

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: P256836

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256836
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-7027-HSS-BK
Description: UTILITY LIGHT ACORN SYMMETRIC W/ HSS
Light Source: (90) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2957.9 lumens
Efficiency: N/A
Efficacy: 101.6 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



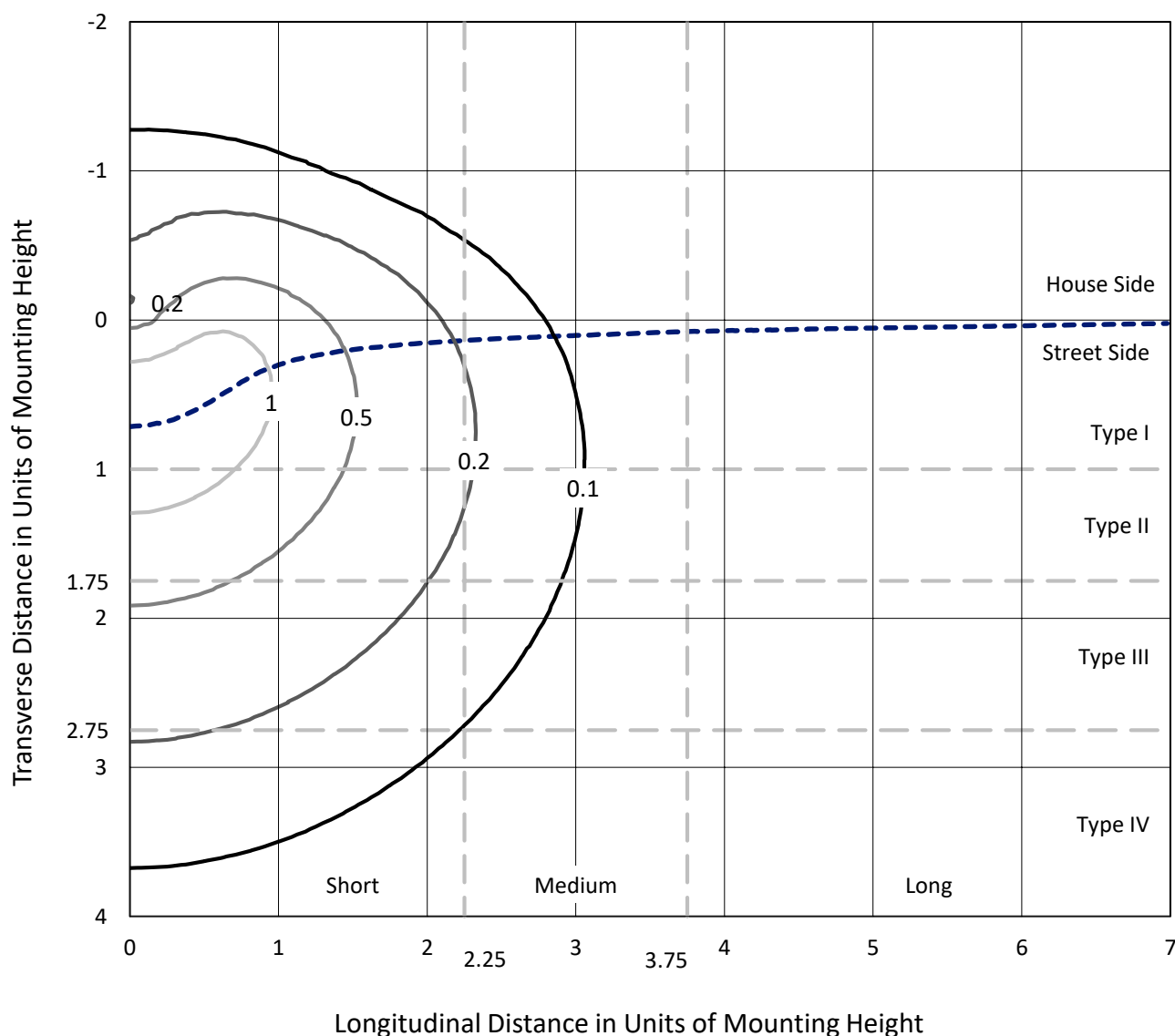
REPORT NUMBER: P256836

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

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

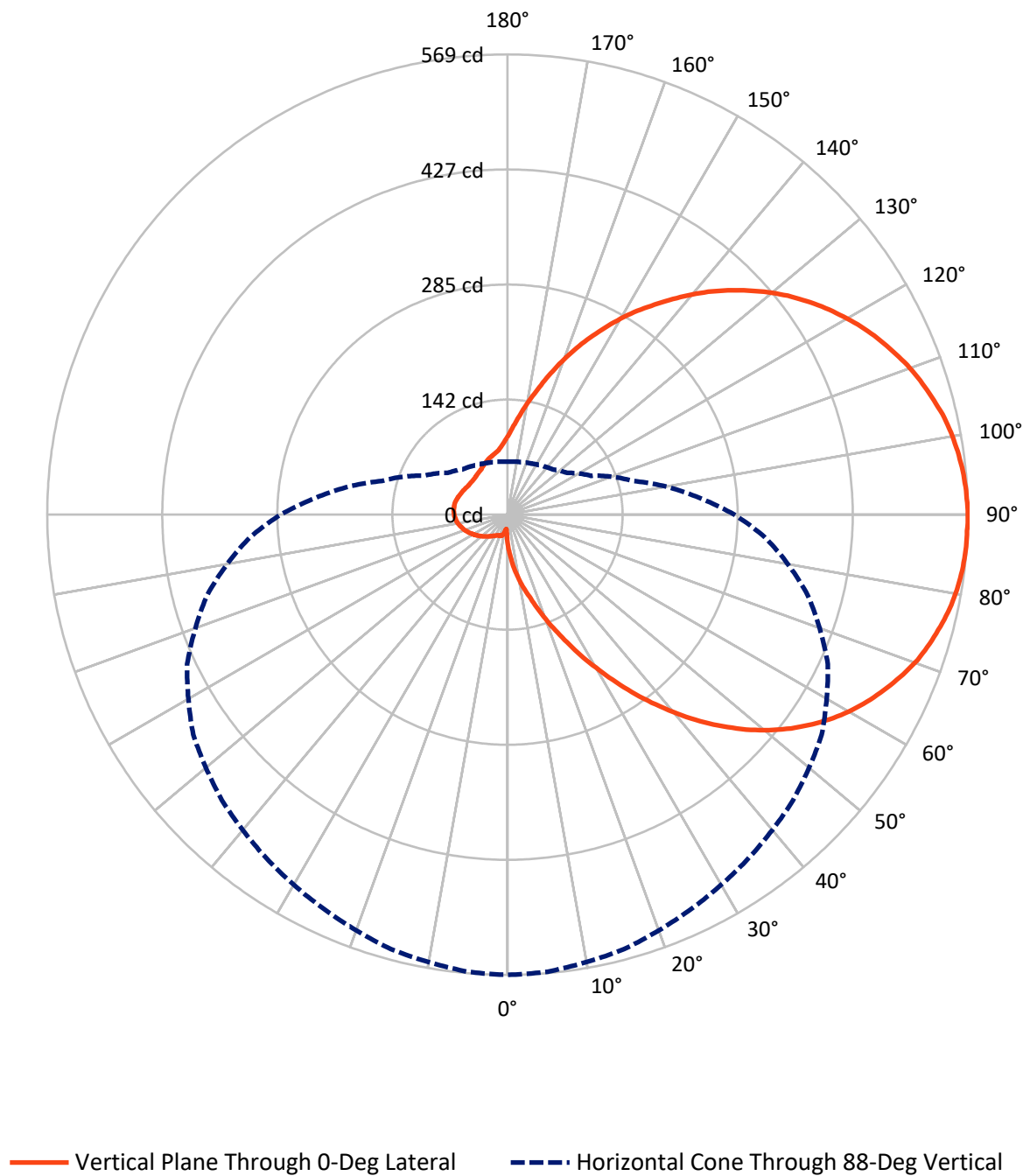


Based on 10 foot mounting height. Maximum calculated value = 1.5 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P256836

