

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: P228100

Luminaire Tested: **ISS-AF-350-LED-E1-SL2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228100
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29761)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISS-AF-350-LED-E1-SL2
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II W/SPILL CONTROL
Light Source: (16) 4000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2308.8 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G1

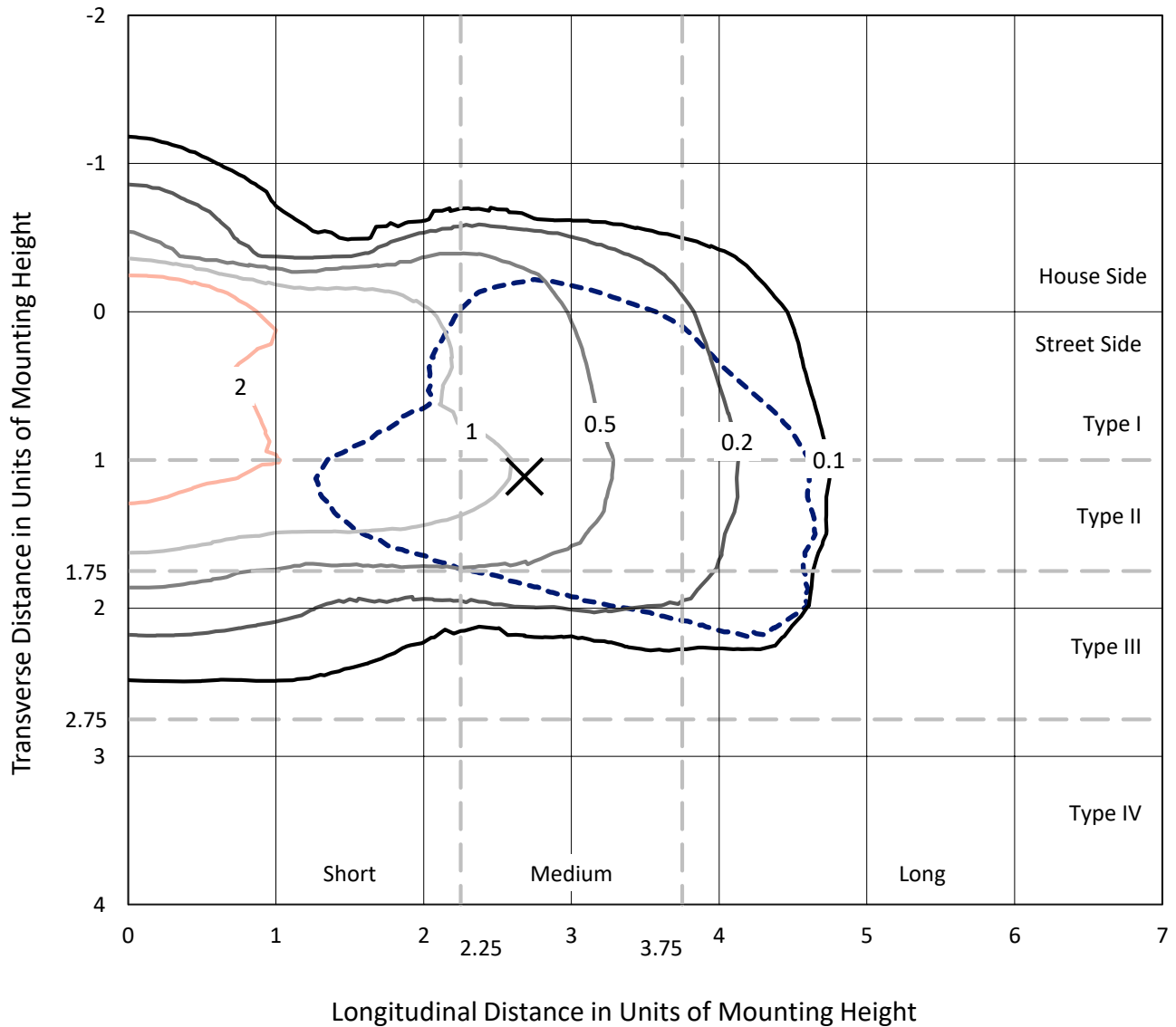
Input Watts (W): 20.09
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

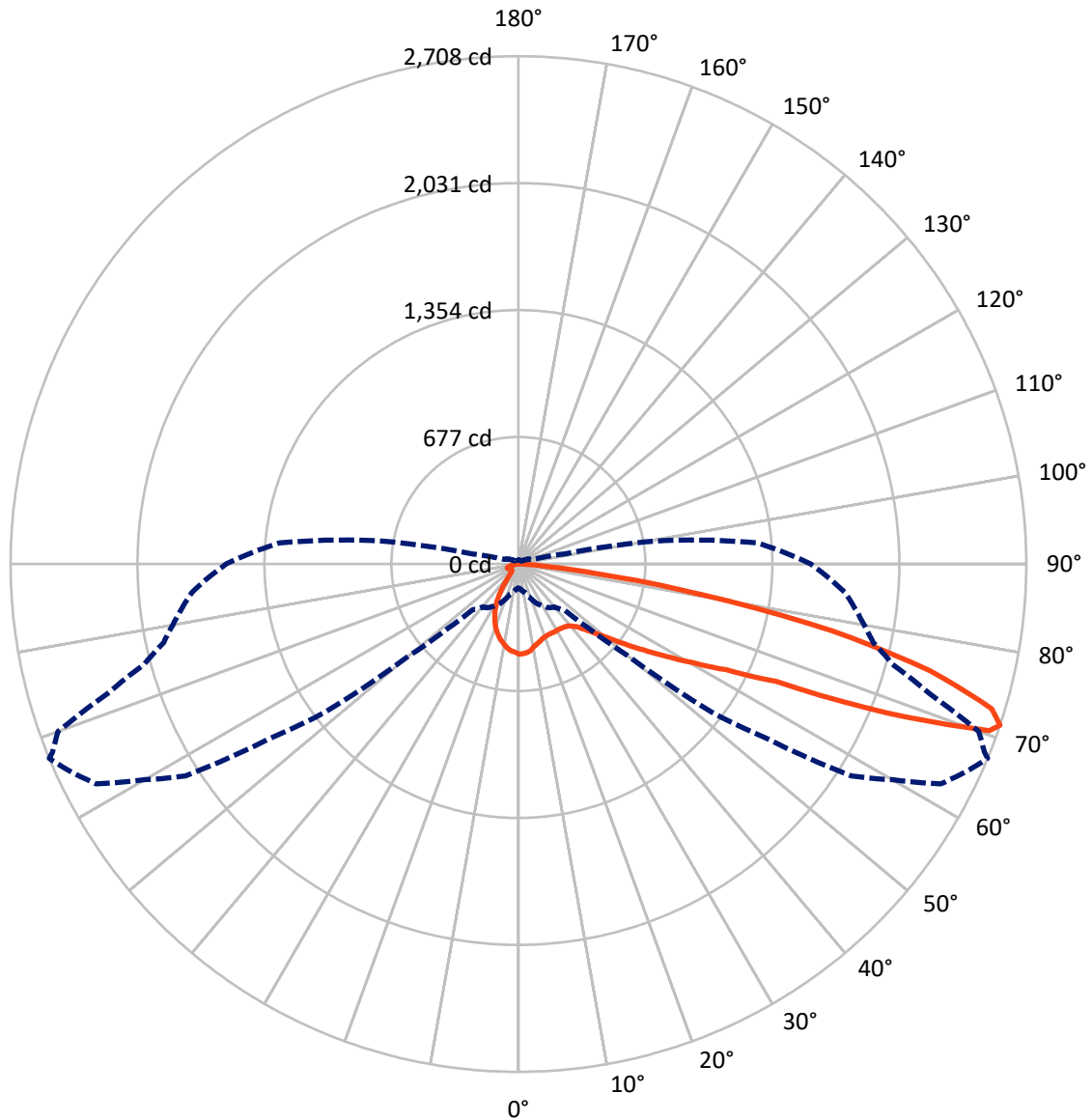
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.8 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	389.1	0.0	389.1
	% Fixture	16.9	0.0	16.9
Street Side	Lumens	1919.7	0.0	1919.7
	% Fixture	83.1	0.0	83.1
Total	Lumens	2308.8	0.0	2308.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.0	1.8
10°-20°	100.4	4.4
20°-30°	136.6	5.9
30°-40°	186.7	8.1
40°-50°	281.3	12.2
50°-60°	445.8	19.3
60°-70°	590.2	25.6
70°-80°	470.1	20.4
80°-90°	55.7	2.4
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°	2308.8	100.0
0°-180°	2308.8	100.0



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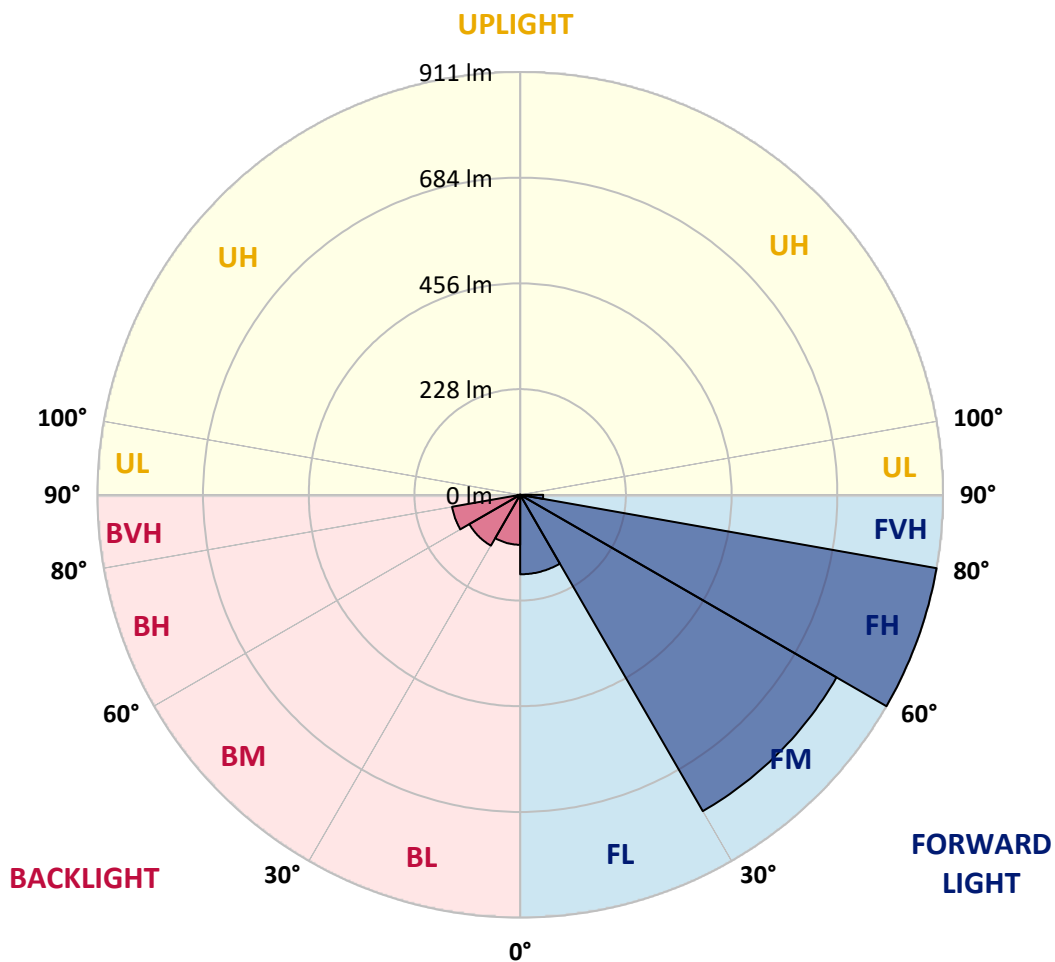
CATALOG NUMBER: ISS-AF-350-LED-E1-SL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	171.3	7.4			
FM (30°-60°)	787.3	34.1			
FH (60°-80°)	911.4	39.5			G1/1800
FVH (80°-90°)	49.7	2.2			G1/100
BL (0°-30°)	107.7	4.7	B0/110		
BM (30°-60°)	126.4	5.5	B0/220		
BH (60°-80°)	148.9	6.4	B1/500		G1/500
