

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: P218831

Luminaire Tested: **XTOR12BRL-Y**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P218831
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27753)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: XTOR12BRL-Y
Description: CROSSTOUR WALL MOUNT LED WITH REFRACTIVE LENS

Light Source: EATON LED 3000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12595 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U4 - G3

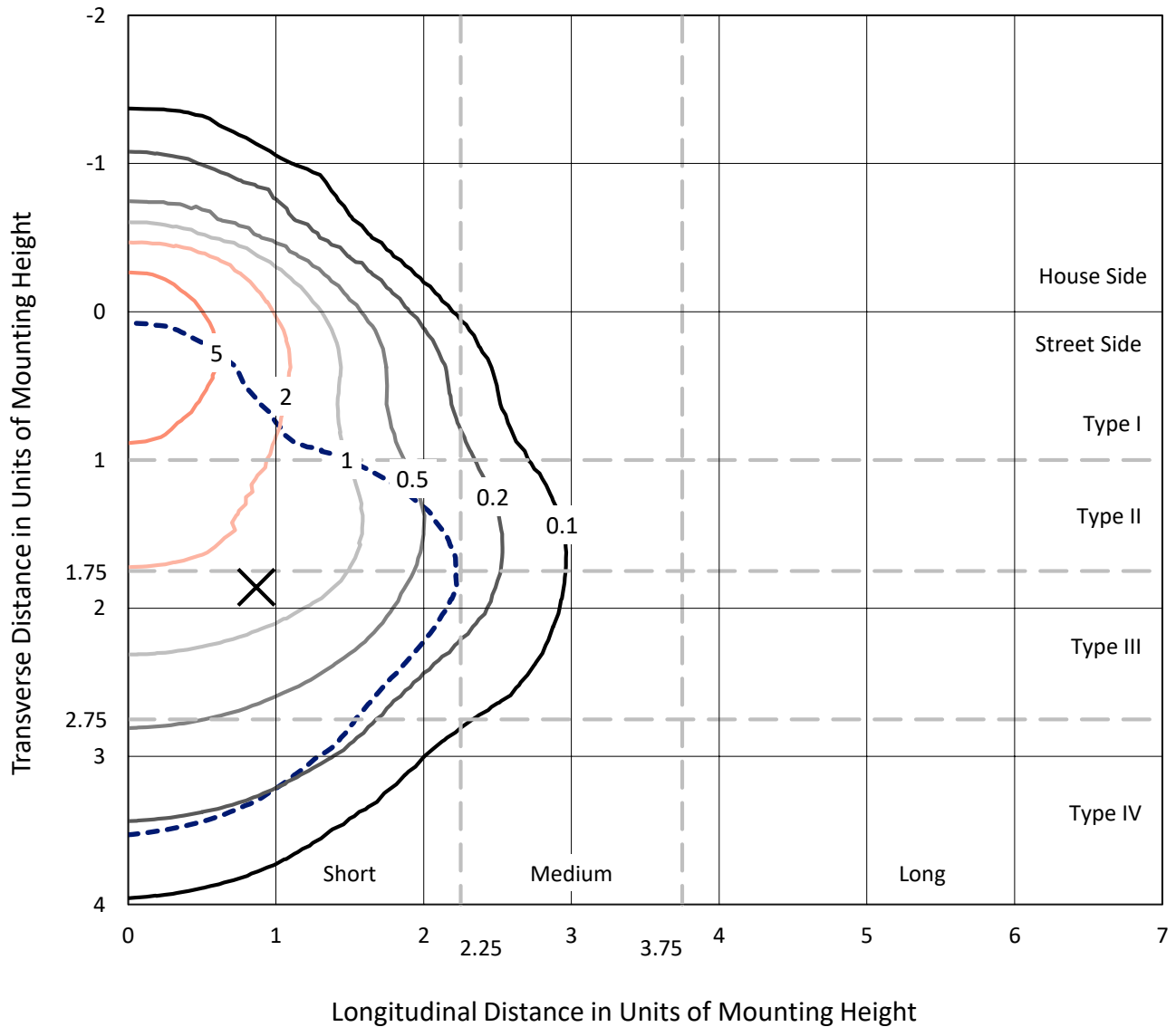
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

