

Scaled data based on original data using
LM-31-95 IESNA Approved Method for Photometric Testing of Roadway Luminaires
Using Incandescent Filament and High Intensity Discharge Lamps

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: STREETWORKS

Report Number: 767437_320MP

Luminaire Tested: **OVX32PXX3EG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: 767437_320MP
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: OVX32PXX3EG
Description: 400 WATT MH TYPE III ROADWAY
Light Source: 320 WATT PULSE-START CLEAR ED-28 HORIZONTAL BURN
Ballast/Driver: -

Summary

Lumens per Lamp: 30000 (1 lamp)
Luminaire Lumens: 23185.4 lumens
Efficiency: 77.3%
Efficacy: 66.2 lumens/watt
Luminous Opening: Point Source (0' x 0' x 0')
IES Classification: Type III - Medium - Semi-Cutoff
BUG Rating: B3 - U3 - G4

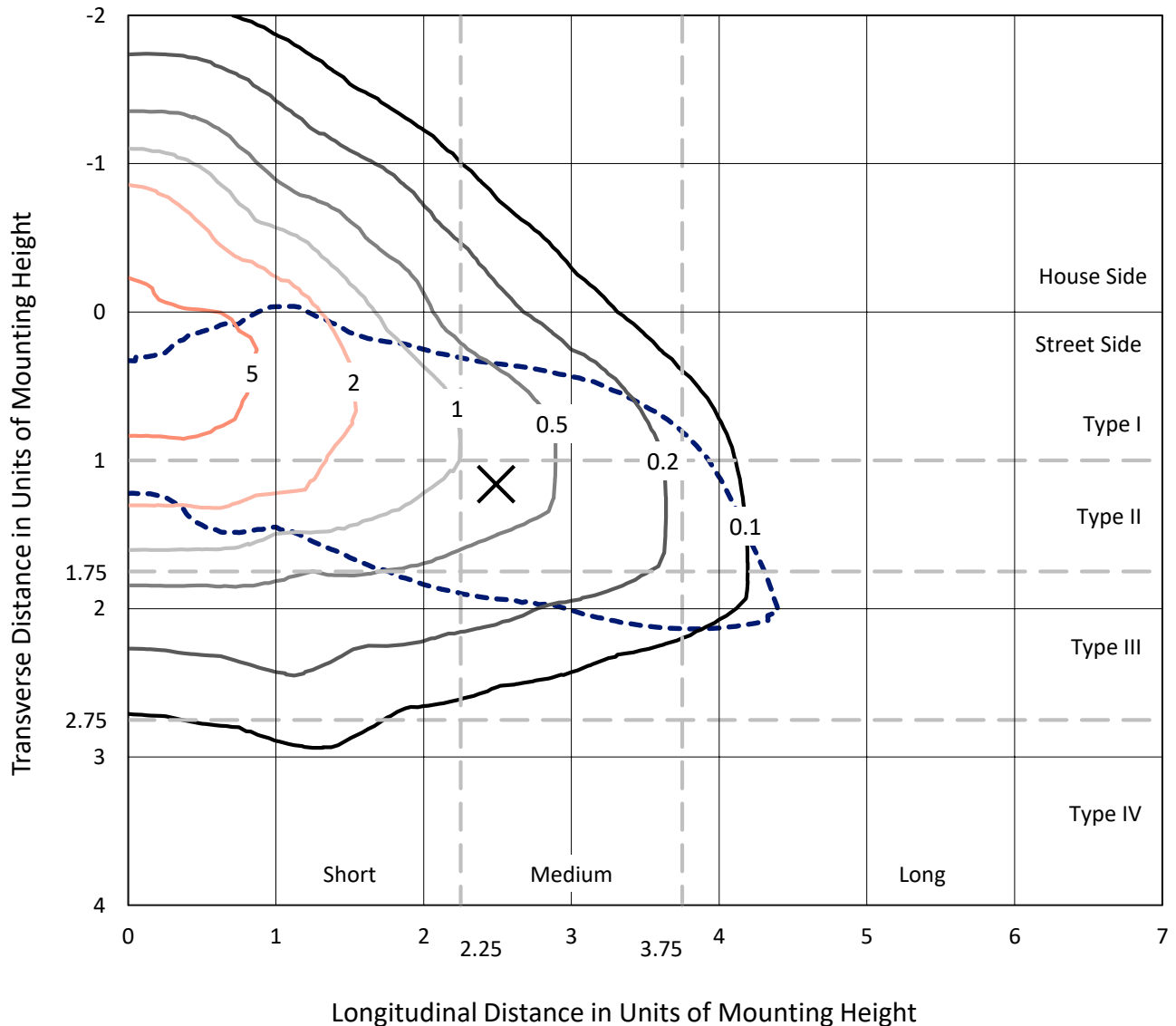
Input Watts (W): 350
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

