

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: STREETWORKS

Report Number: P253721

Luminaire Tested: **ULA-A9-D-U-SYM-VMx-BK**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P253721
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1804-729-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ULA-A9-D-U-SYM-VMx-BK
Description: UTILITY LIGHT ACORN TYPE V SYMMETRIC
Light Source: (90) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8514 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.17' x H: 2.17')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B2 - U5 - G3

Input Watts (W): 73.4
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

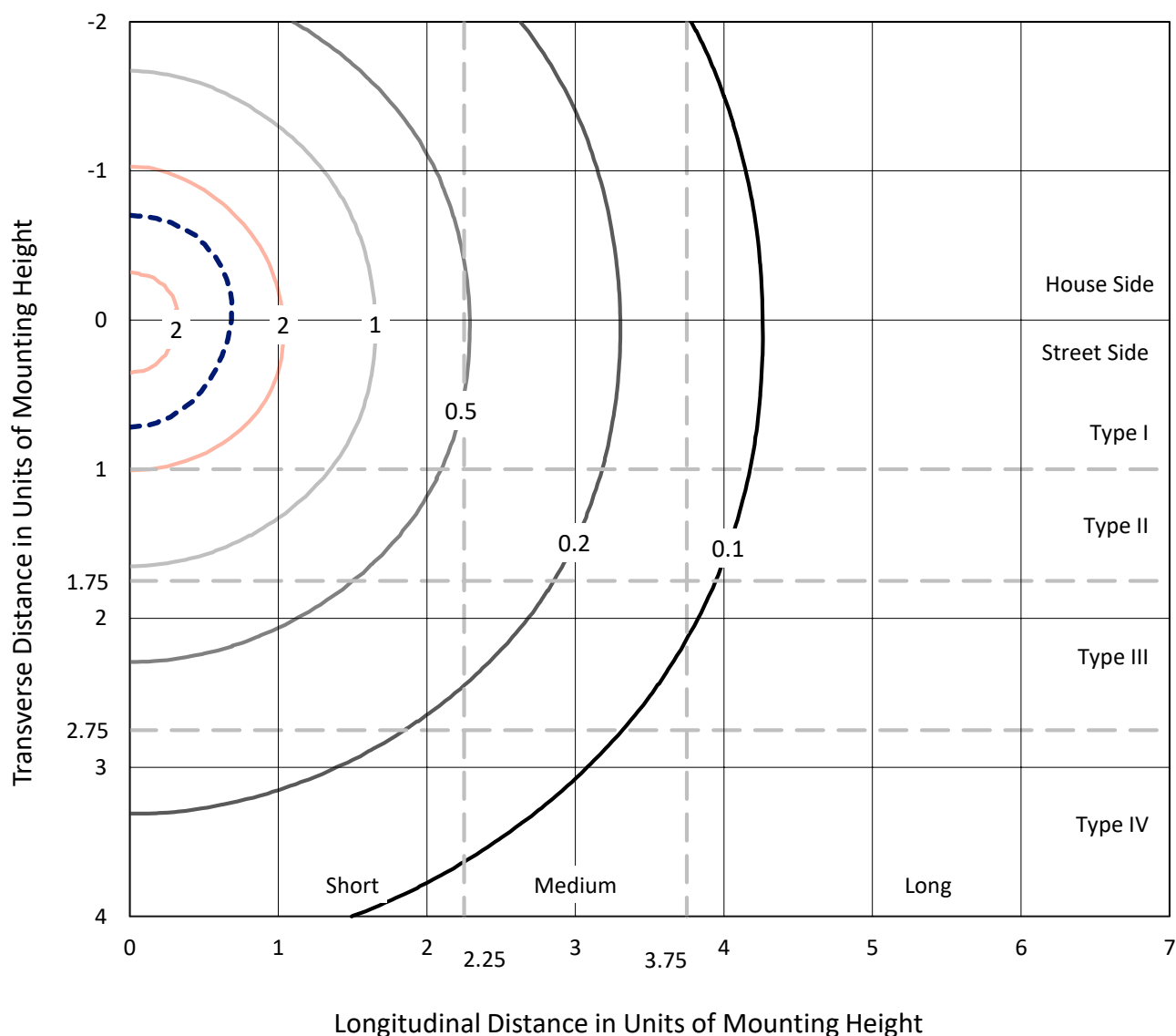


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

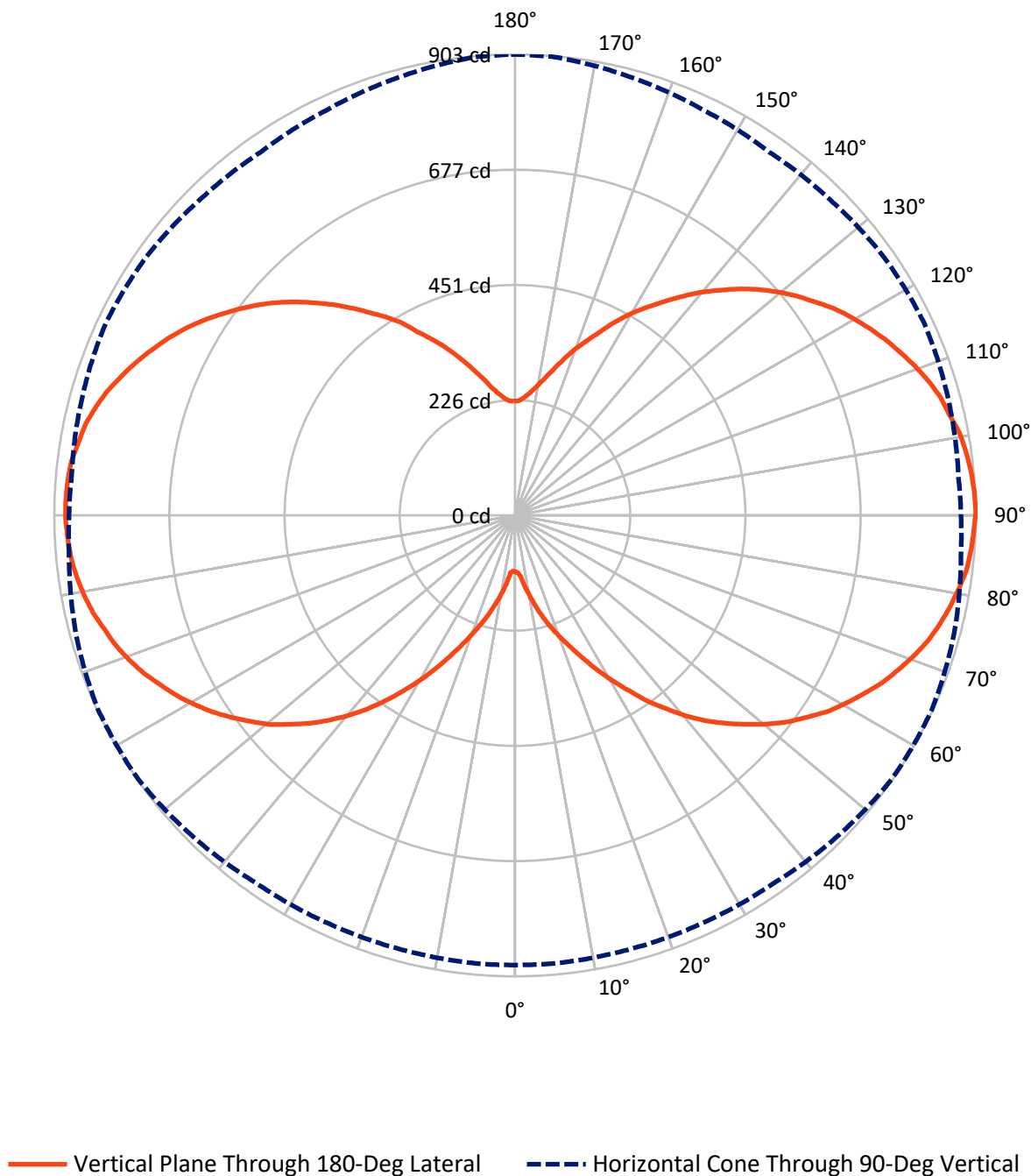


Based on 10 foot mounting height. Maximum calculated value = 2.6 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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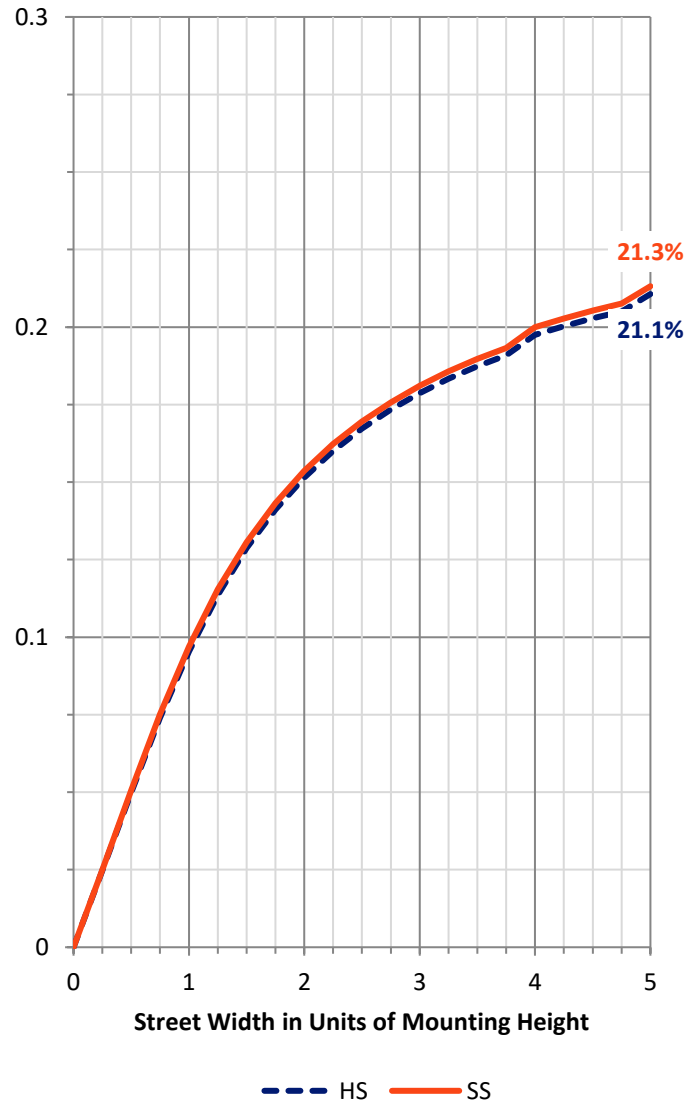
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2075.5	2158.6	4234.1
	% Fixture	24.4	25.4	49.7
Street Side	Lumens	2103.5	2176.4	4279.9
	% Fixture	24.7	25.6	50.3
Total	Lumens	4179.0	4335.0	8514.0
	% Fixture	49.1	50.9	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.6	0.1
10°-20°	59.2	0.7
20°-30°	146.1	1.7
30°-40°	283.0	3.3
40°-50°	449.4	5.3
50°-60°	617.4	7.3
60°-70°	768.4	9.0
70°-80°	887.4	10.4
80°-90°	955.6	11.2
90°-100°	960.1	11.3
100°-110°	897.0	10.5
110°-120°	779.4	9.2
120°-130°	631.4	7.4
130°-140°	468.8	5.5
