

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: LUMARK

Report Number: P290566

Luminaire Tested: **AXCS4ARL-W-GRF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290566
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1901-095-9)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: AXCS4ARL-W-GRF
Description: 4ARL AXCENT SMALL LED WALLPACK WITH 3000K CCT AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4764.3 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 0.5' x H: 0.17')
IES Classification: Type IV - Short
BUG Rating: B1 - U4 - G3

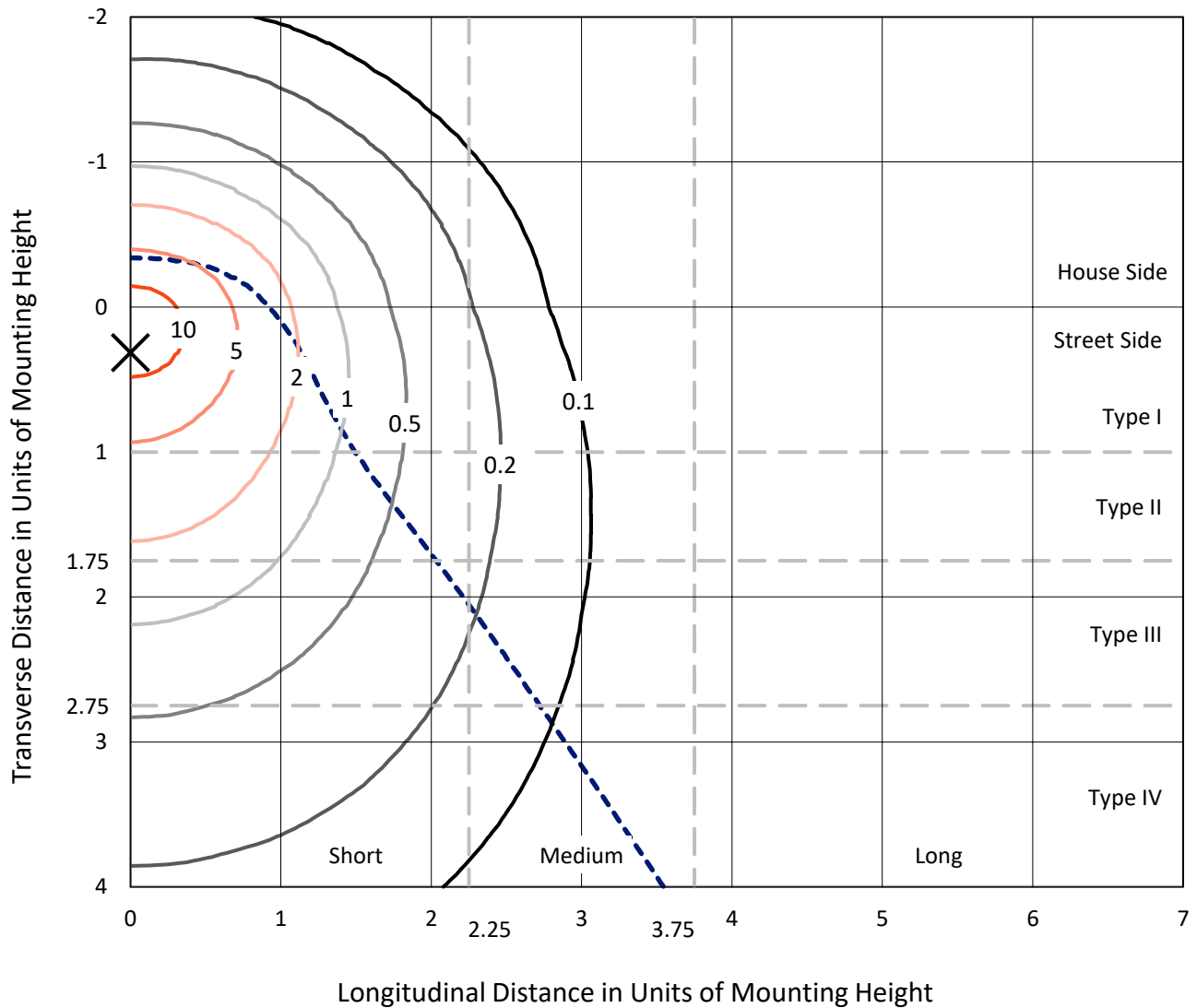
Input Watts (W): 42.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

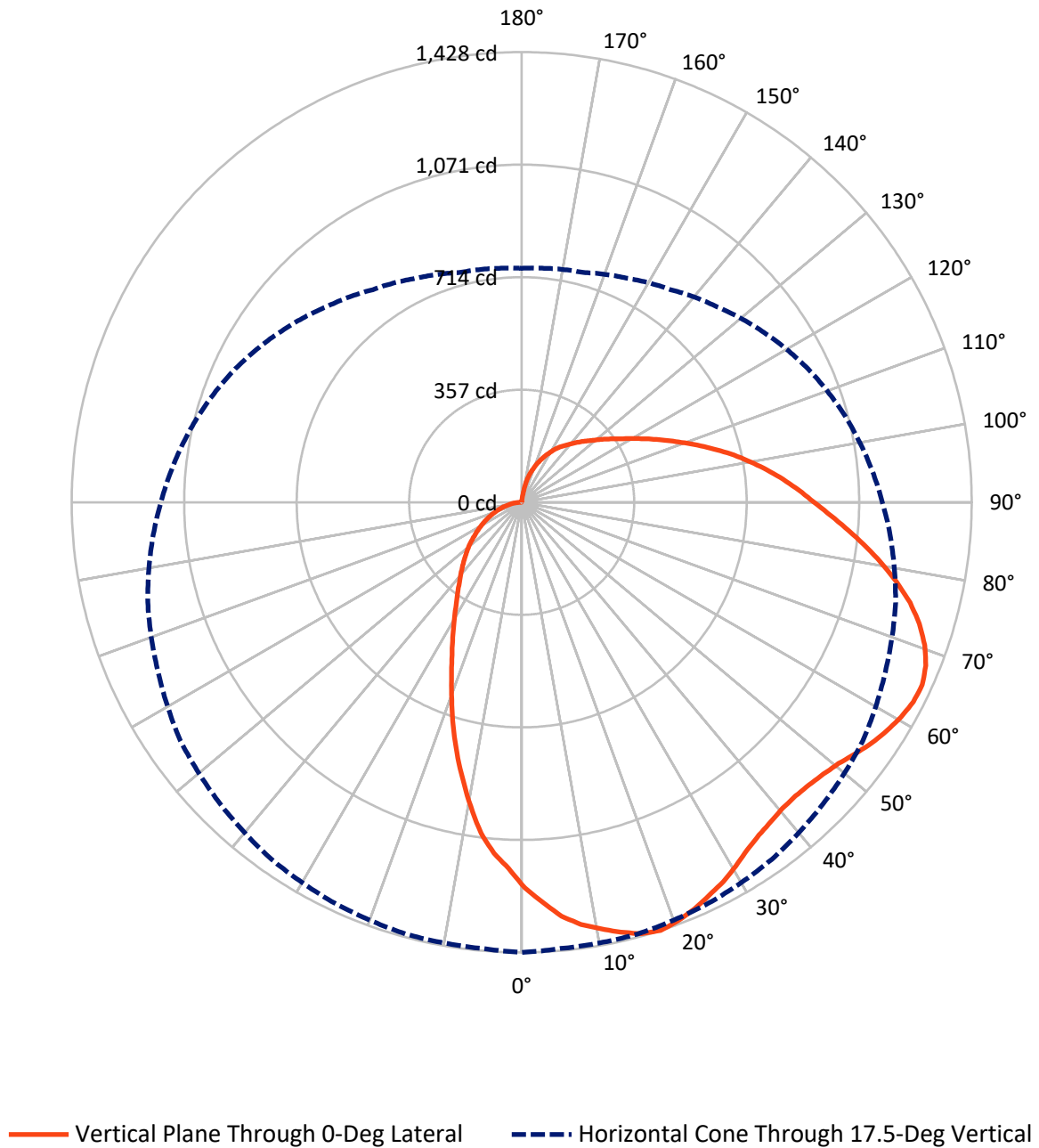
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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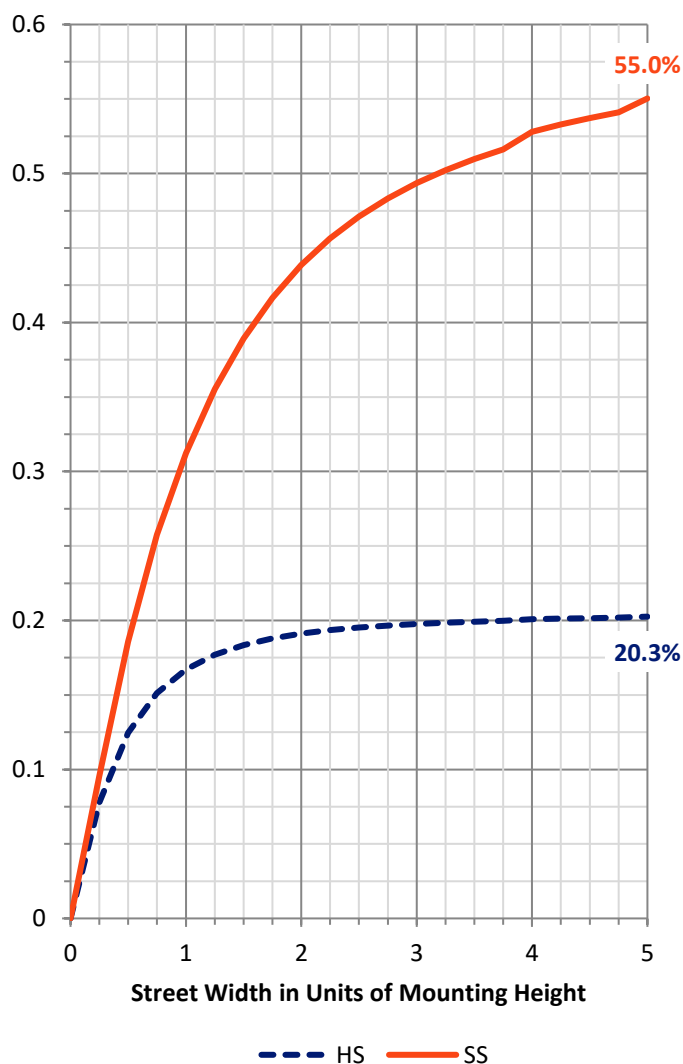
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	983.0	73.0	1056.0
	% Fixture	20.6	1.5	22.2
Street Side	Lumens	2851.5	856.7	3708.2
	% Fixture	59.9	18.0	77.8
Total	Lumens	3834.5	929.8	4764.3
	% Fixture	80.5	19.5	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.5	2.4
10°-20°	321.8	6.8
20°-30°	460.2	9.7
30°-40°	526.4	11.0
40°-50°	546.5	11.5
50°-60°	544.0	11.4
60°-70°	519.3	10.9
70°-80°	450.4	9.5
80°-90°	350.5	7.4
90°-100°	278.0	5.8
100°-110°	219.0	4.6
110°-120°	160.5	3.4
120°-130°	113.8	2.4
130°-140°	77.7	1.6
140°-150°	48.4	1.0
150°-160°	24.4	0.5
