

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: P256835

Luminaire Tested: **ULA-A3-D-U-SYM-VMx-HSS-BK**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256835
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1804-729-17)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ULA-A3-D-U-SYM-VMx-HSS-BK
Description: UTILITY LIGHT ACORN SYMMETRIC W/ HSS
Light Source: (90) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2609.9 lumens
Efficiency: N/A
Efficacy: 123.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.17' x H: 2.17')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B0 - U5 - G3

Input Watts (W): 21.1
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

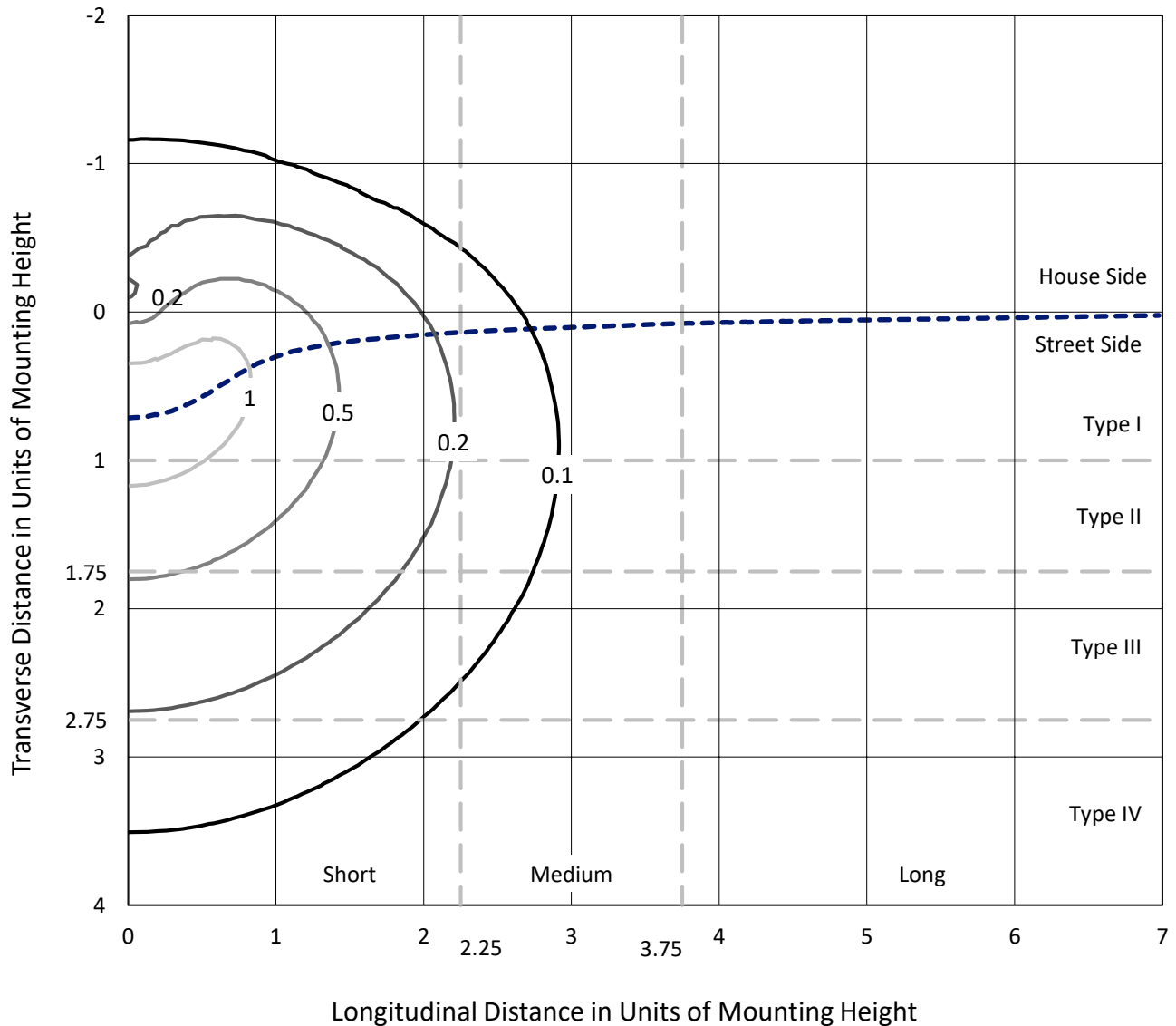


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

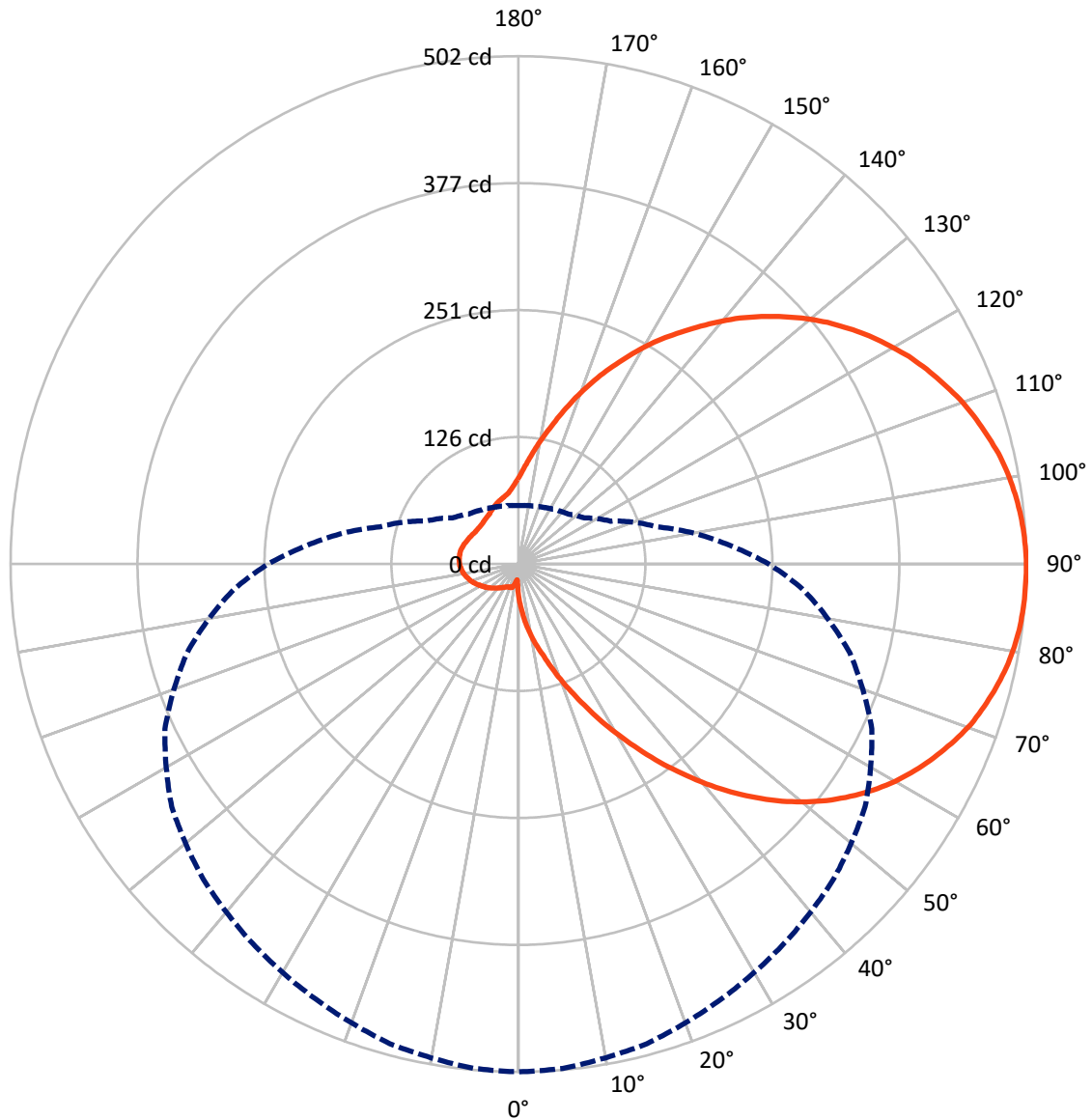


Based on 10 foot mounting height. Maximum calculated value = 1.3 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 88-Deg Vertical



