

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: P228233

Luminaire Tested: **ISS-AF-350-LED-E1-SL3-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228233
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: ISS-AF-350-LED-E1-SL3-7050
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE III W/SPILL CONTROL
Light Source: (16) 5000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2220 lumens
Efficiency: N/A
Efficacy: 110.5 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

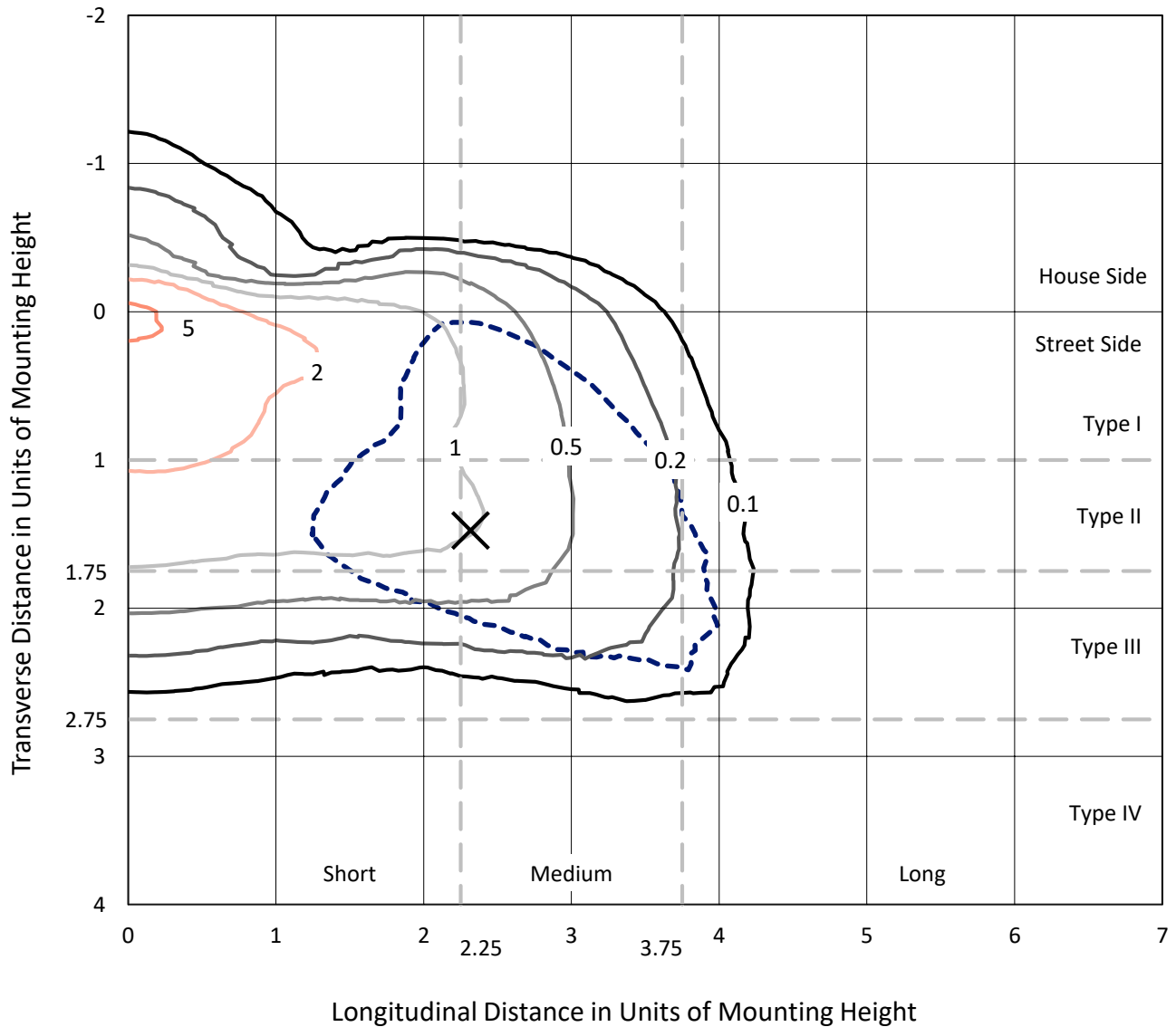
Input Watts (W): 20.09
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

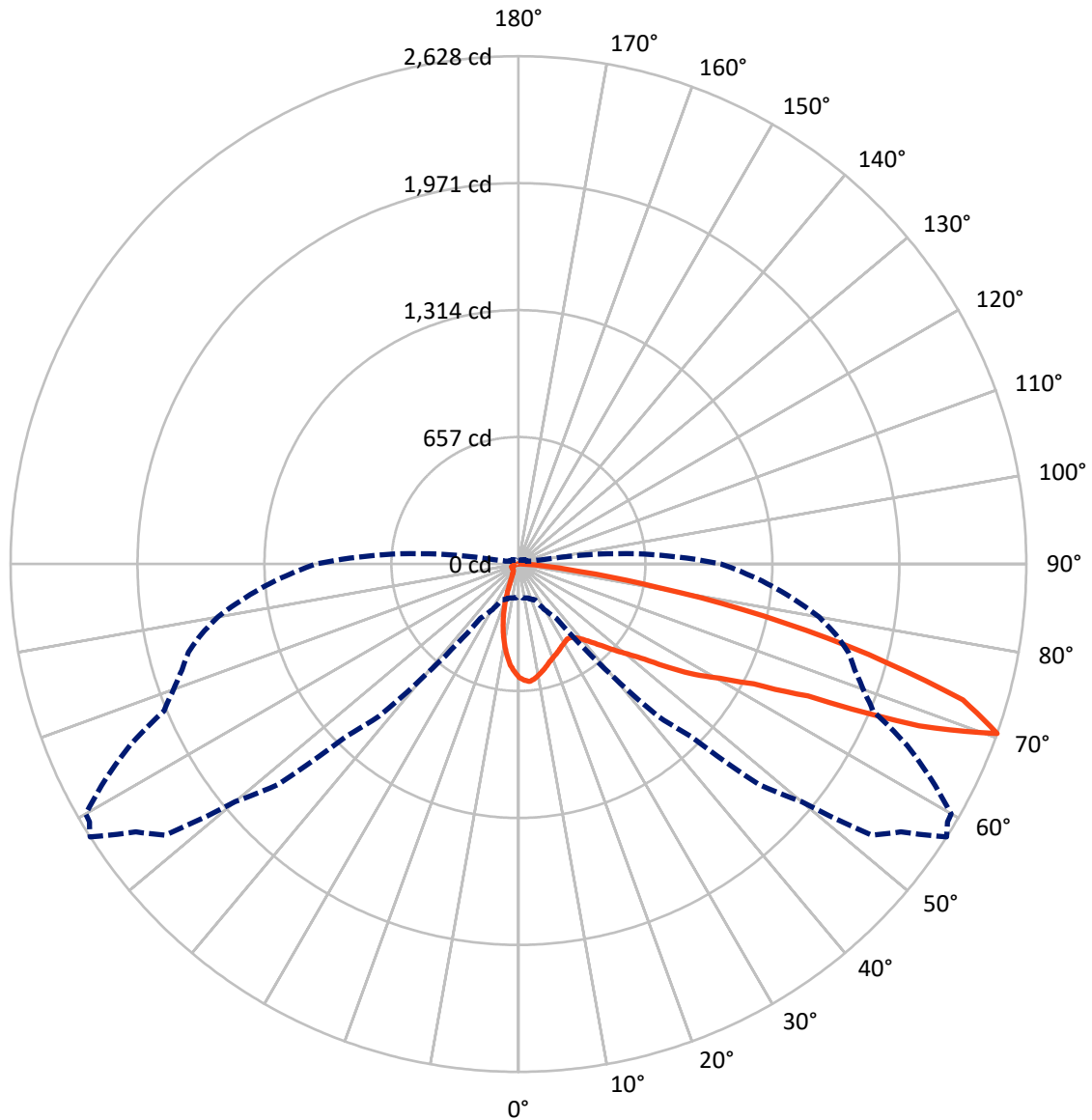
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.9 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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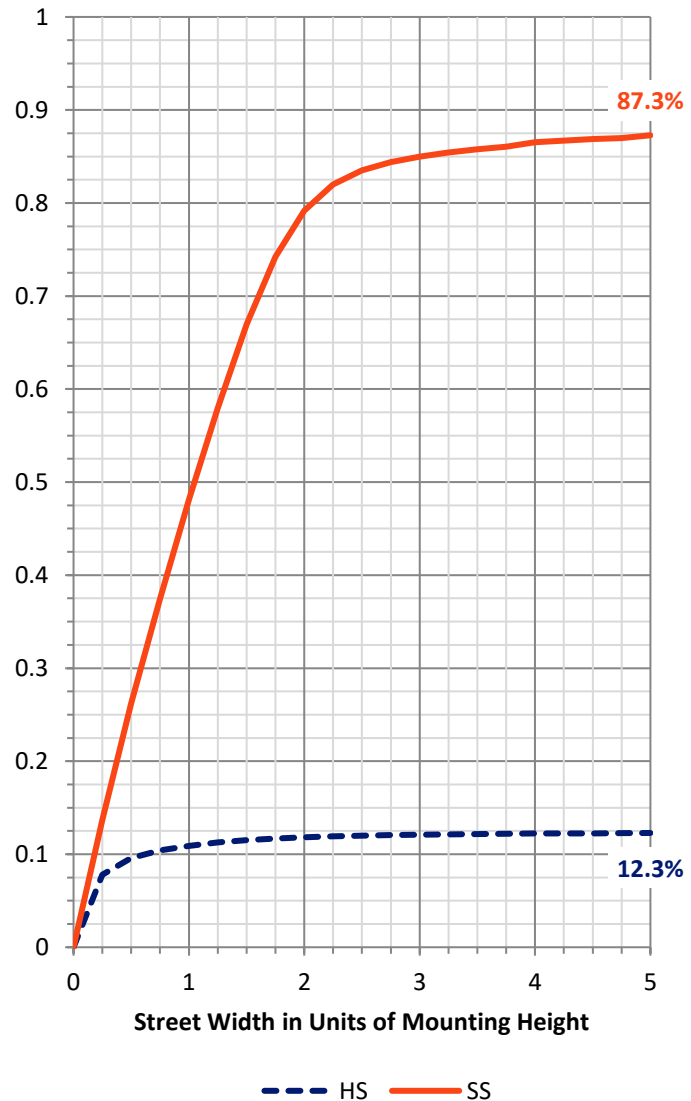
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	274.7	0.0	274.7
	% Fixture	12.4	0.0	12.4
Street Side	Lumens	1945.3	0.0	1945.3
	% Fixture	87.6	0.0	87.6
Total	Lumens	2220.0	0.0	2220.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.7	2.3
10°-20°	110.2	5.0
20°-30°	138.4	6.2
30°-40°	180.9	8.1
40°-50°	271.4	12.2
50°-60°	429.1	19.3
60°-70°	618.5	27.9
70°-80°	382.8	17.2
80°-90°	38.0	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°	2220.0	100.0
0°-180°	2220.0	100.0



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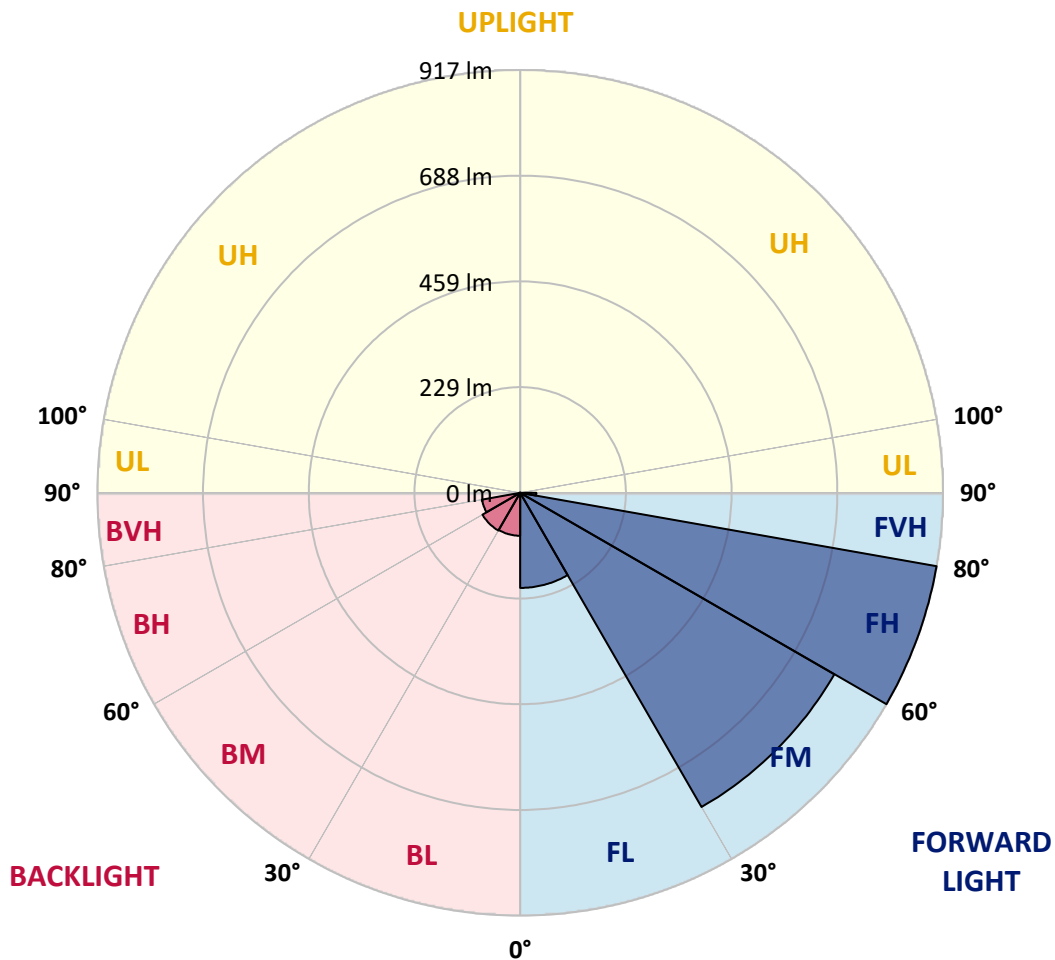
CATALOG NUMBER: ISS-AF-350-LED-E1-SL3-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	206.2	9.3			
FM	(30°-60°)	787.0	35.4			