160°-170°	7.7	0.2
170°-180°	0.3	0.0
0°-90°	3834.5	80.5
0°-180°	4764.3	100.0

Coefficient of Utilization

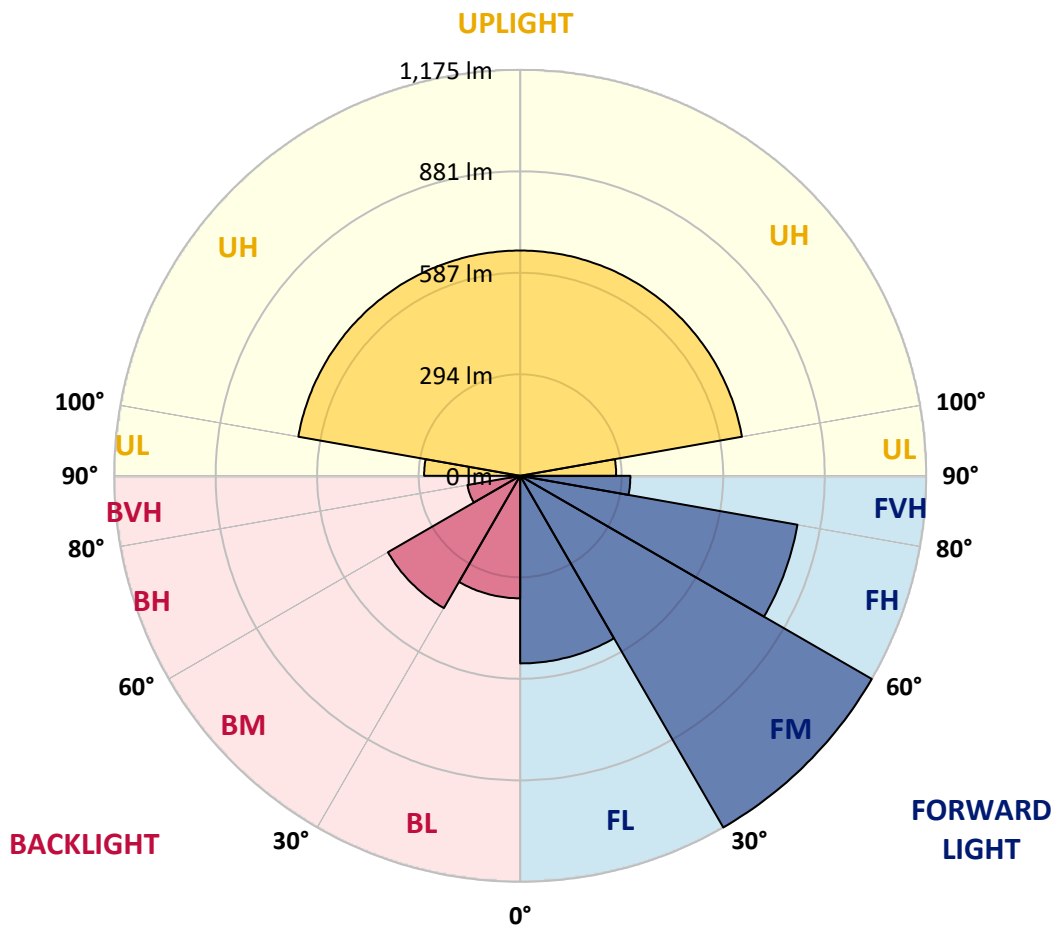


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	542.9	11.4			
FM (30°-60°)	1174.9	24.7			
FH (60°-80°)	814.8	17.1			G1/1800
FVH (80°-90°)	318.8	6.7			G3/500
BL (0°-30°)	354.5	7.4	B1/500		
BM (30°-60°)	441.9	9.3	B1/1000		
BH (60°-80°)	154.9	3.3	B1/500		G1/500
BVH (80°-90°)	31.7	0.7			G1/100
UL (90°-100°)	278.0	5.8		U3/500	
UH (100°-180°)	651.8	13.7		U4/1000	

BUG Rating: B1-U4-G3
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1223.7	1223.7	1223.7	1223.7	1223.7	1223.7	1223.7	1223.7	1223.7	1223.7	1223.7
2.5°	1270.2	1264.7	1265.5	1262.4	1260.1	1254.7	1251.6	1243.8	1236.9	1230.7	1224.5
5°	1318.9	1310.4	1309.6	1305.0	1297.2	1288.0	1278.7	1264.7	1248.5	1234.6	1222.9
7.5°	1352.2	1345.2	1343.7	1338.3	1325.1	1312.7	1297.2	1277.1	1255.5	1231.5	1216.0
10°	1376.2	1369.2	1367.7	1357.6	1342.1	1323.6	1305.0	1278.7	1251.6	1219.1	1199.7
12.5°	1399.4	1394.0	1389.4	1378.5	1359.9	1337.5	1313.5	1280.2	1247.7	1205.9	1185.0
15°	1420.3	1415.7	1411.8	1397.9	1379.3	1350.7	1322.8	1281.8	1243.1	1194.3	1168.8
17.5°	1428.1	1421.1	1418.0	1403.3	1383.2	1353.0	1321.2	1273.3	1228.4	1173.4	1144.8
20°	1417.2	1411.8	1408.7	1395.5	1375.4	1344.5	1306.5	1255.5	1204.4	1146.3	1111.5
22.5°	1401.7	1397.9	1391.7	1382.4	1361.5	1330.5	1288.0	1234.6	1177.3	1113.0	1077.4
