)	604.7	3.9		U4/1000	
UH	(100°-180°)	19.4	0.1		U2/50	

BUG Rating: B3-U4-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	6°	10°	15°	20°	25°	30°	35°	40°	45°
0°	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0
2.5°	5492.4	5420.5	5349.7	5305.4	5186.4	5071.2	5173.6	5146.0	5194.2	5158.8	5338.9
5°	5441.2	5348.7	5256.2	5223.7	5216.9	5282.8	5467.8	5418.6	5442.2	5415.6	5618.3
7.5°	5206.0	5087.0	5007.3	5022.0	5065.3	4926.6	4992.5	5065.3	5046.6	4913.8	5227.7
10°	5170.6	5072.2	5017.1	5120.4	5008.3	4967.9	5138.1	4950.2	5027.0	4933.5	5035.8
12.5°	4895.1	4807.5	4788.8	4840.0	4698.3	4754.4	4789.8	4869.5	4868.5	5075.2	5088.0
15°	5098.8	5019.1	5071.2	5035.8	5014.2	4895.1	4916.8	4685.5	4670.8	4740.6	4912.8
17.5°	4721.0	4667.8	4670.8	4548.8	4481.9	4480.9	4645.2	4817.4	5018.1	4715.0	4713.1
20°	5141.1	5163.7	5188.3	5133.2	5014.2	4843.9	4784.9	4540.9	4480.9	4686.5	5051.6
22.5°	5026.0	5034.8	5014.2	4921.7	4743.6	4724.9	4914.8	5026.0	4785.9	4415.9	4589.1
25°	5447.1	5459.9	5501.2	5452.0	5296.6	5148.0	4983.7	4734.7	4733.7	4898.1	4598.9
27.5°	5718.7	5663.6	5735.4	5526.8	5285.7	5151.9	5246.4	5215.9	4829.2	4584.2	4855.8
30°	5658.6	5672.4	5751.1	5677.3	5594.7	5527.8	5454.0	5169.6	5050.6	4917.7	4586.2
32.5°	5525.8	5549.4	5634.0	5516.0	5423.5	5343.8	5407.7	5371.3	5140.1	4907.9	4877.4
35°	5674.4	5692.1	5784.6	5631.1	5453.0	5317.2	5321.2	5242.4	5054.5	5004.3	4824.3
37.5°	5685.2	5730.5	5878.1	5746.2	5607.5	5487.4	5374.3	5185.4	4995.5	4873.5	4862.6
40°	5504.2	5556.3	5688.2	5515.0	5349.7	5331.0	5367.4	5233.6	4930.5	4820.3	4712.1
42.5°	5777.7	5822.0	5952.8	5695.1	5428.4	5300.5	5277.9	5165.7	4881.3	4736.7	4609.8
45°	5852.5	5919.4	6027.6	5808.2	5628.1	5510.1	5403.8	5136.2	4847.9	4683.6	4537.0
46°	5909.6	5991.2	6119.1	5917.4	5703.9	5598.6	5444.1	5222.8	4851.8	4655.0	4500.5
47.5°	5801.3	5888.9	6011.9	5860.4	5727.5	5641.9	5572.1	5310.3	4934.5	4648.1	4427.7
50°	5624.2	5688.2	5817.1	5682.3	5530.7	5505.2	5529.8	5411.7	5022.0	4740.6	4374.6
52.5°	5651.8	5712.8	5851.5	5750.2	5600.6	5542.5	5432.3	5243.4	4951.2	4773.1	4410.0
55°	5649.8	5651.8	5756.1	5529.8	5190.3	5191.3	5287.7	5240.5	4939.4	4719.0	4343.1
57.5°	5324.1	5363.5	5536.6	5488.4	5292.6	5253.3	5254.2	5134.2	4845.9	4639.3	4280.1
60°	5182.4	5162.7	5326.1	5261.1	5062.4	5084.0	5059.4	4850.8	4618.6	4559.6	4221.1
62.5°	4779.0	4757.4	4922.7	4904.0	4828.2	4851.8	4876.4	4897.1	4622.6	4363.8	4031.2
65°	4761.3	4726.9	4890.2	4783.9	4596.0	4552.7	4554.7	4475.0	4341.2	4297.9	3921.0
