

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: P256817

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256817
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-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: 4070 lumens
Efficiency: N/A
Efficacy: 139.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.17' x H: 2.17')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B1 - U5 - G3

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



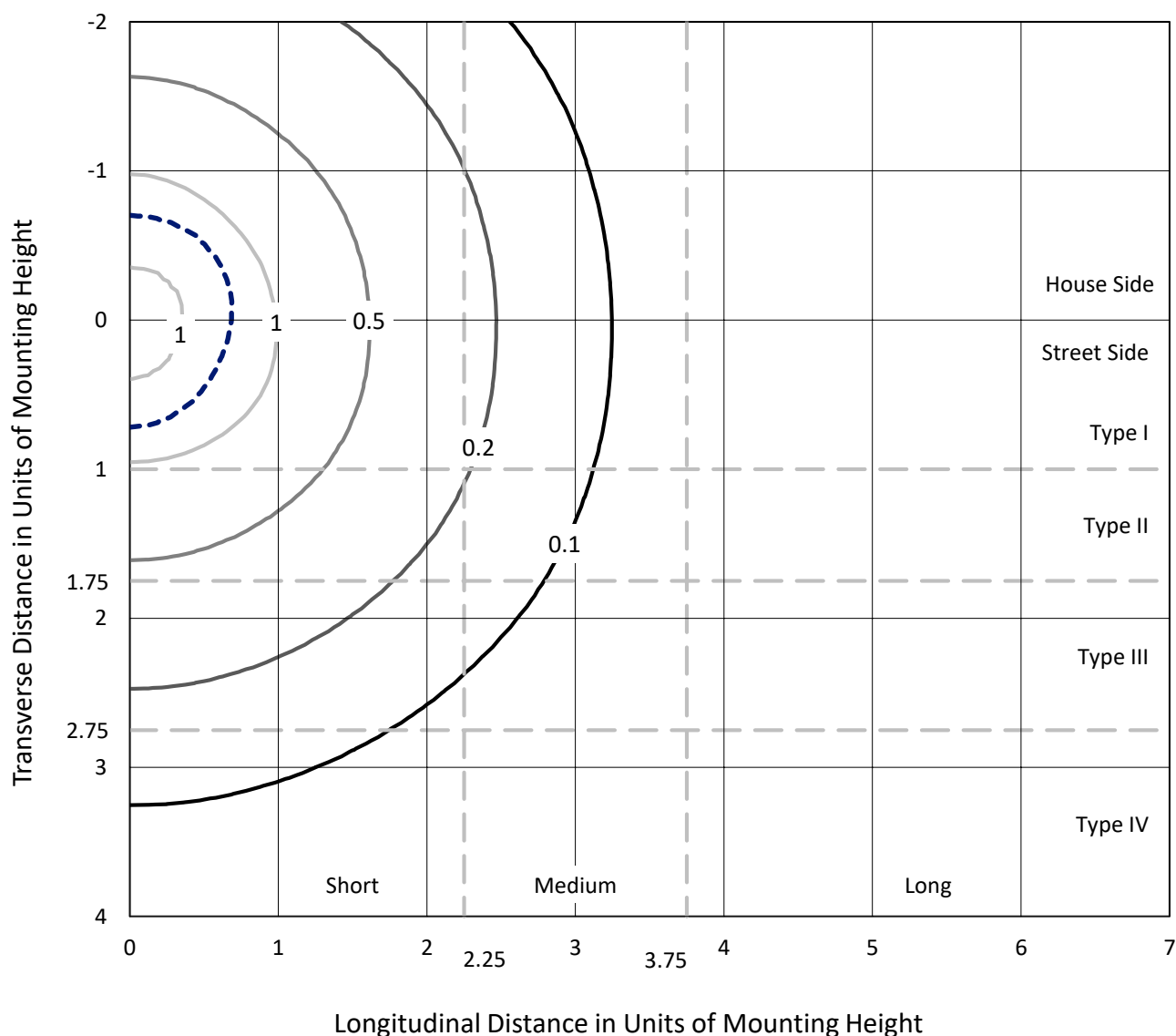
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