25°	1381.6	1378.5	1374.7	1364.6	1342.1	1311.2	1267.1	1209.8	1148.6	1078.2	1041.1
27.5°	1363.0	1357.6	1353.0	1342.1	1320.5	1286.4	1243.8	1183.5	1115.4	1038.7	1000.0
30°	1339.0	1334.4	1327.4	1315.1	1290.3	1256.2	1209.8	1149.4	1074.3	996.2	952.8
32.5°	1314.3	1312.0	1301.1	1287.2	1257.0	1221.4	1173.4	1107.6	1031.0	948.9	905.6
35°	1296.5	1293.4	1282.5	1260.1	1226.0	1185.0	1133.9	1067.4	986.9	901.0	856.1
37.5°	1284.9	1281.0	1267.1	1237.7	1196.6	1148.6	1093.7	1022.5	941.2	852.2	806.5
40°	1275.6	1273.3	1254.7	1217.5	1168.0	1111.5	1050.3	976.0	893.2	801.9	757.0
42.5°	1274.0	1270.2	1248.5	1202.0	1142.4	1075.9	1004.7	928.8	845.2	752.3	706.7
45°	1278.7	1274.0	1246.9	1190.4	1120.8	1041.8	961.3	882.4	793.4	702.0	657.1
47.5°	1288.7	1285.6	1252.4	1184.2	1100.6	1008.5	918.8	833.6	745.4	651.7	606.8
50°	1302.7	1300.3	1260.9	1181.9	1081.3	977.6	879.3	787.2	698.2	604.5	560.4
52.5°	1325.1	1317.4	1274.0	1184.2	1070.5	948.9	838.3	740.0	650.9	558.1	516.3
55°	1348.3	1339.0	1288.7	1188.1	1058.1	923.4	800.3	696.6	605.3	513.2	472.1
57.5°	1366.9	1357.6	1303.4	1193.5	1048.0	901.0	766.3	656.4	562.7	471.4	431.9
60°	1383.2	1375.4	1314.3	1195.1	1037.2	874.6	732.2	616.1	521.7	431.9	394.0
62.5°	1394.8	1384.7	1323.6	1191.2	1024.8	850.6	700.5	578.2	482.2	394.7	356.8
65°	1397.1	1387.0	1319.7	1184.2	1010.1	825.1	669.5	543.4	445.8	359.1	322.8
67.5°	1383.2	1375.4	1308.1	1168.8	990.7	801.1	637.8	510.1	411.0	326.6	291.0
70°	1356.8	1353.0	1282.5	1145.5	963.6	772.5	606.8	477.6	376.9	292.6	260.1
