

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: P290567

Luminaire Tested: **AXCS4ARL-GRF**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290567
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-GRF
Description: 4ARL AXCENT SMALL LED WALLPACK WITH 4000K CCT AND 70 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5637.7 lumens
Efficiency: N/A
Efficacy: 133.9 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 0.5' x H: 0.17')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U4 - G3

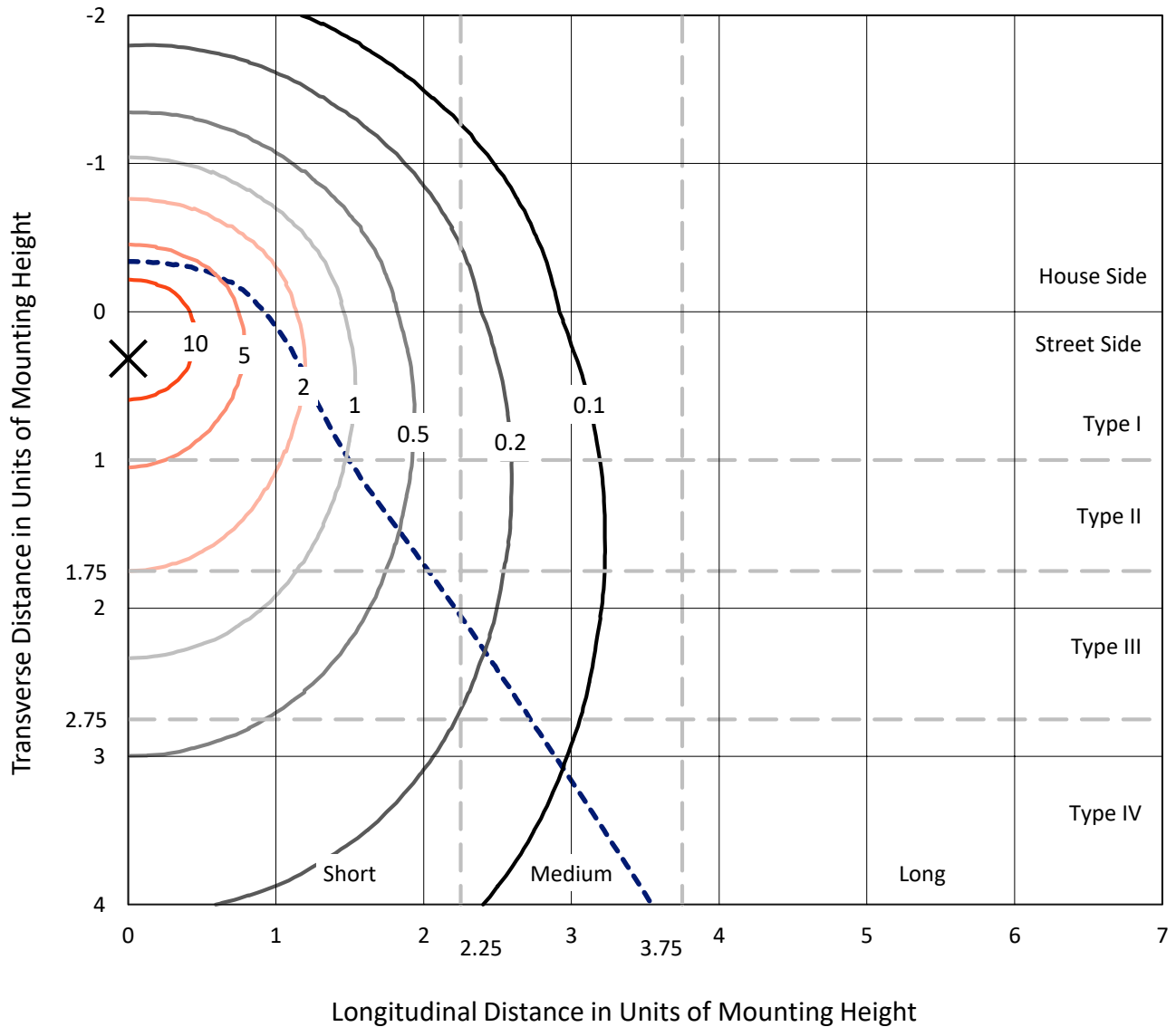
Input Watts (W): 42.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

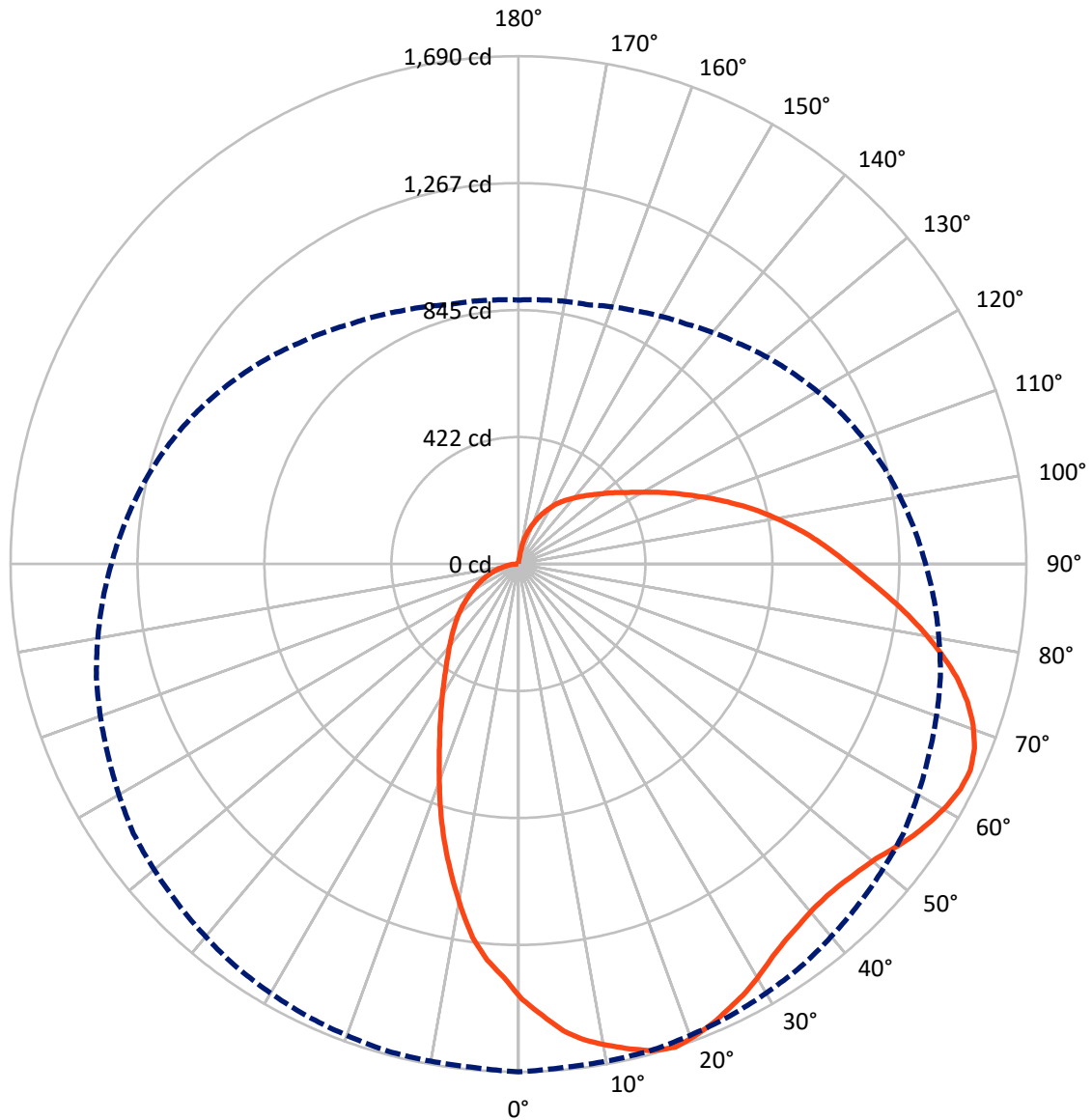
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.6 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 17.5-Deg Vertical

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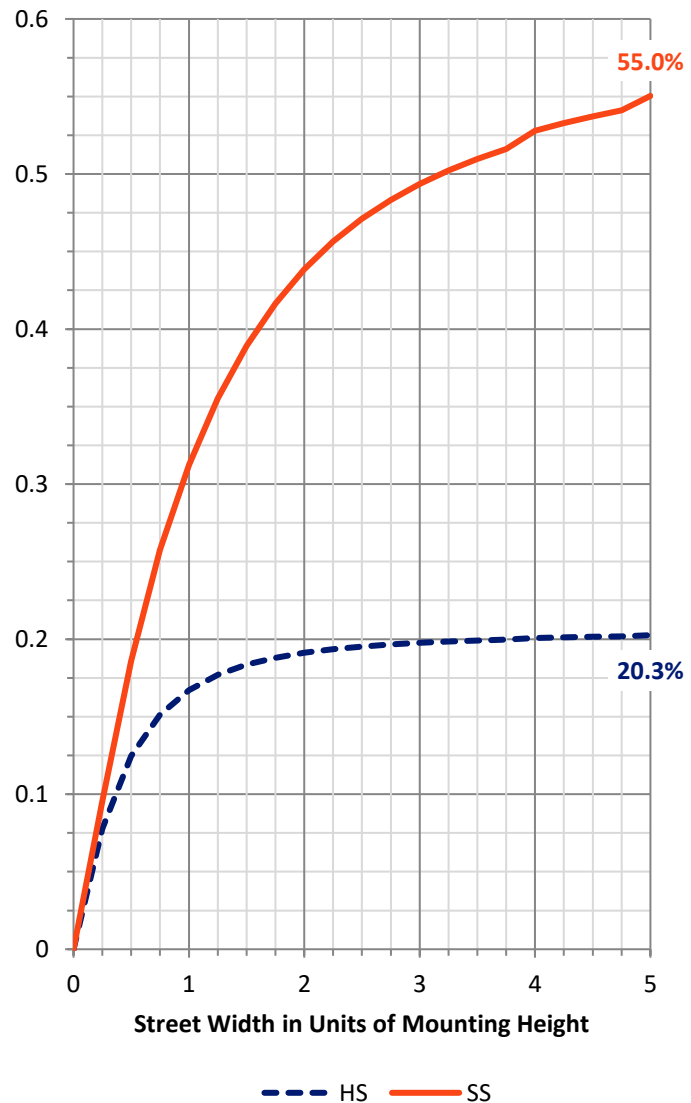
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1163.2	86.4	1249.7
	% Fixture	20.6	1.5	22.2
Street Side	Lumens	3374.3	1013.8	4388.1
	% Fixture	59.9	18.0	77.8
Total	Lumens	4537.5	1100.2	5637.7
	% Fixture	80.5	19.5	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.6	2.4
10°-20°	380.8	6.8
20°-30°	544.5	9.7
30°-40°	622.9	11.0
40°-50°	646.6	11.5
50°-60°	643.8	11.4
60°-70°	614.5	10.9
70°-80°	533.0	9.5
80°-90°	414.8	7.4
90°-100°	328.9	5.8
100°-110°	259.1	4.6
110°-120°	190.0	3.4
120°-130°	134.6	2.4
130°-140°	91.9	1.6
140°-150°	57.3	1.0
