

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: P227701

Luminaire Tested: **ISS-AF-600-LED-E1-T3-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P227701  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29759)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISS-AF-600-LED-E1-T3-8030  
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III  
Light Source: (16) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3187 lumens  
Efficiency: N/A  
Efficacy: 94.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Semi-Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 33.7  
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

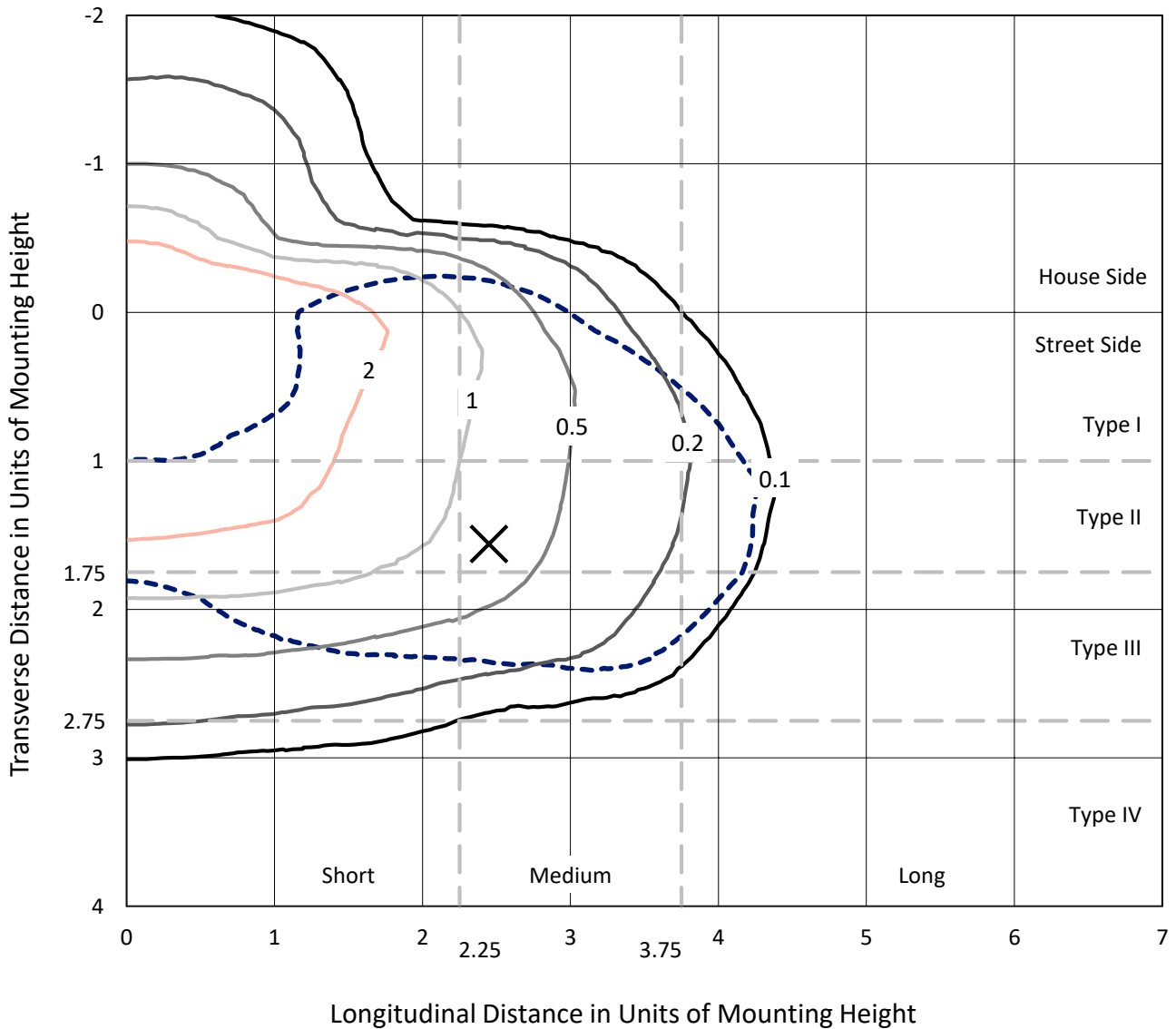


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### Iso-Footcandle Lines of Horizontal Illumination

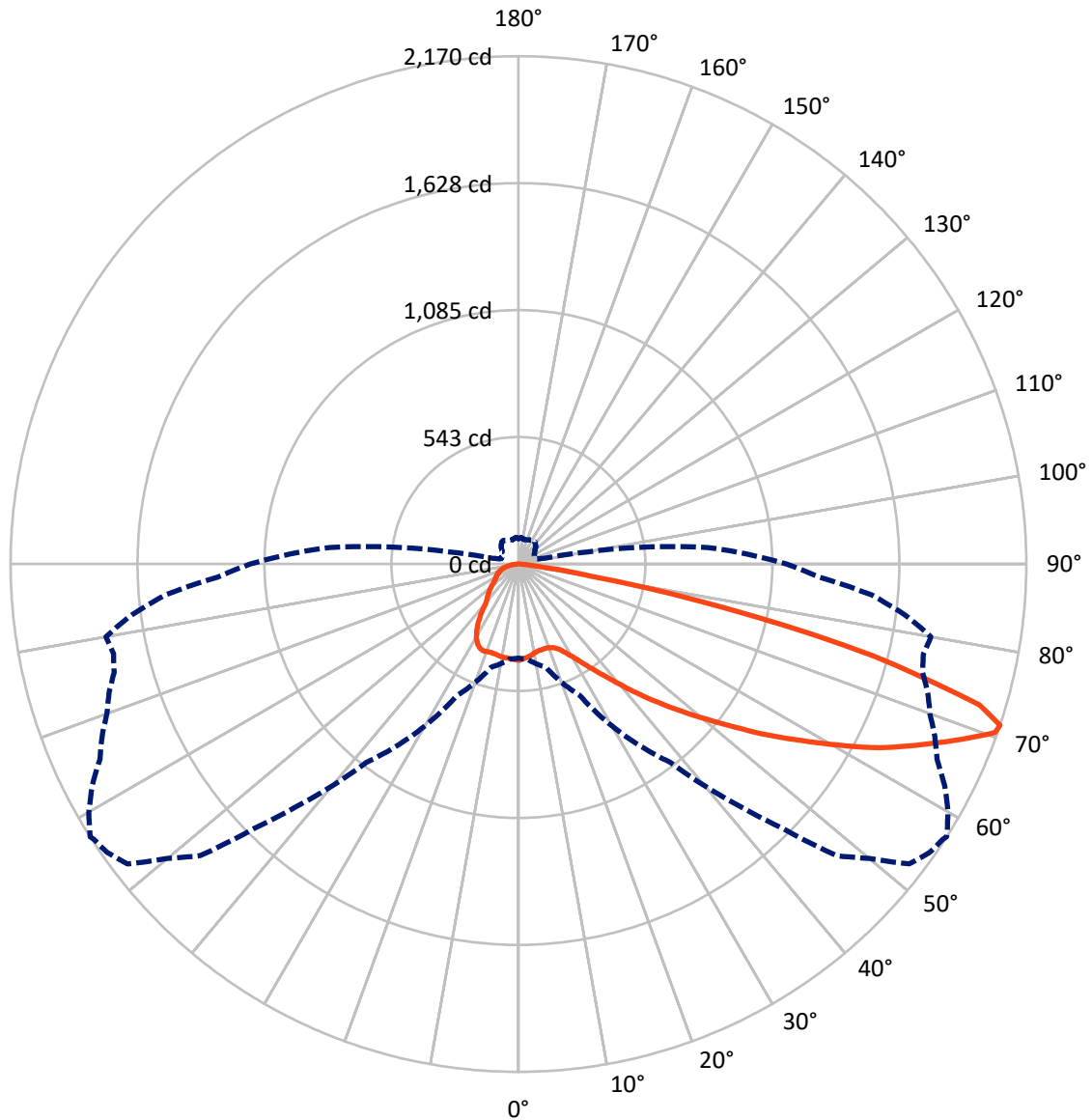
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.2 fc  
 Type III - Medium - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57.5-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	693.8	0.0	693.8
	% Fixture	21.8	0.0	21.8
<b>Street Side</b>	Lumens	2493.2	0.0	2493.2
	% Fixture	78.2	0.0	78.2
<b>Total</b>	Lumens	3187.0	0.0	3187.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.7	1.2
10°-20°	111.6	3.5
20°-30°	185.4	5.8
30°-40°	295.1	9.3
40°-50°	479.4	15.0
50°-60°	718.7	22.6
60°-70°	857.4	26.9
70°-80°	463.1	14.5
80°-90°	37.7	1.2
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°	3187.0	100.0
0°-180°	3187.0	100.0



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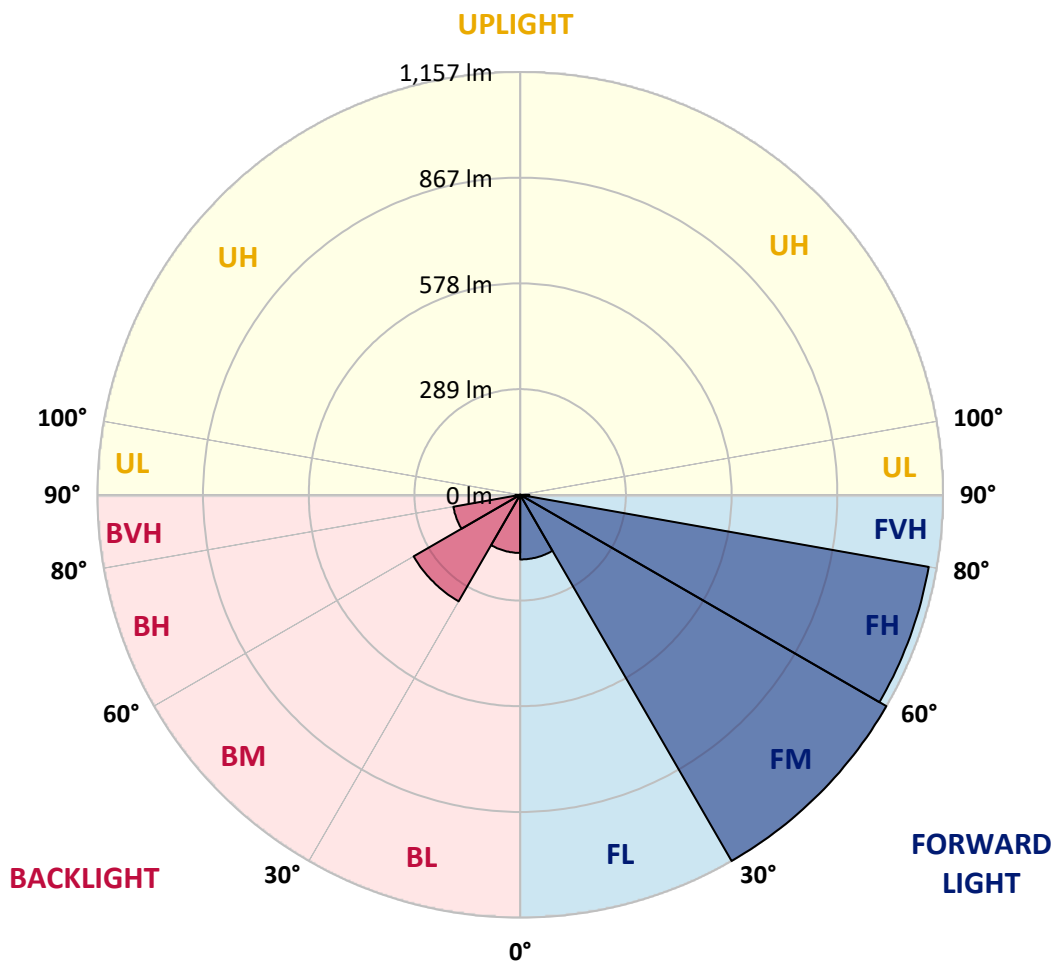
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	176.8	5.5			
FM	(30°-60°)	1156.7	36.3			
FH	(60°-80°)	1134.9	35.6			G1/1800
FVH	(80°-90°)	24.8	0.8			G1/100
BL	(0°-30°)	158.9	5.0	B1/500		