BVH (80°-90°)	6.0	0.3			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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	481.1	481.1	481.1	481.1	481.1	481.1	481.1	481.1	481.1	481.1	481.1
2.5°	472.3	470.7	470.7	473.1	477.1	473.8	476.3	476.3	477.1	479.6	480.3
5°	437.6	434.3	437.6	440.8	449.7	448.1	450.5	453.0	457.8	458.6	465.0
7.5°	406.2	404.6	407.0	413.5	424.7	421.5	424.7	427.9	433.6	436.0	442.4
10°	382.0	379.6	382.8	387.6	399.0	398.1	399.8	403.8	410.2	411.8	419.9
12.5°	364.3	364.3	365.9	372.4	382.0	381.2	386.1	388.4	394.0	395.7	404.6
15°	355.4	353.0	356.2	361.8	371.5	371.5	374.7	377.2	385.2	386.1	394.0
17.5°	347.4	348.1	348.9	355.4	364.3	362.6	366.7	368.3	377.2	375.5	385.2
20°	347.4	348.9	348.1	352.2	358.6	355.4	360.3	361.0	370.7	368.3	378.8
22.5°	357.0	358.6	356.2	355.4	357.8	355.4	357.8	359.5	366.7	365.1	374.7
25°	374.0	377.2	374.0	368.3	365.9	359.5	361.0	363.5	369.1	365.1	374.0
27.5°	400.5	402.9	397.3	391.7	380.4	373.2	370.7	369.9	376.3	369.9	377.2
30°	431.2	434.3	429.5	419.1	402.9	390.9	386.1	383.6	387.6	378.0	385.2
32.5°	464.2	467.4	464.2	456.1	434.3	416.6	410.2	404.6	407.7	394.9	398.1
35°	498.1	501.2	504.5	499.7	471.5	451.3	440.8	436.0	435.2	419.1	419.9
37.5°	527.8	531.1	541.6	546.4	520.6	493.2	483.5	473.1	473.8	451.3	451.3
40°	564.2	568.1	581.9	593.1	576.2	543.2	531.9	520.6	520.6	490.8	491.6
42.5°	613.3	618.2	627.0	642.3	636.7	602.8	590.8	575.4	577.0	541.6	540.7
45°	682.6	685.8	685.8	695.5	696.3	664.1	656.0	640.7	643.9	598.8	601.2
47.5°	772.8	768.8	752.7	758.3	764.8	731.0	723.7	714.0	718.1	669.7	674.5
50°	856.7	853.4	820.4	822.0	845.4	810.8	808.3	796.3	801.9	753.5	760.8
