

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: P227569

Luminaire Tested: **ISS-AF-350-LED-E1-T2-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227569
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29758)
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-T2-8030
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-TYPE II
Light Source: (16) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1907 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B0 - U0 - G1

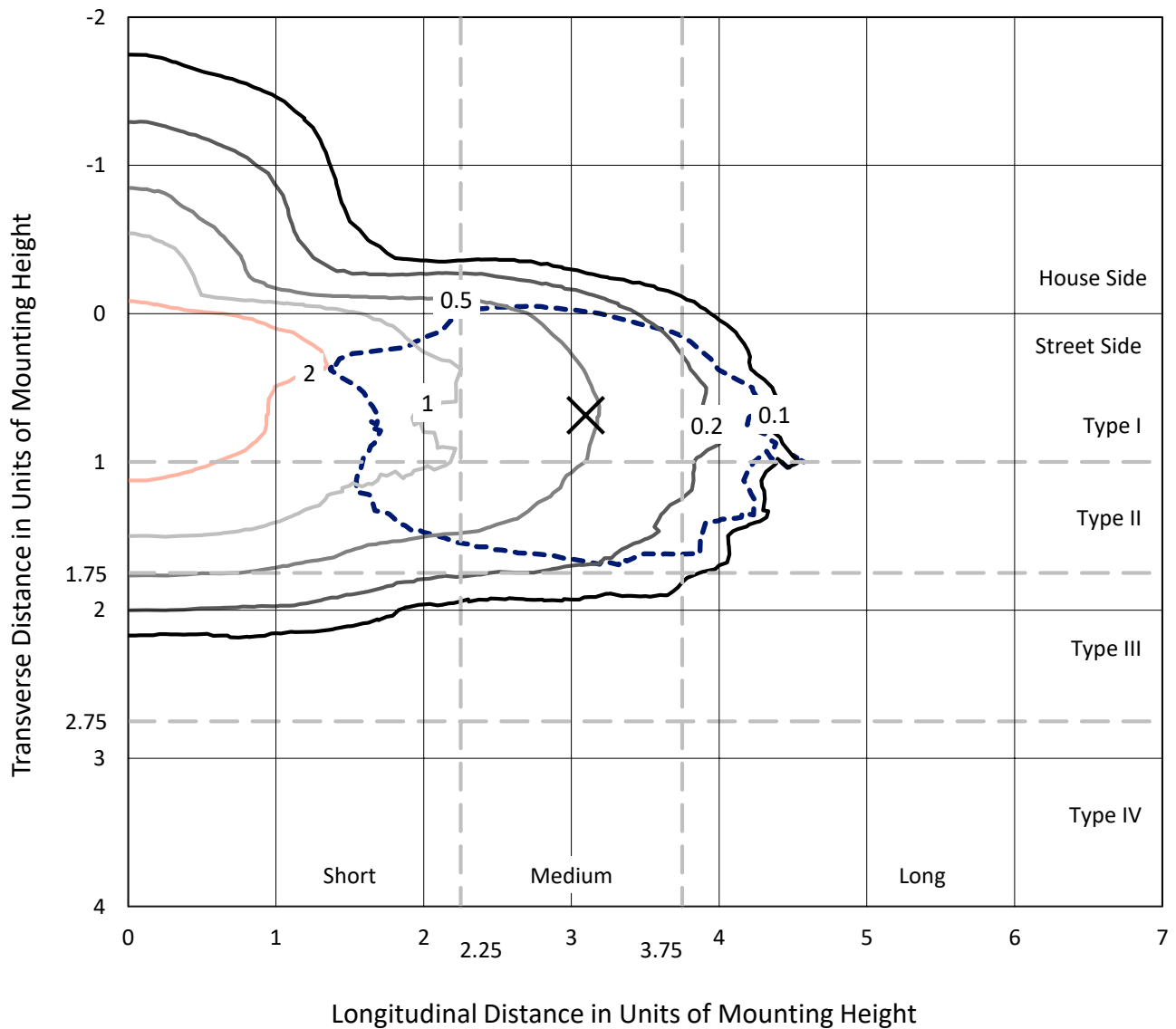
Input Watts (W): 20.09
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

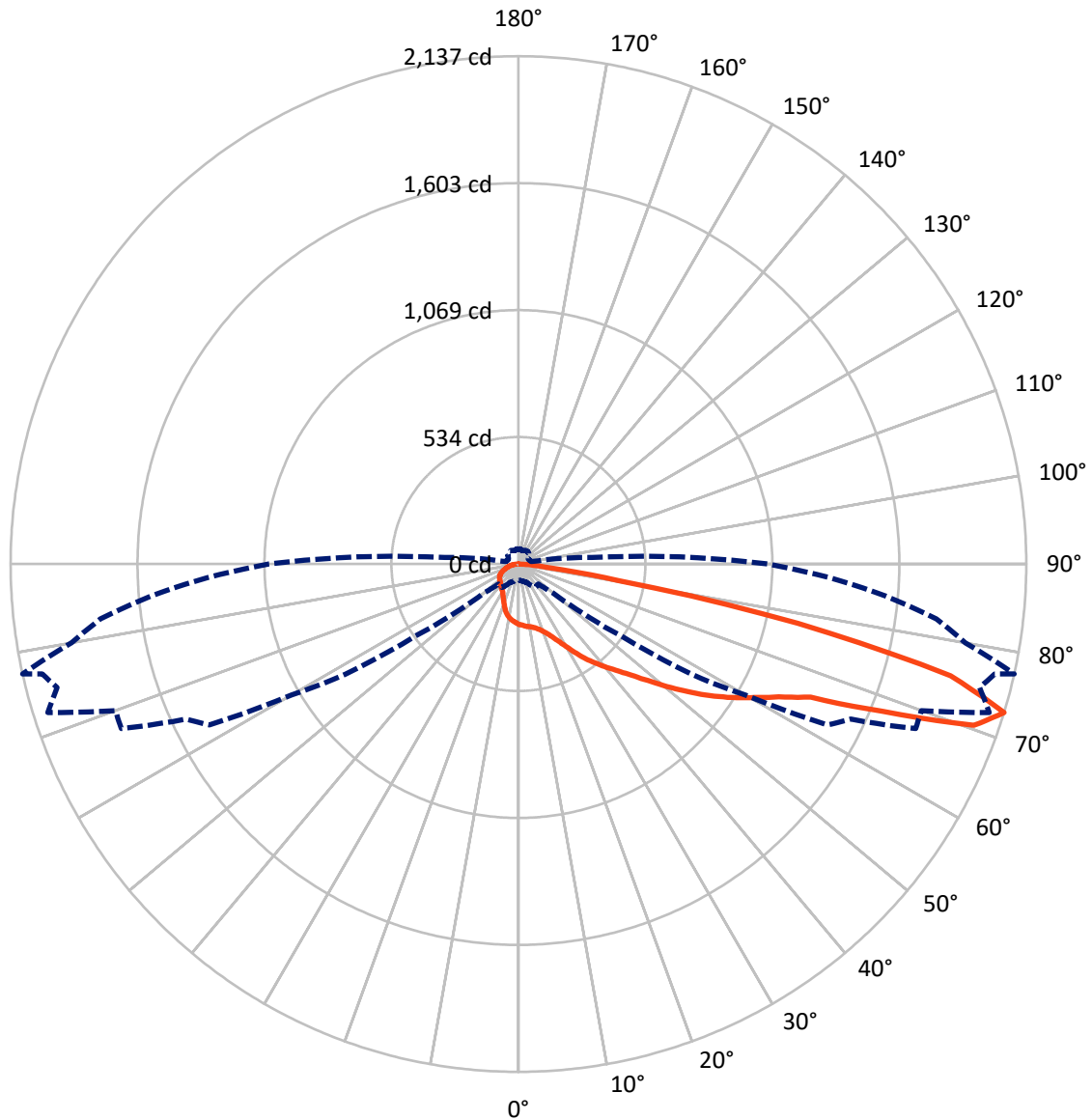
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.1 fc
 Type II - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	316.0	0.0	316.0
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	1591.0	0.0	1591.0
	% Fixture	83.4	0.0	83.4
Total	Lumens	1907.0	0.0	1907.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.6	1.2
10°-20°	72.5	3.8
20°-30°	128.7	6.8
30°-40°	204.0	10.7
40°-50°	306.0	16.0
50°-60°	396.5	20.8
60°-70°	450.5	23.6
70°-80°	299.0	15.7
80°-90°	26.1	1.4
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°	1907.0	100.0
0°-180°	1907.0	100.0



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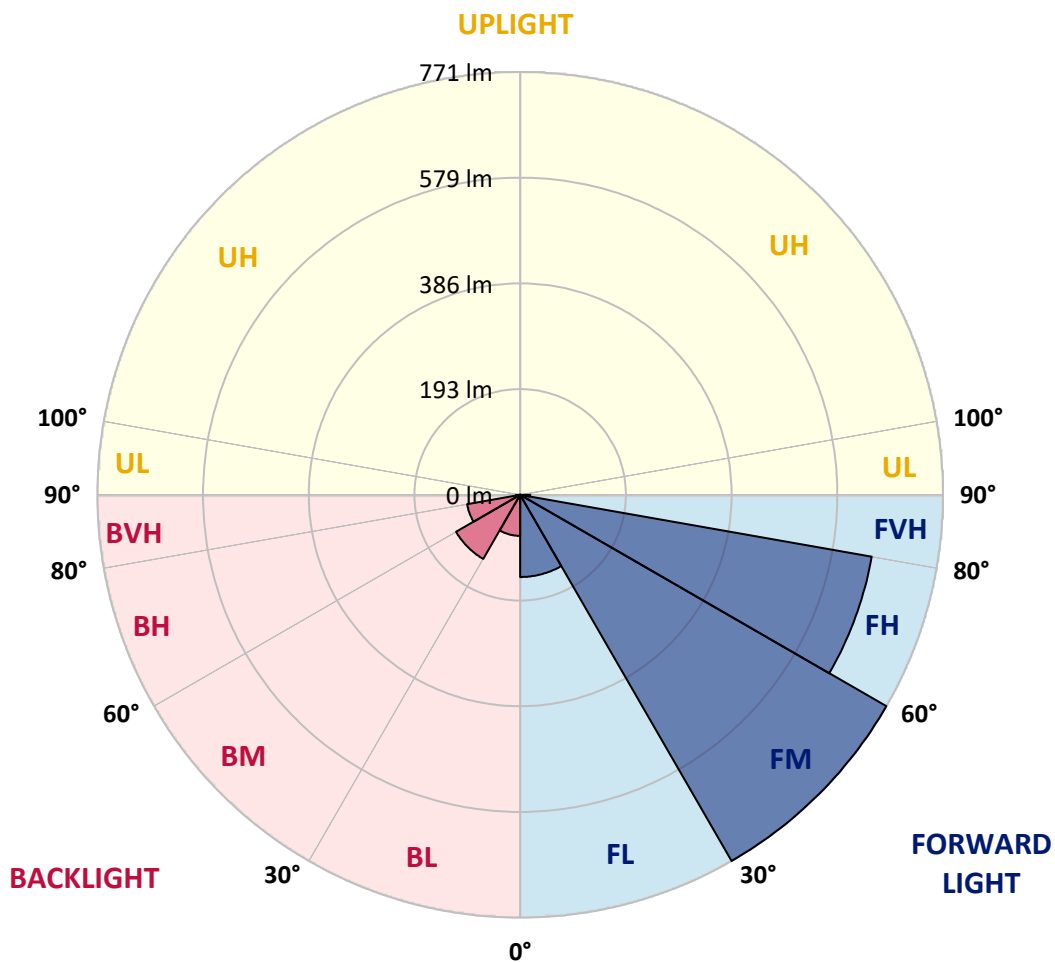
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	150.0	7.9			
FM (30°-60°)	771.5	40.5			
FH (60°-80°)	651.2	34.2			G0/660
FVH (80°-90°)	18.3	1.0			G1/100
BL (0°-30°)	74.9	3.9	B0/110		
BM (30°-60°)	135.0	7.1	B0/220		
BH (60°-80°)	98.3	5.2	B0/110		G0/110