140°-150°	311.3	3.7
150°-160°	179.8	2.1
160°-170°	84.3	1.0
170°-180°	22.8	0.3
0°-90°	4179.0	49.1
0°-180°	8514.0	100.0



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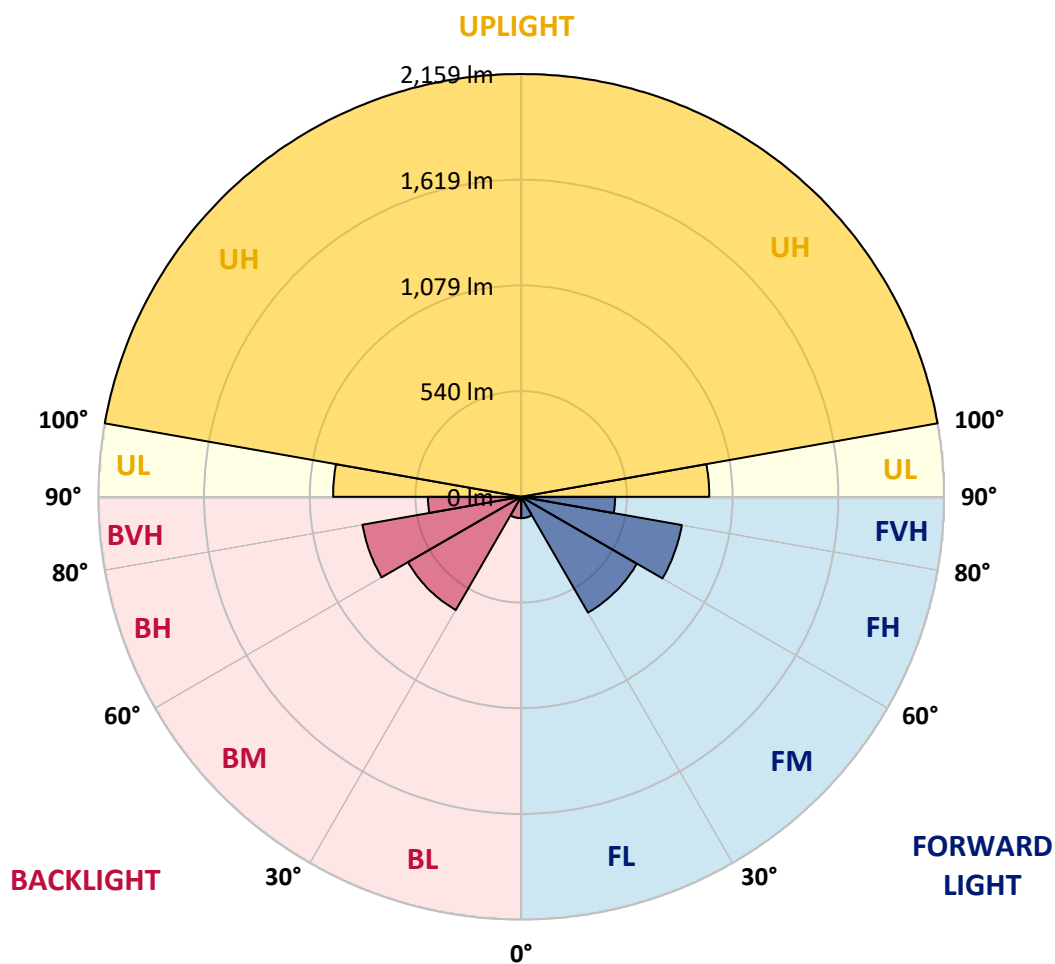
CATALOG NUMBER: ULA-A9-D-U-SYM-VMx-BK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	108.7	1.3			
FM	(30°-60°)	682.3	8.0			
FH	(60°-80°)	833.0	9.8			G1/1800
FVH	(80°-90°)	479.6	5.6			G3/500
BL	(0°-30°)	109.2	1.3	B0/110		
BM	(30°-60°)	667.5	7.8	B1/1000		
BH	(60°-80°)	822.7	9.7	B2/1000		G1/1800
BVH	(80°-90°)	476.0	5.6			G3/500
UL	(90°-100°)	960.1	11.3		U4/1000	
UH	(100°-180°)	2158.6	25.4		U5	

BUG Rating: B2-U5-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	110.7	110.7	110.7	110.7	110.7	110.7	110.7	110.7	110.7	110.7	110.7
2.5°	109.0	109.0	109.0	107.3	107.3	107.3	107.3	107.3	107.3	109.0	109.0
5°	112.4	112.4	112.4	112.4	112.4	112.4	112.4	114.1	115.8	115.8	117.5
7.5°	132.9	131.2	131.2	131.2	131.2	131.2	131.2	132.9	134.6	136.3	136.3
10°	153.3	151.6	151.6	153.3	153.3	155.0	153.3	156.7	156.7	158.4	160.1
12.5°	173.7	172.0	173.7	175.4	177.2	177.2	178.9	180.6	180.6	182.3	182.3
15°	195.9	194.2	195.9	197.6	199.3	201.0	202.7	204.4	206.1	206.1	204.4
17.5°	219.7	218.0	219.7	221.4	223.1	224.8	228.3	230.0	230.0	230.0	230.0
20°	243.6	241.9	243.6	247.0	248.7	250.4	255.5	257.2	255.5	255.5	253.8
22.5°	270.8	269.1	270.8	274.2	279.4	281.1	284.5	286.2	284.5	284.5	282.8
25°	299.8	299.8	301.5	304.9	310.0	313.4	318.5	320.2	316.8	316.8	315.1
27.5°	332.2	332.2	333.9	339.0	342.4	347.5	354.3	354.3	352.6	350.9	349.2
