

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: P256838

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256838
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-A4-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: 3223.4 lumens
Efficiency: N/A
Efficacy: 110.8 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): 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

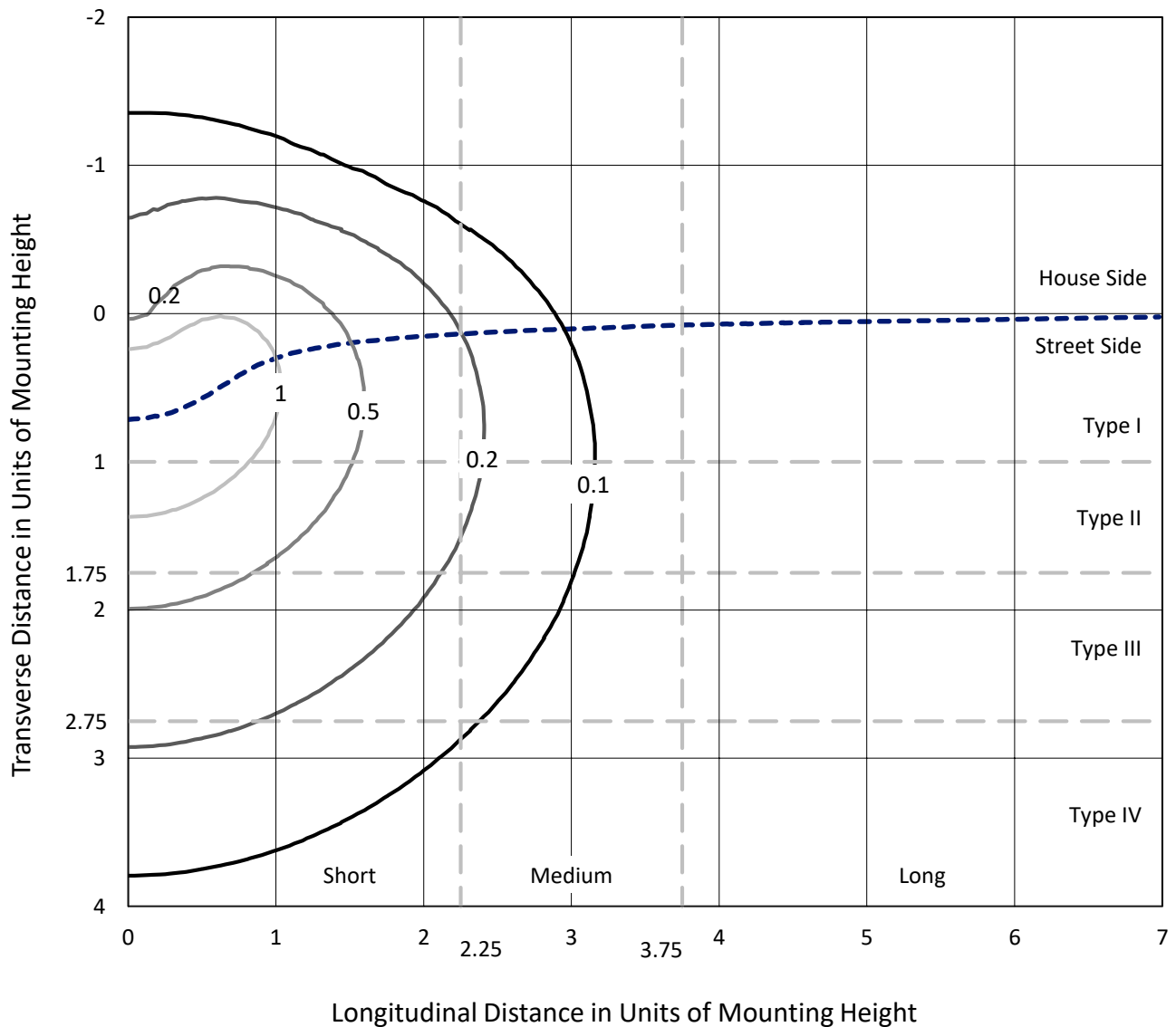


REPORT NUMBER: P256838

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

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

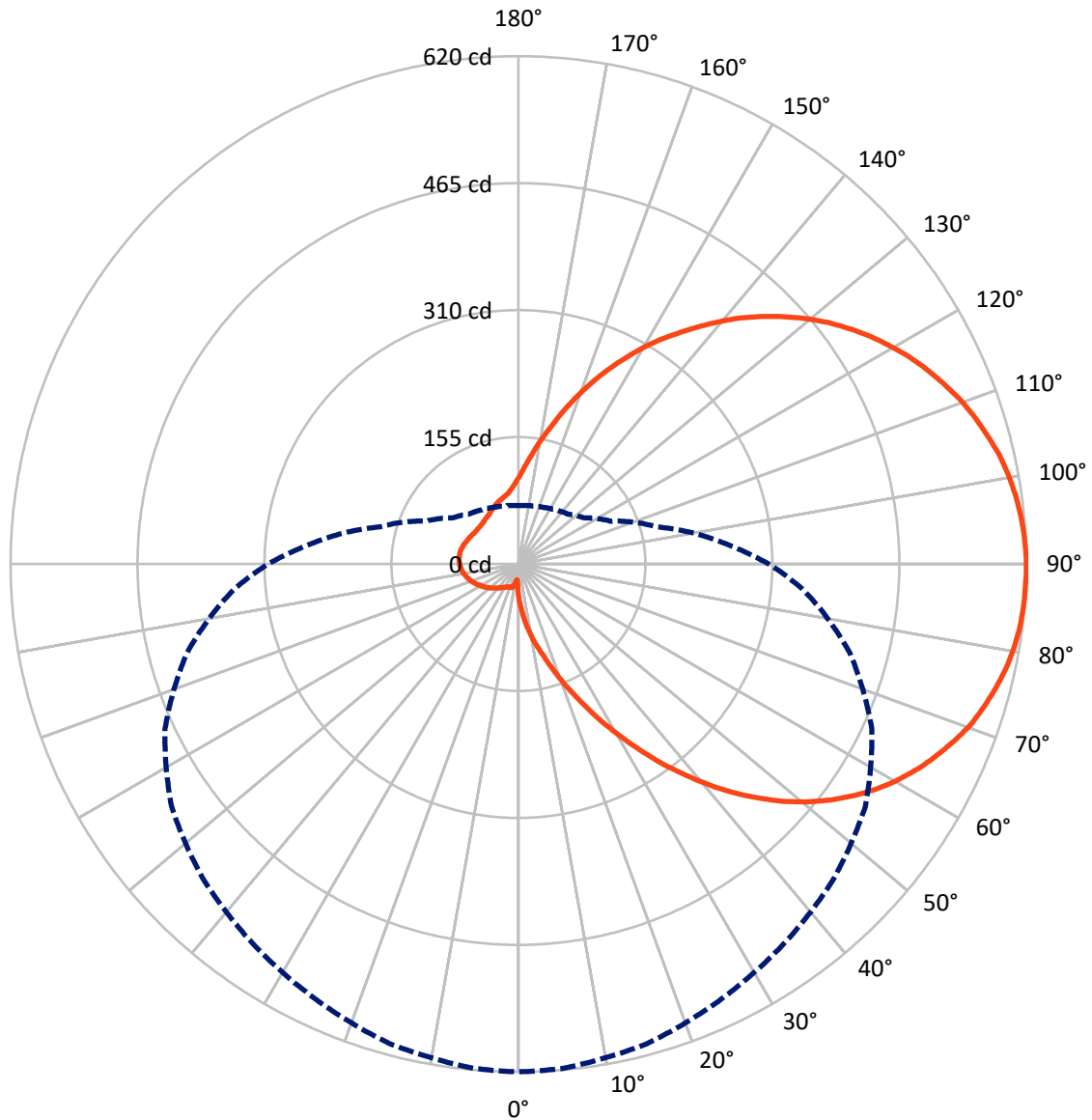


Based on 10 foot mounting height. Maximum calculated value = 1.6 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P256838

