

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: P228016

Luminaire Tested: **ISC-AF-350-LED-E1-T4W-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228016
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29757)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISC-AF-350-LED-E1-T4W-8030
Description: IMPACT ELITE LED CYLINDER LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE
Light Source: (16) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1947 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

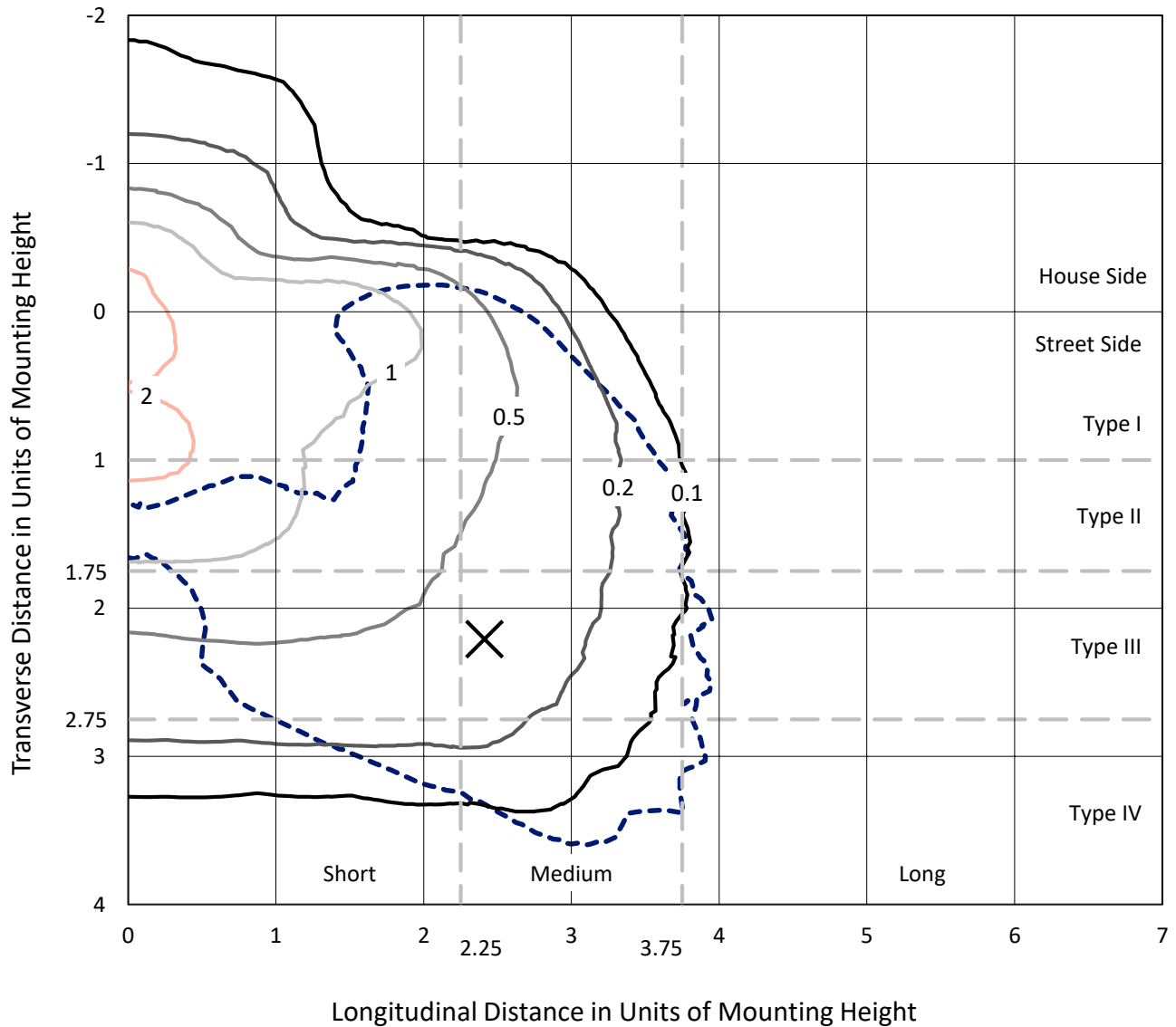
Input Watts (W): 20.09
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

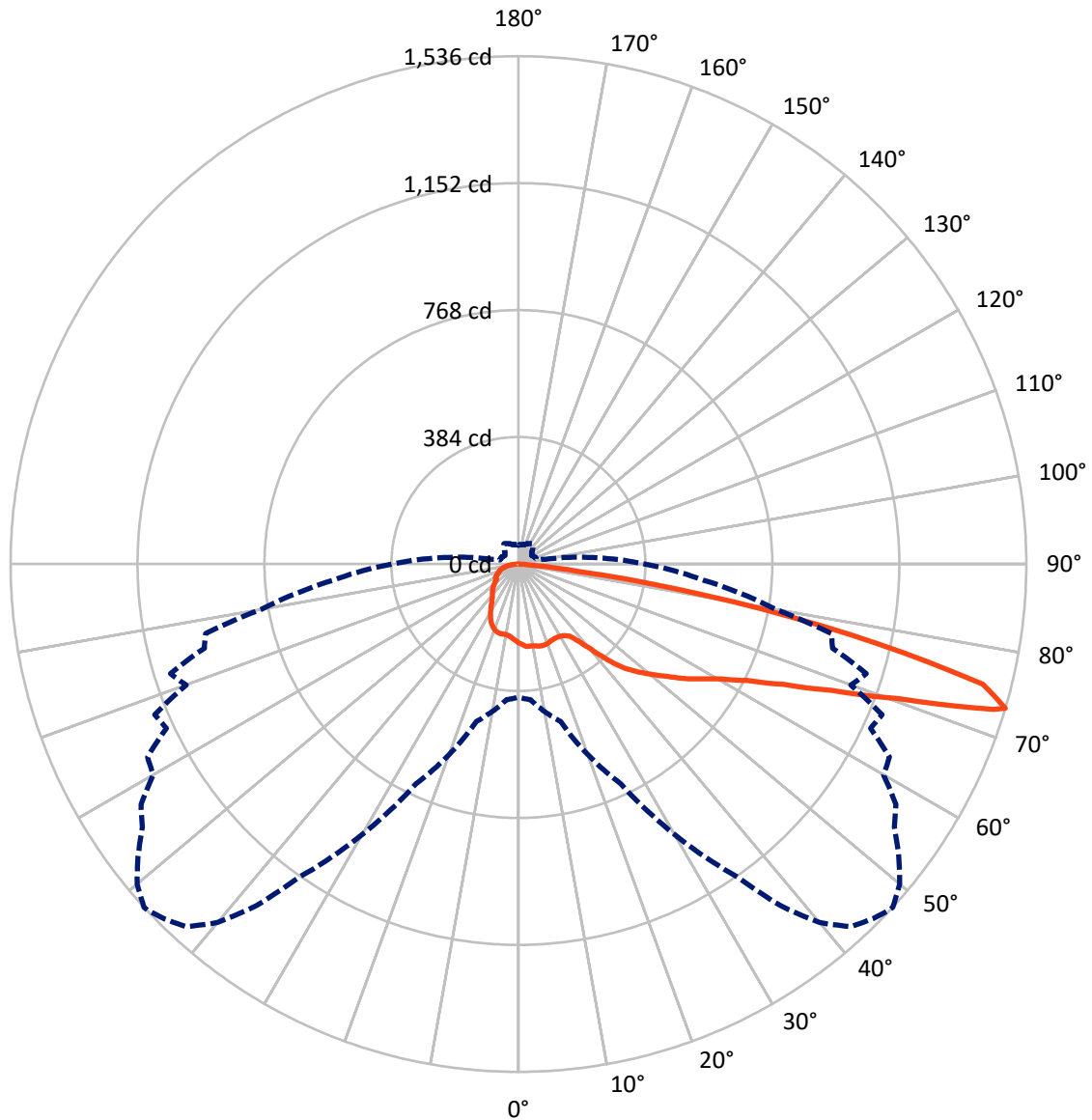
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.8 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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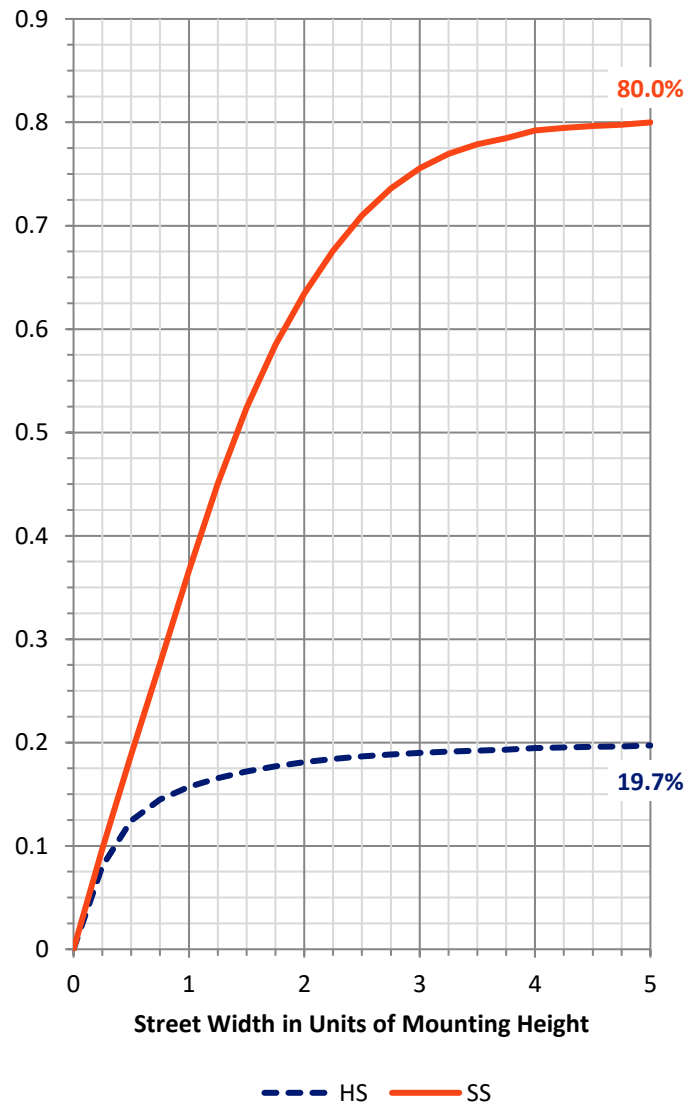
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	389.0	0.0	389.0
	% Fixture	20.0	0.0	20.0
Street Side	Lumens	1558.0	0.0	1558.0
	% Fixture	80.0	0.0	80.0
Total	Lumens	1947.0	0.0	1947.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.8	1.2
10°-20°	67.7	3.5
20°-30°	104.1	5.3
30°-40°	151.9	7.8
40°-50°	250.5	12.9
50°-60°	392.2	20.1
60°-70°	532.0	27.3
70°-80°	393.9	20.2
80°-90°	31.8	1.6
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°	1947.0	100.0
0°-180°	1947.0	100.0



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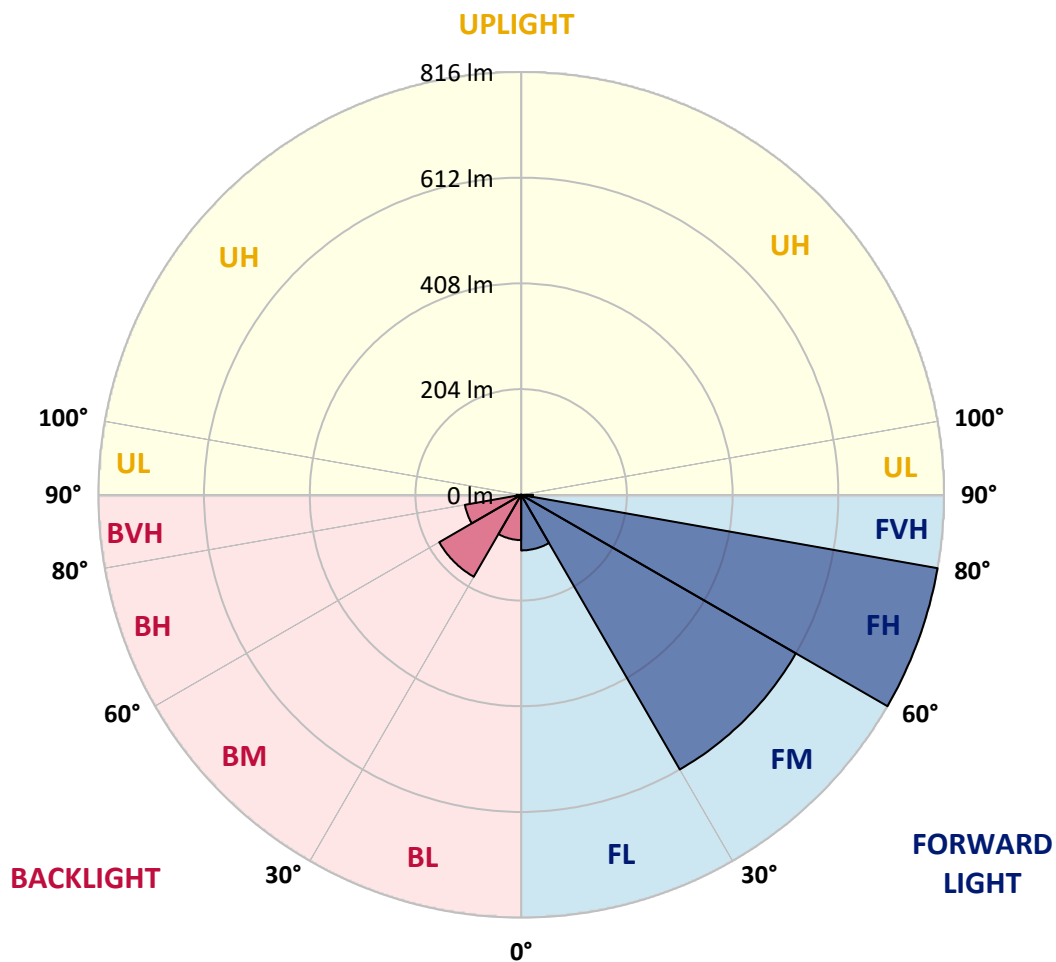
CATALOG NUMBER: ISC-AF-350-LED-E1-T4W-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	107.3	5.5			
FM	(30°-60°)	611.9	31.4			
