

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: P14206

Luminaire Tested: **GAR-080-LED-E1-3-GLOW-X-3000**

Issue Date: 6/29/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P14206  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 6/29/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GAR-080-LED-E1-3-GLOW-X-3000  
Description: MCGRAW-EDISON POST TOP WITH A TYPE III PRISMATIC REFRACTOR WITH ARCHITECTURAL CAGE  
Light Source: [6] 3000K LEDS  
Ballast/Driver: [2] ELECTRONIC DRIVERS

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11765.2 lumens  
Efficiency: N/A  
Efficacy: 116.1 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 1.08' x H: 2.21')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B3 - U5 - G4

Input Watts (W): 101.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: 28.75 FT

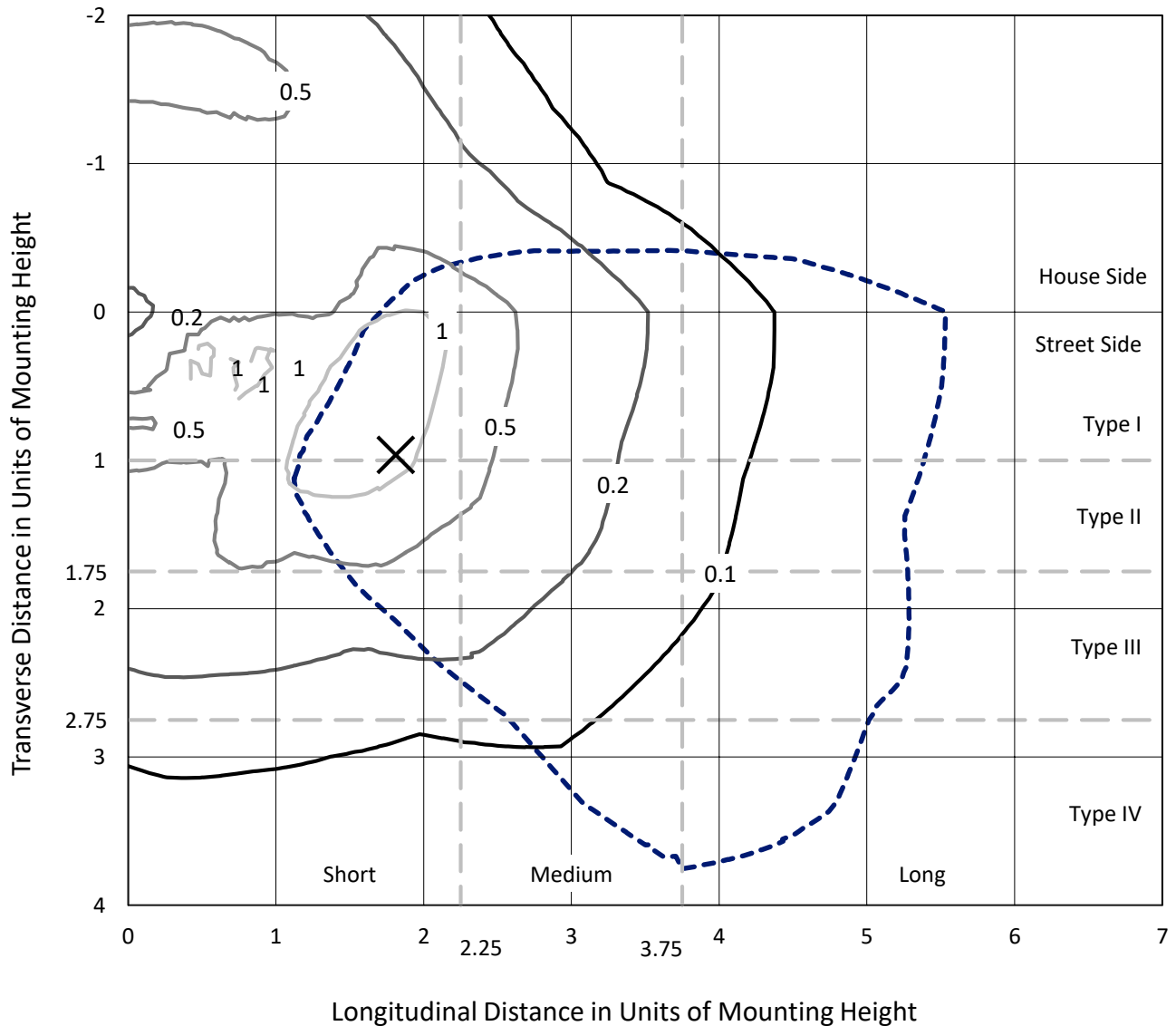


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

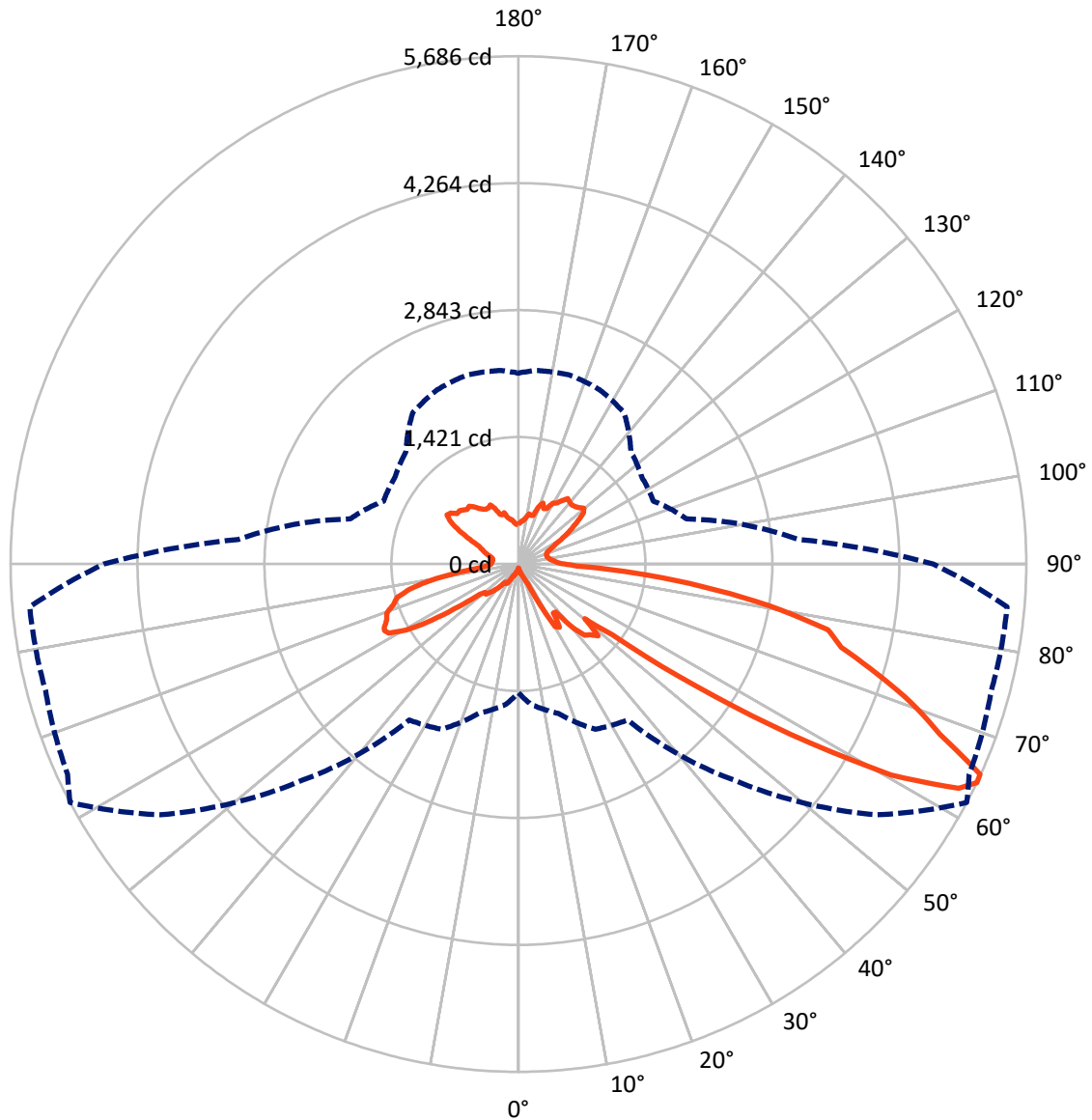


Based on 20 foot mounting height. Maximum calculated value = 1.5 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral      - - - Horizontal Cone Through 64-Deg Vertical