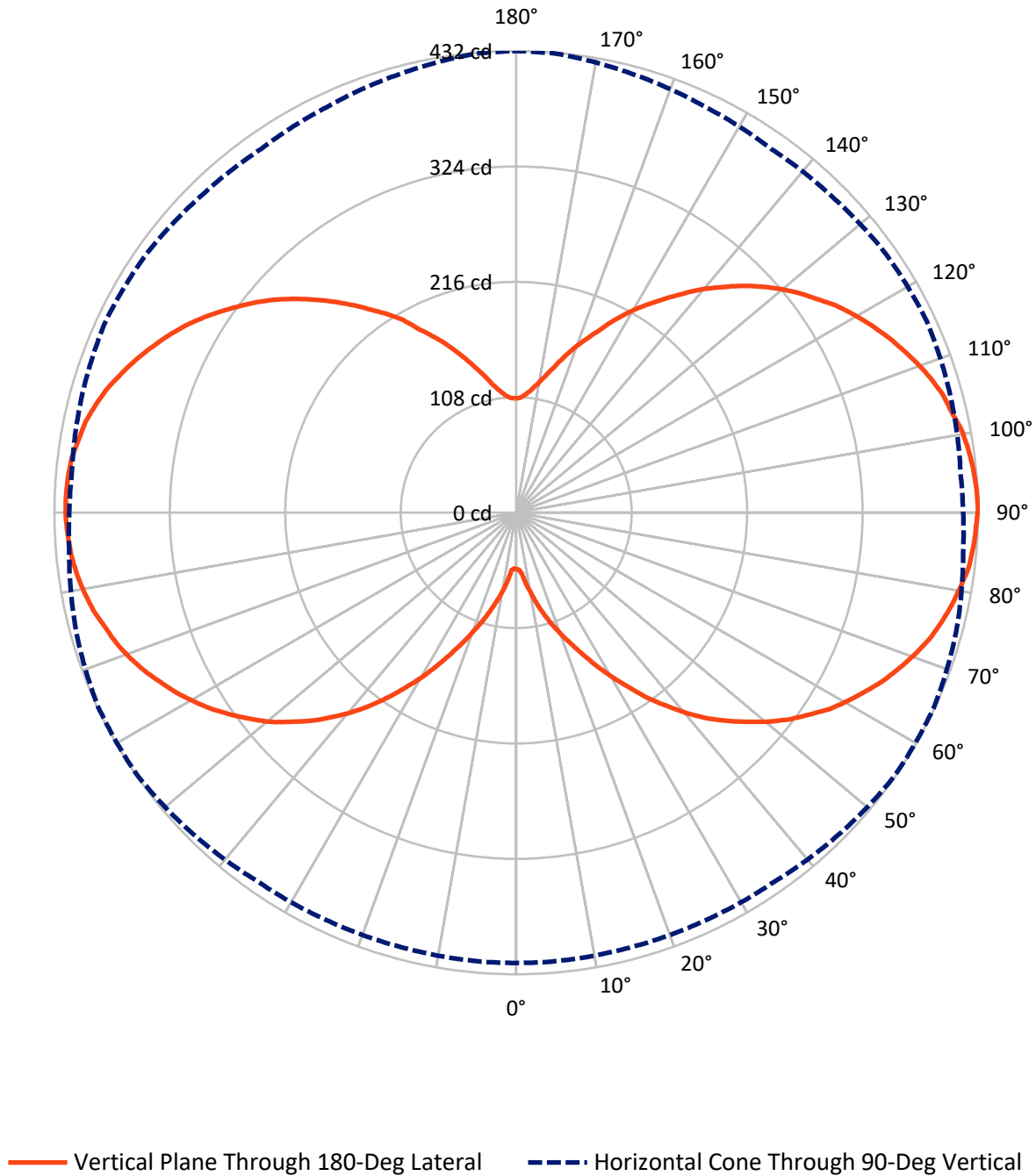


Based on 10 foot mounting height. Maximum calculated value = 1.2 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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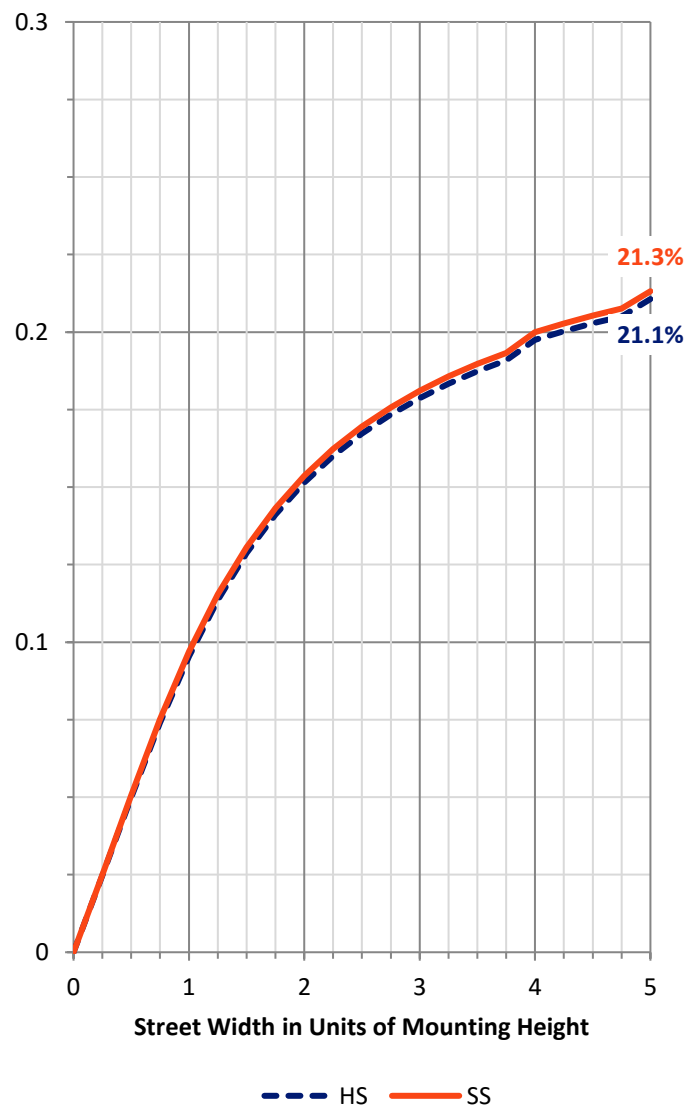
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	992.2	1031.9	2024.0
	% Fixture	24.4	25.4	49.7
Street Side	Lumens	1005.6	1040.4	2046.0
	% Fixture	24.7	25.6	50.3
Total	Lumens	1997.7	2072.3	4070.0
	% Fixture	49.1	50.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.0	0.1
10°-20°	28.3	0.7
20°-30°	69.8	1.7
30°-40°	135.3	3.3
40°-50°	214.8	5.3
50°-60°	295.1	7.3
60°-70°	367.3	9.0
70°-80°	424.2	10.4
80°-90°	456.8	11.2
90°-100°	459.0	11.3
100°-110°	428.8	10.5
110°-120°	372.6	9.2
120°-130°	301.8	7.4
130°-140°	224.1	5.5
140°-150°	148.8	3.7
150°-160°	86.0	2.1
160°-170°	40.3	1.0
170°-180°	10.9	0.3
0°-90°	1997.7	49.1
0°-180°	4070.0	100.0