150°-160°	28.9	0.5
160°-170°	9.1	0.2
170°-180°	0.4	0.0
0°-90°	4537.5	80.5
0°-180°	5637.7	100.0



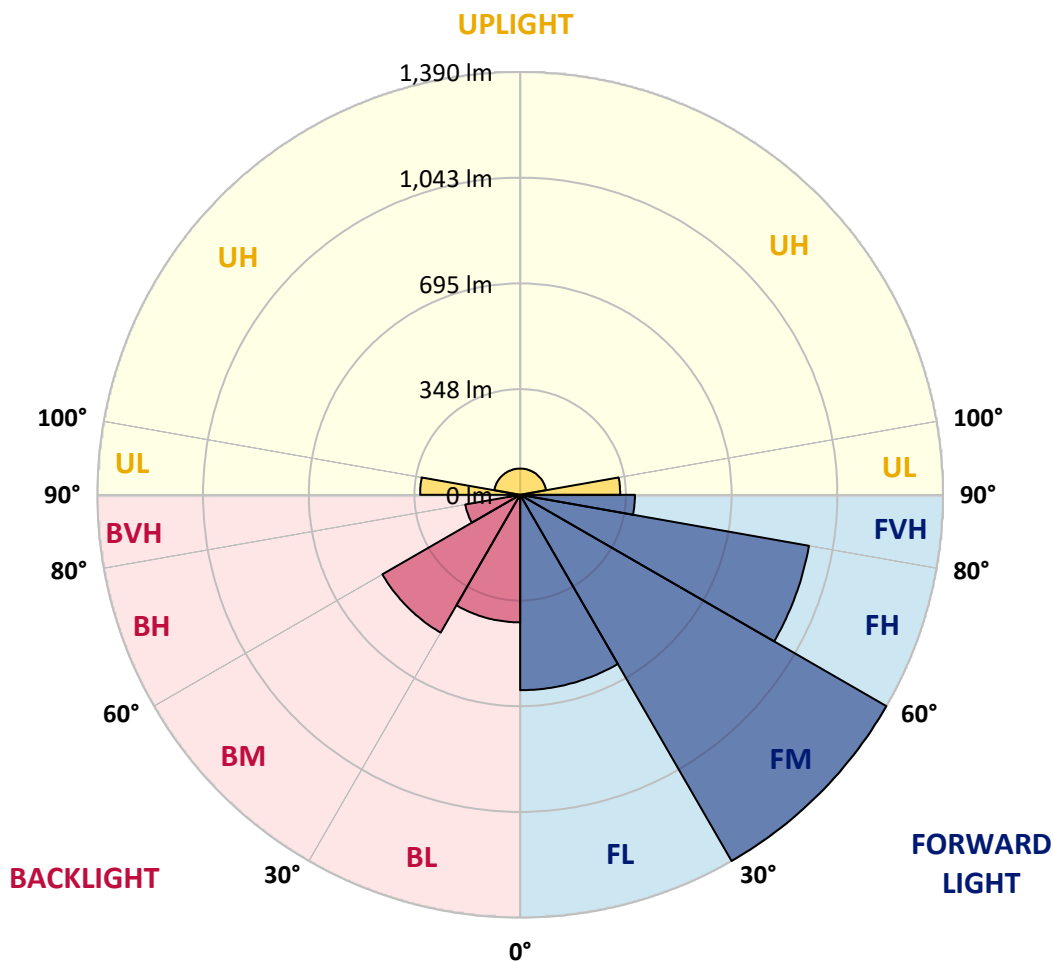
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	642.5	11.4			
FM (30°-60°)	1390.3	24.7			
FH (60°-80°)	964.2	17.1			G1/1800
FVH (80°-90°)	377.3	6.7			G3/500
BL (0°-30°)	419.5	7.4	B1/500		
BM (30°-60°)	523.0	9.3	B1/1000		
BH (60°-80°)	183.3	3.3	B1/500		G1/500
BVH (80°-90°)	37.5	0.7			G1/100
UL (90°-100°)	328.9	5.8		U3/500	
UH (100°-180°)	86.4	1.5		U3/500	

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°	1448.1	1448.1	1448.1	1448.1	1448.1	1448.1	1448.1	1448.1	1448.1	1448.1	1448.1
2.5°	1503.0	1496.6	1497.5	1493.9	1491.1	1484.7	1481.0	1471.9	1463.6	1456.3	1449.0
5°	1560.7	1550.6	1549.7	1544.2	1535.1	1524.1	1513.1	1496.6	1477.4	1460.9	1447.2
7.5°	1600.1	1591.9	1590.0	1583.6	1568.1	1553.4	1535.1	1511.3	1485.6	1457.2	1438.9
10°	1628.5	1620.3	1618.4	1606.5	1588.2	1566.2	1544.2	1513.1	1481.0	1442.6	1419.7
12.5°	1656.0	1649.6	1644.1	1631.3	1609.3	1582.7	1554.3	1514.9	1476.5	1427.0	1402.3
15°	1680.7	1675.2	1670.6	1654.1	1632.2	1598.3	1565.3	1516.8	1471.0	1413.3	1383.0
17.5°	1689.9	1681.6	1678.0	1660.6	1636.7	1601.0	1563.5	1506.7	1453.6	1388.5	1354.6
20°	1677.0	1670.6	1667.0	1651.4	1627.6	1590.9	1546.1	1485.6	1425.2	1356.5	1315.3
22.5°	1658.7	1654.1	1646.8	1635.8	1611.1	1574.5	1524.1	1460.9	1393.1	1317.1	1275.0
25°	1634.9	1631.3	1626.7	1614.8	1588.2	1551.6	1499.4	1431.6	1359.2	1275.9	1231.9