FH	(60°-80°)	815.8	41.9			G1/1800
FVH	(80°-90°)	23.0	1.2			G1/100
BL	(0°-30°)	87.3	4.5	B0/110		
BM	(30°-60°)	182.7	9.4	B0/220		
BH	(60°-80°)	110.2	5.7	B1/500		G1/500
BVH	(80°-90°)	8.9	0.5			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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47°	47.5°
0°	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1
2.5°	253.2	252.6	250.7	250.0	248.1	246.8	246.2	245.5	247.4	246.2	244.2
5°	269.3	268.0	265.4	261.6	257.7	255.2	254.5	253.2	253.2	251.9	250.7
7.5°	280.9	280.2	276.4	270.6	264.2	259.7	257.1	255.2	255.8	254.5	250.7
10°	291.8	290.5	284.1	277.0	267.4	262.2	259.0	255.8	258.4	256.4	251.3
12.5°	300.2	298.9	289.9	280.9	269.9	264.2	260.9	259.0	261.6	260.3	254.5
15°	304.6	303.4	294.4	283.4	271.9	265.4	264.2	262.9	264.8	262.2	257.1
17.5°	302.1	302.1	293.7	282.2	272.5	266.1	264.2	262.9	265.4	262.9	257.1
20°	292.4	293.7	287.9	275.7	268.7	264.2	262.2	259.7	262.2	259.7	255.8
22.5°	280.2	281.5	278.3	267.4	262.2	259.0	258.4	255.8	257.7	255.8	251.9
25°	269.3	269.3	268.0	258.4	257.7	255.2	255.8	254.5	255.8	253.2	250.7
27.5°	269.9	269.9	264.8	255.2	254.5	254.5	254.5	254.5	255.2	253.2	250.7
30°	307.9	309.1	294.4	267.4	257.7	256.4	257.1	256.4	257.1	256.4	253.2
32.5°	365.1	365.1	350.9	309.1	275.1	266.7	263.5	262.9	260.9	260.3	257.7
35°	421.6	421.0	406.8	360.6	317.5	301.4	291.2	281.5	277.0	272.5	268.0
37.5°	469.2	467.3	465.3	412.6	367.6	349.0	336.8	322.6	313.6	305.9	295.7
40°	513.5	516.7	523.8	460.8	417.8	400.4	388.2	370.2	361.2	351.6	339.4
42.5°	574.6	579.1	579.7	512.9	463.4	451.8	442.2	428.7	419.1	407.5	396.6
45°	633.7	634.4	636.3	568.8	519.3	504.5	497.5	484.6	472.4	457.6	448.6