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

Luminous Intensity Polar Plot



REPORT NUMBER: P256836

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

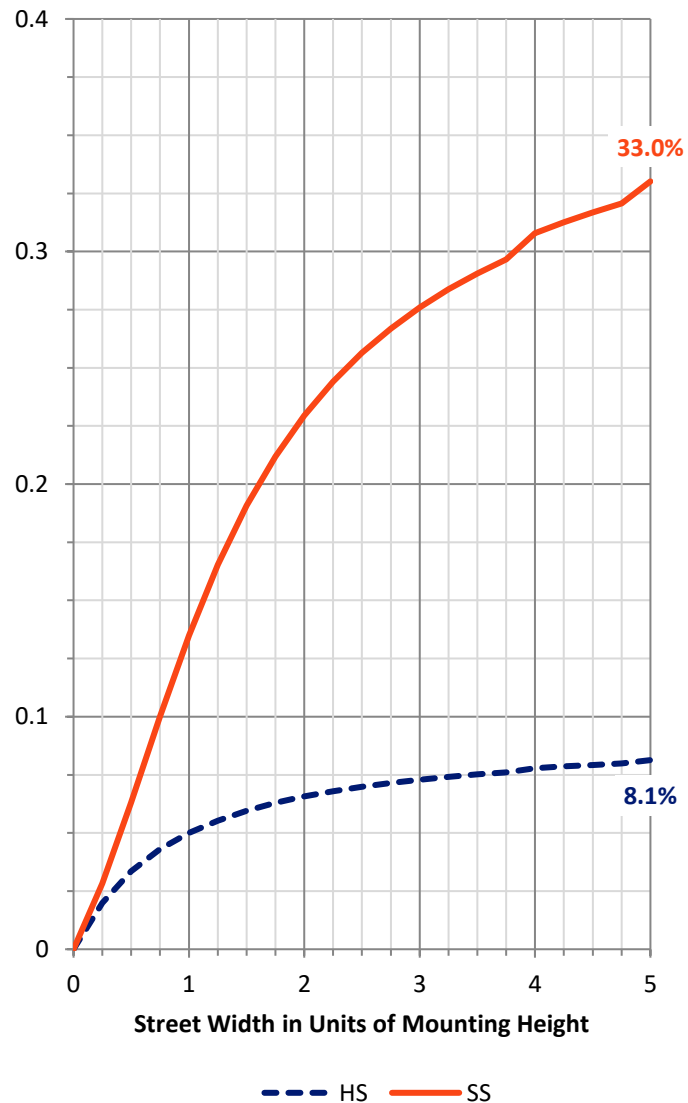
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	267.5	351.1	618.5
	% Fixture	9.0	11.9	20.9
Street Side	Lumens	1145.3	1194.1	2339.4
	% Fixture	38.7	40.4	79.1
Total	Lumens	1412.8	1545.1	2957.9
	% Fixture	47.8	52.2	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.2	0.1
10°-20°	20.0	0.7
20°-30°	50.3	1.7
30°-40°	97.9	3.3
40°-50°	155.4	5.3
50°-60°	211.8	7.2
60°-70°	260.1	8.8
70°-80°	296.5	10.0
80°-90°	316.5	10.7
90°-100°	318.4	10.8
100°-110°	302.1	10.2
110°-120°	271.2	9.2
120°-130°	229.6	7.8
130°-140°	178.9	6.0
140°-150°	124.5	4.2
150°-160°	75.0	2.5
160°-170°	35.8	1.2
170°-180°	9.7	0.3
0°-90°	1412.8	47.8
0°-180°	2957.9	100.0