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

Luminous Intensity Polar Plot



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



REPORT NUMBER: P256838

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

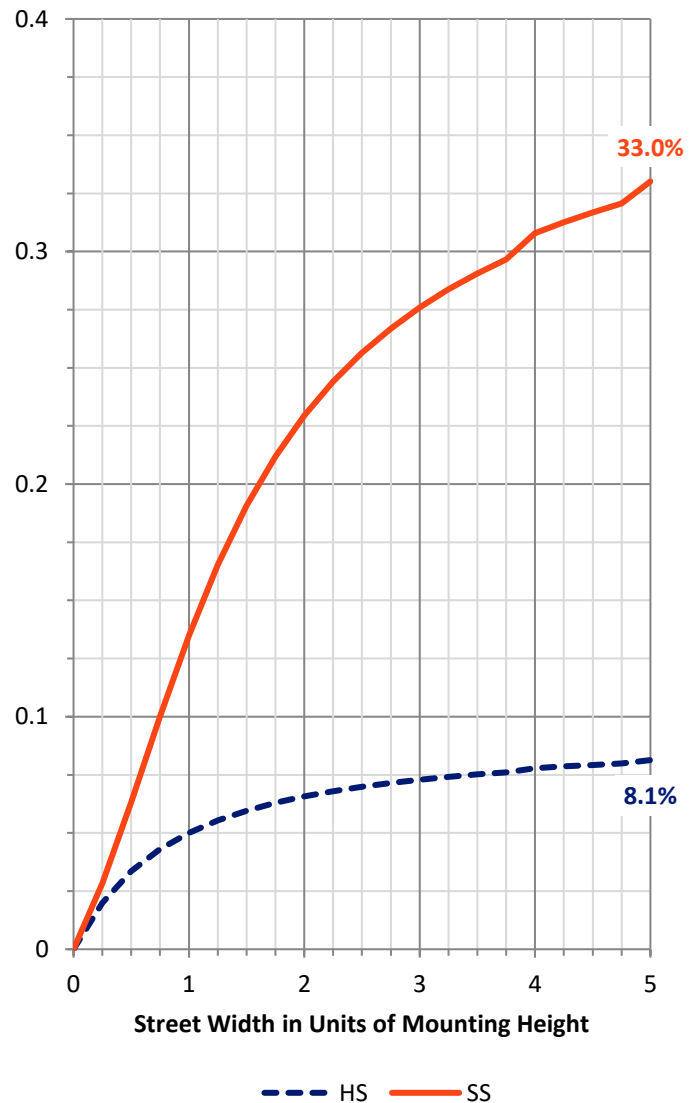
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	291.5	382.6	674.0
	% Fixture	9.0	11.9	20.9
Street Side	Lumens	1248.1	1301.2	2549.4
	% Fixture	38.7	40.4	79.1
Total	Lumens	1539.6	1683.8	3223.4
	% Fixture	47.8	52.2	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.6	0.1
10°-20°	21.8	0.7
20°-30°	54.8	1.7
30°-40°	106.6	3.3
40°-50°	169.4	5.3
50°-60°	230.8	7.2
60°-70°	283.5	8.8
70°-80°	323.2	10.0
80°-90°	344.9	10.7
90°-100°	347.0	10.8
100°-110°	329.2	10.2
110°-120°	295.5	9.2
120°-130°	250.2	7.8
130°-140°	194.9	6.0
140°-150°	135.7	4.2
150°-160°	81.7	2.5
160°-170°	39.0	1.2
170°-180°	10.6	0.3
0°-90°	1539.6	47.8
0°-180°	3223.4	100.0