47.5°	674.2	672.3	680.6	633.1	584.9	568.2	557.9	538.6	520.0	501.3	487.8
50°	723.7	721.8	721.8	706.3	660.7	641.4	623.4	587.4	567.5	544.4	525.1
52.5°	767.4	760.3	764.8	773.8	740.4	716.0	684.5	644.0	617.7	589.4	565.0
55°	827.2	790.5	800.8	832.3	819.5	781.5	739.8	696.7	666.5	634.4	611.9
57.5°	806.6	781.5	811.8	867.0	866.4	831.0	795.7	743.0	712.8	682.6	654.9
60°	732.7	745.6	811.1	890.8	894.0	866.4	837.5	788.6	764.8	733.3	705.7
62.5°	675.5	694.1	784.1	888.9	925.5	899.8	876.0	847.1	830.4	804.0	775.8
65°	672.3	683.2	770.6	887.0	969.9	956.4	945.4	931.9	928.7	909.4	876.7
67.5°	703.1	713.4	793.8	936.4	1035.4	1029.6	1045.7	1043.1	1057.3	1047.6	1020.6
70°	642.7	648.5	747.5	953.8	1185.2	1210.9	1246.9	1244.9	1275.2	1252.0	1220.5
72.5°	451.2	462.8	550.2	788.0	1188.4	1325.9	1409.5	1480.2	1513.0	1518.7	1504.0
73°	403.0	412.0	493.0	734.0	1156.3	1302.8	1415.3	1487.9	1516.8	1534.8	1536.1
75°	140.1	144.6	215.3	444.8	924.2	1137.0	1281.6	1347.1	1340.1	1392.8	1450.6
77.5°	45.0	45.6	55.9	115.0	446.0	705.7	867.0	927.4	892.7	949.9	1027.1
80°	27.6	28.9	36.6	52.1	117.0	214.0	362.5	453.8	435.1	488.5	570.7
82.5°	16.7	17.4	22.5	32.1	46.9	52.1	68.1	92.6	113.8	136.9	179.3
85°	7.7	8.4	10.9	14.8	19.3	19.9	19.3	18.0	20.6	23.8	27.6
87.5°	0.0	0.0	0.6	1.3	0.6	0.0	0.0	0.0	0.0	0.6	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):

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1
2.5°	246.2	244.2	244.2	241.7	242.9	240.4	241.7	239.1	240.4	237.2	239.1
5°	250.0	246.8	246.8	242.9	243.6	239.1	241.0	235.9	238.4	232.7	236.5
7.5°	251.9	246.2	248.7	241.7	244.9	237.2	241.0	232.7	237.8	228.8	235.2