72.5°	1319.7	1316.6	1246.9	1112.3	935.0	742.3	575.9	448.2	345.2	263.2	230.7
75°	1273.3	1268.6	1201.3	1074.3	897.1	708.2	544.1	417.2	314.3	233.0	202.8
77.5°	1216.0	1213.7	1151.0	1027.1	856.8	672.6	512.4	387.0	285.6	205.1	174.2
80°	1155.6	1154.1	1093.7	977.6	812.7	637.0	481.4	359.1	257.7	175.7	150.2
82.5°	1092.9	1092.1	1034.9	923.4	767.8	600.6	451.3	332.8	233.8	153.3	127.7
85°	1030.2	1028.7	975.3	870.0	723.7	567.4	424.9	311.2	212.1	132.4	109.1
87.5°	970.6	969.1	918.0	819.7	682.7	534.1	400.9	291.0	193.5	115.3	94.4
90°	918.0	915.7	868.4	774.8	647.1	509.3	383.9	277.9	182.7	106.8	87.5
92.5°	870.8	869.2	824.3	738.4	618.4	491.5	373.1	272.5	178.8	104.5	85.9
95°	823.6	820.5	779.4	700.5	589.8	473.7	362.2	265.5	174.9	102.9	84.4
97.5°	775.6	773.2	735.3	662.6	561.2	454.3	350.6	257.7	170.3	101.4	82.0
100°	727.6	726.0	692.7	626.2	532.5	433.4	336.7	249.2	164.9	99.1	79.7
102.5°	681.1	680.4	648.6	588.3	503.9	411.8	322.0	239.9	159.4	96.0	77.4
105°	632.4	633.1	603.7	549.6	472.9	388.6	307.3	229.9	154.8	93.7	75.1
107.5°	586.7	585.9	560.4	511.6	443.5	369.2	293.4	220.6	149.4	90.6	72.8
110°	541.8	540.3	519.4	476.0	416.4	348.3	278.6	212.1	144.0	87.5	69.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	501.6	500.8	481.4	442.7	390.1	328.2	264.7	202.8	138.5	83.6	66.6
115°	464.4	463.6	445.8	411.8	365.3	310.4	252.3	192.0	132.4	79.7	63.5
117.5°	429.6	427.3	413.3	383.9	342.1	293.4	239.9	183.4	126.9	76.6	60.4