Coefficient of Utilization



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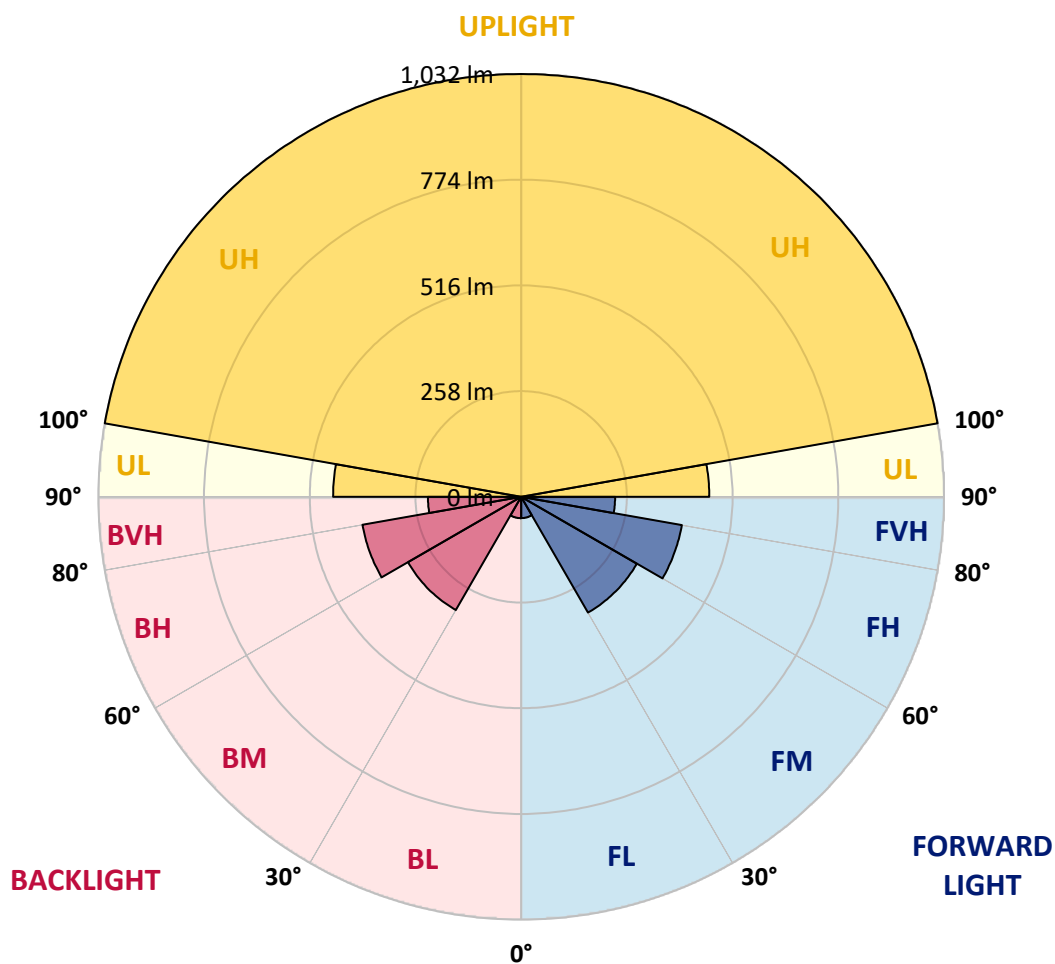
CATALOG NUMBER: ULA-A4-D-U-SYM-VMx-BK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	52.0	1.3			
FM	(30°-60°)	326.1	8.0			
FH	(60°-80°)	398.2	9.8			G0/660
FVH	(80°-90°)	229.3	5.6			G3/500
BL	(0°-30°)	52.2	1.3	B0/110		
BM	(30°-60°)	319.1	7.8	B1/1000		
BH	(60°-80°)	393.3	9.7	B1/500		G0/660
BVH	(80°-90°)	227.6	5.6			G3/500
UL	(90°-100°)	459.0	11.3		U3/500	
UH	(100°-180°)	1031.9	25.4		U5	

