

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: P227581

Luminaire Tested: **ISS-AF-800-LED-E1-T2-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P227581  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29758)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISS-AF-800-LED-E1-T2-7030  
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II  
Light Source: (16) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

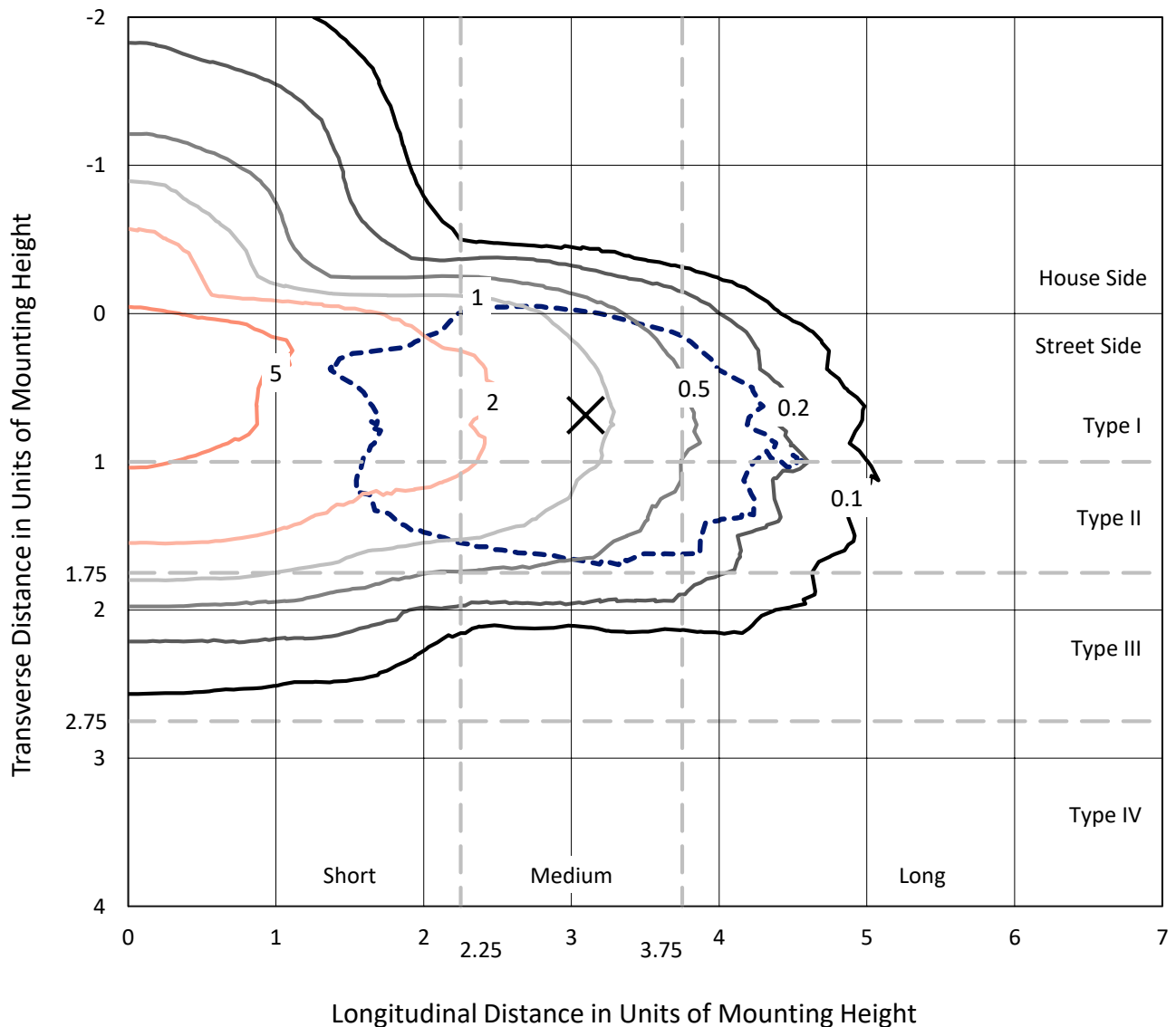
Lumens per Lamp: N/A  
Luminaire Lumens: 4241 lumens  
Efficiency: N/A  
Efficacy: 97.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 43.5  
Input Voltage (V): 120  
Input Current (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

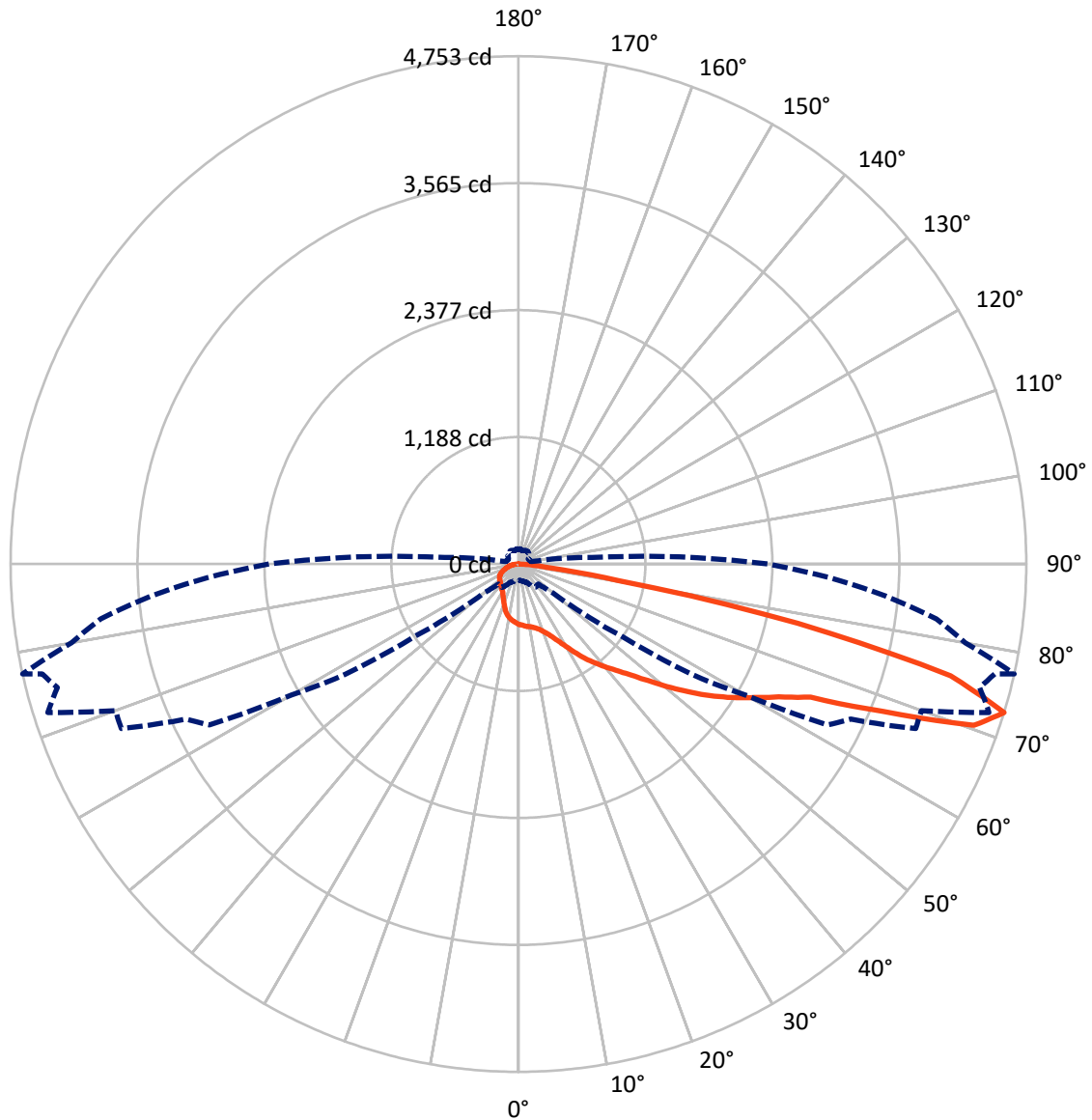
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.9 fc  
 Type II - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	702.7	0.0	702.7
	% Fixture	16.6	0.0	16.6
<b>Street Side</b>	Lumens	3538.3	0.0	3538.3
	% Fixture	83.4	0.0	83.4
<b>Total</b>	Lumens	4241.0	0.0	4241.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.6	1.2
10°-20°	161.3	3.8
20°-30°	286.3	6.8
30°-40°	453.6	10.7
40°-50°	680.5	16.0
50°-60°	881.8	20.8
60°-70°	1001.9	23.6
70°-80°	664.9	15.7
80°-90°	58.2	1.4
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°	4241.0	100.0
0°-180°	4241.0	100.0



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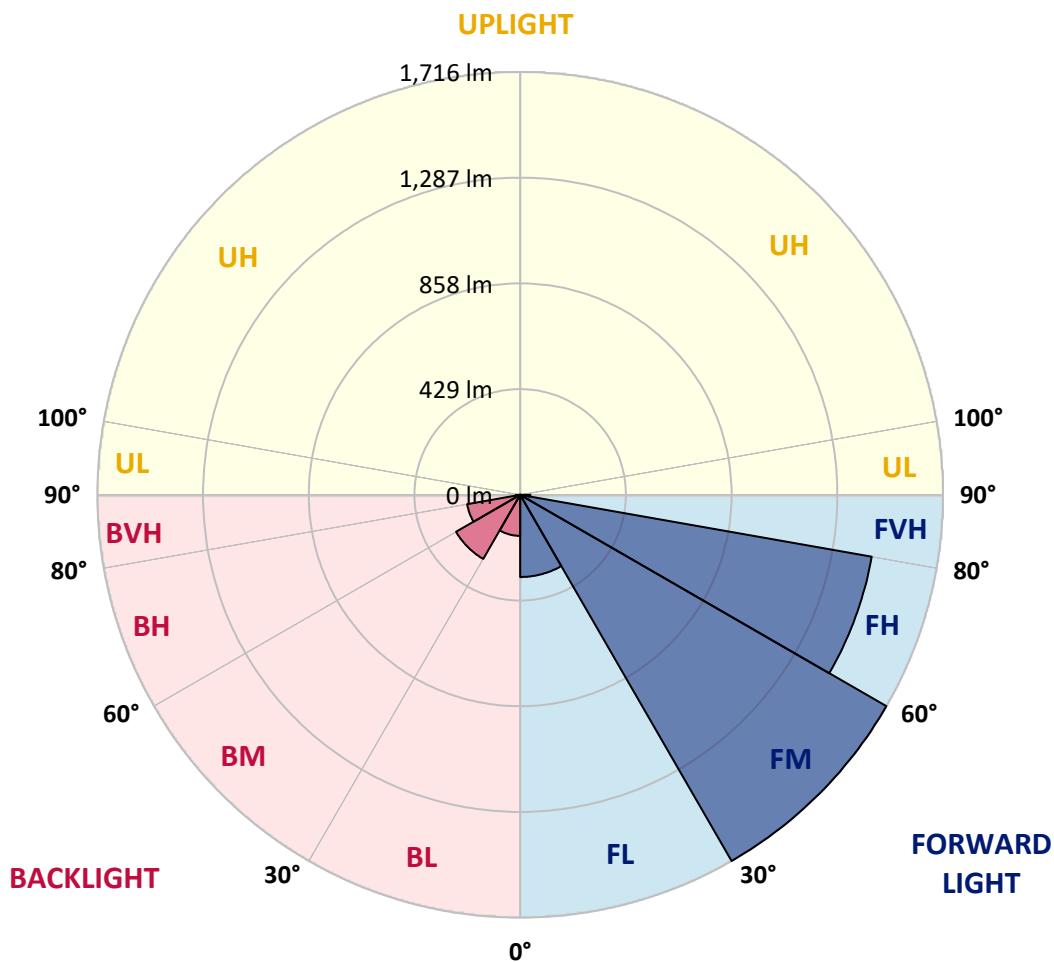
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	333.6	7.9			
FM	(30°-60°)	1715.7	40.5			
FH	(60°-80°)	1448.3	34.1			G1/1800
FVH	(80°-90°)	40.6	1.0			G1/100
BL	(0°-30°)	166.5	3.9	B1/500		
BM	(30°-60°)	300.2	7.1	B1/1000		
BH	(60°-80°)	218.5	5.2	B1/500		G1/500