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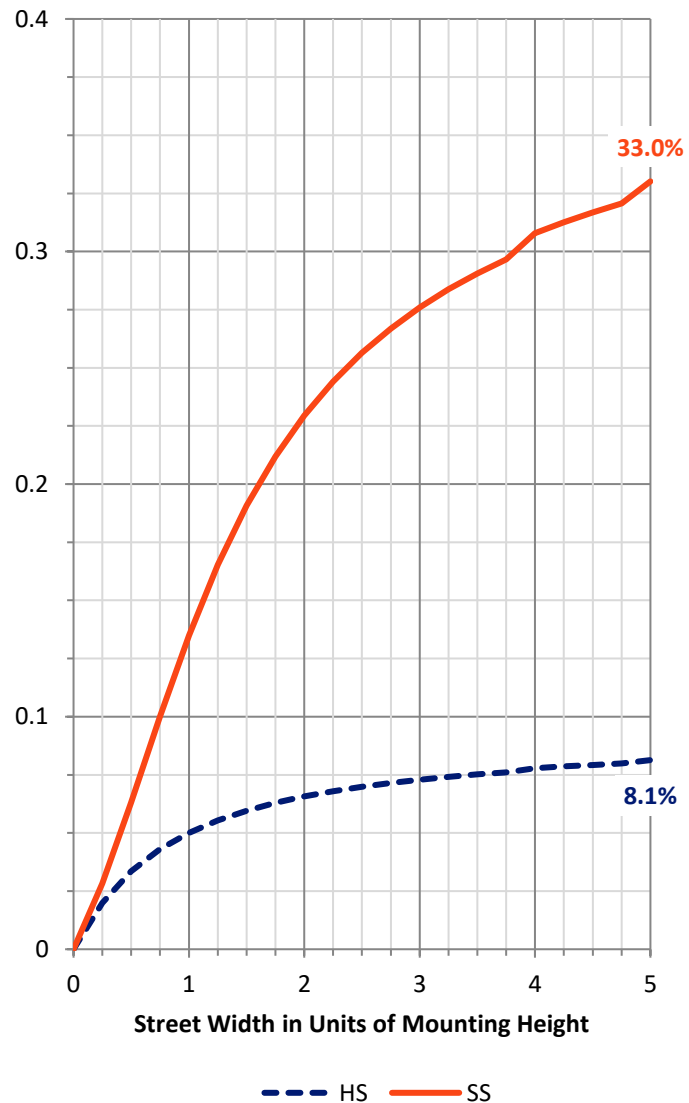
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	236.0	309.7	545.7
	% Fixture	9.0	11.9	20.9
Street Side	Lumens	1010.6	1053.6	2064.1
	% Fixture	38.7	40.4	79.1
Total	Lumens	1246.6	1363.3	2609.9
	% Fixture	47.8	52.2	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.7	0.1
10°-20°	17.6	0.7
20°-30°	44.4	1.7
30°-40°	86.4	3.3
40°-50°	137.2	5.3
50°-60°	186.9	7.2
60°-70°	229.5	8.8
70°-80°	261.7	10.0
80°-90°	279.3	10.7
90°-100°	281.0	10.8
100°-110°	266.5	10.2
110°-120°	239.3	9.2
120°-130°	202.6	7.8
130°-140°	157.8	6.0
140°-150°	109.9	4.2
150°-160°	66.2	2.5
160°-170°	31.6	1.2
170°-180°	8.6	0.3
0°-90°	1246.6	47.8
0°-180°	2609.9	100.0



