

Scaled data based on original data using
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge
or Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: STREETWORKS

Report Number: ITL53278_400MP

Luminaire Tested: **GMX40PXX5SF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: ITL53278_400MP
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GMX40PXX5SF
Description: 400W MH TYPE V AREA
Light Source: 400 WATT PULSE-START CLEAR ED-28 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 40000 (1 lamp)
Luminaire Lumens: 29333.6 lumens
Efficiency: 73.3%
Efficacy: 64.9 lumens/watt
Luminous Opening: Rectangular (W 1.01' x L: 1.03' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

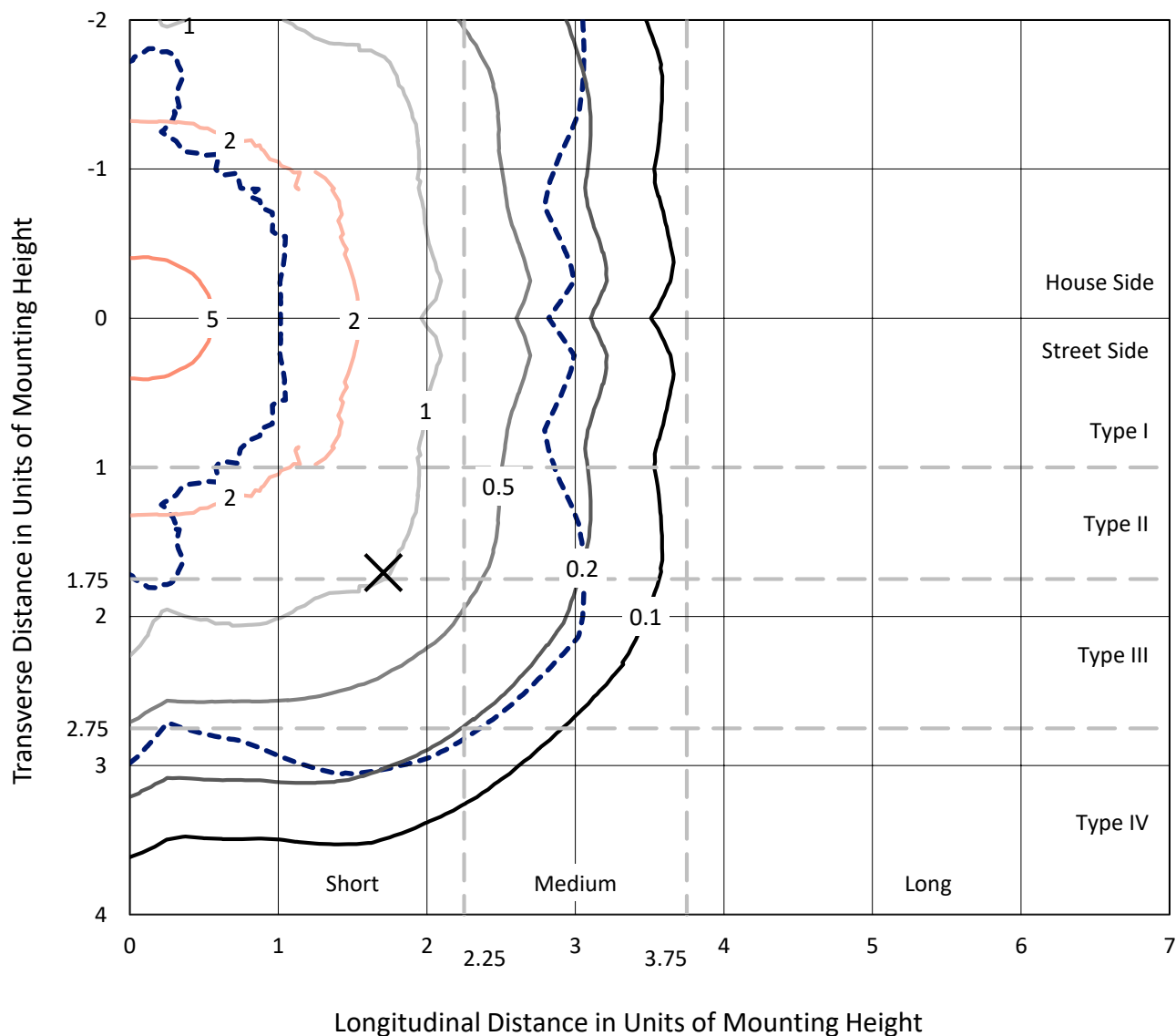
Input Watts (W): 452
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

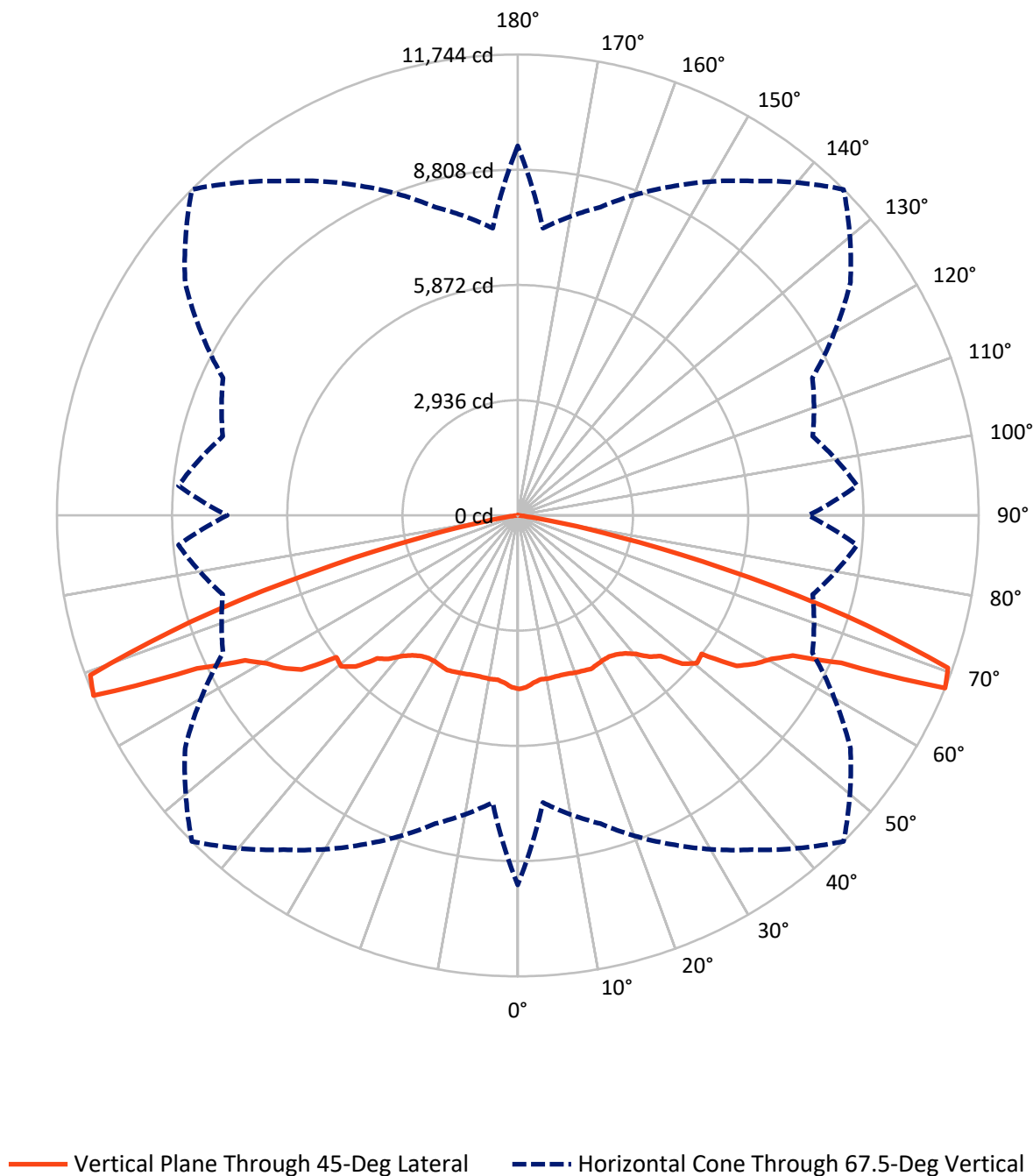
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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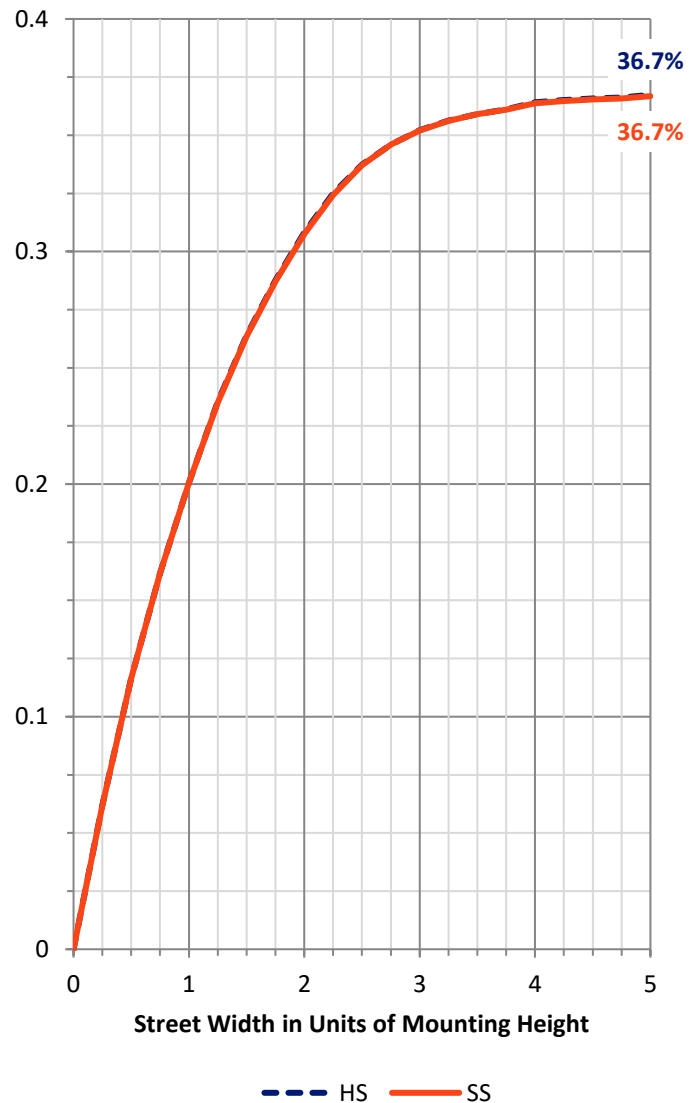
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14666.8	0.0	14666.8
	% Lamp	36.7	0.0	36.7
Street Side	Lumens	14666.8	0.0	14666.8
	% Lamp	36.7	0.0	36.7
Total	Lumens	29333.6	0.0	29333.6
	% Lamp	73.3	0.0	73.3

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	407.2	1.4	1.0