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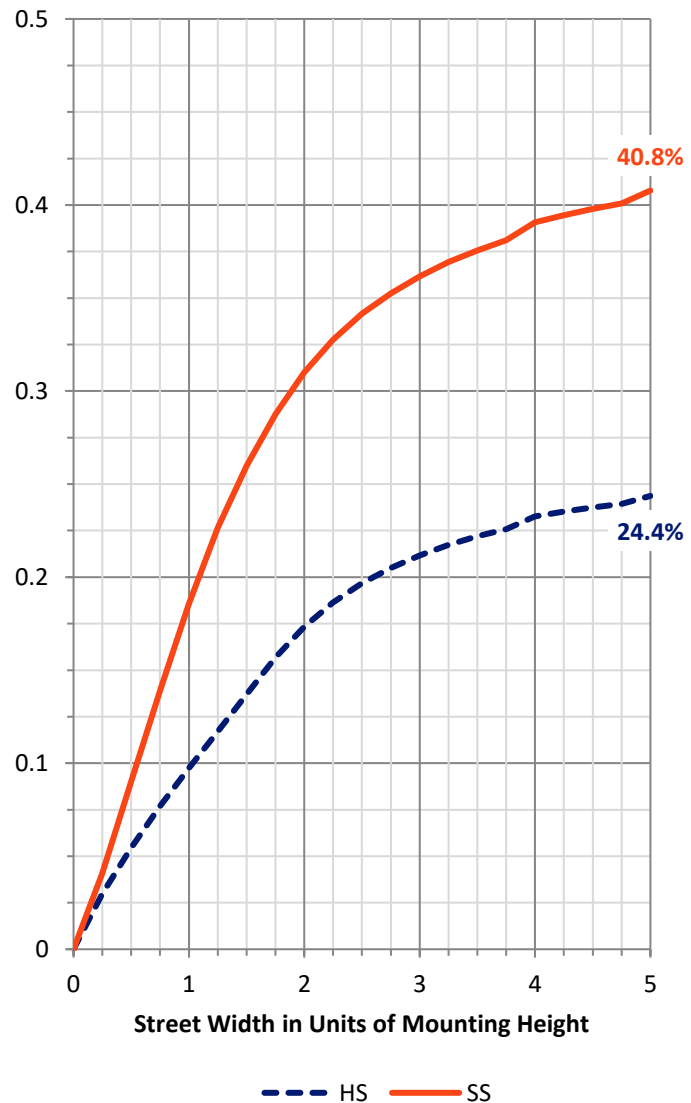
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2970.8	1892.5	4863.3
	% Fixture	25.3	16.1	41.3
<b>Street Side</b>	Lumens	5013.4	1888.4	6901.9
	% Fixture	42.6	16.1	58.7
<b>Total</b>	Lumens	7984.2	3780.9	11765.2
	% Fixture	67.9	32.1	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	7.0	0.1
10°-20°	32.6	0.3
20°-30°	106.6	0.9
30°-40°	256.6	2.2
40°-50°	508.1	4.3
50°-60°	1221.6	10.4
60°-70°	2672.7	22.7
70°-80°	2281.3	19.4
80°-90°	897.7	7.6
90°-100°	361.2	3.1
100°-110°	356.3	3.0
110°-120°	516.0	4.4
120°-130°	770.8	6.6
130°-140°	718.2	6.1
140°-150°	524.1	4.5
150°-160°	324.2	2.8
160°-170°	163.7	1.4
170°-180°	46.6	0.4
0°-90°	7984.2	67.9
0°-180°	11765.2	100.0