FH	(60°-80°)	917.2	41.3			G1/1800
FVH	(80°-90°)	34.9	1.6			G1/100
BL	(0°-30°)	93.1	4.2	B0/110		
BM	(30°-60°)	94.5	4.3	B0/220		
BH	(60°-80°)	84.1	3.8	B0/110		G0/110
BVH	(80°-90°)	3.0	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°	587.6	587.6	587.6	587.6	587.6	587.6	587.6	587.6	587.6	587.6	587.6
2.5°	616.7	616.0	614.4	611.2	609.7	611.2	609.7	607.3	604.1	606.5	604.9
5°	615.2	616.7	613.6	611.2	615.2	616.7	613.6	613.6	610.4	613.6	612.0
7.5°	584.4	585.2	586.0	585.2	595.5	595.5	593.9	595.5	596.3	597.8	598.6
10°	545.9	546.6	548.2	550.6	563.2	564.8	565.5	567.1	569.5	571.1	575.8
12.5°	507.3	508.8	512.0	519.9	533.2	534.8	537.2	539.5	543.5	545.9	554.5
15°	475.0	475.7	478.9	487.6	507.3	511.2	512.8	515.9	523.8	523.8	533.2
17.5°	445.0	446.6	449.0	459.2	478.9	485.2	489.9	491.5	501.7	504.1	515.1
20°	422.2	423.0	423.8	433.2	451.3	460.8	464.7	471.0	478.9	485.2	494.7
22.5°	409.6	410.4	408.8	412.7	428.5	440.3	445.0	451.3	454.5	465.5	471.0
25°	410.4	411.2	407.2	404.9	412.7	425.3	429.3	435.6	434.0	449.8	449.8
27.5°	418.2	419.8	415.9	408.8	409.6	419.8	422.2	424.6	419.8	435.6	432.4
30°	434.0	435.6	430.9	425.3	416.7	423.0	423.0	423.0	414.3	427.7	422.2
32.5°	450.5	452.1	450.5	446.6	435.6	437.2	434.0	432.4	420.6	431.6	423.0
35°	475.0	475.7	476.5	476.5	460.8	463.9	455.3	450.5	439.5	448.2	436.4
37.5°	504.1	504.1	509.6	512.0	494.7	494.7	485.2	478.9	468.7	471.8	460.0
40°	530.1	532.5	545.1	552.2	536.4	530.1	522.2	516.7	508.8	508.8	497.0
42.5°	560.0	564.8	579.7	593.1	584.4	575.0	567.1	561.6	557.7	556.9	544.3
45°	597.0	602.6	619.1	631.7	634.1	627.0	620.7	615.2	612.0	610.4	599.4