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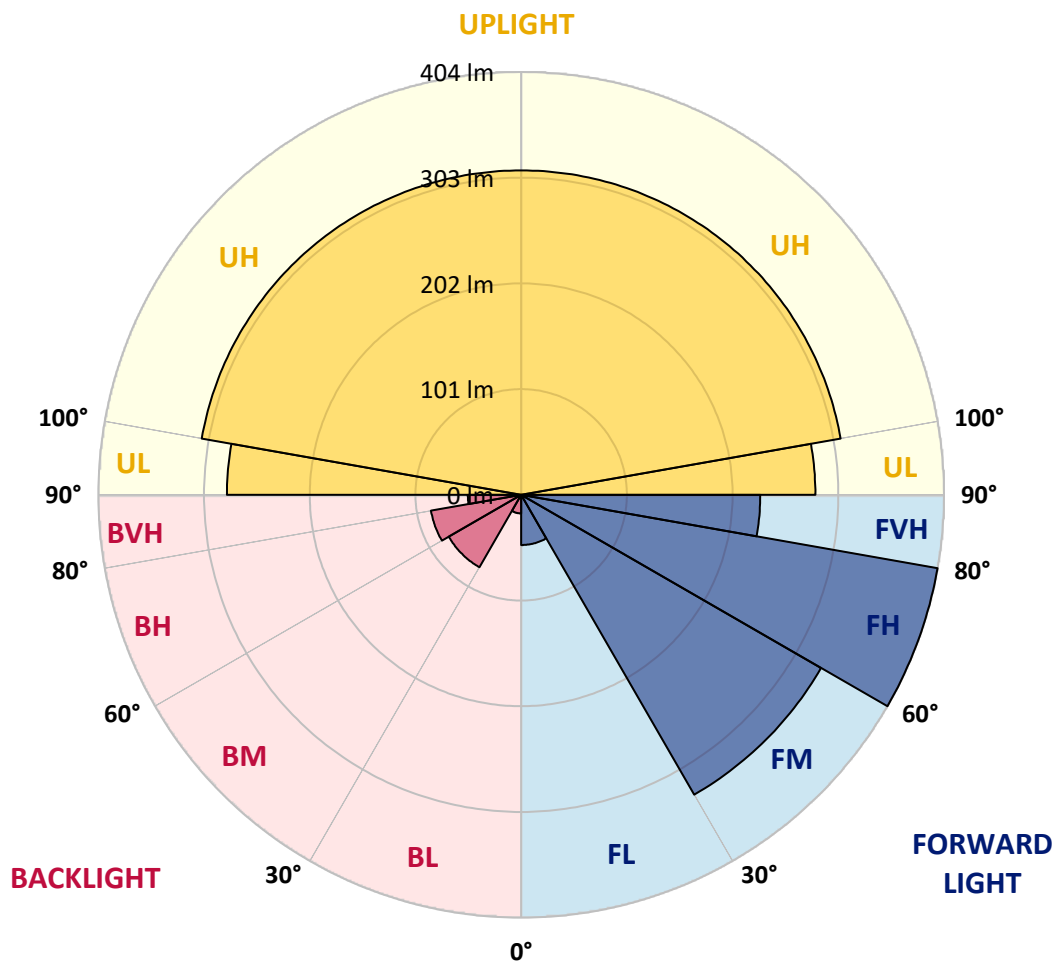
CATALOG NUMBER: ULA-A3-D-U-SYM-VMx-HSS-BK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	48.0	1.8			
FM	(30°-60°)	330.6	12.7			
FH	(60°-80°)	403.7	15.5			G0/660
FVH	(80°-90°)	228.3	8.7			G3/500
BL	(0°-30°)	17.8	0.7	B0/110		
BM	(30°-60°)	79.8	3.1	B0/220		
BH	(60°-80°)	87.4	3.3	B0/110		G0/110
BVH	(80°-90°)	51.0	2.0			G1/100
UL	(90°-100°)	281.0	10.8		U3/500	
UH	(100°-180°)	309.7	11.9		U3/500	