BVH	(80°-90°)	17.5	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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2
2.5°	613.4	610.6	609.1	606.3	603.4	602.0	597.7	594.8	599.1	597.7	597.7
5°	659.2	656.3	652.0	647.8	642.0	637.7	633.5	629.2	632.0	629.2	626.3
7.5°	696.4	693.5	687.8	683.5	677.8	672.1	666.3	664.9	662.1	657.8	656.3
10°	717.8	715.0	712.1	709.2	700.7	696.4	689.2	684.9	686.4	680.6	680.6
12.5°	737.8	735.0	733.5	733.5	726.4	722.1	719.2	715.0	717.8	709.2	706.4
15°	756.4	753.6	749.3	753.6	752.1	750.7	749.3	747.8	752.1	743.6	745.0
17.5°	786.5	785.0	776.4	770.7	772.2	776.4	779.3	777.9	777.9	773.6	775.0
20°	833.6	833.6	822.2	812.2	796.5	796.5	797.9	796.5	799.3	802.2	806.5
22.5°	869.4	866.5	862.2	853.7	836.5	822.2	822.2	816.5	820.8	822.2	830.8
25°	915.1	912.3	902.3	902.3	885.1	866.5	863.7	855.1	865.1	846.5	860.8
27.5°	970.9	968.1	955.2	949.5	940.9	918.0	912.3	913.7	923.7	896.6	910.9
30°	1041.0	1038.1	1022.4	1006.7	992.4	968.1	965.2	963.8	986.6	955.2	973.8
32.5°	1129.6	1129.6	1112.5	1091.0	1062.4	1029.5	1018.1	1019.5	1051.0	1016.7	1048.1
35°	1264.0	1246.9	1215.4	1182.5	1152.5	1113.9	1098.2	1095.3	1123.9	1089.6	1125.3
37.5°	1349.8	1338.4	1309.8	1285.5	1252.6	1215.4	1204.0	1208.3	1232.6	1182.5	1234.0
40°	1427.1	1425.6	1407.0	1391.3	1358.4	1321.2	1335.5	1392.7	1457.1	1359.9	1361.3
42.5°	1478.5	1481.4	1480.0	1481.4	1462.8	1424.2	1448.5	1528.6	1638.7	1581.5	1528.6
45°	1487.1	1497.1	1501.4	1530.0	1548.6	1525.7	1538.6	1623.0	1843.2	1931.8	1693.0
47.5°	1508.6	1518.6	1510.0	1544.3	1630.1	1628.7	1680.2	1711.6	1741.6	1755.9	1936.1
50°	1537.2	1555.8	1547.2	1575.8	1645.8	1685.9	1730.2	1770.2	1745.9	1655.8	1704.5
52.5°	1538.6	1560.0	1607.2	1635.8	1704.5	1695.9	1725.9	1704.5	1741.6	1648.7	1695.9