REPORT NUMBER: P256838

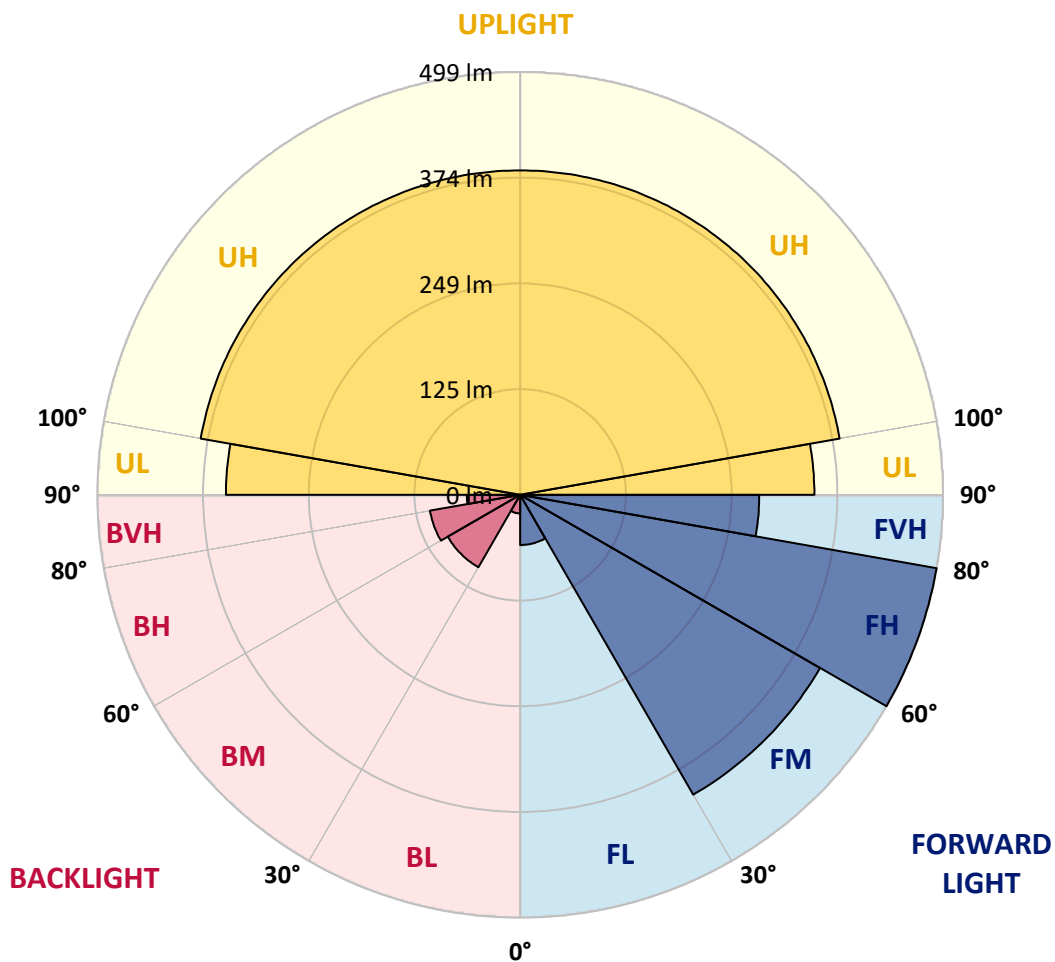
CATALOG NUMBER: ULA-A4-D-U-SYM-VMx-HSS-BK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	59.2	1.8			
FM (30°-60°)	408.3	12.7			
FH (60°-80°)	498.7	15.5			G0/660
FVH (80°-90°)	281.9	8.7			G3/500
BL (0°-30°)	21.9	0.7	B0/110		
BM (30°-60°)	98.6	3.1	B0/220		
BH (60°-80°)	108.0	3.3	B0/110		G0/110
BVH (80°-90°)	63.0	2.0			G1/100
UL (90°-100°)	347.0	10.8		U3/500	
UH (100°-180°)	382.6	11.9		U3/500	