BUG Rating: B0-U5-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1
2.5°	41.4	41.4	40.6	41.0	39.9	39.1	37.5	36.0	34.8	33.3	32.5
5°	52.6	51.9	51.1	50.3	48.4	46.4	44.5	41.8	39.1	36.4	34.8
7.5°	63.1	62.7	61.2	60.0	57.7	55.4	52.6	49.2	46.1	42.6	40.6
10°	73.5	73.2	71.6	70.4	67.7	65.4	61.9	58.1	54.2	49.5	47.2
12.5°	84.0	83.6	82.1	81.3	79.0	76.3	72.4	67.3	62.7	57.3	54.6
15°	94.8	94.8	94.4	92.9	90.2	87.5	83.6	77.8	72.0	65.4	62.3
17.5°	109.2	108.4	107.2	106.1	103.7	100.6	94.8	89.4	82.1	74.3	69.7
20°	123.9	123.1	122.3	120.8	117.7	114.6	108.8	102.2	92.9	83.6	77.8
22.5°	139.7	139.0	138.2	136.6	133.5	130.1	123.9	116.1	106.4	94.4	87.1
25°	157.1	157.1	156.0	154.4	151.0	147.5	140.1	131.6	120.4	106.1	97.9
27.5°	176.9	175.7	175.3	173.4	170.3	166.1	158.3	148.2	135.1	118.4	109.5
30°	196.6	196.2	195.9	193.5	190.0	185.4	176.5	166.1	150.2	130.8	120.4
32.5°	217.9	218.3	216.8	214.0	210.2	205.1	195.5	183.1	166.1	143.2	131.2
35°	240.8	240.4	238.0	236.1	231.1	224.9	214.0	200.1	180.8	155.2	141.7
37.5°	262.8	263.2	260.9	257.8	252.0	245.0	233.0	217.1	194.7	166.8	151.7
40°	285.7	286.0	283.3	278.7	272.5	264.4	251.2	233.8	209.0	178.0	160.6
42.5°	308.1	308.1	305.4	300.7	292.2	282.9	268.6	249.7	222.2	188.1	169.5
45°	329.4	329.4	325.9	320.1	310.8	300.4	284.9	264.0	234.2	197.4	177.3
47.5°	350.3	349.9	346.0	338.3	329.4	317.4	301.1	277.1	245.8	206.3	184.2
50°	369.6	369.6	364.2	355.7	344.5	332.5	315.1	289.9	256.6	214.4	190.8
52.5°	387.5	387.1	381.3	372.0	359.6	346.8	328.2	301.5	265.9	221.8	197.0
55°	403.7	403.3	396.7	386.3	373.5	359.6	340.2	312.4	275.2	228.8	202.4
57.5°	418.8	418.4	410.7	399.1	386.3	371.6	351.5	322.4	283.7	235.3	207.9
60°	432.4	431.6	423.8	411.1	397.5	382.4	362.3	332.1	291.5	241.1	212.9
62.5°	444.3	443.6	435.1	421.9	407.6	392.1	370.8	340.2	298.4	246.9	217.1
65°	455.2	454.4	445.9	431.6	416.9	401.0	379.3	348.0	305.0	252.0	221.8
67.5°	465.3	464.5	454.8	440.1	425.4	409.1	387.5	355.3	311.2	257.0	226.0
70°	474.5	473.0	462.9	448.2	432.4	415.7	394.4	361.9	317.0	261.7	229.9
72.5°	481.5	480.3	470.3	454.8	438.9	422.7	400.6	367.3	322.4	265.9	233.4
75°	487.7	486.9	476.5	460.6	444.3	427.7	406.0	372.0	326.7	270.2	236.9
77.5°	493.1	491.6	481.5	465.6	449.0	432.0	410.3	376.6	330.6	273.3	239.6
80°	497.0	495.8	485.4	469.1	452.5	435.4	413.8	380.1	333.6	276.0	241.9
82.5°	499.7	498.2	488.1	471.8	455.2	437.8	416.1	382.0	336.0	278.3	244.2
85°	501.2	500.1	489.6	473.8	456.7	439.3	417.6	384.0	337.9	280.2	245.8
87.5°	501.6	500.9	490.8	474.5	457.5	440.5	418.4	385.1	339.1	281.4	246.9
88°	502.0	500.5	490.8	474.5	457.9	440.5	418.4	385.5	339.1	281.8	247.3
90°	502.0	500.5	490.8	474.9	457.9	440.1	418.8	385.9	339.5	282.2	248.1
92.5°	500.9	499.7	490.0	474.5	457.5	439.7	418.4	385.5	339.8	282.9	248.9
95°	498.9	497.8	488.5	473.0	456.0	438.5	417.3	384.7	339.5	282.9	248.9
97.5°	495.8	494.7	485.8	470.3	453.6	436.2	414.9	383.2	338.3	282.6	248.9
100°	492.0	490.8	481.9	466.8	450.2	433.1	412.2	381.3	336.7	281.8	248.5
102.5°	486.9	485.4	476.9	462.2	446.3	429.3	408.7	377.8	334.4	280.2	247.7
105°	480.0	479.2	471.1	456.7	440.5	424.2	404.1	374.3	331.7	278.3	246.2
107.5°	473.4	472.2	464.1	450.2	435.1	419.2	399.4	370.0	328.6	276.4	245.0