10°	254.5	246.2	250.7	242.9	246.8	237.8	242.9	232.7	239.1	228.2	234.0
12.5°	258.4	249.4	253.2	244.2	249.4	239.1	244.2	234.0	240.4	228.2	235.2
15°	260.9	251.9	255.8	246.8	250.7	239.1	245.5	233.3	240.4	227.5	235.2
17.5°	260.3	251.9	255.8	245.5	250.0	238.4	244.9	232.7	239.1	225.6	234.0
20°	257.7	250.7	253.2	244.2	248.1	236.5	242.3	230.1	237.2	223.7	232.0
22.5°	254.5	247.4	250.7	242.3	246.2	234.6	239.7	228.8	235.9	222.4	230.1
25°	252.6	246.8	248.7	240.4	245.5	235.2	240.4	228.2	235.9	222.4	231.4
27.5°	251.9	246.8	250.7	242.9	247.4	238.4	243.6	232.7	239.1	225.0	234.0
30°	255.8	251.3	254.5	248.1	251.9	242.9	248.1	237.8	244.2	230.7	241.0
32.5°	260.3	255.8	259.0	253.2	259.0	250.0	256.4	246.2	253.9	240.4	250.0
35°	269.9	264.8	269.3	262.9	269.3	262.2	269.3	258.4	268.0	254.5	264.8
37.5°	295.0	280.9	285.4	278.3	284.7	275.7	287.9	277.0	287.9	275.1	289.2
40°	334.9	309.8	314.3	299.5	309.1	295.7	310.4	302.1	316.9	300.8	318.8
42.5°	386.9	363.1	358.6	336.1	344.5	328.4	343.2	328.4	348.4	332.9	355.4
45°	434.5	409.4	402.3	380.5	386.3	365.1	383.7	363.1	389.5	371.5	399.8
47.5°	473.7	444.1	438.3	413.3	423.6	403.6	426.8	404.9	437.0	419.1	451.8
50°	509.7	473.0	471.8	444.8	462.1	442.2	475.0	460.2	491.7	473.7	512.2
52.5°	550.8	504.5	511.0	486.5	514.2	497.5	535.4	514.2	555.3	536.0	578.4
55°	594.5	545.7	562.4	547.6	580.4	569.5	601.6	582.3	622.8	603.5	648.5
57.5°	642.7	600.9	630.5	623.4	652.4	638.9	674.9	657.5	698.0	681.9	726.9
60°	705.7	678.1	707.0	706.3	731.4	730.8	753.9	743.6	782.2	775.1	816.3
62.5°	787.3	765.5	796.3	788.0	818.2	813.0	841.3	841.3	869.0	878.6	919.7
65°	897.2	868.3	905.0	892.1	922.3	923.6	941.6	944.8	978.2	989.1	1024.5