10°-20°	1191.0	4.1	3.0
20°-30°	1991.2	6.8	5.0
30°-40°	2748.1	9.4	6.9
40°-50°	4090.5	13.9	10.2
50°-60°	6001.1	20.5	15.0
60°-70°	8178.6	27.9	20.4
70°-80°	4514.3	15.4	11.3
80°-90°	211.5	0.7	0.5
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	29333.6	100.0	73.3
0°-180°	29333.6	100.0	73.3

Coefficient of Utilization

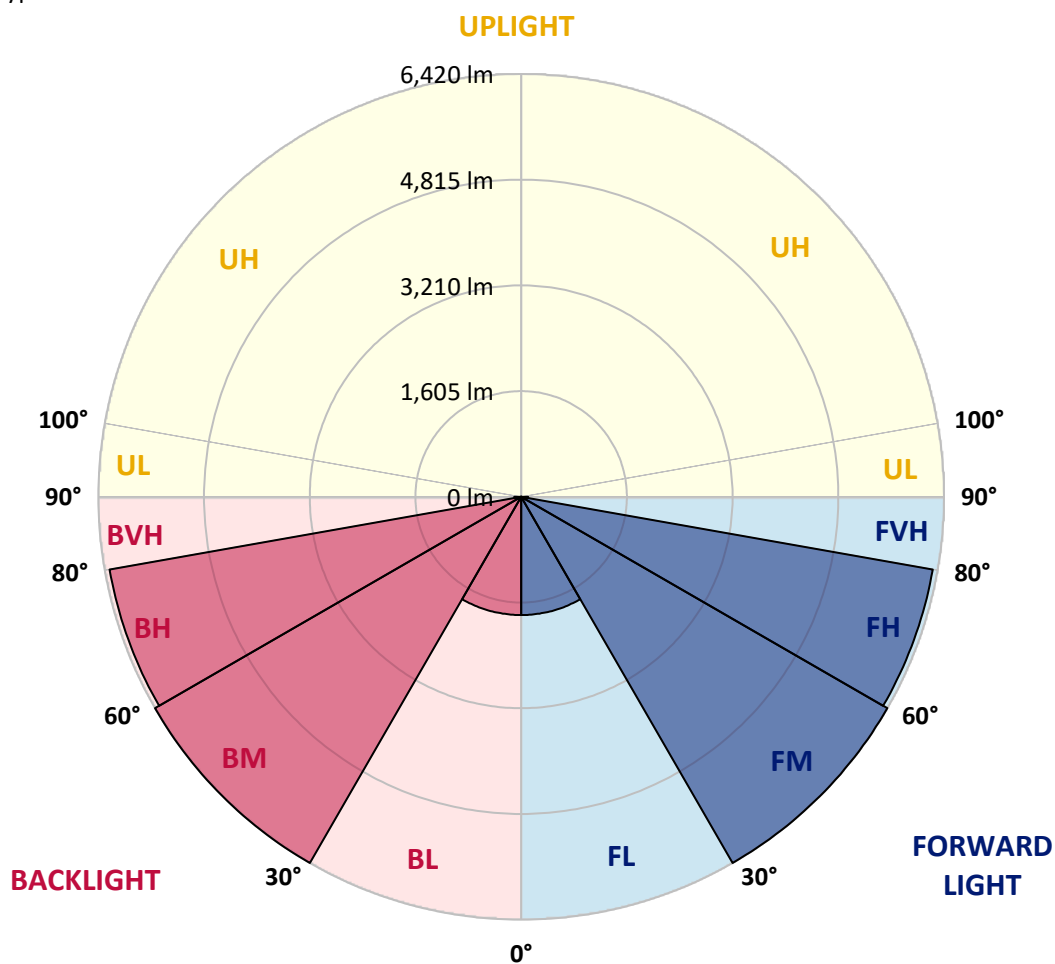


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1794.7	4.5			
FM	(30°-60°)	6419.9	16.0			
FH	(60°-80°)	6346.4	15.9			G3/7500
FVH	(80°-90°)	105.7	0.3			G2/225
BL	(0°-30°)	1794.7	4.5	B3/2500		
BM	(30°-60°)	6419.9	16.0	B4/8500		
BH	(60°-80°)	6346.4	15.9	B5		G3/7500
BVH	(80°-90°)	105.7	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		10666.4	26.7			

BUG Rating: B5-U0-G3
Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4423.3	4423.3	4423.3	4423.3	4423.3	4423.3	4423.3	4423.3	4423.3	4423.3	4423.3
2.5°	4355.6	4355.6	4368.9	4368.9	4368.9	4377.8	4383.3	4387.8	4392.2	4401.1	4401.1
5°	4245.6	4250.0	4258.9	4263.3	4268.9	4277.8	4305.6	4336.7	4341.1	4360.0	4364.4
7.5°	4154.4	4158.9	4176.7	4185.6	4204.4	4217.8	4236.7	4254.4	4286.7	4300.0	4300.0
10°	4098.9	4107.8	4135.6	4163.3	4195.6	4227.8	4250.0	4263.3	4291.1	4314.4	4310.0
12.5°	4044.4	4044.4	4076.7	4126.7	4176.7	4217.8	4258.9	4286.7	4305.6	4318.9	4318.9