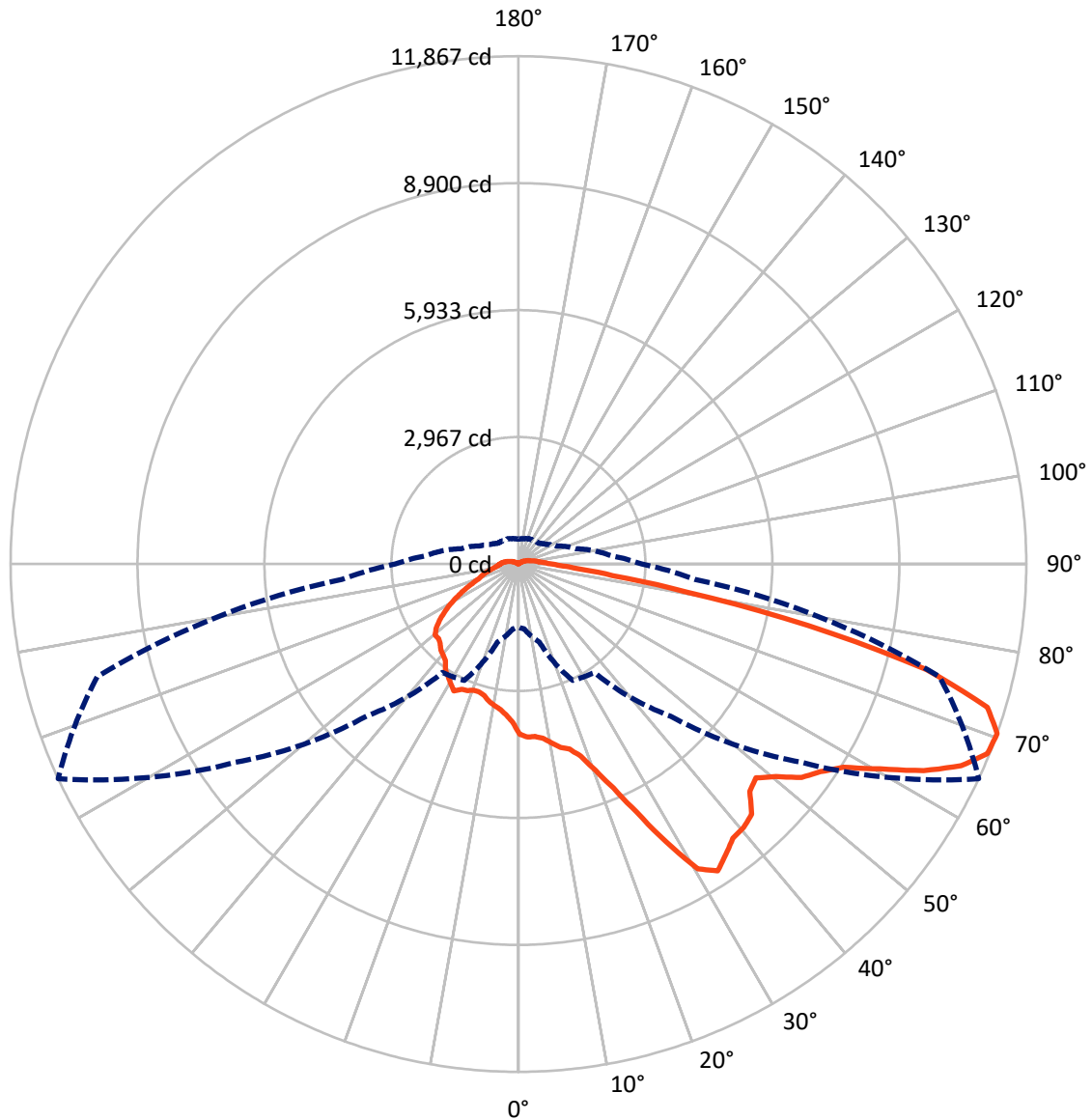
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
 Type III - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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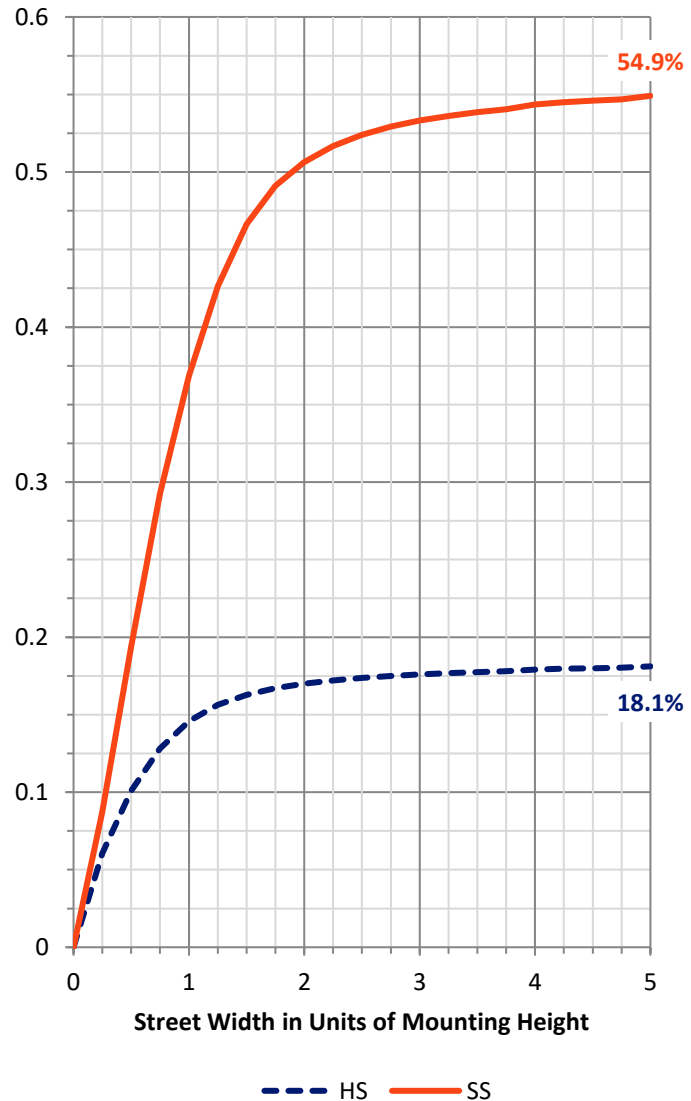
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5579.7	293.2	5872.9
	% Lamp	18.6	1.0	19.6
Street Side	Lumens	16730.4	582.1	17312.5
	% Lamp	55.8	1.9	57.7
Total	Lumens	22310.0	875.3	23185.4
	% Lamp	74.4	2.9	77.3