27.5°	1612.9	1606.5	1601.0	1588.2	1562.6	1522.3	1471.9	1400.4	1319.8	1229.2	1183.4
30°	1584.5	1579.0	1570.8	1556.1	1526.8	1486.5	1431.6	1360.1	1271.3	1178.8	1127.5
32.5°	1555.2	1552.5	1539.7	1523.2	1487.5	1445.3	1388.5	1310.7	1220.0	1122.9	1071.6
35°	1534.2	1530.5	1517.7	1491.1	1450.8	1402.3	1341.8	1263.1	1167.8	1066.1	1013.0
37.5°	1520.4	1515.8	1499.4	1464.6	1416.0	1359.2	1294.2	1209.9	1113.8	1008.4	954.4
40°	1509.4	1506.7	1484.7	1440.7	1382.1	1315.3	1242.9	1155.0	1057.0	948.9	895.8
42.5°	1507.6	1503.0	1477.4	1422.4	1351.9	1273.1	1188.9	1099.1	1000.2	890.3	836.2
45°	1513.1	1507.6	1475.5	1408.7	1326.2	1232.8	1137.6	1044.1	938.8	830.7	777.6
47.5°	1525.0	1521.3	1482.0	1401.4	1302.4	1193.4	1087.2	986.4	882.0	771.2	718.1
50°	1541.5	1538.7	1492.0	1398.6	1279.5	1156.8	1040.5	931.5	826.2	715.3	663.1
52.5°	1568.1	1558.9	1507.6	1401.4	1266.7	1122.9	991.9	875.6	770.3	660.4	610.9
55°	1595.5	1584.5	1525.0	1405.9	1252.1	1092.7	947.1	824.3	716.2	607.3	558.7
57.5°	1617.5	1606.5	1542.4	1412.3	1240.2	1066.1	906.8	776.7	665.9	557.8	511.1
60°	1636.7	1627.6	1555.2	1414.2	1227.3	1035.0	866.5	729.1	617.3	511.1	466.2
62.5°	1650.5	1638.6	1566.2	1409.6	1212.7	1006.6	828.9	684.2	570.6	467.1	422.2
65°	1653.2	1641.3	1561.6	1401.4	1195.3	976.4	792.3	643.0	527.6	425.0	381.9
67.5°	1636.7	1627.6	1547.9	1383.0	1172.4	948.0	754.7	603.6	486.4	386.5	344.4
70°	1605.6	1601.0	1517.7	1355.6	1140.3	914.1	718.1	565.1	446.1	346.2	307.7