55°	1412.8	1417.1	1554.3	1698.7	1818.9	1794.5	1776.0	1727.3	1774.5	1658.7	1718.8
57.5°	1214.0	1228.3	1371.3	1614.4	1871.8	1893.2	1887.5	1883.2	1920.4	1766.0	1831.7
60°	995.2	1012.4	1148.2	1434.2	1761.7	1817.4	1894.6	1941.8	2037.6	1976.1	2084.8
62.5°	620.6	633.5	783.6	1141.1	1554.3	1664.4	1777.4	1833.2	1971.9	2000.5	2184.9
65°	296.0	300.3	358.9	620.6	1129.6	1337.0	1504.3	1623.0	1793.1	1921.8	2170.6
67.5°	230.2	231.6	253.1	330.3	579.1	717.8	908.0	1065.3	1246.9	1598.6	1907.5
70°	184.5	184.5	201.6	243.1	358.9	377.5	426.1	479.0	556.2	839.4	1089.6
72.5°	154.4	154.4	165.9	191.6	266.0	270.3	267.4	263.1	263.1	331.7	423.3
75°	130.1	128.7	135.8	153.0	197.3	203.0	200.2	190.2	178.7	178.7	201.6
77.5°	105.8	105.8	111.5	120.1	143.0	145.9	145.9	137.3	127.3	128.7	138.7
80°	82.9	82.9	87.2	92.9	100.1	98.7	98.7	90.1	82.9	81.5	87.2
82.5°	60.1	61.5	71.5	67.2	64.3	60.1	60.1	58.6	52.9	48.6	51.5
85°	18.6	20.0	34.3	40.0	32.9	27.2	25.7	21.4	22.9	18.6	21.4
87.5°	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	1.4	0.0	1.4
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°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77°
0°	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2
2.5°	590.6	593.4	587.7	587.7	580.5	584.8	577.7	579.1	572.0	574.8	574.8
5°	619.2	620.6	613.4	610.6	603.4	603.4	596.3	596.3	586.3	589.1	586.3
7.5°	646.3	646.3	639.2	633.5	626.3	623.4	614.9	610.6	602.0	600.6	596.3
10°	669.2	669.2	659.2	653.5	644.9	640.6	629.2	624.9	614.9	607.7	603.4
12.5°	697.8	694.9	683.5	677.8	663.5	662.1	644.9	642.0	627.7	623.4	616.3
15°	732.1	735.0	716.4	715.0	694.9	693.5	670.6	669.2	647.8	646.3	636.3
17.5°	769.3	775.0	759.3	757.9	733.5	733.5	706.4	705.0	676.4	674.9	662.1
