

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: P256815

Luminaire Tested: **ULA-A4-D-U-SYM-VMx-7027-BK**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256815
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-A4-D-U-SYM-VMx-7027-BK
Description: UTILITY LIGHT ACORN TYPE V SYMMETRIC
Light Source: (90) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3734.8 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.17' x H: 2.17')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B1 - U5 - G2

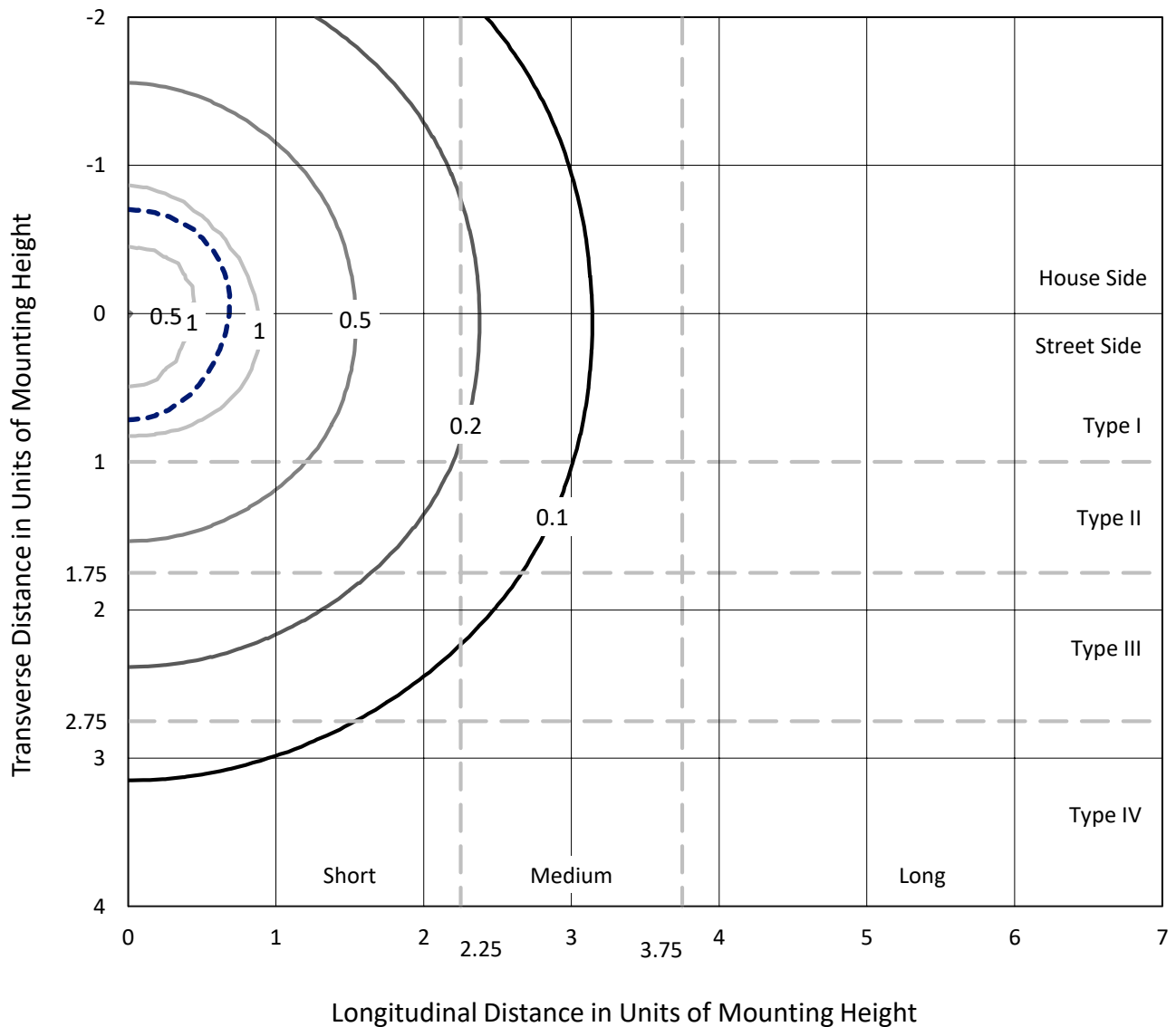
Input Watts (W): 29.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P256815
 CATALOG NUMBER: ULA-A4-D-U-SYM-VMx-7027-BK