BM	(30°-60°)	336.4	10.6	B1/1000		
BH	(60°-80°)	185.6	5.8	B1/500		G1/500
BVH	(80°-90°)	12.9	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

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

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	411.7	411.7	411.7	411.7	411.7	411.7	411.7	411.7	411.7	411.7	411.7
2.5°	411.7	410.7	409.6	409.6	409.6	408.6	405.4	406.4	409.6	407.5	410.7
5°	410.7	408.6	407.5	407.5	407.5	404.3	403.3	402.2	408.6	403.3	407.5
7.5°	399.1	399.1	397.0	399.1	401.2	398.0	395.9	397.0	402.2	397.0	402.2
10°	390.7	388.5	387.5	387.5	389.6	385.4	383.3	385.4	391.7	385.4	392.8
12.5°	387.5	388.5	385.4	385.4	384.3	379.1	379.1	379.1	384.3	379.1	385.4
15°	392.8	391.7	388.5	386.4	383.3	379.1	378.0	379.1	383.3	377.0	384.3
17.5°	400.1	400.1	394.9	389.6	386.4	382.2	382.2	380.1	383.3	379.1	384.3
20°	419.1	415.9	408.6	400.1	391.7	389.6	385.4	385.4	387.5	383.3	386.4
22.5°	451.7	448.6	435.9	420.1	406.4	401.2	399.1	398.0	395.9	393.8	393.8
25°	494.9	489.6	474.9	455.9	432.8	428.6	424.3	421.2	413.8	413.8	408.6
27.5°	541.2	536.0	520.2	499.1	470.7	464.4	459.1	454.9	442.2	442.2	432.8
30°	593.9	587.6	568.6	545.4	512.8	510.7	503.3	497.0	480.2	479.1	466.5
32.5°	654.9	646.5	627.6	597.0	562.3	563.3	551.8	547.5	525.4	526.5	509.6
35°	724.4	715.0	696.0	656.0	620.2	623.4	612.8	605.5	578.1	578.1	560.2
37.5°	798.2	798.2	773.9	727.6	684.4	691.8	679.2	671.8	644.4	648.6	620.2
40°	880.3	885.5	859.2	806.6	762.4	765.5	756.0	747.6	715.0	722.3	691.8
42.5°	966.6	976.1	952.9	898.2	848.7	859.2	843.4	835.0	800.3	816.1	780.3
45°	1091.9	1094.0	1050.9	998.2	957.2	966.6	944.5	941.4	898.2	915.0	879.2
47.5°	1170.9	1165.6	1134.1	1102.5	1078.2	1097.2	1077.2	1071.9	1022.4	1034.0	983.5
50°	1224.6	1227.8	1203.5	1200.4	1204.6	1240.4	1237.2	1226.7	1167.7	1159.3	1096.1
