

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: P228618

Luminaire Tested: **ISS-AF-450-LED-E1-SLR-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P228618
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29764)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISS-AF-450-LED-E1-SLR-7050
Description: IMPACT ELITE LED QUATER SPHERE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-90° SPILL LIGHT ELIMINATOR RIGHT
Light Source: (16) 5000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2498 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

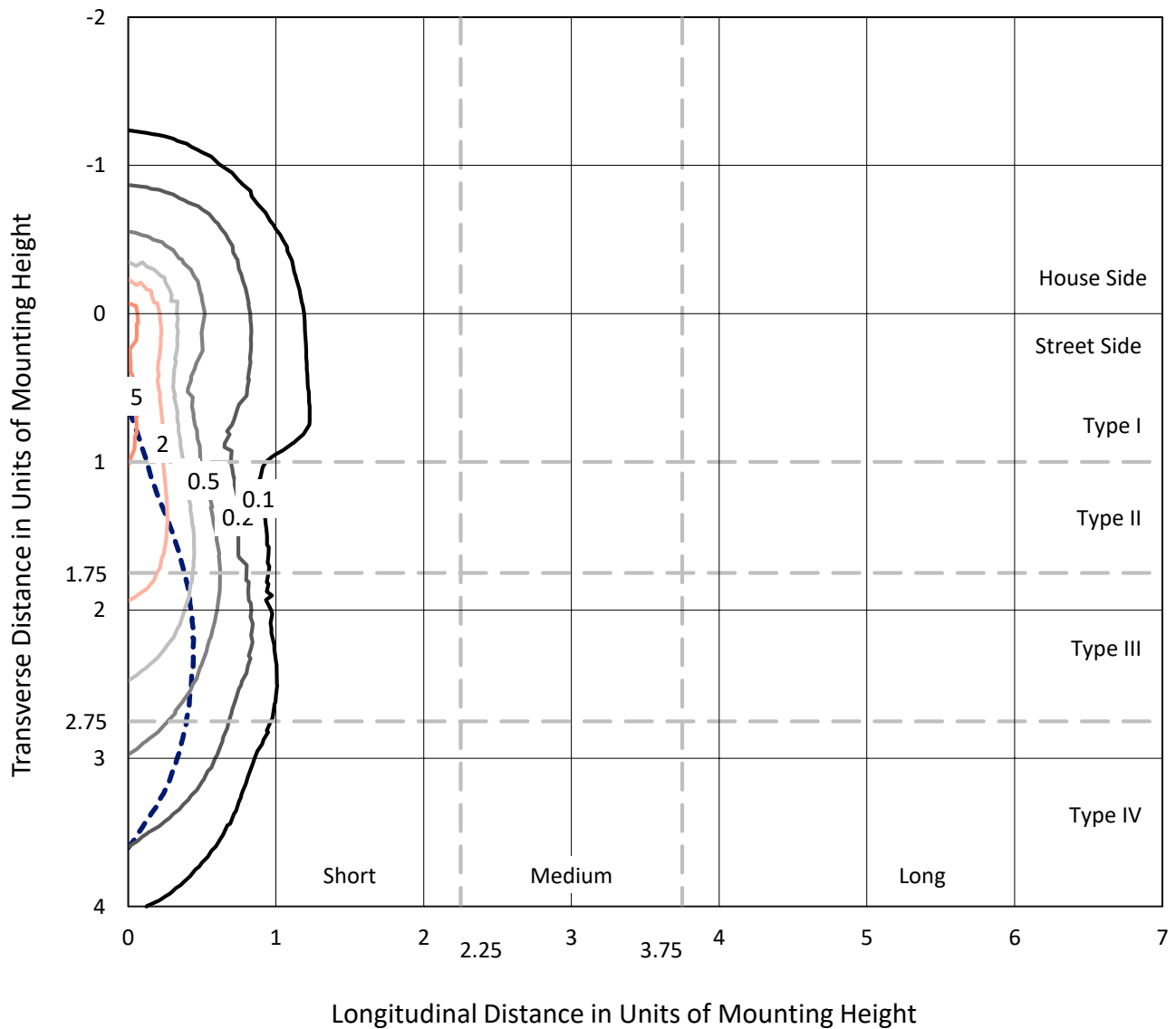
Input Watts (W): 25.31
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