Coefficient of Utilization



REPORT NUMBER: P256836

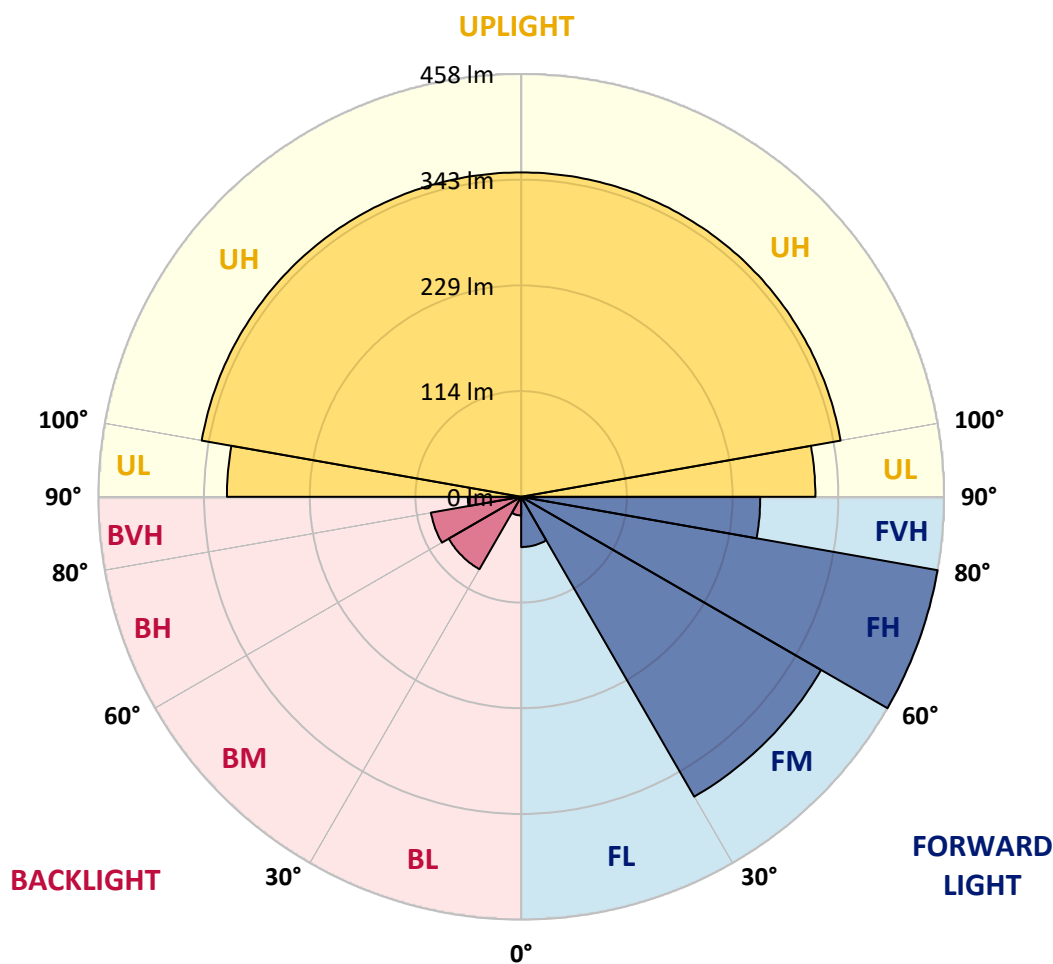
CATALOG NUMBER: ULA-A4-D-U-SYM-VMx-7027-HSS-BK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	54.3	1.8			
FM	(30°-60°)	374.7	12.7			
FH	(60°-80°)	457.6	15.5			G0/660
FVH	(80°-90°)	258.7	8.7			G3/500
BL	(0°-30°)	20.1	0.7	B0/110		
BM	(30°-60°)	90.5	3.1	B0/220		
BH	(60°-80°)	99.1	3.3	B0/110		G0/110
BVH	(80°-90°)	57.8	2.0			G1/100
UL	(90°-100°)	318.4	10.8		U3/500	
UH	(100°-180°)	351.1	11.9		U3/500	