Iso-Footcandle Lines of Horizontal Illumination

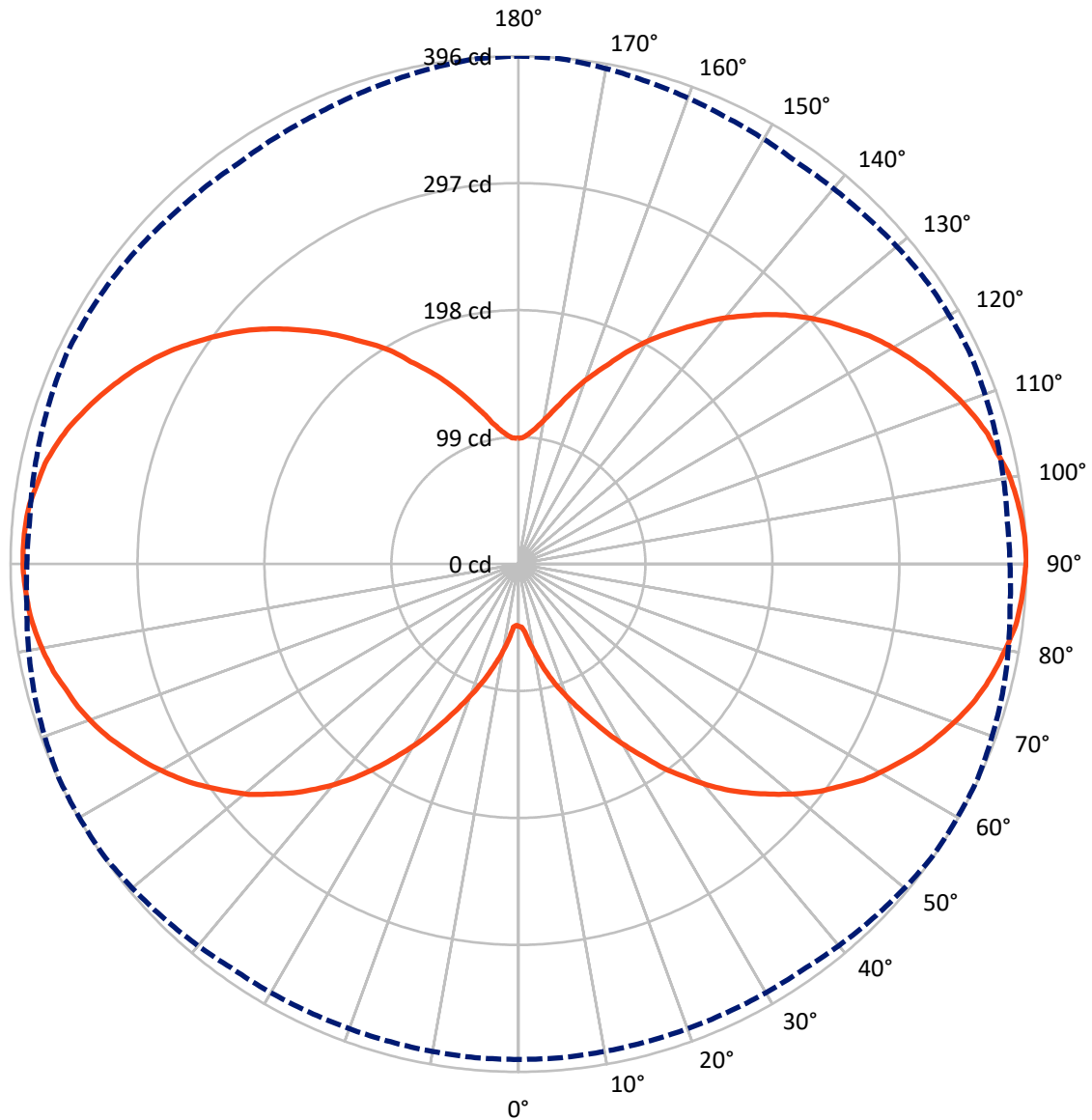
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1.1 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P256815
CATALOG NUMBER: ULA-A4-D-U-SYM-VMx-7027-BK