BVH (80°-90°)	7.9	0.4			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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°	50°
0°	254.6	254.6	254.6	254.6	254.6	254.6	254.6	254.6	254.6	254.6	254.6
2.5°	275.8	274.6	273.9	272.6	271.3	270.7	268.8	267.5	269.4	268.8	268.8
5°	296.4	295.1	293.2	291.3	288.7	286.8	284.8	282.9	284.2	282.9	281.6
7.5°	313.1	311.8	309.3	307.3	304.8	302.2	299.6	299.0	297.7	295.8	295.1
10°	322.8	321.5	320.2	318.9	315.1	313.1	309.9	308.0	308.6	306.1	306.1
12.5°	331.8	330.5	329.8	329.8	326.6	324.7	323.4	321.5	322.8	318.9	317.6
15°	340.1	338.8	336.9	338.8	338.2	337.6	336.9	336.3	338.2	334.3	335.0
17.5°	353.6	353.0	349.1	346.6	347.2	349.1	350.4	349.8	349.8	347.8	348.5
20°	374.9	374.9	369.7	365.2	358.1	358.1	358.8	358.1	359.4	360.7	362.6
22.5°	390.9	389.6	387.7	383.9	376.1	369.7	369.7	367.1	369.1	369.7	373.6
25°	411.5	410.2	405.7	405.7	398.0	389.6	388.4	384.5	389.0	380.6	387.1
27.5°	436.6	435.3	429.5	426.9	423.1	412.8	410.2	410.9	415.4	403.1	409.6
30°	468.1	466.8	459.7	452.7	446.2	435.3	434.0	433.4	443.7	429.5	437.9
32.5°	508.0	508.0	500.2	490.6	477.7	462.9	457.8	458.4	472.6	457.2	471.3
35°	568.4	560.7	546.5	531.7	518.2	500.9	493.8	492.5	505.4	489.9	506.0
37.5°	607.0	601.8	589.0	578.0	563.2	546.5	541.4	543.3	554.2	531.7	554.9
40°	641.7	641.0	632.7	625.6	610.8	594.1	600.5	626.3	655.2	611.5	612.1
42.5°	664.8	666.1	665.5	666.1	657.8	640.4	651.3	687.3	736.8	711.1	687.3
45°	668.7	673.2	675.1	688.0	696.3	686.1	691.8	729.8	828.8	868.7	761.3
47.5°	678.3	682.8	679.0	694.4	733.0	732.3	755.5	769.6	783.1	789.6	870.6
50°	691.2	699.6	695.7	708.6	740.1	758.1	778.0	796.0	785.1	744.6	766.4
52.5°	691.8	701.5	722.7	735.6	766.4	762.6	776.1	766.4	783.1	741.4	762.6
