

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: P208580

Luminaire Tested: **XTOR12BRL-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P208580  
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-W  
Description: CROSSTOUR WALL MOUNT LED WITH REFRACTIVE LENS  
  
Light Source: EATON LED 4000K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13258 lumens  
Efficiency: N/A  
Efficacy: 130.0 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

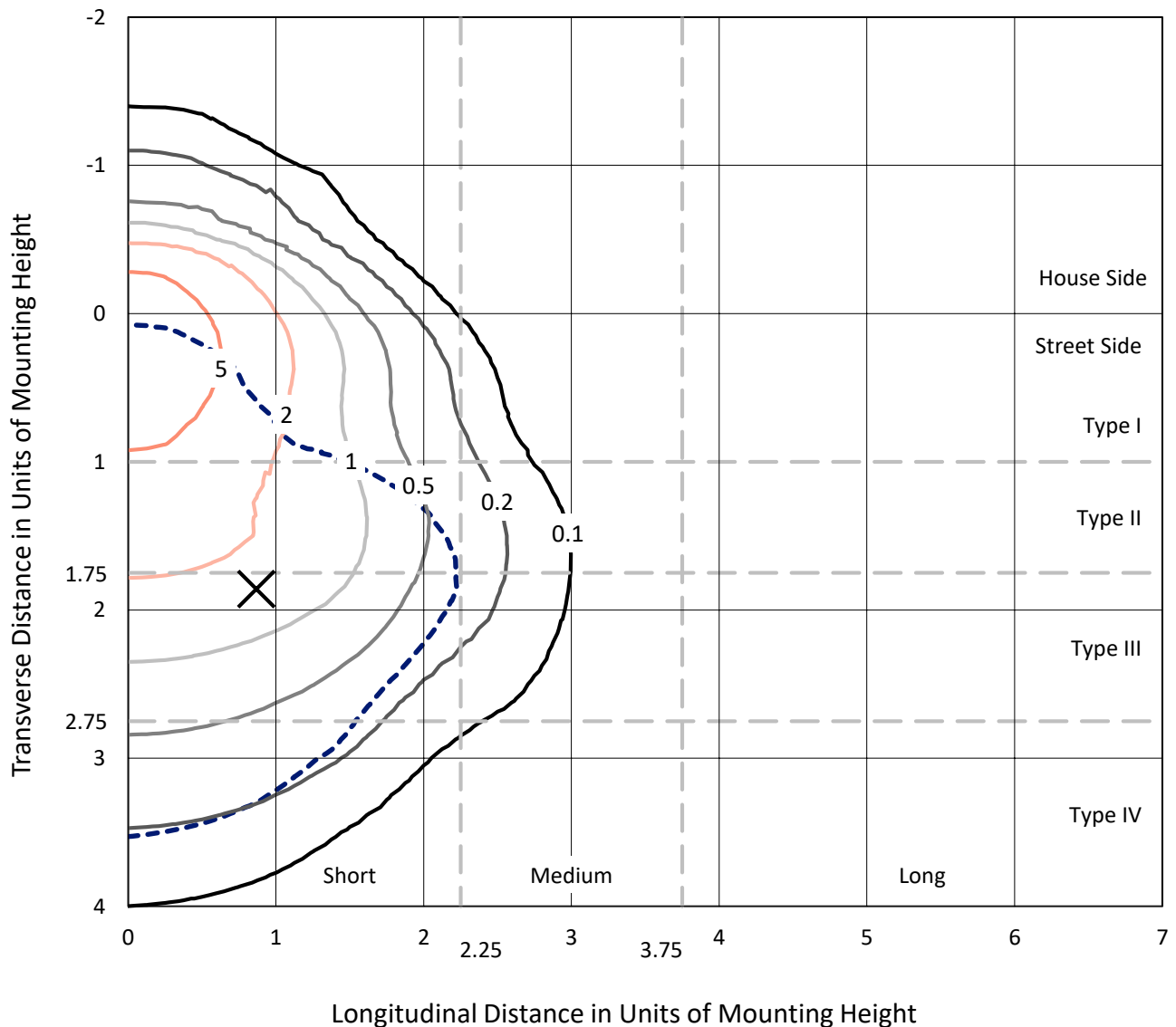
Input Watts (W): 102  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