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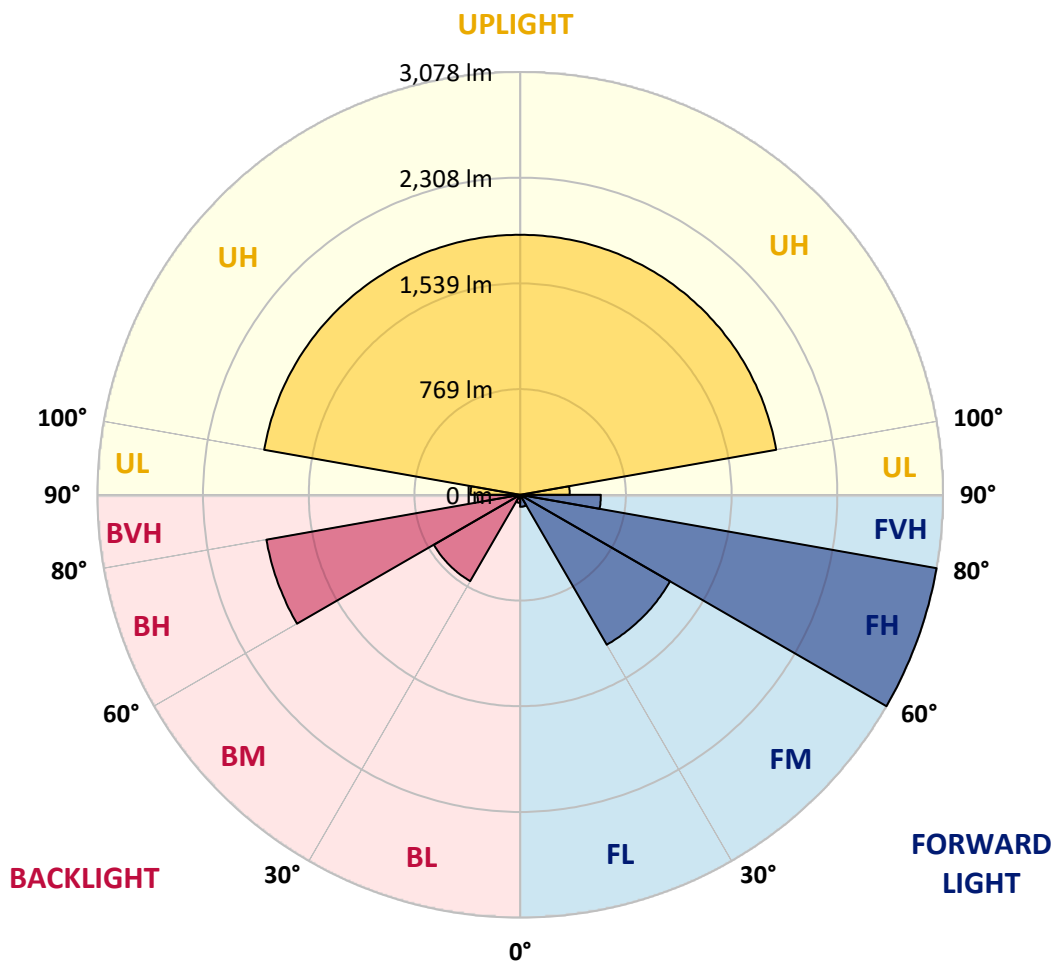
CATALOG NUMBER: GAR-080-LED-E1-3-GLOW-X-3000

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	87.8	0.7			
FM	(30°-60°)	1260.3	10.7			
FH	(60°-80°)	3077.9	26.2			G2/5000
FVH	(80°-90°)	587.4	5.0			G4/750
BL	(0°-30°)	58.4	0.5	B0/110		
BM	(30°-60°)	726.0	6.2	B1/1000		
BH	(60°-80°)	1876.1	15.9	B3/2500		G3/2500
BVH	(80°-90°)	310.3	2.6			G3/500
UL	(90°-100°)	361.2	3.1		U3/500	
UH	(100°-180°)	1892.5	16.1		U5	

