

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: P274489

Luminaire Tested: **ULA-A9-D-U-ASYM-VMx-BK-PDR**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P274489
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1804-729-11)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ULA-A9-D-U-ASYM-VMx-BK-PDR
Description: UTILITY LIGHT ACORN TYPE IV ASYMMETRIC
Light Source: (120) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9057 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.17' x H: 2.17')
IES Classification: Type - Short - Non-Cutoff
BUG Rating: B2 - U5 - G4

Input Watts (W): 71.9
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



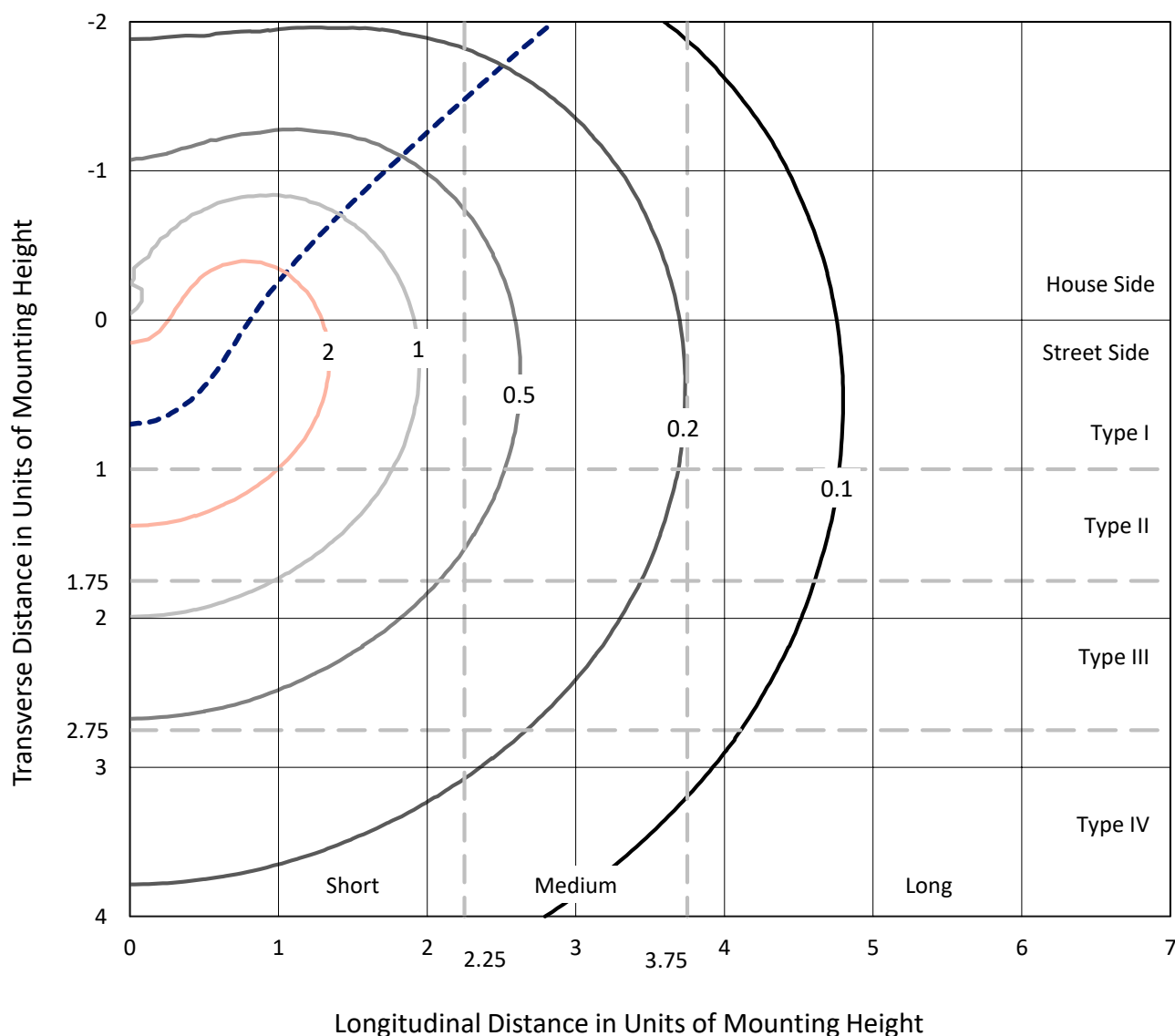
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

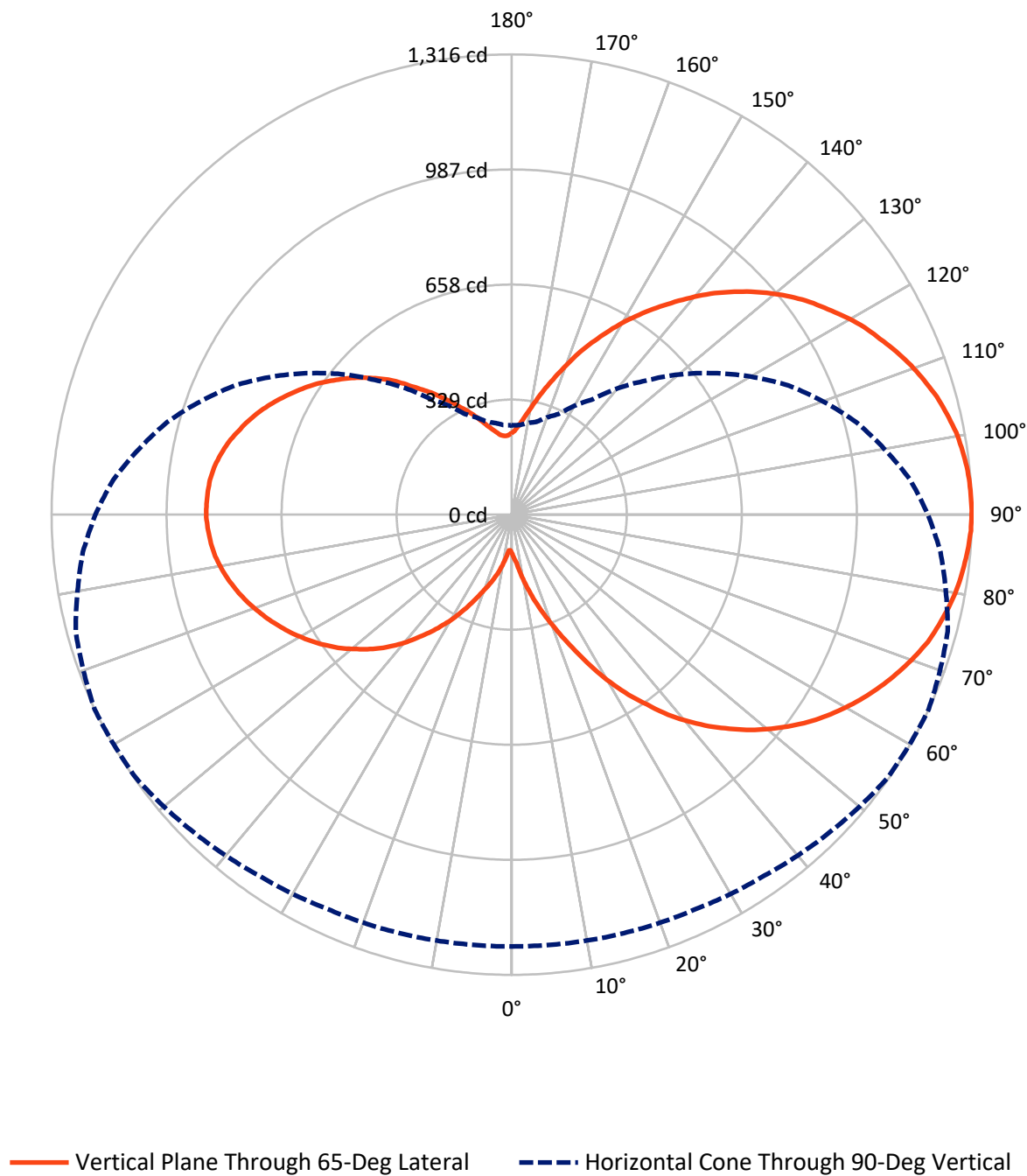


Based on 10 foot mounting height. Maximum calculated value = 3.7 fc
 Type - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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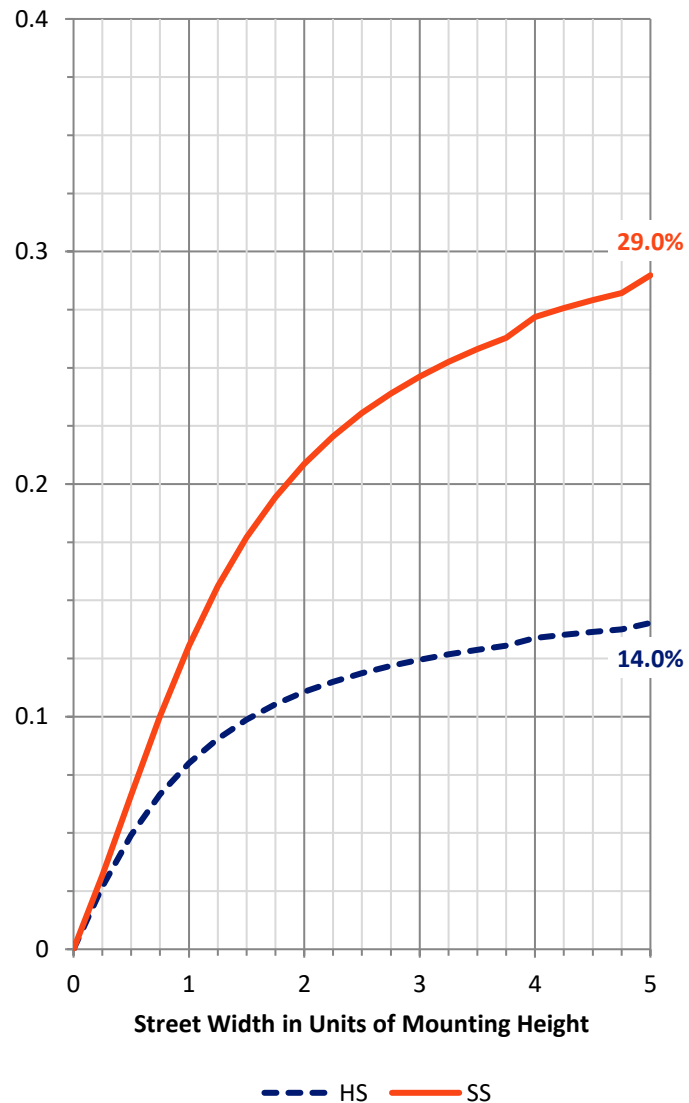
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1420.7	1492.2	2912.9
	% Fixture	15.7	16.5	32.2
Street Side	Lumens	3037.5	3106.5	6144.0
	% Fixture	33.5	34.3	67.8
Total	Lumens	4458.2	4598.8	9057.0
	% Fixture	49.2	50.8	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.8	0.1
10°-20°	61.7	0.7
20°-30°	155.4	1.7
30°-40°	303.0	3.3
40°-50°	480.5	5.3
50°-60°	659.4	7.3
60°-70°	820.1	9.1
70°-80°	947.0	10.5
80°-90°	1018.4	11.2
90°-100°	1022.2	11.3
100°-110°	953.6	10.5
110°-120°	827.4	9.1
120°-130°	669.2	7.4
130°-140°	495.9	5.5
140°-150°	328.4	3.6
