

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: P256796

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256796
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1804-729-18)
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-ASYM-VMx-HSS-BK
Description: UTILITY LIGHT ACORN ASYMMETRIC W/ HSS
Light Source: (60) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3616.7 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.17' x H: 2.17')
IES Classification: Type - Short - Non-Cutoff
BUG Rating: B1 - U5 - G3

Input Watts (W): 29.7
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



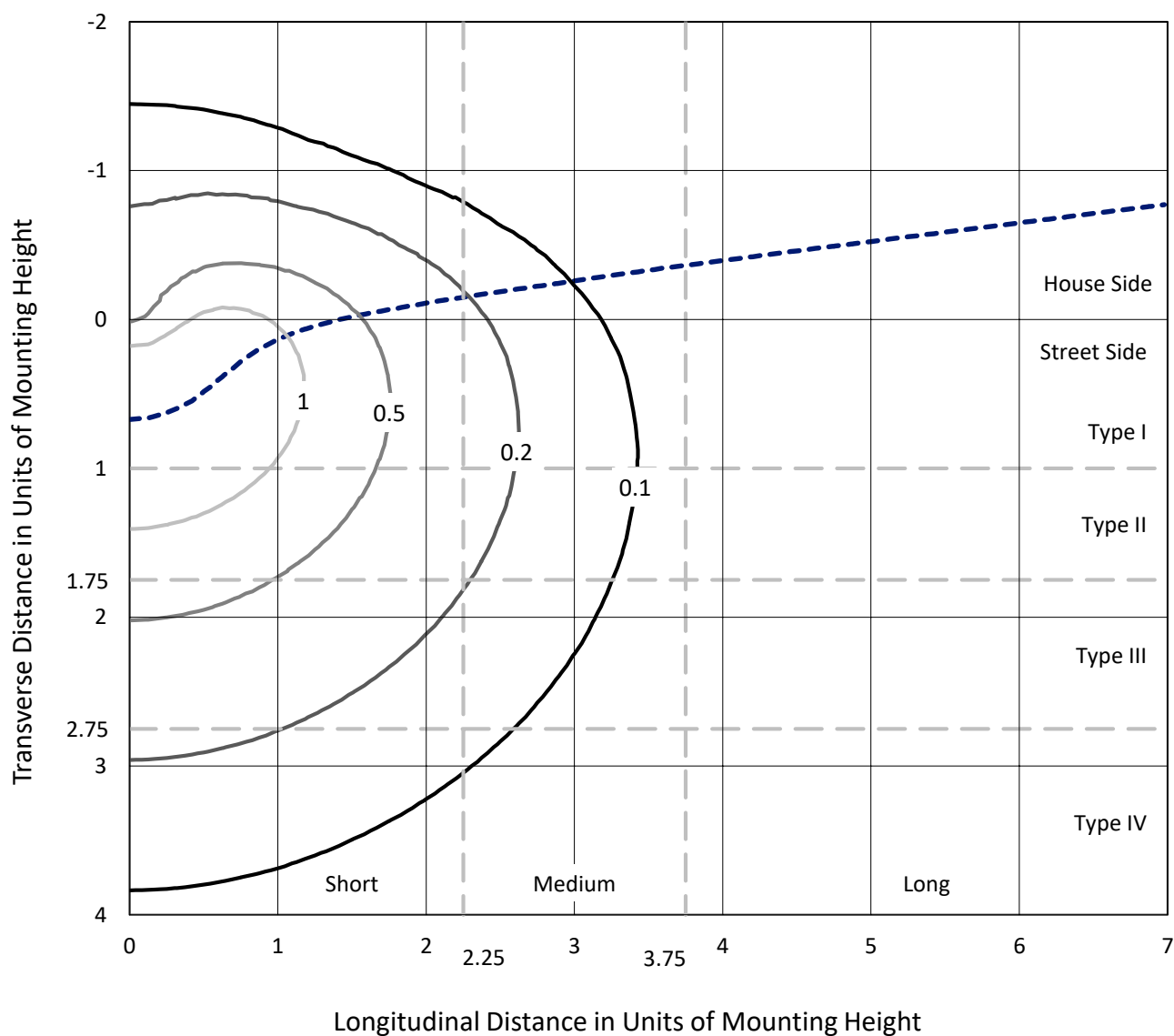
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