BUG Rating: B0-U5-G3

Type IV Short





REPORT NUMBER: P256838

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7
2.5°	51.2	51.2	50.2	50.7	49.2	48.3	46.4	44.5	43.0	41.1	40.2
5°	65.0	64.1	63.1	62.1	59.8	57.4	55.0	51.6	48.3	44.9	43.0
7.5°	77.9	77.4	75.5	74.1	71.2	68.4	65.0	60.7	56.9	52.6	50.2
10°	90.8	90.4	88.4	87.0	83.7	80.8	76.5	71.7	66.9	61.2	58.3
12.5°	103.7	103.3	101.3	100.4	97.5	94.2	89.4	83.2	77.4	70.8	67.4
15°	117.1	117.1	116.6	114.7	111.4	108.0	103.3	96.1	88.9	80.8	77.0
17.5°	134.8	133.9	132.4	131.0	128.1	124.3	117.1	110.4	101.3	91.8	86.0
20°	153.0	152.0	151.1	149.2	145.3	141.5	134.3	126.2	114.7	103.3	96.1
22.5°	172.6	171.6	170.7	168.8	164.9	160.6	153.0	143.4	131.5	116.6	107.6
25°	194.1	194.1	192.7	190.7	186.4	182.1	173.1	162.5	148.7	131.0	120.9
27.5°	218.5	217.0	216.6	214.2	210.3	205.1	195.5	183.1	166.8	146.3	135.3
30°	242.8	242.4	241.9	239.0	234.7	229.0	218.0	205.1	185.5	161.6	148.7
32.5°	269.1	269.6	267.7	264.4	259.6	253.4	241.4	226.1	205.1	176.9	162.1
35°	297.3	296.9	294.0	291.6	285.4	277.7	264.4	247.2	223.2	191.7	175.0
37.5°	324.6	325.1	322.2	318.4	311.2	302.6	287.8	268.2	240.5	206.0	187.4
40°	352.8	353.3	349.9	344.2	336.5	326.5	310.3	288.7	258.1	219.9	198.4
42.5°	380.5	380.5	377.2	371.4	360.9	349.5	331.8	308.3	274.4	232.3	209.4
45°	406.8	406.8	402.5	395.3	383.9	371.0	351.8	326.0	289.2	243.8	218.9
47.5°	432.6	432.2	427.4	417.8	406.8	392.0	371.9	342.3	303.6	254.8	227.6
50°	456.5	456.5	449.8	439.3	425.5	410.6	389.1	358.1	316.9	264.8	235.7
52.5°	478.5	478.0	470.9	459.4	444.1	428.3	405.4	372.4	328.4	273.9	243.3
55°	498.6	498.1	490.0	477.1	461.3	444.1	420.2	385.8	339.9	282.5	250.0
57.5°	517.2	516.8	507.2	492.9	477.1	458.9	434.1	398.2	350.4	290.7	256.7
60°	534.0	533.0	523.5	507.7	491.0	472.3	447.5	410.2	360.0	297.8	262.9
62.5°	548.8	547.8	537.3	521.1	503.4	484.3	458.0	420.2	368.6	305.0	268.2
65°	562.2	561.2	550.7	533.0	514.9	495.3	468.5	429.8	376.7	311.2	273.9
67.5°	574.6	573.7	561.7	543.5	525.4	505.3	478.5	438.8	384.4	317.4	279.2
70°	586.1	584.2	571.7	553.6	534.0	513.4	487.1	447.0	391.5	323.2	284.0
72.5°	594.7	593.3	580.8	561.7	542.1	522.0	494.8	453.7	398.2	328.4	288.3
75°	602.3	601.4	588.5	568.9	548.8	528.2	501.5	459.4	403.5	333.7	292.6
77.5°	609.0	607.1	594.7	575.1	554.5	533.5	506.7	465.1	408.3	337.5	295.9
80°	613.8	612.4	599.5	579.4	558.8	537.8	511.0	469.4	412.1	340.8	298.8
82.5°	617.2	615.2	602.8	582.7	562.2	540.7	513.9	471.8	414.9	343.7	301.6
85°	619.1	617.6	604.7	585.1	564.1	542.6	515.8	474.2	417.3	346.1	303.6
87.5°	619.6	618.6	606.2	586.1	565.1	544.0	516.8	475.7	418.8	347.5	305.0
88°	620.0	618.1	606.2	586.1	565.5	544.0	516.8	476.1	418.8	348.0	305.5
90°	620.0	618.1	606.2	586.6	565.5	543.5	517.2	476.6	419.2	348.5	306.4
92.5°	618.6	617.2	605.2	586.1	565.1	543.1	516.8	476.1	419.7	349.5	307.4
95°	616.2	614.8	603.3	584.2	563.1	541.6	515.3	475.2	419.2	349.5	307.4
97.5°	612.4	610.9	600.0	580.8	560.3	538.8	512.5	473.3	417.8	349.0	307.4
100°	607.6	606.2	595.2	576.5	556.0	534.9	509.1	470.9	415.9	348.0	306.9
102.5°	601.4	599.5	589.0	570.8	551.2	530.2	504.8	466.6	413.0	346.1	306.0
105°	592.8	591.8	581.8	564.1	544.0	523.9	499.1	462.3	409.7	343.7	304.0
107.5°	584.7	583.2	573.2	556.0	537.3	517.7	493.3	457.0	405.9	341.3	302.6



