

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: P271373

Luminaire Tested: **ISC-AF-450-LED-E1-SL3-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271373
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29762)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISC-AF-450-LED-E1-SL3-7027
Description: IMPACT ELITE LED CYLINDER LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III W/SPILL CONTROL
Light Source: (16) 2700K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2421.3 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B0 - U0 - G1

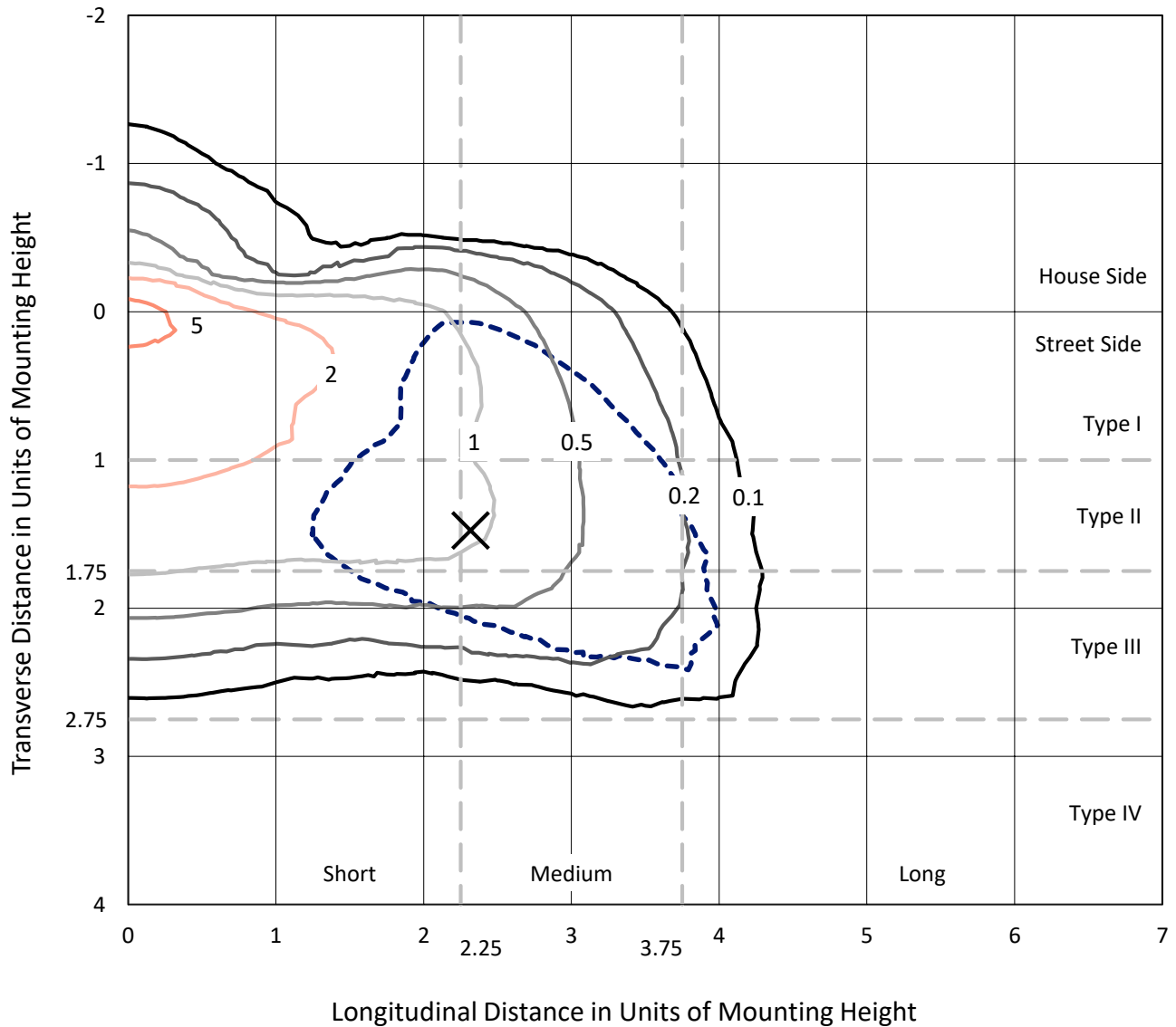
Input Watts (W): 25.31
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

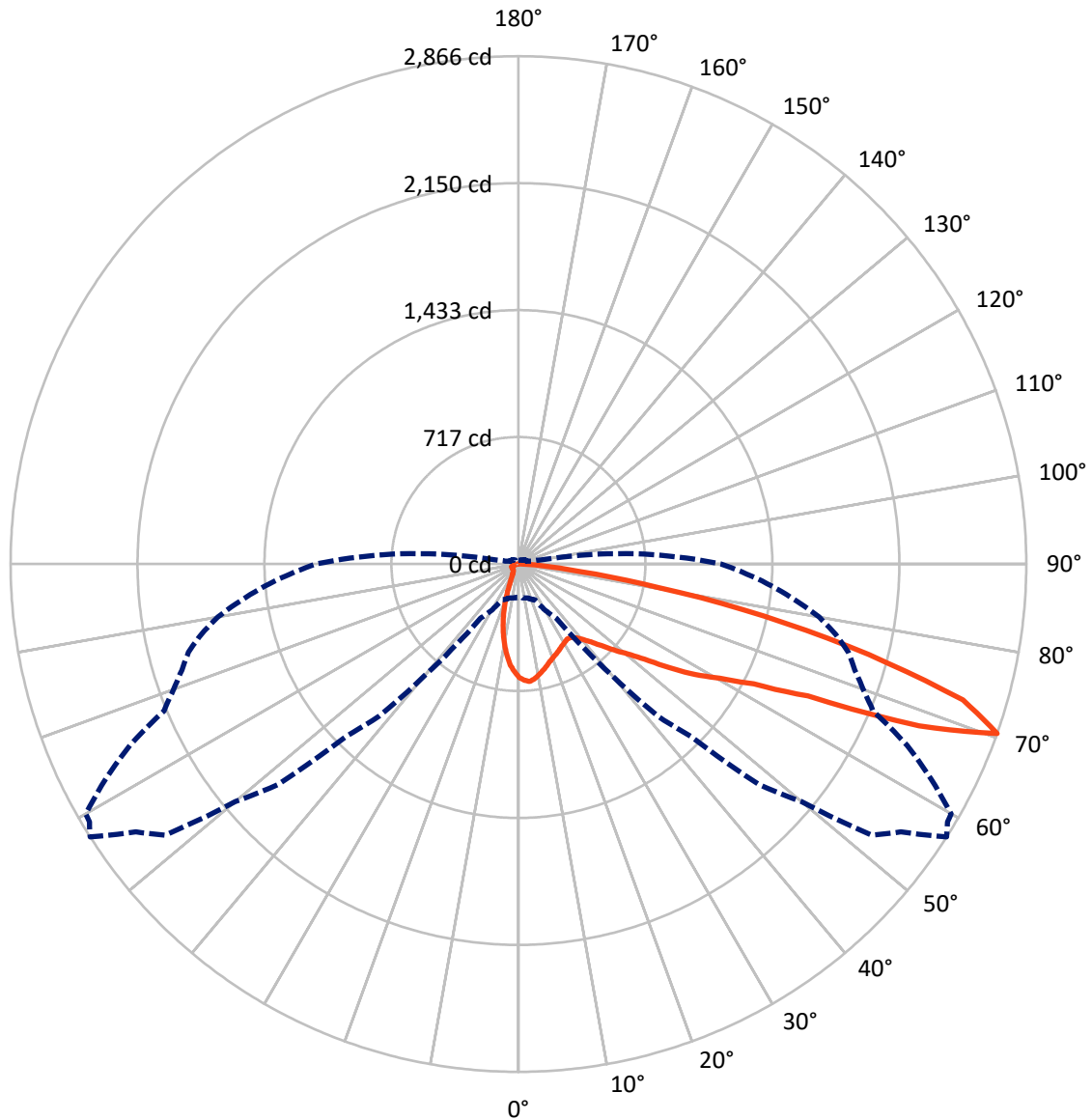
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.4 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 57.5-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	299.6	0.0	299.6
	% Fixture	12.4	0.0	12.4
Street Side	Lumens	2121.7	0.0	2121.7
	% Fixture	87.6	0.0	87.6
Total	Lumens	2421.3	0.0	2421.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.3	2.3
10°-20°	120.1	5.0
20°-30°	151.0	6.2
30°-40°	197.3	8.1
40°-50°	296.0	12.2
50°-60°	468.0	19.3
60°-70°	674.6	27.9
70°-80°	417.5	17.2
80°-90°	41.4	1.7
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°	2421.3	100.0
0°-180°	2421.3	100.0



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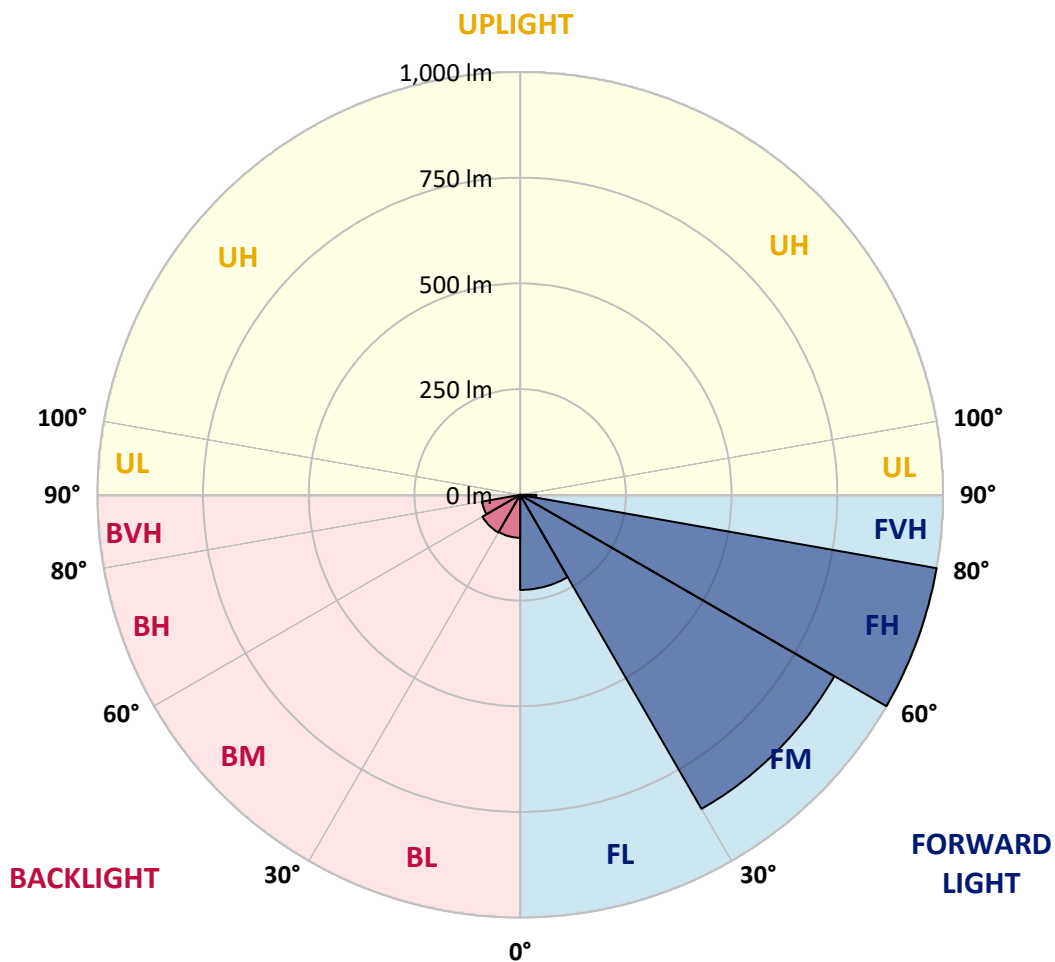
CATALOG NUMBER: ISC-AF-450-LED-E1-SL3-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	224.9	9.3			
FM	(30°-60°)	858.3	35.4			