55°	635.3	637.2	698.9	763.9	817.9	806.9	798.6	776.7	797.9	745.9	772.9
57.5°	545.9	552.3	616.6	725.9	841.7	851.3	848.7	846.8	863.5	794.1	823.7
60°	447.5	455.2	516.3	644.9	792.1	817.2	851.9	873.2	916.2	888.6	937.5
62.5°	279.1	284.8	352.4	513.1	698.9	748.4	799.2	824.3	886.7	899.5	982.5
65°	133.1	135.0	161.4	279.1	508.0	601.2	676.4	729.8	806.3	864.2	976.0
67.5°	103.5	104.2	113.8	148.5	260.4	322.8	408.3	479.0	560.7	718.8	857.7
70°	82.9	82.9	90.7	109.3	161.4	169.7	191.6	215.4	250.1	377.4	489.9
72.5°	69.4	69.4	74.6	86.2	119.6	121.5	120.2	118.3	118.3	149.2	190.3
75°	58.5	57.9	61.1	68.8	88.7	91.3	90.0	85.5	80.4	80.4	90.7
77.5°	47.6	47.6	50.2	54.0	64.3	65.6	65.6	61.7	57.2	57.9	62.4
80°	37.3	37.3	39.2	41.8	45.0	44.4	44.4	40.5	37.3	36.6	39.2
82.5°	27.0	27.6	32.1	30.2	28.9	27.0	27.0	26.4	23.8	21.9	23.1
85°	8.4	9.0	15.4	18.0	14.8	12.2	11.6	9.6	10.3	8.4	9.6
87.5°	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.6	0.0	0.6
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°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77°
0°	254.6	254.6	254.6	254.6	254.6	254.6	254.6	254.6	254.6	254.6	254.6
2.5°	265.5	266.8	264.3	264.3	261.0	263.0	259.8	260.4	257.2	258.5	258.5
5°	278.4	279.1	275.8	274.6	271.3	271.3	268.1	268.1	263.6	264.9	263.6
7.5°	290.6	290.6	287.4	284.8	281.6	280.3	276.5	274.6	270.7	270.0	268.1
10°	300.9	300.9	296.4	293.8	290.0	288.1	282.9	281.0	276.5	273.3	271.3
12.5°	313.8	312.5	307.3	304.8	298.3	297.7	290.0	288.7	282.3	280.3	277.1
15°	329.2	330.5	322.1	321.5	312.5	311.8	301.6	300.9	291.3	290.6	286.1
17.5°	345.9	348.5	341.4	340.8	329.8	329.8	317.6	317.0	304.1	303.5	297.7