67.5°	1046.3	1012.9	1041.8	1017.4	1052.1	1050.2	1065.6	1072.1	1076.6	1102.9	1106.8
70°	1261.0	1210.9	1237.2	1203.8	1210.2	1214.7	1185.8	1207.0	1155.6	1197.4	1140.8
72.5°	1493.0	1435.8	1390.2	1356.8	1290.6	1280.9	1196.7	1214.7	1105.5	1141.5	1027.1
73°	1505.3	1450.0	1388.3	1353.6	1275.2	1264.9	1174.9	1190.3	1069.5	1103.6	983.4
75°	1368.4	1383.1	1234.7	1248.8	1112.5	1128.6	987.9	1005.9	857.4	883.1	728.2
77.5°	922.3	971.8	805.3	867.7	698.6	761.0	570.1	575.9	420.3	392.7	266.7
80°	457.0	499.4	354.1	386.9	259.7	255.2	155.5	129.2	109.9	112.5	115.7
82.5°	131.8	148.5	91.9	91.3	64.9	61.7	61.7	65.6	66.8	74.6	72.6
85°	25.1	30.2	26.4	35.3	31.5	34.7	32.1	37.3	34.7	43.1	37.3
87.5°	0.6	0.0	0.6	1.9	1.9	4.5	3.2	5.1	5.1	9.0	8.4
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):

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1
2.5°	236.5	239.7	238.4	237.2	235.9	235.2	232.7	234.0	230.7	233.3	230.7
5°	231.4	235.2	233.3	230.7	229.5	228.2	223.7	226.9	221.7	226.2	222.4
7.5°	225.6	232.0	230.1	227.5	225.0	223.7	214.7	221.7	214.0	220.5	214.0
10°	223.7	230.7	228.2	225.0	222.4	221.1	210.2	218.5	210.2	217.2	208.9
12.5°	222.4	230.7	226.9	223.7	221.1	219.2	207.0	217.2	206.3	216.6	207.0
15°	221.1	230.7	225.6	221.7	219.2	217.2	204.4	216.0	203.7	215.3	204.4
17.5°	219.8	228.8	224.3	219.8	217.2	216.0	201.8	214.0	201.2	214.0	203.1
20°	217.9	226.9	221.7	217.2	214.7	212.7	198.6	211.5	198.0	210.8	198.6
22.5°	215.3	225.0	220.5	216.0	213.4	210.2	194.7	208.2	194.1	207.0	195.4
25°	216.0	226.2	220.5	216.0	212.1	208.9	192.2	207.0	190.9	203.7	190.9
27.5°	219.2	228.2	222.4	218.5	213.4	209.5	192.2	205.7	189.6	200.5	187.0