52.5°	888.1	882.5	849.5	867.2	932.4	913.1	917.1	911.4	914.7	863.2	861.5
55°	852.6	852.6	832.5	864.7	997.7	1008.2	1041.3	1054.2	1067.9	1016.2	1004.9
57.5°	754.3	760.8	764.0	821.2	987.2	1032.4	1095.3	1150.0	1220.2	1216.9	1233.9
60°	591.6	602.8	621.3	714.8	942.1	1016.2	1097.6	1179.9	1276.5	1338.6	1430.5
62.5°	415.0	424.7	440.1	504.5	810.8	938.0	1055.8	1182.2	1305.6	1403.1	1524.0
65°	282.0	291.7	324.0	359.5	489.2	674.5	854.3	1063.8	1251.6	1432.9	1595.7
67.5°	203.1	208.7	233.7	293.4	325.6	359.5	426.4	672.9	904.2	1269.3	1507.0
70°	152.3	157.9	180.6	246.6	286.1	294.9	311.1	354.6	413.5	713.2	1025.1
71°	127.4	135.4	162.8	232.1	284.5	291.7	299.0	324.8	344.1	504.5	760.8
72.5°	89.4	95.1	120.9	214.4	273.2	290.1	307.1	306.3	304.6	344.1	460.1
75°	57.2	57.2	57.2	120.9	291.7	281.3	287.8	322.3	304.6	289.3	303.0
77.5°	45.1	44.3	41.9	60.5	228.1	285.3	302.2	311.1	328.0	302.2	288.5
80°	33.9	33.0	33.0	37.8	105.6	184.5	255.4	283.7	295.7	321.5	293.4
82.5°	17.7	17.7	19.3	22.6	39.5	64.4	132.2	217.6	243.4	245.0	247.5
85°	5.6	4.8	6.4	10.4	16.9	21.0	37.0	87.9	130.5	157.9	166.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	3.3	5.6	7.3
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):

	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	68°	70°	72.5°	75°
0°	481.1	481.1	481.1	481.1	481.1	481.1	481.1	481.1	481.1	481.1	481.1
2.5°	477.9	481.1	478.7	481.9	477.9	482.7	478.7	481.1	481.9	478.7	482.7
5°	460.9	470.7	467.4	474.6	471.5	477.9	474.6	481.1	481.1	478.7	484.4
7.5°	440.1	449.7	450.5	457.8	457.8	465.9	465.9	472.3	475.5	475.5	483.5
10°	419.1	427.9	429.5	437.6	439.3	448.9	448.9	457.8	464.2	466.7	476.3