20°	802.2	809.3	799.3	802.2	780.7	782.2	752.1	752.1	712.1	709.2	697.8
22.5°	832.2	846.5	837.9	853.7	832.2	842.2	802.2	809.3	762.1	756.4	739.3
25°	862.2	880.8	878.0	903.7	888.0	905.1	863.7	878.0	816.5	820.8	797.9
27.5°	892.3	916.6	913.7	950.9	945.2	979.5	943.7	959.5	892.3	896.6	870.8
30°	942.3	969.5	959.5	998.1	998.1	1053.9	1026.7	1051.0	976.6	985.2	955.2
32.5°	1009.5	1041.0	1011.0	1061.0	1058.1	1131.1	1109.6	1151.1	1078.2	1089.6	1052.4
35°	1082.4	1132.5	1083.9	1139.6	1131.1	1206.9	1192.6	1259.8	1182.5	1195.4	1158.2
37.5°	1178.3	1238.3	1174.0	1222.6	1184.0	1271.2	1262.6	1354.1	1275.5	1308.4	1264.0
40°	1291.2	1338.4	1258.3	1299.8	1235.5	1325.5	1311.2	1437.1	1364.1	1417.1	1377.0
42.5°	1395.6	1428.5	1322.7	1374.2	1296.9	1388.5	1362.7	1514.3	1451.4	1532.9	1488.5
45°	1490.0	1527.2	1387.0	1444.2	1358.4	1458.5	1414.2	1588.6	1545.7	1668.7	1624.4
47.5°	1624.4	1570.1	1445.6	1520.0	1424.2	1534.3	1475.7	1675.9	1660.1	1834.6	1783.1
50°	1580.1	1615.8	1494.3	1571.5	1484.3	1618.7	1554.3	1780.2	1784.5	2014.8	1984.7
52.5°	1584.4	1644.4	1531.4	1638.7	1554.3	1735.9	1668.7	1906.1	1926.1	2189.2	2147.7
55°	1610.1	1698.7	1587.2	1731.6	1653.0	1866.0	1818.9	2041.9	2076.2	2353.6	2329.3
57.5°	1674.4	1797.4	1683.0	1871.8	1790.3	2014.8	1971.9	2182.1	2229.2	2518.1	2510.9
60°	1921.8	2067.7	1867.5	2076.2	1967.6	2183.5	2126.3	2329.3	2376.5	2675.4	2694.0
62.5°	2197.8	2450.9	2332.2	2549.5	2262.1	2480.9	2312.2	2510.9	2513.8	2844.1	2902.7
65°	2269.3	2658.2	2759.7	3164.4	3014.3	3238.8	2788.3	2921.3	2749.7	3151.5	3235.9
67.5°	2242.1	2718.3	3000.0	3456.1	3626.3	4018.1	3942.3	3896.5	3499.0	3787.9	3889.4
70°	1645.8	2150.6	2839.8	3303.1	3793.6	4051.0	4458.5	4500.0	4482.8	4442.8	4510.0