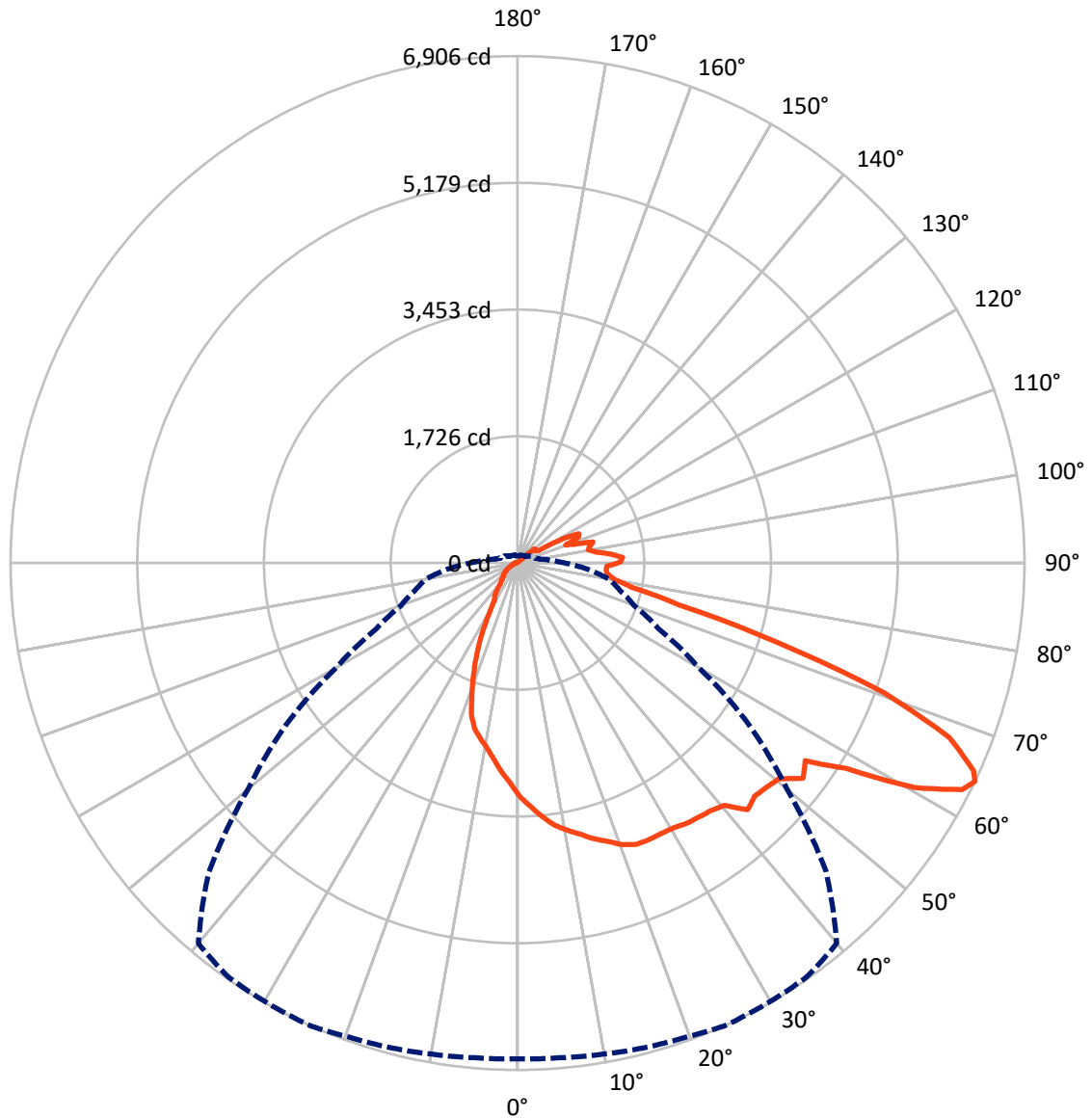
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 9 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 25-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

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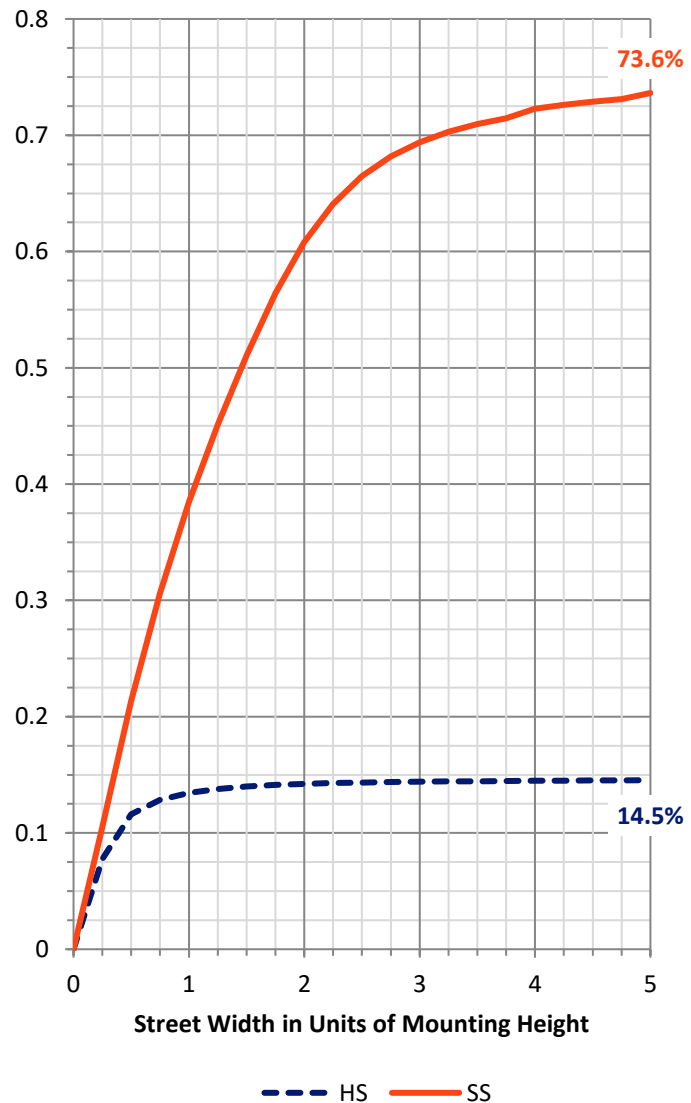
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1863.6	58.7	1922.3
	% Fixture	14.8	0.5	15.3
Street Side	Lumens	9605.4	1067.4	10672.7
	% Fixture	76.3	8.5	84.7
Total	Lumens	11469.0	1126.0	12595.0
	% Fixture	91.1	8.9	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.4	2.4
10°-20°	871.4	6.9
20°-30°	1296.2	10.3
30°-40°	1547.0	12.3
40°-50°	1742.3	13.8
50°-60°	1908.5	15.2
60°-70°	2234.8	17.7
70°-80°	1081.6	8.6
80°-90°	485.9	3.9
90°-100°	442.3	3.5
100°-110°	310.5	2.5
110°-120°	260.6	2.1
120°-130°	101.9	0.8
130°-140°	10.8	0.1
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°-90°	11469.0	91.1
0°-180°	12595.0	100.0