FH	(60°-80°)	1000.4	41.3			G1/1800
FVH	(80°-90°)	38.1	1.6			G1/100
BL	(0°-30°)	101.6	4.2	B0/110		
BM	(30°-60°)	103.0	4.3	B0/220		
BH	(60°-80°)	91.7	3.8	B0/110		G0/110
BVH	(80°-90°)	3.3	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-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°	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9
2.5°	672.7	671.8	670.0	666.6	664.9	666.6	664.9	662.4	659.0	661.5	659.7
5°	670.9	672.7	669.2	666.6	670.9	672.7	669.2	669.2	665.8	669.2	667.5
7.5°	637.4	638.2	639.1	638.2	649.5	649.5	647.8	649.5	650.4	652.1	652.9
10°	595.4	596.3	597.9	600.4	614.2	616.0	616.9	618.6	621.1	622.9	627.9
12.5°	553.3	555.0	558.4	567.0	581.7	583.3	586.0	588.5	592.8	595.4	604.8
15°	518.1	519.0	522.4	531.8	553.3	557.6	559.3	562.7	571.3	571.3	581.7
17.5°	485.4	487.2	489.7	500.9	522.4	529.2	534.3	536.1	547.2	549.9	561.8
20°	460.5	461.3	462.2	472.5	492.2	502.5	506.8	513.7	522.4	529.2	539.5
22.5°	446.7	447.5	445.9	450.2	467.4	480.2	485.4	492.2	495.7	507.7	513.7
25°	447.5	448.4	444.1	441.6	450.2	464.0	468.2	475.0	473.4	490.6	490.6
27.5°	456.2	457.9	453.6	445.9	446.7	457.9	460.5	463.1	457.9	475.0	471.6
30°	473.4	475.0	469.9	464.0	454.5	461.3	461.3	461.3	451.8	466.5	460.5
32.5°	491.5	493.1	491.5	487.2	475.0	476.8	473.4	471.6	458.8	470.8	461.3
35°	518.1	519.0	519.8	519.8	502.5	506.0	496.5	491.5	479.3	488.8	475.9
37.5°	549.9	549.9	555.8	558.4	539.5	539.5	529.2	522.4	511.1	514.5	501.7
40°	578.1	580.8	594.5	602.2	585.1	578.1	569.5	563.6	555.0	555.0	542.0
42.5°	610.8	616.0	632.2	646.9	637.4	627.2	618.6	612.6	608.2	607.3	593.6