BUG Rating: B1-U5-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
2.5°	52.1	52.1	52.1	51.3	51.3	51.3	51.3	51.3	51.3	52.1	52.1
5°	53.7	53.7	53.7	53.7	53.7	53.7	53.7	54.6	55.4	55.4	56.2
7.5°	63.5	62.7	62.7	62.7	62.7	62.7	62.7	63.5	64.3	65.1	65.1
10°	73.3	72.5	72.5	73.3	73.3	74.1	73.3	74.9	74.9	75.7	76.5
12.5°	83.1	82.2	83.1	83.9	84.7	84.7	85.5	86.3	86.3	87.1	87.1
15°	93.6	92.8	93.6	94.5	95.3	96.1	96.9	97.7	98.5	98.5	97.7
17.5°	105.0	104.2	105.0	105.9	106.7	107.5	109.1	109.9	109.9	109.9	109.9
20°	116.4	115.6	116.4	118.1	118.9	119.7	122.1	123.0	122.1	122.1	121.3
22.5°	129.5	128.7	129.5	131.1	133.5	134.4	136.0	136.8	136.0	136.0	135.2
25°	143.3	143.3	144.1	145.8	148.2	149.8	152.3	153.1	151.5	151.5	150.6
27.5°	158.8	158.8	159.6	162.0	163.7	166.1	169.4	169.4	168.6	167.7	166.9
30°	175.1	174.3	175.9	178.3	180.8	183.2	186.5	188.1	187.3	184.8	183.2
32.5°	191.4	190.5	192.2	195.4	198.7	201.1	204.4	205.2	204.4	201.9	200.3
35°	208.5	209.3	210.1	212.5	216.6	219.0	222.3	223.1	221.5	219.9	217.4
37.5°	225.6	225.6	227.2	229.6	233.7	236.1	239.4	240.2	239.4	236.1	234.5
40°	241.8	241.8	243.5	245.9	249.2	252.4	255.7	257.3	254.9	252.4	250.0
42.5°	257.3	257.3	258.9	260.6	263.8	267.9	271.2	272.8	271.2	267.1	264.6
45°	272.8	272.8	274.4	276.0	279.3	282.6	286.6	287.4	285.0	280.9	279.3
47.5°	286.6	286.6	288.3	289.9	293.1	297.2	300.5	301.3	298.8	294.8	292.3
50°	301.3	300.5	302.1	303.7	307.0	311.1	314.3	314.3	311.9	307.0	304.5
52.5°	313.5	314.3	314.3	315.9	319.2	322.5	326.5	327.3	324.1	318.4	316.8
55°	325.7	326.5	326.5	327.3	330.6	334.7	339.6	338.7	335.5	330.6	327.3
57.5°	337.9	337.9	338.7	338.7	341.2	346.1	351.0	350.1	346.9	341.2	338.7
60°	348.5	348.5	348.5	350.1	351.8	355.8	360.7	361.5	356.7	351.0	348.5
62.5°	359.1	359.1	359.1	359.9	361.5	365.6	371.3	371.3	365.6	359.9	357.5
65°	368.1	368.9	368.9	368.9	371.3	376.2	380.3	380.3	376.2	368.9	367.2
67.5°	377.8	377.8	377.0	377.0	379.5	383.5	389.2	389.2	384.3	377.0	375.4
70°	386.0	386.0	385.2	385.2	387.6	392.5	398.2	397.4	391.7	386.0	383.5
72.5°	393.3	394.1	392.5	392.5	394.9	399.8	405.5	404.7	399.0	392.5	390.9
75°	399.0	400.6	399.0	398.2	400.6	405.5	411.2	411.2	405.5	398.2	396.6
77.5°	405.5	406.3	404.7	404.7	406.3	412.0	416.9	416.9	412.0	404.7	402.3
80°	410.4	411.2	410.4	409.6	411.2	416.1	421.8	421.8	416.9	409.6	407.1
82.5°	414.5	414.5	413.7	413.7	415.3	420.2	425.1	425.1	420.2	413.7	412.0
85°	417.7	418.5	417.7	416.9	418.5	423.4	428.3	428.3	423.4	416.1	414.5
87.5°	419.4	420.2	419.4	419.4	420.2	425.1	429.9	429.1	425.1	417.7	416.1
90°	421.0	421.0	420.2	420.2	421.0	425.9	430.8	430.8	425.9	419.4	417.7
92.5°	421.0	421.8	421.0	421.0	421.8	425.1	429.9	430.8	425.9	419.4	417.7
95°	420.2	420.2	420.2	419.4	420.2	424.2	429.1	429.1	425.1	417.7	416.1
97.5°	418.5	418.5	417.7	417.7	418.5	422.6	426.7	426.7	422.6	416.1	414.5
100°	414.5	415.3	415.3	414.5	415.3	418.5	423.4	423.4	418.5	412.8	411.2
102.5°	411.2	410.4	410.4	410.4	410.4	413.7	418.5	417.7	413.7	408.0	406.3
105°	405.5	405.5	404.7	404.7	405.5	408.8	413.7	412.8	408.0	402.3	400.6
107.5°	399.0	399.0	398.2	398.2	399.0	402.3	407.1	406.3	401.4	395.7	394.1
110°	390.9	390.9	390.0	389.2	391.7	394.9	399.8	399.0	394.1	388.4	386.8