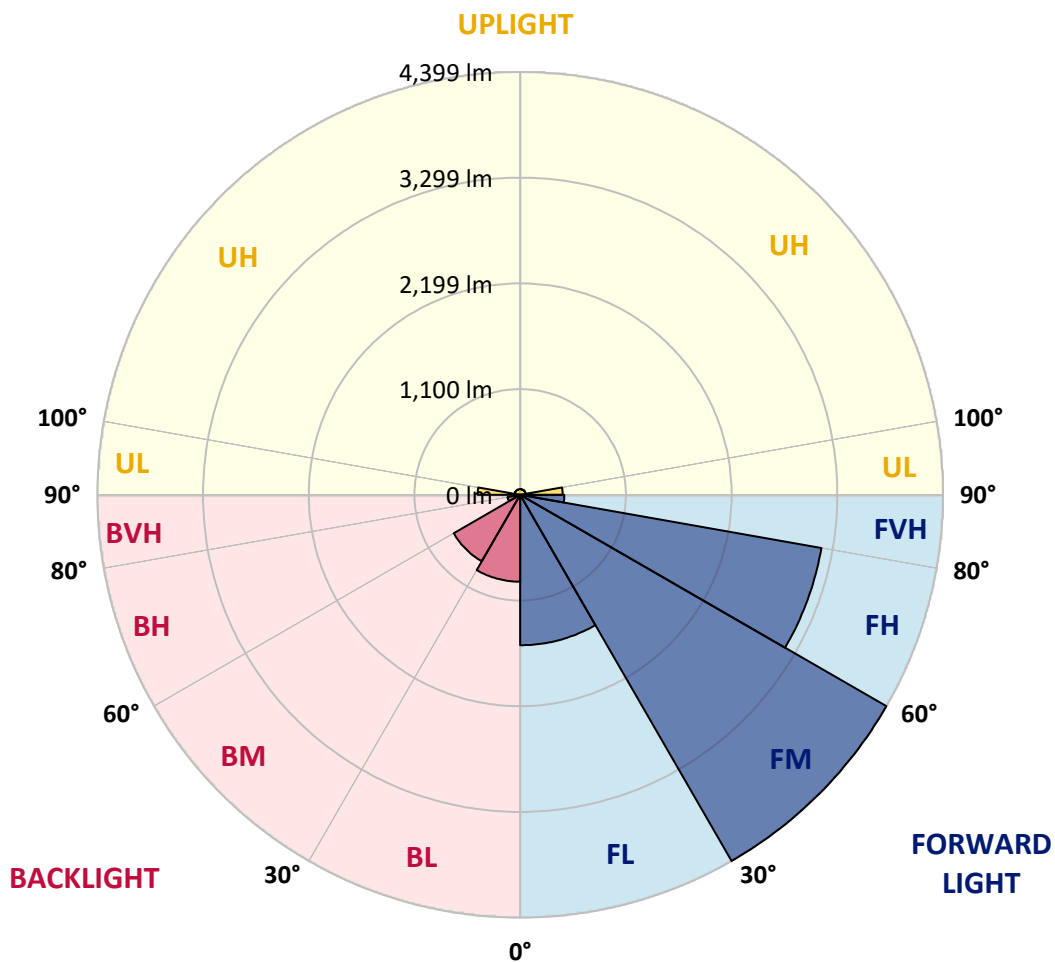
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1564.8	12.4			
FM	(30°-60°)	4398.6	34.9			
FH	(60°-80°)	3182.5	25.3			G2/5000
FVH	(80°-90°)	459.4	3.6			G3/500
BL	(0°-30°)	904.1	7.2	B2/1000		
BM	(30°-60°)	799.1	6.3	B1/1000		
BH	(60°-80°)	133.9	1.1	B1/500		G1/500
BVH	(80°-90°)	26.5	0.2			G1/100
UL	(90°-100°)	442.3	3.5		U3/500	
UH	(100°-180°)	58.7	0.5		U3/500	