20°	360.7	363.9	359.4	360.7	351.1	351.7	338.2	338.2	320.2	318.9	313.8
22.5°	374.2	380.6	376.8	383.9	374.2	378.7	360.7	363.9	342.7	340.1	332.4
25°	387.7	396.1	394.8	406.4	399.3	407.0	388.4	394.8	367.1	369.1	358.8
27.5°	401.2	412.1	410.9	427.6	425.0	440.4	424.4	431.4	401.2	403.1	391.6
30°	423.7	435.9	431.4	448.8	448.8	473.9	461.7	472.6	439.2	443.0	429.5
32.5°	453.9	468.1	454.6	477.1	475.8	508.6	498.9	517.6	484.8	489.9	473.2
35°	486.7	509.2	487.4	512.5	508.6	542.7	536.2	566.5	531.7	537.5	520.8
37.5°	529.8	556.8	527.9	549.7	532.4	571.6	567.7	608.9	573.5	588.3	568.4
40°	580.6	601.8	565.8	584.5	555.5	596.0	589.6	646.2	613.4	637.2	619.2
42.5°	627.5	642.3	594.8	617.9	583.2	624.3	612.8	680.9	652.6	689.3	669.3
45°	670.0	686.7	623.7	649.4	610.8	655.8	635.9	714.3	695.1	750.4	730.4
47.5°	730.4	706.0	650.0	683.5	640.4	689.9	663.6	753.6	746.5	824.9	801.8
50°	710.5	726.6	671.9	706.6	667.4	727.8	698.9	800.5	802.4	906.0	892.4
52.5°	712.4	739.4	688.6	736.8	698.9	780.6	750.4	857.1	866.1	984.4	965.7
55°	724.0	763.9	713.7	778.6	743.3	839.1	817.9	918.2	933.6	1058.3	1047.4
57.5°	752.9	808.2	756.8	841.7	805.0	906.0	886.7	981.2	1002.4	1132.3	1129.1
60°	864.2	929.7	839.7	933.6	884.7	981.8	956.1	1047.4	1068.6	1203.0	1211.4
62.5°	988.3	1102.1	1048.7	1146.4	1017.2	1115.6	1039.7	1129.1	1130.3	1278.9	1305.2
65°	1020.4	1195.3	1240.9	1422.9	1355.4	1456.3	1253.8	1313.6	1236.4	1417.1	1455.1
67.5°	1008.2	1222.3	1349.0	1554.1	1630.6	1806.8	1772.7	1752.1	1573.4	1703.2	1748.9
70°	740.1	967.0	1276.9	1485.3	1705.8	1821.5	2004.8	2023.4	2015.7	1997.7	2027.9
72.5°	336.9	528.5	864.2	1102.1	1466.0	1543.8	1809.3	1804.2	2076.8	2009.3	2056.9