72.5°	1561.6	1558.0	1475.5	1316.2	1106.4	878.4	681.4	530.3	408.5	311.4	272.9
75°	1506.7	1501.2	1421.5	1271.3	1061.5	838.1	643.9	493.7	371.9	275.7	240.0
77.5°	1438.9	1436.2	1362.0	1215.4	1013.9	795.9	606.3	458.0	338.0	242.7	206.1
80°	1367.5	1365.6	1294.2	1156.8	961.7	753.8	569.7	425.0	305.0	207.9	177.7
82.5°	1293.3	1292.4	1224.6	1092.7	908.6	710.8	534.0	393.8	276.6	181.4	151.1
85°	1219.1	1217.3	1154.1	1029.5	856.4	671.4	502.8	368.2	251.0	156.6	129.1
87.5°	1148.6	1146.7	1086.3	970.0	807.8	632.0	474.4	344.4	229.0	136.5	111.7
90°	1086.3	1083.5	1027.7	916.8	765.7	602.7	454.3	328.8	216.2	126.4	103.5
92.5°	1030.4	1028.6	975.5	873.8	731.8	581.6	441.5	322.4	211.6	123.6	101.7
95°	974.5	970.9	922.3	828.9	697.9	560.5	428.6	314.2	207.0	121.8	99.8
97.5°	917.7	915.0	870.1	784.0	664.0	537.6	414.9	305.0	201.5	120.0	97.1
100°	861.0	859.1	819.7	741.0	630.2	512.9	398.4	294.9	195.1	117.2	94.3
102.5°	806.0	805.1	767.5	696.1	596.3	487.3	381.0	283.9	188.7	113.6	91.6
105°	748.3	749.2	714.4	650.3	559.6	459.8	363.6	272.0	183.2	110.8	88.8
107.5°	694.3	693.3	663.1	605.4	524.8	436.9	347.1	261.0	176.8	107.2	86.1
110°	641.1	639.3	614.6	563.3	492.8	412.2	329.7	251.0	170.4	103.5	82.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	593.5	592.6	569.7	523.9	461.6	388.3	313.2	240.0	163.9	98.9	78.8
115°	549.6	548.6	527.6	487.3	432.3	367.3	298.6	227.1	156.6	94.3	75.1
117.5°	508.3	505.6	489.1	454.3	404.8	347.1	283.9	217.1	150.2	90.7	71.4
120°	470.8	469.9	455.2	425.0	381.0	327.9	270.2	207.0	143.8	86.1	67.8