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	375.4	1.6	1.3
10°-20°	1169.1	5.0	3.9
20°-30°	2271.7	9.8	7.6
30°-40°	3480.5	15.0	11.6
40°-50°	4047.0	17.5	13.5
50°-60°	4113.2	17.7	13.7
60°-70°	3624.0	15.6	12.1
70°-80°	2384.2	10.3	7.9
80°-90°	845.1	3.6	2.8
90°-100°	434.6	1.9	1.4
100°-110°	266.8	1.2	0.9
110°-120°	136.1	0.6	0.5
120°-130°	46.7	0.2	0.2
130°-140°	7.4	0.0	0.0
140°-150°	0.1	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°	22310.0	96.2	74.4
0°-180°	23185.4	100.0	77.3

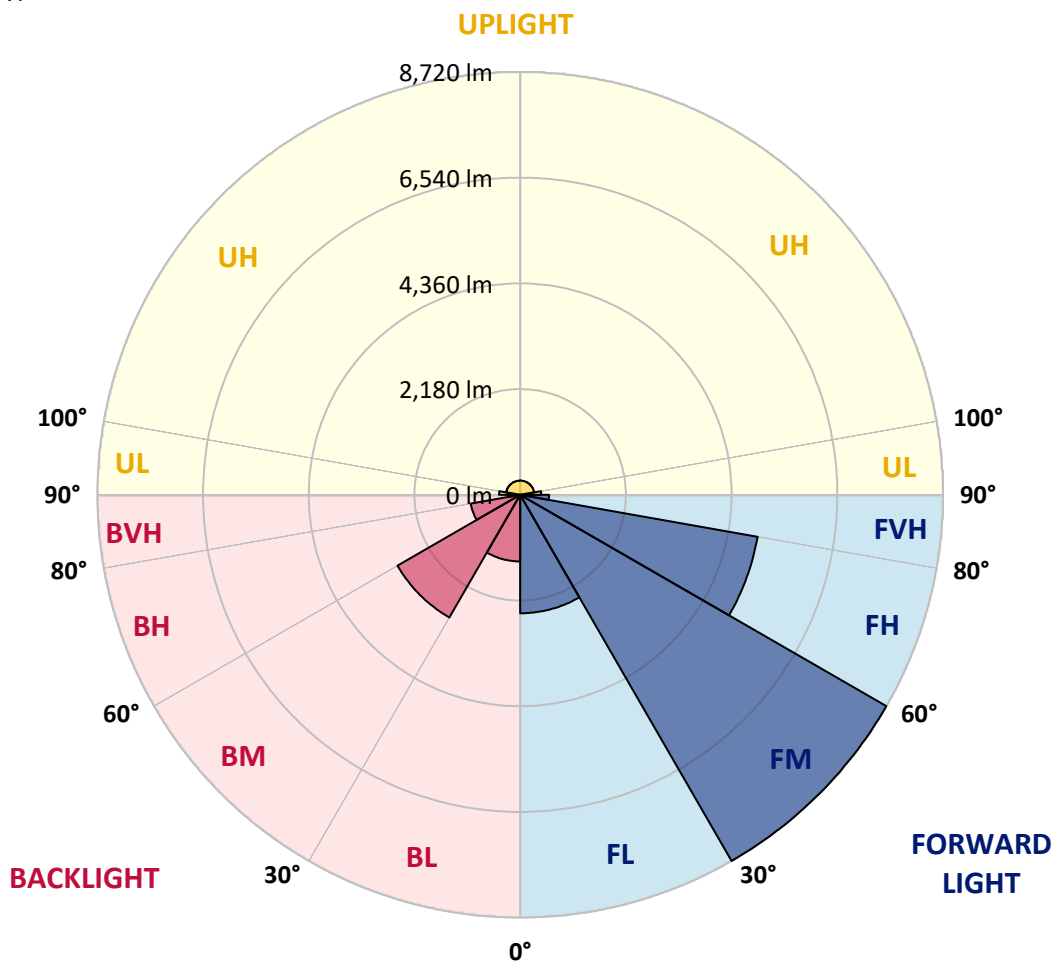


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2442.0	8.1			
FM (30°-60°)	8719.8	29.1			
FH (60°-80°)	4972.5	16.6			G2/5000
FVH (80°-90°)	596.1	2.0			G4/750
BL (0°-30°)	1374.1	4.6	B3/2500		
BM (30°-60°)	2920.8	9.7	B3/5000		
BH (60°-80°)	1035.7	3.5	B3/2500		G3/2500
BVH (80°-90°)	249.1	0.8			G3/500
UL (90°-100°)	434.6	1.4		U3/500	
UH (100°-180°)	293.2	1.0		U3/500	
Trapped Light	6814.6	22.7			

BUG Rating: B3-U3-G4
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3980.8	3980.8	3980.8	3980.8	3980.8	3980.8	3980.8	3980.8	3980.8	3980.8	3980.8
2.5°	4237.5	4230.8	4224.2	4204.2	4170.0	4135.8	4081.7	4048.3	4007.5	3980.8	3953.3
5°	4414.2	4406.7	4386.7	4345.8	4291.7	4224.2	4135.8	4048.3	3960.0	3899.2	3858.3
7.5°	4603.3	4630.0	4590.0	4515.0	4427.5	4332.5	4224.2	4109.2	3966.7	3845.0	3797.5
10°	4860.8	4880.8	4820.0	4711.7	4610.0	4495.0	4380.0	4251.7	4068.3	3865.8	3784.2
12.5°	5158.3	5145.0	5077.5	4948.3	4806.7	4684.2	4562.5	4400.0	4163.3	3905.8	3797.5