120°	397.8	397.1	384.7	359.1	322.0	277.1	228.3	174.9	121.5	72.8	57.3
122.5°	369.2	370.8	359.1	335.9	302.6	262.4	217.5	167.2	116.1	68.9	55.0
125°	346.0	345.2	335.9	315.8	285.6	249.2	207.4	159.4	110.7	65.0	51.9
127.5°	324.3	322.8	314.3	296.4	269.4	236.8	197.4	151.7	105.3	61.9	48.8
130°	303.4	301.9	294.1	279.4	253.9	224.5	185.8	144.0	99.1	58.1	45.7
132.5°	285.6	284.8	277.9	263.9	241.5	213.6	176.5	136.2	93.7	54.2	42.6
135°	269.4	268.6	261.6	250.0	228.3	202.8	167.2	128.5	88.2	50.3	39.5
137.5°	253.9	253.9	247.7	236.1	216.7	189.6	157.9	120.7	82.8	46.4	37.2
140°	239.2	239.2	233.0	222.1	204.3	178.0	147.8	112.2	76.6	42.6	34.1
142.5°	225.2	226.0	219.8	209.8	189.6	166.4	137.8	104.5	71.2	38.7	31.0
145°	212.1	212.9	206.7	196.6	177.2	154.8	127.7	97.5	65.8	34.8	28.6
147.5°	198.1	198.1	192.7	181.1	164.1	143.2	117.7	89.8	60.4	31.0	25.5
150°	181.1	181.9	175.7	166.4	150.9	130.8	107.6	82.0	54.2	26.3	23.2
152.5°	165.6	165.6	160.2	150.9	136.2	118.4	97.5	73.5	48.8	22.4	20.1
155°	149.4	149.4	144.0	135.5	122.3	106.0	86.7	65.0	42.6	17.8	17.8
157.5°	133.1	133.1	128.5	120.0	108.4	94.4	76.6	56.5	36.4	15.5	14.7
160°	116.1	116.1	112.2	103.7	94.4	82.0	65.0	47.2	30.2	13.2	12.4
162.5°	99.1	99.1	96.0	89.0	79.7	68.1	51.9	37.9	24.0	10.8	10.1
165°	82.0	82.0	78.9	72.0	63.5	51.1	37.9	27.9	17.0	8.5	7.7
167.5°	62.7	62.7	60.4	52.6	39.5	33.3	27.1	18.6	10.8	6.2	6.2
170°	32.5	33.3	27.1	25.5	24.0	19.4	14.7	10.1	5.4	4.6	4.6
172.5°	0.8	0.8	3.9	5.4	7.7	8.5	7.0	4.6	3.1	3.1	3.1