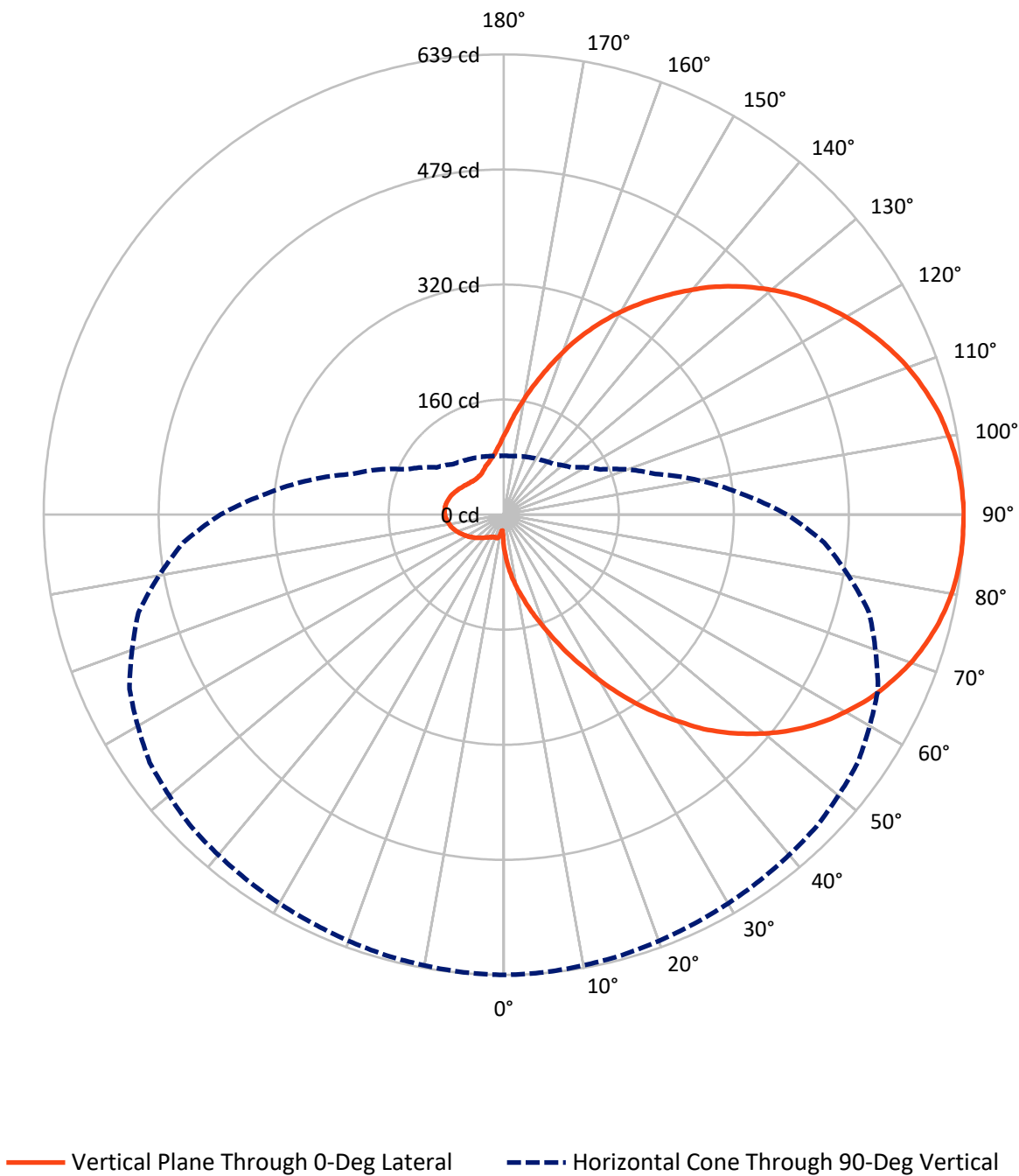


Based on 10 foot mounting height. Maximum calculated value = 1.8 fc
 Type - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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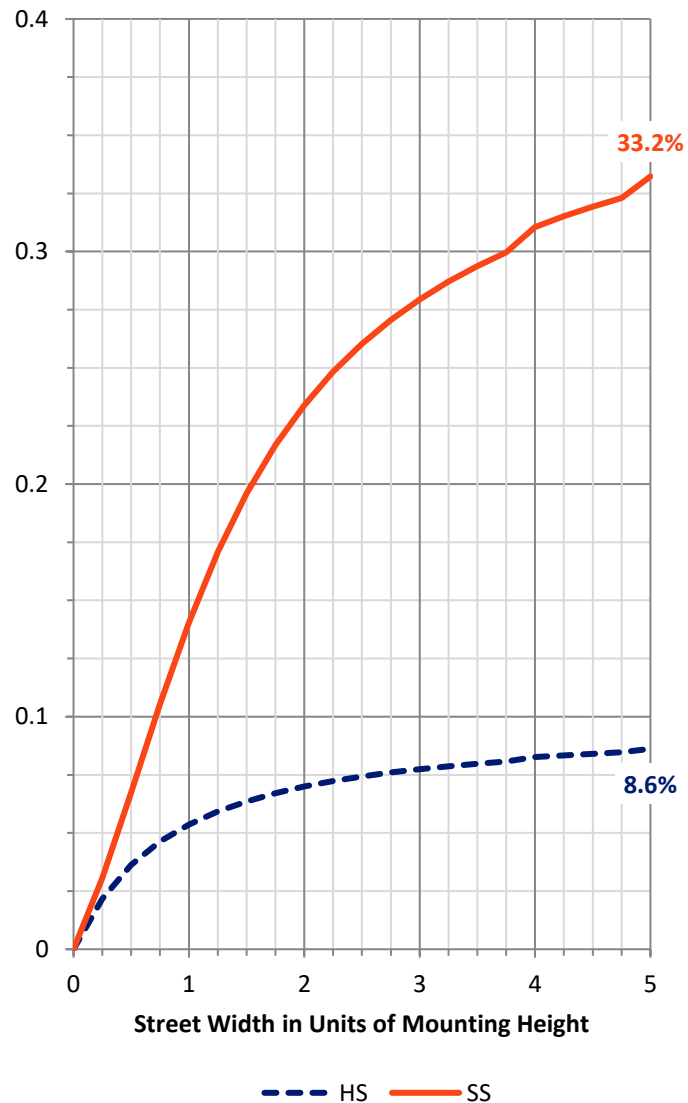
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	345.8	420.1	765.9
	% Fixture	9.6	11.6	21.2
Street Side	Lumens	1402.7	1448.1	2850.8
	% Fixture	38.8	40.0	78.8
Total	Lumens	1748.5	1868.2	3616.7
	% Fixture	48.3	51.7	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.3	0.1
10°-20°	25.2	0.7
20°-30°	62.9	1.7
30°-40°	121.3	3.4
40°-50°	191.1	5.3
50°-60°	260.4	7.2
60°-70°	321.3	8.9
70°-80°	367.8	10.2
80°-90°	393.2	10.9
90°-100°	395.0	10.9
100°-110°	372.7	10.3
110°-120°	330.9	9.1
120°-130°	276.0	7.6
130°-140°	211.4	5.8
140°-150°	144.6	4.0
150°-160°	86.0	2.4
160°-170°	40.7	1.1
170°-180°	11.0	0.3
0°-90°	1748.5	48.3
0°-180°	3616.7	100.0