72.5°	749.3	1175.4	1921.8	2450.9	3260.2	3433.2	4023.8	4012.4	4618.6	4468.5	4574.3
75°	294.6	453.3	915.1	1368.4	2255.0	2468.0	3137.2	2971.4	3727.8	3507.6	3733.5
77.5°	161.6	203.0	343.2	587.7	1231.2	1344.1	1920.4	1643.0	2312.2	1930.4	2006.2
80°	97.2	121.5	157.3	223.1	523.4	553.4	819.3	660.6	945.2	717.8	696.4
82.5°	52.9	65.8	78.6	110.1	194.5	215.9	283.1	254.5	303.1	258.8	253.1
85°	21.4	28.6	30.0	44.3	64.3	74.4	90.1	97.2	118.7	108.7	105.8
87.5°	0.0	1.4	0.0	2.9	0.0	2.9	0.0	4.3	4.3	7.1	8.6
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°	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2
2.5°	570.5	574.8	569.1	569.1	562.0	566.2	562.0	557.7	550.5	551.9	541.9
5°	580.5	583.4	576.3	573.4	569.1	567.7	559.1	550.5	540.5	540.5	529.1
7.5°	590.6	590.6	580.5	580.5	570.5	567.7	554.8	540.5	526.2	524.8	507.6
10°	596.3	594.8	582.0	582.0	567.7	566.2	550.5	529.1	509.1	503.3	479.0
12.5°	607.7	606.3	590.6	587.7	569.1	569.1	546.2	517.6	489.0	479.0	444.7
15°	622.0	623.4	604.9	600.6	579.1	577.7	546.2	503.3	464.7	449.0	407.5
17.5°	644.9	646.3	620.6	616.3	590.6	586.3	547.7	486.2	431.8	414.7	377.5
20°	674.9	670.6	636.3	634.9	600.6	596.3	546.2	460.4	398.9	381.8	348.9
22.5°	712.1	707.8	663.5	659.2	619.2	612.0	544.8	433.3	368.9	350.3	328.9
25°	763.6	757.9	703.5	697.8	647.8	636.3	543.4	404.7	343.2	328.9	316.0
27.5°	827.9	816.5	750.7	745.0	677.8	663.5	537.6	371.8	317.4	307.4	301.7
30°	905.1	895.1	810.8	802.2	717.8	699.2	531.9	341.8	298.9	294.6	290.3
32.5°	996.7	986.6	883.7	873.7	769.3	742.1	521.9	317.4	287.4	287.4	281.7
35°	1092.5	1083.9	962.3	955.2	826.5	790.7	509.1	296.0	277.4	277.4	271.7
37.5°	1178.3	1185.4	1048.1	1042.4	883.7	839.4	494.8	281.7	268.8	266.0	260.2
40°	1271.2	1288.4	1128.2	1132.5	943.7	890.8	477.6	270.3	258.8	256.0	254.5