30°	366.2	364.5	367.9	373.0	378.2	383.3	390.1	393.5	391.8	386.7	383.3
32.5°	400.3	398.6	402.0	408.8	415.6	420.7	427.6	429.3	427.6	422.4	419.0
35°	436.1	437.8	439.5	444.6	453.1	458.2	465.0	466.7	463.3	459.9	454.8
37.5°	471.8	471.8	475.2	480.4	488.9	494.0	500.8	502.5	500.8	494.0	490.6
40°	505.9	505.9	509.3	514.4	521.2	528.1	534.9	538.3	533.2	528.1	522.9
42.5°	538.3	538.3	541.7	545.1	551.9	560.4	567.2	570.6	567.2	558.7	553.6
45°	570.6	570.6	574.0	577.4	584.3	591.1	599.6	601.3	596.2	587.7	584.3
47.5°	599.6	599.6	603.0	606.4	613.2	621.7	628.6	630.3	625.1	616.6	611.5
50°	630.3	628.6	632.0	635.4	642.2	650.7	657.5	657.5	652.4	642.2	637.1
52.5°	655.8	657.5	657.5	660.9	667.7	674.5	683.1	684.8	677.9	666.0	662.6
55°	681.4	683.1	683.1	684.8	691.6	700.1	710.3	708.6	701.8	691.6	684.8
57.5°	706.9	706.9	708.6	708.6	713.7	723.9	734.2	732.5	725.6	713.7	708.6
60°	729.1	729.1	729.1	732.5	735.9	744.4	754.6	756.3	746.1	734.2	729.1
62.5°	751.2	751.2	751.2	752.9	756.3	764.8	776.7	776.7	764.8	752.9	747.8
65°	769.9	771.6	771.6	771.6	776.7	787.0	795.5	795.5	787.0	771.6	768.2
67.5°	790.4	790.4	788.7	788.7	793.8	802.3	814.2	814.2	804.0	788.7	785.3
70°	807.4	807.4	805.7	805.7	810.8	821.0	833.0	831.3	819.3	807.4	802.3
72.5°	822.7	824.4	821.0	821.0	826.1	836.4	848.3	846.6	834.7	821.0	817.6
75°	834.7	838.1	834.7	833.0	838.1	848.3	860.2	860.2	848.3	833.0	829.6
77.5°	848.3	850.0	846.6	846.6	850.0	861.9	872.1	872.1	861.9	846.6	841.5
80°	858.5	860.2	858.5	856.8	860.2	870.4	882.4	882.4	872.1	856.8	851.7
82.5°	867.0	867.0	865.3	865.3	868.7	878.9	889.2	889.2	878.9	865.3	861.9