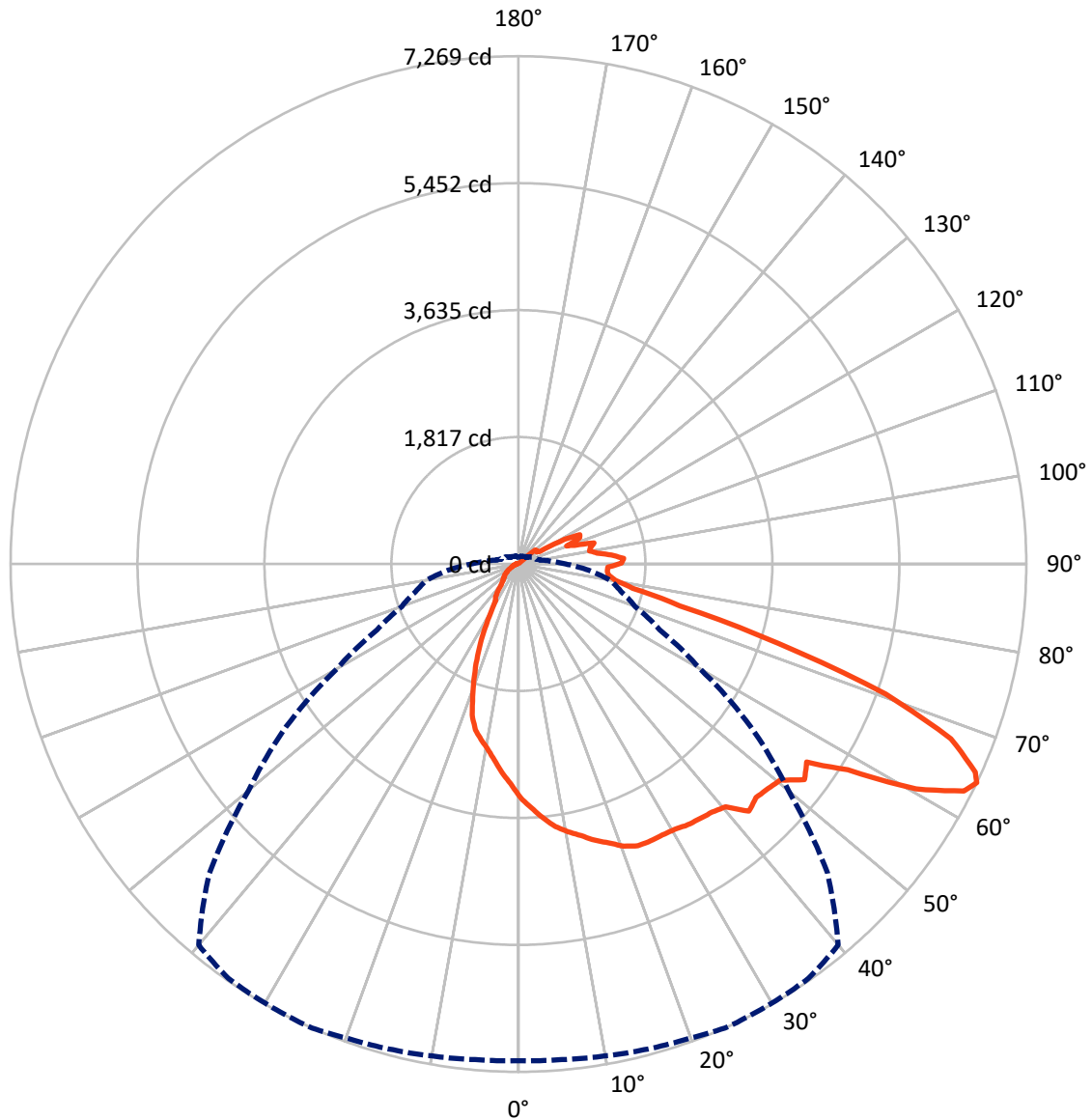
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 9.4 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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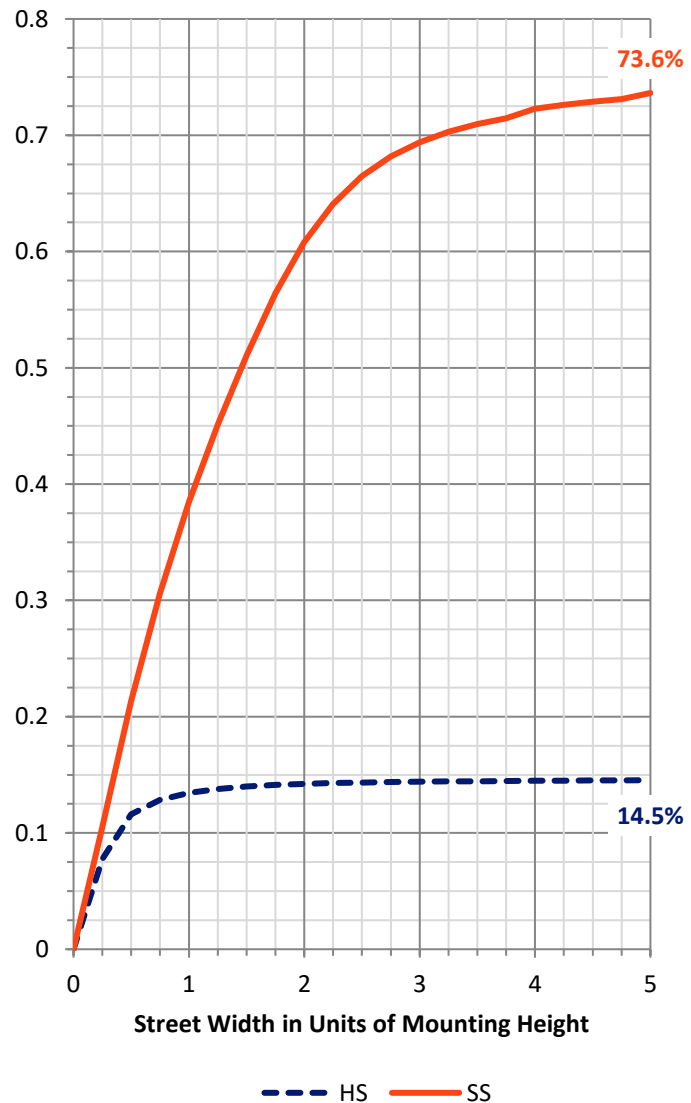
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1961.7	61.7	2023.5
	% Fixture	14.8	0.5	15.3
<b>Street Side</b>	Lumens	10111.0	1123.5	11234.5
	% Fixture	76.3	8.5	84.7
<b>Total</b>	Lumens	12072.7	1185.3	13258.0
	% Fixture	91.1	8.9	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	317.2	2.4
10°-20°	917.2	6.9
20°-30°	1364.4	10.3
30°-40°	1628.4	12.3
40°-50°	1834.0	13.8
50°-60°	2008.9	15.2
60°-70°	2352.4	17.7
70°-80°	1138.5	8.6
80°-90°	511.5	3.9
90°-100°	465.6	3.5
100°-110°	326.8	2.5
110°-120°	274.3	2.1
120°-130°	107.2	0.8
130°-140°	11.4	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°	12072.7	91.1
0°-180°	13258.0	100.0