12.5°	402.9	414.2	414.2	423.1	421.5	436.0	437.6	445.7	452.1	457.8	470.7
15°	393.3	403.8	403.8	412.7	411.0	425.5	427.9	436.0	445.7	448.9	466.7
17.5°	383.6	394.0	391.7	403.8	402.9	419.1	417.5	429.5	437.6	442.4	462.6
20°	375.5	387.6	386.1	398.1	394.9	412.7	412.7	424.7	432.8	436.8	460.1
22.5°	371.5	384.4	381.2	393.3	390.9	408.6	408.6	420.6	429.5	436.0	459.4
25°	371.5	382.8	379.6	393.3	389.2	408.6	407.7	419.9	428.7	434.3	460.1
27.5°	373.2	384.4	382.0	394.9	391.7	408.6	410.2	420.6	429.5	436.0	461.8
30°	378.8	389.2	383.6	395.7	393.3	409.4	408.6	419.9	428.7	436.8	461.8
32.5°	390.9	396.5	389.2	399.8	394.9	411.0	411.0	419.1	429.5	439.3	461.8
35°	407.7	411.8	400.5	407.7	399.0	415.0	414.2	423.1	431.2	439.3	463.4
37.5°	432.0	436.8	419.1	425.5	411.0	423.9	420.6	431.2	439.3	444.1	471.5
40°	468.2	469.8	446.5	451.3	431.2	442.4	434.3	448.9	453.0	456.1	483.5
42.5°	512.6	514.1	484.4	487.5	461.8	471.5	457.8	473.1	478.7	477.9	507.7
45°	567.3	568.1	534.3	536.7	506.9	515.0	498.1	511.0	515.0	512.6	543.2
47.5°	627.0	633.4	595.6	598.8	567.3	571.4	550.4	565.0	565.0	562.5	593.9
50°	705.9	715.7	671.4	676.2	639.9	643.1	619.0	634.2	632.6	626.1	661.6
52.5°	804.3	813.1	766.4	772.8	734.2	735.8	705.9	723.7	718.8	708.4	749.5
55°	924.3	925.2	881.7	887.3	848.6	846.2	809.2	830.8	823.7	809.2	847.0
57.5°	1117.0	1093.6	1021.9	1020.3	978.4	975.2	927.6	954.2	942.1	911.4	961.5
60°	1427.2	1434.5	1251.6	1223.3	1145.2	1130.7	1067.9	1098.4	1083.9	1034.0	1083.1
62.5°	1602.1	1717.4	1706.1	1604.6	1403.1	1348.2	1241.9	1278.2	1240.3	1167.0	1212.9
65°	1731.9	1888.3	1978.5	2076.0	1985.8	1761.7	1510.3	1561.0	1468.3	1328.9	1373.3