15°	3952.2	3966.7	4003.3	4076.7	4150.0	4217.8	4268.9	4310.0	4327.8	4336.7	4336.7
17.5°	3925.6	3930.0	3980.0	4057.8	4154.4	4236.7	4310.0	4355.6	4377.8	4387.8	4392.2
20°	3906.7	3921.1	3980.0	4062.2	4154.4	4268.9	4351.1	4410.0	4442.2	4455.6	4455.6
22.5°	3943.3	3966.7	4016.7	4085.6	4167.8	4295.6	4405.6	4483.3	4528.9	4552.2	4547.8
25°	3943.3	3984.4	4048.9	4122.2	4208.9	4332.2	4487.8	4580.0	4634.4	4647.8	4657.8
27.5°	3952.2	3962.2	4025.6	4117.8	4181.1	4305.6	4474.4	4593.3	4657.8	4671.1	4675.6
30°	3824.4	3833.3	3921.1	4025.6	4122.2	4277.8	4442.2	4580.0	4634.4	4657.8	4666.7
32.5°	3742.2	3755.6	3843.3	3975.6	4113.3	4286.7	4455.6	4606.7	4680.0	4730.0	4740.0
35°	3733.3	3751.1	3865.6	4012.2	4176.7	4346.7	4533.3	4694.4	4772.2	4826.7	4831.1
37.5°	3778.9	3796.7	3925.6	4098.9	4273.3	4461.1	4630.0	4803.3	4885.6	4950.0	4968.9
40°	3897.8	3943.3	4117.8	4310.0	4474.4	4643.3	4803.3	4977.8	5096.7	5174.4	5187.8
42.5°	4172.2	4217.8	4383.3	4584.4	4730.0	4922.2	4945.6	5151.1	5321.1	5403.3	5398.9
45°	4876.7	4872.2	4954.4	5055.6	5036.7	5110.0	5196.7	5330.0	5626.7	5768.9	5773.3
47.5°	5416.7	5357.8	5362.2	5288.9	5498.9	5645.6	5211.1	5476.7	6084.4	6244.4	6185.6
50°	5874.4	5855.6	5892.2	5980.0	6226.7	5920.0	6291.1	6203.3	6432.2	6954.4	6825.6
52.5°	5663.3	5677.8	6047.8	6002.2	5814.4	5865.6	6190.0	6181.1	6798.9	7343.3	7311.1