47.5°	638.8	644.3	659.3	674.2	685.3	683.7	676.6	671.1	673.5	671.9	664.8
50°	685.3	688.4	697.9	715.2	740.4	745.9	744.3	740.4	745.1	745.1	738.8
52.5°	722.3	724.6	731.7	752.2	794.0	806.6	816.8	824.7	832.6	837.3	833.3
55°	756.2	756.2	756.9	782.9	845.2	865.6	888.5	905.0	915.3	934.2	942.0
57.5°	811.3	807.4	806.6	834.1	906.6	927.9	960.9	984.6	998.8	1037.4	1036.6
60°	795.5	797.1	825.5	906.6	1032.6	1051.5	1081.5	1106.7	1133.4	1161.8	1164.2
62.5°	686.1	690.0	732.5	853.8	1113.0	1211.4	1303.6	1373.7	1413.1	1438.3	1403.6
65°	480.5	489.9	547.4	695.5	1024.7	1176.8	1322.5	1484.7	1609.2	1802.2	1858.1
67.5°	239.4	246.5	256.0	364.7	765.6	979.1	1179.9	1401.3	1566.7	1850.2	2008.5
70°	171.7	174.9	182.0	204.8	342.6	512.8	749.1	1065.7	1260.3	1688.0	1911.7
72.5°	133.1	136.3	145.7	178.0	226.8	250.5	297.7	486.8	723.9	1165.7	1468.2
75°	103.2	107.9	121.3	160.7	218.2	231.6	233.9	251.3	286.7	517.5	823.1
77.5°	72.5	73.3	86.6	138.6	211.9	237.9	233.9	233.9	238.7	263.9	352.1
80°	48.0	48.8	57.5	96.1	185.9	216.6	239.4	228.4	229.2	233.1	239.4
82.5°	25.2	26.8	33.9	58.3	108.7	146.5	199.3	207.9	204.8	208.7	207.2
85°	7.1	7.1	11.8	22.1	53.6	56.7	88.2	120.5	122.9	139.4	148.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	3.2	7.1	7.9
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):

	52.5°	55°	57.5°	59°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	587.6	587.6	587.6	587.6	587.6	587.6	587.6	587.6	587.6	587.6	587.6
2.5°	606.5	603.3	602.6	601.0	601.8	599.4	598.6	595.5	595.5	593.9	592.3
5°	610.4	607.3	610.4	604.9	605.7	603.3	599.4	599.4	596.3	593.9	589.2