30°	225.6	234.6	229.5	223.7	219.2	214.0	195.4	206.3	189.6	196.7	183.2
32.5°	236.5	244.9	239.7	235.2	230.1	222.4	201.8	209.5	190.9	194.1	180.0
35°	250.7	260.9	258.4	255.2	248.7	235.2	212.7	214.0	193.5	191.5	175.5
37.5°	273.8	287.9	287.3	286.7	279.6	255.2	225.0	223.0	196.0	189.6	169.7
40°	304.0	320.7	325.2	329.7	314.9	278.9	239.1	232.0	197.3	185.7	160.7
42.5°	339.4	361.9	375.3	383.7	356.7	305.3	255.2	242.3	197.3	180.0	150.4
45°	383.1	409.4	435.1	444.1	403.0	333.6	271.9	250.7	194.7	171.0	136.9
47.5°	436.4	467.3	502.6	507.1	453.1	363.8	283.4	256.4	186.4	158.8	124.7
50°	495.5	532.8	584.9	581.7	506.5	395.3	291.2	260.3	171.6	144.6	109.9
52.5°	561.7	608.7	682.6	667.8	571.4	434.5	298.2	265.4	153.6	127.9	95.1
55°	644.6	700.6	793.1	761.6	643.4	477.5	308.5	266.1	129.8	108.0	84.2
57.5°	734.0	793.8	912.0	854.8	710.8	511.0	304.0	245.5	106.0	91.3	75.8
60°	841.3	913.9	1030.9	941.6	767.4	522.5	272.5	202.5	90.6	82.3	72.0
62.5°	961.5	1033.5	1128.6	1002.0	799.5	503.2	202.5	140.1	77.8	73.3	66.2
65°	1089.4	1157.5	1175.5	1007.1	778.3	418.4	125.3	91.9	67.5	65.6	61.1
67.5°	1207.0	1213.5	1131.2	923.6	675.5	291.8	85.5	73.3	62.3	61.7	59.1
70°	1237.2	1126.0	940.3	719.2	487.8	173.5	69.4	63.6	59.8	59.8	57.8
72.5°	1033.5	857.4	628.6	435.8	266.1	92.6	59.1	57.8	56.6	56.6	55.3
73°	969.2	789.9	563.0	380.5	225.0	82.9	57.8	56.6	55.9	55.3	54.6
75°	644.0	496.2	319.4	192.8	104.8	59.8	51.4	51.4	50.8	51.4	50.8
77.5°	248.1	187.0	123.4	82.9	59.8	46.9	43.7	44.3	43.7	45.0	44.3
80°	109.3	108.0	81.6	58.5	43.7	35.3	35.3	35.3	36.0	36.6	36.6
82.5°	74.6	63.0	48.2	36.0	26.4	25.7	26.4	26.4	27.0	27.6	27.0