Luminous Intensity Polar Plot



— Vertical Plane Through 180-Deg Lateral - - - Horizontal Cone Through 90-Deg Vertical

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CATALOG NUMBER: ULA-A4-D-U-SYM-VMx-7027-BK

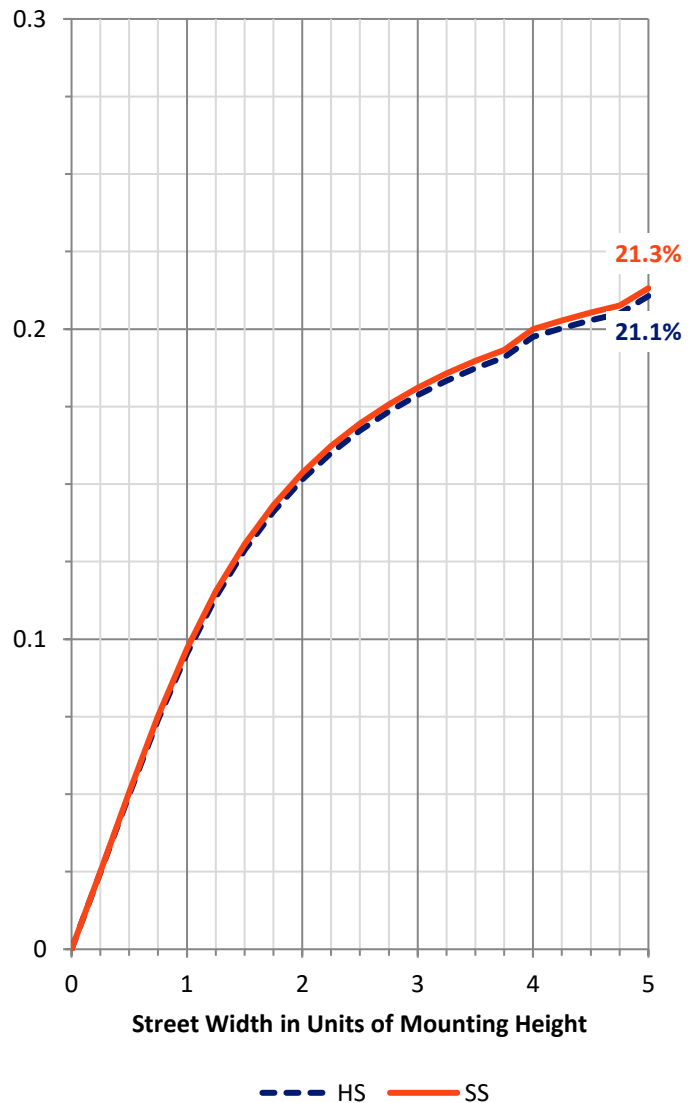
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	910.4	946.9	1857.4
	% Fixture	24.4	25.4	49.7
Street Side	Lumens	922.7	954.7	1877.5
	% Fixture	24.7	25.6	50.3
Total	Lumens	1833.2	1901.6	3734.8
	% Fixture	49.1	50.9	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.5	0.1
10°-20°	26.0	0.7
20°-30°	64.1	1.7
30°-40°	124.2	3.3
40°-50°	197.1	5.3
50°-60°	270.8	7.3
60°-70°	337.1	9.0
70°-80°	389.3	10.4
80°-90°	419.2	11.2
90°-100°	421.2	11.3
100°-110°	393.5	10.5
110°-120°	341.9	9.2
120°-130°	277.0	7.4
130°-140°	205.7	5.5
140°-150°	136.6	3.7
150°-160°	78.9	2.1
160°-170°	37.0	1.0
170°-180°	10.0	0.3
0°-90°	1833.2	49.1
0°-180°	3734.8	100.0