7.5°	599.4	599.4	600.2	597.0	597.8	597.0	592.3	591.5	586.8	586.8	581.3
10°	578.9	578.9	582.1	579.7	580.5	579.7	577.4	576.6	575.0	575.0	566.3
12.5°	555.3	560.0	564.8	562.4	562.4	564.0	564.0	564.8	564.0	563.2	556.1
15°	535.6	542.7	547.4	546.6	547.4	551.4	552.9	553.7	556.1	555.3	549.0
17.5°	517.5	525.4	529.3	532.5	534.8	538.0	542.7	545.1	548.2	547.4	541.1
20°	501.0	508.0	515.1	519.1	519.9	526.2	531.7	538.8	540.3	541.9	534.0
22.5°	483.6	489.9	504.1	501.7	507.3	519.1	522.2	532.5	532.5	538.0	526.9
25°	468.7	469.4	491.5	487.6	492.3	513.6	515.9	534.0	529.3	537.2	524.6
27.5°	453.7	452.9	479.7	475.0	480.5	509.6	511.2	536.4	531.7	541.1	524.6
30°	442.7	440.3	471.0	461.6	469.4	505.7	506.5	538.8	534.8	547.4	530.1
32.5°	440.3	436.4	463.1	456.1	463.9	501.7	506.5	547.4	542.7	558.5	536.4
35°	450.5	444.2	467.1	460.8	467.1	503.3	510.4	560.8	555.3	573.4	551.4
37.5°	469.4	464.7	483.6	477.3	482.0	514.3	520.6	578.1	577.4	599.4	574.2
40°	502.5	497.8	512.8	504.1	508.0	538.0	541.1	602.6	604.9	631.7	606.5
42.5°	547.4	539.5	551.4	541.1	546.6	573.4	570.3	632.5	639.6	676.6	647.5
45°	604.9	594.7	601.8	590.7	594.7	617.5	608.9	672.7	679.8	725.4	699.4
47.5°	667.9	655.3	664.0	649.8	652.2	676.6	660.8	720.7	731.7	789.2	764.0
50°	743.6	727.0	730.2	716.8	718.3	742.8	725.4	779.8	793.2	857.0	834.9
52.5°	840.4	816.8	816.8	798.7	799.5	823.9	802.6	849.9	864.9	929.4	914.5
55°	968.0	949.1	945.2	926.3	920.0	924.7	894.8	927.9	944.4	1005.1	993.2
57.5°	1069.6	1067.3	1079.1	1052.3	1046.0	1047.6	1009.8	1012.1	1031.1	1078.3	1082.2
60°	1193.3	1197.2	1198.8	1176.8	1174.4	1152.4	1113.8	1107.5	1131.1	1163.4	1176.0
