

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: ITL49959_350MP

Luminaire Tested: **GMX35PXX4SF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-46-04
Report Number: ITL49959_350MP
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GMX35PXX4SF
Description: 400W MH TYPE IV AREA
Light Source: 350 WATT PULSE-START CLEAR ED-28 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 33000 (1 lamp)
Luminaire Lumens: 24607.5 lumens
Efficiency: 74.6%
Efficacy: 62.0 lumens/watt
Luminous Opening: Rectangular (W 1.09' x L: 1.06' x H: 0')
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B4 - U0 - G3

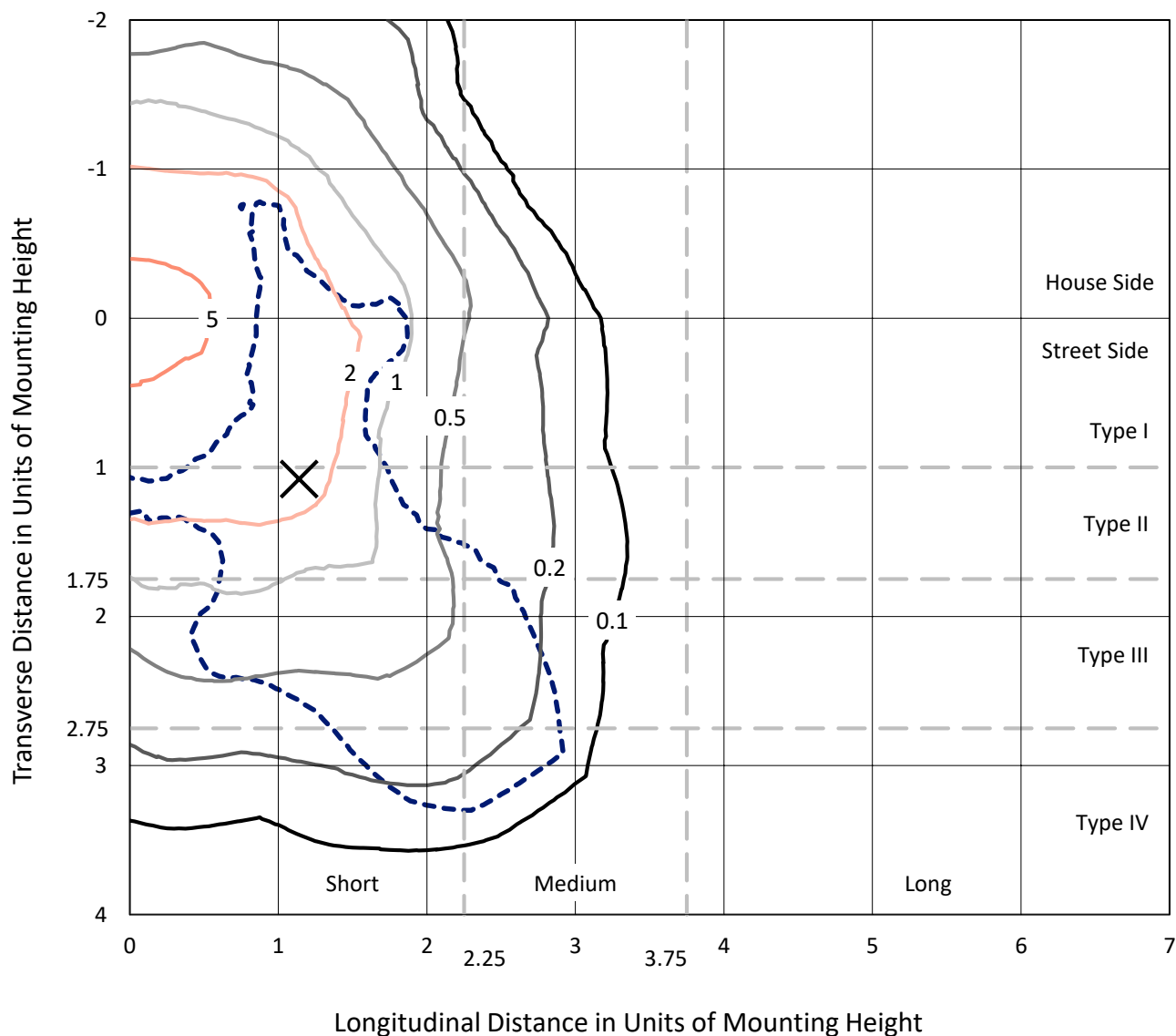
Input Watts (W): 397
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

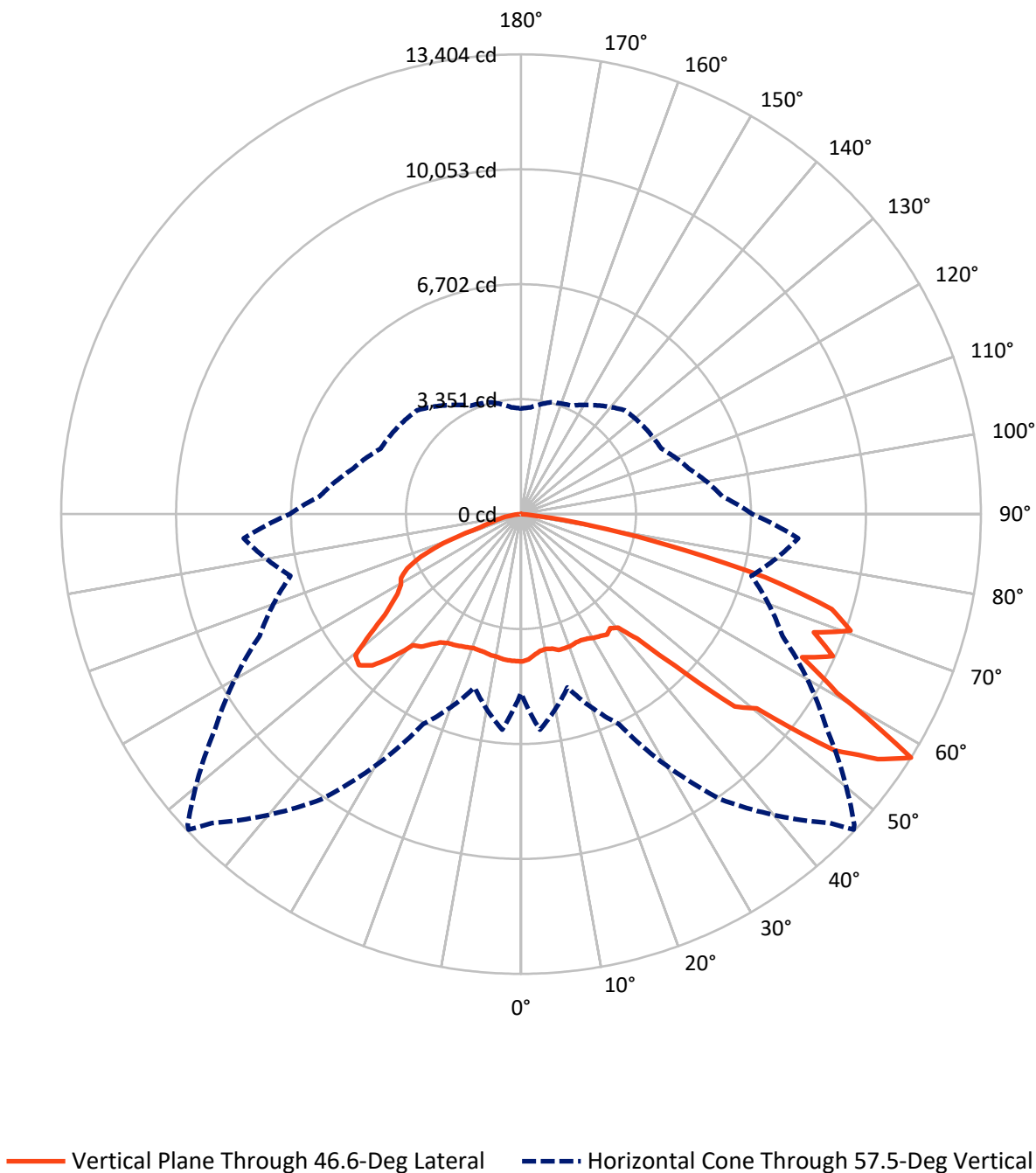
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc
 Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



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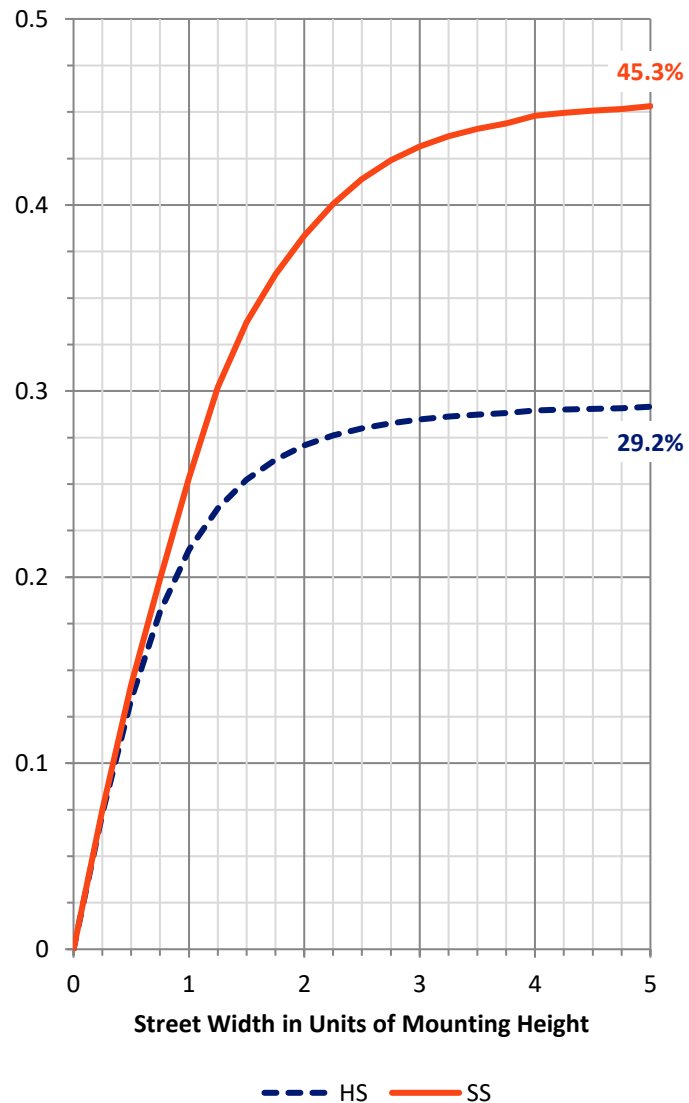
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9668.1	0.0	9668.1
	% Lamp	29.3	0.0	29.3
Street Side	Lumens	14939.4	0.0	14939.4
	% Lamp	45.3	0.0	45.3
Total	Lumens	24607.5	0.0	24607.5
	% Lamp	74.6	0.0	74.6

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	399.0	1.6	1.2
10°-20°	1167.2	4.7	3.5
20°-30°	1944.1	7.9	5.9
30°-40°	2887.4	11.7	8.7
40°-50°	4581.6	18.6	13.9