150°-160°	190.0	2.1
160°-170°	88.3	1.0
170°-180°	23.8	0.3
0°-90°	4458.2	49.2
0°-180°	9057.0	100.0

Coefficient of Utilization



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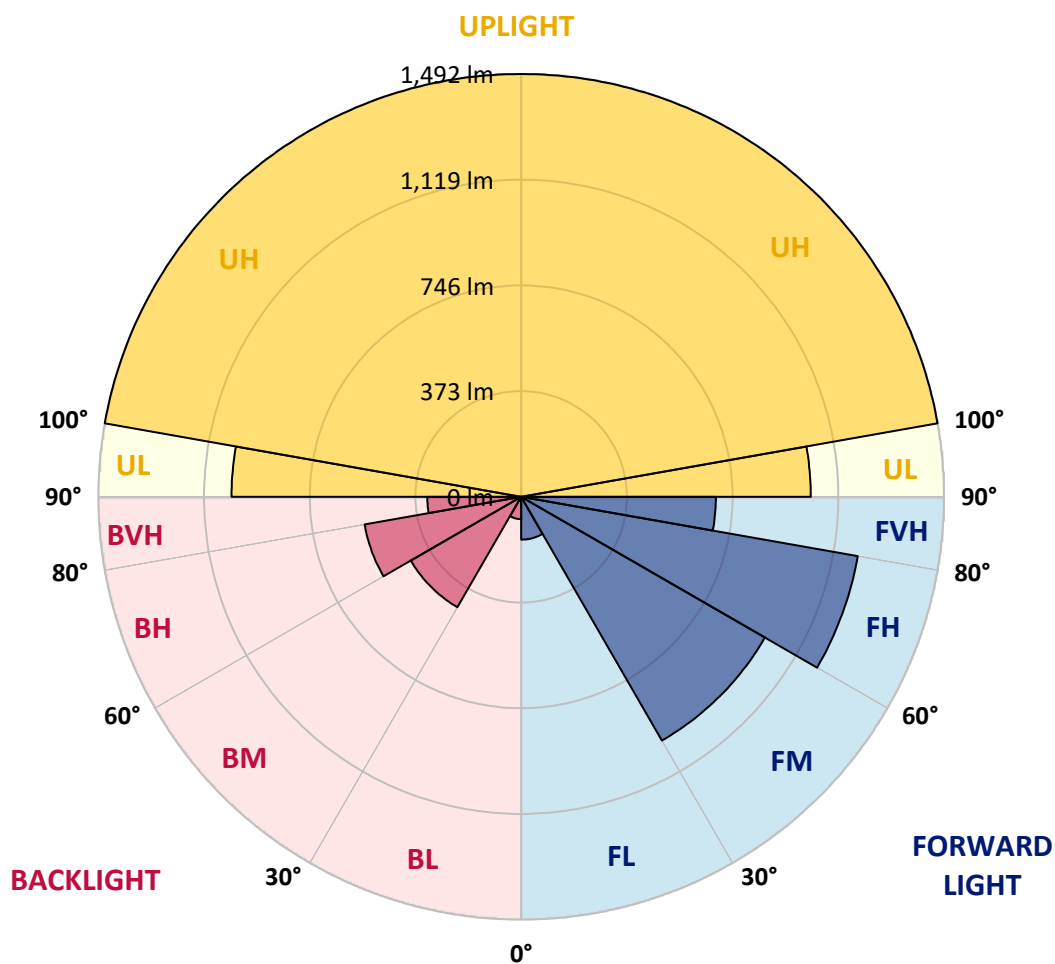
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	151.2	1.7			
FM	(30°-60°)	993.2	11.0			
FH	(60°-80°)	1206.1	13.3			G1/1800
FVH	(80°-90°)	687.0	7.6			G4/750
BL	(0°-30°)	78.7	0.9	B0/110		
BM	(30°-60°)	449.6	5.0	B1/1000		
BH	(60°-80°)	561.0	6.2	B2/1000		G2/1000
BVH	(80°-90°)	331.4	3.7			G3/500
UL	(90°-100°)	1022.2	11.3		U5	
UH	(100°-180°)	1492.2	16.5		U5	

BUG Rating: B2-U5-G4

Type Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1
2.5°	135.3	131.4	131.4	129.5	129.5	127.5	125.6	123.7	119.8	115.9	114.0
5°	162.3	160.4	160.4	156.5	152.7	148.8	143.0	137.2	131.4	123.7	121.7
7.5°	193.2	191.3	191.3	185.5	181.6	175.8	170.0	162.3	154.6	146.9	143.0
10°	224.1	222.2	222.2	218.4	214.5	206.8	199.0	193.2	181.6	172.0	168.1
12.5°	257.0	253.1	253.1	249.3	247.3	241.5	233.8	226.1	212.6	201.0	195.2
15°	287.9	286.0	286.0	284.0	282.1	276.3	268.6	260.9	247.3	233.8	226.1
17.5°	322.7	320.8	318.8	318.8	318.8	313.0	307.2	299.5	284.0	266.7	258.9
20°	361.3	357.5	357.5	359.4	359.4	355.5	349.7	340.1	324.6	305.3	293.7
22.5°	401.9	400.0	401.9	401.9	403.9	401.9	396.1	386.5	371.0	347.8	334.3
25°	446.4	444.4	448.3	450.2	454.1	456.0	450.2	438.6	421.2	394.2	378.7
27.5°	500.5	498.5	500.5	508.2	510.1	512.1	508.2	498.5	477.3	446.4	427.0
30°	548.8	548.8	552.6	558.4	564.2	568.1	564.2	556.5	533.3	498.5	477.3
32.5°	599.0	600.9	602.9	610.6	618.3	624.1	620.3	614.5	587.4	554.6	527.5