85°	873.8	875.5	873.8	872.1	875.5	885.8	896.0	896.0	885.8	870.4	867.0
87.5°	877.2	878.9	877.2	877.2	878.9	889.2	899.4	897.7	889.2	873.8	870.4
90°	880.7	880.7	878.9	878.9	880.7	890.9	901.1	901.1	890.9	877.2	873.8
92.5°	880.7	882.4	880.7	880.7	882.4	889.2	899.4	901.1	890.9	877.2	873.8
95°	878.9	878.9	878.9	877.2	878.9	887.5	897.7	897.7	889.2	873.8	870.4
97.5°	875.5	875.5	873.8	873.8	875.5	884.1	892.6	892.6	884.1	870.4	867.0
100°	867.0	868.7	868.7	867.0	868.7	875.5	885.8	885.8	875.5	863.6	860.2
102.5°	860.2	858.5	858.5	858.5	858.5	865.3	875.5	873.8	865.3	853.4	850.0
105°	848.3	848.3	846.6	846.6	848.3	855.1	865.3	863.6	853.4	841.5	838.1
107.5°	834.7	834.7	833.0	833.0	834.7	841.5	851.7	850.0	839.8	827.8	824.4
110°	817.6	817.6	815.9	814.2	819.3	826.1	836.4	834.7	824.4	812.5	809.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	800.6	800.6	800.6	798.9	804.0	810.8	819.3	817.6	807.4	795.5	793.8
115°	781.9	781.9	780.2	780.2	787.0	793.8	802.3	798.9	788.7	778.4	775.0
117.5°	763.1	763.1	759.7	759.7	766.5	775.0	783.6	780.2	769.9	759.7	756.3
120°	742.7	742.7	739.3	739.3	747.8	756.3	764.8	761.4	751.2	739.3	737.6
122.5°	720.5	720.5	717.1	718.8	727.3	735.9	744.4	741.0	730.8	720.5	717.1
125°	696.7	696.7	695.0	696.7	705.2	713.7	722.2	718.8	708.6	700.1	695.0
127.5°	672.8	672.8	672.8	674.5	683.1	691.6	700.1	695.0	686.5	676.2	674.5
130°	649.0	649.0	647.3	650.7	659.2	667.7	674.5	672.8	662.6	654.1	650.7
132.5°	623.4	623.4	623.4	625.1	633.7	642.2	650.7	647.3	638.8	628.6	625.1
135°	596.2	596.2	597.9	599.6	608.1	616.6	623.4	620.0	613.2	603.0	597.9
137.5°	568.9	570.6	570.6	574.0	580.9	589.4	594.5	592.8	584.3	575.7	572.3