15°	5456.7	5456.7	5415.8	5246.7	5090.8	4948.3	4738.3	4488.3	4183.3	3919.2	3784.2
17.5°	5740.8	5754.2	5821.7	5665.8	5483.3	5260.0	4982.5	4718.3	4373.3	4000.8	3838.3
20°	6092.5	6160.0	6302.5	6180.8	5923.3	5734.2	5517.5	5145.0	4637.5	4143.3	3926.7
22.5°	6512.5	6593.3	6857.5	6742.5	6471.7	6343.3	6200.8	5686.7	4969.2	4319.2	4061.7
25°	7054.2	7155.8	7392.5	7175.8	6939.2	7060.8	6979.2	6424.2	5381.7	4569.2	4298.3
27.5°	7730.8	7805.0	7791.7	7520.8	7385.8	7771.7	7947.5	7351.7	5936.7	4900.8	4583.3
30°	8190.8	8272.5	8090.0	7886.7	7927.5	8394.2	8942.5	8265.8	6397.5	5246.7	4874.2
32.5°	8231.7	8265.8	8103.3	8245.0	8407.5	8976.7	9735.0	8550.0	6600.0	5544.2	5145.0
35°	7690.0	7696.7	7811.7	8556.7	8732.5	9369.2	9789.2	8340.0	6647.5	5578.3	5246.7
37.5°	7080.8	7054.2	7351.7	8712.5	9024.2	9436.7	9436.7	8136.7	6715.0	5774.2	5361.7
40°	6729.2	6688.3	7026.7	8584.2	9057.5	9206.7	9070.8	8096.7	7263.3	6268.3	5686.7
42.5°	6755.8	6701.7	7060.8	8285.8	8840.8	9132.5	8780.0	7995.0	7663.3	6776.7	6038.3
45°	6945.8	6830.8	7067.5	7737.5	8489.2	9139.2	8333.3	7575.0	7798.3	7297.5	6322.5
47.5°	6729.2	6675.0	6850.8	7250.0	8035.8	9010.0	7880.0	7466.7	8353.3	7954.2	6573.3
50°	6038.3	6031.7	6350.0	6945.8	7609.2	8725.8	7750.8	7805.0	8658.3	7358.3	5950.8
52.5°	5415.8	5470.0	5896.7	6965.8	7392.5	8739.2	7609.2	8285.8	8414.2	6701.7	5422.5
55°	5131.7	5178.3	5706.7	7115.0	7575.0	9139.2	7880.0	8563.3	8340.0	6092.5	4989.2
57.5°	4481.7	4542.5	5050.0	6566.7	7277.5	9558.3	8576.7	8955.8	8285.8	5564.2	4657.5