67.5°	4677.7	4679.6	4825.2	4784.9	4605.8	4525.1	4445.4	4333.3	4125.7	4009.6	3740.9
70°	3806.9	3769.5	3910.2	3954.5	4062.7	4245.7	4159.1	4008.6	3905.3	3811.8	3539.2
72.5°	3982.0	3934.8	4063.7	4087.3	4161.1	4171.9	4194.5	4292.0	3833.4	3477.2	3164.4
75°	3822.6	3805.9	3901.3	3810.8	3641.6	3623.9	3604.2	3584.5	3430.0	3268.7	2883.9
77.5°	3823.6	3793.1	3880.7	3763.6	3578.6	3513.7	3408.4	3248.0	3077.8	3052.2	2820.0
80°	3430.0	3451.7	3512.7	3511.7	3521.5	3616.0	3477.2	3222.4	2947.9	2764.9	2543.5
82.5°	3397.6	3373.0	3419.2	3361.1	3252.9	3194.9	3040.4	3013.8	2878.0	2616.3	2255.2
85°	3079.7	3066.9	3101.4	3088.6	3034.5	3098.4	2989.2	2763.9	2546.4	2355.6	2065.3
87.5°	2765.9	2760.9	2789.5	2720.6	2640.9	2594.7	2483.5	2424.4	2312.3	2131.2	1845.9
90°	2344.7	2333.9	2348.7	2306.4	2252.2	2233.5	2204.0	2171.6	1987.6	1803.6	1576.3
92.5°	2199.1	2242.4	2194.2	2191.2	2143.0	2099.7	1980.7	1795.7	1642.2	1513.3	1366.7
95°	1809.5	1809.5	1812.4	1791.8	1751.4	1719.9	1665.8	1574.3	1456.2	1369.6	1211.2
97.5°	1648.1	1649.1	1639.2	1623.5	1576.3	1537.9	1485.8	1411.0	1316.5	1207.3	1034.1
100°	1460.2	1465.1	1458.2	1466.1	1435.6	1423.8	1369.6	1271.3	1152.2	1030.2	876.7
102.5°	1336.2	1331.3	1322.4	1310.6	1272.2	1229.9	1174.8	1102.0	1014.4	901.3	752.7
105°	1184.7	1190.6	1170.9	1170.9	1144.3	1113.8	1066.6	988.9	892.4	777.3	659.2
107.5°	1079.4	1077.4	1058.7	1053.8	1032.2	989.8	947.5	867.8	781.2	686.8	572.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	6°	10°	15°	20°	25°	30°	35°	40°	45°
110°	968.2	973.1	953.4	951.5	923.9	885.5	840.3	765.5	683.8	596.3	501.8
112.5°	865.9	868.8	848.2	847.2	823.6	787.2	752.7	683.8	613.0	532.3	451.6
115°	791.1	795.0	772.4	772.4	749.8	709.4	672.0	599.2	532.3	460.5	390.6
117.5°	707.5	703.5	685.8	686.8	663.2	621.9	592.3	528.4	465.4	402.4	342.4
120°	636.6	638.6	617.9	615.9	589.4	553.0	517.6	464.4	412.3	358.2	303.1
122.5°	543.1	543.1	523.5	523.5	499.8	465.4	435.9	382.8	343.4	301.1	257.8
125°	446.7	448.7	429.0	430.0	409.3	380.8	364.1	326.7	295.2	259.8	225.3
127.5°	380.8	384.7	369.0	371.9	356.2	331.6	317.8	282.4	256.8	221.4	191.9
130°	323.7	324.7	313.9	313.9	301.1	282.4	270.6	243.0	219.4	191.9	162.4
132.5°	278.5	278.5	266.6	267.6	254.8	237.1	228.3	203.7	184.0	160.4	139.7
135°	232.2	232.2	223.4	223.4	211.5	195.8	188.9	169.2	152.5	135.8	116.1
137.5°	188.9	189.9	181.0	182.0	174.2	162.4	157.4	140.7	127.9	111.2	95.4
140°	156.4	154.5	149.6	149.6	142.7	132.8	130.9	117.1	106.3	91.5	79.7
142.5°	127.9	127.9	123.0	125.0	118.1	109.2	107.2	96.4	86.6	76.7	65.9