52.5°	1273.0	1259.4	1255.1	1284.6	1329.9	1372.0	1388.9	1375.2	1311.0	1287.8	1226.7
55°	1264.6	1244.6	1266.7	1338.3	1427.8	1493.1	1495.2	1485.7	1427.8	1418.4	1352.0
57.5°	1207.8	1212.0	1257.2	1359.4	1511.0	1578.4	1590.0	1578.4	1531.0	1539.4	1484.7
60°	1128.8	1137.2	1208.8	1340.4	1577.4	1635.3	1640.5	1654.2	1622.6	1644.7	1606.8
62.5°	1010.9	1022.4	1114.0	1293.1	1531.0	1617.4	1665.8	1697.4	1691.1	1741.6	1721.6
65°	928.7	928.7	1018.2	1238.3	1485.7	1599.5	1672.1	1731.1	1739.5	1819.5	1812.2
67.5°	776.0	781.3	858.2	1085.6	1431.0	1559.5	1669.0	1769.0	1819.5	1945.9	1952.2
70°	537.0	541.2	591.8	775.0	1156.2	1265.7	1426.8	1590.0	1741.6	1932.2	2031.2
71°	402.2	407.5	457.0	618.1	979.3	1069.8	1237.2	1406.8	1597.4	1844.8	1956.4
72.5°	196.9	200.1	248.5	397.0	681.3	797.1	894.0	1056.1	1258.3	1541.6	1699.5
75°	91.6	92.7	103.2	143.2	260.1	309.6	352.7	457.0	582.3	830.8	1022.4
77.5°	67.4	67.4	73.7	93.7	134.8	136.9	134.8	137.9	166.4	238.0	358.0
80°	49.5	49.5	53.7	63.2	89.5	89.5	86.3	87.4	84.2	87.4	99.0
82.5°	32.6	32.6	34.7	37.9	54.8	54.8	52.6	52.6	50.5	49.5	53.7
85°	19.0	20.0	21.1	17.9	23.2	22.1	20.0	22.1	21.1	19.0	23.2
87.5°	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.1	0.0	1.1
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):**

	52.5°	55°	57°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	411.7	411.7	411.7	411.7	411.7	411.7	411.7	411.7	411.7	411.7	411.7
2.5°	406.4	409.6	409.6	405.4	408.6	405.4	407.5	404.3	407.5	402.2	408.6
5°	403.3	406.4	406.4	400.1	406.4	400.1	405.4	398.0	405.4	397.0	405.4
7.5°	394.9	402.2	402.2	393.8	401.2	394.9	401.2	393.8	400.1	390.7	401.2
10°	385.4	392.8	393.8	385.4	393.8	386.4	395.9	386.4	395.9	385.4	397.0
12.5°	379.1	387.5	389.6	380.1	390.7	381.2	392.8	382.2	392.8	381.2	394.9