35°	653.1	655.1	655.1	664.7	674.4	678.2	680.2	666.6	645.4	604.8	575.8
37.5°	707.2	705.3	707.2	716.9	726.5	732.3	734.3	726.5	699.5	655.1	626.1
40°	753.6	753.6	757.5	767.1	776.8	784.5	786.4	776.8	751.7	703.4	672.4
42.5°	801.9	801.9	805.8	813.5	825.1	832.8	836.7	827.0	798.0	751.7	716.9
45°	846.3	846.3	850.2	859.9	871.5	879.2	885.0	873.4	844.4	796.1	763.3
47.5°	888.9	890.8	892.7	900.5	914.0	921.7	929.4	919.8	888.9	834.8	801.9
50°	929.4	931.4	933.3	943.0	952.6	962.3	971.9	962.3	933.3	877.3	840.6
52.5°	966.2	968.1	971.9	975.8	989.3	1000.9	1010.6	1002.9	970.0	914.0	875.3
55°	1004.8	1004.8	1006.7	1010.6	1024.1	1037.6	1049.2	1041.5	1008.7	950.7	912.0
57.5°	1037.6	1037.6	1039.6	1043.4	1055.0	1068.6	1082.1	1076.3	1043.4	983.5	944.9
60°	1066.6	1066.6	1068.6	1072.4	1084.0	1101.4	1114.9	1109.1	1076.3	1014.5	975.8
62.5°	1095.6	1095.6	1097.5	1101.4	1113.0	1130.4	1145.9	1140.1	1107.2	1045.4	1004.8
65°	1120.7	1120.7	1120.7	1124.6	1138.1	1157.4	1172.9	1169.0	1134.3	1074.4	1031.9
67.5°	1143.9	1143.9	1143.9	1145.9	1161.3	1180.6	1200.0	1196.1	1163.2	1101.4	1057.0
70°	1167.1	1163.2	1167.1	1167.1	1182.6	1203.8	1223.1	1221.2	1188.4	1126.5	1082.1
72.5°	1184.5	1182.6	1184.5	1188.4	1201.9	1223.1	1244.4	1244.4	1211.6	1147.8	1105.3
75°	1198.0	1198.0	1198.0	1201.9	1217.4	1240.5	1261.8	1261.8	1230.9	1167.1	1124.6
77.5°	1211.6	1211.6	1213.5	1215.4	1230.9	1254.1	1279.2	1277.3	1248.3	1184.5	1143.9
80°	1221.2	1219.3	1221.2	1227.0	1240.5	1265.7	1290.8	1290.8	1261.8	1200.0	1157.4
82.5°	1228.9	1227.0	1228.9	1234.7	1248.3	1275.3	1300.4	1300.4	1273.4	1213.5	1171.0