BUG Rating: B2-U4-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	24°	25°	30°	35°	40°	45°
0°	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3
2.5°	3335.4	3329.8	3336.3	3330.7	3323.2	3318.6	3317.6	3307.3	3296.1	3289.6	3300.8
5°	3499.2	3491.7	3495.4	3487.0	3473.9	3466.4	3465.5	3447.7	3429.9	3424.3	3418.7
7.5°	3643.3	3640.5	3643.3	3630.2	3618.0	3608.7	3604.0	3581.5	3555.3	3534.7	3517.0
10°	3756.5	3751.9	3750.9	3737.8	3726.6	3706.0	3701.3	3677.9	3648.9	3621.8	3592.8
12.5°	3857.6	3845.5	3841.7	3830.5	3813.6	3791.2	3789.3	3759.4	3728.5	3695.7	3663.9
15°	3973.7	3966.2	3963.4	3948.4	3926.9	3903.5	3898.8	3854.8	3810.8	3769.6	3737.8
17.5°	4108.4	4092.5	4089.7	4065.4	4034.5	3998.9	3987.7	3940.9	3894.1	3846.4	3798.7
20°	4220.7	4217.9	4210.4	4189.8	4157.1	4108.4	4096.3	4028.9	3963.4	3896.9	3845.5
22.5°	4243.2	4245.1	4232.9	4220.7	4199.2	4171.1	4162.7	4114.0	4046.7	3959.6	3883.8
25°	4254.4	4259.1	4249.7	4228.2	4206.7	4177.7	4171.1	4130.0	4093.5	4034.5	3943.7
27.5°	4289.1	4290.0	4274.1	4243.2	4212.3	4180.5	4172.1	4131.8	4089.7	4046.7	3993.3
30°	4369.5	4363.9	4337.7	4298.4	4246.9	4203.0	4186.1	4123.4	4072.9	4027.0	3970.9
32.5°	4404.2	4392.9	4365.8	4336.8	4294.7	4245.1	4229.2	4139.3	4059.8	3982.1	3933.4
35°	4451.9	4436.9	4407.9	4359.2	4319.9	4272.2	4251.6	4177.7	4080.4	3972.7	3877.3
37.5°	4534.2	4515.5	4489.3	4433.2	4342.4	4299.3	4279.7	4188.9	4096.3	3987.7	3852.0
40°	4694.3	4676.5	4630.6	4567.0	4449.1	4361.1	4340.5	4217.0	4094.4	3989.6	3855.7
42.5°	4851.5	4834.7	4802.8	4779.4	4732.6	4619.4	4596.9	4413.5	4186.1	4000.8	3863.2
45°	4763.5	4743.9	4713.0	4652.2	4613.8	4553.0	4530.5	4486.5	4429.4	4215.1	3923.1
47.5°	4858.1	4835.6	4802.8	4763.5	4642.8	4583.8	4564.2	4444.4	4342.4	4224.5	4089.7
50°	5001.2	4975.0	4919.8	4869.3	4755.1	4647.5	4618.5	4451.9	4295.6	4136.5	3957.8
52.5°	5237.1	5217.4	5163.1	5119.2	5024.6	4905.8	4870.2	4660.6	4380.8	4076.6	3792.1
55°	5472.9	5436.4	5335.3	5187.5	4983.5	4812.2	4756.0	4523.0	4281.6	4046.7	3766.8
57.5°	5751.8	5733.1	5705.9	5612.4	5445.8	5298.8	5278.3	5004.0	4683.0	4379.8	4103.7
60°	6378.8	6385.4	6402.2	6400.4	6295.5	6209.4	6212.2	6046.6	5776.1	5481.3	4984.4
62.5°	6743.8	6750.4	6774.7	6809.3	6815.9	6832.7	6797.2	6801.8	6721.4	6553.8	5754.6
64°	6755.0	6765.3	6792.5	6826.2	6858.0	6904.8	6905.7	6893.6	6878.6	6763.5	5943.7
65°	6686.7	6695.1	6716.7	6736.3	6767.2	6811.2	6827.1	6821.5	6844.0	6720.4	5927.7
67.5°	6204.8	6201.9	6213.2	6256.2	6272.1	6296.5	6344.2	6323.6	6406.0	6085.0	5373.7
70°	5457.9	5434.5	5412.1	5380.3	5297.0	5240.8	5300.7	5113.5	5030.3	4637.2	4144.0
72.5°	4329.3	4278.8	4217.0	4093.5	3861.4	3659.2	3694.8	3293.3	2901.2	2763.6	2839.4