140°	541.7	541.7	543.4	546.8	553.6	560.4	563.8	562.1	557.0	548.5	543.4
142.5°	514.4	514.4	516.1	519.5	524.6	529.8	534.9	533.2	528.1	521.2	516.1
145°	487.2	487.2	488.9	492.3	497.4	500.8	505.9	504.2	499.1	492.3	487.2
147.5°	463.3	461.6	463.3	466.7	471.8	473.5	476.9	476.9	471.8	465.0	461.6
150°	437.8	437.8	439.5	441.2	444.6	448.0	449.7	449.7	444.6	437.8	434.4
152.5°	407.1	407.1	408.8	413.9	415.6	420.7	422.4	419.0	415.6	407.1	405.4
155°	383.3	383.3	383.3	386.7	388.4	390.1	391.8	390.1	386.7	381.6	379.9
157.5°	361.1	359.4	359.4	362.8	364.5	364.5	366.2	364.5	362.8	357.7	356.0
160°	337.3	337.3	337.3	339.0	339.0	342.4	342.4	340.7	337.3	335.6	332.2
162.5°	315.1	315.1	315.1	315.1	316.8	316.8	316.8	315.1	313.4	311.7	310.0
165°	293.0	293.0	293.0	293.0	293.0	294.7	294.7	293.0	291.3	289.6	289.6
167.5°	274.2	274.2	272.5	272.5	274.2	274.2	274.2	272.5	272.5	270.8	270.8
170°	255.5	257.2	257.2	255.5	255.5	255.5	255.5	255.5	255.5	253.8	253.8
172.5°	241.9	241.9	241.9	241.9	241.9	241.9	241.9	241.9	241.9	240.2	240.2
175°	231.7	231.7	231.7	230.0	231.7	231.7	231.7	230.0	230.0	230.0	230.0
177.5°	224.8	224.8	224.8	224.8	224.8	224.8	224.8	224.8	224.8	224.8	224.8
180°	223.1	223.1	223.1	223.1	223.1	223.1	223.1	223.1	223.1	223.1	223.1

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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	110.7	110.7	110.7	110.7	110.7	110.7	110.7	110.7	110.7	110.7
2.5°	109.0	109.0	110.7	110.7	112.4	112.4	112.4	112.4	112.4	112.4
5°	117.5	117.5	119.2	119.2	119.2	120.9	120.9	120.9	120.9	120.9