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CATALOG NUMBER: ULA-A3-D-U-SYM-VMx-HSS-BK

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	465.6	464.5	456.3	443.2	428.1	413.0	393.6	365.4	325.1	274.0	243.9
112.5°	456.3	455.6	447.4	435.1	420.7	406.4	387.8	360.4	321.3	271.7	242.3
115°	447.1	445.9	438.2	426.5	412.6	399.1	381.3	354.6	316.6	269.0	240.8
117.5°	437.0	435.8	428.1	416.9	404.1	390.9	373.9	348.4	312.0	265.9	238.8
120°	425.4	424.6	417.3	406.8	395.2	382.4	365.8	341.8	306.9	262.8	236.9
122.5°	413.8	412.6	406.0	396.4	385.5	373.5	357.6	334.8	301.1	258.9	234.6
125°	401.0	400.2	394.0	385.1	375.1	363.8	348.7	326.3	294.9	255.1	231.9
127.5°	387.8	386.7	380.9	372.7	363.8	353.0	339.1	318.2	288.4	250.0	228.8
130°	373.5	372.7	367.3	360.0	351.1	341.4	328.2	308.5	280.6	244.6	224.5
132.5°	358.4	357.6	353.0	346.8	337.9	329.0	316.6	297.7	271.7	238.4	219.9
135°	342.9	342.6	338.3	332.5	324.4	316.2	304.2	286.8	262.8	231.9	214.4
137.5°	327.1	326.7	322.8	317.0	310.8	302.3	291.1	274.8	252.8	224.1	207.9
140°	310.0	309.7	306.6	301.1	294.6	287.6	276.8	262.0	241.5	215.2	200.9
142.5°	293.0	292.6	289.9	286.0	279.8	272.5	262.4	248.5	230.3	206.3	193.1
145°	276.4	276.0	273.7	269.8	264.0	257.4	247.7	235.7	218.7	197.0	185.4
147.5°	260.5	259.7	257.8	254.7	249.3	242.7	233.8	222.6	207.1	187.7	177.3
150°	243.5	243.1	240.8	238.4	233.0	227.6	219.1	209.4	195.1	177.7	168.4
152.5°	226.4	226.0	224.5	221.8	217.1	212.1	204.4	195.5	183.1	167.6	159.5
155°	209.8	209.4	207.9	205.9	201.3	196.6	189.7	181.5	170.3	157.1	149.8
157.5°	193.1	193.1	192.4	190.0	185.8	181.5	174.6	168.4	158.3	146.7	140.9
160°	176.9	176.9	176.5	174.2	170.7	166.8	160.6	154.4	146.7	136.6	131.6
162.5°	161.0	160.2	160.6	159.1	155.6	152.5	147.1	142.1	134.7	126.2	121.9
165°	145.9	145.5	145.9	144.4	141.3	138.6	133.5	129.7	123.5	116.1	113.0
167.5°	132.4	132.4	132.0	130.8	128.1	125.8	121.9	118.4	113.4	107.6	104.9
170°	120.4	119.6	120.0	118.8	116.9	115.0	111.5	108.4	104.5	99.9	97.9
172.5°	109.2	108.4	108.8	107.6	106.4	104.9	102.6	99.9	96.8	92.5	91.3
175°	99.1	98.7	98.7	97.9	97.2	96.0	93.7	92.1	90.2	87.9	87.1
177.5°	90.2	89.4	89.8	89.4	89.0	88.6	87.9	87.1	85.9	84.8	84.4
180°	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6