75°	3012.5	2937.7	2833.8	2678.4	2444.5	2263.8	2270.4	2022.4	1835.2	1901.7	2084.2
77.5°	2095.4	2045.8	1986.8	1887.6	1725.7	1596.6	1589.1	1412.2	1317.7	1495.5	1707.9
80°	1665.8	1646.2	1603.1	1533.9	1439.4	1358.9	1336.4	1222.2	1137.1	1259.7	1394.4
82.5°	1553.5	1534.8	1489.0	1421.6	1313.9	1246.6	1231.6	1131.5	1008.9	1046.3	1106.2
85°	1484.3	1473.0	1445.9	1393.5	1308.3	1230.7	1211.9	1087.5	944.3	875.0	886.3
87.5°	1433.7	1426.3	1388.8	1344.8	1288.7	1235.3	1217.6	1136.1	1012.6	847.0	790.8
90°	1653.7	1652.7	1629.3	1578.8	1517.0	1426.3	1401.0	1294.3	1097.8	851.6	788.0
92.5°	1700.5	1695.8	1662.1	1613.4	1524.5	1454.3	1433.7	1325.2	1122.1	878.8	856.3
95°	1510.5	1497.4	1457.1	1420.6	1340.2	1284.0	1270.0	1198.8	1092.1	900.3	866.6
97.5°	1143.6	1137.1	1104.3	1097.8	1051.9	1066.9	1078.1	1122.1	1036.0	831.0	746.8
100°	873.2	878.8	877.8	904.0	935.9	971.4	983.6	1026.6	894.7	657.9	609.2
102.5°	962.1	961.1	967.7	988.3	1002.3	1009.8	1004.2	960.2	743.1	536.2	555.9
105°	1086.5	1095.0	1112.7	1109.0	1107.1	1080.9	1068.8	923.7	685.1	507.2	545.6
107.5°	995.8	1002.3	1011.7	994.8	930.2	828.2	830.1	730.9	599.0	474.5	540.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	24°	25°	30°	35°	40°	45°
110°	989.2	976.1	949.9	874.1	789.9	729.0	700.0	618.6	508.2	422.1	459.5
112.5°	1166.1	1149.2	1105.3	1030.4	966.7	920.9	903.1	827.3	732.8	620.5	562.5
115°	1080.9	1078.1	1077.2	1060.3	1016.3	942.4	926.5	859.1	780.5	636.4	533.4
117.5°	834.8	861.0	829.2	799.2	757.1	721.5	715.0	669.1	593.3	482.0	387.4
120°	344.4	348.1	334.1	337.8	325.7	330.4	335.0	346.3	355.6	331.3	303.2
122.5°	261.1	263.9	270.5	280.8	292.9	301.3	304.2	315.4	336.0	330.4	294.8
125°	264.8	267.7	276.1	287.3	293.9	302.3	303.2	314.4	326.6	312.6	263.9
127.5°	277.0	278.9	284.5	295.7	306.0	304.2	305.1	311.6	311.6	284.5	239.6
130°	292.0	293.9	295.7	300.4	297.6	293.9	289.2	276.1	268.6	253.6	215.2
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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3
2.5°	3300.8	3293.3	3284.9	3269.9	3256.8	3226.8	3210.9	3194.1	3167.9	3157.6	3146.4
5°	3411.2	3389.7	3373.8	3344.8	3314.8	3271.8	3244.6	3210.0	3169.8	3148.2	3121.1
7.5°	3499.2	3470.2	3445.8	3404.7	3361.6	3301.7	3261.5	3210.0	3156.7	3121.1	3084.6
10°	3567.5	3529.1	3486.1	3433.7	3381.3	3310.1	3254.0	3190.3	3123.9	3074.3	3021.9
12.5°	3631.1	3590.0	3534.7	3470.2	3401.9	3322.3	3247.4	3175.4	3096.8	3032.2	2966.7
15°	3700.4	3651.7	3589.0	3514.2	3431.8	3339.2	3250.2	3162.3	3073.4	2993.8	2915.2
17.5°	3744.4	3692.9	3626.5	3539.4	3447.7	3342.9	3243.7	3138.9	3033.1	2938.6	2842.2
20°	3778.1	3706.0	3638.6	3541.3	3444.0	3324.2	3217.5	3098.6	2977.9	2871.2	2760.8
22.5°	3802.4	3723.8	3637.7	3535.7	3432.7	3305.5	3181.0	3049.0	2918.0	2795.4	2670.0