45°	651.2	657.2	675.3	689.0	691.5	683.8	677.0	670.9	667.5	665.8	653.8
47.5°	696.7	702.7	719.0	735.4	747.4	745.8	738.0	732.0	734.5	732.7	725.1
50°	747.4	750.8	761.1	780.1	807.6	813.5	811.9	807.6	812.7	812.7	805.8
52.5°	787.7	790.4	798.1	820.4	866.0	879.7	890.8	899.5	908.1	913.1	908.9
55°	824.7	824.7	825.6	853.9	921.8	944.2	969.0	987.1	998.3	1018.9	1027.5
57.5°	884.9	880.6	879.7	909.7	988.9	1012.0	1048.1	1073.8	1089.4	1131.4	1130.6
60°	867.8	869.4	900.3	988.9	1126.3	1146.9	1179.6	1207.1	1236.2	1267.1	1269.8
62.5°	748.3	752.6	799.0	931.3	1213.9	1321.2	1421.7	1498.2	1541.2	1568.7	1530.9
65°	524.0	534.3	597.0	758.6	1117.7	1283.5	1442.4	1619.4	1755.1	1965.6	2026.6
67.5°	261.1	269.0	279.2	397.8	835.1	1067.8	1286.9	1528.4	1708.8	2018.0	2190.7
70°	187.3	190.7	198.4	223.4	373.8	559.3	817.0	1162.4	1374.6	1841.1	2085.1
72.5°	145.2	148.6	158.9	194.1	247.4	273.2	324.7	530.9	789.5	1271.4	1601.4
75°	112.6	117.7	132.3	175.3	238.1	252.5	255.2	274.1	312.7	564.5	897.8
77.5°	79.1	79.9	94.5	151.3	231.1	259.4	255.2	255.2	260.3	287.7	384.0
80°	52.4	53.3	62.7	104.8	202.7	236.3	261.1	249.1	250.0	254.3	261.1
82.5°	27.5	29.3	36.9	63.6	118.6	159.8	217.4	226.8	223.4	227.7	225.9
85°	7.7	7.7	12.8	24.1	58.4	61.8	96.2	131.4	133.9	152.0	162.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	3.4	7.7	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):

	52.5°	55°	57.5°	59°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9
2.5°	661.5	658.1	657.2	655.5	656.3	653.8	652.9	649.5	649.5	647.8	646.0
5°	665.8	662.4	665.8	659.7	660.6	658.1	653.8	653.8	650.4	647.8	642.6