67.5°	1780.2	1968.9	2159.0	2297.6	2392.0	2408.8	2117.9	2131.6	1903.5	1624.8	1630.4
70°	1527.2	1805.2	2177.6	2353.3	2540.2	2632.1	2662.7	2648.2	2500.7	2105.8	1955.2
71°	1294.2	1631.2	2103.4	2299.3	2538.7	2627.2	2707.9	2680.4	2611.9	2296.8	2065.5
72.5°	876.9	1300.0	1886.6	2134.9	2454.0	2518.5	2639.3	2591.0	2576.5	2439.5	2168.7
75°	412.7	647.9	1227.4	1603.0	2076.8	2138.9	2265.4	2205.8	2167.9	2214.6	2063.1
77.5°	303.8	353.8	673.7	996.1	1510.3	1598.2	1706.9	1633.6	1585.3	1631.9	1526.3
80°	276.4	278.0	348.9	525.5	901.0	953.4	994.5	934.9	861.5	858.3	760.8
82.5°	254.7	241.0	226.5	278.0	461.8	439.3	406.2	376.3	292.6	234.6	169.2
85°	162.0	177.3	161.2	152.3	183.7	151.5	120.1	115.3	81.4	54.8	50.7
87.5°	11.3	12.9	15.3	17.7	21.8	17.7	11.3	13.7	8.1	0.0	4.0
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):

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	481.1	481.1	481.1	481.1	481.1	481.1	481.1	481.1	481.1	481.1	481.1
2.5°	477.1	481.1	482.7	481.9	480.3	478.7	473.1	477.1	471.5	475.5	470.7
5°	479.6	485.2	486.0	484.4	482.7	479.6	469.8	475.5	469.0	472.3	465.0
7.5°	478.7	487.5	488.4	486.7	483.5	477.9	468.2	472.3	461.8	464.2	454.5
10°	474.6	487.5	488.4	484.4	479.6	470.7	459.4	460.9	450.5	450.5	437.6
12.5°	470.7	486.0	490.0	484.4	476.3	464.2	451.3	449.7	437.6	436.8	422.3
15°	470.7	487.5	493.2	486.0	473.8	457.0	441.6	438.4	424.7	420.6	404.6
17.5°	469.8	487.5	495.6	486.0	471.5	449.7	430.4	427.1	409.4	402.9	384.4
20°	469.0	489.2	497.3	484.4	464.2	440.8	419.1	412.7	393.3	382.8	361.0
22.5°	468.2	492.4	498.9	482.7	459.4	429.5	407.0	395.7	373.2	359.5	333.7