25°	3839.8	3744.4	3645.2	3524.5	3419.6	3286.7	3146.4	3003.2	2854.4	2718.7	2574.6
27.5°	3892.2	3771.5	3650.8	3517.0	3400.9	3258.7	3105.2	2954.5	2788.9	2639.1	2490.3
30°	3915.6	3795.9	3644.2	3502.9	3364.4	3220.3	3056.5	2890.9	2715.9	2553.0	2407.0
32.5°	3868.8	3797.7	3637.7	3475.8	3317.6	3162.3	2996.6	2818.8	2631.6	2461.3	2321.9
35°	3812.7	3751.9	3627.4	3443.0	3273.6	3098.6	2931.1	2743.9	2541.8	2364.9	2218.9
37.5°	3746.3	3680.7	3586.2	3414.0	3216.6	3035.9	2866.5	2670.0	2455.7	2268.5	2110.4
40°	3699.5	3590.9	3499.2	3377.5	3164.1	2973.2	2798.2	2584.8	2362.1	2160.0	1982.2
42.5°	3695.7	3523.5	3413.1	3314.8	3117.4	2916.1	2725.2	2510.0	2269.5	2050.5	1845.5
45°	3713.5	3499.2	3316.7	3218.4	3062.1	2851.6	2655.0	2422.9	2171.2	1938.2	1699.5
47.5°	3745.3	3446.8	3216.6	3098.6	2988.2	2780.4	2588.6	2338.7	2072.9	1821.2	1509.5
50°	3706.9	3415.9	3118.3	2927.4	2864.7	2685.9	2480.0	2221.7	1947.5	1642.4	1299.9
52.5°	3549.7	3283.0	3071.5	2821.6	2711.2	2563.3	2346.2	2094.5	1793.1	1418.8	1067.8
55°	3537.6	3290.5	2946.1	2700.9	2523.1	2397.7	2180.6	1932.6	1558.2	1166.1	840.4
57.5°	3741.6	3323.2	2912.4	2517.5	2284.4	2189.9	1978.4	1724.8	1299.9	916.2	626.1
60°	4212.3	3489.8	2887.1	2341.5	2029.9	1897.0	1734.2	1435.6	1013.5	686.0	459.5
62.5°	4658.7	3740.6	2848.8	2203.0	1822.1	1626.5	1445.0	1135.2	762.7	513.8	354.7
64°	4789.7	3855.7	2849.7	2119.7	1687.4	1445.0	1266.2	956.4	640.1	439.9	307.9
65°	4813.1	3885.7	2853.4	2059.8	1601.3	1314.9	1147.4	847.9	579.3	404.3	280.8
67.5°	4547.3	3765.0	2794.5	1938.2	1389.8	1006.1	867.5	642.9	463.3	321.0	233.0
70°	3823.9	3293.3	2521.2	1775.3	1123.0	801.1	659.8	519.4	375.3	255.5	204.0
72.5°	2856.2	2540.9	2087.0	1533.9	1054.7	746.8	531.6	408.0	292.0	202.1	171.3
75°	2014.0	1784.7	1511.4	1310.2	1119.3	764.6	412.7	315.4	216.2	158.2	140.4
77.5°	1552.6	1201.6	900.3	1083.7	986.4	613.9	306.0	218.1	150.7	129.1	111.4
80°	1188.5	841.3	578.4	766.5	676.6	373.4	221.8	149.7	116.0	97.3	83.3
82.5°	905.9	674.8	494.1	519.4	369.7	243.3	165.6	117.0	94.5	79.5	72.1
85°	787.1	658.8	453.9	341.6	253.6	170.3	126.3	100.1	81.4	70.2	64.6
87.5°	749.6	666.3	429.6	283.6	214.3	146.0	111.4	90.8	73.0	64.6	57.1
90°	817.9	722.5	440.8	252.7	202.1	139.4	111.4	82.4	67.4	56.2	50.5
92.5°	882.5	707.5	403.4	252.7	219.0	171.3	103.9	82.4	62.7	53.3	47.7
95°	783.3	592.4	331.3	283.6	308.8	175.0	114.2	82.4	59.9	50.5	45.9
97.5°	629.8	454.8	278.9	345.3	360.3	230.2	118.9	83.3	59.0	47.7	44.0
100°	526.0	386.5	248.0	307.9	365.0	245.2	118.9	74.9	56.2	46.8	42.1
102.5°	495.1	363.1	233.0	249.9	282.6	187.2	105.8	68.3	52.4	44.0	41.2
105°	526.0	382.8	246.1	200.3	195.6	140.4	94.5	64.6	48.7	42.1	38.4
107.5°	585.8	450.1	290.1	195.6	160.0	122.6	91.7	60.8	45.9	39.3	36.5



