

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: McGRAW-EDISON

Report Number: P228488

Luminaire Tested: **ISS-AF-450-LED-E1-SLL-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P228488  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29764)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISS-AF-450-LED-E1-SLL-7050  
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE  
LIGHT SQUARE WITH ACCULED OPTICS-90° SPILL LIGHT ELIMINATOR LEFT  
Light Source: (16) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

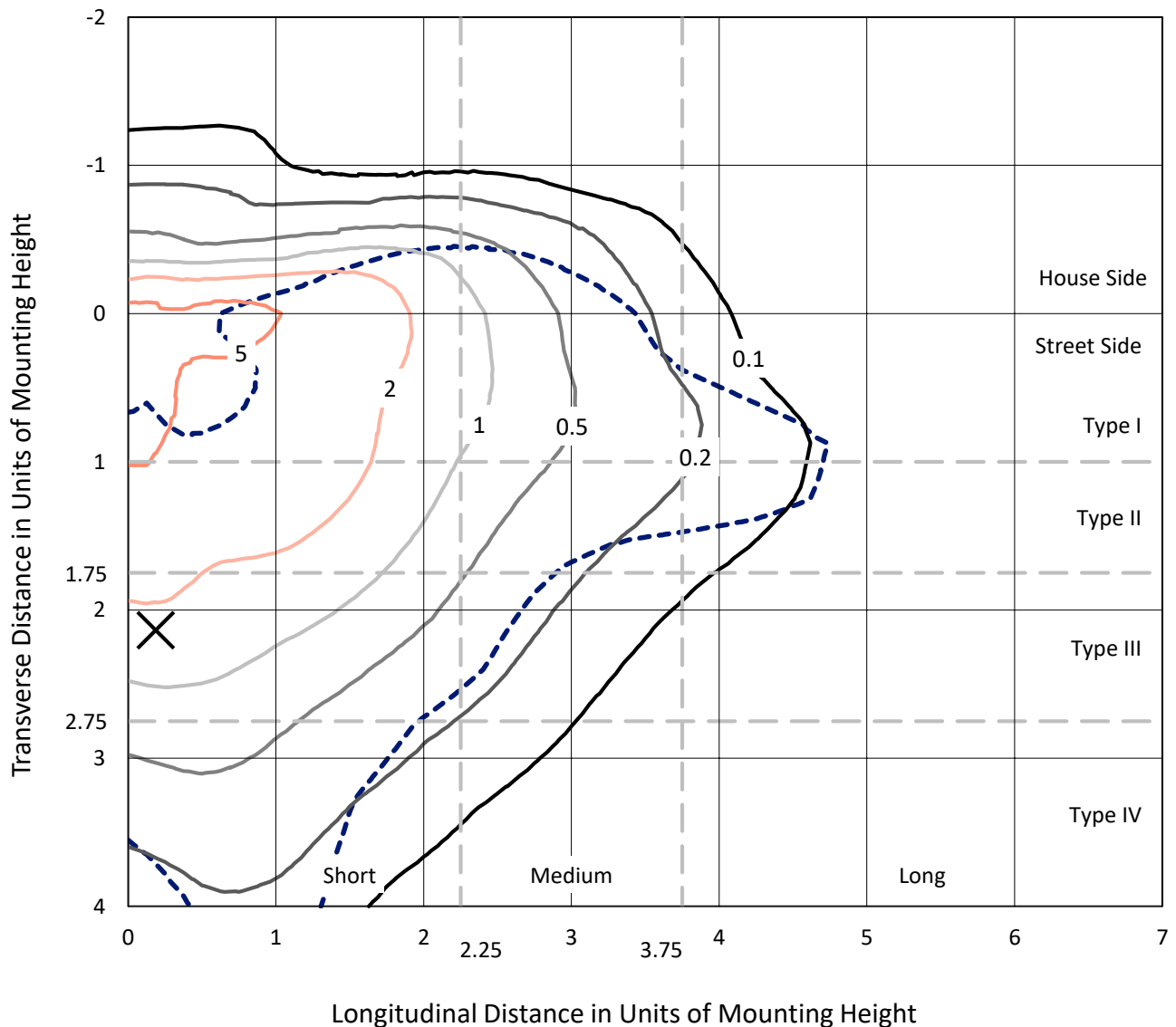
Lumens per Lamp: N/A  
Luminaire Lumens: 2498 lumens  
Efficiency: N/A  
Efficacy: 98.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 25.31  
Input Voltage (V): 120  
Input Current (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