Coefficient of Utilization



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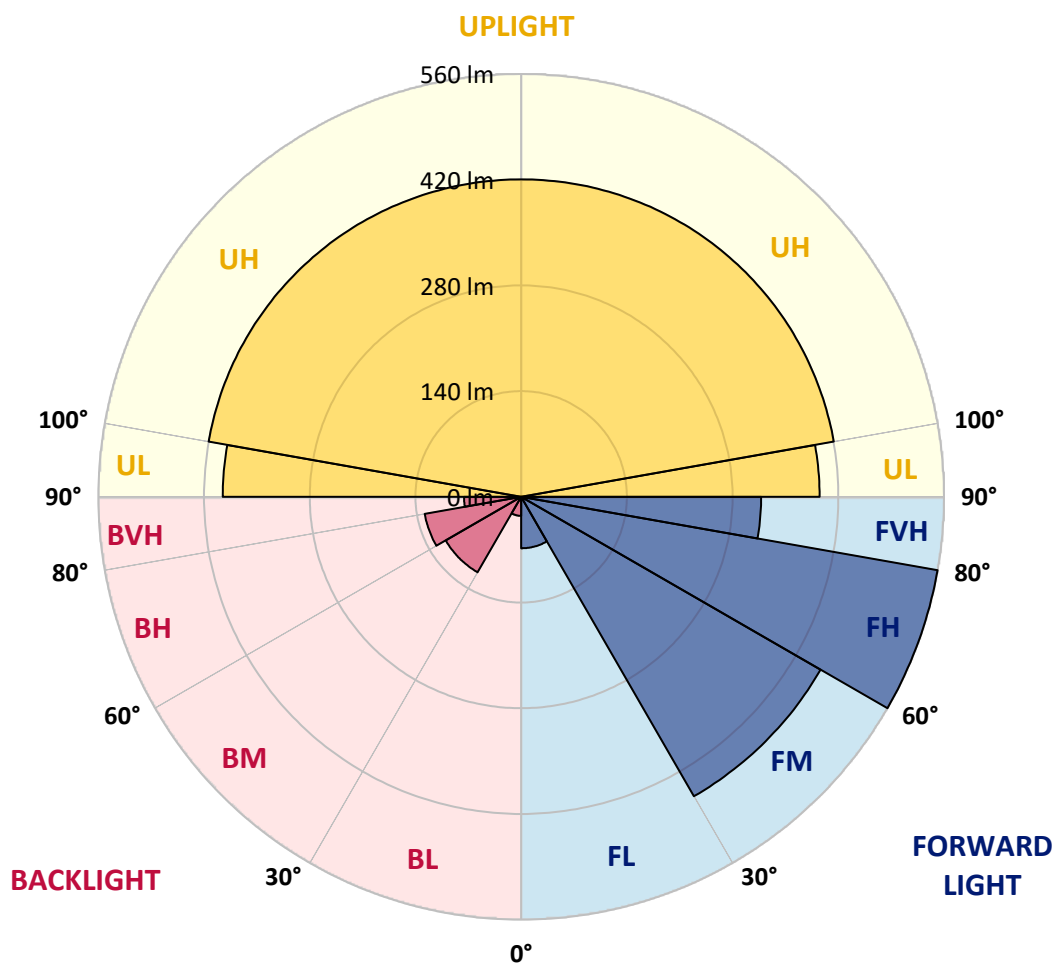
CATALOG NUMBER: ULA-A4-D-U-ASYM-VMx-HSS-BK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	68.1	1.9			
FM	(30°-60°)	457.5	12.6			
FH	(60°-80°)	559.5	15.5			G0/660
FVH	(80°-90°)	317.5	8.8			G3/500
BL	(0°-30°)	25.3	0.7	B0/110		
BM	(30°-60°)	115.3	3.2	B0/220		
BH	(60°-80°)	129.6	3.6	B1/500		G1/500
BVH	(80°-90°)	75.7	2.1			G1/100
UL	(90°-100°)	395.0	10.9		U3/500	
UH	(100°-180°)	420.1	11.6		U3/500	