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CATALOG NUMBER: ULA-A3-D-U-SYM-VMx-HSS-BK

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1
2.5°	31.7	30.2	28.3	26.3	24.4	22.8	22.1	20.9	20.9	20.1
5°	33.3	30.2	27.1	24.4	21.7	19.4	17.4	16.3	15.9	15.9
7.5°	38.7	35.2	31.4	27.9	24.8	22.1	19.7	17.8	17.0	16.6
10°	44.9	40.6	35.6	31.7	28.3	24.8	22.1	20.1	19.4	19.4
12.5°	51.5	46.1	40.3	35.2	30.6	27.1	24.4	22.8	22.1	21.7
15°	58.4	51.5	44.5	38.3	33.3	29.0	26.3	24.8	24.0	23.6
17.5°	65.4	56.9	48.8	41.4	35.2	31.0	27.5	25.2	24.4	24.4
20°	72.8	62.3	52.6	44.1	37.2	31.7	27.9	25.5	24.4	24.4
22.5°	81.3	68.5	56.5	46.8	38.7	32.9	28.6	25.9	24.4	24.4
25°	90.2	75.1	61.2	49.5	40.6	34.1	29.4	26.3	25.2	24.8
27.5°	100.2	81.7	65.8	52.3	42.6	35.2	30.2	27.1	25.5	25.5
30°	109.9	87.9	69.7	55.0	44.1	36.4	31.0	27.9	26.3	26.3
32.5°	119.2	94.1	73.2	57.3	45.7	37.5	32.1	28.6	27.5	27.1
35°	127.7	99.9	76.3	58.8	46.8	38.7	33.3	29.8	28.3	28.3
37.5°	135.9	104.9	79.0	60.4	48.0	39.5	34.4	31.0	29.4	29.4
40°	143.2	109.2	80.9	61.5	48.8	40.6	35.6	32.1	31.0	30.6
42.5°	150.2	112.6	82.4	62.3	49.5	41.8	36.8	33.7	32.1	32.1
45°	156.0	115.7	84.0	63.1	50.3	42.6	37.9	34.8	33.7	33.3
47.5°	161.4	118.4	84.8	63.9	51.1	43.7	39.1	36.4	35.2	34.8
50°	166.4	120.4	85.5	64.3	51.9	44.9	40.3	37.9	36.8	36.4
52.5°	171.1	122.3	85.9	64.6	52.6	45.7	41.8	39.1	37.9	37.9
55°	175.0	124.2	86.7	65.4	53.4	47.2	43.0	41.0	39.9	39.5
57.5°	179.2	125.8	87.5	65.8	54.6	48.4	44.5	42.6	41.4	41.0
60°	182.7	127.3	88.3	66.6	55.4	49.5	46.1	44.1	43.0	42.6
62.5°	186.2	128.5	88.6	67.3	56.5	51.1	47.6	45.7	44.5	44.1
65°	189.3	130.1	89.8	68.5	57.7	52.3	49.2	47.2	46.1	46.1
67.5°	192.4	131.6	90.6	69.3	59.2	53.8	50.7	48.8	47.6	47.6
70°	195.5	132.8	91.3	70.4	60.4	55.4	52.3	50.3	49.2	49.2
72.5°	198.2	134.3	92.5	72.0	61.9	56.9	53.8	51.9	50.7	50.7
75°	200.5	135.5	93.7	73.2	63.1	58.4	55.4	53.4	52.3	51.9
77.5°	203.2	137.0	95.2	74.3	64.6	60.0	56.9	55.0	53.4	53.4
80°	205.1	137.8	96.4	75.5	66.2	61.2	58.1	56.1	55.0	54.6
82.5°	207.1	139.3	97.5	76.6	67.3	62.3	59.2	57.3	56.1	55.7
85°	208.2	140.1	98.3	77.8	68.5	63.5	60.4	58.1	56.9	56.5
87.5°	209.4	141.3	99.5	79.0	69.7	64.6	61.5	59.2	57.7	57.3
88°	209.8	141.7	100.2	79.3	69.7	65.0	61.5	59.2	58.1	57.7
90°	210.6	142.4	101.0	80.1	70.4	65.4	62.3	59.6	58.4	58.1
92.5°	210.9	143.2	101.8	80.9	71.6	66.2	62.7	60.4	58.8	58.4
95°	211.7	144.0	103.0	82.1	72.4	67.0	63.1	60.8	59.2	58.8
97.5°	211.7	144.8	104.1	82.8	72.8	67.3	63.5	60.8	59.2	58.8
100°	211.7	145.5	105.3	83.6	73.5	67.3	63.5	60.8	59.2	58.8
102.5°	211.3	146.7	106.4	84.8	73.9	67.7	63.5	60.4	58.8	58.8
105°	210.9	147.5	107.6	85.9	74.7	67.7	63.1	60.0	58.4	58.4
107.5°	210.9	149.0	109.5	87.1	75.1	67.7	62.7	59.6	58.1	57.7