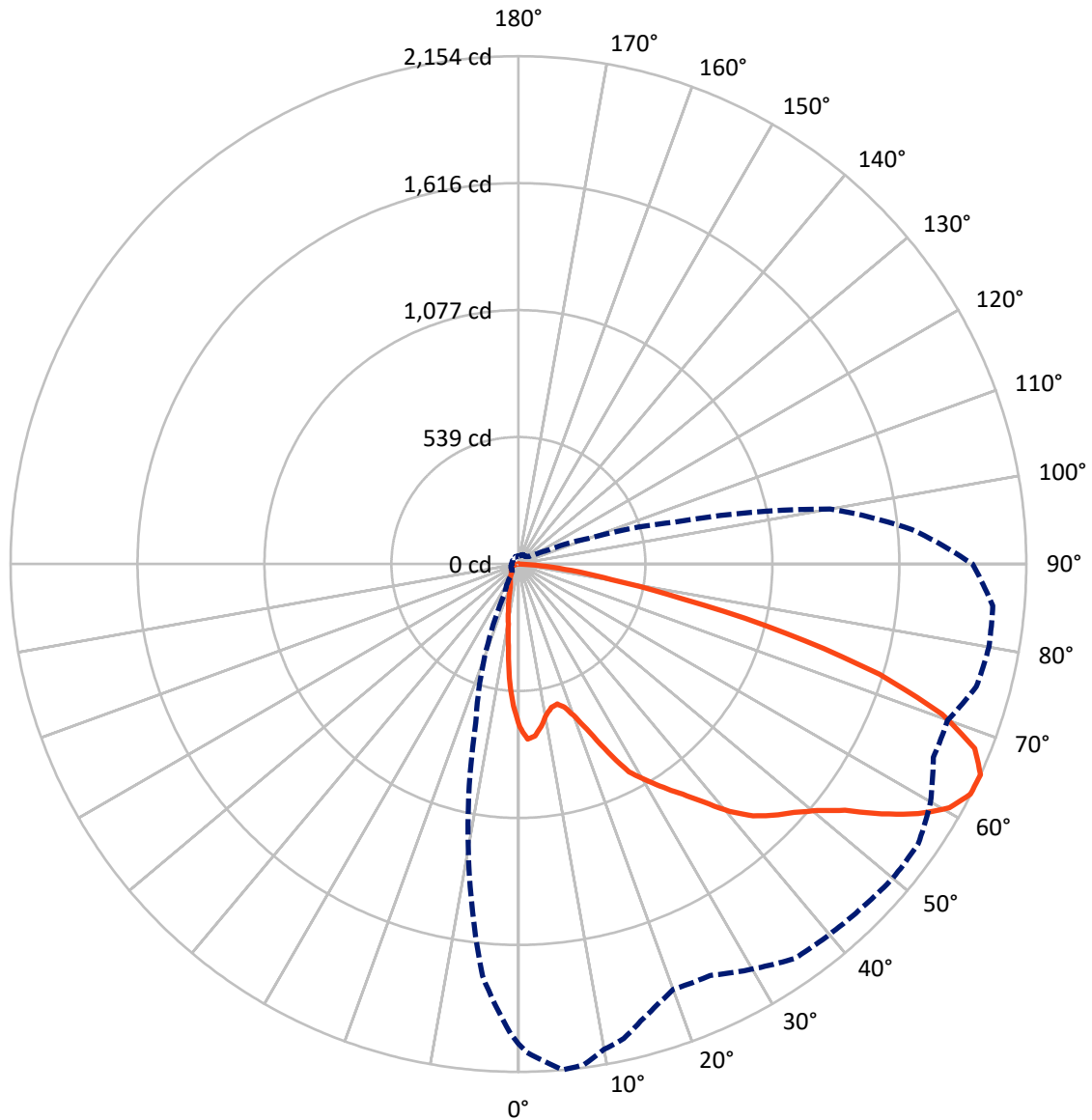
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.3 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 5-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	415.4	0.0	415.4
	% Fixture	16.6	0.0	16.6
<b>Street Side</b>	Lumens	2082.6	0.0	2082.6
	% Fixture	83.4	0.0	83.4
<b>Total</b>	Lumens	2498.0	0.0	2498.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.1	2.1
10°-20°	109.4	4.4
20°-30°	159.0	6.4
30°-40°	235.2	9.4
40°-50°	342.6	13.7
50°-60°	513.6	20.6
60°-70°	640.1	25.6
70°-80°	374.9	15.0
80°-90°	70.1	2.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2498.0	100.0
0°-180°	2498.0	100.0