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

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	382.7	382.7	382.7	381.9	384.3	387.6	391.7	390.9	386.0	380.3	379.5
115°	373.8	373.8	372.9	372.9	376.2	379.5	383.5	381.9	377.0	372.1	370.5
117.5°	364.8	364.8	363.2	363.2	366.4	370.5	374.6	372.9	368.1	363.2	361.5
120°	355.0	355.0	353.4	353.4	357.5	361.5	365.6	364.0	359.1	353.4	352.6
122.5°	344.4	344.4	342.8	343.6	347.7	351.8	355.8	354.2	349.3	344.4	342.8
125°	333.0	333.0	332.2	333.0	337.1	341.2	345.3	343.6	338.7	334.7	332.2
127.5°	321.6	321.6	321.6	322.5	326.5	330.6	334.7	332.2	328.2	323.3	322.5
130°	310.2	310.2	309.4	311.1	315.1	319.2	322.5	321.6	316.8	312.7	311.1
132.5°	298.0	298.0	298.0	298.8	302.9	307.0	311.1	309.4	305.4	300.5	298.8
135°	285.0	285.0	285.8	286.6	290.7	294.8	298.0	296.4	293.1	288.3	285.8
137.5°	272.0	272.8	272.8	274.4	277.7	281.7	284.2	283.4	279.3	275.2	273.6
140°	258.9	258.9	259.8	261.4	264.6	267.9	269.5	268.7	266.3	262.2	259.8
142.5°	245.9	245.9	246.7	248.4	250.8	253.2	255.7	254.9	252.4	249.2	246.7
145°	232.9	232.9	233.7	235.3	237.8	239.4	241.8	241.0	238.6	235.3	232.9
147.5°	221.5	220.7	221.5	223.1	225.6	226.4	228.0	228.0	225.6	222.3	220.7
150°	209.3	209.3	210.1	210.9	212.5	214.2	215.0	215.0	212.5	209.3	207.6
152.5°	194.6	194.6	195.4	197.9	198.7	201.1	201.9	200.3	198.7	194.6	193.8
155°	183.2	183.2	183.2	184.8	185.7	186.5	187.3	186.5	184.8	182.4	181.6
157.5°	172.6	171.8	171.8	173.4	174.3	174.3	175.1	174.3	173.4	171.0	170.2
160°	161.2	161.2	161.2	162.0	162.0	163.7	163.7	162.9	161.2	160.4	158.8
162.5°	150.6	150.6	150.6	150.6	151.5	151.5	151.5	150.6	149.8	149.0	148.2
165°	140.1	140.1	140.1	140.1	140.1	140.9	140.9	140.1	139.2	138.4	138.4
167.5°	131.1	131.1	130.3	130.3	131.1	131.1	131.1	130.3	130.3	129.5	129.5
170°	122.1	123.0	123.0	122.1	122.1	122.1	122.1	122.1	122.1	121.3	121.3
172.5°	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6	115.6	114.8	114.8
175°	110.7	110.7	110.7	109.9	110.7	110.7	110.7	109.9	109.9	109.9	109.9
177.5°	107.5	107.5	107.5	107.5	107.5	107.5	107.5	107.5	107.5	107.5	107.5
180°	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7