BUG Rating: B1-U5-G3

Type Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6
2.5°	59.7	58.7	58.7	58.1	58.1	56.0	53.9	51.8	49.2	47.7	46.6
5°	75.4	73.8	73.3	71.8	70.2	66.5	63.9	59.7	56.0	51.3	49.2
7.5°	90.1	89.0	87.5	85.4	83.8	79.1	75.4	70.2	65.5	60.2	58.1
10°	104.7	103.7	102.1	100.0	96.9	93.2	89.0	82.7	77.0	70.7	67.6
12.5°	118.9	118.4	117.3	115.2	112.6	108.4	103.7	96.9	90.1	81.7	77.5
15°	136.2	135.1	134.1	132.0	129.4	124.6	119.4	112.6	103.7	94.3	89.6
17.5°	153.5	152.4	152.4	150.8	147.7	143.5	137.7	129.4	118.4	106.8	100.6
20°	172.8	171.8	171.8	170.2	167.1	162.9	156.6	147.7	135.6	120.5	113.1
22.5°	194.8	193.8	193.8	192.2	189.1	184.9	178.1	168.1	154.0	137.7	127.8
25°	218.9	217.3	217.3	215.8	212.6	208.4	201.6	190.1	173.9	155.5	144.0
27.5°	242.5	242.5	241.4	241.4	238.3	234.1	226.8	214.2	195.9	173.9	160.3
30°	270.2	270.2	268.7	268.1	264.5	260.8	252.4	238.8	218.9	192.7	176.5
32.5°	297.5	297.5	295.9	295.4	291.2	287.5	278.6	264.0	241.4	211.1	193.3
35°	325.2	324.2	323.1	322.6	319.0	314.2	305.3	288.6	263.4	229.4	209.5
37.5°	351.9	351.9	350.9	349.3	346.2	340.4	329.9	312.1	285.4	247.7	224.7
40°	378.7	379.2	378.1	376.6	371.3	366.6	355.6	336.2	306.9	265.0	239.9
42.5°	406.9	405.4	403.8	402.2	397.0	391.2	379.7	359.3	327.3	281.8	254.0
45°	431.6	430.5	428.9	426.8	422.1	414.8	403.3	380.8	346.7	297.0	267.6
47.5°	454.6	454.1	451.5	448.8	444.6	436.8	424.2	401.2	365.0	312.1	279.7
50°	477.1	477.1	474.5	470.3	465.6	459.3	444.6	420.6	382.3	326.3	291.7
52.5°	498.1	497.5	493.9	489.2	485.0	478.2	464.0	438.9	398.6	339.4	302.2
55°	517.4	516.9	512.7	508.0	503.3	496.5	481.8	455.6	414.3	351.9	312.7
57.5°	535.3	534.7	530.5	524.8	520.1	513.3	498.1	470.8	428.4	363.5	322.6
60°	551.0	550.4	546.3	540.0	535.3	528.4	513.8	485.5	442.0	374.5	331.5
62.5°	566.7	565.6	560.9	554.6	548.9	542.6	527.9	499.6	455.1	384.9	339.9
65°	580.3	579.2	574.0	567.2	562.0	555.2	540.5	512.2	466.6	394.9	348.3
67.5°	592.3	591.3	586.1	578.7	573.5	566.7	552.5	523.7	477.1	403.8	355.6
70°	603.9	602.3	597.1	589.2	584.0	577.2	563.0	534.2	487.6	412.2	362.9
72.5°	612.8	611.7	606.0	598.1	592.3	586.6	572.4	543.6	496.5	420.0	369.8
75°	621.1	620.1	614.3	606.0	600.7	594.4	580.8	552.0	503.8	426.8	375.5
77.5°	627.4	626.4	620.6	612.2	607.0	600.7	587.1	558.8	510.1	432.6	380.2
80°	632.7	631.1	625.3	617.5	611.7	605.4	592.3	564.1	515.9	437.3	384.9
82.5°	635.8	634.8	629.5	621.7	615.9	609.1	596.0	568.2	519.5	441.5	388.1
85°	637.9	636.9	631.6	624.3	618.0	611.7	598.6	570.9	522.7	444.1	390.7
87.5°	638.4	637.9	633.2	625.9	619.6	612.8	599.7	572.4	524.8	446.2	392.3
90°	639.0	637.9	633.2	626.4	620.1	613.3	600.2	573.5	525.3	446.7	393.3
92.5°	637.4	636.9	632.7	625.9	620.1	612.2	599.1	573.0	525.3	447.3	393.8
95°	635.3	634.2	631.1	624.3	618.0	610.7	597.1	571.4	524.3	446.7	393.3
97.5°	631.6	631.1	628.0	621.1	615.4	607.5	593.9	568.2	521.6	444.6	392.3
100°	626.4	625.9	622.7	616.4	610.1	602.8	589.2	563.5	517.4	441.5	389.7
102.5°	621.1	620.1	617.0	610.7	604.9	597.6	584.0	558.8	512.7	437.8	387.0
105°	613.3	612.2	609.6	603.9	597.6	590.2	576.6	552.0	505.9	433.1	382.8
107.5°	604.9	603.9	601.2	595.5	589.2	582.4	569.3	544.7	499.1	427.9	378.7
110°	595.5	593.4	591.3	585.5	579.8	573.5	560.4	536.3	492.3	421.6	373.9