42.5°	1365.6	1398.5	1212.6	1228.3	1003.8	943.7	464.7	263.1	254.5	248.8	247.4
45°	1482.8	1530.0	1317.0	1347.0	1073.9	1008.1	460.4	254.5	241.7	234.5	230.2
47.5°	1628.7	1691.6	1445.6	1480.0	1166.8	1085.3	469.0	251.7	233.1	224.5	215.9
50°	1801.7	1861.8	1598.6	1612.9	1271.2	1169.7	487.6	256.0	230.2	217.3	204.5
52.5°	1984.7	2030.5	1760.2	1744.5	1379.9	1252.6	509.1	257.4	223.1	210.2	194.5
55°	2173.5	2199.2	1910.4	1868.9	1478.5	1335.5	537.6	256.0	217.3	203.0	183.0
57.5°	2357.9	2366.5	2043.4	2003.3	1575.8	1434.2	573.4	251.7	208.8	194.5	173.0
60°	2538.1	2552.4	2190.6	2153.5	1681.6	1561.5	624.9	244.5	197.3	187.3	164.4
62.5°	2735.4	2782.6	2366.5	2372.2	1827.4	1760.2	722.1	235.9	185.9	174.5	151.6
65°	3004.3	3184.4	2656.8	2791.2	2107.7	2134.9	908.0	211.6	170.2	155.9	140.1
67.5°	3677.8	3875.1	3361.7	3416.1	2764.0	2602.5	1025.3	180.2	150.1	140.1	130.1
70°	4521.4	4379.8	4015.2	3686.3	3147.3	2675.4	902.3	151.6	133.0	127.3	121.5
72.5°	4753.1	4245.4	3945.1	3451.8	2909.9	2333.6	690.7	130.1	118.7	115.8	111.5
75°	4176.8	3441.8	3459.0	2742.6	2412.3	1778.8	471.9	111.5	103.0	101.5	100.1
77.5°	2671.1	1768.8	2153.5	1355.6	1392.7	823.6	230.2	92.9	88.7	88.7	85.8
80°	949.5	589.1	666.3	427.5	388.9	261.7	124.4	74.4	71.5	72.9	71.5
82.5°	284.6	225.9	221.6	173.0	134.4	110.1	68.6	57.2	54.3	55.8	52.9
85°	114.4	88.7	74.4	57.2	47.2	42.9	37.2	38.6	34.3	37.2	32.9
87.5°	7.1	5.7	4.3	5.7	0.0	2.9	7.1	5.7	1.4	5.7	4.3
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):**

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°
0°	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2	566.2
2.5°	549.1	539.1	543.4	539.1	541.9	533.4	536.2	529.1	529.1	527.6	520.5
5°	530.5	520.5	519.1	509.1	510.5	499.0	497.6	484.7	484.7	473.3	451.9