50°-60°	5811.5	23.6	17.6
60°-70°	4881.5	19.8	14.8
70°-80°	2654.6	10.8	8.0
80°-90°	280.7	1.1	0.9
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°	24607.5	100.0	74.6
0°-180°	24607.5	100.0	74.6

Coefficient of Utilization

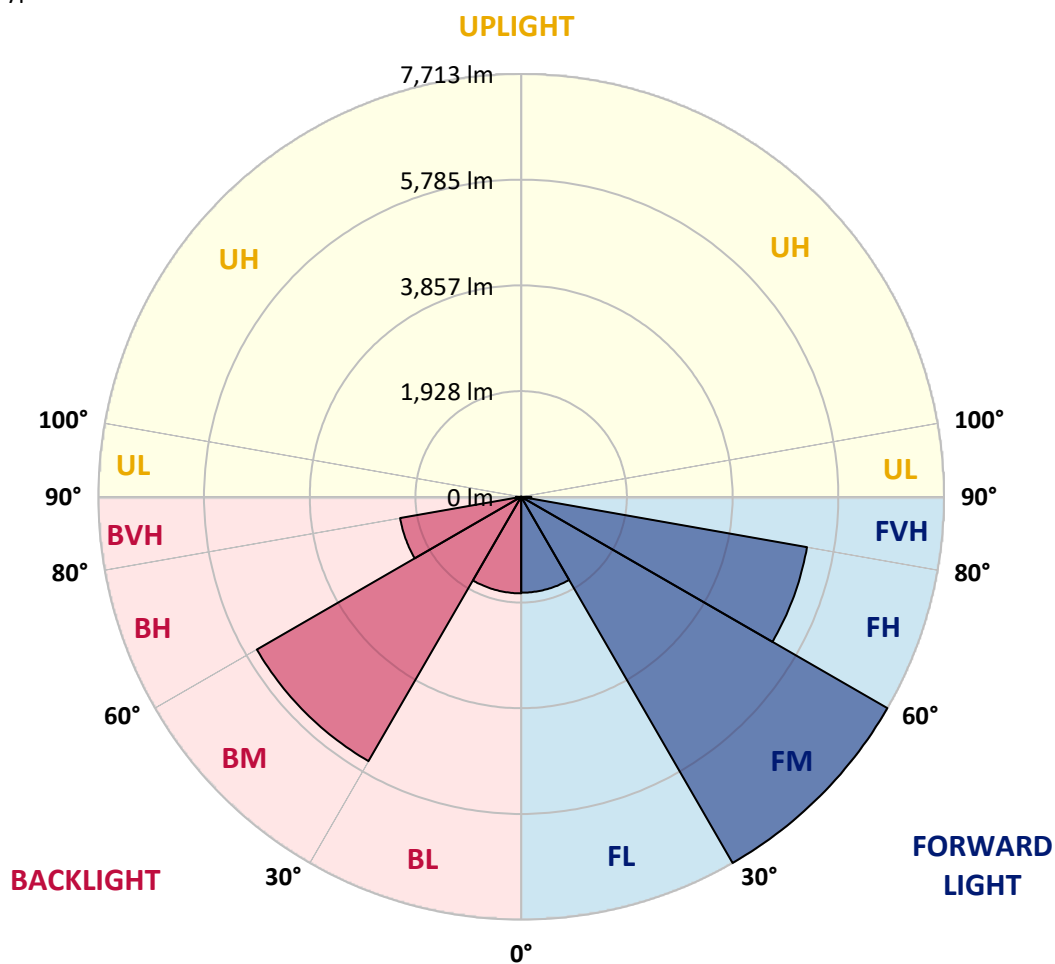


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1749.0	5.3			
FM	(30°-60°)	7713.0	23.4			
FH	(60°-80°)	5294.0	16.0			G3/7500
FVH	(80°-90°)	183.4	0.6			G2/225
BL	(0°-30°)	1761.2	5.3	B3/2500		
BM	(30°-60°)	5567.4	16.9	B4/8500		
BH	(60°-80°)	2242.2	6.8	B3/2500		G3/2500
BVH	(80°-90°)	97.2	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		8392.5	25.4			

BUG Rating: B4-U0-G3
Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46.6°	55°	65°	75°	85°
0°	4294.6	4294.6	4294.6	4294.6	4294.6	4294.6	4294.6	4294.6	4294.6	4294.6	4294.6
2.5°	4194.7	4213.0	4213.0	4241.4	4268.9	4268.9	4241.4	4268.9	4288.2	4278.1	4288.2
5°	4026.9	4045.2	4054.4	4082.8	4101.2	4129.6	4120.4	4147.9	4176.3	4194.7	4222.2
7.5°	3952.7	3980.2	3980.2	3998.5	4008.6	4036.1	4026.9	4054.4	4101.2	4138.8	4185.5
10°	3952.7	3952.7	3971.0	3980.2	3998.5	4008.6	3998.5	4036.1	4073.7	4110.3	4157.1
12.5°	3952.7	3961.8	3980.2	4017.8	4017.8	4026.9	4026.9	4064.5	4092.0	4092.0	4120.4
15°	4045.2	4026.9	4036.1	4026.9	4073.7	4092.0	4110.3	4082.8	4073.7	4082.8	4110.3
17.5°	4288.2	4250.6	4353.2	4259.8	4120.4	4110.3	4110.3	4110.3	4101.2	4101.2	4147.9