85°	1232.8	1232.8	1234.7	1240.5	1254.1	1281.1	1306.2	1308.2	1283.0	1223.1	1180.6
87.5°	1234.7	1234.7	1236.7	1244.4	1257.9	1283.0	1310.1	1314.0	1288.8	1227.0	1186.4
90°	1234.7	1234.7	1238.6	1244.4	1259.9	1285.0	1312.0	1315.9	1290.8	1230.9	1190.3
92.5°	1234.7	1232.8	1238.6	1244.4	1257.9	1283.0	1310.1	1314.0	1290.8	1230.9	1190.3
95°	1230.9	1228.9	1234.7	1240.5	1254.1	1279.2	1304.3	1310.1	1286.9	1228.9	1186.4
97.5°	1223.1	1223.1	1227.0	1234.7	1248.3	1271.5	1298.5	1302.4	1279.2	1221.2	1180.6
100°	1215.4	1215.4	1219.3	1225.1	1238.6	1263.7	1286.9	1292.7	1265.7	1211.6	1169.0
102.5°	1205.8	1205.8	1207.7	1213.5	1228.9	1252.1	1273.4	1277.3	1254.1	1196.1	1155.5
105°	1192.2	1190.3	1194.2	1200.0	1213.5	1236.7	1257.9	1261.8	1234.7	1178.7	1138.1
107.5°	1174.8	1174.8	1174.8	1182.6	1196.1	1219.3	1238.6	1240.5	1213.5	1157.4	1114.9
110°	1157.4	1157.4	1157.4	1163.2	1178.7	1200.0	1219.3	1219.3	1190.3	1134.3	1095.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	1138.1	1136.2	1136.2	1142.0	1157.4	1178.7	1198.0	1194.2	1165.2	1109.1	1070.5
115°	1114.9	1114.9	1113.0	1118.8	1136.2	1155.5	1172.9	1167.1	1140.1	1082.1	1043.4
117.5°	1091.8	1089.8	1089.8	1095.6	1111.1	1132.3	1147.8	1142.0	1111.1	1055.0	1016.4
120°	1066.6	1064.7	1062.8	1068.6	1086.0	1105.3	1118.8	1111.1	1078.2	1024.1	987.4
122.5°	1037.6	1035.7	1035.7	1041.5	1058.9	1078.2	1089.8	1078.2	1049.2	993.2	956.5
125°	1006.7	1008.7	1006.7	1012.5	1028.0	1049.2	1058.9	1047.3	1016.4	960.4	923.6
127.5°	975.8	975.8	973.9	981.6	997.1	1016.4	1026.1	1012.5	981.6	925.6	890.8
130°	943.0	943.0	941.0	948.8	964.2	981.6	987.4	973.9	943.0	888.9	854.1