25°	472.3	496.4	499.7	481.1	452.1	417.5	393.3	378.0	353.0	335.2	304.6
27.5°	473.8	500.4	501.2	477.9	443.2	404.6	378.8	357.8	329.6	307.8	273.2
30°	478.7	501.2	498.9	471.5	432.8	388.4	361.8	336.0	304.6	276.4	235.3
32.5°	480.3	503.7	497.3	464.2	422.3	372.4	342.5	312.7	274.8	241.7	191.8
35°	483.5	505.3	495.6	460.1	411.0	355.4	322.3	288.5	245.0	203.1	145.9
37.5°	488.4	512.6	499.7	458.6	405.4	340.9	299.8	263.5	209.5	160.4	96.7
40°	500.4	527.0	506.9	460.9	401.3	328.8	278.0	237.7	169.2	118.5	66.9
42.5°	524.7	552.1	525.5	473.1	403.8	318.3	255.4	210.3	128.2	84.6	55.6
45°	560.9	584.3	556.1	493.2	413.5	312.7	234.6	182.1	91.9	67.7	50.7
47.5°	614.1	636.7	601.2	525.5	430.4	310.3	212.8	152.3	70.9	61.3	49.2
50°	684.3	710.8	666.5	576.2	461.8	312.7	189.3	124.1	62.1	59.6	48.4
52.5°	770.5	796.3	751.9	651.2	513.3	326.4	164.4	108.0	58.8	58.8	47.6
55°	868.0	904.2	860.7	755.1	593.1	356.2	149.0	102.4	58.8	59.6	46.7
57.5°	983.2	1013.8	975.2	855.1	689.1	405.4	150.7	108.0	58.8	59.6	45.9
60°	1096.0	1133.9	1089.5	982.4	798.6	479.6	183.7	137.0	61.3	62.1	45.9
62.5°	1213.7	1242.7	1206.5	1093.6	922.8	571.4	249.8	198.2	70.9	73.3	49.2
65°	1342.6	1390.2	1352.3	1259.7	1098.4	718.1	375.5	297.4	104.8	85.4	54.0
67.5°	1565.8	1585.3	1566.6	1482.1	1304.0	838.9	447.2	302.2	104.8	83.0	60.5
70°	1868.1	1824.5	1741.6	1583.6	1325.7	752.7	320.8	184.5	89.4	79.0	63.6
71°	1938.2	1871.3	1748.8	1558.7	1280.6	679.3	249.0	145.9	83.8	77.3	63.6
72.5°	1980.9	1881.0	1695.6	1485.3	1191.9	535.1	164.4	114.5	76.5	73.3	61.3
75°	1925.3	1740.8	1497.4	1285.4	976.0	278.0	103.1	87.1	65.3	63.6	53.2
77.5°	1528.8	1366.9	1104.9	934.1	627.8	123.3	74.2	66.1	51.6	49.9	41.1