122.5°	436.9	438.7	425.0	397.5	358.1	310.5	257.4	197.8	137.4	81.5	65.0
125°	409.4	408.5	397.5	373.7	338.0	294.9	245.5	188.7	131.0	76.9	61.4
127.5°	383.8	381.9	371.9	350.8	318.7	280.3	233.6	179.5	124.6	73.3	57.7
130°	359.0	357.2	348.0	330.6	300.4	265.6	219.8	170.4	117.2	68.7	54.0
132.5°	338.0	337.1	328.8	312.3	285.8	252.8	208.8	161.2	110.8	64.1	50.4
135°	318.7	317.8	309.6	295.8	270.2	240.0	197.8	152.0	104.4	59.5	46.7
137.5°	300.4	300.4	293.1	279.4	256.5	224.4	186.8	142.9	98.0	55.0	44.0
140°	283.0	283.0	275.7	262.9	241.8	210.7	174.9	132.8	90.7	50.4	40.3
142.5°	266.5	267.4	260.1	248.2	224.4	196.9	163.0	123.6	84.3	45.8	36.6
145°	251.0	251.9	244.6	232.6	209.7	183.2	151.1	115.4	77.9	41.2	33.9
147.5°	234.5	234.5	228.1	214.3	194.2	169.4	139.2	106.2	71.4	36.6	30.2
150°	214.3	215.2	207.9	196.9	178.6	154.8	127.3	97.1	64.1	31.1	27.5
152.5°	196.0	196.0	189.6	178.6	161.2	140.1	115.4	87.0	57.7	26.6	23.8
155°	176.8	176.8	170.4	160.3	144.7	125.5	102.6	76.9	50.4	21.1	21.1
157.5°	157.5	157.5	152.0	142.0	128.2	111.7	90.7	66.9	43.0	18.3	17.4
160°	137.4	137.4	132.8	122.7	111.7	97.1	76.9	55.9	35.7	15.6	14.7
162.5°	117.2	117.2	113.6	105.3	94.3	80.6	61.4	44.9	28.4	12.8	11.9
165°	97.1	97.1	93.4	85.2	75.1	60.5	44.9	33.0	20.2	10.1	9.2
167.5°	74.2	74.2	71.4	62.3	46.7	39.4	32.1	22.0	12.8	7.3	7.3
170°	38.5	39.4	32.1	30.2	28.4	22.9	17.4	11.9	6.4	5.5	5.5
172.5°	0.9	0.9	4.6	6.4	9.2	10.1	8.2	5.5	3.7	3.7	3.7