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

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	584.5	583.4	580.8	575.6	569.3	563.5	550.4	526.9	482.9	414.8	369.2
115°	572.4	571.4	568.8	563.5	558.3	552.5	540.5	515.9	474.0	408.0	364.0
117.5°	559.9	558.8	555.7	551.0	546.3	541.0	528.4	505.4	464.0	400.1	358.2
120°	546.3	545.2	542.6	538.4	533.7	528.4	516.4	493.4	453.6	392.3	351.9
122.5°	531.6	531.1	528.4	523.7	519.5	515.4	503.8	481.3	442.6	383.4	345.7
125°	516.4	515.4	512.7	508.5	505.4	500.7	489.2	467.2	430.5	373.9	338.3
127.5°	499.6	499.1	496.5	492.8	489.7	485.5	474.0	453.0	417.4	364.0	330.5
130°	481.8	481.8	478.2	476.1	473.5	468.7	457.7	437.3	403.3	352.5	321.6
132.5°	463.5	463.0	460.9	457.7	455.6	450.9	440.5	420.6	388.1	340.9	312.1
135°	444.6	444.1	441.0	438.9	437.3	432.6	421.6	402.7	372.4	328.4	301.7
137.5°	424.7	424.7	421.6	420.0	417.9	412.7	402.2	383.9	355.6	314.8	290.1
140°	403.3	403.3	401.2	398.6	397.0	391.2	381.3	363.5	337.3	299.6	277.6
142.5°	382.3	382.3	380.2	377.6	375.5	369.8	359.8	343.0	319.0	284.9	265.0
145°	361.9	361.9	360.3	357.7	355.1	349.3	339.4	323.1	301.1	269.7	252.4
147.5°	341.5	341.5	339.9	337.3	334.7	328.9	319.0	303.8	283.3	255.6	239.3
150°	321.0	321.0	319.0	316.3	314.2	308.0	298.5	283.9	265.5	239.9	225.7
152.5°	300.1	300.1	298.0	295.9	292.8	287.0	277.6	265.0	247.2	224.7	212.1
155°	278.6	277.6	276.5	274.4	271.3	265.5	256.6	245.1	228.9	209.5	198.5
157.5°	257.7	256.6	255.1	253.5	250.3	245.1	236.7	225.7	211.6	194.8	185.4
160°	235.2	236.2	234.6	233.1	229.9	224.2	216.8	207.4	194.8	180.2	172.3
162.5°	214.2	214.7	213.7	212.1	209.5	203.7	197.4	189.1	178.1	165.5	158.7
165°	194.3	194.8	193.8	192.2	189.6	184.4	179.1	171.3	161.8	151.9	146.1
167.5°	176.5	177.5	175.4	173.9	171.8	167.1	162.4	156.1	147.7	139.8	135.1
170°	159.2	160.8	158.7	157.6	155.5	151.9	147.2	142.5	135.6	128.8	124.6
172.5°	144.0	145.1	143.5	142.5	140.4	137.2	134.1	129.9	124.6	119.4	116.8
175°	129.9	129.9	129.4	127.3	126.7	124.6	122.0	119.4	116.8	113.1	111.0
177.5°	116.8	116.8	116.8	116.3	115.7	114.7	113.6	112.1	110.5	108.9	107.9
180°	107.4	107.4	107.4	107.4	107.4	107.4	107.4	107.4	107.4	107.4	107.4