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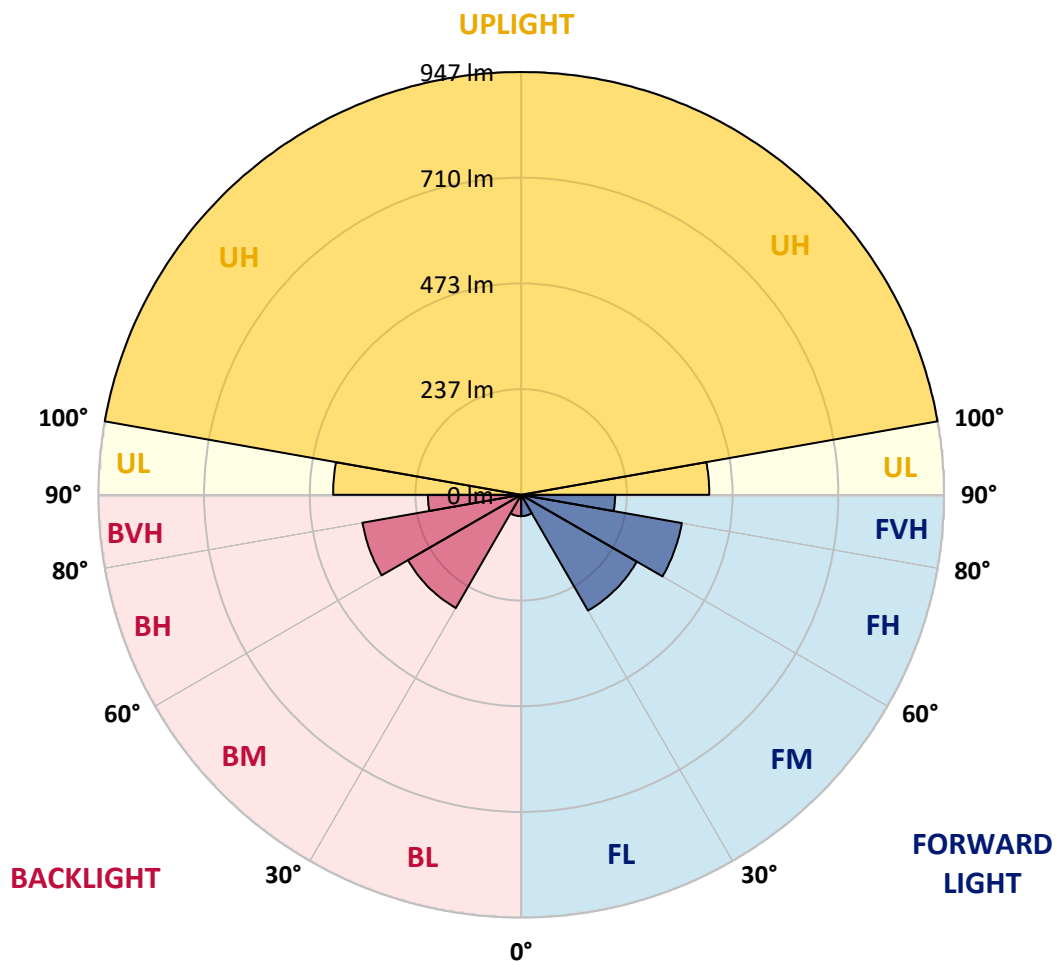
CATALOG NUMBER: ULA-A4-D-U-SYM-VMx-7027-BK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	47.7	1.3			
FM (30°-60°)	299.3	8.0			
FH (60°-80°)	365.4	9.8			G0/660
FVH (80°-90°)	210.4	5.6			G2/225
BL (0°-30°)	47.9	1.3	B0/110		
BM (30°-60°)	292.8	7.8	B1/1000		
BH (60°-80°)	360.9	9.7	B1/500		G0/660
BVH (80°-90°)	208.8	5.6			G2/225
UL (90°-100°)	421.2	11.3		U3/500	
UH (100°-180°)	946.9	25.4		U4/1000	