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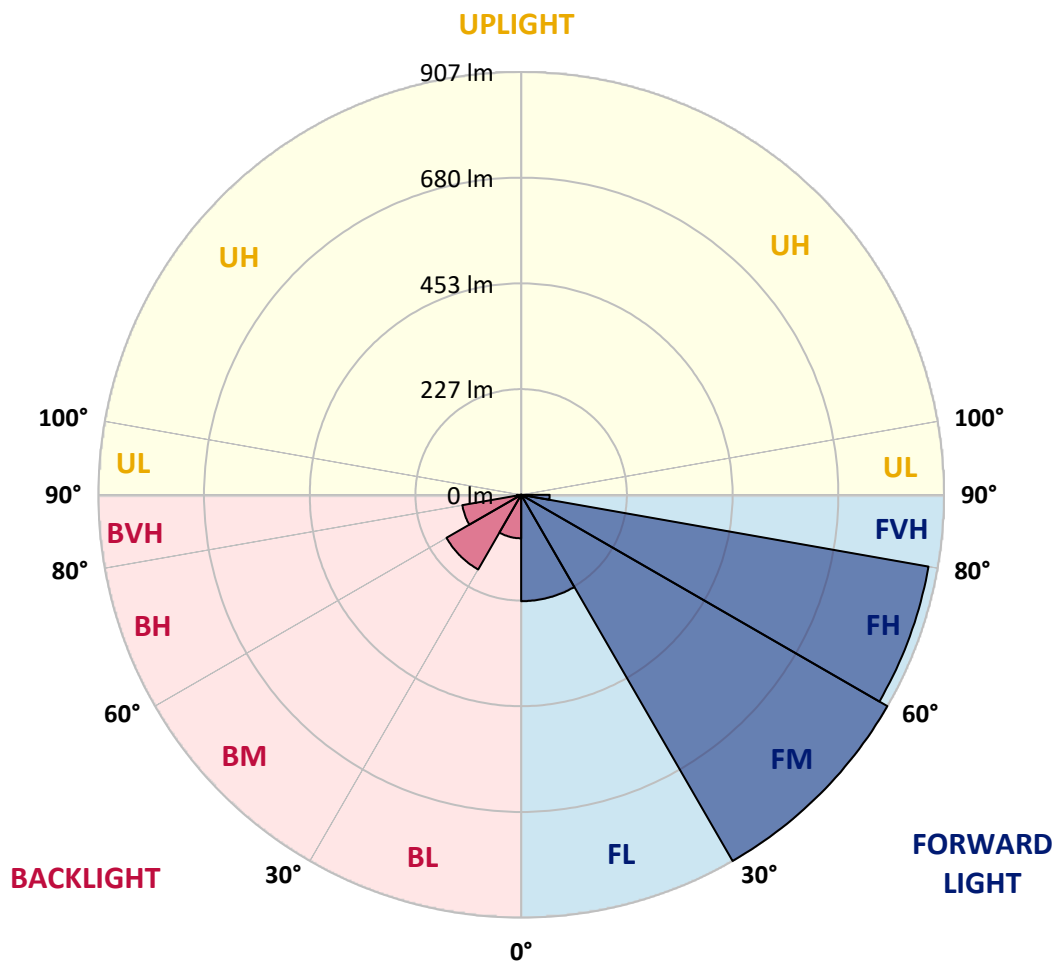
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	228.2	9.1			
FM	(30°-60°)	906.6	36.3			
FH	(60°-80°)	886.8	35.5			G1/1800
FVH	(80°-90°)	61.1	2.4			G1/100
BL	(0°-30°)	93.3	3.7	B0/110		
BM	(30°-60°)	184.9	7.4	B0/220		
BH	(60°-80°)	128.2	5.1	B1/500		G1/500
BVH	(80°-90°)	9.0	0.4			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	1°	5°	7.5°	10°	12.5°	15°	17.5°	20°	25°	35°
0°	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3
2.5°	733.8	731.8	743.7	745.7	753.6	753.6	762.5	770.4	773.4	780.3	798.1
5°	710.1	716.0	732.8	749.6	761.5	773.4	786.2	802.1	814.9	836.7	882.2
7.5°	657.7	666.6	695.3	712.1	730.9	751.6	767.4	786.2	806.0	842.6	923.7
10°	606.2	613.2	649.8	670.5	697.2	719.0	741.7	762.5	784.3	829.8	923.7
12.5°	573.6	582.5	624.0	643.8	674.5	697.2	724.9	749.6	775.4	823.8	914.8
15°	566.7	576.6	616.1	640.9	667.6	689.3	714.0	739.8	765.5	812.9	894.0
17.5°	585.5	597.3	639.9	667.6	688.3	713.1	730.9	755.6	772.4	810.0	848.5
20°	630.0	643.8	694.3	721.0	737.8	753.6	767.4	782.3	789.2	798.1	791.2
22.5°	701.2	718.0	775.4	806.0	817.9	829.8	830.7	832.7	827.8	804.0	750.6
25°	803.0	819.9	885.1	914.8	914.8	914.8	903.9	896.0	873.3	828.8	739.8
27.5°	898.0	919.7	997.9	1016.7	1010.7	1001.8	981.1	961.3	928.6	854.5	738.8
30°	969.2	991.0	1063.2	1078.0	1063.2	1041.4	1008.8	980.1	941.5	867.3	745.7
32.5°	1034.5	1060.2	1129.4	1131.4	1104.7	1080.0	1043.4	1010.7	970.2	891.1	766.5
35°	1103.7	1129.4	1199.6	1185.8	1147.2	1113.6	1076.0	1047.3	1006.8	921.7	800.1
37.5°	1199.6	1222.4	1281.7	1249.1	1199.6	1156.1	1115.6	1078.0	1037.4	963.3	856.5
40°	1292.6	1325.2	1379.6	1327.2	1266.9	1208.5	1164.0	1124.5	1080.0	1019.6	928.6
42.5°	1379.6	1410.3	1460.7	1393.5	1323.3	1264.9	1218.4	1175.9	1133.4	1083.9	1015.7
45°	1445.9	1477.5	1520.1	1448.9	1368.7	1308.4	1258.0	1220.4	1182.8	1149.2	1125.5
47.5°	1510.2	1541.8	1574.5	1497.3	1418.2	1356.9	1297.5	1262.9	1233.3	1215.5	1244.1
50°	1593.2	1615.0	1642.7	1559.6	1475.6	1405.3	1346.0	1319.3	1291.6	1297.5	1393.5
52.5°	1706.0	1724.8	1734.7	1653.6	1559.6	1479.5	1414.2	1377.6	1354.9	1389.5	1551.7
55°	1865.2	1891.9	1870.2	1790.0	1671.4	1580.4	1500.3	1456.8	1442.9	1489.4	1709.9
57.5°	2002.7	2014.5	1998.7	1919.6	1798.0	1696.1	1611.0	1565.6	1549.7	1611.0	1854.3
60°	2063.0	2077.8	2099.6	2031.4	1917.6	1816.8	1743.6	1699.1	1672.4	1743.6	1970.0
62.5°	2072.9	2097.6	2151.0	2116.4	2026.4	1951.3	1885.0	1823.7	1802.9	1857.3	2046.2
65°	2034.3	2071.9	2154.0	2141.1	2090.7	2062.0	2006.6	1959.2	1919.6	1925.5	2042.2
67.5°	1947.3	1990.8	2086.7	2080.8	2086.7	2086.7	2038.3	1998.7	1947.3	1874.1	1891.9
70°	1737.6	1795.0	1905.8	1934.4	1984.9	1984.9	1942.4	1882.0	1822.7	1672.4	1581.4
72.5°	1392.5	1431.1	1601.2	1740.6	1804.9	1779.2	1737.6	1636.8	1506.2	1341.1	1217.4
75°	942.5	965.2	1173.9	1429.1	1545.8	1524.0	1455.8	1330.2	1195.7	1011.7	855.5
77.5°	525.1	554.8	711.1	910.8	1068.1	1065.1	1056.2	976.1	869.3	717.0	635.9
80°	308.6	318.5	400.5	545.9	681.4	648.8	626.0	562.7	508.3	439.1	501.4
82.5°	188.9	179.0	227.5	332.3	402.5	388.7	350.1	326.4	300.6	281.9	333.3
85°	51.4	46.5	93.0	139.4	171.1	184.9	184.9	183.0	164.2	123.6	148.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	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):**