132.5°	906.3	908.2	908.2	915.9	929.4	943.0	950.7	935.2	904.3	852.1	817.4
135°	871.5	869.5	871.5	877.3	892.7	904.3	906.3	892.7	863.7	811.6	778.7
137.5°	830.9	832.8	832.8	838.6	852.1	863.7	865.7	850.2	821.2	771.0	738.1
140°	792.2	792.2	796.1	800.0	809.6	819.3	819.3	803.8	776.8	726.5	695.6
142.5°	751.7	751.7	753.6	761.3	769.1	774.9	772.9	757.5	730.4	682.1	655.1
145°	713.0	713.0	715.0	720.7	726.5	730.4	726.5	713.0	686.0	637.7	612.5
147.5°	676.3	674.4	678.2	682.1	686.0	687.9	684.0	668.6	639.6	599.0	572.0
150°	637.7	637.7	637.7	643.5	645.4	645.4	639.6	624.1	597.1	556.5	533.3
152.5°	599.0	597.1	599.0	600.9	602.9	600.9	593.2	577.8	552.6	515.9	494.7
155°	558.4	558.4	560.4	560.4	560.4	558.4	550.7	533.3	510.1	477.3	452.2
157.5°	519.8	519.8	519.8	519.8	519.8	515.9	506.3	490.8	463.8	434.8	419.3
160°	481.1	481.1	479.2	477.3	475.3	467.6	459.9	444.4	425.1	400.0	386.5
162.5°	438.6	436.7	436.7	434.8	432.8	427.0	417.4	403.9	386.5	365.2	353.6
165°	400.0	398.1	396.1	396.1	392.3	386.5	378.7	367.1	351.7	332.4	322.7
167.5°	365.2	363.3	361.3	361.3	357.5	349.7	342.0	332.4	318.8	303.4	295.6
170°	334.3	332.4	330.4	328.5	324.6	318.8	311.1	301.4	291.8	280.2	272.5
172.5°	303.4	301.4	299.5	299.5	295.6	289.8	284.0	276.3	268.6	258.9	255.1
175°	274.4	276.3	274.4	272.5	270.5	264.7	260.9	255.1	251.2	245.4	241.5
177.5°	251.2	253.1	253.1	251.2	249.3	245.4	243.5	239.6	237.7	233.8	231.9
180°	231.9	231.9	231.9	231.9	231.9	231.9	231.9	231.9	231.9	231.9	231.9



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1
2.5°	112.1	106.3	102.4	96.6	90.8	87.0	83.1	79.2	77.3	77.3
5°	115.9	110.1	102.4	94.7	88.9	81.2	77.3	73.4	71.5	71.5