BUG Rating: B0-U5-G3

Type IV Short



REPORT NUMBER: P256836

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4
2.5°	46.9	46.9	46.1	46.5	45.2	44.3	42.6	40.8	39.5	37.7	36.8
5°	59.7	58.8	57.9	57.0	54.8	52.6	50.4	47.4	44.3	41.2	39.5
7.5°	71.5	71.1	69.3	68.0	65.4	62.7	59.7	55.7	52.2	48.3	46.1
10°	83.3	82.9	81.2	79.8	76.8	74.1	70.2	65.8	61.4	56.2	53.5
12.5°	95.2	94.8	93.0	92.1	89.5	86.4	82.0	76.3	71.1	64.9	61.9
15°	107.5	107.5	107.0	105.3	102.2	99.1	94.8	88.2	81.6	74.1	70.6
17.5°	123.7	122.8	121.5	120.2	117.6	114.1	107.5	101.3	93.0	84.2	79.0
20°	140.4	139.5	138.6	136.9	133.4	129.8	123.3	115.8	105.3	94.8	88.2
22.5°	158.4	157.5	156.6	154.9	151.3	147.4	140.4	131.6	120.6	107.0	98.7
25°	178.1	178.1	176.8	175.0	171.1	167.1	158.8	149.1	136.4	120.2	111.0
27.5°	200.5	199.2	198.7	196.5	193.0	188.2	179.4	168.0	153.1	134.2	124.1
30°	222.8	222.4	222.0	219.3	215.4	210.1	200.0	188.2	170.2	148.3	136.4
32.5°	247.0	247.4	245.7	242.6	238.2	232.5	221.5	207.5	188.2	162.3	148.7
35°	272.9	272.4	269.8	267.6	261.9	254.9	242.6	226.8	204.9	175.9	160.6
37.5°	297.9	298.3	295.7	292.2	285.6	277.7	264.1	246.1	220.7	189.1	172.0
40°	323.7	324.2	321.1	315.8	308.8	299.6	284.7	265.0	236.9	201.8	182.0
42.5°	349.2	349.2	346.1	340.8	331.2	320.7	304.4	282.9	251.8	213.2	192.1
45°	373.3	373.3	369.4	362.8	352.3	340.4	322.9	299.2	265.4	223.7	200.9
47.5°	397.0	396.6	392.2	383.4	373.3	359.7	341.3	314.1	278.6	233.8	208.8
50°	418.9	418.9	412.8	403.1	390.4	376.8	357.1	328.6	290.8	243.0	216.3
52.5°	439.1	438.7	432.1	421.6	407.5	393.1	372.0	341.7	301.4	251.4	223.3
55°	457.5	457.1	449.6	437.8	423.3	407.5	385.6	354.0	311.9	259.3	229.4
57.5°	474.6	474.2	465.4	452.3	437.8	421.1	398.3	365.4	321.5	266.7	235.6
60°	490.0	489.1	480.3	465.9	450.5	433.4	410.6	376.4	330.3	273.3	241.3
62.5°	503.6	502.7	493.1	478.2	461.9	444.4	420.2	385.6	338.2	279.9	246.1
65°	515.9	515.0	505.4	489.1	472.5	454.5	429.9	394.4	345.7	285.6	251.4
67.5°	527.3	526.4	515.4	498.8	482.1	463.7	439.1	402.7	352.7	291.3	256.2
70°	537.8	536.1	524.7	508.0	490.0	471.1	447.0	410.2	359.3	296.5	260.6
72.5°	545.7	544.4	533.0	515.4	497.5	479.0	454.0	416.3	365.4	301.4	264.5
75°	552.7	551.9	540.0	522.0	503.6	484.7	460.2	421.6	370.2	306.2	268.5
77.5°	558.9	557.1	545.7	527.7	508.9	489.6	465.0	426.8	374.6	309.7	271.5
80°	563.3	561.9	550.1	531.7	512.8	493.5	468.9	430.8	378.1	312.8	274.2
82.5°	566.3	564.6	553.2	534.7	515.9	496.1	471.6	433.0	380.8	315.4	276.8
85°	568.1	566.8	554.9	536.9	517.6	497.9	473.3	435.2	383.0	317.6	278.6
87.5°	568.5	567.6	556.2	537.8	518.5	499.2	474.2	436.5	384.3	318.9	279.9
88°	569.0	567.2	556.2	537.8	519.0	499.2	474.2	436.9	384.3	319.4	280.3
90°	569.0	567.2	556.2	538.3	519.0	498.8	474.6	437.4	384.7	319.8	281.2
92.5°	567.6	566.3	555.4	537.8	518.5	498.3	474.2	436.9	385.2	320.7	282.1
95°	565.5	564.1	553.6	536.1	516.8	497.0	472.9	436.0	384.7	320.7	282.1
97.5°	561.9	560.6	550.5	533.0	514.1	494.4	470.3	434.3	383.4	320.2	282.1
100°	557.6	556.2	546.1	529.0	510.2	490.9	467.2	432.1	381.6	319.4	281.6
102.5°	551.9	550.1	540.4	523.8	505.8	486.5	463.2	428.1	379.0	317.6	280.8
105°	544.0	543.1	533.9	517.6	499.2	480.8	458.0	424.2	375.9	315.4	279.0
107.5°	536.5	535.2	526.0	510.2	493.1	475.1	452.7	419.4	372.4	313.2	277.7