	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
0°	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3
2.5°	805.0	806.0	803.0	810.0	802.1	798.1	786.2	786.2	776.3	768.4	759.5
5°	899.0	904.9	900.0	901.0	885.1	869.3	845.6	831.7	807.0	780.3	752.6
7.5°	962.3	972.2	968.2	951.4	926.7	893.0	853.5	815.9	775.4	731.8	691.3
10°	979.1	990.0	981.1	949.4	908.9	861.4	813.9	763.5	714.0	667.6	624.0
12.5°	955.4	963.3	944.5	909.9	870.3	822.8	773.4	729.9	671.5	622.1	571.6
15°	895.0	890.1	888.1	863.4	835.7	797.1	750.6	706.1	651.7	601.3	547.9
17.5°	829.8	823.8	825.8	815.9	812.0	794.1	759.5	722.0	673.5	612.2	554.8
20°	772.4	766.5	769.4	774.4	789.2	790.2	784.3	759.5	723.9	659.6	589.4
22.5°	722.9	723.9	733.8	747.7	772.4	804.0	828.8	833.7	809.0	733.8	645.8
25°	708.1	703.2	714.0	736.8	778.3	839.6	895.0	922.7	908.9	833.7	725.9
27.5°	703.2	696.2	708.1	737.8	804.0	890.1	969.2	1010.7	1015.7	938.5	812.0
30°	703.2	700.2	712.1	750.6	820.9	906.9	994.9	1057.2	1077.0	1012.7	887.1
32.5°	712.1	714.0	734.8	784.3	856.5	944.5	1035.5	1102.7	1138.3	1089.9	947.4
35°	731.8	735.8	765.5	822.8	901.0	990.0	1073.0	1141.3	1198.6	1172.9	1003.8
37.5°	774.4	780.3	816.9	875.2	946.5	1026.6	1107.7	1180.8	1263.9	1253.0	1063.2
40°	849.5	849.5	886.1	936.6	994.9	1056.2	1136.3	1222.4	1324.2	1339.1	1136.3
42.5°	944.5	940.5	964.3	1000.8	1041.4	1092.8	1165.0	1260.9	1380.6	1413.2	1191.7
45°	1075.0	1055.2	1068.1	1077.0	1096.8	1128.4	1192.7	1297.5	1426.1	1468.6	1233.3
47.5°	1228.3	1200.6	1189.7	1172.9	1166.0	1177.9	1233.3	1326.2	1469.6	1516.1	1300.5
50°	1397.4	1370.7	1342.0	1296.5	1257.0	1245.1	1278.7	1364.8	1516.1	1575.4	1374.7
52.5°	1573.5	1554.7	1517.1	1445.9	1370.7	1328.2	1344.0	1429.1	1590.3	1667.4	1462.7
55°	1734.7	1740.6	1695.1	1612.0	1504.2	1439.0	1457.8	1542.8	1724.8	1815.8	1610.1
57.5°	1907.7	1891.9	1856.3	1770.3	1652.6	1582.4	1590.3	1693.1	1875.1	1944.3	1756.4
60°	2022.5	2022.5	1983.9	1918.6	1806.9	1741.6	1753.5	1848.4	1995.8	2002.7	1821.7
62.5°	2096.6	2107.5	2076.9	2030.4	1921.6	1867.2	1907.7	1975.0	2055.1	1997.7	1789.1
65°	2061.0	2072.9	2069.9	2018.5	1941.4	1937.4	2010.6	2026.4	2019.5	1925.5	1676.3
67.5°	1899.8	1876.1	1875.1	1848.4	1832.6	1914.7	2007.6	2012.6	1895.9	1784.1	1498.3
70°	1593.2	1552.7	1536.9	1544.8	1617.0	1770.3	1902.8	1865.2	1679.3	1583.4	1275.8
72.5°	1228.3	1179.9	1170.0	1200.6	1312.4	1528.0	1709.0	1656.5	1380.6	1268.9	988.0
75°	871.3	850.5	851.5	911.8	1032.5	1240.2	1450.8	1445.9	1022.6	875.2	680.4
77.5°	633.9	637.9	655.7	679.4	783.3	984.0	1181.8	1169.0	727.9	601.3	475.7
80°	523.2	529.1	529.1	516.2	542.9	649.8	803.0	857.4	487.6	404.5	332.3
82.5°	375.8	405.5	422.3	401.5	391.6	428.2	503.4	539.0	303.6	255.2	232.4
85°	179.0	204.7	210.7	205.7	236.4	270.0	287.8	294.7	166.1	118.7	152.3
87.5°	0.0	0.0	1.0	7.9	21.8	37.6	37.6	57.4	8.9	3.0	6.9
90°	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):**