15°	378.0	385.4	387.5	379.1	388.5	378.0	391.7	379.1	392.8	380.1	395.9
17.5°	379.1	385.4	387.5	378.0	387.5	379.1	390.7	380.1	392.8	381.2	395.9
20°	382.2	386.4	386.4	381.2	388.5	381.2	390.7	380.1	393.8	383.3	397.0
22.5°	391.7	392.8	392.8	388.5	392.8	387.5	394.9	387.5	397.0	388.5	401.2
25°	407.5	406.4	404.3	403.3	404.3	401.2	405.4	400.1	409.6	402.2	414.9
27.5°	434.9	430.7	428.6	428.6	427.5	428.6	428.6	426.5	430.7	428.6	437.0
30°	468.6	461.2	458.0	461.2	457.0	461.2	460.1	459.1	463.3	461.2	468.6
32.5°	512.8	500.2	498.1	504.4	495.9	503.3	497.0	500.2	503.3	505.4	509.6
35°	564.4	549.7	547.5	553.9	544.4	554.9	547.5	551.8	553.9	559.1	562.3
37.5°	625.5	607.6	604.4	612.8	600.2	611.8	601.2	613.9	610.7	618.1	621.3
40°	699.2	678.1	670.7	682.3	667.6	677.1	666.5	680.2	677.1	691.8	695.0
42.5°	789.7	759.2	751.8	763.4	741.3	744.5	736.0	751.8	749.7	769.7	772.9
45°	883.4	846.6	836.1	847.6	822.4	828.7	816.1	832.9	831.8	847.6	860.3
47.5°	987.7	942.4	928.7	941.4	910.8	918.2	905.6	923.5	924.5	942.4	955.0
50°	1096.1	1048.8	1030.9	1042.4	1014.0	1019.3	1006.6	1028.8	1027.7	1051.9	1061.4
52.5°	1214.1	1165.6	1152.0	1157.2	1123.5	1129.8	1119.3	1146.7	1140.4	1155.1	1174.1
55°	1344.6	1288.8	1273.0	1288.8	1248.8	1257.2	1243.6	1268.8	1258.3	1277.3	1282.5
57.5°	1478.4	1423.6	1411.0	1422.6	1384.7	1391.0	1373.1	1394.1	1385.7	1398.3	1406.8
60°	1620.5	1571.0	1558.4	1571.0	1534.2	1535.2	1504.7	1526.8	1514.2	1530.0	1526.8
62.5°	1756.4	1714.2	1711.1	1729.0	1682.6	1677.4	1640.5	1656.3	1638.4	1649.0	1636.3
65°	1872.2	1848.0	1852.2	1866.9	1825.9	1813.2	1771.1	1779.5	1753.2	1753.2	1737.4
67.5°	2023.8	1997.5	1997.5	2010.1	1958.5	1925.9	1868.0	1860.6	1817.4	1809.0	1772.2
70°	2150.2	2157.5	2149.1	2159.6	2098.6	2032.2	1955.4	1918.5	1861.7	1834.3	1791.1
71°	2104.9	2147.0	2161.8	2170.2	2119.6	2053.3	1973.3	1925.9	1871.1	1834.3	1787.9