55°	5544.4	5507.8	5956.7	6194.4	6652.2	6766.7	6518.9	6756.7	7443.3	7791.1	7466.7
57.5°	5270.0	5192.2	6181.1	6862.2	7690.0	7132.2	8871.1	8532.2	7447.8	7814.4	7384.4
60°	5828.9	5211.1	6025.6	7343.3	6620.0	7425.6	9131.1	7008.9	6912.2	7100.0	6725.6
62.5°	7311.1	6341.1	6788.9	8138.9	7918.9	7864.4	8221.1	7311.1	7384.4	7228.9	6514.4
65°	9543.3	7557.8	8162.2	9364.4	8637.8	9058.9	10137.8	8353.3	7690.0	8147.8	7036.7
67.5°	9415.6	7343.3	8130.0	9245.6	10398.9	11744.4	10348.9	8285.6	7782.2	8678.9	7402.2
70°	7274.4	5736.7	6784.4	8592.2	10582.2	11630.0	10778.9	7672.2	6620.0	7374.4	6295.6
72.5°	4858.9	3897.8	4822.2	6775.6	7974.4	8756.7	7814.4	6477.8	4451.1	5055.6	3971.1
75°	2936.7	2296.7	2900.0	4492.2	5187.8	5435.6	5777.8	4694.4	3180.0	3340.0	2497.8
77.5°	1610.0	1225.6	1510.0	2324.4	2452.2	2598.9	3024.4	3266.7	1687.8	1738.9	1281.1
80°	750.0	608.9	708.9	920.0	832.2	823.3	983.3	987.8	750.0	682.2	512.2
82.5°	311.1	256.7	278.9	324.4	297.8	251.1	293.3	302.2	287.8	233.3	201.1
85°	110.0	91.1	91.1	101.1	86.7	77.8	82.2	86.7	95.6	73.3	64.4
87.5°	8.9	4.4	4.4	8.9	4.4	4.4	4.4	4.4	4.4	4.4	8.9
90°	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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4423.3	4423.3	4423.3	4423.3	4423.3	4423.3	4423.3	4423.3	4423.3	4423.3