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1223.7	1223.7	1223.7	1223.7	1223.7	1223.7	1223.7	1223.7	1223.7	1223.7
2.5°	1219.8	1209.0	1197.4	1188.1	1180.4	1176.5	1170.3	1164.1	1164.1	1162.6
5°	1214.4	1196.6	1178.8	1164.9	1149.4	1141.7	1129.3	1118.5	1118.5	1116.9
7.5°	1202.8	1178.8	1155.6	1131.6	1109.2	1092.9	1074.3	1058.1	1053.4	1058.1
10°	1183.5	1151.0	1120.8	1085.9	1056.5	1029.4	1003.9	983.8	975.3	978.4
12.5°	1164.1	1125.4	1085.2	1041.8	999.3	964.4	931.1	908.7	901.7	898.6
15°	1144.8	1096.8	1047.2	993.1	941.2	894.0	859.2	832.8	823.6	820.5
17.5°	1117.7	1061.9	1002.3	938.9	877.0	823.6	784.9	754.7	745.4	742.3
20°	1082.1	1020.2	951.3	879.3	809.6	751.6	705.9	678.8	664.9	664.1
22.5°	1041.8	974.5	899.4	819.7	743.8	685.0	637.0	609.9	596.0	593.7
25°	1002.3	928.8	846.8	760.1	681.9	622.3	575.9	548.8	537.9	532.5
27.5°	962.9	884.7	794.9	703.6	624.6	565.8	522.5	496.1	484.5	481.4
30°	916.4	835.2	742.3	650.9	570.4	513.9	473.7	448.9	438.1	435.8
32.5°	866.1	783.3	688.1	596.0	521.7	467.5	430.4	408.7	397.8	394.7
35°	817.4	733.8	637.8	547.2	478.3	428.0	393.2	373.1	363.8	360.7
37.5°	768.6	684.2	588.3	503.9	439.6	392.4	361.5	342.1	334.4	331.3
40°	718.3	634.7	543.4	462.9	403.3	362.2	333.6	315.0	307.3	305.7
42.5°	671.1	590.6	502.3	427.3	370.8	333.6	308.8	292.6	283.3	282.5
45°	620.0	544.1	461.3	392.4	341.3	307.3	285.6	270.9	262.4	261.6
47.5°	575.9	501.6	423.4	359.9	314.3	284.1	263.9	250.0	243.0	241.5