**BUG Rating: B3-U5-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4
2.5°	56.0	54.4	59.0	56.0	54.4	53.0	54.4	54.4	53.0	54.4	56.0
5°	66.6	66.6	66.6	66.6	63.5	63.5	63.5	63.5	65.1	66.6	71.1
7.5°	75.7	74.1	75.7	77.2	75.7	77.2	75.7	77.2	74.1	72.7	75.7
10°	92.4	92.4	92.4	93.8	95.3	95.3	93.8	90.8	90.8	90.8	89.2
12.5°	101.4	99.8	104.4	108.9	107.5	104.4	103.0	99.8	101.4	99.8	98.4
15°	113.6	113.6	116.5	118.1	124.0	122.6	116.5	116.5	115.0	112.0	110.4
17.5°	122.6	124.0	127.1	134.6	143.8	145.2	137.7	133.2	130.1	125.6	119.5
20°	136.2	137.7	137.7	148.4	169.4	181.6	175.5	161.9	155.8	145.2	134.6
22.5°	159.0	157.4	157.4	172.5	198.3	227.0	208.9	186.1	183.1	164.9	157.4
25°	181.6	183.1	189.2	215.0	267.9	281.4	257.2	254.3	243.7	198.3	163.5
27.5°	289.1	289.1	281.4	336.0	440.4	503.9	540.2	517.6	473.6	310.3	215.0
30°	398.0	398.0	369.3	408.6	573.6	649.3	776.3	812.6	736.9	432.7	292.0
32.5°	399.5	407.0	391.9	454.0	591.7	659.9	759.7	846.0	792.9	494.8	361.6
35°	373.8	363.2	349.6	395.0	481.3	523.5	593.3	673.5	673.5	472.2	364.7
37.5°	360.2	366.3	381.4	482.8	617.4	578.1	591.7	682.5	740.1	544.8	391.9
40°	526.7	517.6	469.1	531.2	690.1	773.3	861.1	932.3	971.6	749.1	449.4
42.5°	635.5	634.1	558.5	612.9	850.5	954.9	1007.9	1089.7	1159.2	1018.5	549.3
45°	656.8	659.9	593.3	650.7	871.7	1079.1	1156.1	1129.0	1166.7	1201.5	675.0
47.5°	655.2	665.8	612.9	679.5	880.8	1103.2	1242.4	1201.5	1218.2	1262.0	794.5
50°	514.5	520.6	550.8	599.2	750.7	907.9	1021.5	962.5	951.9	1045.7	876.3
52.5°	475.2	514.5	600.8	791.4	962.5	1051.8	1381.7	1316.6	1342.4	1290.9	1027.6
55°	628.1	699.2	824.8	1057.8	1233.3	1796.3	2335.0	2403.2	2454.7	2164.0	1505.7
57.5°	927.7	998.7	1116.8	1349.9	1566.2	2789.0	3744.0	3598.6	3394.4	3161.3	2615.0
60°	1280.3	1337.7	1452.8	1741.9	1987.0	3244.5	4854.7	4792.6	4356.8	4476.4	4108.6
62.5°	1505.7	1578.4	1688.9	2050.5	2214.0	3267.3	5063.6	5531.1	5242.1	5348.0	5240.7
64°	1440.7	1575.3	1731.3	2040.0	2130.8	3424.7	4894.0	5685.6	5569.0	5481.2	5491.8
65°	1475.4	1570.8	1707.0	2011.2	2145.9	3494.2	4851.8	5679.5	5529.6	5416.2	5460.0
67.5°	1407.4	1520.8	1637.4	1905.2	2082.3	3612.3	4266.0	5086.2	4978.7	4797.2	4924.3
70°	1336.3	1448.3	1534.6	1731.3	1997.6	3401.9	3955.8	4676.1	4546.0	4256.9	4391.6
72.5°	1331.8	1451.3	1524.0	1676.7	1938.6	3302.1	3712.2	4193.4	4164.6	3833.2	4032.9
75°	1241.0	1334.7	1427.1	1539.1	1829.6	3055.4	3335.3	3733.4	3787.8	3582.1	3854.4
77.5°	1227.3	1318.0	1405.9	1549.7	1790.3	3114.4	3374.7	3544.2	3628.9	3426.1	3600.2
80°	1077.5	1159.2	1251.4	1442.2	1595.1	2734.5	2914.7	2854.2	2913.1	2711.9	2751.2
82.5°	790.0	856.6	947.4	1110.7	1183.4	2020.2	2183.7	2082.3	2058.1	1882.6	1781.2
85°	498.0	550.8	609.8	776.3	786.9	1225.8	1374.0	1316.6	1266.7	1073.0	902.0
87.5°	313.2	332.9	375.3	463.0	463.0	638.7	664.4	652.2	641.6	575.0	576.6