145°	104.3	104.3	101.3	101.3	96.4	88.6	87.6	78.7	71.8	62.0	55.1
147.5°	85.6	85.6	82.7	83.6	78.7	73.8	71.8	64.0	58.1	51.2	45.3
150°	71.8	69.9	67.9	67.9	64.0	59.0	59.0	52.1	48.2	42.3	36.4
152.5°	58.1	57.1	56.1	56.1	52.1	49.2	47.2	43.3	39.4	33.5	28.5
155°	46.2	46.2	45.3	44.3	42.3	38.4	37.4	33.5	29.5	25.6	20.7
157.5°	36.4	36.4	35.4	35.4	32.5	29.5	29.5	25.6	21.6	17.7	14.8
160°	28.5	27.6	26.6	26.6	24.6	21.6	20.7	17.7	14.8	11.8	8.9
162.5°	20.7	19.7	19.7	18.7	16.7	14.8	13.8	10.8	8.9	6.9	5.9
165°	11.8	11.8	11.8	10.8	9.8	7.9	7.9	5.9	3.9	3.9	4.9
167.5°	4.9	4.9	4.9	3.9	3.0	3.0	3.9	3.9	3.9	3.9	4.9
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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0
2.5°	5209.0	5206.0	5113.5	5062.4	5079.1	5106.7	5120.4	5154.9	5235.6	5333.0	5336.9
5°	5474.7	5429.4	5273.9	5147.0	5060.4	4992.5	4998.4	5055.5	5199.1	5351.7	5248.3
7.5°	5370.4	5577.0	5479.6	5244.4	5160.8	5082.1	5030.9	5056.5	5260.2	5386.1	5085.0
10°	5076.2	5092.9	5188.3	5377.2	5339.9	5228.7	5091.9	5018.1	5288.7	5320.2	4987.6
12.5°	4992.5	4995.5	4893.1	5069.3	5497.3	5245.4	5055.5	4877.4	5217.8	5072.2	4738.7
15°	5075.2	5000.4	4832.1	4861.7	5144.0	5330.0	5023.0	4807.5	5176.5	4915.8	4529.1
17.5°	4745.6	4941.4	4907.9	4782.0	4844.9	5286.7	4984.6	4745.6	5129.3	4734.7	4445.4
20°	4604.8	4629.4	4824.3	4768.2	4677.7	5019.1	4996.5	4647.2	5010.2	4518.3	4427.7
22.5°	4886.3	4571.4	4482.8	4834.1	4567.5	4754.4	5002.4	4518.3	4843.9	4351.0	4377.6
25°	4412.0	4755.4	4346.1	4460.2	4653.1	4547.8	4930.5	4405.1	4673.7	4224.1	4111.9
27.5°	4515.3	4317.5	4575.3	4165.0	4649.1	4351.0	4797.7	4292.0	4476.9	4140.4	3844.3
30°	4700.3	4293.9	4379.5	4198.5	4373.6	4287.0	4624.5	4162.1	4234.9	4007.6	3627.8
32.5°	4472.0	4540.9	4110.9	4284.1	4070.6	4249.6	4425.8	4042.0	4043.0	3825.6	3466.4
35°	4696.4	4361.8	4263.4	4153.2	3966.3	4141.4	4305.7	3968.2	3888.5	3679.0	3346.4
37.5°	4663.9	4423.8	4358.9	3979.1	3981.0	4045.0	4150.3	3860.0	3768.5	3499.9	3160.4
40°	4677.7	4436.6	4212.3	3964.3	3895.4	3864.9	3981.0	3702.6	3585.5	3310.0	2927.2
42.5°	4553.7	4407.1	4152.2	3925.9	3769.5	3685.8	3764.6	3509.7	3372.0	3065.0	2646.8
45°	4398.2	4253.6	4055.8	3764.6	3596.3	3458.6	3500.9	3274.6	3102.4	2769.8	2351.6
46°	4344.1	4154.2	4002.7	3703.6	3525.5	3378.9	3392.6	3170.3	2985.3	2654.7	2229.6
47.5°	4232.9	4026.3	3882.6	3591.4	3405.4	3269.6	3273.6	3019.7	2840.6	2474.6	2075.1
50°	4160.1	3863.0	3652.4	3429.0	3192.9	3049.2	3030.5	2761.9	2557.3	2187.3	1803.6