75°	132.5	203.8	411.5	615.3	1014.0	1109.8	1410.7	1336.1	1676.2	1577.2	1678.8
77.5°	72.7	91.3	154.3	264.3	553.6	604.4	863.5	738.8	1039.7	868.0	902.1
80°	43.7	54.7	70.7	100.3	235.3	248.8	368.4	297.1	425.0	322.8	313.1
82.5°	23.8	29.6	35.4	49.5	87.4	97.1	127.3	114.4	136.3	116.4	113.8
85°	9.6	12.9	13.5	19.9	28.9	33.4	40.5	43.7	53.4	48.9	47.6
87.5°	0.0	0.6	0.0	1.3	0.0	1.3	0.0	1.9	1.9	3.2	3.9
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°	82.5°	85°	87.5°	90°	95°	100°	102.5°	105°	107.5°
0°	254.6	254.6	254.6	254.6	254.6	254.6	254.6	254.6	254.6	254.6	254.6
2.5°	256.5	258.5	255.9	255.9	252.7	254.6	252.7	250.8	247.5	248.2	243.7
5°	261.0	262.3	259.1	257.8	255.9	255.3	251.4	247.5	243.0	243.0	237.9
7.5°	265.5	265.5	261.0	261.0	256.5	255.3	249.5	243.0	236.6	236.0	228.3
10°	268.1	267.5	261.7	261.7	255.3	254.6	247.5	237.9	228.9	226.3	215.4
12.5°	273.3	272.6	265.5	264.3	255.9	255.9	245.6	232.8	219.9	215.4	200.0
15°	279.7	280.3	272.0	270.0	260.4	259.8	245.6	226.3	209.0	201.9	183.2
17.5°	290.0	290.6	279.1	277.1	265.5	263.6	246.3	218.6	194.2	186.5	169.7
20°	303.5	301.6	286.1	285.5	270.0	268.1	245.6	207.0	179.4	171.7	156.9
22.5°	320.2	318.3	298.3	296.4	278.4	275.2	245.0	194.8	165.9	157.5	147.9
25°	343.3	340.8	316.3	313.8	291.3	286.1	244.3	182.0	154.3	147.9	142.1
27.5°	372.3	367.1	337.6	335.0	304.8	298.3	241.8	167.2	142.7	138.2	135.7
30°	407.0	402.5	364.6	360.7	322.8	314.4	239.2	153.7	134.4	132.5	130.5
32.5°	448.2	443.7	397.4	392.9	345.9	333.7	234.7	142.7	129.2	129.2	126.7
35°	491.2	487.4	432.7	429.5	371.6	355.6	228.9	133.1	124.7	124.7	122.2
37.5°	529.8	533.0	471.3	468.7	397.4	377.4	222.5	126.7	120.9	119.6	117.0