7.5°	138.0	139.7	141.4	139.7	139.7	141.4	139.7	139.7	141.4	141.4
10°	158.4	160.1	161.8	161.8	161.8	161.8	161.8	161.8	161.8	160.1
12.5°	182.3	182.3	182.3	184.0	184.0	184.0	184.0	184.0	185.7	184.0
15°	204.4	204.4	204.4	206.1	206.1	206.1	206.1	207.8	209.5	207.8
17.5°	228.3	228.3	228.3	228.3	228.3	228.3	230.0	231.7	233.4	231.7
20°	253.8	253.8	252.1	252.1	252.1	252.1	253.8	255.5	255.5	255.5
22.5°	282.8	279.4	279.4	277.7	277.7	279.4	281.1	282.8	282.8	281.1
25°	313.4	310.0	306.6	308.3	306.6	308.3	310.0	311.7	311.7	310.0
27.5°	345.8	342.4	339.0	339.0	337.3	339.0	339.0	342.4	344.1	342.4
30°	379.9	376.4	371.3	371.3	369.6	369.6	373.0	374.7	376.4	374.7
32.5°	415.6	408.8	407.1	405.4	402.0	402.0	405.4	407.1	410.5	408.8
35°	453.1	448.0	441.2	437.8	437.8	439.5	441.2	442.9	448.0	446.3
37.5°	487.2	480.4	475.2	471.8	471.8	471.8	476.9	478.7	482.1	480.4
40°	519.5	512.7	507.6	504.2	504.2	504.2	509.3	511.0	516.1	516.1
42.5°	550.2	543.4	541.7	536.6	534.9	536.6	540.0	545.1	550.2	550.2
45°	579.2	574.0	570.6	567.2	565.5	567.2	570.6	577.4	582.6	580.9
47.5°	608.1	603.0	599.6	596.2	594.5	594.5	599.6	606.4	613.2	611.5
50°	635.4	630.3	626.8	625.1	623.4	623.4	628.6	635.4	643.9	642.2
52.5°	659.2	655.8	654.1	652.4	649.0	649.0	654.1	662.6	669.4	671.1
55°	683.1	679.7	679.7	676.2	674.5	674.5	679.7	688.2	695.0	696.7
57.5°	706.9	703.5	705.2	701.8	698.4	696.7	703.5	713.7	720.5	723.9
60°	727.3	725.6	725.6	723.9	720.5	718.8	725.6	735.9	744.4	746.1
62.5°	747.8	746.1	747.8	746.1	741.0	739.3	746.1	756.3	766.5	768.2
65°	766.5	764.8	769.9	766.5	761.4	759.7	766.5	778.4	788.7	790.4