52.5°	4078.4	3725.2	3515.6	3248.0	2975.4	2822.9	2798.3	2551.4	2336.9	1963.0	1565.5
55°	3994.8	3651.4	3299.2	3046.3	2794.4	2635.0	2584.8	2343.7	2123.3	1719.9	1339.1
57.5°	3938.7	3507.8	3157.5	2881.0	2619.3	2443.1	2415.6	2182.4	1922.6	1523.1	1137.4
60°	3854.1	3402.5	3011.8	2694.0	2439.2	2235.5	2187.3	1947.2	1658.9	1219.1	932.8
62.5°	3688.8	3277.5	2882.9	2500.2	2234.5	2058.4	1993.5	1737.6	1395.2	1008.5	769.4
65°	3566.8	3179.1	2737.3	2313.2	2029.9	1876.4	1823.2	1564.5	1177.8	807.8	653.3
67.5°	3388.7	2974.5	2639.9	2176.5	1842.9	1692.4	1620.6	1348.0	964.3	651.4	566.8
70°	3272.6	2826.9	2403.8	2031.8	1662.9	1492.6	1382.4	1097.1	741.9	545.1	493.0
72.5°	2886.9	2574.0	2194.2	1829.1	1493.6	1281.1	1148.3	860.0	559.9	447.7	426.0
75°	2689.1	2373.3	2010.2	1670.7	1348.0	1091.2	926.9	644.5	434.9	370.0	360.1
77.5°	2490.4	2158.8	1829.1	1505.4	1171.9	920.0	725.2	483.1	334.5	303.1	287.3
80°	2328.0	1969.9	1612.7	1315.5	1027.2	751.7	563.8	356.2	254.8	240.1	223.4
82.5°	2013.1	1735.7	1422.8	1122.7	857.0	616.9	431.0	267.6	195.8	184.0	167.3
85°	1801.6	1502.5	1199.4	952.5	700.6	493.0	330.6	199.7	145.6	136.8	120.0
87.5°	1573.3	1305.7	1030.2	781.2	584.5	394.6	255.8	151.5	107.2	100.4	88.6
90°	1365.7	1128.6	894.4	658.3	475.2	329.6	199.7	113.2	82.7	75.8	69.9
92.5°	1204.3	987.9	771.4	558.9	408.3	270.6	162.4	89.5	67.9	61.0	56.1
95°	1038.1	876.7	674.0	486.1	346.3	225.3	132.8	73.8	58.1	52.1	48.2
97.5°	883.6	739.9	576.6	410.3	288.3	184.0	111.2	64.9	53.1	49.2	42.3
100°	743.9	609.1	472.3	343.4	237.1	153.5	94.5	60.0	52.1	47.2	39.4
102.5°	622.8	510.7	387.7	274.5	195.8	128.9	82.7	56.1	52.1	45.3	35.4
105°	547.1	435.9	328.6	227.3	163.3	110.2	73.8	54.1	52.1	44.3	32.5
107.5°	474.3	382.8	283.4	196.8	142.7	97.4	67.9	52.1	50.2	42.3	29.5



REPORT NUMBER: P303575
 CATALOG NUMBER: WPLLED45

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
110°	415.2	331.6	248.9	176.1	128.9	87.6	63.0	51.2	49.2	40.3	27.6
112.5°	370.0	289.3	218.4	158.4	116.1	77.7	59.0	49.2	46.2	37.4	24.6
115°	321.7	254.8	192.9	141.7	104.3	67.9	55.1	46.2	43.3	34.4	22.6
117.5°	284.4	225.3	173.2	125.9	89.5	60.0	50.2	43.3	39.4	31.5	20.7
120°	248.0	192.9	149.6	108.2	73.8	53.1	44.3	38.4	34.4	27.6	17.7
122.5°	213.5	169.2	132.8	94.5	63.0	47.2	38.4	34.4	31.5	24.6	15.7
125°	188.9	149.6	117.1	78.7	55.1	41.3	33.5	30.5	27.6	21.6	13.8
127.5°	159.4	127.9	97.4	66.9	46.2	35.4	28.5	26.6	23.6	18.7	11.8
130°	135.8	107.2	80.7	56.1	41.3	30.5	24.6	21.6	19.7	15.7	9.8