72.5°	1899.6	2001.7	2059.6	2059.6	2065.9	2023.8	1946.9	1895.4	1833.2	1784.8	1741.6
75°	1331.0	1497.3	1572.1	1563.7	1618.4	1637.4	1643.7	1621.6	1586.8	1517.3	1486.8
77.5°	592.8	781.3	894.0	895.0	954.0	1005.6	1046.7	1089.8	1074.0	1040.3	1038.2
80°	134.8	244.3	312.7	315.9	369.6	417.0	445.4	488.6	493.8	445.4	418.0
82.5°	57.9	68.4	77.9	76.9	94.8	113.7	134.8	146.4	141.1	116.9	110.6
85°	24.2	31.6	33.7	31.6	39.0	43.2	50.5	51.6	60.0	53.7	56.9
87.5°	0.0	1.1	1.1	0.0	2.1	0.0	2.1	1.1	5.3	2.1	6.3
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):**

	77.5°	80°	82.5°	85°	87.5°	90°	95°	100°	102.5°	105°	107.5°
0°	411.7	411.7	411.7	411.7	411.7	411.7	411.7	411.7	411.7	411.7	411.7
2.5°	404.3	409.6	404.3	409.6	406.4	409.6	408.6	409.6	404.3	409.6	403.3
5°	397.0	405.4	398.0	404.3	398.0	405.4	405.4	405.4	398.0	406.4	399.1
7.5°	390.7	400.1	390.7	400.1	393.8	401.2	401.2	404.3	395.9	405.4	394.9
10°	384.3	395.9	384.3	398.0	387.5	399.1	400.1	402.2	390.7	403.3	392.8
12.5°	381.2	395.9	382.2	395.9	383.3	399.1	400.1	402.2	389.6	405.4	391.7
15°	381.2	397.0	382.2	397.0	383.3	399.1	401.2	403.3	389.6	406.4	391.7
17.5°	381.2	397.0	384.3	398.0	385.4	400.1	402.2	404.3	391.7	406.4	393.8
20°	384.3	399.1	386.4	401.2	388.5	403.3	404.3	407.5	393.8	407.5	395.9
22.5°	391.7	404.3	393.8	407.5	398.0	409.6	410.7	413.8	403.3	414.9	405.4
25°	404.3	418.0	409.6	420.1	414.9	424.3	426.5	426.5	422.2	429.6	426.5
27.5°	430.7	441.2	434.9	444.4	441.2	448.6	448.6	449.6	452.8	454.9	458.0
30°	464.4	471.7	469.6	474.9	475.9	480.2	480.2	486.5	499.1	486.5	485.4
32.5°	509.6	513.9	514.9	517.0	521.2	524.4	528.6	536.0	546.5	517.0	507.5
35°	565.4	566.5	569.7	572.8	580.2	582.3	596.0	590.7	590.7	544.4	524.4
37.5°	626.5	626.5	634.9	634.9	652.8	653.9	667.6	640.2	624.4	564.4	534.9