20°	4380.8	4389.9	4120.4	4147.9	4129.6	4101.2	4110.3	4138.8	4157.1	4176.3	4232.2
22.5°	4157.1	4157.1	4045.2	4092.0	4054.4	4073.7	4073.7	4157.1	4241.4	4278.1	4344.1
25°	4120.4	4064.5	3952.7	4026.9	4017.8	4073.7	4073.7	4185.5	4353.2	4371.6	4465.1
27.5°	3952.7	3998.5	3971.0	3980.2	3971.0	4073.7	4110.3	4297.3	4511.8	4530.2	4604.4
30°	4045.2	3971.0	3933.4	4054.4	3980.2	4110.3	4185.5	4436.7	4744.7	4604.4	4660.3
32.5°	4324.8	4353.2	3933.4	4138.8	4054.4	4194.7	4241.4	4884.0	4800.6	4539.3	4753.8
35°	4380.8	4436.7	4297.3	4157.1	4120.4	4213.0	4315.7	4735.5	5051.8	4977.5	5117.8
37.5°	4288.2	4409.2	4604.4	4380.8	4241.4	4166.2	4222.2	4753.8	5545.8	5835.5	5713.6
40°	4567.8	4772.2	4959.2	4669.5	4567.8	4288.2	4353.2	4986.7	6207.7	6254.4	6105.0
42.5°	5071.0	5210.3	5294.7	4995.8	4838.2	4791.4	4959.2	5415.7	6701.8	6665.1	6665.1
45°	5965.7	5686.1	5518.3	5275.4	5891.4	6319.5	6310.3	6068.3	7280.2	7177.5	7531.3
47.5°	6171.0	6422.2	6216.8	6721.0	7260.9	8174.8	8380.2	6776.9	7783.4	7848.5	8109.8
50°	7363.6	6589.9	6944.7	8342.6	8034.6	8715.7	8910.9	8454.4	8360.9	7978.7	7736.7
52.5°	6468.9	6655.0	6543.2	9163.0	8845.8	10924.8	11446.4	9731.3	8892.6	8360.9	8342.6
54°	5592.6	6245.2	6226.9	8398.5	9265.7	11632.5	12080.8	10514.2	9358.2	8715.7	8631.3
55°	5368.9	6012.4	6068.3	7643.2	9284.0	11922.2	12611.5	10840.5	9693.8	9097.9	8268.3