	100°	105°	110°	115°	120°	125°	130°	135°	145°	155°	165°
0°	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3
2.5°	747.7	734.8	724.9	713.1	703.2	693.3	686.4	671.5	659.6	632.9	626.0
5°	729.9	702.2	683.4	665.6	642.8	627.0	610.2	589.4	566.7	528.1	516.2
7.5°	659.6	625.0	599.3	573.6	543.9	517.2	492.5	464.8	425.3	383.7	367.9
10°	583.5	546.9	511.3	480.6	445.0	415.4	393.6	373.8	342.2	310.5	289.8
12.5°	521.2	479.7	439.1	408.4	389.7	374.8	359.0	343.2	309.5	273.9	249.2
15°	492.5	444.1	408.4	382.7	365.9	348.1	329.3	311.5	272.0	230.4	200.8
17.5°	496.5	441.1	395.6	361.0	338.2	313.5	291.7	269.0	225.5	176.0	149.3
20°	518.2	444.1	381.7	341.2	308.6	276.9	249.2	220.5	167.1	128.6	109.8
22.5°	545.9	453.9	373.8	321.4	280.9	241.3	205.7	172.1	123.6	100.9	92.0
25°	593.4	476.7	371.9	303.6	254.2	206.7	170.1	134.5	99.9	89.0	84.1
27.5°	652.7	502.4	373.8	290.8	231.4	179.0	138.5	111.8	90.0	84.1	80.1
30°	712.1	529.1	364.9	271.0	204.7	153.3	118.7	101.9	89.0	82.1	75.2
32.5°	764.5	548.9	350.1	250.2	181.0	130.5	100.9	87.0	78.1	70.2	68.2
35°	802.1	557.8	333.3	237.4	165.2	116.7	89.0	78.1	69.2	61.3	57.4
37.5°	837.7	558.8	315.5	225.5	159.2	110.8	82.1	72.2	64.3	57.4	53.4
40°	874.3	554.8	305.6	213.6	150.3	107.8	79.1	67.3	62.3	54.4	50.4
42.5°	901.0	547.9	301.6	206.7	142.4	99.9	77.1	66.3	59.3	53.4	48.5
45°	925.7	541.0	301.6	200.8	136.5	94.9	73.2	67.3	57.4	52.4	46.5
47.5°	955.4	543.9	302.6	195.8	131.5	90.0	69.2	65.3	58.3	51.4	45.5
50°	1005.8	577.6	307.6	192.9	127.6	86.0	66.3	62.3	64.3	50.4	44.5
52.5°	1092.8	631.0	315.5	190.9	123.6	83.1	62.3	60.3	65.3	50.4	43.5
55°	1206.6	685.4	323.4	185.9	117.7	77.1	60.3	56.4	60.3	50.4	42.5
57.5°	1317.3	725.9	330.3	179.0	107.8	71.2	57.4	53.4	55.4	49.4	40.5
60°	1381.6	757.6	337.2	167.1	95.9	64.3	54.4	50.4	49.4	49.4	39.6
62.5°	1399.4	745.7	333.3	152.3	86.0	59.3	51.4	47.5	44.5	50.4	39.6
65°	1343.0	683.4	318.5	139.4	79.1	57.4	48.5	45.5	42.5	43.5	37.6
67.5°	1170.0	574.6	277.9	127.6	78.1	56.4	46.5	43.5	39.6	38.6	35.6
70°	954.4	451.0	230.4	118.7	77.1	56.4	44.5	40.5	37.6	34.6	32.6
72.5°	733.8	337.2	193.8	114.7	78.1	55.4	41.5	36.6	33.6	31.6	29.7
75°	516.2	238.3	161.2	102.9	73.2	52.4	38.6	32.6	29.7	27.7	25.7
77.5°	373.8	162.2	119.7	83.1	62.3	45.5	33.6	27.7	24.7	23.7	21.8
80°	238.3	99.9	80.1	61.3	45.5	35.6	25.7	21.8	19.8	17.8	16.8
82.5°	137.5	58.3	48.5	41.5	29.7	23.7	18.8	16.8	12.9	11.9	10.9
85°	84.1	36.6	26.7	21.8	18.8	14.8	10.9	9.9	6.9	5.9	4.9
87.5°	18.8	7.9	6.9	4.9	5.9	4.9	3.0	2.0	0.0	0.0	0.0
90°	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):**