BUG Rating: B1-U5-G2

Type V Short





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CATALOG NUMBER: ULA-A4-D-U-SYM-VMx-7027-BK

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6
2.5°	47.8	47.8	47.8	47.1	47.1	47.1	47.1	47.1	47.1	47.8	47.8
5°	49.3	49.3	49.3	49.3	49.3	49.3	49.3	50.1	50.8	50.8	51.6
7.5°	58.3	57.5	57.5	57.5	57.5	57.5	57.5	58.3	59.0	59.8	59.8
10°	67.2	66.5	66.5	67.2	67.2	68.0	67.2	68.7	68.7	69.5	70.2
12.5°	76.2	75.5	76.2	77.0	77.7	77.7	78.5	79.2	79.2	80.0	80.0
15°	85.9	85.2	85.9	86.7	87.4	88.2	88.9	89.7	90.4	90.4	89.7
17.5°	96.4	95.6	96.4	97.1	97.9	98.6	100.1	100.9	100.9	100.9	100.9
20°	106.9	106.1	106.9	108.3	109.1	109.8	112.1	112.8	112.1	112.1	111.3
22.5°	118.8	118.1	118.8	120.3	122.5	123.3	124.8	125.5	124.8	124.8	124.0
25°	131.5	131.5	132.3	133.8	136.0	137.5	139.7	140.5	139.0	139.0	138.2
27.5°	145.7	145.7	146.5	148.7	150.2	152.4	155.4	155.4	154.7	153.9	153.2
30°	160.7	159.9	161.4	163.6	165.9	168.1	171.1	172.6	171.9	169.6	168.1
32.5°	175.6	174.8	176.3	179.3	182.3	184.6	187.6	188.3	187.6	185.3	183.8
35°	191.3	192.0	192.8	195.0	198.8	201.0	204.0	204.7	203.2	201.7	199.5
37.5°	207.0	207.0	208.5	210.7	214.5	216.7	219.7	220.4	219.7	216.7	215.2
40°	221.9	221.9	223.4	225.7	228.6	231.6	234.6	236.1	233.9	231.6	229.4
42.5°	236.1	236.1	237.6	239.1	242.1	245.8	248.8	250.3	248.8	245.1	242.8
45°	250.3	250.3	251.8	253.3	256.3	259.3	263.0	263.8	261.5	257.8	256.3
47.5°	263.0	263.0	264.5	266.0	269.0	272.7	275.7	276.5	274.2	270.5	268.3
50°	276.5	275.7	277.2	278.7	281.7	285.4	288.4	288.4	286.2	281.7	279.5
52.5°	287.7	288.4	288.4	289.9	292.9	295.9	299.6	300.4	297.4	292.2	290.7
55°	298.9	299.6	299.6	300.4	303.4	307.1	311.6	310.8	307.9	303.4	300.4
57.5°	310.1	310.1	310.8	310.8	313.1	317.6	322.1	321.3	318.3	313.1	310.8
60°	319.8	319.8	319.8	321.3	322.8	326.5	331.0	331.8	327.3	322.1	319.8
62.5°	329.5	329.5	329.5	330.3	331.8	335.5	340.7	340.7	335.5	330.3	328.0
65°	337.7	338.5	338.5	338.5	340.7	345.2	349.0	349.0	345.2	338.5	337.0
67.5°	346.7	346.7	346.0	346.0	348.2	351.9	357.2	357.2	352.7	346.0	344.5
70°	354.2	354.2	353.4	353.4	355.7	360.2	365.4	364.6	359.4	354.2	351.9
72.5°	360.9	361.7	360.2	360.2	362.4	366.9	372.1	371.4	366.1	360.2	358.7
75°	366.1	367.6	366.1	365.4	367.6	372.1	377.3	377.3	372.1	365.4	363.9
77.5°	372.1	372.9	371.4	371.4	372.9	378.1	382.6	382.6	378.1	371.4	369.1
80°	376.6	377.3	376.6	375.9	377.3	381.8	387.1	387.1	382.6	375.9	373.6
82.5°	380.3	380.3	379.6	379.6	381.1	385.6	390.0	390.0	385.6	379.6	378.1
85°	383.3	384.1	383.3	382.6	384.1	388.6	393.0	393.0	388.6	381.8	380.3
87.5°	384.8	385.6	384.8	384.8	385.6	390.0	394.5	393.8	390.0	383.3	381.8
90°	386.3	386.3	385.6	385.6	386.3	390.8	395.3	395.3	390.8	384.8	383.3