80°	713.2	572.2	335.2	287.8	197.4	72.5	50.7	45.1	37.0	35.5	29.1
82.5°	129.7	97.5	75.8	73.3	66.1	42.8	29.8	27.4	23.3	22.6	18.5
85°	44.3	42.8	32.2	32.2	33.0	22.6	16.9	16.2	12.1	12.1	8.1
87.5°	0.8	4.0	4.0	5.6	4.8	4.0	1.6	2.5	0.8	2.5	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°	481.1	481.1	481.1	481.1	481.1	481.1	481.1	481.1	481.1	481.1	481.1
2.5°	474.6	468.2	473.8	468.2	471.5	465.0	469.0	466.7	466.7	464.2	462.6
5°	467.4	459.4	463.4	457.0	460.1	450.5	453.0	448.9	440.8	436.0	429.5
7.5°	457.0	444.9	448.1	438.4	440.8	427.9	430.4	423.1	407.7	398.1	388.4
10°	438.4	427.1	427.9	415.8	415.0	402.1	399.8	390.1	367.4	351.4	338.5
12.5°	419.9	407.0	405.4	390.9	388.4	373.2	369.9	354.6	321.5	290.1	270.0
15°	400.5	384.4	379.6	364.3	355.4	342.5	333.7	311.1	263.5	222.4	195.8
17.5°	378.8	357.8	350.6	332.9	320.0	300.6	287.8	257.1	195.8	151.5	133.0
20°	350.6	328.0	315.1	292.6	275.6	252.3	236.1	196.6	130.5	108.0	105.6
22.5°	319.2	292.6	276.4	248.3	227.3	202.2	176.5	133.0	92.7	87.9	91.0
25°	286.1	253.1	232.1	197.4	169.2	140.2	116.0	88.7	75.8	75.0	79.8
27.5°	246.6	208.7	178.9	137.8	112.0	89.4	79.0	70.1	64.4	65.3	70.1
30°	203.1	154.0	122.4	86.2	75.0	65.3	63.6	60.5	58.0	59.6	62.9
32.5°	151.5	98.3	79.0	62.1	61.3	55.6	57.2	55.6	54.8	55.6	58.0
35°	102.4	65.3	62.1	53.2	54.8	50.7	53.2	52.4	51.6	51.6	53.2
37.5°	70.9	54.0	55.6	49.2	51.6	48.4	50.7	49.9	49.2	48.4	49.2
40°	58.8	49.2	51.6	46.7	49.2	45.9	48.4	47.6	46.7	45.1	45.1
42.5°	54.0	46.7	49.2	44.3	47.6	43.5	46.7	45.1	43.5	41.9	42.8
45°	52.4	45.1	47.6	42.8	45.9	41.9	44.3	43.5	40.3	39.5	40.3
47.5°	50.7	44.3	46.7	41.9	44.3	40.3	42.8	41.1	37.8	37.0	37.8