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°	1448.1	1448.1	1448.1	1448.1	1448.1	1448.1	1448.1	1448.1	1448.1	1448.1
2.5°	1443.5	1430.7	1416.9	1405.9	1396.8	1392.2	1384.9	1377.5	1377.5	1375.7
5°	1437.1	1416.0	1394.9	1378.5	1360.1	1351.0	1336.3	1323.5	1323.5	1321.7
7.5°	1423.3	1394.9	1367.5	1339.1	1312.5	1293.3	1271.3	1252.1	1246.6	1252.1
10°	1400.4	1362.0	1326.2	1285.0	1250.2	1218.2	1187.9	1164.1	1154.1	1157.7
12.5°	1377.5	1331.7	1284.1	1232.8	1182.5	1141.2	1101.8	1075.3	1067.0	1063.4
15°	1354.6	1297.9	1239.2	1175.1	1113.8	1057.9	1016.7	985.5	974.5	970.9
17.5°	1322.6	1256.6	1186.1	1111.0	1037.7	974.5	928.7	893.0	882.0	878.4
20°	1280.5	1207.2	1125.7	1040.5	958.1	889.4	835.3	803.3	786.8	785.9
22.5°	1232.8	1153.1	1064.3	970.0	880.2	810.6	753.8	721.7	705.3	702.5
25°	1186.1	1099.1	1002.0	899.4	806.9	736.4	681.4	649.4	636.6	630.2
27.5°	1139.4	1046.9	940.6	832.6	739.1	669.5	618.2	587.1	573.4	569.7
30°	1084.4	988.3	878.4	770.3	675.0	608.2	560.5	531.2	518.4	515.7
32.5°	1024.9	926.9	814.3	705.3	617.3	553.2	509.3	483.6	470.8	467.1
35°	967.2	868.3	754.7	647.6	566.0	506.5	465.3	441.5	430.5	426.8
37.5°	909.5	809.7	696.1	596.3	520.2	464.4	427.7	404.8	395.7	392.0
40°	850.0	751.1	643.0	547.7	477.2	428.6	394.8	372.8	363.6	361.8
42.5°	794.1	698.8	594.4	505.6	438.7	394.8	365.5	346.2	335.2	334.3
45°	733.7	643.9	545.9	464.4	403.9	363.6	338.0	320.6	310.5	309.6
47.5°	681.4	593.5	501.0	425.9	371.9	336.1	312.3	295.8	287.6	285.8