40°	571.6	579.3	507.3	509.2	424.4	400.6	214.8	121.5	116.4	115.1	114.4
42.5°	614.0	628.8	545.2	552.3	451.4	424.4	209.0	118.3	114.4	111.9	111.2
45°	666.8	688.0	592.2	605.7	482.9	453.3	207.0	114.4	108.7	105.4	103.5
47.5°	732.3	760.6	650.0	665.5	524.7	488.0	210.9	113.2	104.8	100.9	97.1
50°	810.1	837.2	718.8	725.3	571.6	526.0	219.3	115.1	103.5	97.7	91.9
52.5°	892.4	913.0	791.5	784.4	620.5	563.2	228.9	115.7	100.3	94.5	87.4
55°	977.3	988.9	859.0	840.4	664.8	600.5	241.8	115.1	97.7	91.3	82.3
57.5°	1060.3	1064.1	918.8	900.8	708.6	644.9	257.8	113.2	93.9	87.4	77.8
60°	1141.3	1147.7	985.0	968.3	756.1	702.1	281.0	109.9	88.7	84.2	73.9
62.5°	1230.0	1251.2	1064.1	1066.7	821.7	791.5	324.7	106.1	83.6	78.4	68.2
65°	1350.9	1431.9	1194.6	1255.1	947.7	960.0	408.3	95.2	76.5	70.1	63.0
67.5°	1653.7	1742.5	1511.6	1536.1	1242.9	1170.2	461.0	81.0	67.5	63.0	58.5
70°	2033.1	1969.4	1805.5	1657.6	1415.2	1203.0	405.7	68.2	59.8	57.2	54.7
72.5°	2137.2	1909.0	1774.0	1552.1	1308.5	1049.3	310.6	58.5	53.4	52.1	50.2
75°	1878.1	1547.6	1555.4	1233.2	1084.7	799.9	212.2	50.2	46.3	45.7	45.0
77.5°	1201.1	795.4	968.3	609.5	626.3	370.4	103.5	41.8	39.9	39.9	38.6
80°	426.9	264.9	299.6	192.2	174.9	117.7	55.9	33.4	32.1	32.8	32.1
82.5°	128.0	101.6	99.7	77.8	60.4	49.5	30.9	25.7	24.4	25.1	23.8
85°	51.4	39.9	33.4	25.7	21.2	19.3	16.7	17.4	15.4	16.7	14.8
87.5°	3.2	2.6	1.9	2.6	0.0	1.3	3.2	2.6	0.6	2.6	1.9
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):

	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°
0°	254.6	254.6	254.6	254.6	254.6	254.6	254.6	254.6	254.6	254.6	254.6
2.5°	246.9	242.4	244.3	242.4	243.7	239.8	241.1	237.9	237.9	237.3	234.0