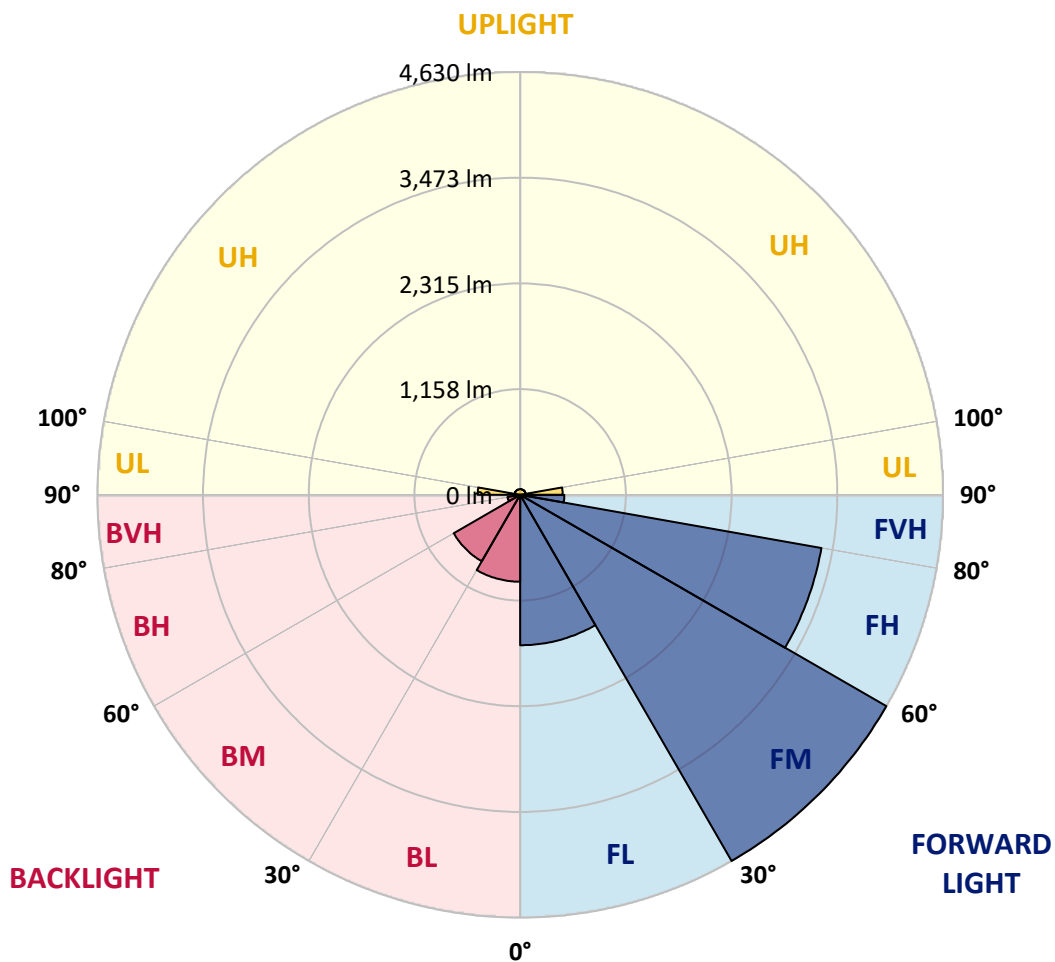


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1647.2	12.4			
FM	(30°-60°)	4630.1	34.9			
FH	(60°-80°)	3350.1	25.3			G2/5000
FVH	(80°-90°)	483.6	3.6			G3/500
BL	(0°-30°)	951.7	7.2	B2/1000		
BM	(30°-60°)	841.2	6.3	B1/1000		
BH	(60°-80°)	140.9	1.1	B1/500		G1/500
BVH	(80°-90°)	27.9	0.2			G1/100
UL	(90°-100°)	465.6	3.5		U3/500	
UH	(100°-180°)	61.7	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°	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5
2.5°	3511.0	3505.1	3512.0	3506.1	3498.2	3493.3	3492.3	3481.4	3469.6	3462.7	3474.5
5°	3683.4	3675.5	3679.4	3670.6	3656.8	3648.9	3647.9	3629.2	3610.5	3604.6	3598.7
7.5°	3835.1	3832.1	3835.1	3821.3	3808.5	3798.6	3793.7	3770.1	3742.5	3720.8	3702.1
10°	3954.3	3949.4	3948.4	3934.6	3922.8	3901.1	3896.2	3871.5	3841.0	3812.4	3781.9
12.5°	4060.7	4047.9	4043.9	4032.1	4014.4	3990.7	3988.8	3957.2	3924.7	3890.3	3856.8
15°	4182.8	4175.0	4172.0	4156.2	4133.6	4109.0	4104.0	4057.7	4011.4	3968.1	3934.6
17.5°	4324.7	4308.0	4305.0	4279.4	4246.9	4209.4	4197.6	4148.4	4099.1	4048.9	3998.6
20°	4442.9	4440.0	4432.1	4410.4	4375.9	4324.7	4311.9	4241.0	4172.0	4102.1	4047.9
22.5°	4466.6	4468.5	4455.7	4442.9	4420.3	4390.7	4381.8	4330.6	4259.7	4168.1	4088.3
25°	4478.4	4483.3	4473.5	4450.8	4428.1	4397.6	4390.7	4347.4	4308.9	4246.9	4151.3
27.5°	4514.8	4515.8	4499.1	4466.6	4434.0	4400.6	4391.7	4349.3	4305.0	4259.7	4203.5
30°	4599.5	4593.6	4566.1	4524.7	4470.5	4424.2	4406.5	4340.5	4287.3	4239.0	4179.9
32.5°	4636.0	4624.2	4595.6	4565.1	4520.7	4468.5	4451.8	4357.2	4273.5	4191.7	4140.5
35°	4686.2	4670.5	4639.9	4588.7	4547.3	4497.1	4475.4	4397.6	4295.1	4181.9	4081.4
37.5°	4772.9	4753.2	4725.6	4666.5	4571.0	4525.7	4505.0	4409.4	4311.9	4197.6	4054.8
40°	4941.4	4922.7	4874.4	4807.4	4683.3	4590.7	4569.0	4439.0	4309.9	4199.6	4058.7
42.5°	5106.9	5089.2	5055.7	5031.0	4981.8	4862.6	4838.9	4645.8	4406.5	4211.4	4066.6
45°	5014.3	4993.6	4961.1	4897.1	4856.7	4792.6	4769.0	4722.7	4662.6	4437.0	4129.6
47.5°	5113.8	5090.1	5055.7	5014.3	4887.2	4825.1	4804.5	4678.4	4571.0	4446.9	4305.0