REPORT NUMBER: P256836

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

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	527.7	526.4	517.2	502.3	485.2	468.1	446.1	414.1	368.5	310.6	276.4
112.5°	517.2	516.3	507.1	493.1	476.8	460.6	439.6	408.4	364.1	307.9	274.6
115°	506.7	505.4	496.6	483.4	467.6	452.3	432.1	401.8	358.8	304.9	272.9
117.5°	495.3	493.9	485.2	472.5	458.0	443.1	423.8	394.8	353.6	301.4	270.7
120°	482.1	481.2	472.9	461.0	447.9	433.4	414.5	387.3	347.9	297.9	268.5
122.5°	468.9	467.6	460.2	449.2	436.9	423.3	405.3	379.5	341.3	293.5	265.8
125°	454.5	453.6	446.6	436.5	425.1	412.4	395.2	369.8	334.3	289.1	262.8
127.5°	439.6	438.2	431.7	422.4	412.4	400.1	384.3	360.6	326.8	283.4	259.3
130°	423.3	422.4	416.3	408.0	397.9	386.9	372.0	349.6	318.0	277.2	254.4
132.5°	406.2	405.3	400.1	393.1	383.0	372.9	358.8	337.3	307.9	270.2	249.2
135°	388.7	388.2	383.4	376.8	367.6	358.4	344.8	325.1	297.9	262.8	243.0
137.5°	370.7	370.2	365.9	359.3	352.3	342.6	329.9	311.5	286.5	254.0	235.6
140°	351.4	350.9	347.4	341.3	333.8	325.9	313.7	297.0	273.7	243.9	227.7
142.5°	332.1	331.6	328.6	324.2	317.2	308.8	297.4	281.6	261.0	233.8	218.9
145°	313.2	312.8	310.1	305.8	299.2	291.7	280.8	267.2	247.9	223.3	210.1
147.5°	295.2	294.4	292.2	288.6	282.5	275.0	265.0	252.2	234.7	212.8	200.9
150°	275.9	275.5	272.9	270.2	264.1	257.9	248.3	237.3	221.1	201.4	190.8
152.5°	256.6	256.2	254.4	251.4	246.1	240.4	231.6	221.5	207.5	189.9	180.7
155°	237.8	237.3	235.6	233.4	228.1	222.8	215.0	205.7	193.0	178.1	169.8
157.5°	218.9	218.9	218.0	215.4	210.6	205.7	197.8	190.8	179.4	166.3	159.7
160°	200.5	200.5	200.0	197.4	193.5	189.1	182.0	175.0	166.3	154.9	149.1
162.5°	182.5	181.6	182.0	180.3	176.3	172.8	166.7	161.0	152.7	143.0	138.2
165°	165.4	164.9	165.4	163.6	160.1	157.0	151.3	147.0	139.9	131.6	128.1
167.5°	150.0	150.0	149.6	148.3	145.2	142.6	138.2	134.2	128.5	122.0	118.9
170°	136.4	135.6	136.0	134.7	132.5	130.3	126.3	122.8	118.4	113.2	111.0
172.5°	123.7	122.8	123.3	122.0	120.6	118.9	116.2	113.2	109.7	104.8	103.5
175°	112.3	111.9	111.9	111.0	110.1	108.8	106.2	104.4	102.2	99.6	98.7
177.5°	102.2	101.3	101.8	101.3	100.9	100.5	99.6	98.7	97.4	96.1	95.6
180°	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8