40°	703.4	702.3	711.8	713.9	738.1	739.2	737.1	677.1	643.4	569.7	529.6
42.5°	784.5	787.6	800.3	804.5	822.4	828.7	802.4	702.3	651.8	566.5	511.7
45°	872.9	879.2	895.0	906.6	925.6	918.2	855.0	713.9	642.3	547.5	477.0
47.5°	969.8	976.1	988.7	1010.9	1019.3	1010.9	898.2	718.1	627.6	518.1	426.5
50°	1067.7	1078.2	1096.1	1127.7	1131.9	1110.9	950.8	733.9	616.0	487.5	368.5
52.5°	1178.3	1188.8	1209.9	1262.5	1252.0	1208.8	1013.0	763.4	619.1	468.6	319.1
55°	1295.2	1309.9	1351.0	1402.6	1379.4	1312.0	1081.4	806.6	631.8	448.6	264.3
57.5°	1418.4	1434.1	1487.8	1548.9	1503.6	1413.1	1150.9	840.3	638.1	407.5	204.3
60°	1540.5	1562.6	1632.1	1682.6	1612.1	1499.4	1213.0	862.4	621.3	329.6	157.9
62.5°	1652.1	1687.9	1765.8	1793.2	1680.5	1554.2	1246.7	846.6	552.8	227.4	127.4
65°	1731.1	1777.4	1828.0	1824.8	1667.9	1536.3	1221.4	773.9	411.7	150.6	108.5
67.5°	1764.8	1808.0	1819.5	1765.8	1577.4	1457.3	1130.9	623.4	236.9	112.7	94.8
70°	1777.4	1814.3	1749.0	1619.5	1400.5	1263.6	924.5	397.0	129.5	91.6	82.1
71°	1772.2	1790.1	1665.8	1514.2	1287.8	1144.6	810.8	302.2	110.6	85.3	77.9
72.5°	1700.6	1675.3	1483.6	1315.2	1091.9	946.6	630.7	190.6	90.6	76.9	72.7
75°	1389.9	1276.2	1091.9	932.9	743.4	594.9	342.2	97.9	72.7	66.3	63.2
77.5°	908.7	809.7	658.1	534.9	406.4	308.5	140.0	67.4	57.9	55.8	54.8
80°	324.3	260.1	196.9	172.7	130.6	107.4	68.4	51.6	45.3	46.3	45.3
82.5°	91.6	84.2	72.7	67.4	59.0	57.9	44.2	39.0	35.8	37.9	36.9
85°	45.3	39.0	28.4	27.4	21.1	24.2	22.1	26.3	23.2	24.2	22.1
87.5°	3.2	4.2	1.1	3.2	0.0	3.2	4.2	5.3	1.1	4.2	3.2
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):**

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°
0°	411.7	411.7	411.7	411.7	411.7	411.7	411.7	411.7	411.7	411.7	411.7
2.5°	410.7	406.4	411.7	406.4	411.7	408.6	411.7	408.6	411.7	413.8	413.8