7.5°	653.8	653.8	654.7	651.2	652.1	651.2	646.0	645.2	640.0	640.0	634.0
10°	631.4	631.4	634.8	632.2	633.1	632.2	629.7	628.8	627.2	627.2	617.7
12.5°	605.6	610.8	616.0	613.5	613.5	615.1	615.1	616.0	615.1	614.2	606.5
15°	584.2	591.9	597.0	596.3	597.0	601.3	603.1	603.9	606.5	605.6	598.8
17.5°	564.5	573.0	577.3	580.8	583.3	586.8	591.9	594.5	597.9	597.0	590.2
20°	546.3	554.2	561.8	566.1	567.0	573.8	579.9	587.6	589.4	591.1	582.6
22.5°	527.5	534.3	549.9	547.2	553.3	566.1	569.5	580.8	580.8	586.8	574.7
25°	511.1	512.0	536.1	531.8	537.0	560.1	562.7	582.6	577.3	586.0	572.1
27.5°	494.9	494.0	523.3	518.1	524.0	555.8	557.6	585.1	579.9	590.2	572.1
30°	482.7	480.2	513.7	503.4	512.0	551.5	552.4	587.6	583.3	597.0	578.1
32.5°	480.2	475.9	505.2	497.4	506.0	547.2	552.4	597.0	591.9	609.1	585.1
35°	491.5	484.5	509.5	502.5	509.5	549.0	556.7	611.7	605.6	625.4	601.3
37.5°	512.0	506.8	527.5	520.6	525.8	561.0	567.9	630.6	629.7	653.8	626.3
40°	548.1	542.9	559.3	549.9	554.2	586.8	590.2	657.2	659.7	689.0	661.5
42.5°	597.0	588.5	601.3	590.2	596.3	625.4	622.0	689.9	697.5	738.0	706.2
45°	659.7	648.7	656.3	644.4	648.7	673.5	664.0	733.6	741.4	791.2	762.9
47.5°	728.5	714.7	724.2	708.8	711.3	738.0	720.8	786.1	798.1	860.8	833.3
50°	811.0	792.9	796.3	781.7	783.5	810.1	791.2	850.4	865.1	934.7	910.6
52.5°	916.6	890.8	890.8	871.2	872.0	898.7	875.4	926.9	943.3	1013.7	997.4
55°	1055.8	1035.2	1031.0	1010.3	1003.4	1008.5	975.9	1012.0	1030.1	1096.2	1083.4
57.5°	1166.7	1164.0	1177.0	1147.8	1140.8	1142.6	1101.3	1103.9	1124.6	1176.2	1180.5
60°	1301.6	1305.9	1307.6	1283.5	1280.9	1256.9	1214.8	1208.0	1233.6	1268.9	1282.6