57.5°	5219.5	6310.3	5229.6	6757.7	10151.2	12742.6	13403.5	10868.9	8407.7	6953.8	8109.8
60°	4995.8	5918.9	5331.3	6888.8	8789.9	10793.8	10589.3	8687.2	6059.2	5648.5	7037.2
62.5°	4791.4	5378.1	5900.6	7307.7	7578.1	9581.9	9199.7	7708.2	5462.4	5471.6	6095.8
65°	4604.4	5499.1	6869.5	7037.2	7260.9	9554.4	9992.6	6515.7	4995.8	4838.2	4874.8
67.5°	4157.1	5219.5	6739.3	7065.7	8333.4	10234.6	9209.8	6068.3	4950.0	4268.9	4120.4
70°	3616.2	4427.5	5089.3	6636.7	9031.9	10579.2	10187.8	6468.9	4791.4	3905.9	3094.7
72.5°	3076.3	3421.0	3327.5	5518.3	9927.5	10010.9	9470.1	6105.0	4483.4	2759.2	2432.8
75°	2124.8	2348.5	2582.2	4735.5	7848.5	7951.2	7354.4	4324.8	3467.8	1985.5	1920.4
77.5°	1305.3	1547.3	1518.9	2535.5	4213.0	4939.9	4362.4	2805.9	2647.3	1808.6	1612.4
80°	708.6	717.8	755.3	1090.8	1379.6	2442.0	2124.8	1640.8	1836.1	1174.2	1286.1
82.5°	205.3	214.5	288.8	326.3	465.7	838.8	643.5	802.1	745.2	503.2	699.4
85°	37.6	46.8	74.2	55.9	84.3	140.2	65.1	326.3	232.8	140.2	223.7
87.5°	0.0	0.0	0.0	0.0	0.0	9.2	0.0	9.2	9.2	18.3	18.3
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4294.6	4294.6	4294.6	4294.6	4294.6	4294.6	4294.6	4294.6	4294.6	4294.6	4294.6
2.5°	4297.3	4288.2	4288.2	4278.1	4288.2	4288.2	4278.1	4268.9	4259.8	4268.9	4268.9
5°	4232.2	4250.6	4278.1	4288.2	4288.2	4278.1	4278.1	4306.5	4306.5	4297.3	4306.5
7.5°	4203.8	4222.2	4268.9	4268.9	4268.9	4259.8	4241.4	4268.9	4278.1	4268.9	4268.9