5°	408.6	401.2	410.7	405.4	411.7	406.4	410.7	407.5	412.8	414.9	417.0
7.5°	407.5	400.1	409.6	402.2	411.7	404.3	410.7	406.4	412.8	414.9	419.1
10°	406.4	397.0	409.6	399.1	410.7	403.3	410.7	404.3	411.7	413.8	414.9
12.5°	406.4	395.9	409.6	398.0	410.7	400.1	409.6	400.1	410.7	409.6	406.4
15°	407.5	393.8	409.6	395.9	409.6	397.0	408.6	395.9	406.4	403.3	401.2
17.5°	407.5	393.8	408.6	394.9	407.5	395.9	405.4	393.8	403.3	402.2	399.1
20°	409.6	395.9	408.6	399.1	408.6	397.0	404.3	393.8	401.2	394.9	382.2
22.5°	415.9	406.4	415.9	406.4	410.7	400.1	403.3	390.7	389.6	379.1	359.1
25°	430.7	426.5	424.3	412.8	409.6	395.9	391.7	377.0	371.7	355.9	328.5
27.5°	449.6	440.1	427.5	413.8	400.1	383.3	371.7	360.1	348.5	328.5	293.8
30°	462.3	448.6	422.2	403.3	378.0	364.3	344.3	331.7	314.8	289.6	255.9
32.5°	470.7	449.6	409.6	387.5	353.8	335.9	309.6	295.9	271.7	247.4	223.2
35°	472.8	445.4	392.8	368.5	324.3	304.3	269.6	254.8	231.7	214.8	205.3
37.5°	464.4	430.7	366.4	334.8	286.4	263.2	230.6	220.1	206.4	200.1	195.9
40°	447.5	402.2	325.4	288.5	239.0	221.1	204.3	204.3	196.9	193.7	186.4
42.5°	417.0	360.1	272.7	236.9	203.2	200.1	190.6	194.8	189.5	187.4	176.9
45°	369.6	300.1	220.1	199.0	183.2	185.3	179.0	183.2	180.1	179.0	166.4
47.5°	308.5	239.0	185.3	178.0	167.4	170.6	165.3	170.6	167.4	168.5	159.0
50°	246.4	193.7	164.3	160.1	152.7	154.8	151.6	156.9	155.8	160.1	154.8
52.5°	196.9	165.3	146.4	143.2	139.0	140.0	139.0	144.3	145.3	153.7	153.7
55°	163.2	142.2	131.6	130.6	126.4	127.4	128.5	133.7	137.9	148.5	153.7
57.5°	140.0	127.4	120.0	119.0	116.9	117.9	120.0	126.4	130.6	144.3	155.8
60°	123.2	115.8	110.6	110.6	108.5	110.6	112.7	119.0	124.3	140.0	151.6
62.5°	110.6	105.3	102.1	103.2	102.1	104.2	106.4	112.7	119.0	133.7	145.3
65°	99.0	95.8	93.7	94.8	94.8	97.9	100.0	106.4	111.6	125.3	140.0