62.5°	1390.2	1386.3	1366.6	1350.1	1335.1	1276.0	1254.7	1220.1	1253.2	1271.3	1297.3
65°	1813.2	1772.2	1646.2	1657.2	1617.9	1489.5	1471.4	1401.3	1453.2	1454.0	1502.9
67.5°	2232.2	2312.6	2235.4	2237.0	2148.0	1915.6	1859.7	1720.3	1749.4	1715.5	1740.7
70°	2303.9	2416.5	2627.6	2589.8	2585.1	2406.3	2218.1	1985.7	1898.3	1825.8	1767.5
72.5°	1982.5	2095.2	2404.7	2318.9	2351.2	2405.5	2209.4	2035.3	1840.0	1747.8	1621.8
75°	1395.0	1557.2	1871.5	1826.6	1850.2	1940.0	1771.5	1751.0	1524.9	1463.5	1269.7
77.5°	747.5	948.3	1300.4	1245.3	1255.5	1306.7	1131.1	1094.9	876.7	816.0	596.3
80°	336.3	466.3	730.2	668.7	650.6	621.5	457.6	360.7	220.5	146.5	101.6
82.5°	222.9	231.6	323.7	280.4	262.3	216.6	140.2	82.7	65.4	55.1	52.8
85°	149.7	137.1	136.3	120.5	111.8	88.2	65.4	41.0	33.9	28.4	26.0
87.5°	8.7	5.5	7.9	8.7	6.3	5.5	3.9	0.0	0.8	0.0	0.8
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°	587.6	587.6	587.6	587.6	587.6	587.6	587.6	587.6	587.6	587.6	587.6
2.5°	588.4	588.4	587.6	582.1	578.9	577.4	571.8	571.1	568.7	567.9	567.9
5°	587.6	584.4	580.5	572.6	564.8	557.7	555.3	549.8	545.9	541.1	541.1
7.5°	576.6	573.4	564.8	552.9	542.7	532.5	526.9	519.1	512.8	506.5	504.9
10°	564.0	559.2	547.4	531.7	518.3	500.2	493.1	482.8	475.7	466.3	456.8
12.5°	550.6	547.4	533.2	515.1	494.7	471.8	460.8	446.6	437.2	426.1	411.9
15°	545.1	538.8	520.6	497.8	472.6	445.0	429.3	414.3	400.1	387.5	368.6
17.5°	538.0	530.1	509.6	482.8	451.3	418.2	397.8	381.2	362.3	348.9	327.7
20°	530.1	518.3	496.2	463.9	428.5	389.1	363.1	346.6	321.4	308.0	282.8
22.5°	523.8	508.8	482.0	445.8	403.3	359.2	328.5	309.6	281.2	265.4	233.9