132.5°	117.1	91.5	68.9	48.2	35.4	24.6	19.7	17.7	15.7	12.8	7.9
135°	96.4	77.7	59.0	41.3	29.5	19.7	15.7	14.8	12.8	9.8	6.9
137.5°	80.7	64.0	49.2	35.4	24.6	15.7	12.8	11.8	9.8	7.9	5.9
140°	66.9	52.1	41.3	28.5	18.7	10.8	10.8	8.9	7.9	6.9	4.9
142.5°	56.1	43.3	34.4	23.6	14.8	8.9	8.9	6.9	6.9	5.9	4.9
145°	46.2	36.4	28.5	17.7	9.8	6.9	7.9	6.9	5.9	5.9	4.9
147.5°	37.4	28.5	21.6	12.8	6.9	6.9	6.9	5.9	5.9	4.9	3.9
150°	29.5	21.6	15.7	8.9	5.9	5.9	5.9	4.9	4.9	4.9	3.9
152.5°	22.6	15.7	9.8	5.9	5.9	5.9	5.9	4.9	4.9	3.9	3.0
155°	15.7	10.8	6.9	4.9	4.9	4.9	4.9	4.9	3.9	3.9	3.0
157.5°	10.8	6.9	4.9	4.9	4.9	4.9	4.9	3.9	3.9	3.9	3.0
160°	6.9	4.9	4.9	4.9	4.9	4.9	4.9	3.9	3.9	3.9	3.0
162.5°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	3.9	3.9	3.9	3.0
165°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	3.9	3.9	3.9
167.5°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	3.9	3.9	3.0
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



REPORT NUMBER: P303575
 CATALOG NUMBER: WPLLED45

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0	5331.0
2.5°	5517.9	5372.3	5310.3	5220.8	5378.2	5162.7	5135.2	5129.3	5079.1	5034.8	4935.5
5°	5253.3	5040.7	4969.9	4842.0	4956.1	4707.2	4637.3	4624.5	4673.7	4786.9	4861.7
7.5°	5072.2	4794.7	4607.8	4564.5	4890.2	4816.4	4634.4	4534.0	4490.7	4415.9	4238.8
10°	4879.4	4603.9	4670.8	4643.2	4640.3	4311.6	4123.7	4283.1	4413.0	4395.3	4317.5
12.5°	4677.7	4769.2	4546.8	4183.7	4229.0	4342.1	4227.0	4143.4	3842.3	3731.1	3598.3
15°	4664.9	4546.8	4155.2	4114.8	4315.6	3976.1	3645.5	3664.2	3735.0	3703.6	3457.6
17.5°	4634.4	4154.2	4108.0	4031.2	3792.1	3578.6	3632.7	3376.9	3163.4	3067.9	2954.8
20°	4276.2	4014.5	3983.0	3582.5	3628.8	3406.4	3103.4	2988.2	2800.3	2533.6	2413.6
22.5°	3988.9	3980.0	3586.5	3412.3	3298.2	2987.2	2772.7	2438.2	2360.5	2235.5	2087.9
25°	3864.9	3651.4	3364.1	3134.8	2928.2	2599.6	2264.0	2246.3	2031.8	1879.3	1893.1
27.5°	3740.9	3371.0	3163.4	2777.7	2572.0	2173.5	2129.2	1872.4	1857.7	1704.2	1532.0
30°	3441.8	3159.4	2822.9	2488.4	2167.6	2071.2	1780.0	1775.0	1532.0	1487.7	1335.2
32.5°	3131.9	2945.9	2512.0	2135.2	2069.2	1753.4	1674.7	1454.3	1355.9	1245.7	1142.4
35°	2920.3	2639.9	2259.1	1927.5	1793.7	1634.3	1411.0	1278.1	1169.9	1065.6	1018.4
37.5°	2749.1	2397.9	2001.3	1811.4	1596.0	1398.2	1234.8	1113.8	997.7	946.6	852.1
40°	2512.0	2179.4	1845.9	1620.6	1451.3	1240.8	1081.4	959.3	869.8	796.0	698.6
42.5°	2253.2	1929.5	1654.0	1419.8	1225.0	1051.8	928.8	820.6	726.1	631.7	570.7