5°	238.5	234.0	233.4	228.9	229.5	224.4	223.8	218.0	218.0	212.8	203.2
7.5°	227.0	219.9	219.3	210.3	209.6	202.5	200.0	193.5	192.9	187.1	181.3
10°	212.2	201.3	199.3	187.7	188.4	180.7	180.0	175.5	175.5	173.0	173.0
12.5°	195.5	183.2	182.0	173.0	173.6	168.5	169.1	166.5	167.8	169.1	173.6
15°	180.0	170.4	169.1	163.3	164.0	162.7	164.6	164.6	166.5	169.7	177.5
17.5°	167.2	158.8	159.5	156.9	159.5	158.8	162.7	162.0	165.9	169.7	179.4
20°	155.6	151.1	153.0	152.4	155.6	155.6	158.8	159.5	162.7	167.8	178.7
22.5°	147.9	146.6	148.5	148.5	151.1	151.7	155.0	156.9	158.8	164.0	173.6
25°	143.4	142.7	144.7	145.3	147.2	147.9	151.1	151.1	154.3	157.5	162.7
27.5°	137.0	135.7	138.2	138.2	140.8	140.2	144.0	142.7	146.0	147.2	148.5
30°	132.5	130.5	132.5	131.8	133.7	131.8	133.7	131.8	133.7	133.7	131.8
32.5°	128.0	126.0	126.7	124.1	126.0	123.5	124.1	121.5	122.8	121.5	122.2
35°	123.5	120.9	120.9	117.7	117.7	114.4	115.7	113.2	115.7	117.7	117.0
37.5°	117.0	115.1	115.1	112.5	113.8	112.5	115.1	113.8	114.4	111.9	107.4
40°	113.2	114.4	113.8	115.7	114.4	112.5	110.6	106.7	106.1	104.8	102.2
42.5°	107.4	108.7	105.4	108.0	106.1	106.7	105.4	103.5	102.2	100.9	98.4
45°	99.0	99.0	96.4	100.3	98.4	102.2	100.9	100.9	99.7	97.7	95.8
47.5°	91.9	92.6	90.0	93.2	91.9	97.1	96.4	98.4	98.4	97.1	91.9
50°	87.4	86.2	84.2	87.4	86.8	91.3	91.9	95.8	95.2	95.8	91.3
52.5°	83.6	81.0	79.1	81.0	81.0	84.9	86.2	90.7	91.3	92.6	90.0
55°	79.1	75.9	74.6	75.9	75.9	79.7	81.7	84.9	86.8	90.7	89.4
57.5°	75.2	70.7	69.4	70.7	71.4	75.2	77.2	80.4	82.9	88.1	87.4
60°	70.7	66.9	65.6	67.5	68.2	72.0	73.9	77.2	79.1	84.9	84.9
62.5°	65.6	62.4	62.4	63.0	64.3	68.2	69.4	73.9	74.6	81.7	82.3