25°	522.2	504.1	471.8	430.9	382.0	330.0	293.0	274.1	238.7	220.5	183.5
27.5°	523.0	501.7	465.5	418.2	363.1	304.0	259.9	237.9	193.0	174.1	131.5
30°	523.8	502.5	459.2	407.2	345.8	277.3	225.3	199.3	145.7	129.2	91.4
32.5°	531.7	505.7	457.6	398.6	330.0	250.5	185.9	162.3	103.2	93.7	67.7
35°	541.1	515.9	460.8	397.0	318.2	223.7	145.7	121.3	74.0	71.7	55.1
37.5°	560.8	531.7	473.4	400.9	311.1	196.1	108.7	92.9	58.3	59.9	48.0
40°	590.7	558.5	493.9	412.7	310.3	168.6	80.3	72.5	50.4	52.0	44.1
42.5°	630.9	595.5	525.4	437.9	314.3	142.6	64.6	62.2	46.5	48.0	42.5
45°	683.7	647.5	569.5	470.2	325.3	121.3	56.7	56.7	44.9	46.5	41.7
47.5°	750.6	710.5	623.8	513.6	342.6	109.5	53.6	54.3	44.1	46.5	41.7
50°	826.3	782.1	693.1	569.5	369.4	106.3	54.3	54.3	44.9	46.5	41.7
52.5°	905.0	864.1	768.0	633.3	406.4	113.4	55.9	55.1	44.9	46.5	41.0
55°	985.4	948.3	850.7	708.1	457.6	138.6	59.9	57.5	44.9	46.5	41.7
57.5°	1065.7	1039.7	937.3	788.5	521.4	184.3	75.6	67.0	49.6	50.4	42.5
60°	1156.3	1137.4	1035.0	894.0	612.0	255.2	111.1	84.3	59.1	55.9	45.7
62.5°	1273.7	1268.9	1187.8	1046.0	757.7	357.6	157.5	102.4	63.8	58.3	48.8
65°	1480.8	1493.4	1416.2	1224.0	854.6	360.0	153.6	89.8	59.9	55.1	48.0
67.5°	1688.7	1651.7	1453.2	1197.2	771.1	239.4	97.7	70.1	52.8	51.2	44.9
70°	1680.9	1580.1	1317.8	1046.8	608.9	130.0	70.9	58.3	47.3	47.3	42.5
72.5°	1507.6	1357.9	1077.5	828.6	406.4	82.7	59.9	51.2	43.3	42.5	39.4
75°	1135.0	958.6	692.4	477.3	181.2	53.6	45.7	41.7	37.8	37.8	34.7
77.5°	534.0	300.9	167.0	111.1	60.7	36.2	31.5	31.5	30.7	31.5	28.4
80°	72.5	65.4	55.9	48.8	37.0	25.2	22.8	23.6	22.8	23.6	21.3