67.5°	89.5	87.4	86.3	87.4	88.4	91.6	94.8	99.0	103.2	115.8	132.7
70°	82.1	80.0	80.0	80.0	81.1	84.2	88.4	90.6	94.8	108.5	124.3
71°	77.9	76.9	76.9	76.9	77.9	81.1	85.3	87.4	91.6	105.3	120.0
72.5°	72.7	72.7	73.7	72.7	74.8	75.8	80.0	82.1	87.4	101.1	114.8
75°	64.2	64.2	65.3	65.3	67.4	67.4	70.5	72.7	79.0	90.6	103.2
77.5°	56.9	56.9	59.0	57.9	57.9	55.8	60.0	62.1	67.4	79.0	91.6
80°	48.4	47.4	49.5	46.3	45.3	43.2	46.3	49.5	57.9	65.3	67.4
82.5°	37.9	34.7	35.8	32.6	32.6	30.5	33.7	34.7	40.0	47.4	51.6
85°	23.2	19.0	21.1	17.9	20.0	17.9	19.0	20.0	24.2	29.5	28.4
87.5°	5.3	3.2	4.2	1.1	3.2	0.0	3.2	1.1	3.2	1.1	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):**

	155°	165°	175°	180°
0°	411.7	411.7	411.7	411.7
2.5°	415.9	414.9	415.9	414.9
5°	421.2	421.2	422.2	423.3
7.5°	422.2	424.3	426.5	425.4
10°	414.9	412.8	414.9	412.8
12.5°	403.3	401.2	403.3	403.3
15°	402.2	401.2	402.2	402.2
17.5°	394.9	389.6	387.5	386.4
20°	373.8	364.3	362.2	359.1
22.5°	344.3	330.6	326.4	323.3
25°	308.5	289.6	282.2	278.0
27.5°	269.6	250.6	243.2	243.2
30°	239.0	224.3	216.9	216.9
32.5°	216.9	208.5	203.2	204.3
35°	199.0	193.7	190.6	191.6
37.5°	187.4	179.0	171.6	171.6
40°	175.8	165.3	155.8	155.8
42.5°	165.3	154.8	148.5	147.4
45°	154.8	147.4	142.2	141.1
47.5°	149.5	143.2	137.9	136.9
50°	147.4	141.1	133.7	133.7
52.5°	149.5	144.3	130.6	130.6
55°	153.7	150.6	130.6	128.5
57.5°	149.5	144.3	131.6	128.5
60°	140.0	131.6	129.5	127.4
62.5°	133.7	125.3	129.5	128.5
65°	128.5	122.1	131.6	129.5
67.5°	123.2	116.9	131.6	127.4
70°	116.9	110.6	120.0	112.7
71°	113.7	106.4	113.7	107.4
72.5°	108.5	100.0	102.1	97.9
75°	97.9	89.5	87.4	86.3
77.5°	81.1	71.6	68.4	67.4
80°	62.1	55.8	55.8	52.6
82.5°	46.3	41.1	40.0	34.7
85°	24.2	19.0	15.8	15.8
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)