	175°	180°	185°	195°	205°	215°	225°	230°	232.5°	235°	237.5°
0°	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3
2.5°	615.1	600.3	601.3	598.3	590.4	577.6	573.6	566.7	567.7	571.6	567.7
5°	502.4	484.6	486.6	485.6	477.7	468.8	461.9	453.0	450.0	453.0	448.0
7.5°	356.0	344.2	348.1	357.0	356.0	351.1	345.2	335.3	333.3	334.3	325.4
10°	272.0	260.1	257.1	256.1	254.2	251.2	243.3	235.4	232.4	233.4	227.5
12.5°	227.5	217.6	205.7	194.8	184.9	181.0	171.1	166.1	165.2	165.2	162.2
15°	180.0	172.1	165.2	154.3	146.4	140.4	133.5	129.6	128.6	129.6	129.6
17.5°	134.5	130.5	127.6	126.6	122.6	118.7	114.7	112.7	111.8	111.8	112.7
20°	102.9	101.9	101.9	101.9	106.8	110.8	111.8	108.8	107.8	106.8	105.8
22.5°	89.0	88.0	89.0	94.9	92.0	89.0	89.0	89.0	89.0	89.0	90.0
25°	82.1	83.1	84.1	81.1	78.1	76.2	75.2	75.2	74.2	74.2	75.2
27.5°	78.1	77.1	76.2	74.2	72.2	69.2	68.2	67.3	67.3	67.3	67.3
30°	73.2	72.2	71.2	69.2	66.3	62.3	61.3	61.3	60.3	61.3	61.3
32.5°	67.3	66.3	65.3	63.3	60.3	58.3	57.4	55.4	55.4	55.4	56.4
35°	54.4	53.4	53.4	54.4	54.4	53.4	53.4	51.4	51.4	51.4	51.4
37.5°	50.4	49.4	49.4	48.5	49.4	50.4	49.4	48.5	48.5	47.5	47.5
40°	47.5	47.5	46.5	45.5	45.5	47.5	46.5	45.5	44.5	44.5	44.5
42.5°	45.5	44.5	44.5	43.5	43.5	43.5	42.5	41.5	40.5	40.5	40.5
45°	43.5	43.5	42.5	41.5	40.5	40.5	38.6	37.6	37.6	37.6	38.6
47.5°	42.5	41.5	41.5	40.5	39.6	37.6	36.6	35.6	35.6	35.6	35.6
50°	41.5	40.5	39.6	39.6	37.6	36.6	35.6	34.6	34.6	34.6	34.6
52.5°	40.5	39.6	38.6	37.6	36.6	35.6	34.6	33.6	33.6	33.6	33.6
55°	38.6	37.6	37.6	36.6	36.6	35.6	34.6	33.6	33.6	33.6	32.6
57.5°	37.6	36.6	35.6	35.6	35.6	34.6	33.6	32.6	32.6	32.6	32.6
60°	36.6	35.6	35.6	34.6	34.6	33.6	33.6	32.6	31.6	31.6	30.7
62.5°	35.6	34.6	34.6	33.6	34.6	33.6	32.6	31.6	30.7	30.7	29.7
65°	34.6	33.6	33.6	33.6	32.6	32.6	31.6	29.7	29.7	29.7	28.7
67.5°	32.6	31.6	31.6	32.6	31.6	30.7	30.7	28.7	28.7	27.7	27.7
70°	29.7	29.7	29.7	30.7	29.7	28.7	28.7	27.7	26.7	25.7	25.7
72.5°	27.7	26.7	27.7	27.7	27.7	26.7	27.7	25.7	24.7	23.7	23.7
75°	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	22.7	21.8	20.8
77.5°	18.8	19.8	19.8	19.8	19.8	20.8	19.8	19.8	19.8	18.8	17.8
80°	13.8	13.8	14.8	15.8	14.8	15.8	14.8	15.8	14.8	14.8	14.8
82.5°	7.9	7.9	8.9	9.9	9.9	10.9	8.9	9.9	9.9	10.9	9.9
85°	3.0	3.0	3.0	3.0	4.0	4.0	3.0	4.0	4.0	4.9	4.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	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):**

	240°	242.5°	245°	247.5°	250°	252.5°	255°	257.5°	260°	265°	270°
0°	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3
2.5°	575.6	575.6	563.7	565.7	567.7	571.6	569.7	568.7	567.7	573.6	576.6
5°	452.0	451.0	436.1	435.2	438.1	439.1	436.1	431.2	428.2	429.2	432.2
7.5°	328.3	325.4	311.5	309.5	308.6	309.5	306.6	301.6	297.7	298.7	301.6
10°	229.4	221.5	219.6	220.5	222.5	224.5	224.5	224.5	225.5	231.4	238.3
12.5°	166.1	163.2	165.2	167.1	171.1	174.1	177.0	178.0	179.0	186.9	192.9
15°	131.5	131.5	133.5	134.5	136.5	138.5	140.4	140.4	141.4	144.4	149.3
17.5°	113.7	113.7	113.7	113.7	113.7	112.7	111.8	109.8	108.8	107.8	108.8
20°	104.8	103.8	101.9	100.9	98.9	96.9	95.9	93.0	92.0	89.0	88.0
22.5°	90.0	89.0	89.0	89.0	89.0	88.0	87.0	86.0	84.1	81.1	79.1
25°	74.2	74.2	74.2	75.2	75.2	76.2	78.1	78.1	78.1	78.1	75.2
27.5°	67.3	67.3	67.3	67.3	68.2	68.2	69.2	69.2	69.2	70.2	71.2
30°	61.3	62.3	62.3	63.3	63.3	64.3	64.3	65.3	65.3	66.3	66.3
32.5°	56.4	56.4	57.4	58.3	58.3	58.3	60.3	60.3	59.3	60.3	60.3
35°	50.4	50.4	50.4	50.4	50.4	50.4	50.4	50.4	48.5	47.5	48.5
37.5°	46.5	45.5	45.5	44.5	43.5	43.5	43.5	44.5	43.5	44.5	44.5
40°	42.5	42.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	42.5	43.5
42.5°	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	39.6	40.5	40.5
45°	37.6	37.6	37.6	37.6	38.6	38.6	38.6	38.6	38.6	38.6	39.6
47.5°	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	37.6	38.6
50°	34.6	34.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6	36.6	37.6
52.5°	33.6	33.6	33.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	35.6
55°	32.6	33.6	33.6	33.6	33.6	33.6	32.6	32.6	32.6	32.6	33.6
57.5°	31.6	31.6	32.6	32.6	32.6	31.6	31.6	30.7	30.7	30.7	32.6
60°	30.7	30.7	30.7	30.7	30.7	29.7	29.7	29.7	29.7	30.7	30.7
62.5°	29.7	29.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7
65°	28.7	28.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
67.5°	26.7	26.7	26.7	25.7	25.7	25.7	25.7	26.7	25.7	25.7	25.7
70°	24.7	24.7	24.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7
72.5°	22.7	22.7	22.7	22.7	21.8	21.8	21.8	21.8	21.8	21.8	21.8
75°	20.8	19.8	19.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
77.5°	17.8	16.8	16.8	16.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8
80°	14.8	13.8	13.8	12.9	12.9	12.9	12.9	12.9	12.9	11.9	11.9
82.5°	10.9	9.9	9.9	9.9	9.9	8.9	8.9	8.9	8.9	7.9	6.9
85°	4.9	4.9	4.0	4.9	4.9	5.9	4.9	4.9	4.9	4.0	2.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	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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REPORT N  
 CATALOG