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

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9	52.9
2.5°	52.1	52.1	52.9	52.9	53.7	53.7	53.7	53.7	53.7	53.7
5°	56.2	56.2	57.0	57.0	57.0	57.8	57.8	57.8	57.8	57.8
7.5°	66.0	66.8	67.6	66.8	66.8	67.6	66.8	66.8	67.6	67.6
10°	75.7	76.5	77.4	77.4	77.4	77.4	77.4	77.4	77.4	76.5
12.5°	87.1	87.1	87.1	87.9	87.9	87.9	87.9	87.9	88.8	87.9
15°	97.7	97.7	97.7	98.5	98.5	98.5	98.5	99.3	100.2	99.3
17.5°	109.1	109.1	109.1	109.1	109.1	109.1	109.9	110.7	111.6	110.7
20°	121.3	121.3	120.5	120.5	120.5	120.5	121.3	122.1	122.1	122.1
22.5°	135.2	133.5	133.5	132.7	132.7	133.5	134.4	135.2	135.2	134.4
25°	149.8	148.2	146.6	147.4	146.6	147.4	148.2	149.0	149.0	148.2
27.5°	165.3	163.7	162.0	162.0	161.2	162.0	162.0	163.7	164.5	163.7
30°	181.6	180.0	177.5	177.5	176.7	176.7	178.3	179.1	180.0	179.1
32.5°	198.7	195.4	194.6	193.8	192.2	192.2	193.8	194.6	196.2	195.4
35°	216.6	214.2	210.9	209.3	209.3	210.1	210.9	211.7	214.2	213.3
37.5°	232.9	229.6	227.2	225.6	225.6	225.6	228.0	228.8	230.4	229.6
40°	248.4	245.1	242.7	241.0	241.0	241.0	243.5	244.3	246.7	246.7
42.5°	263.0	259.8	258.9	256.5	255.7	256.5	258.1	260.6	263.0	263.0
45°	276.9	274.4	272.8	271.2	270.3	271.2	272.8	276.0	278.5	277.7
47.5°	290.7	288.3	286.6	285.0	284.2	284.2	286.6	289.9	293.1	292.3
50°	303.7	301.3	299.7	298.8	298.0	298.0	300.5	303.7	307.8	307.0
52.5°	315.1	313.5	312.7	311.9	310.2	310.2	312.7	316.8	320.0	320.8
55°	326.5	324.9	324.9	323.3	322.5	322.5	324.9	329.0	332.2	333.0
57.5°	337.9	336.3	337.1	335.5	333.9	333.0	336.3	341.2	344.4	346.1
60°	347.7	346.9	346.9	346.1	344.4	343.6	346.9	351.8	355.8	356.7
62.5°	357.5	356.7	357.5	356.7	354.2	353.4	356.7	361.5	366.4	367.2
65°	366.4	365.6	368.1	366.4	364.0	363.2	366.4	372.1	377.0	377.8
67.5°	374.6	374.6	376.2	375.4	372.1	371.3	374.6	380.3	386.0	386.8
70°	382.7	383.5	386.0	384.3	381.1	380.3	382.7	389.2	394.9	395.7
72.5°	389.2	390.9	394.1	392.5	388.4	386.8	390.9	397.4	403.1	403.9
75°	396.6	397.4	399.8	399.0	395.7	393.3	397.4	403.9	409.6	410.4
77.5°	402.3	403.9	407.1	405.5	401.4	399.8	403.9	410.4	416.1	416.1
80°	407.1	409.6	412.0	411.2	407.1	404.7	408.8	415.3	421.0	421.0
82.5°	411.2	413.7	416.1	415.3	411.2	408.8	412.0	418.5	425.1	425.9
85°	414.5	416.9	420.2	419.4	414.5	412.0	415.3	422.6	427.5	428.3
87.5°	415.3	418.5	422.6	420.2	416.9	413.7	417.7	423.4	429.1	429.9
90°	416.9	420.2	423.4	421.8	417.7	415.3	418.5	424.2	430.8	431.6
92.5°	416.9	420.2	423.4	422.6	418.5	415.3	418.5	425.1	429.9	430.8
95°	416.1	419.4	422.6	421.8	416.9	414.5	417.7	423.4	429.1	429.1
97.5°	413.7	416.9	420.2	419.4	415.3	412.0	415.3	421.0	426.7	426.7
100°	410.4	413.7	417.7	416.9	412.0	409.6	412.0	418.5	423.4	423.4
102.5°	405.5	408.8	412.8	412.0	408.0	404.7	407.1	413.7	417.7	417.7
105°	400.6	403.1	407.1	406.3	402.3	399.0	402.3	408.0	412.8	413.7
107.5°	394.1	396.6	400.6	400.6	396.6	393.3	395.7	402.3	406.3	407.1
110°	386.8	389.2	392.5	392.5	389.2	386.0	388.4	394.1	399.8	399.8