7.5°	504.8	489.0	487.6	467.6	466.2	450.4	444.7	430.4	429.0	416.1	403.2
10°	471.9	447.6	443.3	417.5	419.0	401.8	400.4	390.4	390.4	384.6	384.6
12.5°	434.7	407.5	404.7	384.6	386.1	374.6	376.1	370.3	373.2	376.1	386.1
15°	400.4	378.9	376.1	363.2	364.6	361.8	366.1	366.1	370.3	377.5	394.7
17.5°	371.8	353.2	354.6	348.9	354.6	353.2	361.8	360.3	368.9	377.5	398.9
20°	346.0	336.0	340.3	338.9	346.0	346.0	353.2	354.6	361.8	373.2	397.5
22.5°	328.9	326.0	330.3	330.3	336.0	337.5	344.6	348.9	353.2	364.6	386.1
25°	318.9	317.4	321.7	323.2	327.5	328.9	336.0	336.0	343.2	350.3	361.8
27.5°	304.6	301.7	307.4	307.4	313.2	311.7	320.3	317.4	324.6	327.5	330.3
30°	294.6	290.3	294.6	293.1	297.4	293.1	297.4	293.1	297.4	297.4	293.1
32.5°	284.6	280.3	281.7	276.0	280.3	274.5	276.0	270.3	273.1	270.3	271.7
35°	274.5	268.8	268.8	261.7	261.7	254.5	257.4	251.7	257.4	261.7	260.2
37.5°	260.2	256.0	256.0	250.2	253.1	250.2	256.0	253.1	254.5	248.8	238.8
40°	251.7	254.5	253.1	257.4	254.5	250.2	245.9	237.4	235.9	233.1	227.4
42.5°	238.8	241.7	234.5	240.2	235.9	237.4	234.5	230.2	227.4	224.5	218.8
45°	220.2	220.2	214.5	223.1	218.8	227.4	224.5	224.5	221.6	217.3	213.1
47.5°	204.5	205.9	200.2	207.3	204.5	215.9	214.5	218.8	218.8	215.9	204.5
50°	194.5	191.6	187.3	194.5	193.0	203.0	204.5	213.1	211.6	213.1	203.0
52.5°	185.9	180.2	175.9	180.2	180.2	188.7	191.6	201.6	203.0	205.9	200.2
55°	175.9	168.7	165.9	168.7	168.7	177.3	181.6	188.7	193.0	201.6	198.8
57.5°	167.3	157.3	154.4	157.3	158.7	167.3	171.6	178.7	184.5	195.9	194.5
60°	157.3	148.7	145.9	150.1	151.6	160.2	164.4	171.6	175.9	188.7	188.7
62.5°	145.9	138.7	138.7	140.1	143.0	151.6	154.4	164.4	165.9	181.6	183.0
65°	135.8	131.6	131.6	133.0	135.8	143.0	144.4	154.4	155.9	171.6	175.9