**CANDELA DISTRIBUTION (continued):**

**CANDELA**

	275°	280°	282.5°	285°	287.5°	290°	292.5°	295°	297.5°	300°	302.5°	
0°	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	0°
2.5°	574.6	584.5	585.5	579.5	591.4	593.4	590.4	590.4	592.4	600.3	600.3	2.5°
5°	428.2	441.1	440.1	432.2	448.0	453.0	450.0	451.0	454.9	463.8	468.8	5°
7.5°	302.6	313.5	312.5	311.5	321.4	325.4	327.4	330.3	342.2	343.2	349.1	7.5°
10°	245.3	255.2	258.1	265.0	268.0	273.9	277.9	282.8	292.7	297.7	304.6	10°
12.5°	198.8	210.7	213.6	221.5	225.5	232.4	236.4	246.3	252.2	258.1	267.0	12.5°
15°	153.3	163.2	166.1	172.1	176.0	183.9	187.9	193.8	205.7	211.6	223.5	15°
17.5°	112.7	118.7	120.7	124.6	127.6	130.5	138.5	148.3	155.3	165.2	171.1	17.5°
20°	88.0	90.0	91.0	92.0	94.0	95.9	99.9	106.8	110.8	118.7	124.6	20°
22.5°	79.1	80.1	80.1	81.1	81.1	82.1	84.1	86.0	88.0	91.0	94.0	22.5°
25°	73.2	74.2	74.2	75.2	75.2	76.2	77.1	78.1	80.1	81.1	82.1	25°
27.5°	70.2	70.2	70.2	70.2	71.2	71.2	72.2	74.2	74.2	76.2	77.1	27.5°
30°	67.3	67.3	67.3	68.2	69.2	71.2	73.2	76.2	77.1	79.1	80.1	30°
32.5°	62.3	60.3	62.3	61.3	59.3	59.3	60.3	62.3	62.3	63.3	64.3	32.5°
35°	48.5	48.5	49.4	50.4	50.4	51.4	52.4	53.4	54.4	56.4	57.4	35°
37.5°	45.5	46.5	46.5	47.5	48.5	48.5	49.4	51.4	52.4	53.4	54.4	37.5°
40°	43.5	44.5	45.5	46.5	46.5	47.5	48.5	49.4	50.4	52.4	53.4	40°
42.5°	41.5	43.5	43.5	44.5	45.5	46.5	47.5	48.5	50.4	51.4	52.4	42.5°
45°	40.5	41.5	42.5	43.5	44.5	45.5	46.5	48.5	49.4	51.4	52.4	45°
47.5°	39.6	40.5	41.5	42.5	43.5	44.5	45.5	47.5	49.4	51.4	53.4	47.5°
50°	37.6	39.6	40.5	41.5	42.5	43.5	45.5	47.5	49.4	52.4	57.4	50°
52.5°	36.6	38.6	38.6	40.5	41.5	43.5	45.5	47.5	50.4	54.4	59.3	52.5°
55°	34.6	36.6	36.6	38.6	40.5	42.5	43.5	46.5	49.4	53.4	54.4	55°
57.5°	32.6	34.6	35.6	36.6	38.6	40.5	41.5	44.5	48.5	49.4	48.5	57.5°
60°	31.6	32.6	33.6	34.6	36.6	37.6	40.5	46.5	50.4	46.5	41.5	60°
62.5°	29.7	31.6	32.6	33.6	35.6	36.6	38.6	42.5	43.5	38.6	37.6	62.5°
65°	28.7	30.7	30.7	32.6	33.6	33.6	34.6	34.6	34.6	34.6	34.6	65°
67.5°	26.7	28.7	28.7	29.7	30.7	30.7	31.6	31.6	31.6	31.6	31.6	67.5°
70°	24.7	25.7	26.7	27.7	27.7	27.7	28.7	28.7	28.7	29.7	29.7	70°
72.5°	22.7	23.7	23.7	24.7	24.7	25.7	25.7	26.7	26.7	26.7	27.7	72.5°
75°	18.8	19.8	20.8	21.8	21.8	22.7	22.7	22.7	22.7	23.7	23.7	75°
77.5°	15.8	15.8	17.8	17.8	18.8	18.8	19.8	19.8	19.8	19.8	19.8	77.5°
80°	11.9	11.9	12.9	13.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	80°
82.5°	6.9	6.9	7.9	7.9	8.9	8.9	9.9	8.9	8.9	7.9	7.9	82.5°
85°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0	0.0	0.0	85°
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	87.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90°



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**DISTRIBUTION (continued):**