50°	5264.5	5236.9	5178.8	5125.6	5005.4	4892.1	4861.6	4686.2	4521.7	4354.3	4166.1
52.5°	5512.8	5492.1	5434.9	5388.6	5289.1	5164.0	5126.6	4905.9	4611.4	4291.2	3991.7
55°	5761.0	5722.6	5616.2	5460.5	5245.8	5065.5	5006.4	4761.1	4506.9	4259.7	3965.1
57.5°	6054.6	6034.9	6006.3	5907.8	5732.4	5577.8	5556.1	5267.5	4929.6	4610.4	4319.8
60°	6714.6	6721.5	6739.2	6737.3	6626.9	6536.3	6539.3	6364.9	6080.2	5769.9	5246.8
62.5°	7098.8	7105.7	7131.3	7167.8	7174.7	7192.4	7155.0	7159.9	7075.2	6898.8	6057.5
64°	7110.6	7121.5	7150.0	7185.5	7219.0	7268.3	7269.2	7256.4	7240.7	7119.5	6256.5
65°	7038.7	7047.6	7070.2	7090.9	7123.4	7169.7	7186.5	7180.6	7204.2	7074.2	6239.8
67.5°	6531.4	6528.4	6540.2	6585.6	6602.3	6627.9	6678.2	6656.5	6743.2	6405.3	5656.6
70°	5745.2	5720.6	5697.0	5663.5	5575.8	5516.7	5579.7	5382.7	5295.0	4881.3	4362.1
72.5°	4557.2	4504.0	4439.0	4308.9	4064.6	3851.8	3889.3	3466.7	3053.9	2909.1	2988.9
75°	3171.1	3092.3	2983.0	2819.4	2573.1	2383.0	2389.9	2128.9	1931.8	2001.8	2193.9
77.5°	2205.7	2153.5	2091.4	1987.0	1816.6	1680.6	1672.7	1486.6	1387.1	1574.2	1797.9
80°	1753.5	1732.8	1687.5	1614.6	1515.1	1430.4	1406.8	1286.6	1196.9	1326.0	1467.8
82.5°	1635.3	1615.6	1567.3	1496.4	1383.1	1312.2	1296.4	1191.0	1062.0	1101.4	1164.4
85°	1562.4	1550.6	1522.0	1466.9	1377.2	1295.4	1275.7	1144.7	994.0	921.1	932.9
87.5°	1509.2	1501.3	1461.9	1415.6	1356.5	1300.4	1281.6	1195.9	1065.9	891.5	832.4
90°	1740.7	1739.7	1715.1	1661.9	1596.9	1501.3	1474.7	1362.4	1155.6	896.5	829.5
92.5°	1790.0	1785.0	1749.6	1698.4	1604.8	1530.9	1509.2	1394.9	1181.2	925.0	901.4
95°	1590.0	1576.2	1533.8	1495.4	1410.7	1351.6	1336.8	1261.9	1149.6	947.7	912.2
97.5°	1203.8	1196.9	1162.4	1155.6	1107.3	1123.0	1134.9	1181.2	1090.5	874.8	786.1
100°	919.1	925.0	924.0	951.6	985.1	1022.6	1035.4	1080.7	941.8	692.5	641.3
102.5°	1012.7	1011.7	1018.6	1040.3	1055.1	1062.9	1057.0	1010.7	782.2	564.5	585.2
105°	1143.7	1152.6	1171.3	1167.4	1165.4	1137.8	1125.0	972.3	721.1	533.9	574.3
107.5°	1048.2	1055.1	1064.9	1047.2	979.2	871.8	873.8	769.4	630.5	499.5	568.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	24°	25°	30°	35°	40°	45°