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

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6
2.5°	45.6	42.4	39.8	37.2	34.6	33.0	30.4	29.9	29.3	28.8
5°	47.1	42.9	38.2	34.6	30.9	27.2	24.6	23.0	22.0	22.0
7.5°	55.0	50.3	44.5	39.3	35.1	30.9	27.8	25.1	23.6	23.0
10°	63.9	57.6	50.8	44.5	39.8	35.1	30.9	28.3	27.2	27.2
12.5°	73.8	66.0	57.6	49.8	44.0	38.2	34.0	31.9	30.9	30.9
15°	83.8	73.8	63.9	54.5	47.1	41.4	37.2	34.6	33.5	33.5
17.5°	94.3	82.2	69.7	58.7	50.3	43.5	38.8	35.6	34.0	34.0
20°	105.3	90.1	75.4	62.3	52.4	44.5	39.3	35.6	34.0	33.5
22.5°	117.8	99.0	81.7	66.5	55.0	46.1	39.8	36.1	34.0	34.0
25°	132.0	108.4	88.0	70.2	57.1	47.1	40.3	36.1	34.6	34.0
27.5°	146.6	118.4	94.3	74.4	59.2	48.7	41.4	37.2	35.1	35.1
30°	161.3	128.3	100.0	77.5	61.3	49.8	42.4	38.2	36.1	35.6
32.5°	175.4	138.3	105.3	80.7	63.4	51.3	43.5	39.3	37.2	37.2
35°	188.0	146.1	110.0	82.7	64.9	52.9	45.0	40.3	38.2	38.2
37.5°	201.1	154.0	113.6	84.8	66.0	53.9	46.1	41.9	39.8	39.8
40°	213.2	160.8	116.8	86.4	67.0	55.0	47.7	43.5	41.4	41.4
42.5°	224.7	167.1	119.4	88.0	68.6	56.6	49.2	45.0	43.5	43.5
45°	235.2	171.8	121.5	89.0	69.7	58.1	51.3	47.1	45.6	45.0
47.5°	244.6	176.5	123.1	90.1	70.7	59.2	52.9	49.2	47.1	47.1
50°	253.5	180.7	124.6	90.6	71.8	60.8	55.0	51.3	49.8	49.8
52.5°	261.9	184.4	125.7	91.7	72.8	62.3	56.6	53.4	51.8	51.8
55°	269.7	188.0	127.8	92.7	74.4	64.4	58.7	55.5	53.9	53.9
57.5°	277.1	191.2	129.4	93.7	75.4	66.5	61.3	58.1	56.6	56.6
60°	283.9	193.8	130.4	94.8	77.0	68.6	63.4	60.2	58.7	58.7
62.5°	290.7	196.9	131.5	96.4	79.1	70.7	66.0	62.8	61.3	61.3
65°	297.0	199.5	133.0	97.9	80.7	72.8	68.1	65.5	63.9	63.4
67.5°	302.2	201.6	134.6	99.5	82.7	74.9	70.7	68.1	66.0	66.0
70°	307.4	204.3	136.7	101.1	84.8	77.5	72.8	70.2	68.6	68.1
72.5°	312.7	206.9	138.3	102.7	86.9	79.6	75.4	72.3	70.7	70.7
75°	317.4	209.0	140.4	104.7	89.0	82.2	77.5	74.9	72.8	72.8
77.5°	321.0	211.1	141.9	106.3	91.1	83.8	79.6	77.0	74.9	74.9
80°	324.2	212.6	143.5	108.4	93.2	85.9	81.7	78.6	77.0	76.5
82.5°	327.3	214.2	144.5	110.0	94.8	88.0	83.3	80.7	78.6	78.0
85°	328.9	215.8	146.1	111.6	96.4	89.6	84.8	81.7	80.1	79.6
87.5°	330.5	216.8	147.2	112.6	97.9	90.6	86.4	83.3	81.2	80.7
90°	331.5	217.9	148.2	114.2	99.0	92.2	87.5	83.8	81.7	81.7
92.5°	332.0	218.4	149.3	114.7	100.0	92.7	88.0	84.3	82.2	82.2
95°	332.0	218.9	150.3	115.7	101.1	93.2	88.5	84.8	82.7	82.2
97.5°	331.5	219.4	150.8	116.8	101.6	93.2	88.5	84.8	82.7	82.2
100°	329.9	218.9	151.9	117.3	101.6	93.2	88.0	84.3	82.2	81.7
102.5°	328.4	219.4	152.9	118.4	102.1	93.2	87.5	83.8	81.7	81.2
105°	325.8	220.0	154.0	118.9	102.1	92.7	86.9	82.7	80.7	80.1
107.5°	323.1	220.0	155.0	119.4	102.1	92.2	85.9	81.7	79.6	79.1
110°	320.5	221.0	156.6	121.0	102.1	91.7	84.8	80.7	78.0	78.0