92.5°	386.3	387.1	386.3	386.3	387.1	390.0	394.5	395.3	390.8	384.8	383.3
95°	385.6	385.6	385.6	384.8	385.6	389.3	393.8	393.8	390.0	383.3	381.8
97.5°	384.1	384.1	383.3	383.3	384.1	387.8	391.5	391.5	387.8	381.8	380.3
100°	380.3	381.1	381.1	380.3	381.1	384.1	388.6	388.6	384.1	378.8	377.3
102.5°	377.3	376.6	376.6	376.6	376.6	379.6	384.1	383.3	379.6	374.4	372.9
105°	372.1	372.1	371.4	371.4	372.1	375.1	379.6	378.8	374.4	369.1	367.6
107.5°	366.1	366.1	365.4	365.4	366.1	369.1	373.6	372.9	368.4	363.1	361.7
110°	358.7	358.7	357.9	357.2	359.4	362.4	366.9	366.1	361.7	356.4	354.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	351.2	351.2	351.2	350.4	352.7	355.7	359.4	358.7	354.2	349.0	348.2
115°	343.0	343.0	342.2	342.2	345.2	348.2	351.9	350.4	346.0	341.5	340.0
117.5°	334.8	334.8	333.3	333.3	336.2	340.0	343.7	342.2	337.7	333.3	331.8
120°	325.8	325.8	324.3	324.3	328.0	331.8	335.5	334.0	329.5	324.3	323.5
122.5°	316.1	316.1	314.6	315.3	319.1	322.8	326.5	325.0	320.6	316.1	314.6
125°	305.6	305.6	304.9	305.6	309.3	313.1	316.8	315.3	310.8	307.1	304.9
127.5°	295.2	295.2	295.2	295.9	299.6	303.4	307.1	304.9	301.1	296.6	295.9
130°	284.7	284.7	283.9	285.4	289.2	292.9	295.9	295.2	290.7	286.9	285.4
132.5°	273.5	273.5	273.5	274.2	278.0	281.7	285.4	283.9	280.2	275.7	274.2
135°	261.5	261.5	262.3	263.0	266.8	270.5	273.5	272.0	269.0	264.5	262.3
137.5°	249.6	250.3	250.3	251.8	254.8	258.5	260.8	260.0	256.3	252.6	251.1
140°	237.6	237.6	238.4	239.9	242.8	245.8	247.3	246.6	244.3	240.6	238.4
142.5°	225.7	225.7	226.4	227.9	230.1	232.4	234.6	233.9	231.6	228.6	226.4
145°	213.7	213.7	214.5	215.9	218.2	219.7	221.9	221.2	218.9	215.9	213.7
147.5°	203.2	202.5	203.2	204.7	207.0	207.7	209.2	209.2	207.0	204.0	202.5
150°	192.0	192.0	192.8	193.5	195.0	196.5	197.3	197.3	195.0	192.0	190.5
152.5°	178.6	178.6	179.3	181.6	182.3	184.6	185.3	183.8	182.3	178.6	177.8
155°	168.1	168.1	168.1	169.6	170.4	171.1	171.9	171.1	169.6	167.4	166.6
157.5°	158.4	157.7	157.7	159.2	159.9	159.9	160.7	159.9	159.2	156.9	156.2
160°	147.9	147.9	147.9	148.7	148.7	150.2	150.2	149.4	147.9	147.2	145.7
162.5°	138.2	138.2	138.2	138.2	139.0	139.0	139.0	138.2	137.5	136.7	136.0
165°	128.5	128.5	128.5	128.5	128.5	129.3	129.3	128.5	127.8	127.0	127.0
167.5°	120.3	120.3	119.6	119.6	120.3	120.3	120.3	119.6	119.6	118.8	118.8
170°	112.1	112.8	112.8	112.1	112.1	112.1	112.1	112.1	112.1	111.3	111.3
172.5°	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	106.1	105.4	105.4
175°	101.6	101.6	101.6	100.9	101.6	101.6	101.6	100.9	100.9	100.9	100.9
177.5°	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
180°	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9