82.5°	44.1	39.4	32.3	30.7	22.8	17.3	16.5	17.3	15.8	16.5	12.6
85°	21.3	18.9	15.0	14.2	11.8	10.2	8.7	10.2	7.9	8.7	5.5
87.5°	0.0	1.6	0.8	1.6	1.6	1.6	0.0	1.6	0.0	1.6	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):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	587.6	587.6	587.6	587.6	587.6	587.6	587.6	587.6	587.6	587.6	587.6
2.5°	564.0	561.6	560.8	557.7	556.9	553.7	552.9	549.8	544.3	541.9	538.0
5°	534.0	530.1	526.9	525.4	519.1	515.9	511.2	504.9	493.1	487.6	478.1
7.5°	492.3	491.5	482.0	478.9	471.0	465.5	458.4	448.2	430.9	420.6	405.6
10°	446.6	443.5	432.4	426.1	415.9	408.0	398.6	383.6	356.8	335.5	312.7
12.5°	404.1	394.6	382.0	372.6	360.0	348.9	337.9	315.1	272.5	237.9	206.4
15°	360.0	345.8	332.4	316.6	303.3	285.9	273.3	243.4	187.5	144.9	125.2
17.5°	315.1	295.4	280.4	259.1	244.2	220.5	207.2	170.9	122.9	104.0	97.7
20°	267.8	241.8	225.3	199.3	184.3	154.4	144.1	118.1	94.5	87.4	85.9
22.5°	217.4	185.9	167.8	139.4	129.2	111.1	103.2	90.6	79.6	76.4	78.0
25°	164.6	130.8	118.9	98.5	94.5	85.1	81.9	75.6	70.1	70.1	72.5
27.5°	117.4	91.4	88.2	75.6	74.8	70.1	67.7	64.6	63.0	64.6	67.7
30°	85.9	69.3	69.3	62.2	62.2	59.1	58.3	56.7	56.7	59.9	63.0
32.5°	67.7	56.7	58.3	52.8	53.6	51.2	52.0	51.2	52.0	54.3	56.7
35°	56.7	48.8	51.2	46.5	48.0	45.7	47.3	47.3	48.8	49.6	50.4
37.5°	50.4	44.9	46.5	43.3	44.9	42.5	44.9	44.9	45.7	45.7	45.7
40°	46.5	41.7	44.1	41.0	43.3	41.0	43.3	43.3	42.5	41.7	42.5
42.5°	44.1	41.0	43.3	40.2	42.5	40.2	41.7	41.0	39.4	39.4	39.4
45°	43.3	40.2	41.7	39.4	41.0	38.6	40.2	39.4	37.0	36.2	37.8
47.5°	43.3	39.4	41.7	38.6	40.2	37.8	39.4	37.0	34.7	34.7	37.0