67.5°	783.6	783.6	787.0	785.3	778.4	776.7	783.6	795.5	807.4	809.1
70°	800.6	802.3	807.4	804.0	797.2	795.5	800.6	814.2	826.1	827.8
72.5°	814.2	817.6	824.4	821.0	812.5	809.1	817.6	831.3	843.2	844.9
75°	829.6	831.3	836.4	834.7	827.8	822.7	831.3	844.9	856.8	858.5
77.5°	841.5	844.9	851.7	848.3	839.8	836.4	844.9	858.5	870.4	870.4
80°	851.7	856.8	861.9	860.2	851.7	846.6	855.1	868.7	880.7	880.7
82.5°	860.2	865.3	870.4	868.7	860.2	855.1	861.9	875.5	889.2	890.9
85°	867.0	872.1	878.9	877.2	867.0	861.9	868.7	884.1	894.3	896.0
87.5°	868.7	875.5	884.1	878.9	872.1	865.3	873.8	885.8	897.7	899.4
90°	872.1	878.9	885.8	882.4	873.8	868.7	875.5	887.5	901.1	902.8
92.5°	872.1	878.9	885.8	884.1	875.5	868.7	875.5	889.2	899.4	901.1
95°	870.4	877.2	884.1	882.4	872.1	867.0	873.8	885.8	897.7	897.7
97.5°	865.3	872.1	878.9	877.2	868.7	861.9	868.7	880.7	892.6	892.6
100°	858.5	865.3	873.8	872.1	861.9	856.8	861.9	875.5	885.8	885.8
102.5°	848.3	855.1	863.6	861.9	853.4	846.6	851.7	865.3	873.8	873.8
105°	838.1	843.2	851.7	850.0	841.5	834.7	841.5	853.4	863.6	865.3
107.5°	824.4	829.6	838.1	838.1	829.6	822.7	827.8	841.5	850.0	851.7
110°	809.1	814.2	821.0	821.0	814.2	807.4	812.5	824.4	836.4	836.4



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	792.1	797.2	804.0	804.0	795.5	790.4	795.5	809.1	819.3	819.3
115°	775.0	778.4	785.3	785.3	778.4	773.3	780.2	792.1	802.3	802.3
117.5°	756.3	759.7	764.8	766.5	759.7	754.6	761.4	771.6	783.6	783.6
120°	735.9	739.3	744.4	744.4	739.3	735.9	741.0	752.9	763.1	764.8
122.5°	717.1	718.8	722.2	722.2	717.1	715.4	720.5	734.2	742.7	744.4