REPORT NUMBER: P256815
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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6
2.5°	47.8	47.8	48.6	48.6	49.3	49.3	49.3	49.3	49.3	49.3
5°	51.6	51.6	52.3	52.3	52.3	53.1	53.1	53.1	53.1	53.1
7.5°	60.5	61.3	62.0	61.3	61.3	62.0	61.3	61.3	62.0	62.0
10°	69.5	70.2	71.0	71.0	71.0	71.0	71.0	71.0	71.0	70.2
12.5°	80.0	80.0	80.0	80.7	80.7	80.7	80.7	80.7	81.4	80.7
15°	89.7	89.7	89.7	90.4	90.4	90.4	90.4	91.2	91.9	91.2
17.5°	100.1	100.1	100.1	100.1	100.1	100.1	100.9	101.6	102.4	101.6
20°	111.3	111.3	110.6	110.6	110.6	110.6	111.3	112.1	112.1	112.1
22.5°	124.0	122.5	122.5	121.8	121.8	122.5	123.3	124.0	124.0	123.3
25°	137.5	136.0	134.5	135.2	134.5	135.2	136.0	136.7	136.7	136.0
27.5°	151.7	150.2	148.7	148.7	147.9	148.7	148.7	150.2	150.9	150.2
30°	166.6	165.1	162.9	162.9	162.1	162.1	163.6	164.4	165.1	164.4
32.5°	182.3	179.3	178.6	177.8	176.3	176.3	177.8	178.6	180.1	179.3
35°	198.8	196.5	193.5	192.0	192.0	192.8	193.5	194.3	196.5	195.8
37.5°	213.7	210.7	208.5	207.0	207.0	207.0	209.2	210.0	211.5	210.7
40°	227.9	224.9	222.7	221.2	221.2	221.2	223.4	224.2	226.4	226.4
42.5°	241.4	238.4	237.6	235.4	234.6	235.4	236.9	239.1	241.4	241.4
45°	254.1	251.8	250.3	248.8	248.1	248.8	250.3	253.3	255.5	254.8
47.5°	266.8	264.5	263.0	261.5	260.8	260.8	263.0	266.0	269.0	268.3
50°	278.7	276.5	275.0	274.2	273.5	273.5	275.7	278.7	282.4	281.7
52.5°	289.2	287.7	286.9	286.2	284.7	284.7	286.9	290.7	293.7	294.4
55°	299.6	298.1	298.1	296.6	295.9	295.9	298.1	301.9	304.9	305.6
57.5°	310.1	308.6	309.3	307.9	306.4	305.6	308.6	313.1	316.1	317.6
60°	319.1	318.3	318.3	317.6	316.1	315.3	318.3	322.8	326.5	327.3
62.5°	328.0	327.3	328.0	327.3	325.0	324.3	327.3	331.8	336.2	337.0
65°	336.2	335.5	337.7	336.2	334.0	333.3	336.2	341.5	346.0	346.7
67.5°	343.7	343.7	345.2	344.5	341.5	340.7	343.7	349.0	354.2	354.9
70°	351.2	351.9	354.2	352.7	349.7	349.0	351.2	357.2	362.4	363.1
72.5°	357.2	358.7	361.7	360.2	356.4	354.9	358.7	364.6	369.9	370.6
75°	363.9	364.6	366.9	366.1	363.1	360.9	364.6	370.6	375.9	376.6
77.5°	369.1	370.6	373.6	372.1	368.4	366.9	370.6	376.6	381.8	381.8
80°	373.6	375.9	378.1	377.3	373.6	371.4	375.1	381.1	386.3	386.3
82.5°	377.3	379.6	381.8	381.1	377.3	375.1	378.1	384.1	390.0	390.8
85°	380.3	382.6	385.6	384.8	380.3	378.1	381.1	387.8	392.3	393.0
87.5°	381.1	384.1	387.8	385.6	382.6	379.6	383.3	388.6	393.8	394.5
90°	382.6	385.6	388.6	387.1	383.3	381.1	384.1	389.3	395.3	396.0
92.5°	382.6	385.6	388.6	387.8	384.1	381.1	384.1	390.0	394.5	395.3
95°	381.8	384.8	387.8	387.1	382.6	380.3	383.3	388.6	393.8	393.8
97.5°	379.6	382.6	385.6	384.8	381.1	378.1	381.1	386.3	391.5	391.5
100°	376.6	379.6	383.3	382.6	378.1	375.9	378.1	384.1	388.6	388.6
102.5°	372.1	375.1	378.8	378.1	374.4	371.4	373.6	379.6	383.3	383.3
105°	367.6	369.9	373.6	372.9	369.1	366.1	369.1	374.4	378.8	379.6
107.5°	361.7	363.9	367.6	367.6	363.9	360.9	363.1	369.1	372.9	373.6
110°	354.9	357.2	360.2	360.2	357.2	354.2	356.4	361.7	366.9	366.9