10°	4166.2	4194.7	4232.2	4268.9	4250.6	4213.0	4194.7	4203.8	4203.8	4185.5	4176.3
12.5°	4138.8	4157.1	4194.7	4232.2	4213.0	4203.8	4147.9	4120.4	4082.8	4045.2	4026.9
15°	4129.6	4120.4	4147.9	4157.1	4166.2	4166.2	4129.6	4045.2	3989.3	3980.2	3971.0
17.5°	4166.2	4166.2	4203.8	4222.2	4185.5	4147.9	4120.4	4017.8	3961.8	3961.8	3933.4
20°	4222.2	4232.2	4259.8	4259.8	4222.2	4129.6	4101.2	3998.5	3942.6	3924.2	3915.1
22.5°	4344.1	4362.4	4400.0	4324.8	4250.6	4176.3	4082.8	3989.3	3924.2	3905.9	3895.8
25°	4492.6	4492.6	4492.6	4409.2	4324.8	4213.0	4064.5	3980.2	3924.2	3895.8	3859.2
27.5°	4642.0	4623.7	4623.7	4539.3	4389.9	4259.8	4073.7	3961.8	3877.5	3830.8	3839.9
30°	4697.9	4688.8	4660.3	4669.5	4530.2	4278.1	4101.2	3924.2	3830.8	3803.2	3803.2
32.5°	4856.5	4884.0	4744.7	4800.6	4679.6	4362.4	4110.3	3905.9	3812.4	3765.7	3765.7
35°	5163.6	5136.1	4959.2	5173.7	5126.9	4492.6	4120.4	3905.9	3765.7	3709.8	3709.8
37.5°	5751.2	5695.2	5480.8	5378.1	5639.3	4688.8	4138.8	3905.9	3718.9	3663.0	3653.8
40°	6171.0	6142.6	5881.3	5788.8	5565.1	4838.2	4222.2	3895.8	3691.4	3626.3	3616.2
42.5°	6766.8	6739.3	6263.6	6292.0	5835.5	5565.1	4344.1	3905.9	3672.2	3607.1	3597.9
45°	7745.8	7699.1	6757.7	6730.2	6319.5	6151.8	4604.4	3905.9	3635.5	3588.8	3616.2
47.5°	8193.2	7913.6	6851.2	6739.3	6497.3	6450.6	4651.2	3886.7	3607.1	3588.8	3653.8