110°	1041.3	1027.5	999.9	920.1	831.4	767.4	736.9	651.2	534.9	444.3	483.7
112.5°	1227.5	1209.7	1163.4	1084.6	1017.6	969.4	950.6	870.9	771.4	653.1	592.1
115°	1137.8	1134.9	1133.9	1116.1	1069.8	992.0	975.3	904.3	821.6	669.9	561.5
117.5°	878.7	906.3	872.8	841.3	797.0	759.5	752.6	704.4	624.6	507.3	407.8
120°	362.5	366.5	351.7	355.6	342.8	347.7	352.7	364.5	374.3	348.7	319.2
122.5°	274.8	277.8	284.7	295.5	308.3	317.2	320.2	332.0	353.7	347.7	310.3
125°	278.8	281.7	290.6	302.4	309.3	318.2	319.2	331.0	343.8	329.0	277.8
127.5°	291.6	293.6	299.5	311.3	322.1	320.2	321.2	328.0	328.0	299.5	252.2
130°	307.4	309.3	311.3	316.2	313.3	309.3	304.4	290.6	282.7	267.0	226.6
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°	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5
2.5°	3474.5	3466.7	3457.8	3442.0	3428.2	3396.7	3380.0	3362.2	3334.6	3323.8	3312.0
5°	3590.8	3568.1	3551.4	3520.8	3489.3	3444.0	3415.4	3379.0	3336.6	3314.0	3285.4
7.5°	3683.4	3652.8	3627.2	3583.9	3538.6	3475.5	3433.2	3379.0	3322.8	3285.4	3247.0
10°	3755.3	3714.9	3669.6	3614.4	3559.3	3484.4	3425.3	3358.3	3288.3	3236.1	3181.0
12.5°	3822.3	3778.9	3720.8	3652.8	3580.9	3497.2	3418.4	3342.5	3259.8	3191.8	3122.8
15°	3895.2	3844.0	3778.0	3699.1	3612.5	3514.9	3421.3	3328.7	3235.1	3151.4	3068.7
17.5°	3941.5	3887.3	3817.4	3725.7	3629.2	3518.9	3414.4	3304.1	3192.8	3093.3	2991.8
20°	3976.9	3901.1	3830.2	3727.7	3625.3	3499.2	3386.9	3261.7	3134.7	3022.4	2906.1
22.5°	4002.6	3919.8	3829.2	3721.8	3613.4	3479.5	3348.4	3209.5	3071.6	2942.6	2810.6
25°	4042.0	3941.5	3837.1	3710.0	3599.6	3459.8	3312.0	3161.3	3004.6	2861.8	2710.1
27.5°	4097.1	3970.1	3843.0	3702.1	3579.9	3430.2	3268.6	3110.0	2935.7	2778.1	2621.4
30°	4121.8	3995.7	3836.1	3687.3	3541.5	3389.8	3217.4	3043.1	2858.8	2687.4	2533.7
32.5°	4072.5	3997.6	3829.2	3658.8	3492.3	3328.7	3154.4	2967.2	2770.2	2590.9	2444.1
35°	4013.4	3949.4	3818.3	3624.3	3446.0	3261.7	3085.4	2888.4	2675.6	2489.4	2335.7
37.5°	3943.5	3874.5	3775.0	3593.7	3385.9	3195.7	3017.4	2810.6	2585.0	2387.9	2221.5
40°	3894.2	3779.9	3683.4	3555.3	3330.7	3129.7	2945.5	2720.9	2486.5	2273.7	2086.5