REPORT NUMBER: P256838

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

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	575.1	573.7	563.6	547.4	528.7	510.1	486.2	451.3	401.6	338.5	301.2
112.5°	563.6	562.7	552.6	537.3	519.6	502.0	479.0	445.1	396.8	335.6	299.3
115°	552.1	550.7	541.2	526.8	509.6	492.9	470.9	437.9	391.0	332.2	297.3
117.5°	539.7	538.3	528.7	514.9	499.1	482.8	461.8	430.2	385.3	328.4	295.0
120°	525.4	524.4	515.3	502.4	488.1	472.3	451.8	422.1	379.1	324.6	292.6
122.5°	511.0	509.6	501.5	489.5	476.1	461.3	441.7	413.5	371.9	319.8	289.7
125°	495.3	494.3	486.7	475.7	463.2	449.4	430.7	403.0	364.3	315.0	286.4
127.5°	479.0	477.6	470.4	460.4	449.4	436.0	418.8	393.0	356.1	308.8	282.5
130°	461.3	460.4	453.7	444.6	433.6	421.6	405.4	381.0	346.6	302.1	277.3
132.5°	442.7	441.7	436.0	428.3	417.3	406.3	391.0	367.6	335.6	294.5	271.5
135°	423.6	423.1	417.8	410.6	400.6	390.6	375.7	354.2	324.6	286.4	264.8
137.5°	404.0	403.5	398.7	391.5	383.9	373.4	359.5	339.4	312.2	276.8	256.7
140°	382.9	382.4	378.6	371.9	363.8	355.2	341.8	323.6	298.3	265.8	248.1
142.5°	361.9	361.4	358.1	353.3	345.6	336.5	324.1	306.9	284.4	254.8	238.5
145°	341.3	340.8	338.0	333.2	326.0	317.9	306.0	291.1	270.1	243.3	229.0
147.5°	321.7	320.8	318.4	314.6	307.9	299.7	288.7	274.9	255.8	231.9	218.9
150°	300.7	300.2	297.3	294.5	287.8	281.1	270.6	258.6	240.9	219.4	208.0
152.5°	279.7	279.2	277.3	273.9	268.2	262.0	252.4	241.4	226.1	207.0	197.0
155°	259.1	258.6	256.7	254.3	248.6	242.8	234.2	224.2	210.3	194.1	185.0
157.5°	238.5	238.5	237.6	234.7	229.5	224.2	215.6	208.0	195.5	181.2	174.0
160°	218.5	218.5	218.0	215.1	210.8	206.0	198.4	190.7	181.2	168.8	162.5
162.5°	198.9	197.9	198.4	196.5	192.2	188.4	181.7	175.4	166.4	155.8	150.6
165°	180.2	179.7	180.2	178.3	174.5	171.1	164.9	160.1	152.5	143.4	139.6
167.5°	163.5	163.5	163.0	161.6	158.2	155.4	150.6	146.3	140.1	132.9	129.6
170°	148.7	147.7	148.2	146.8	144.4	142.0	137.7	133.9	129.1	123.3	120.9
172.5°	134.8	133.9	134.3	132.9	131.5	129.6	126.7	123.3	119.5	114.3	112.8
175°	122.4	121.9	121.9	120.9	120.0	118.6	115.7	113.8	111.4	108.5	107.6
177.5°	111.4	110.4	110.9	110.4	110.0	109.5	108.5	107.6	106.1	104.7	104.2
180°	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3