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	347.5	349.7	352.7	352.7	349.0	346.7	349.0	354.9	359.4	359.4
115°	340.0	341.5	344.5	344.5	341.5	339.2	342.2	347.5	351.9	351.9
117.5°	331.8	333.3	335.5	336.2	333.3	331.0	334.0	338.5	343.7	343.7
120°	322.8	324.3	326.5	326.5	324.3	322.8	325.0	330.3	334.8	335.5
122.5°	314.6	315.3	316.8	316.8	314.6	313.8	316.1	322.1	325.8	326.5
125°	304.9	304.9	307.1	306.4	304.9	304.1	307.1	311.6	316.1	316.1
127.5°	295.2	295.2	295.9	295.9	294.4	293.7	297.4	301.9	305.6	306.4
130°	284.7	283.9	284.7	284.7	283.9	283.9	286.9	291.4	295.2	295.9
132.5°	273.5	272.7	272.7	272.7	272.7	272.7	275.7	280.2	283.9	284.7
135°	261.5	260.8	260.8	260.8	260.0	261.5	264.5	268.3	272.0	272.7
137.5°	250.3	248.8	248.8	248.1	248.8	250.3	252.6	256.3	260.0	260.0
140°	237.6	235.4	235.4	235.4	236.9	238.4	240.6	244.3	247.3	248.1
142.5°	225.7	223.4	222.7	223.4	224.2	225.7	228.6	232.4	234.6	234.6
145°	213.0	210.7	210.0	210.7	212.2	214.5	216.7	219.7	221.9	221.9
147.5°	201.7	199.5	198.8	198.8	201.0	203.2	205.5	208.5	210.0	210.0
150°	189.8	187.6	186.8	187.6	189.8	191.3	194.3	196.5	198.0	198.0
152.5°	177.1	174.8	174.1	174.8	176.3	178.6	181.6	183.8	186.1	185.3
155°	165.9	163.6	162.9	163.6	165.1	167.4	168.9	171.1	172.6	171.9
157.5°	155.4	153.9	153.2	153.9	155.4	156.9	158.4	159.9	161.4	160.7
160°	145.7	144.2	144.2	144.2	145.0	147.2	147.9	149.4	150.2	150.2
162.5°	136.0	134.5	134.5	135.2	136.0	137.5	138.2	139.0	139.0	139.0
165°	127.0	125.5	125.5	126.3	126.3	127.8	127.8	128.5	129.3	128.5
167.5°	118.8	118.1	117.3	118.1	118.8	119.6	119.6	119.6	120.3	119.6
170°	111.3	111.3	110.6	110.6	111.3	112.1	112.1	112.1	112.1	112.1
172.5°	105.4	105.4	105.4	105.4	106.1	106.1	106.1	106.1	106.1	106.1
175°	100.9	100.9	100.9	100.9	101.6	101.6	101.6	101.6	101.6	101.6
177.5°	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6	98.6
180°	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9	97.9

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