62.5°	1516.2	1511.9	1490.5	1472.5	1456.2	1391.7	1368.6	1330.7	1366.8	1386.5	1414.9
65°	1977.6	1933.0	1795.5	1807.5	1764.6	1624.6	1604.8	1528.4	1585.0	1585.9	1639.1
67.5°	2434.7	2522.4	2438.1	2439.8	2342.7	2089.3	2028.4	1876.3	1908.0	1871.1	1898.6
70°	2512.8	2635.6	2866.0	2824.7	2819.5	2624.5	2419.1	2165.7	2070.4	1991.4	1927.9
72.5°	2162.3	2285.2	2622.8	2529.2	2564.4	2623.7	2409.7	2219.9	2006.8	1906.3	1768.9
75°	1521.5	1698.4	2041.2	1992.2	2018.0	2116.0	1932.1	1909.8	1663.2	1596.2	1384.8
77.5°	815.3	1034.4	1418.3	1358.1	1369.4	1425.3	1233.6	1194.2	956.2	890.0	650.4
80°	366.9	508.6	796.3	729.3	709.6	677.8	499.1	393.5	240.6	159.8	110.9
82.5°	243.1	252.5	353.0	305.9	286.1	236.3	152.9	90.2	71.2	60.2	57.5
85°	163.2	149.5	148.6	131.4	122.0	96.2	71.2	44.6	36.9	30.9	28.4
87.5°	9.4	6.0	8.6	9.4	6.8	6.0	4.3	0.0	0.9	0.0	0.9
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):

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9
2.5°	641.7	641.7	640.9	634.8	631.4	629.7	623.7	622.9	620.3	619.4	619.4
5°	640.9	637.4	633.1	624.5	616.0	608.2	605.6	599.7	595.4	590.2	590.2
7.5°	628.8	625.4	616.0	603.1	591.9	580.8	574.7	566.1	559.3	552.4	550.8
10°	615.1	609.9	597.0	579.9	565.2	545.5	537.7	526.7	519.0	508.6	498.3
12.5°	600.4	597.0	581.7	561.8	539.5	514.5	502.5	487.2	476.8	464.7	449.3
15°	594.5	587.6	567.9	542.9	515.4	485.4	468.2	451.8	436.5	422.7	402.0
17.5°	586.8	578.1	555.8	526.7	492.2	456.2	433.8	415.7	395.2	380.6	357.3
20°	578.1	565.2	541.2	506.0	467.4	424.4	396.1	378.0	350.5	335.9	308.4