REPORT NUMBER: P256836

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

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4
2.5°	36.0	34.2	32.0	29.8	27.6	25.9	25.0	23.7	23.7	22.8
5°	37.7	34.2	30.7	27.6	24.6	21.9	19.7	18.4	18.0	18.0
7.5°	43.9	39.9	35.5	31.6	28.1	25.0	22.4	20.2	19.3	18.9
10°	50.9	46.1	40.4	36.0	32.0	28.1	25.0	22.8	21.9	21.9
12.5°	58.3	52.2	45.6	39.9	34.7	30.7	27.6	25.9	25.0	24.6
15°	66.2	58.3	50.4	43.4	37.7	32.9	29.8	28.1	27.2	26.8
17.5°	74.1	64.5	55.3	46.9	39.9	35.1	31.1	28.5	27.6	27.6
20°	82.5	70.6	59.7	50.0	42.1	36.0	31.6	29.0	27.6	27.6
22.5°	92.1	77.6	64.0	53.1	43.9	37.3	32.5	29.4	27.6	27.6
25°	102.2	85.1	69.3	56.2	46.1	38.6	33.3	29.8	28.5	28.1
27.5°	113.6	92.6	74.6	59.2	48.3	39.9	34.2	30.7	29.0	29.0
30°	124.6	99.6	79.0	62.3	50.0	41.2	35.1	31.6	29.8	29.8
32.5°	135.1	106.6	82.9	64.9	51.8	42.6	36.4	32.5	31.1	30.7
35°	144.8	113.2	86.4	66.7	53.1	43.9	37.7	33.8	32.0	32.0
37.5°	154.0	118.9	89.5	68.4	54.4	44.7	39.0	35.1	33.3	33.3
40°	162.3	123.7	91.7	69.7	55.3	46.1	40.4	36.4	35.1	34.7
42.5°	170.2	127.7	93.4	70.6	56.2	47.4	41.7	38.2	36.4	36.4
45°	176.8	131.2	95.2	71.5	57.0	48.3	43.0	39.5	38.2	37.7
47.5°	182.9	134.2	96.1	72.4	57.9	49.6	44.3	41.2	39.9	39.5
50°	188.6	136.4	96.9	72.8	58.8	50.9	45.6	43.0	41.7	41.2
52.5°	193.9	138.6	97.4	73.3	59.7	51.8	47.4	44.3	43.0	43.0
55°	198.3	140.8	98.3	74.1	60.5	53.5	48.7	46.5	45.2	44.7
57.5°	203.1	142.6	99.1	74.6	61.9	54.8	50.4	48.3	46.9	46.5
60°	207.1	144.3	100.0	75.5	62.7	56.2	52.2	50.0	48.7	48.3
62.5°	211.0	145.6	100.5	76.3	64.0	57.9	54.0	51.8	50.4	50.0
65°	214.5	147.4	101.8	77.6	65.4	59.2	55.7	53.5	52.2	52.2
67.5°	218.0	149.1	102.6	78.5	67.1	61.0	57.5	55.3	54.0	54.0
70°	221.5	150.5	103.5	79.8	68.4	62.7	59.2	57.0	55.7	55.7
72.5°	224.6	152.2	104.8	81.6	70.2	64.5	61.0	58.8	57.5	57.5
75°	227.2	153.5	106.2	82.9	71.5	66.2	62.7	60.5	59.2	58.8
77.5°	230.3	155.3	107.9	84.2	73.3	68.0	64.5	62.3	60.5	60.5
80°	232.5	156.2	109.2	85.5	75.0	69.3	65.8	63.6	62.3	61.9
82.5°	234.7	157.9	110.5	86.9	76.3	70.6	67.1	64.9	63.6	63.2
85°	236.0	158.8	111.4	88.2	77.6	71.9	68.4	65.8	64.5	64.0
87.5°	237.3	160.1	112.7	89.5	79.0	73.3	69.7	67.1	65.4	64.9
88°	237.8	160.6	113.6	89.9	79.0	73.7	69.7	67.1	65.8	65.4
90°	238.6	161.4	114.5	90.8	79.8	74.1	70.6	67.6	66.2	65.8
92.5°	239.1	162.3	115.4	91.7	81.2	75.0	71.1	68.4	66.7	66.2
95°	240.0	163.2	116.7	93.0	82.0	75.9	71.5	68.9	67.1	66.7
97.5°	240.0	164.1	118.0	93.9	82.5	76.3	71.9	68.9	67.1	66.7
100°	240.0	164.9	119.3	94.8	83.3	76.3	71.9	68.9	67.1	66.7
102.5°	239.5	166.3	120.6	96.1	83.8	76.8	71.9	68.4	66.7	66.7
105°	239.1	167.1	122.0	97.4	84.7	76.8	71.5	68.0	66.2	66.2
107.5°	239.1	168.9	124.1	98.7	85.1	76.8	71.1	67.6	65.8	65.4