60°	3385.0	3398.3	3919.2	5205.8	6011.7	9592.5	9443.3	9714.2	8394.2	5334.2	4549.2
62.5°	2518.3	2565.8	2992.5	3926.7	4745.8	8374.2	9978.3	10628.3	8888.3	5246.7	4230.8
65°	2071.7	2098.3	2498.3	3303.3	4007.5	6993.3	10052.5	11365.8	9633.3	4549.2	3459.2
67.5°	1719.2	1766.7	2159.2	3120.8	3520.0	6031.7	9382.5	11820.0	9917.5	4129.2	2999.2
70°	1475.8	1523.3	1888.3	2999.2	3093.3	5030.0	8082.5	11866.7	10188.3	4135.8	2876.7
72.5°	1313.3	1340.0	1618.3	2545.0	2545.0	3905.8	6566.7	11460.8	9490.8	3960.0	2687.5
75°	1164.2	1177.5	1360.8	1841.7	1963.3	2884.2	5009.2	9850.0	7338.3	3364.2	2295.0
77.5°	1015.8	1022.5	1170.8	1354.2	1543.3	2145.8	3649.2	6911.7	4610.0	2565.8	1841.7
80°	907.5	920.8	1076.7	1110.0	1272.5	1658.3	2477.5	3980.8	2687.5	1834.2	1435.0
82.5°	799.2	825.8	961.7	954.2	1083.3	1306.7	1658.3	2220.8	1725.8	1265.8	1090.0
85°	717.5	745.0	832.5	819.2	920.8	1015.8	1150.8	1374.2	1245.8	873.3	825.8
87.5°	663.3	670.0	724.2	717.5	771.7	812.5	873.3	961.7	934.2	643.3	629.2
90°	582.5	595.8	622.5	629.2	656.7	670.0	704.2	724.2	717.5	521.7	507.5
95°	487.5	487.5	494.2	514.2	514.2	514.2	507.5	494.2	467.5	399.2	385.8
105°	351.7	359.2	365.8	372.5	359.2	345.0	325.0	284.2	264.2	264.2	257.5
115°	243.3	243.3	230.0	230.0	216.7	189.2	162.5	162.5	162.5	162.5	162.5
125°	80.8	80.8	67.5	54.2	34.2	40.8	54.2	67.5	67.5	67.5	67.5
135°	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
155°	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