22.5°	571.3	555.0	525.8	486.3	439.9	391.8	358.2	337.7	306.7	289.5	255.2
25°	569.5	549.9	514.5	469.9	416.6	360.0	319.5	299.0	260.3	240.6	200.1
27.5°	570.4	547.2	507.7	456.2	396.1	331.7	283.4	259.4	210.5	189.8	143.5
30°	571.3	548.1	500.9	444.1	377.2	302.4	245.7	217.4	158.9	140.9	99.6
32.5°	579.9	551.5	499.1	434.7	360.0	273.2	202.7	177.0	112.6	102.2	73.9
35°	590.2	562.7	502.5	433.1	347.0	244.0	158.9	132.3	80.8	78.2	60.2
37.5°	611.7	579.9	516.3	437.3	339.3	213.9	118.6	101.4	63.6	65.3	52.4
40°	644.4	609.1	538.6	450.2	338.5	183.8	87.7	79.1	55.0	56.8	48.1
42.5°	688.1	649.5	573.0	477.7	342.7	155.5	70.4	67.8	50.7	52.4	46.4
45°	745.8	706.2	621.1	512.9	354.8	132.3	61.8	61.8	49.0	50.7	45.5
47.5°	818.7	774.9	680.4	560.1	373.8	119.5	58.4	59.3	48.1	50.7	45.5
50°	901.2	853.1	756.0	621.1	402.9	116.0	59.3	59.3	49.0	50.7	45.5
52.5°	987.1	942.4	837.6	690.7	443.3	123.7	60.9	60.2	49.0	50.7	44.6
55°	1074.7	1034.4	927.8	772.4	499.1	151.3	65.3	62.7	49.0	50.7	45.5
57.5°	1162.4	1134.0	1022.3	859.9	568.6	201.0	82.5	73.0	54.1	55.0	46.4
60°	1261.1	1240.5	1128.8	975.1	667.5	278.4	121.1	92.0	64.4	60.9	49.9
62.5°	1389.2	1384.0	1295.5	1140.8	826.4	390.0	171.8	111.7	69.6	63.6	53.3
65°	1615.2	1628.9	1544.6	1335.0	932.1	392.6	167.5	97.9	65.3	60.2	52.4
67.5°	1841.9	1801.6	1585.0	1305.9	841.0	261.1	106.4	76.4	57.5	55.9	49.0
70°	1833.4	1723.3	1437.3	1141.7	664.0	141.8	77.3	63.6	51.6	51.6	46.4
72.5°	1644.3	1481.0	1175.3	903.8	443.3	90.2	65.3	55.9	47.3	46.4	43.0
75°	1238.0	1045.4	755.1	520.6	197.5	58.4	49.9	45.5	41.2	41.2	37.8
77.5°	582.6	328.2	182.2	121.1	66.1	39.5	34.3	34.3	33.5	34.3	30.9