90°	267.9	278.5	304.2	346.5	349.6	461.6	475.2	479.7	499.4	479.7	505.4
92.5°	270.8	278.5	296.6	328.4	329.9	413.1	422.3	423.7	440.4	426.8	457.1
95°	267.9	275.5	296.6	322.3	320.9	376.7	382.8	393.4	405.6	381.4	408.6
97.5°	266.3	272.4	287.5	310.3	310.3	357.1	355.7	361.6	375.3	352.6	379.9
100°	284.5	285.9	305.8	326.8	317.8	354.1	343.5	348.0	352.6	340.5	363.2
102.5°	293.6	292.0	310.3	337.4	323.9	340.5	326.8	334.5	342.0	326.8	345.1
105°	295.2	295.2	316.2	348.0	334.5	334.5	325.4	329.9	334.5	328.4	354.1
107.5°	308.7	310.3	329.9	361.6	348.0	339.0	323.9	329.9	331.3	334.5	376.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
110°	328.4	328.4	349.6	382.8	373.8	357.1	332.9	334.5	337.4	351.2	402.5
112.5°	348.0	346.5	381.4	422.3	414.6	385.9	357.1	357.1	363.2	381.4	435.9
115°	381.4	376.7	411.7	481.3	481.3	432.7	401.1	405.6	416.2	420.7	484.2
117.5°	502.5	476.7	508.4	590.1	585.6	534.1	481.3	470.7	475.2	499.4	588.7
120°	570.5	546.3	600.8	665.8	667.4	638.7	588.7	578.1	578.1	612.9	694.7
122.5°	581.1	590.1	664.4	729.5	756.6	723.4	697.6	688.6	699.2	758.2	820.2
125°	668.9	667.4	732.4	846.0	867.2	839.9	805.1	802.0	821.7	883.7	912.6
127.5°	814.2	808.1	847.4	958.0	973.1	945.8	927.7	921.6	941.3	995.7	1023.0
130°	945.8	939.7	970.0	1013.8	1027.6	1004.8	988.3	962.5	963.9	1027.6	1079.1
132.5°	988.3	992.8	1013.8	1035.1	1038.2	1009.3	950.4	926.2	929.1	956.4	1010.9
135°	942.9	945.8	970.0	1012.4	1032.1	979.1	911.0	902.0	909.5	924.6	977.7
137.5°	886.9	897.5	938.2	973.1	998.7	959.4	915.6	891.4	905.0	945.8	959.4
140°	911.0	917.1	950.4	963.9	982.2	951.9	912.6	900.4	906.5	915.6	912.6
142.5°	903.4	915.6	923.1	926.2	927.7	906.5	900.4	917.1	927.7	927.7	933.7
145°	933.7	921.6	912.6	898.9	914.0	898.9	871.7	859.6	862.5	882.3	888.3
147.5°	861.1	858.0	871.7	861.1	856.6	849.0	833.8	803.6	808.1	832.3	826.3
150°	770.3	768.8	756.6	753.6	732.4	752.1	767.2	783.9	788.4	777.8	776.3
152.5°	709.8	712.8	734.0	750.7	771.7	765.8	738.5	694.7	679.5	694.7	705.3
155°	693.1	696.1	693.1	730.9	732.4	705.3	682.5	682.5	675.0	690.1	670.3
157.5°	684.1	685.5	667.4	682.5	682.5	691.5	730.9	735.5	724.9	690.1	687.0
160°	696.1	697.6	682.5	659.9	656.8	658.3	673.5	679.5	676.4	637.1	646.2
162.5°	629.6	626.5	608.4	611.4	615.9	591.7	568.9	570.5	568.9	546.3	555.4
165°	517.6	519.0	541.8	559.9	575.0	573.6	564.4	561.4	568.9	541.8	535.7
167.5°	568.9	567.5	566.0	566.0	573.6	578.1	573.6	575.0	576.6	579.5	575.0
170°	549.3	550.8	553.8	543.3	535.7	531.2	526.7	529.6	526.7	529.6	529.6
172.5°	493.3	493.3	498.0	502.5	505.4	500.9	496.4	494.8	490.3	487.3	484.2
175°	482.8	481.3	482.8	484.2	484.2	481.3	482.8	482.8	484.2	479.7	476.7
177.5°	473.6	473.6	470.7	470.7	469.1	464.6	463.0	460.0	458.5	458.5	454.0
180°	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4