50°	626.5	545.0	462.5	392.9	342.6	311.4	288.5	272.9	264.7	263.8
52.5°	577.0	501.9	424.1	360.9	316.0	286.7	266.5	251.9	243.6	241.8
55°	528.5	458.9	388.3	331.6	290.3	262.9	244.6	231.7	220.7	218.9
57.5°	483.6	419.5	355.4	303.2	266.5	242.7	223.5	209.7	201.5	198.8
60°	440.6	381.9	324.2	277.5	243.6	219.8	203.3	190.5	182.3	179.5
62.5°	399.3	347.1	294.9	252.8	219.8	199.7	184.1	172.2	163.9	160.3
65°	360.0	313.2	267.4	229.0	198.8	180.4	164.9	153.9	144.7	142.9
67.5°	324.2	282.1	240.9	204.2	178.6	162.1	146.5	136.5	128.2	125.5
70°	290.3	251.9	213.4	183.2	159.4	142.9	130.1	119.1	110.8	108.1
72.5°	257.4	221.7	188.7	162.1	140.1	124.6	112.7	101.7	94.3	93.4
75°	222.6	194.2	165.8	141.1	122.7	107.2	96.2	86.1	78.8	77.9
77.5°	193.3	167.6	142.9	121.8	105.3	90.7	80.6	71.4	63.2	62.3
80°	165.8	143.8	122.7	104.4	88.8	76.0	65.9	56.8	49.5	48.5
82.5°	141.1	121.8	104.4	88.8	74.2	63.2	53.1	44.0	37.6	36.6
85°	120.9	104.4	89.8	75.1	62.3	51.3	42.1	33.9	26.6	26.6
87.5°	104.4	91.6	78.8	65.0	51.3	39.4	30.2	21.1	14.7	12.8
90°	97.1	82.4	67.8	54.0	39.4	27.5	18.3	10.1	3.7	2.7
92.5°	95.3	81.5	66.9	52.2	37.6	25.6	16.5	8.2	1.8	0.9
95°	93.4	79.7	65.9	51.3	37.6	25.6	16.5	7.3	1.8	0.9
97.5°	90.7	77.9	65.0	50.4	36.6	24.7	15.6	7.3	1.8	0.9
100°	88.8	76.0	63.2	49.5	36.6	24.7	15.6	7.3	1.8	0.9
102.5°	86.1	74.2	61.4	48.5	34.8	23.8	14.7	6.4	0.9	0.9
105°	83.3	72.4	60.5	47.6	34.8	22.9	13.7	6.4	0.9	0.9
107.5°	80.6	70.5	58.6	45.8	33.0	22.0	12.8	5.5	0.9	0.9
110°	77.9	67.8	56.8	44.9	32.1	21.1	12.8	5.5	0.9	0.9