45°	1960.0	1700.3	1492.6	1245.7	1059.7	929.8	811.8	684.8	572.7	521.5	450.6
46°	1855.7	1606.8	1392.3	1143.3	994.8	879.6	749.8	624.8	534.3	471.3	412.3
47.5°	1692.4	1459.2	1280.1	1018.4	922.9	808.8	670.1	548.1	467.4	408.3	361.1
50°	1462.1	1271.3	1065.6	901.3	798.0	687.8	546.1	447.7	377.8	339.5	304.0
52.5°	1244.7	1080.4	911.1	769.4	678.9	547.1	446.7	366.0	316.8	288.3	265.7
55°	1058.7	918.0	780.3	668.1	550.0	450.6	369.0	305.0	271.6	250.9	234.2
57.5°	906.2	795.0	683.8	574.6	450.6	371.9	304.0	258.8	231.2	217.5	205.6
60°	761.6	695.6	595.3	462.5	366.0	305.0	248.0	218.4	199.7	186.0	180.1
62.5°	642.5	605.1	501.8	377.8	299.1	248.0	200.7	181.0	167.3	156.4	154.5
65°	557.9	520.5	410.3	308.0	243.0	196.8	162.4	147.6	136.8	130.9	126.9
67.5°	491.0	435.9	335.5	249.9	192.9	151.5	127.9	114.1	105.3	102.3	98.4
70°	429.0	362.1	276.5	198.8	149.6	117.1	98.4	85.6	78.7	71.8	70.8
72.5°	363.1	294.2	220.4	160.4	116.1	90.5	69.9	58.1	51.2	45.3	43.3
75°	295.2	233.2	170.2	123.0	85.6	64.0	43.3	30.5	20.7	4.9	1.0
77.5°	231.2	182.0	127.9	89.5	57.1	36.4	16.7	2.0	0.0	0.0	0.0
80°	174.2	134.8	95.4	62.0	34.4	15.7	3.9	0.0	0.0	0.0	0.0
82.5°	130.9	98.4	66.9	43.3	23.6	10.8	2.0	0.0	0.0	0.0	0.0
85°	96.4	72.8	49.2	31.5	16.7	6.9	1.0	0.0	0.0	0.0	0.0
87.5°	69.9	54.1	37.4	23.6	11.8	4.9	1.0	0.0	0.0	0.0	0.0
90°	55.1	43.3	29.5	18.7	9.8	3.9	1.0	0.0	0.0	0.0	0.0
92.5°	46.2	35.4	24.6	16.7	7.9	3.9	1.0	0.0	0.0	0.0	0.0
95°	40.3	30.5	20.7	12.8	6.9	3.9	1.0	0.0	0.0	0.0	0.0
97.5°	33.5	25.6	17.7	10.8	4.9	3.0	1.0	0.0	0.0	0.0	0.0
100°	29.5	21.6	14.8	8.9	3.9	2.0	1.0	0.0	0.0	0.0	0.0
102.5°	26.6	19.7	12.8	6.9	3.0	2.0	0.0	0.0	0.0	0.0	0.0
105°	22.6	16.7	10.8	5.9	3.0	2.0	0.0	0.0	0.0	0.0	0.0
107.5°	20.7	14.8	8.9	4.9	3.0	2.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P303575
 CATALOG NUMBER: WPLLED45

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	18.7	12.8	7.9	3.9	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0°
112.5°	16.7	10.8	5.9	3.9	2.0	1.0	0.0	0.0	0.0	0.0	0.0	2.5°
115°	14.8	8.9	4.9	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	5°
117.5°	13.8	7.9	4.9	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	7.5°
120°	11.8	6.9	3.9	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	10°
122.5°	9.8	5.9	3.9	3.0	2.0	1.0	0.0	0.0	0.0	0.0	0.0	12.5°
125°	8.9	4.9	3.9	3.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	15°
127.5°	6.9	4.9	3.9	3.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	17.5°
130°	5.9	4.9	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	20°