7.5°	137.2	129.5	119.8	110.1	102.4	92.8	87.0	83.1	81.2	81.2
10°	160.4	150.7	139.1	127.5	117.9	108.2	100.5	94.7	92.8	92.8
12.5°	187.4	173.9	160.4	144.9	133.3	119.8	112.1	106.3	104.3	102.4
15°	216.4	199.0	181.6	162.3	146.9	133.3	121.7	114.0	112.1	112.1
17.5°	247.3	224.1	202.9	179.7	160.4	141.1	129.5	119.8	115.9	115.9
20°	280.2	253.1	224.1	197.1	172.0	150.7	133.3	123.7	117.9	117.9
22.5°	318.8	286.0	249.3	216.4	187.4	160.4	139.1	125.6	119.8	117.9
25°	359.4	318.8	278.3	239.6	202.9	170.0	146.9	131.4	121.7	121.7
27.5°	403.9	357.5	309.2	262.8	218.4	181.6	152.7	135.3	125.6	123.7
30°	452.2	398.1	342.0	286.0	235.7	193.2	160.4	139.1	129.5	127.5
32.5°	498.5	436.7	372.9	311.1	253.1	202.9	168.1	144.9	133.3	131.4
35°	548.8	479.2	405.8	336.2	270.5	214.5	173.9	148.8	137.2	135.3
37.5°	595.1	519.8	436.7	359.4	287.9	226.1	181.6	154.6	141.1	139.1
40°	639.6	560.4	471.5	384.5	305.3	237.7	189.4	160.4	144.9	143.0
42.5°	682.1	599.0	504.3	407.7	320.8	249.3	197.1	166.2	150.7	148.8
45°	724.6	633.8	535.2	430.9	338.2	258.9	204.8	170.0	156.5	152.7
47.5°	763.3	668.6	564.2	454.1	353.6	270.5	210.6	175.8	160.4	158.4
50°	800.0	703.4	591.3	477.3	369.1	280.2	218.4	181.6	166.2	164.2
52.5°	834.8	734.3	620.3	500.5	382.6	289.8	226.1	187.4	172.0	170.0
55°	867.6	765.2	645.4	519.8	398.1	299.5	231.9	195.2	177.8	175.8
57.5°	902.4	794.2	670.5	541.0	411.6	309.2	239.6	201.0	183.6	181.6
60°	929.4	821.2	693.7	558.4	425.1	318.8	247.3	206.8	189.4	187.4
62.5°	960.4	846.3	716.9	577.8	438.6	328.5	255.1	214.5	197.1	195.2
65°	985.5	871.5	738.1	595.1	450.2	336.2	260.9	220.3	202.9	201.0
67.5°	1012.5	896.6	759.4	612.5	463.8	345.9	268.6	228.0	210.6	208.7