2.5°	4401.1	4392.2	4387.8	4383.3	4377.8	4368.9	4368.9	4368.9	4355.6	4355.6
5°	4360.0	4341.1	4336.7	4305.6	4277.8	4268.9	4263.3	4258.9	4250.0	4245.6
7.5°	4300.0	4286.7	4254.4	4236.7	4217.8	4204.4	4185.6	4176.7	4158.9	4154.4
10°	4314.4	4291.1	4263.3	4250.0	4227.8	4195.6	4163.3	4135.6	4107.8	4098.9
12.5°	4318.9	4305.6	4286.7	4258.9	4217.8	4176.7	4126.7	4076.7	4044.4	4044.4
15°	4336.7	4327.8	4310.0	4268.9	4217.8	4150.0	4076.7	4003.3	3966.7	3952.2
17.5°	4387.8	4377.8	4355.6	4310.0	4236.7	4154.4	4057.8	3980.0	3930.0	3925.6
20°	4455.6	4442.2	4410.0	4351.1	4268.9	4154.4	4062.2	3980.0	3921.1	3906.7
22.5°	4552.2	4528.9	4483.3	4405.6	4295.6	4167.8	4085.6	4016.7	3966.7	3943.3
25°	4647.8	4634.4	4580.0	4487.8	4332.2	4208.9	4122.2	4048.9	3984.4	3943.3
27.5°	4671.1	4657.8	4593.3	4474.4	4305.6	4181.1	4117.8	4025.6	3962.2	3952.2
30°	4657.8	4634.4	4580.0	4442.2	4277.8	4122.2	4025.6	3921.1	3833.3	3824.4
32.5°	4730.0	4680.0	4606.7	4455.6	4286.7	4113.3	3975.6	3843.3	3755.6	3742.2
35°	4826.7	4772.2	4694.4	4533.3	4346.7	4176.7	4012.2	3865.6	3751.1	3733.3
37.5°	4950.0	4885.6	4803.3	4630.0	4461.1	4273.3	4098.9	3925.6	3796.7	3778.9
40°	5174.4	5096.7	4977.8	4803.3	4643.3	4474.4	4310.0	4117.8	3943.3	3897.8
42.5°	5403.3	5321.1	5151.1	4945.6	4922.2	4730.0	4584.4	4383.3	4217.8	4172.2
45°	5768.9	5626.7	5330.0	5196.7	5110.0	5036.7	5055.6	4954.4	4872.2	4876.7