42.5°	3890.3	3709.0	3592.7	3489.3	3281.5	3069.6	2868.7	2642.1	2388.9	2158.4	1942.7
45°	3909.0	3683.4	3491.3	3387.8	3223.3	3001.7	2794.8	2550.5	2285.5	2040.2	1789.0
47.5°	3942.5	3628.2	3385.9	3261.7	3145.5	2926.8	2724.9	2461.8	2182.1	1917.1	1589.0
50°	3902.1	3595.7	3282.4	3081.5	3015.5	2827.3	2610.6	2338.7	2050.0	1728.9	1368.3
52.5°	3736.6	3455.8	3233.2	2970.2	2853.9	2698.3	2469.7	2204.7	1887.5	1493.4	1124.0
55°	3723.8	3463.7	3101.2	2843.1	2655.9	2523.9	2295.3	2034.3	1640.2	1227.5	884.6
57.5°	3938.5	3498.2	3065.7	2650.0	2404.7	2305.2	2082.6	1815.6	1368.3	964.4	659.0
60°	4434.0	3673.5	3039.1	2464.8	2136.7	1996.8	1825.4	1511.2	1066.9	722.1	483.7
62.5°	4904.0	3937.5	2998.7	2319.0	1918.0	1712.1	1521.0	1195.0	802.9	540.8	373.4
64°	5041.9	4058.7	2999.7	2231.3	1776.2	1521.0	1332.9	1006.8	673.8	463.0	324.1
65°	5066.5	4090.2	3003.6	2168.3	1685.5	1384.1	1207.8	892.5	609.8	425.6	295.5
67.5°	4786.7	3963.2	2941.6	2040.2	1462.9	1059.0	913.2	676.8	487.6	337.9	245.3
70°	4025.2	3466.7	2653.9	1868.8	1182.1	843.3	694.5	546.7	395.0	268.9	214.8
72.5°	3006.6	2674.6	2196.8	1614.6	1110.2	786.1	559.6	429.5	307.4	212.8	180.3
75°	2120.0	1878.6	1591.0	1379.2	1178.2	804.8	434.4	332.0	227.6	166.5	147.8
77.5°	1634.3	1264.9	947.7	1140.8	1038.3	646.2	322.1	229.5	158.6	135.9	117.2
80°	1251.1	885.6	608.8	806.8	712.2	393.1	233.5	157.6	122.2	102.5	87.7
82.5°	953.6	710.3	520.1	546.7	389.1	256.1	174.4	123.1	99.5	83.7	75.9
85°	828.5	693.5	477.8	359.6	267.0	179.3	133.0	105.4	85.7	73.9	68.0
87.5°	789.1	701.4	452.2	298.5	225.6	153.7	117.2	95.6	76.8	68.0	60.1
90°	861.0	760.5	464.0	266.0	212.8	146.8	117.2	86.7	70.9	59.1	53.2
92.5°	929.0	744.8	424.6	266.0	230.5	180.3	109.3	86.7	66.0	56.2	50.2
95°	824.5	623.6	348.7	298.5	325.1	184.2	120.2	86.7	63.0	53.2	48.3
97.5°	663.0	478.8	293.6	363.5	379.3	242.3	125.1	87.7	62.1	50.2	46.3
100°	553.6	406.9	261.1	324.1	384.2	258.1	125.1	78.8	59.1	49.3	44.3
102.5°	521.1	382.2	245.3	263.0	297.5	197.0	111.3	71.9	55.2	46.3	43.3
105°	553.6	402.9	259.1	210.8	205.9	147.8	99.5	68.0	51.2	44.3	40.4
107.5°	616.7	473.8	305.4	205.9	168.5	129.1	96.5	64.0	48.3	41.4	38.4