70°	1035.7	917.8	778.7	628.0	477.3	355.5	276.3	233.8	218.4	214.5
72.5°	1057.0	941.0	798.0	643.5	492.7	363.3	284.0	241.5	224.1	222.2
75°	1076.3	958.4	815.4	657.0	502.4	371.0	289.8	247.3	231.9	228.0
77.5°	1095.6	975.8	830.9	670.5	512.1	380.7	297.6	255.1	237.7	235.7
80°	1111.1	989.3	844.4	680.2	519.8	386.5	303.4	260.9	243.5	241.5
82.5°	1122.7	1000.9	856.0	689.8	527.5	392.3	307.2	264.7	247.3	245.4
85°	1132.3	1010.6	863.7	697.6	535.2	396.1	313.0	268.6	251.2	249.3
87.5°	1140.1	1016.4	869.5	703.4	537.2	400.0	315.0	272.5	255.1	253.1
90°	1143.9	1020.3	873.4	705.3	541.0	401.9	316.9	274.4	257.0	255.1
92.5°	1142.0	1020.3	873.4	707.2	543.0	403.9	318.8	274.4	257.0	255.1
95°	1140.1	1018.3	871.5	705.3	541.0	403.9	318.8	274.4	257.0	255.1
97.5°	1132.3	1012.5	867.6	701.4	539.1	401.9	315.0	272.5	255.1	253.1
100°	1122.7	1000.9	859.9	695.6	535.2	398.1	313.0	268.6	251.2	249.3
102.5°	1107.2	989.3	848.3	687.9	527.5	392.3	307.2	264.7	247.3	245.4
105°	1089.8	973.9	834.8	676.3	519.8	386.5	301.4	258.9	241.5	239.6
107.5°	1072.4	952.6	817.4	662.8	510.1	378.7	295.6	253.1	235.7	233.8
110°	1049.2	933.3	800.0	649.3	498.5	369.1	287.9	245.4	229.9	226.1



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CATALOG NUMBER: ULA-A9-D-U-ASYM-VMx-BK-PDR

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	1024.1	912.0	780.7	631.9	486.9	361.3	282.1	239.6	222.2	220.3
115°	999.0	886.9	759.4	616.4	469.5	351.7	274.4	233.8	216.4	214.5
117.5°	971.9	861.8	736.2	597.1	456.0	342.0	266.7	226.1	208.7	206.8
120°	943.0	836.7	713.0	577.8	442.5	332.4	258.9	220.3	202.9	201.0