47.5°	6244.4	6084.4	5476.7	5211.1	5645.6	5498.9	5288.9	5362.2	5357.8	5416.7
50°	6954.4	6432.2	6203.3	6291.1	5920.0	6226.7	5980.0	5892.2	5855.6	5874.4
52.5°	7343.3	6798.9	6181.1	6190.0	5865.6	5814.4	6002.2	6047.8	5677.8	5663.3
55°	7791.1	7443.3	6756.7	6518.9	6766.7	6652.2	6194.4	5956.7	5507.8	5544.4
57.5°	7814.4	7447.8	8532.2	8871.1	7132.2	7690.0	6862.2	6181.1	5192.2	5270.0
60°	7100.0	6912.2	7008.9	9131.1	7425.6	6620.0	7343.3	6025.6	5211.1	5828.9
62.5°	7228.9	7384.4	7311.1	8221.1	7864.4	7918.9	8138.9	6788.9	6341.1	7311.1
65°	8147.8	7690.0	8353.3	10137.8	9058.9	8637.8	9364.4	8162.2	7557.8	9543.3
67.5°	8678.9	7782.2	8285.6	10348.9	11744.4	10398.9	9245.6	8130.0	7343.3	9415.6
70°	7374.4	6620.0	7672.2	10778.9	11630.0	10582.2	8592.2	6784.4	5736.7	7274.4
72.5°	5055.6	4451.1	6477.8	7814.4	8756.7	7974.4	6775.6	4822.2	3897.8	4858.9
75°	3340.0	3180.0	4694.4	5777.8	5435.6	5187.8	4492.2	2900.0	2296.7	2936.7
77.5°	1738.9	1687.8	3266.7	3024.4	2598.9	2452.2	2324.4	1510.0	1225.6	1610.0
80°	682.2	750.0	987.8	983.3	823.3	832.2	920.0	708.9	608.9	750.0
82.5°	233.3	287.8	302.2	293.3	251.1	297.8	324.4	278.9	256.7	311.1
85°	73.3	95.6	86.7	82.2	77.8	86.7	101.1	91.1	91.1	110.0
87.5°	4.4	4.4	4.4	4.4	4.4	4.4	8.9	4.4	4.4	8.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)