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
175°	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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3980.8	3980.8	3980.8	3980.8	3980.8	3980.8	3980.8	3980.8	3980.8	3980.8
2.5°	3940.0	3669.2	3703.3	3669.2	3825.0	3825.0	3790.8	3804.2	3790.8	3818.3
5°	3825.0	3554.2	3547.5	3540.8	3689.2	3669.2	3669.2	3669.2	3662.5	3655.8
7.5°	3736.7	3445.8	3425.0	3418.3	3567.5	3547.5	3574.2	3567.5	3580.8	3560.8
10°	3730.0	3370.8	3357.5	3317.5	3479.2	3479.2	3479.2	3486.7	3500.0	3506.7
12.5°	3710.0	3317.5	3283.3	3242.5	3391.7	3378.3	3370.8	3391.7	3391.7	3411.7
15°	3641.7	3263.3	3175.0	3155.0	3296.7	3283.3	3283.3	3303.3	3303.3	3317.5
17.5°	3675.8	3242.5	3127.5	3080.0	3222.5	3209.2	3209.2	3201.7	3249.2	3235.8
20°	3764.2	3276.7	3127.5	3046.7	3147.5	3114.2	3086.7	3107.5	3155.0	3140.8
22.5°	3872.5	3370.8	3188.3	3012.5	3066.7	2985.0	2965.0	3012.5	3039.2	3060.0
25°	4041.7	3479.2	3215.8	2971.7	2965.0	2850.0	2856.7	2930.8	2965.0	2978.3
27.5°	4278.3	3587.5	3324.2	2917.5	2863.3	2789.2	2830.0	2897.5	2958.3	2951.7
30°	4515.0	3750.0	3209.2	2815.8	2789.2	2728.3	2809.2	2910.8	2985.0	2978.3
32.5°	4711.7	3750.0	3100.8	2694.2	2707.5	2700.8	2782.5	2951.7	3066.7	3100.8
35°	4745.8	3716.7	3005.8	2559.2	2620.0	2646.7	2755.0	2951.7	3127.5	3168.3
37.5°	4921.7	3831.7	2830.0	2410.0	2498.3	2538.3	2687.5	2876.7	3080.0	3127.5
40°	5056.7	3872.5	2761.7	2301.7	2362.5	2390.0	2545.0	2700.8	2890.8	2938.3
42.5°	5117.5	3574.2	2707.5	2193.3	2180.0	2234.2	2382.5	2484.2	2613.3	2653.3
45°	5110.8	3391.7	2606.7	2050.8	1990.0	2058.3	2206.7	2260.8	2328.3	2369.2
47.5°	5077.5	3391.7	2552.5	1888.3	1800.8	1888.3	2044.2	2050.8	2065.0	2071.7
50°	4718.3	3378.3	2559.2	1733.3	1618.3	1705.8	1881.7	1861.7	1807.5	1814.2
52.5°	4366.7	3175.0	2436.7	1570.8	1462.5	1510.0	1699.2	1679.2	1577.5	1570.8
55°	4081.7	2951.7	2260.8	1510.0	1293.3	1313.3	1475.8	1482.5	1367.5	1354.2
57.5°	3940.0	2687.5	2058.3	1374.2	1150.8	1137.5	1245.8	1279.2	1185.0	1164.2
60°	3919.2	2396.7	1841.7	1252.5	1029.2	1001.7	1055.8	1083.3	1029.2	1001.7
62.5°	3635.0	2112.5	1604.2	1137.5	920.8	893.3	907.5	920.8	880.0	866.7
65°	2904.2	1787.5	1387.5	1015.8	832.5	799.2	791.7	799.2	758.3	758.3
67.5°	2410.0	1530.0	1170.8	907.5	758.3	717.5	710.8	697.5	663.3	663.3
70°	2186.7	1387.5	995.0	799.2	683.3	656.7	643.3	615.8	589.2	582.5
72.5°	1963.3	1259.2	907.5	663.3	636.7	615.8	602.5	568.3	528.3	528.3
75°	1604.2	1062.5	819.2	582.5	582.5	568.3	555.0	500.8	474.2	474.2
77.5°	1285.8	845.8	710.8	528.3	521.7	514.2	487.5	446.7	413.3	405.8
80°	1055.8	697.5	622.5	487.5	487.5	480.8	460.0	405.8	392.5	379.2
82.5°	860.0	595.8	555.0	446.7	453.3	440.0	426.7	372.5	351.7	351.7
85°	704.2	541.7	500.8	405.8	420.0	413.3	385.8	338.3	311.7	325.0
87.5°	568.3	487.5	460.0	372.5	392.5	379.2	351.7	305.0	284.2	270.8
90°	487.5	460.0	433.3	338.3	359.2	345.0	311.7	270.8	243.3	243.3
95°	385.8	311.7	379.2	284.2	297.5	270.8	243.3	203.3	182.5	189.2
105°	270.8	155.8	243.3	128.3	169.2	142.5	121.7	121.7	121.7	108.3
115°	162.5	142.5	121.7	40.8	40.8	26.7	47.5	40.8	20.0	0.0
125°	60.8	40.8	26.7	6.7	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	6.7	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
155°	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



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
175°	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

(END OF REPORT)