85°	41.1	34.7	25.7	16.1	14.1	17.4	17.4	17.4	16.7	16.7	16.1
87.5°	12.9	9.6	7.1	1.9	3.2	3.2	4.5	3.9	3.9	4.5	4.5
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):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1	239.1
2.5°	233.3	231.4	233.3	230.1	232.7	230.1	232.0	232.0	231.4	231.4	231.4
5°	225.6	222.4	225.6	223.7	225.6	223.0	225.0	225.6	226.2	228.2	227.5
7.5°	219.8	213.4	220.5	214.0	219.8	214.0	219.2	219.8	221.7	224.3	226.2
10°	217.2	208.9	217.2	209.5	216.6	210.2	216.6	217.2	219.2	222.4	225.6
12.5°	216.0	207.0	216.0	208.2	216.0	209.5	216.0	217.9	219.2	221.7	225.6
15°	214.7	205.7	216.0	207.6	216.0	209.5	216.6	217.9	219.8	222.4	225.6
17.5°	214.0	203.7	214.7	207.0	214.7	208.2	216.0	216.0	218.5	221.7	223.7
20°	211.5	201.8	211.5	203.7	211.5	205.7	212.1	212.1	214.7	216.0	219.2
22.5°	207.6	197.3	206.3	199.2	206.3	200.5	205.7	205.7	207.6	209.5	211.5
25°	201.8	192.2	199.9	193.5	198.6	193.5	197.3	196.7	198.0	199.2	200.5
27.5°	195.4	185.7	192.2	185.1	188.3	183.2	185.7	184.5	185.1	185.7	186.4
30°	188.3	178.7	181.9	175.5	176.1	171.0	172.2	170.3	169.7	169.0	167.7
32.5°	180.6	170.3	170.3	163.9	162.6	158.1	158.1	155.5	153.6	151.0	148.5
35°	171.0	162.0	157.5	152.3	149.8	145.3	144.6	141.4	136.9	132.4	129.8
37.5°	161.3	151.0	144.6	139.5	136.9	133.7	133.0	130.5	125.3	120.2	116.3
40°	148.5	138.2	131.1	129.2	127.3	124.7	125.3	122.1	117.0	111.2	108.0
42.5°	135.6	126.6	120.8	120.2	118.9	118.3	118.9	116.3	110.5	105.4	101.5
45°	124.7	115.7	109.9	109.3	108.6	111.2	111.8	111.2	104.8	99.6	94.5
47.5°	113.8	102.8	99.0	97.7	98.3	102.2	103.5	105.4	99.6	93.8	86.8
50°	100.9	90.6	89.3	88.1	88.7	91.9	95.1	99.0	93.8	85.5	75.8