132.5°	5.9	3.9	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	22.5°
135°	4.9	3.9	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	25°
137.5°	4.9	3.9	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	27.5°
140°	4.9	3.9	3.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	30°
142.5°	3.9	3.0	3.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	32.5°
145°	3.9	3.0	2.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	35°
147.5°	3.9	3.0	2.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	37.5°
150°	3.0	3.0	2.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	40°
152.5°	3.0	2.0	2.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	42.5°
155°	3.0	3.0	2.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	45°
157.5°	3.0	2.0	2.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	46°
160°	3.0	3.0	2.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	47.5°
162.5°	3.0	3.0	3.0	2.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	50°
165°	3.9	3.0	3.0	2.0	2.0	1.0	1.0	1.0	1.0	0.0	0.0	52.5°
167.5°	3.0	3.0	3.0	2.0	1.0	1.0	1.0	1.0	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°



LUMBER: P303575
 NUMBER: WPLLED45

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

160°	165°	170°	175°	180°
5331.0	5331.0	5331.0	5331.0	5331.0
4946.3	4973.8	5059.4	4885.3	4954.1
4908.9	4865.6	4906.9	4779.0	4819.3
4249.6	4281.1	4282.1	4166.0	4224.1
4203.4	4185.7	4127.6	3980.0	3967.3
3740.0	3764.6	3872.8	3746.8	3756.7
3235.2	3179.1	3177.1	3026.6	3044.3
2896.7	2792.4	2699.0	2509.1	2533.6
2391.0	2295.5	2228.6	2134.2	2159.8
1952.1	1916.7	1934.4	1907.9	1941.3
1804.5	1719.9	1655.0	1553.6	1574.3
1476.9	1502.5	1415.9	1337.2	1335.2
1264.4	1228.9	1184.7	1108.9	1120.7
1077.4	1077.4	1044.9	994.8	992.8
960.3	914.1	862.9	824.5	837.3
802.9	751.7	712.4	683.8	693.7
657.3	612.0	591.3	565.8	574.6
543.1	508.7	464.4	436.9	438.8
416.2	391.6	361.1	340.4	350.3
383.7	352.3	331.6	313.9	323.7
338.5	318.8	299.1	285.3	291.2
292.2	281.4	266.6	258.8	263.7
259.8	249.9	243.0	239.1	246.0
231.2	228.3	230.2	230.2	239.1
208.6	211.5	214.5	210.6	217.5
186.9	186.9	182.0	179.1	184.0
158.4	157.4	159.4	162.4	168.3
130.9	136.8	137.8	136.8	139.7
105.3	108.2	106.3	105.3	107.2
77.7	74.8	75.8	75.8	76.7
42.3	38.4	33.5	25.6	22.6
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	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



303575
WPLLED45

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
0.0	0.0	0.0	0.0

(END OF REPORT)