REPORT NUMBER: P208580  
 CATALOG NUMBER: XTOR12BRL-W

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
110°	552.7	468.9	342.8	237.4	166.5	124.1	94.6	63.0	45.3	39.4	39.4
112.5°	590.1	533.0	400.9	273.9	186.2	128.1	90.6	62.1	44.3	39.4	41.4
115°	535.9	513.2	425.6	309.3	208.8	128.1	83.7	58.1	43.3	38.4	36.4
117.5°	376.3	373.4	300.5	227.6	161.6	103.4	70.9	52.2	38.4	33.5	31.5
120°	299.5	257.1	192.1	163.5	124.1	82.8	62.1	46.3	34.5	30.5	28.6
122.5°	248.3	182.2	147.8	128.1	98.5	72.9	55.2	42.4	33.5	28.6	27.6
125°	210.8	169.4	137.9	106.4	85.7	68.0	52.2	43.3	32.5	28.6	26.6
127.5°	200.0	163.5	140.9	118.2	91.6	65.0	49.3	41.4	33.5	28.6	28.6
130°	187.2	155.6	127.1	109.3	89.6	64.0	48.3	41.4	35.5	31.5	31.5
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: P208580  
 CATALOG NUMBER: XTOR12BRL-W

**CANDELA DISTRIBUTION (continued):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5
2.5°	3296.2	3272.6	3252.9	3242.0	3234.2	3229.2	3201.7	3197.7	3186.9	3170.1	3144.5
5°	3253.9	3217.4	3186.9	3163.2	3140.6	3124.8	3086.4	3072.6	3050.9	3025.3	2993.8
7.5°	3196.7	3147.5	3096.2	3064.7	3023.3	2994.8	2945.5	2919.9	2891.3	2854.9	2824.4
10°	3117.9	3049.9	2990.8	2938.6	2887.4	2848.0	2793.8	2764.3	2734.7	2700.2	2679.5
12.5°	3044.0	2962.3	2888.4	2822.4	2767.2	2724.9	2674.6	2648.0	2622.4	2594.8	2569.2
15°	2968.2	2875.6	2790.9	2721.9	2668.7	2629.3	2585.0	2551.5	2518.0	2483.5	2453.0
17.5°	2883.5	2779.0	2689.4	2623.4	2577.1	2534.7	2476.6	2431.3	2382.0	2321.9	2261.8
20°	2783.0	2672.6	2590.9	2530.8	2476.6	2416.5	2340.7	2263.8	2149.5	2024.4	1944.6
22.5°	2677.6	2581.0	2499.3	2433.3	2354.4	2274.7	2137.7	1983.1	1865.8	1739.7	1659.9
25°	2589.9	2498.3	2410.6	2322.9	2216.5	2056.0	1866.8	1732.8	1599.8	1470.8	1380.2
27.5°	2507.1	2407.6	2300.3	2187.0	2001.8	1805.7	1628.4	1478.7	1334.8	1203.8	1092.5
30°	2417.5	2303.2	2166.3	1968.3	1758.4	1573.2	1385.1	1219.6	1058.0	895.5	798.0
32.5°	2316.0	2182.1	1985.0	1746.6	1544.7	1332.9	1131.9	941.8	781.2	667.9	614.7
35°	2186.0	2003.7	1751.6	1534.8	1315.1	1091.5	865.9	701.4	599.9	572.4	578.3
37.5°	2040.2	1795.9	1552.6	1317.1	1086.6	847.2	649.2	558.6	538.9	529.0	495.5
40°	1851.0	1588.0	1339.8	1089.5	837.4	638.4	520.1	499.5	502.4	435.4	386.2
42.5°	1660.9	1385.1	1121.1	859.0	634.4	497.5	456.1	478.8	415.7	359.6	339.9
45°	1464.9	1173.3	898.4	636.4	483.7	423.6	454.1	405.9	342.8	319.2	310.3
47.5°	1265.9	957.5	673.8	473.8	405.9	404.9	410.8	329.0	301.4	288.6	283.7
50°	1037.3	731.0	495.5	395.0	362.5	385.2	325.1	285.7	267.0	258.1	259.1
52.5°	803.9	530.0	395.0	343.8	333.0	335.9	274.8	254.2	238.4	230.5	246.3
55°	591.1	395.0	338.9	310.3	316.2	281.7	239.4	223.6	222.6	205.9	207.9
57.5°	439.4	329.0	300.5	286.7	289.6	235.4	204.9	196.0	186.2	188.2	190.1
60°	346.8	292.6	268.0	263.0	239.4	199.0	176.3	166.5	168.5	164.5	157.6
62.5°	291.6	259.1	239.4	232.5	187.2	162.5	153.7	148.8	144.8	137.9	131.0
64°	262.0	242.3	222.6	207.9	170.4	145.8	147.8	137.9	131.0	124.1	122.2
65°	250.2	226.6	211.8	194.1	156.6	135.0	133.0	125.1	120.2	120.2	117.2
67.5°	216.7	189.1	177.3	160.6	133.0	114.3	109.3	104.4	104.4	106.4	101.5
70°	182.2	154.7	141.9	130.0	114.3	100.5	93.6	90.6	89.6	90.6	87.7
72.5°	151.7	125.1	110.3	108.4	101.5	91.6	83.7	75.9	76.8	80.8	78.8
75°	123.1	95.6	93.6	97.5	95.6	80.8	71.9	66.0	68.0	69.9	66.0
77.5°	91.6	81.8	83.7	87.7	89.6	72.9	60.1	57.1	61.1	62.1	54.2
80°	78.8	74.9	73.9	78.8	85.7	63.0	51.2	51.2	56.2	56.2	46.3
82.5°	71.9	69.9	67.0	80.8	79.8	55.2	45.3	46.3	51.2	48.3	37.4
85°	63.0	62.1	61.1	81.8	79.8	49.3	39.4	42.4	50.2	42.4	29.6
87.5°	56.2	55.2	57.1	109.3	81.8	43.3	33.5	44.3	58.1	39.4	23.6
90°	49.3	48.3	53.2	119.2	78.8	36.4	30.5	53.2	65.0	36.4	20.7
92.5°	46.3	45.3	49.3	99.5	68.0	35.5	34.5	61.1	65.0	33.5	19.7
95°	45.3	43.3	47.3	74.9	55.2	37.4	36.4	61.1	59.1	30.5	21.7
97.5°	44.3	43.3	50.2	68.0	49.3	39.4	37.4	52.2	47.3	29.6	22.7
100°	43.3	43.3	52.2	59.1	47.3	39.4	37.4	41.4	39.4	30.5	25.6
102.5°	42.4	43.3	58.1	49.3	44.3	38.4	35.5	36.4	35.5	31.5	26.6
105°	40.4	49.3	54.2	42.4	39.4	34.5	32.5	33.5	32.5	30.5	26.6
107.5°	47.3	61.1	42.4	37.4	34.5	30.5	30.5	30.5	27.6	27.6	24.6