65°	61.1	59.2	59.2	59.8	61.1	64.3	64.9	69.4	70.1	77.2	79.1
67.5°	57.2	55.9	55.9	56.6	57.2	59.8	60.4	64.9	66.2	72.7	75.9
70°	53.4	52.1	51.4	51.4	53.4	55.3	56.6	61.1	61.7	67.5	71.4
72.5°	48.9	47.6	47.6	46.9	48.9	50.2	52.7	55.3	56.6	62.4	64.9
75°	44.4	43.1	43.1	42.4	43.7	46.3	46.9	49.5	50.2	55.3	57.9
77.5°	38.6	37.3	37.3	37.3	38.6	39.2	39.9	42.4	43.7	48.2	50.8
80°	32.1	30.9	31.5	30.9	32.8	30.2	32.1	34.7	36.0	38.6	37.3
82.5°	24.4	22.5	23.1	23.1	23.8	21.9	23.1	24.4	25.7	27.6	27.0
85°	15.4	13.5	14.8	13.5	14.8	12.9	14.1	14.1	15.4	14.1	13.5
87.5°	3.2	1.3	3.2	1.3	3.9	0.0	1.9	0.0	1.3	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):

	155°	165°	175°	180°
0°	254.6	254.6	254.6	254.6
2.5°	230.8	228.3	227.0	226.3
5°	198.0	193.5	192.2	191.0
7.5°	178.1	176.8	176.8	176.2
10°	174.2	176.2	176.8	176.8
12.5°	178.7	182.0	184.5	184.5
15°	184.5	190.3	193.5	193.5
17.5°	189.0	196.8	200.0	200.6
20°	189.7	197.4	201.9	202.5
22.5°	183.9	189.0	192.2	192.2
25°	169.1	171.7	173.6	173.6
27.5°	150.5	149.8	149.2	151.7
30°	131.2	129.9	127.3	129.9
32.5°	124.1	119.6	113.2	115.1
35°	113.2	111.9	108.7	109.3
37.5°	109.3	120.2	119.6	120.2
40°	104.8	118.3	117.7	119.0
42.5°	100.9	108.7	100.9	101.6
45°	93.9	97.1	90.7	90.7
47.5°	90.7	89.4	86.8	86.2
50°	88.1	88.1	86.8	85.5
52.5°	86.2	84.9	89.4	88.7
55°	83.6	82.3	85.5	85.5
57.5°	81.7	78.4	83.6	83.6
60°	79.7	76.5	81.7	81.7
62.5°	78.4	74.6	81.0	80.4
65°	76.5	72.7	81.0	79.7
67.5°	73.9	68.8	79.7	77.8
70°	68.8	64.3	75.2	70.1
72.5°	63.7	58.5	64.3	59.8
75°	55.9	51.4	52.1	51.4
77.5°	46.9	41.8	40.5	41.2
80°	35.4	32.1	30.9	30.9
82.5°	25.7	21.9	22.5	18.6
85°	11.6	8.4	6.4	6.4
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)