REPORT NUMBER: P256796

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

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	317.9	221.5	158.7	122.0	102.7	90.6	83.3	79.1	76.5	76.5
115°	314.8	222.6	160.8	123.1	102.7	90.1	82.2	77.5	74.9	74.9
117.5°	311.6	223.6	162.4	124.6	103.2	89.6	81.2	75.9	73.3	73.3
120°	308.0	224.7	164.5	126.2	103.7	89.0	80.1	74.4	72.3	71.8
122.5°	304.3	224.7	166.5	128.8	104.2	88.5	79.1	73.3	70.7	70.2
125°	299.6	224.7	168.1	129.9	104.7	88.5	78.0	71.8	69.1	68.6
127.5°	294.3	224.2	169.7	130.9	104.7	88.0	77.0	70.7	67.6	67.6
130°	288.1	222.6	170.2	132.0	105.3	87.5	76.5	69.7	66.5	66.0
132.5°	281.8	220.5	170.2	133.0	105.8	87.5	75.4	68.6	65.5	64.9
135°	272.9	216.8	169.2	133.0	105.8	87.5	74.9	68.1	64.4	64.4
137.5°	264.0	212.6	167.6	132.0	105.8	86.9	74.9	67.6	63.9	63.4
140°	254.0	206.9	165.0	131.5	105.3	86.9	74.4	67.0	63.4	62.8
142.5°	243.5	201.1	162.4	130.4	105.3	86.9	74.4	67.0	63.4	62.8
145°	233.1	194.8	159.2	128.8	104.2	86.9	74.4	67.0	63.4	62.8
147.5°	222.1	188.0	155.5	126.2	103.7	86.9	74.9	67.0	63.9	63.4
150°	210.5	179.6	150.8	123.6	102.7	86.4	74.9	67.6	64.4	63.9
152.5°	199.0	171.3	145.1	120.5	101.6	86.4	75.4	68.6	65.5	64.9
155°	186.4	162.9	139.8	117.8	100.6	86.9	77.0	70.2	67.6	67.0
157.5°	174.9	154.5	134.6	115.2	100.0	87.5	78.6	72.3	69.7	69.1
160°	163.4	146.1	128.8	112.6	99.0	88.0	79.6	74.4	71.8	71.8
162.5°	151.9	137.2	122.0	108.9	97.4	88.0	81.2	76.5	73.8	73.8
165°	140.4	127.8	116.3	105.3	95.8	88.5	82.2	78.6	76.5	75.9
167.5°	130.4	120.5	111.0	102.7	94.8	89.0	83.8	80.7	79.1	79.1
170°	121.0	114.2	106.8	100.6	94.8	90.1	85.9	83.8	82.2	82.2
172.5°	114.2	109.5	104.2	99.5	95.3	91.7	89.0	87.5	86.4	85.9
175°	109.5	106.3	102.7	100.0	97.4	94.8	93.2	92.7	92.2	92.2
177.5°	107.4	105.3	103.7	102.1	101.1	100.0	99.5	99.0	99.0	98.5
180°	107.4	107.4	107.4	107.4	107.4	107.4	107.4	107.4	107.4	107.4

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