REPORT NUMBER: P256817

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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	378.6	381.1	384.3	384.3	380.3	377.8	380.3	386.8	391.7	391.7
115°	370.5	372.1	375.4	375.4	372.1	369.7	372.9	378.6	383.5	383.5
117.5°	361.5	363.2	365.6	366.4	363.2	360.7	364.0	368.9	374.6	374.6
120°	351.8	353.4	355.8	355.8	353.4	351.8	354.2	359.9	364.8	365.6
122.5°	342.8	343.6	345.3	345.3	342.8	342.0	344.4	351.0	355.0	355.8
125°	332.2	332.2	334.7	333.9	332.2	331.4	334.7	339.6	344.4	344.4
127.5°	321.6	321.6	322.5	322.5	320.8	320.0	324.1	329.0	333.0	333.9
130°	310.2	309.4	310.2	310.2	309.4	309.4	312.7	317.6	321.6	322.5
132.5°	298.0	297.2	297.2	297.2	297.2	297.2	300.5	305.4	309.4	310.2
135°	285.0	284.2	284.2	284.2	283.4	285.0	288.3	292.3	296.4	297.2
137.5°	272.8	271.2	271.2	270.3	271.2	272.8	275.2	279.3	283.4	283.4
140°	258.9	256.5	256.5	256.5	258.1	259.8	262.2	266.3	269.5	270.3
142.5°	245.9	243.5	242.7	243.5	244.3	245.9	249.2	253.2	255.7	255.7
145°	232.1	229.6	228.8	229.6	231.3	233.7	236.1	239.4	241.8	241.8
147.5°	219.9	217.4	216.6	216.6	219.0	221.5	223.9	227.2	228.8	228.8
150°	206.8	204.4	203.6	204.4	206.8	208.5	211.7	214.2	215.8	215.8
152.5°	193.0	190.5	189.7	190.5	192.2	194.6	197.9	200.3	202.8	201.9
155°	180.8	178.3	177.5	178.3	180.0	182.4	184.0	186.5	188.1	187.3
157.5°	169.4	167.7	166.9	167.7	169.4	171.0	172.6	174.3	175.9	175.1
160°	158.8	157.2	157.2	157.2	158.0	160.4	161.2	162.9	163.7	163.7
162.5°	148.2	146.6	146.6	147.4	148.2	149.8	150.6	151.5	151.5	151.5
165°	138.4	136.8	136.8	137.6	137.6	139.2	139.2	140.1	140.9	140.1
167.5°	129.5	128.7	127.8	128.7	129.5	130.3	130.3	130.3	131.1	130.3
170°	121.3	121.3	120.5	120.5	121.3	122.1	122.1	122.1	122.1	122.1
172.5°	114.8	114.8	114.8	114.8	115.6	115.6	115.6	115.6	115.6	115.6
175°	109.9	109.9	109.9	109.9	110.7	110.7	110.7	110.7	110.7	110.7
177.5°	107.5	107.5	107.5	107.5	107.5	107.5	107.5	107.5	107.5	107.5
180°	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7	106.7

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