50°	49.9	42.8	45.1	40.3	42.8	39.5	41.1	39.5	36.3	35.5	35.5
52.5°	49.2	41.9	44.3	38.7	41.1	36.3	38.7	37.0	33.9	33.0	33.0
55°	49.2	41.1	42.8	37.0	39.5	34.7	36.3	34.7	33.0	31.4	31.4
57.5°	48.4	39.5	41.9	35.5	37.0	33.0	34.7	33.0	30.6	29.8	29.8
60°	48.4	38.7	41.1	34.7	36.3	31.4	33.0	31.4	29.1	28.2	28.2
62.5°	50.7	40.3	41.9	35.5	36.3	31.4	32.2	29.8	27.4	27.4	26.6
65°	55.6	45.1	45.1	37.0	37.0	31.4	32.2	29.1	25.8	25.8	25.8
67.5°	60.5	49.9	49.2	39.5	38.7	31.4	31.4	27.4	24.1	24.1	24.1
70°	63.6	52.4	50.7	40.3	38.7	30.6	29.8	25.8	22.6	22.6	22.6
71°	62.9	52.4	49.9	39.5	37.0	29.1	29.1	25.0	21.8	21.8	21.0
72.5°	59.6	49.2	46.7	37.0	35.5	27.4	27.4	23.3	20.2	20.2	19.3
75°	50.7	41.9	39.5	31.4	29.8	24.1	23.3	19.3	17.7	16.9	16.9
77.5°	39.5	33.0	30.6	25.0	24.1	19.3	18.5	16.2	14.5	14.5	13.7
80°	28.2	23.3	21.8	16.9	15.3	12.9	13.7	12.1	11.3	11.3	10.4
82.5°	16.9	12.1	12.1	9.7	10.4	8.1	8.9	8.9	8.1	6.4	6.4
85°	8.9	5.6	7.3	4.0	5.6	2.5	4.0	3.3	3.3	2.5	2.5
87.5°	1.6	0.0	0.8	0.0	0.8	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°	481.1	481.1
2.5°	457.8	458.6
5°	426.4	427.9
7.5°	381.2	383.6
10°	327.2	328.8
12.5°	257.9	257.9
15°	180.6	182.1
17.5°	126.5	127.4
20°	106.4	107.2
22.5°	95.1	96.0
25°	84.6	85.4
27.5°	73.3	74.2
30°	66.1	66.9
32.5°	59.6	60.5
35°	54.0	54.0
37.5°	49.9	49.9
40°	45.9	45.9
42.5°	43.5	43.5
45°	41.1	41.1
47.5°	38.7	38.7
50°	36.3	37.0
52.5°	33.9	33.9
55°	31.4	31.4
57.5°	29.1	29.8
60°	27.4	27.4
62.5°	25.8	25.8
65°	25.0	25.0
67.5°	23.3	23.3
70°	21.8	21.8
71°	21.0	21.0
72.5°	19.3	19.3
75°	16.9	16.2
77.5°	13.7	13.7
80°	10.4	9.7
82.5°	6.4	5.6
85°	2.5	1.6
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)