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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4	42.4
2.5°	57.6	54.4	59.0	59.0	59.0	56.0	53.0	57.6	56.0	57.6	54.4
5°	71.1	68.2	68.2	68.2	66.6	71.1	66.6	66.6	66.6	69.6	71.1
7.5°	74.1	75.7	77.2	77.2	78.6	75.7	75.7	74.1	74.1	74.1	75.7
10°	89.2	90.8	89.2	87.8	89.2	89.2	89.2	87.8	87.8	87.8	86.3
12.5°	98.4	96.9	95.3	95.3	93.8	92.4	93.8	95.3	95.3	101.4	98.4
15°	112.0	108.9	105.9	103.0	104.4	105.9	105.9	104.4	108.9	107.5	108.9
17.5°	118.1	116.5	116.5	115.0	115.0	113.6	113.6	115.0	116.5	116.5	118.1
20°	130.1	130.1	127.1	125.6	127.1	124.0	124.0	125.6	125.6	127.1	127.1
22.5°	143.8	137.7	137.7	139.2	137.7	137.7	134.6	136.2	136.2	139.2	139.2
25°	160.4	154.3	149.8	151.3	157.4	152.9	155.8	154.3	157.4	155.8	152.9
27.5°	198.3	184.5	184.5	193.8	204.4	196.7	190.6	190.6	199.7	207.3	208.9
30°	242.1	230.1	225.4	237.6	251.2	240.6	231.5	234.6	248.2	258.8	261.8
32.5°	290.6	273.9	260.4	255.7	260.4	255.7	257.2	267.9	276.9	280.0	284.5
35°	308.7	292.0	266.3	248.2	239.1	237.6	257.2	275.5	276.9	266.3	269.4
37.5°	348.0	320.9	284.5	267.9	276.9	287.5	310.3	328.4	319.3	305.8	307.2
40°	378.3	355.7	329.9	326.8	337.4	354.1	364.7	367.7	381.4	393.4	402.5
42.5°	447.9	429.8	390.5	387.3	402.5	416.2	404.0	414.6	441.9	460.0	472.2
45°	538.7	508.4	460.0	431.3	457.1	478.1	469.1	484.2	496.4	505.4	517.6
47.5°	629.6	579.5	508.4	490.3	511.5	513.1	493.3	500.9	517.6	532.7	547.9
50°	694.7	638.7	534.1	488.7	487.3	528.2	553.8	575.0	537.3	500.9	499.4
52.5°	786.9	699.2	579.5	546.3	568.9	647.7	715.7	736.9	702.2	667.4	662.8
55°	1068.4	862.5	741.5	785.5	879.2	958.0	1006.4	1021.5	1062.4	1088.1	1091.1
57.5°	1770.6	1293.9	1074.5	1136.5	1194.0	1194.0	1257.5	1354.4	1470.9	1493.7	1496.7
60°	3010.0	2105.1	1514.8	1455.8	1460.3	1449.7	1693.4	1884.0	1962.8	1820.5	1784.2
62.5°	4182.8	2860.1	1838.6	1634.4	1670.8	1731.3	2085.4	2254.8	2244.2	2114.1	2076.2
64°	4639.8	3149.2	1949.2	1666.1	1688.9	1779.6	2064.2	2151.9	2192.7	2174.6	2136.7
65°	4706.4	3226.4	1976.4	1661.6	1673.7	1764.5	2000.5	2079.3	2141.4	2150.5	2123.2
67.5°	4597.5	3324.7	2023.3	1611.6	1575.3	1661.6	1790.3	1905.2	2008.2	2085.4	2083.8
70°	4314.5	3308.1	2024.9	1596.5	1522.4	1581.4	1640.5	1796.3	1920.4	1971.8	1994.6
72.5°	4016.4	3162.9	1803.8	1493.7	1418.0	1481.5	1543.6	1711.6	1820.5	1850.8	1887.1
75°	3859.0	3038.7	1585.9	1424.0	1380.1	1439.1	1439.1	1576.8	1704.0	1738.8	1788.7
77.5°	3566.9	2767.9	1374.0	1251.4	1222.7	1254.6	1204.6	1304.5	1412.0	1437.7	1477.0
80°	2755.7	2142.8	1092.6	1007.9	962.5	961.0	885.3	954.9	1035.1	1075.9	1101.7
82.5°	1782.6	1386.2	736.9	687.0	649.3	632.6	575.0	597.8	632.6	653.8	661.3
85°	894.3	736.9	460.0	437.4	408.6	401.1	381.4	401.1	408.6	404.0	405.6
87.5°	579.5	498.0	355.7	345.1	313.2	310.3	307.2	331.3	342.0	340.5	348.0
90°	488.7	423.7	325.4	319.3	296.6	293.6	298.1	322.3	332.9	329.9	331.3
92.5°	437.4	396.6	314.8	307.2	281.4	284.5	285.9	305.8	313.2	311.7	302.6
95°	405.6	370.8	316.2	310.3	276.9	283.0	287.5	296.6	292.0	285.9	280.0
97.5°	373.8	340.5	296.6	293.6	283.0	283.0	296.6	284.5	270.8	258.8	249.8
100°	358.6	331.3	296.6	293.6	289.1	289.1	308.7	298.1	273.9	258.8	257.2
102.5°	348.0	332.9	310.3	299.7	292.0	295.2	317.8	329.9	296.6	281.4	273.9
105°	358.6	357.1	337.4	322.3	308.7	319.3	345.1	346.5	328.4	301.1	292.0
107.5°	390.5	395.0	376.7	366.3	354.1	364.7	384.4	367.7	340.5	337.4	332.9