REPORT NUMBER: P208580  
 CATALOG NUMBER: XTOR12BRL-W

REPORT N  
 CATALOG

**CANDELA DISTRIBUTION (continued):**

**CANDELA**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	58.1	50.2	35.5	32.5	31.5	29.6	31.5	26.6	23.6	23.6	19.7	0°
112.5°	44.3	35.5	31.5	29.6	30.5	30.5	29.6	23.6	21.7	21.7	17.7	2.5°
115°	33.5	31.5	30.5	28.6	30.5	31.5	27.6	22.7	20.7	19.7	16.7	5°
117.5°	30.5	29.6	28.6	29.6	32.5	31.5	25.6	21.7	20.7	18.7	15.8	7.5°
120°	27.6	28.6	29.6	32.5	35.5	28.6	22.7	20.7	19.7	16.7	14.8	10°
122.5°	27.6	28.6	33.5	39.4	36.4	24.6	20.7	19.7	18.7	15.8	12.8	12.5°
125°	27.6	30.5	37.4	40.4	31.5	22.7	20.7	18.7	17.7	14.8	11.8	15°
127.5°	29.6	33.5	37.4	35.5	26.6	20.7	19.7	17.7	16.7	13.8	10.8	17.5°
130°	33.5	35.5	34.5	28.6	23.6	20.7	19.7	17.7	15.8	12.8	9.9	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: P208580  
 NUMBER: XTOR12BRL-W

REPORT NUMBER: P  
 CATALOG NUMBER:

**DISTRIBUTION (continued):**

160°	165°	170°	175°	180°
3343.5	3343.5	3343.5	3343.5	3343.5
3129.7	3133.7	3136.6	3125.8	3123.8
2973.1	2974.1	2973.1	2956.4	2956.4
2800.7	2798.7	2792.8	2774.1	2771.2
2652.9	2652.0	2644.1	2629.3	2628.3
2544.6	2540.6	2531.8	2513.1	2514.0
2420.5	2404.7	2387.9	2359.4	2355.4
2180.1	2143.6	2099.3	2057.9	2047.1
1857.9	1824.5	1765.3	1744.7	1730.9
1572.3	1526.0	1478.7	1446.2	1428.4
1293.5	1231.4	1180.2	1150.6	1125.0
975.3	916.2	864.0	834.4	806.8
707.3	667.9	649.2	639.3	636.4
602.9	613.7	616.7	608.8	605.9
555.6	532.0	504.4	477.8	472.9
438.4	406.9	386.2	375.3	372.4
358.6	348.7	340.9	337.9	334.9
325.1	315.2	312.3	309.3	308.3
304.4	291.6	286.7	285.7	283.7
277.8	267.0	261.1	263.0	260.1
254.2	249.2	252.2	249.2	248.3
232.5	215.7	211.8	209.8	208.8
213.8	210.8	207.9	202.0	202.9
197.0	191.1	182.2	178.3	176.3
154.7	149.7	142.8	138.9	137.9
126.1	120.2	118.2	117.2	116.2
119.2	111.3	103.4	101.5	99.5
110.3	102.5	100.5	98.5	96.5
95.6	88.7	85.7	82.8	81.8
82.8	76.8	74.9	72.9	71.9
72.9	68.0	66.0	65.0	64.0
58.1	54.2	51.2	50.2	49.3
47.3	44.3	42.4	41.4	40.4
40.4	37.4	35.5	33.5	32.5
32.5	29.6	28.6	25.6	24.6
25.6	22.7	21.7	19.7	17.7
20.7	17.7	17.7	14.8	12.8
17.7	16.7	16.7	11.8	10.8
17.7	16.7	16.7	10.8	10.8
18.7	16.7	17.7	11.8	11.8
19.7	17.7	17.7	12.8	11.8
19.7	17.7	15.8	9.9	10.8
20.7	17.7	13.8	7.9	7.9
20.7	16.7	13.8	6.9	6.9
18.7	14.8	11.8	6.9	6.9

**CANDELA DISTRIBUTION:**

	160°
110°	15.8
112.5°	13.8
115°	12.8
117.5°	12.8
120°	11.8
122.5°	10.8
125°	9.9
127.5°	8.9
130°	8.9
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

'208580  
XTOR12BRL-W

**TION (continued):**

165°	170°	175°	180°
12.8	9.9	5.9	6.9
10.8	8.9	5.9	5.9
10.8	7.9	5.9	6.9
10.8	7.9	6.9	6.9
9.9	6.9	6.9	6.9
9.9	6.9	5.9	5.9
8.9	5.9	5.9	5.9
7.9	4.9	5.9	5.9
6.9	4.9	4.9	4.9
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

(END OF REPORT)