52.5°	89.3	80.3	81.0	79.7	81.0	83.6	86.1	92.6	86.1	77.8	73.3
55°	80.3	73.3	74.6	73.3	74.6	77.8	79.7	84.8	84.8	82.9	79.1
57.5°	73.9	68.8	70.1	68.8	70.7	73.3	75.2	86.1	92.6	87.4	79.7
60°	70.1	65.6	66.2	64.9	66.2	70.1	73.9	86.8	97.1	86.8	81.0
62.5°	64.3	60.4	59.8	59.8	61.1	67.5	69.4	81.0	95.8	86.1	81.6
65°	60.4	57.2	56.6	55.9	57.2	61.7	63.6	75.2	92.6	81.6	73.9
67.5°	58.5	55.9	54.6	53.3	54.6	58.5	60.4	70.7	87.4	77.8	69.4
70°	56.6	54.0	53.3	52.1	52.7	55.3	57.8	64.9	82.9	73.3	64.9
72.5°	54.0	51.4	50.8	48.8	49.5	52.1	53.3	61.1	77.1	68.8	60.4
73°	53.3	50.8	50.1	48.2	48.8	50.8	52.1	59.8	75.8	68.1	59.8
75°	50.1	47.6	46.9	45.6	46.3	46.3	47.6	54.6	72.0	64.3	55.9
77.5°	44.3	42.4	41.8	40.5	39.8	39.2	41.1	48.2	65.6	57.8	45.0
80°	36.6	34.7	34.1	31.5	31.5	31.5	34.1	41.1	48.8	41.8	34.7
82.5°	27.0	25.7	25.7	23.8	23.1	22.5	24.4	28.3	38.6	32.8	27.0
85°	16.1	15.4	16.1	14.1	14.8	14.1	16.1	19.9	21.2	16.7	12.9
87.5°	3.9	4.5	4.5	4.5	3.9	3.9	3.2	2.6	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°
0°	239.1	239.1
2.5°	230.7	230.1
5°	227.5	227.5
7.5°	226.2	226.2
10°	226.9	226.9
12.5°	226.9	228.2
15°	228.8	228.2
17.5°	226.9	226.9
20°	221.7	223.0
22.5°	214.7	214.7
25°	203.1	203.7
27.5°	187.7	189.0
30°	168.4	169.7
32.5°	146.5	147.8
35°	129.2	129.8
37.5°	117.6	117.6
40°	108.0	108.0
42.5°	99.0	98.3
45°	90.0	88.7
47.5°	81.0	80.3
50°	73.3	73.3
52.5°	74.6	74.6
55°	80.3	80.3
57.5°	81.0	80.3
60°	88.1	87.4
62.5°	91.9	93.8
65°	80.3	77.8
67.5°	76.5	72.6
70°	68.8	63.0
72.5°	61.1	57.8
73°	59.1	56.6
75°	52.7	51.4
77.5°	39.8	39.2
80°	33.4	32.8
82.5°	22.5	21.2
85°	9.6	9.0
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)