REPORT NUMBER: P218831
 CATALOG NUMBER: XTOR12BRL-Y

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
110°	525.0	445.5	325.7	225.5	158.2	117.9	89.8	59.9	43.0	37.4	37.4
112.5°	560.6	506.3	380.9	260.2	176.9	121.7	86.1	59.0	42.1	37.4	39.3
115°	509.1	487.6	404.3	293.9	198.4	121.7	79.5	55.2	41.2	36.5	34.6
117.5°	357.5	354.7	285.4	216.2	153.5	98.3	67.4	49.6	36.5	31.8	29.9
120°	284.5	244.3	182.5	155.4	117.9	78.6	59.0	44.0	32.8	29.0	27.1
122.5°	235.8	173.1	140.4	121.7	93.6	69.3	52.4	40.2	31.8	27.1	26.2
125°	200.3	161.0	131.0	101.1	81.4	64.6	49.6	41.2	30.9	27.1	25.3
127.5°	190.0	155.4	133.8	112.3	87.0	61.8	46.8	39.3	31.8	27.1	27.1
130°	177.8	147.9	120.7	103.9	85.2	60.8	45.9	39.3	33.7	29.9	29.9
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



REPORT NUMBER: P218831
 CATALOG NUMBER: XTOR12BRL-Y

CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3	3176.3
2.5°	3131.4	3108.9	3090.2	3079.9	3072.4	3067.8	3041.5	3037.8	3027.5	3011.6	2987.3
5°	3091.1	3056.5	3027.5	3005.0	2983.5	2968.6	2932.1	2919.0	2898.4	2874.0	2844.1
7.5°	3036.9	2990.1	2941.4	2911.5	2872.2	2845.0	2798.2	2773.9	2746.8	2712.1	2683.1
10°	2962.0	2897.4	2841.3	2791.7	2743.0	2705.6	2654.1	2626.0	2597.9	2565.2	2545.5
12.5°	2891.8	2814.1	2743.9	2681.2	2628.8	2588.6	2540.9	2515.6	2491.3	2465.1	2440.7
15°	2819.7	2731.8	2651.3	2585.8	2535.2	2497.8	2455.7	2423.9	2392.1	2359.3	2330.3
17.5°	2739.3	2640.1	2554.9	2492.2	2448.2	2408.0	2352.8	2309.7	2262.9	2205.8	2148.7
20°	2643.8	2539.0	2461.3	2404.2	2352.8	2295.7	2223.6	2150.6	2042.0	1923.2	1847.4
22.5°	2543.7	2452.0	2374.3	2311.6	2236.7	2160.9	2030.8	1883.9	1772.5	1652.7	1576.9
25°	2460.4	2373.3	2290.1	2206.8	2105.7	1953.1	1773.5	1646.2	1519.8	1397.2	1311.1
27.5°	2381.8	2287.2	2185.2	2077.6	1901.7	1715.4	1547.0	1404.7	1268.1	1143.6	1037.9
30°	2296.6	2188.0	2058.0	1869.9	1670.5	1494.6	1315.8	1158.6	1005.1	850.7	758.0
32.5°	2200.2	2072.9	1885.8	1659.3	1467.4	1266.2	1075.3	894.7	742.1	634.5	584.0
35°	2076.7	1903.5	1664.0	1458.1	1249.4	1036.9	822.6	666.3	569.9	543.7	549.4
37.5°	1938.2	1706.1	1474.9	1251.2	1032.3	804.8	616.7	530.6	511.9	502.6	470.7
40°	1758.5	1508.6	1272.8	1035.1	795.5	606.4	494.1	474.5	477.3	413.7	366.9
42.5°	1577.9	1315.8	1065.0	816.1	602.7	472.6	433.3	454.8	394.9	341.6	322.9
45°	1391.6	1114.6	853.5	604.6	459.5	402.4	431.4	385.6	325.7	303.2	294.8
47.5°	1202.6	909.7	640.1	450.1	385.6	384.6	390.3	312.6	286.4	274.2	269.5
50°	985.5	694.4	470.7	375.3	344.4	365.9	308.8	271.4	253.6	245.2	246.1
52.5°	763.7	503.5	375.3	326.6	316.3	319.1	261.1	241.5	226.5	219.0	234.0
55°	561.5	375.3	321.9	294.8	300.4	267.7	227.4	212.4	211.5	195.6	197.5
57.5°	417.4	312.6	285.4	272.3	275.1	223.7	194.7	186.2	176.9	178.7	180.6
60°	329.4	278.0	254.6	249.9	227.4	189.0	167.5	158.2	160.0	156.3	149.7
62.5°	277.0	246.1	227.4	220.9	177.8	154.4	146.0	141.3	137.6	131.0	124.5
64°	248.9	230.2	211.5	197.5	161.9	138.5	140.4	131.0	124.5	117.9	116.0
65°	237.7	215.2	201.2	184.4	148.8	128.2	126.3	118.9	114.2	114.2	111.4
67.5°	205.9	179.7	168.5	152.5	126.3	108.6	103.9	99.2	99.2	101.1	96.4
70°	173.1	146.9	134.8	123.5	108.6	95.5	88.9	86.1	85.2	86.1	83.3
72.5°	144.1	118.9	104.8	102.9	96.4	87.0	79.5	72.1	73.0	76.7	74.9
75°	117.0	90.8	88.9	92.7	90.8	76.7	68.3	62.7	64.6	66.4	62.7
77.5°	87.0	77.7	79.5	83.3	85.2	69.3	57.1	54.3	58.0	59.0	51.5
80°	74.9	71.1	70.2	74.9	81.4	59.9	48.7	48.7	53.3	53.3	44.0
82.5°	68.3	66.4	63.6	76.7	75.8	52.4	43.0	44.0	48.7	45.9	35.6
85°	59.9	59.0	58.0	77.7	75.8	46.8	37.4	40.2	47.7	40.2	28.1
87.5°	53.3	52.4	54.3	103.9	77.7	41.2	31.8	42.1	55.2	37.4	22.5
90°	46.8	45.9	50.5	113.2	74.9	34.6	29.0	50.5	61.8	34.6	19.7
92.5°	44.0	43.0	46.8	94.5	64.6	33.7	32.8	58.0	61.8	31.8	18.7
95°	43.0	41.2	44.9	71.1	52.4	35.6	34.6	58.0	56.2	29.0	20.6
97.5°	42.1	41.2	47.7	64.6	46.8	37.4	35.6	49.6	44.9	28.1	21.5
100°	41.2	41.2	49.6	56.2	44.9	37.4	35.6	39.3	37.4	29.0	24.3
102.5°	40.2	41.2	55.2	46.8	42.1	36.5	33.7	34.6	33.7	29.9	25.3
105°	38.4	46.8	51.5	40.2	37.4	32.8	30.9	31.8	30.9	29.0	25.3
107.5°	44.9	58.0	40.2	35.6	32.8	29.0	29.0	29.0	26.2	26.2	23.4