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	426.8	431.3	419.2	407.0	404.0	417.6	451.0	422.3	379.9	388.9	395.0
112.5°	464.6	475.2	461.6	438.8	438.8	469.1	531.2	544.8	487.3	460.0	458.5
115°	520.6	532.7	516.0	482.8	493.3	541.8	609.8	646.2	597.8	561.4	572.1
117.5°	628.1	647.7	624.9	609.8	617.4	670.3	759.7	786.9	749.1	721.8	736.9
120°	732.4	761.1	752.1	758.2	773.3	833.8	912.6	885.3	844.4	841.5	850.5
122.5°	855.0	859.6	853.5	883.7	923.1	959.4	967.0	909.5	865.6	827.7	826.3
125°	939.7	953.3	965.5	976.1	954.9	948.8	953.3	921.6	874.7	790.0	776.3
127.5°	1038.2	1041.1	1018.5	967.0	902.0	914.0	944.3	868.6	829.3	823.2	827.7
130°	1083.6	1060.8	980.6	894.3	873.1	921.6	935.2	870.2	853.5	827.7	833.8
132.5°	1007.9	1004.8	938.2	898.9	870.2	903.4	936.8	906.5	852.1	759.7	736.9
135°	994.2	988.3	936.8	876.3	830.9	836.8	862.5	886.9	867.2	796.1	776.3
137.5°	963.9	958.0	905.0	832.3	846.0	856.6	871.7	882.3	892.8	889.8	879.2
140°	911.0	891.4	859.6	846.0	858.0	897.5	888.3	874.7	883.7	876.3	868.6
142.5°	921.6	903.4	855.0	815.7	803.6	829.3	824.8	827.7	805.1	765.8	761.1
145°	879.2	865.6	830.9	779.4	726.3	744.6	761.1	756.6	744.6	758.2	758.2
147.5°	805.1	788.4	756.6	741.5	708.2	746.0	762.7	747.6	738.5	711.2	703.7
150°	773.3	761.1	724.9	715.7	706.7	709.8	703.7	724.9	720.4	703.7	703.7
152.5°	712.8	715.7	744.6	720.4	691.5	690.1	703.7	717.3	734.0	734.0	735.5
155°	671.9	680.9	709.8	744.6	706.7	734.0	694.7	684.1	706.7	714.3	712.8
157.5°	665.8	658.3	661.3	680.9	664.4	665.8	656.8	658.3	652.2	635.5	629.6
160°	638.7	628.1	619.0	600.8	584.1	576.6	576.6	593.3	617.4	634.1	641.6
162.5°	568.9	575.0	593.3	576.6	584.1	612.9	594.7	603.9	615.9	614.3	617.4
165°	540.2	552.4	567.5	594.7	602.3	588.7	582.7	566.0	546.3	546.3	544.8
167.5°	568.9	558.5	541.8	532.7	532.7	541.8	544.8	531.2	520.6	519.0	517.6
170°	526.7	522.1	514.5	508.4	514.5	514.5	520.6	520.6	526.7	529.6	529.6
172.5°	485.8	487.3	491.9	498.0	498.0	493.3	491.9	491.9	485.8	484.2	485.8
175°	473.6	472.2	467.7	463.0	458.5	452.6	447.9	441.9	437.4	437.4	435.9
177.5°	452.6	449.4	447.9	444.9	443.4	438.8	437.4	432.7	431.3	428.2	426.8
180°	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4	443.4

(END OF REPORT)