80°	79.1	71.2	60.9	53.3	40.3	27.5	25.0	25.8	25.0	25.8	23.2
82.5°	48.1	43.0	35.2	33.5	25.0	19.0	18.1	19.0	17.2	18.1	13.7
85°	23.2	20.6	16.3	15.5	12.8	11.2	9.4	11.2	8.6	9.4	6.0
87.5°	0.0	1.8	0.9	1.8	1.8	1.8	0.0	1.8	0.0	1.8	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):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9	640.9
2.5°	615.1	612.6	611.7	608.2	607.3	603.9	603.1	599.7	593.6	591.1	586.8
5°	582.6	578.1	574.7	573.0	566.1	562.7	557.6	550.8	537.7	531.8	521.5
7.5°	537.0	536.1	525.8	522.4	513.7	507.7	500.0	488.8	469.9	458.8	442.4
10°	487.2	483.6	471.6	464.7	453.6	445.0	434.7	418.4	389.1	366.0	341.1
12.5°	440.7	430.4	416.6	406.3	392.6	380.6	368.6	343.6	297.2	259.4	225.0
15°	392.6	377.2	362.6	345.4	330.8	311.8	298.1	265.4	204.5	158.1	136.6
17.5°	343.6	322.1	305.9	282.7	266.3	240.6	225.9	186.4	133.9	113.4	106.4
20°	292.1	263.7	245.7	217.4	201.0	168.4	157.2	128.9	103.0	95.4	93.6
22.5°	237.2	202.7	183.0	152.0	140.9	121.1	112.6	98.8	86.8	83.4	85.1
25°	179.5	142.7	129.7	107.3	103.0	92.7	89.3	82.5	76.4	76.4	79.1
27.5°	128.0	99.6	96.2	82.5	81.7	76.4	73.9	70.4	68.7	70.4	73.9
30°	93.6	75.5	75.5	67.8	67.8	64.4	63.6	61.8	61.8	65.3	68.7
32.5°	73.9	61.8	63.6	57.5	58.4	55.9	56.8	55.9	56.8	59.3	61.8
35°	61.8	53.3	55.9	50.7	52.4	49.9	51.6	51.6	53.3	54.1	55.0
37.5°	55.0	49.0	50.7	47.3	49.0	46.4	49.0	49.0	49.9	49.9	49.9
40°	50.7	45.5	48.1	44.6	47.3	44.6	47.3	47.3	46.4	45.5	46.4
42.5°	48.1	44.6	47.3	43.7	46.4	43.7	45.5	44.6	43.0	43.0	43.0
45°	47.3	43.7	45.5	43.0	44.6	42.1	43.7	43.0	40.3	39.5	41.2
47.5°	47.3	43.0	45.5	42.1	43.7	41.2	43.0	40.3	37.8	37.8	40.3