**CANDELA DISTRIBUTION**

305°	307.5°	310°	312.5°	315°	317.5°	320°	322.5°	325°	335°	345°		355°
691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	0°	691.3
615.1	615.1	617.1	625.0	627.0	632.0	631.0	639.9	643.8	667.6	692.3	2.5°	716.0
486.6	490.5	496.5	506.4	512.3	523.2	521.2	539.0	542.0	585.5	628.0	5°	677.4
363.0	368.9	373.8	384.7	393.6	404.5	407.5	428.2	434.2	491.5	550.9	7.5°	619.1
314.5	319.4	326.4	333.3	342.2	347.1	355.0	364.9	371.9	414.4	482.6	10°	560.8
279.9	286.8	293.7	303.6	312.5	321.4	329.3	339.2	348.1	382.7	436.1	12.5°	526.1
237.4	245.3	253.2	264.1	276.9	285.8	294.7	305.6	316.5	359.0	421.3	15°	512.3
183.9	192.9	203.7	218.6	232.4	243.3	252.2	267.0	280.9	332.3	414.4	17.5°	526.1
135.5	143.4	153.3	166.1	176.0	194.8	204.7	222.5	239.3	303.6	404.5	20°	552.8
99.9	104.8	112.7	122.6	133.5	150.3	161.2	177.0	195.8	276.9	404.5	22.5°	598.3
84.1	86.0	89.0	94.9	101.9	113.7	124.6	140.4	159.2	253.2	415.4	25°	672.5
78.1	79.1	81.1	84.1	88.0	94.0	101.9	114.7	133.5	234.4	431.2	27.5°	751.6
82.1	82.1	82.1	83.1	85.1	88.0	92.0	99.9	111.8	206.7	442.1	30°	820.9
66.3	67.3	67.3	69.2	70.2	74.2	78.1	84.1	94.9	189.9	449.0	32.5°	870.3
59.3	60.3	61.3	62.3	64.3	65.3	69.2	76.2	87.0	179.0	448.0	35°	928.6
56.4	57.4	58.3	58.3	59.3	61.3	64.3	71.2	84.1	175.0	448.0	37.5°	995.9
55.4	55.4	55.4	55.4	57.4	59.3	64.3	71.2	82.1	171.1	451.0	40°	1070.1
53.4	53.4	53.4	54.4	57.4	61.3	63.3	67.3	76.2	169.1	455.9	42.5°	1137.3
53.4	53.4	54.4	58.3	59.3	59.3	60.3	63.3	72.2	169.1	465.8	45°	1189.7
55.4	57.4	58.3	57.4	56.4	56.4	56.4	60.3	69.2	172.1	484.6	47.5°	1250.1
60.3	59.3	55.4	54.4	54.4	52.4	53.4	57.4	68.2	172.1	523.2	50°	1333.1
59.3	55.4	54.4	52.4	50.4	49.4	50.4	56.4	67.3	170.1	578.6	52.5°	1454.8
53.4	52.4	49.4	47.5	46.5	47.5	49.4	54.4	65.3	168.1	646.8	55°	1602.1
46.5	45.5	43.5	43.5	44.5	45.5	48.5	52.4	60.3	163.2	701.2	57.5°	1737.6
40.5	40.5	40.5	41.5	42.5	43.5	46.5	49.4	55.4	154.3	737.8	60°	1824.7
36.6	37.6	37.6	39.6	40.5	41.5	43.5	46.5	50.4	144.4	745.7	62.5°	1825.7
34.6	35.6	36.6	36.6	37.6	38.6	41.5	44.5	50.4	136.5	697.2	65°	1753.5
32.6	32.6	33.6	34.6	35.6	36.6	38.6	43.5	51.4	129.6	591.4	67.5°	1570.5
29.7	30.7	31.6	32.6	32.6	33.6	36.6	43.5	52.4	126.6	469.8	70°	1326.2
27.7	27.7	28.7	29.7	29.7	31.6	34.6	42.5	53.4	121.6	354.1	72.5°	1034.5
23.7	24.7	24.7	24.7	25.7	27.7	31.6	38.6	46.5	100.9	239.3	75°	701.2
20.8	19.8	20.8	20.8	21.8	22.7	25.7	29.7	34.6	64.3	126.6	77.5°	446.0
14.8	13.8	13.8	14.8	14.8	14.8	16.8	17.8	19.8	39.6	70.2	80°	263.1
7.9	6.9	7.9	6.9	6.9	7.9	7.9	9.9	9.9	18.8	31.6	82.5°	163.2
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	6.9	85°	66.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	87.5°	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90°	0.0

'228488

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**TION (continued):**

359°	360°
691.3	691.3
727.9	733.8
702.2	710.1
646.8	657.7
595.4	606.2
567.7	573.6
554.8	566.7
573.6	585.5
611.2	630.0
677.4	701.2
782.3	803.0
865.4	898.0
942.5	969.2
1003.8	1034.5
1074.0	1103.7
1159.1	1199.6
1247.1	1292.6
1329.2	1379.6
1406.3	1445.9
1465.7	1510.2
1540.8	1593.2
1668.4	1706.0
1822.7	1865.2
1966.1	2002.7
2032.3	2063.0
2034.3	2072.9
<b>1990.8</b>	<b>2034.3</b>
1880.0	1947.3
1662.5	1737.6
1306.4	1392.5
867.3	942.5
500.4	525.1
295.7	308.6
176.0	188.9
47.5	51.4
0.0	0.0
0.0	0.0

(END OF REPORT)