REPORT NUMBER: P256835

CATALOG NUMBER: ULA-A3-D-U-SYM-VMx-HSS-BK

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	210.6	150.6	111.9	89.0	76.3	68.1	62.7	59.2	57.3	57.3
112.5°	210.2	152.5	113.8	90.6	77.0	68.1	62.3	58.4	56.9	56.5
115°	210.6	154.4	116.5	92.5	78.2	68.5	61.9	58.1	56.1	55.7
117.5°	209.8	156.4	119.2	94.8	79.3	68.9	61.9	57.7	55.4	55.4
120°	209.4	158.3	121.9	97.9	80.9	69.3	61.5	56.9	55.0	54.6
122.5°	208.6	160.2	124.6	100.2	82.4	70.1	61.5	56.5	54.2	54.2
125°	207.5	161.4	126.6	102.2	83.6	70.4	61.5	56.5	53.8	53.4
127.5°	205.5	162.2	128.9	104.1	84.8	71.2	61.5	56.1	53.4	53.0
130°	203.2	162.6	130.1	105.7	85.9	71.6	61.9	56.1	53.4	53.0
132.5°	199.7	162.2	130.8	106.8	87.1	72.4	62.3	56.1	53.4	53.0
135°	196.2	161.0	131.2	107.6	87.9	73.2	62.7	56.1	53.4	53.0
137.5°	191.2	159.1	131.2	108.0	88.3	73.5	63.1	56.5	53.8	53.4
140°	185.8	156.0	129.7	108.0	88.6	74.3	63.9	57.3	54.2	53.8
142.5°	179.6	152.9	128.5	107.2	88.6	74.7	64.3	57.7	54.6	54.6
145°	173.0	149.0	126.2	106.8	88.6	75.1	65.0	58.4	55.4	55.4
147.5°	166.4	144.8	123.9	105.7	88.6	75.5	65.8	59.6	56.5	56.1
150°	159.1	139.3	120.4	103.3	87.9	75.5	66.2	60.4	57.3	56.9
152.5°	151.0	133.5	116.9	101.4	86.7	75.5	67.0	61.2	58.4	58.4
155°	142.8	127.3	112.6	98.7	85.9	75.9	68.1	62.7	60.0	60.0
157.5°	134.3	121.5	108.4	96.0	84.8	75.9	68.9	64.3	61.9	61.5
160°	126.2	115.3	104.1	92.9	83.6	75.9	69.7	65.4	63.5	63.1
162.5°	117.7	108.4	99.1	89.8	81.7	75.1	70.1	66.6	64.6	64.6
165°	109.2	101.8	93.3	86.3	79.7	74.7	70.4	67.3	65.8	65.8
167.5°	102.2	95.6	89.0	83.2	78.6	74.3	70.8	68.5	67.3	67.3
170°	95.2	90.2	85.5	81.3	77.4	73.9	71.6	70.1	68.9	68.9
172.5°	89.8	86.3	82.8	79.7	77.0	74.7	72.8	71.6	70.8	70.8
175°	85.9	83.6	81.7	79.3	77.8	76.3	75.1	74.3	73.9	74.3
177.5°	84.0	82.8	81.7	80.5	80.1	79.3	78.6	78.2	78.2	78.6
180°	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6	83.6

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