67.5°	127.3	124.4	124.4	125.8	127.3	133.0	134.4	144.4	147.3	161.6	168.7
70°	118.7	115.8	114.4	114.4	118.7	123.0	125.8	135.8	137.3	150.1	158.7
72.5°	108.7	105.8	105.8	104.4	108.7	111.5	117.3	123.0	125.8	138.7	144.4
75°	98.7	95.8	95.8	94.4	97.2	103.0	104.4	110.1	111.5	123.0	128.7
77.5°	85.8	82.9	82.9	82.9	85.8	87.2	88.7	94.4	97.2	107.2	113.0
80°	71.5	68.6	70.1	68.6	72.9	67.2	71.5	77.2	80.1	85.8	82.9
82.5°	54.3	50.0	51.5	51.5	52.9	48.6	51.5	54.3	57.2	61.5	60.1
85°	34.3	30.0	32.9	30.0	32.9	28.6	31.5	31.5	34.3	31.5	30.0
87.5°	7.1	2.9	7.1	2.9	8.6	0.0	4.3	0.0	2.9	1.4	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°	566.2	566.2	566.2	566.2
2.5°	513.3	507.6	504.8	503.3
5°	440.4	430.4	427.5	424.7
7.5°	396.1	393.2	393.2	391.8
10°	387.5	391.8	393.2	393.2
12.5°	397.5	404.7	410.4	410.4
15°	410.4	423.3	430.4	430.4
17.5°	420.4	437.6	444.7	446.1
20°	421.8	439.0	449.0	450.4
22.5°	409.0	420.4	427.5	427.5
25°	376.1	381.8	386.1	386.1
27.5°	334.6	333.2	331.7	337.5
30°	291.7	288.8	283.1	288.8
32.5°	276.0	266.0	251.7	256.0
35°	251.7	248.8	241.7	243.1
37.5°	243.1	267.4	266.0	267.4
40°	233.1	263.1	261.7	264.5
42.5°	224.5	241.7	224.5	225.9
45°	208.8	215.9	201.6	201.6
47.5°	201.6	198.8	193.0	191.6
50°	195.9	195.9	193.0	190.2
52.5°	191.6	188.7	198.8	197.3
55°	185.9	183.0	190.2	190.2
57.5°	181.6	174.5	185.9	185.9
60°	177.3	170.2	181.6	181.6
62.5°	174.5	165.9	180.2	178.7
65°	170.2	161.6	180.2	177.3
67.5°	164.4	153.0	177.3	173.0
70°	153.0	143.0	167.3	155.9
72.5°	141.6	130.1	143.0	133.0
75°	124.4	114.4	115.8	114.4
77.5°	104.4	92.9	90.1	91.5
80°	78.6	71.5	68.6	68.6
82.5°	57.2	48.6	50.0	41.5
85°	25.7	18.6	14.3	14.3
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)