REPORT NUMBER: P256838

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

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7	39.7
2.5°	39.2	37.3	34.9	32.5	30.1	28.2	27.2	25.8	25.8	24.9
5°	41.1	37.3	33.5	30.1	26.8	23.9	21.5	20.1	19.6	19.6
7.5°	47.8	43.5	38.7	34.4	30.6	27.2	24.4	22.0	21.0	20.6
10°	55.5	50.2	44.0	39.2	34.9	30.6	27.2	24.9	23.9	23.9
12.5°	63.6	56.9	49.7	43.5	37.8	33.5	30.1	28.2	27.2	26.8
15°	72.2	63.6	55.0	47.3	41.1	35.9	32.5	30.6	29.6	29.2
17.5°	80.8	70.3	60.2	51.2	43.5	38.2	33.9	31.1	30.1	30.1
20°	89.9	77.0	65.0	54.5	45.9	39.2	34.4	31.6	30.1	30.1
22.5°	100.4	84.6	69.8	57.8	47.8	40.6	35.4	32.0	30.1	30.1
25°	111.4	92.7	75.5	61.2	50.2	42.1	36.3	32.5	31.1	30.6
27.5°	123.8	100.9	81.3	64.5	52.6	43.5	37.3	33.5	31.6	31.6
30°	135.8	108.5	86.0	67.9	54.5	44.9	38.2	34.4	32.5	32.5
32.5°	147.2	116.2	90.4	70.8	56.4	46.4	39.7	35.4	33.9	33.5
35°	157.8	123.3	94.2	72.7	57.8	47.8	41.1	36.8	34.9	34.9
37.5°	167.8	129.6	97.5	74.6	59.3	48.8	42.5	38.2	36.3	36.3
40°	176.9	134.8	99.9	76.0	60.2	50.2	44.0	39.7	38.2	37.8
42.5°	185.5	139.1	101.8	77.0	61.2	51.6	45.4	41.6	39.7	39.7
45°	192.7	142.9	103.7	77.9	62.1	52.6	46.8	43.0	41.6	41.1
47.5°	199.3	146.3	104.7	78.9	63.1	54.0	48.3	44.9	43.5	43.0
50°	205.6	148.7	105.6	79.4	64.1	55.5	49.7	46.8	45.4	44.9
52.5°	211.3	151.1	106.1	79.8	65.0	56.4	51.6	48.3	46.8	46.8
55°	216.1	153.5	107.1	80.8	66.0	58.3	53.1	50.7	49.2	48.8
57.5°	221.3	155.4	108.0	81.3	67.4	59.8	55.0	52.6	51.2	50.7
60°	225.6	157.3	109.0	82.2	68.4	61.2	56.9	54.5	53.1	52.6
62.5°	229.9	158.7	109.5	83.2	69.8	63.1	58.8	56.4	55.0	54.5
65°	233.8	160.6	110.9	84.6	71.2	64.5	60.7	58.3	56.9	56.9
67.5°	237.6	162.5	111.9	85.6	73.1	66.4	62.6	60.2	58.8	58.8
70°	241.4	164.0	112.8	87.0	74.6	68.4	64.5	62.1	60.7	60.7
72.5°	244.8	165.9	114.3	88.9	76.5	70.3	66.4	64.1	62.6	62.6
75°	247.6	167.3	115.7	90.4	77.9	72.2	68.4	66.0	64.5	64.1
77.5°	251.0	169.2	117.6	91.8	79.8	74.1	70.3	67.9	66.0	66.0
80°	253.4	170.2	119.0	93.2	81.7	75.5	71.7	69.3	67.9	67.4
82.5°	255.8	172.1	120.5	94.7	83.2	77.0	73.1	70.8	69.3	68.8
85°	257.2	173.1	121.4	96.1	84.6	78.4	74.6	71.7	70.3	69.8
87.5°	258.6	174.5	122.9	97.5	86.0	79.8	76.0	73.1	71.2	70.8
88°	259.1	175.0	123.8	98.0	86.0	80.3	76.0	73.1	71.7	71.2
90°	260.1	175.9	124.8	99.0	87.0	80.8	77.0	73.6	72.2	71.7
92.5°	260.5	176.9	125.7	99.9	88.4	81.7	77.4	74.6	72.7	72.2
95°	261.5	177.8	127.2	101.3	89.4	82.7	77.9	75.1	73.1	72.7
97.5°	261.5	178.8	128.6	102.3	89.9	83.2	78.4	75.1	73.1	72.7
100°	261.5	179.7	130.0	103.3	90.8	83.2	78.4	75.1	73.1	72.7
102.5°	261.0	181.2	131.5	104.7	91.3	83.7	78.4	74.6	72.7	72.7
105°	260.5	182.1	132.9	106.1	92.3	83.7	77.9	74.1	72.2	72.2
107.5°	260.5	184.0	135.3	107.6	92.7	83.7	77.4	73.6	71.7	71.2