50°	529.4	460.5	390.9	332.1	289.5	263.2	243.8	230.7	223.7	222.9
52.5°	487.6	424.2	358.4	305.0	267.0	242.3	225.2	212.9	205.9	204.3
55°	446.6	387.8	328.2	280.2	245.4	222.1	206.7	195.8	186.5	185.0
57.5°	408.7	354.5	300.3	256.2	225.2	205.1	188.9	177.2	170.3	168.0
60°	372.3	322.8	274.0	234.5	205.9	185.8	171.8	161.0	154.0	151.7
62.5°	337.5	293.4	249.2	213.6	185.8	168.7	155.6	145.5	138.5	135.5
65°	304.2	264.7	226.0	193.5	168.0	152.5	139.3	130.0	122.3	120.7
67.5°	274.0	238.4	203.6	172.6	150.9	137.0	123.8	115.3	108.4	106.0
70°	245.4	212.9	180.3	154.8	134.7	120.7	109.9	100.6	93.7	91.3
72.5°	217.5	187.3	159.4	137.0	118.4	105.3	95.2	85.9	79.7	78.9
75°	188.1	164.1	140.1	119.2	103.7	90.6	81.3	72.8	66.6	65.8
77.5°	163.3	141.6	120.7	102.9	89.0	76.6	68.1	60.4	53.4	52.6
80°	140.1	121.5	103.7	88.2	75.1	64.2	55.7	48.0	41.8	41.0
82.5°	119.2	102.9	88.2	75.1	62.7	53.4	44.9	37.2	31.7	31.0
85°	102.2	88.2	75.9	63.5	52.6	43.3	35.6	28.6	22.4	22.4
87.5°	88.2	77.4	66.6	55.0	43.3	33.3	25.5	17.8	12.4	10.8
90°	82.0	69.7	57.3	45.7	33.3	23.2	15.5	8.5	3.1	2.3
92.5°	80.5	68.9	56.5	44.1	31.7	21.7	13.9	7.0	1.5	0.8
95°	78.9	67.3	55.7	43.3	31.7	21.7	13.9	6.2	1.5	0.8
97.5°	76.6	65.8	55.0	42.6	31.0	20.9	13.2	6.2	1.5	0.8
100°	75.1	64.2	53.4	41.8	31.0	20.9	13.2	6.2	1.5	0.8
102.5°	72.8	62.7	51.9	41.0	29.4	20.1	12.4	5.4	0.8	0.8
105°	70.4	61.1	51.1	40.2	29.4	19.4	11.6	5.4	0.8	0.8
107.5°	68.1	59.6	49.5	38.7	27.9	18.6	10.8	4.6	0.8	0.8