122.5°	914.0	809.6	689.8	560.4	429.0	322.7	253.1	212.6	197.1	193.2
125°	883.1	780.7	664.7	539.1	415.4	315.0	245.4	206.8	191.3	189.4
127.5°	850.2	749.7	637.7	517.9	400.0	305.3	239.6	202.9	185.5	183.6
130°	815.4	720.7	612.5	498.5	386.5	295.6	233.8	197.1	179.7	177.8
132.5°	778.7	687.9	585.5	473.4	371.0	286.0	226.1	191.3	175.8	173.9
135°	740.1	655.1	556.5	450.2	355.5	276.3	220.3	187.4	172.0	170.0
137.5°	703.4	620.3	529.5	429.0	342.0	268.6	216.4	183.6	170.0	168.1
140°	660.8	583.6	498.5	407.7	326.6	258.9	210.6	179.7	166.2	164.2
142.5°	620.3	548.8	465.7	386.5	313.0	251.2	206.8	177.8	164.2	162.3
145°	581.6	514.0	438.6	367.1	299.5	243.5	201.0	175.8	164.2	162.3
147.5°	544.9	483.1	413.5	347.8	286.0	235.7	197.1	173.9	162.3	160.4
150°	508.2	446.4	386.5	328.5	274.4	228.0	195.2	172.0	162.3	160.4
152.5°	465.7	415.4	363.3	311.1	262.8	222.2	191.3	172.0	162.3	162.3
155°	432.8	386.5	340.1	293.7	253.1	218.4	191.3	173.9	164.2	164.2
157.5°	400.0	361.3	320.8	280.2	245.4	214.5	191.3	175.8	168.1	168.1
160°	369.1	336.2	301.4	268.6	237.7	212.6	191.3	177.8	172.0	170.0
162.5°	340.1	311.1	282.1	255.1	229.9	208.7	191.3	179.7	173.9	173.9
165°	311.1	287.9	264.7	243.5	224.1	204.8	191.3	183.6	177.8	177.8
167.5°	286.0	268.6	251.2	233.8	218.4	204.8	193.2	185.5	183.6	181.6
170°	266.7	253.1	239.6	226.1	214.5	202.9	195.2	191.3	187.4	187.4
172.5°	249.3	239.6	229.9	220.3	212.6	204.8	201.0	197.1	195.2	195.2
175°	237.7	231.9	226.1	220.3	216.4	210.6	208.7	206.8	204.8	204.8
177.5°	231.9	228.0	226.1	224.1	222.2	220.3	220.3	218.4	218.4	218.4
180°	231.9	231.9	231.9	231.9	231.9	231.9	231.9	231.9	231.9	231.9

(END OF REPORT)