REPORT NUMBER: P256838

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

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	260.1	186.0	138.2	110.0	94.2	84.1	77.4	73.1	70.8	70.8
112.5°	259.6	188.4	140.5	111.9	95.1	84.1	77.0	72.2	70.3	69.8
115°	260.1	190.7	143.9	114.3	96.6	84.6	76.5	71.7	69.3	68.8
117.5°	259.1	193.1	147.2	117.1	98.0	85.1	76.5	71.2	68.4	68.4
120°	258.6	195.5	150.6	120.9	99.9	85.6	76.0	70.3	67.9	67.4
122.5°	257.7	197.9	153.9	123.8	101.8	86.5	76.0	69.8	66.9	66.9
125°	256.2	199.3	156.3	126.2	103.3	87.0	76.0	69.8	66.4	66.0
127.5°	253.8	200.3	159.2	128.6	104.7	88.0	76.0	69.3	66.0	65.5
130°	251.0	200.8	160.6	130.5	106.1	88.4	76.5	69.3	66.0	65.5
132.5°	246.7	200.3	161.6	131.9	107.6	89.4	77.0	69.3	66.0	65.5
135°	242.4	198.9	162.1	132.9	108.5	90.4	77.4	69.3	66.0	65.5
137.5°	236.2	196.5	162.1	133.4	109.0	90.8	77.9	69.8	66.4	66.0
140°	229.5	192.7	160.1	133.4	109.5	91.8	78.9	70.8	66.9	66.4
142.5°	221.8	188.8	158.7	132.4	109.5	92.3	79.4	71.2	67.4	67.4
145°	213.7	184.0	155.8	131.9	109.5	92.7	80.3	72.2	68.4	68.4
147.5°	205.6	178.8	153.0	130.5	109.5	93.2	81.3	73.6	69.8	69.3
150°	196.5	172.1	148.7	127.6	108.5	93.2	81.7	74.6	70.8	70.3
152.5°	186.4	164.9	144.4	125.2	107.1	93.2	82.7	75.5	72.2	72.2
155°	176.4	157.3	139.1	121.9	106.1	93.7	84.1	77.4	74.1	74.1
157.5°	165.9	150.1	133.9	118.6	104.7	93.7	85.1	79.4	76.5	76.0
160°	155.8	142.5	128.6	114.7	103.3	93.7	86.0	80.8	78.4	77.9
162.5°	145.3	133.9	122.4	110.9	100.9	92.7	86.5	82.2	79.8	79.8
165°	134.8	125.7	115.2	106.6	98.5	92.3	87.0	83.2	81.3	81.3
167.5°	126.2	118.1	110.0	102.8	97.0	91.8	87.5	84.6	83.2	83.2
170°	117.6	111.4	105.6	100.4	95.6	91.3	88.4	86.5	85.1	85.1
172.5°	110.9	106.6	102.3	98.5	95.1	92.3	89.9	88.4	87.5	87.5
175°	106.1	103.3	100.9	98.0	96.1	94.2	92.7	91.8	91.3	91.8
177.5°	103.7	102.3	100.9	99.4	99.0	98.0	97.0	96.6	96.6	97.0
180°	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3	103.3

(END OF REPORT)