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 CATALOG NUMBER: AXCS4ARL-GRF

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	74.2	65.0	54.0	43.0	31.1	20.2	11.9	4.6	0.0	0.0
115°	71.4	62.3	52.2	41.2	29.3	19.2	11.0	4.6	0.0	0.0
117.5°	67.8	59.5	50.4	39.4	28.4	18.3	10.1	3.7	0.0	0.0
120°	65.0	56.8	47.6	37.6	27.5	17.4	10.1	3.7	0.0	0.0
122.5°	61.4	54.0	45.8	35.7	25.6	16.5	9.2	2.7	0.0	0.0
125°	57.7	51.3	43.0	33.9	24.7	14.7	8.2	2.7	0.0	0.0
127.5°	55.0	48.5	41.2	32.1	22.9	13.7	7.3	1.8	0.0	0.0
130°	51.3	45.8	38.5	30.2	22.0	12.8	7.3	1.8	0.0	0.0
132.5°	47.6	43.0	36.6	28.4	20.2	11.9	6.4	1.8	0.0	0.0
135°	44.9	40.3	33.9	26.6	19.2	11.0	5.5	1.8	0.0	0.0
137.5°	42.1	37.6	32.1	24.7	17.4	10.1	4.6	1.8	0.0	0.0
140°	38.5	34.8	29.3	22.9	15.6	9.2	4.6	0.9	0.0	0.0
142.5°	34.8	31.1	26.6	21.1	14.7	8.2	3.7	0.9	0.0	0.0
145°	32.1	28.4	24.7	19.2	12.8	7.3	2.7	0.9	0.0	0.0
147.5°	29.3	26.6	22.0	17.4	11.9	6.4	2.7	0.9	0.0	0.0
150°	25.6	23.8	20.2	15.6	10.1	5.5	2.7	0.9	0.0	0.0
152.5°	22.9	21.1	17.4	13.7	9.2	4.6	1.8	0.9	0.0	0.0
155°	20.2	17.4	14.7	11.0	7.3	3.7	1.8	0.9	0.0	0.0
157.5°	17.4	15.6	12.8	9.2	6.4	2.7	1.8	0.9	0.0	0.0
160°	14.7	12.8	11.0	8.2	4.6	2.7	0.9	0.9	0.0	0.0
162.5°	11.9	10.1	9.2	6.4	3.7	2.7	0.9	0.9	0.0	0.0
165°	9.2	8.2	6.4	4.6	2.7	1.8	0.9	0.0	0.0	0.0
167.5°	7.3	6.4	5.5	3.7	2.7	1.8	0.9	0.0	0.0	0.0
170°	5.5	4.6	3.7	2.7	2.7	1.8	0.9	0.0	0.0	0.0
172.5°	3.7	2.7	2.7	2.7	1.8	0.9	0.9	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)