50°	7550.6	7336.1	6609.2	6310.3	6580.8	6301.2	4539.3	3821.6	3579.6	3551.2	3579.6
52.5°	7708.2	7065.7	5909.8	5098.5	6357.1	5247.9	4232.2	3738.2	3532.8	3653.8	3504.4
54°	7522.2	6562.4	5443.2	4716.2	5695.2	4791.4	4120.4	3672.2	3514.5	3756.5	3448.5
55°	7000.6	6124.2	5266.2	4632.8	5275.4	4623.7	4026.9	3635.5	3523.7	3653.8	3355.9
57.5°	6739.3	5891.4	5080.2	4511.8	4400.0	4278.1	3868.3	3486.1	3374.2	3122.2	3076.3
60°	6813.6	6310.3	5005.9	4362.4	4138.8	4045.2	3738.2	3309.2	3197.3	2703.2	2665.7
62.5°	6068.3	5928.1	4828.1	4110.3	3942.6	3961.8	3635.5	3141.4	3179.0	2488.8	2497.9
65°	5061.8	5443.2	4232.2	3570.4	3355.9	3728.1	3467.8	2954.4	2600.6	2292.6	2311.8
67.5°	4660.3	4539.3	3020.4	2311.8	2106.5	3365.1	3168.9	2730.8	2274.2	2209.2	2162.4
70°	3560.3	2861.8	1659.2	1332.8	1323.7	2618.9	2740.8	2386.1	1985.5	2059.8	1957.1
72.5°	2246.8	1621.6	1109.2	894.7	979.0	1286.1	1855.3	1845.2	1594.1	1621.6	1715.1
75°	1594.1	1193.5	838.8	699.4	764.5	894.7	979.0	1053.2	1081.7	1267.8	1491.4
77.5°	1351.2	969.8	652.7	531.7	577.5	708.6	643.5	671.0	708.6	764.5	876.3
80°	1062.4	717.8	475.8	382.2	429.0	531.7	475.8	465.7	484.9	512.4	540.8
82.5°	568.3	391.4	288.8	242.0	270.4	317.2	288.8	288.8	308.0	297.9	335.5
85°	196.2	158.6	130.2	111.8	111.8	130.2	130.2	130.2	140.2	140.2	167.8
87.5°	18.3	18.3	28.4	18.3	18.3	18.3	28.4	28.4	28.4	18.3	37.6
90°	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)