50°	43.3	39.4	41.7	38.6	40.2	37.0	37.8	35.4	32.3	33.1	36.2
52.5°	44.1	41.0	42.5	39.4	40.2	35.4	37.0	33.9	31.5	32.3	34.7
55°	44.9	41.0	42.5	37.8	38.6	35.4	35.4	33.9	31.5	31.5	33.9
57.5°	44.9	40.2	41.0	37.0	37.8	33.9	34.7	33.1	30.7	29.9	31.5
60°	46.5	41.7	41.7	36.2	37.0	33.1	33.9	32.3	29.9	28.4	29.1
62.5°	48.0	42.5	43.3	37.8	37.8	33.9	34.7	31.5	28.4	26.8	27.6
65°	48.0	42.5	43.3	38.6	38.6	34.7	34.7	31.5	26.8	25.2	25.2
67.5°	45.7	41.7	42.5	38.6	38.6	34.7	34.7	30.7	26.0	23.6	22.8
70°	44.1	40.2	41.0	36.2	37.0	33.1	33.1	29.1	24.4	22.1	20.5
72.5°	40.2	37.0	37.0	33.9	33.1	29.1	29.1	26.8	22.8	19.7	18.1
75°	34.7	31.5	30.7	27.6	27.6	25.2	24.4	22.1	18.9	16.5	15.8
77.5°	28.4	24.4	24.4	20.5	20.5	18.1	18.9	16.5	14.2	13.4	12.6
80°	20.5	16.5	16.5	13.4	13.4	11.0	11.8	11.0	10.2	10.2	9.5
82.5°	12.6	8.7	9.5	7.1	8.7	6.3	7.1	6.3	6.3	5.5	5.5
85°	6.3	3.2	4.7	2.4	3.9	0.8	2.4	1.6	1.6	1.6	1.6
87.5°	0.8	0.0	0.8	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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	175°	180°
0°	587.6	587.6
2.5°	534.0	536.4
5°	475.0	475.7
7.5°	403.3	401.7
10°	308.0	304.0
12.5°	198.5	193.0
15°	119.7	118.1
17.5°	96.1	96.1
20°	85.9	85.9
22.5°	79.6	79.6
25°	74.8	75.6
27.5°	70.9	70.9
30°	66.2	66.2
32.5°	58.3	58.3
35°	52.0	51.2
37.5°	46.5	47.3
40°	42.5	43.3
42.5°	41.0	41.0
45°	39.4	39.4
47.5°	39.4	39.4
50°	38.6	39.4
52.5°	37.8	37.8
55°	35.4	36.2
57.5°	33.1	33.9
60°	30.7	30.7
62.5°	27.6	27.6
65°	25.2	25.2
67.5°	22.1	22.1
70°	19.7	19.7
72.5°	17.3	17.3
75°	15.0	15.0
77.5°	12.6	11.8
80°	9.5	9.5
82.5°	5.5	5.5
85°	1.6	1.6
87.5°	0.0	0.0
90°	0.0	0.0

(END OF REPORT)