125°	695.0	695.0	700.1	698.4	695.0	693.3	700.1	710.3	720.5	720.5
127.5°	672.8	672.8	674.5	674.5	671.1	669.4	677.9	688.2	696.7	698.4
130°	649.0	647.3	649.0	649.0	647.3	647.3	654.1	664.3	672.8	674.5
132.5°	623.4	621.7	621.7	621.7	621.7	621.7	628.6	638.8	647.3	649.0
135°	596.2	594.5	594.5	594.5	592.8	596.2	603.0	611.5	620.0	621.7
137.5°	570.6	567.2	567.2	565.5	567.2	570.6	575.7	584.3	592.8	592.8
140°	541.7	536.6	536.6	536.6	540.0	543.4	548.5	557.0	563.8	565.5
142.5°	514.4	509.3	507.6	509.3	511.0	514.4	521.2	529.8	534.9	534.9
145°	485.5	480.4	478.7	480.4	483.8	488.9	494.0	500.8	505.9	505.9
147.5°	459.9	454.8	453.1	453.1	458.2	463.3	468.4	475.2	478.7	478.7
150°	432.7	427.6	425.8	427.6	432.7	436.1	442.9	448.0	451.4	451.4
152.5°	403.7	398.6	396.9	398.6	402.0	407.1	413.9	419.0	424.1	422.4
155°	378.2	373.0	371.3	373.0	376.4	381.6	385.0	390.1	393.5	391.8
157.5°	354.3	350.9	349.2	350.9	354.3	357.7	361.1	364.5	367.9	366.2
160°	332.2	328.8	328.8	328.8	330.5	335.6	337.3	340.7	342.4	342.4
162.5°	310.0	306.6	306.6	308.3	310.0	313.4	315.1	316.8	316.8	316.8
165°	289.6	286.2	286.2	287.9	287.9	291.3	291.3	293.0	294.7	293.0
167.5°	270.8	269.1	267.4	269.1	270.8	272.5	272.5	272.5	274.2	272.5
170°	253.8	253.8	252.1	252.1	253.8	255.5	255.5	255.5	255.5	255.5
172.5°	240.2	240.2	240.2	240.2	241.9	241.9	241.9	241.9	241.9	241.9
175°	230.0	230.0	230.0	230.0	231.7	231.7	231.7	231.7	231.7	231.7
177.5°	224.8	224.8	224.8	224.8	224.8	224.8	224.8	224.8	224.8	224.8
180°	223.1	223.1	223.1	223.1	223.1	223.1	223.1	223.1	223.1	223.1

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