110°	65.8	57.3	48.0	37.9	27.1	17.8	10.8	4.6	0.8	0.8



REPORT NUMBER: P290566
 CATALOG NUMBER: AXCS4ARL-W-GRF

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	62.7	55.0	45.7	36.4	26.3	17.0	10.1	3.9	0.0	0.0
115°	60.4	52.6	44.1	34.8	24.8	16.3	9.3	3.9	0.0	0.0
117.5°	57.3	50.3	42.6	33.3	24.0	15.5	8.5	3.1	0.0	0.0
120°	55.0	48.0	40.2	31.7	23.2	14.7	8.5	3.1	0.0	0.0
122.5°	51.9	45.7	38.7	30.2	21.7	13.9	7.7	2.3	0.0	0.0
125°	48.8	43.3	36.4	28.6	20.9	12.4	7.0	2.3	0.0	0.0
127.5°	46.4	41.0	34.8	27.1	19.4	11.6	6.2	1.5	0.0	0.0
130°	43.3	38.7	32.5	25.5	18.6	10.8	6.2	1.5	0.0	0.0
132.5°	40.2	36.4	31.0	24.0	17.0	10.1	5.4	1.5	0.0	0.0
135°	37.9	34.1	28.6	22.4	16.3	9.3	4.6	1.5	0.0	0.0
137.5°	35.6	31.7	27.1	20.9	14.7	8.5	3.9	1.5	0.0	0.0
140°	32.5	29.4	24.8	19.4	13.2	7.7	3.9	0.8	0.0	0.0
142.5°	29.4	26.3	22.4	17.8	12.4	7.0	3.1	0.8	0.0	0.0
145°	27.1	24.0	20.9	16.3	10.8	6.2	2.3	0.8	0.0	0.0
147.5°	24.8	22.4	18.6	14.7	10.1	5.4	2.3	0.8	0.0	0.0
150°	21.7	20.1	17.0	13.2	8.5	4.6	2.3	0.8	0.0	0.0
152.5°	19.4	17.8	14.7	11.6	7.7	3.9	1.5	0.8	0.0	0.0
155°	17.0	14.7	12.4	9.3	6.2	3.1	1.5	0.8	0.0	0.0
157.5°	14.7	13.2	10.8	7.7	5.4	2.3	1.5	0.8	0.0	0.0
160°	12.4	10.8	9.3	7.0	3.9	2.3	0.8	0.8	0.0	0.0
162.5°	10.1	8.5	7.7	5.4	3.1	2.3	0.8	0.8	0.0	0.0
165°	7.7	7.0	5.4	3.9	2.3	1.5	0.8	0.0	0.0	0.0
167.5°	6.2	5.4	4.6	3.1	2.3	1.5	0.8	0.0	0.0	0.0
170°	4.6	3.9	3.1	2.3	2.3	1.5	0.8	0.0	0.0	0.0
172.5°	3.1	2.3	2.3	2.3	1.5	0.8	0.8	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)