50°	47.3	43.0	45.5	42.1	43.7	40.3	41.2	38.6	35.2	36.1	39.5
52.5°	48.1	44.6	46.4	43.0	43.7	38.6	40.3	36.9	34.3	35.2	37.8
55°	49.0	44.6	46.4	41.2	42.1	38.6	38.6	36.9	34.3	34.3	36.9
57.5°	49.0	43.7	44.6	40.3	41.2	36.9	37.8	36.1	33.5	32.7	34.3
60°	50.7	45.5	45.5	39.5	40.3	36.1	36.9	35.2	32.7	30.9	31.8
62.5°	52.4	46.4	47.3	41.2	41.2	36.9	37.8	34.3	30.9	29.3	30.0
65°	52.4	46.4	47.3	42.1	42.1	37.8	37.8	34.3	29.3	27.5	27.5
67.5°	49.9	45.5	46.4	42.1	42.1	37.8	37.8	33.5	28.4	25.8	25.0
70°	48.1	43.7	44.6	39.5	40.3	36.1	36.1	31.8	26.6	24.1	22.4
72.5°	43.7	40.3	40.3	36.9	36.1	31.8	31.8	29.3	25.0	21.5	19.8
75°	37.8	34.3	33.5	30.0	30.0	27.5	26.6	24.1	20.6	18.1	17.2
77.5°	30.9	26.6	26.6	22.4	22.4	19.8	20.6	18.1	15.5	14.6	13.7
80°	22.4	18.1	18.1	14.6	14.6	12.0	12.8	12.0	11.2	11.2	10.3
82.5°	13.7	9.4	10.3	7.7	9.4	6.8	7.7	6.8	6.8	6.0	6.0
85°	6.8	3.4	5.2	2.5	4.3	0.9	2.5	1.8	1.8	1.8	1.8
87.5°	0.9	0.0	0.9	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):

	175°	180°
0°	640.9	640.9
2.5°	582.6	585.1
5°	518.1	519.0
7.5°	439.9	438.1
10°	335.9	331.7
12.5°	216.5	210.5
15°	130.5	128.9
17.5°	104.8	104.8
20°	93.6	93.6
22.5°	86.8	86.8
25°	81.7	82.5
27.5°	77.3	77.3
30°	72.1	72.1
32.5°	63.6	63.6
35°	56.8	55.9
37.5°	50.7	51.6
40°	46.4	47.3
42.5°	44.6	44.6
45°	43.0	43.0
47.5°	43.0	43.0
50°	42.1	43.0
52.5°	41.2	41.2
55°	38.6	39.5
57.5°	36.1	36.9
60°	33.5	33.5
62.5°	30.0	30.0
65°	27.5	27.5
67.5°	24.1	24.1
70°	21.5	21.5
72.5°	19.0	19.0
75°	16.3	16.3
77.5°	13.7	12.8
80°	10.3	10.3
82.5°	6.0	6.0
85°	1.8	1.8
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)