REPORT NUMBER: P218831
 CATALOG NUMBER: XTOR12BRL-Y

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	55.2	47.7	33.7	30.9	29.9	28.1	29.9	25.3	22.5	22.5	18.7	0°
112.5°	42.1	33.7	29.9	28.1	29.0	29.0	28.1	22.5	20.6	20.6	16.8	2.5°
115°	31.8	29.9	29.0	27.1	29.0	29.9	26.2	21.5	19.7	18.7	15.9	5°
117.5°	29.0	28.1	27.1	28.1	30.9	29.9	24.3	20.6	19.7	17.8	15.0	7.5°
120°	26.2	27.1	28.1	30.9	33.7	27.1	21.5	19.7	18.7	15.9	14.0	10°
122.5°	26.2	27.1	31.8	37.4	34.6	23.4	19.7	18.7	17.8	15.0	12.2	12.5°
125°	26.2	29.0	35.6	38.4	29.9	21.5	19.7	17.8	16.8	14.0	11.2	15°
127.5°	28.1	31.8	35.6	33.7	25.3	19.7	18.7	16.8	15.9	13.1	10.3	17.5°
130°	31.8	33.7	32.8	27.1	22.5	19.7	18.7	16.8	15.0	12.2	9.4	20°
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.5°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25°
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.5°
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30°
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.5°
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35°
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.5°
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40°
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.5°
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45°
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.5°
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50°
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5°
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	55°
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.5°
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	64°
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: P218831
 NUMBER: XTOR12BRL-Y

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

160°	165°	170°	175°	180°
3176.3	3176.3	3176.3	3176.3	3176.3
2973.2	2977.0	2979.8	2969.5	2967.6
2824.4	2825.4	2824.4	2808.5	2808.5
2660.7	2658.8	2653.2	2635.4	2632.6
2520.3	2519.3	2511.9	2497.8	2496.9
2417.3	2413.6	2405.2	2387.4	2388.3
2299.4	2284.4	2268.5	2241.4	2237.6
2071.1	2036.4	1994.3	1955.0	1944.7
1765.0	1733.2	1677.1	1657.4	1644.3
1493.6	1449.6	1404.7	1373.8	1357.0
1228.8	1169.8	1121.2	1093.1	1068.8
926.5	870.4	820.7	792.7	766.5
671.9	634.5	616.7	607.4	604.6
572.7	583.0	585.8	578.4	575.6
527.8	505.4	479.2	453.9	449.2
416.5	386.5	366.9	356.6	353.8
340.7	331.3	323.8	321.0	318.2
308.8	299.5	296.7	293.9	292.9
289.2	277.0	272.3	271.4	269.5
263.9	253.6	248.0	249.9	247.1
241.5	236.8	239.6	236.8	235.8
220.9	205.0	201.2	199.3	198.4
203.1	200.3	197.5	191.9	192.8
187.2	181.6	173.1	169.4	167.5
146.9	142.3	135.7	132.0	131.0
119.8	114.2	112.3	111.4	110.4
113.2	105.8	98.3	96.4	94.5
104.8	97.3	95.5	93.6	91.7
90.8	84.2	81.4	78.6	77.7
78.6	73.0	71.1	69.3	68.3
69.3	64.6	62.7	61.8	60.8
55.2	51.5	48.7	47.7	46.8
44.9	42.1	40.2	39.3	38.4
38.4	35.6	33.7	31.8	30.9
30.9	28.1	27.1	24.3	23.4
24.3	21.5	20.6	18.7	16.8
19.7	16.8	16.8	14.0	12.2
16.8	15.9	15.9	11.2	10.3
16.8	15.9	15.9	10.3	10.3
17.8	15.9	16.8	11.2	11.2
18.7	16.8	16.8	12.2	11.2
18.7	16.8	15.0	9.4	10.3
19.7	16.8	13.1	7.5	7.5
19.7	15.9	13.1	6.6	6.6
17.8	14.0	11.2	6.6	6.6

CANDELA DISTRIBUTION:

	160°
110°	15.0
112.5°	13.1
115°	12.2
117.5°	12.2
120°	11.2
122.5°	10.3
125°	9.4
127.5°	8.4
130°	8.4
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



'218831
XTOR12BRL-Y

TION (continued):

165°	170°	175°	180°
12.2	9.4	5.6	6.6
10.3	8.4	5.6	5.6
10.3	7.5	5.6	6.6
10.3	7.5	6.6	6.6
9.4	6.6	6.6	6.6
9.4	6.6	5.6	5.6
8.4	5.6	5.6	5.6
7.5	4.7	5.6	5.6
6.6	4.7	4.7	4.7
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
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)