REPORT NUMBER: P256836

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

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	238.6	170.6	126.8	100.9	86.4	77.2	71.1	67.1	64.9	64.9
112.5°	238.2	172.8	129.0	102.6	87.3	77.2	70.6	66.2	64.5	64.0
115°	238.6	175.0	132.0	104.8	88.6	77.6	70.2	65.8	63.6	63.2
117.5°	237.8	177.2	135.1	107.5	89.9	78.1	70.2	65.4	62.7	62.7
120°	237.3	179.4	138.2	111.0	91.7	78.5	69.7	64.5	62.3	61.9
122.5°	236.4	181.6	141.3	113.6	93.4	79.4	69.7	64.0	61.4	61.4
125°	235.1	182.9	143.4	115.8	94.8	79.8	69.7	64.0	61.0	60.5
127.5°	232.9	183.8	146.1	118.0	96.1	80.7	69.7	63.6	60.5	60.1
130°	230.3	184.2	147.4	119.8	97.4	81.2	70.2	63.6	60.5	60.1
132.5°	226.4	183.8	148.3	121.1	98.7	82.0	70.6	63.6	60.5	60.1
135°	222.4	182.5	148.7	122.0	99.6	82.9	71.1	63.6	60.5	60.1
137.5°	216.7	180.3	148.7	122.4	100.0	83.3	71.5	64.0	61.0	60.5
140°	210.6	176.8	147.0	122.4	100.5	84.2	72.4	64.9	61.4	61.0
142.5°	203.5	173.3	145.6	121.5	100.5	84.7	72.8	65.4	61.9	61.9
145°	196.1	168.9	143.0	121.1	100.5	85.1	73.7	66.2	62.7	62.7
147.5°	188.6	164.1	140.4	119.8	100.5	85.5	74.6	67.6	64.0	63.6
150°	180.3	157.9	136.4	117.1	99.6	85.5	75.0	68.4	64.9	64.5
152.5°	171.1	151.3	132.5	114.9	98.3	85.5	75.9	69.3	66.2	66.2
155°	161.9	144.3	127.7	111.9	97.4	86.0	77.2	71.1	68.0	68.0
157.5°	152.2	137.7	122.8	108.8	96.1	86.0	78.1	72.8	70.2	69.7
160°	143.0	130.7	118.0	105.3	94.8	86.0	79.0	74.1	71.9	71.5
162.5°	133.4	122.8	112.3	101.8	92.6	85.1	79.4	75.5	73.3	73.3
165°	123.7	115.4	105.7	97.8	90.4	84.7	79.8	76.3	74.6	74.6
167.5°	115.8	108.4	100.9	94.3	89.1	84.2	80.3	77.6	76.3	76.3
170°	107.9	102.2	96.9	92.1	87.7	83.8	81.2	79.4	78.1	78.1
172.5°	101.8	97.8	93.9	90.4	87.3	84.7	82.5	81.2	80.3	80.3
175°	97.4	94.8	92.6	89.9	88.2	86.4	85.1	84.2	83.8	84.2
177.5°	95.2	93.9	92.6	91.2	90.8	89.9	89.1	88.6	88.6	89.1
180°	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8	94.8

(END OF REPORT)