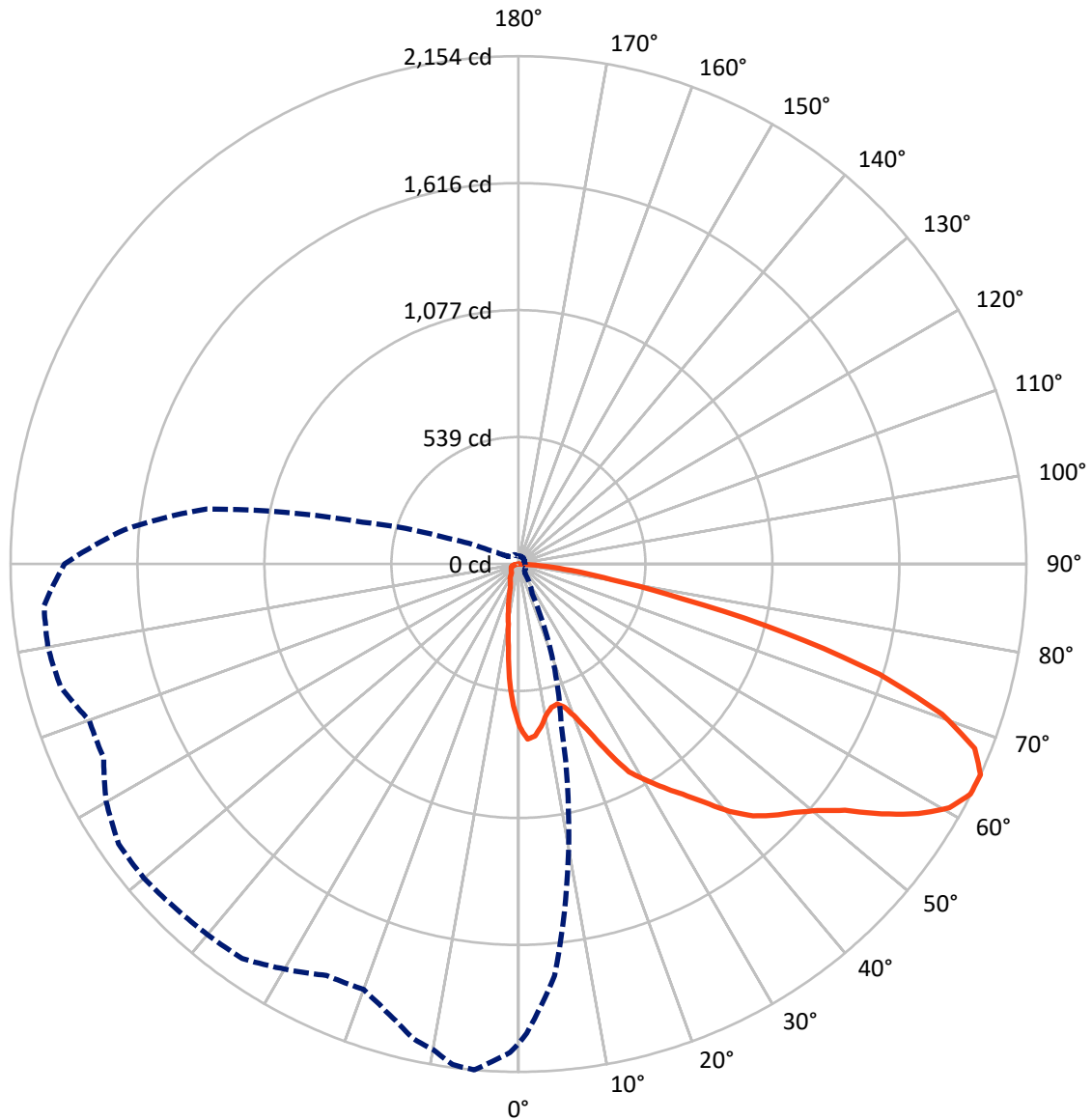
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.9 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 355-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	415.4	0.0	415.4
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	2082.6	0.0	2082.6
	% Fixture	83.4	0.0	83.4
Total	Lumens	2498.0	0.0	2498.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.1	2.1
10°-20°	109.4	4.4
20°-30°	159.0	6.4
30°-40°	235.2	9.4
40°-50°	342.6	13.7
50°-60°	513.6	20.6
60°-70°	640.1	25.6
70°-80°	374.9	15.0
80°-90°	70.1	2.8
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°	2498.0	100.0
0°-180°	2498.0	100.0



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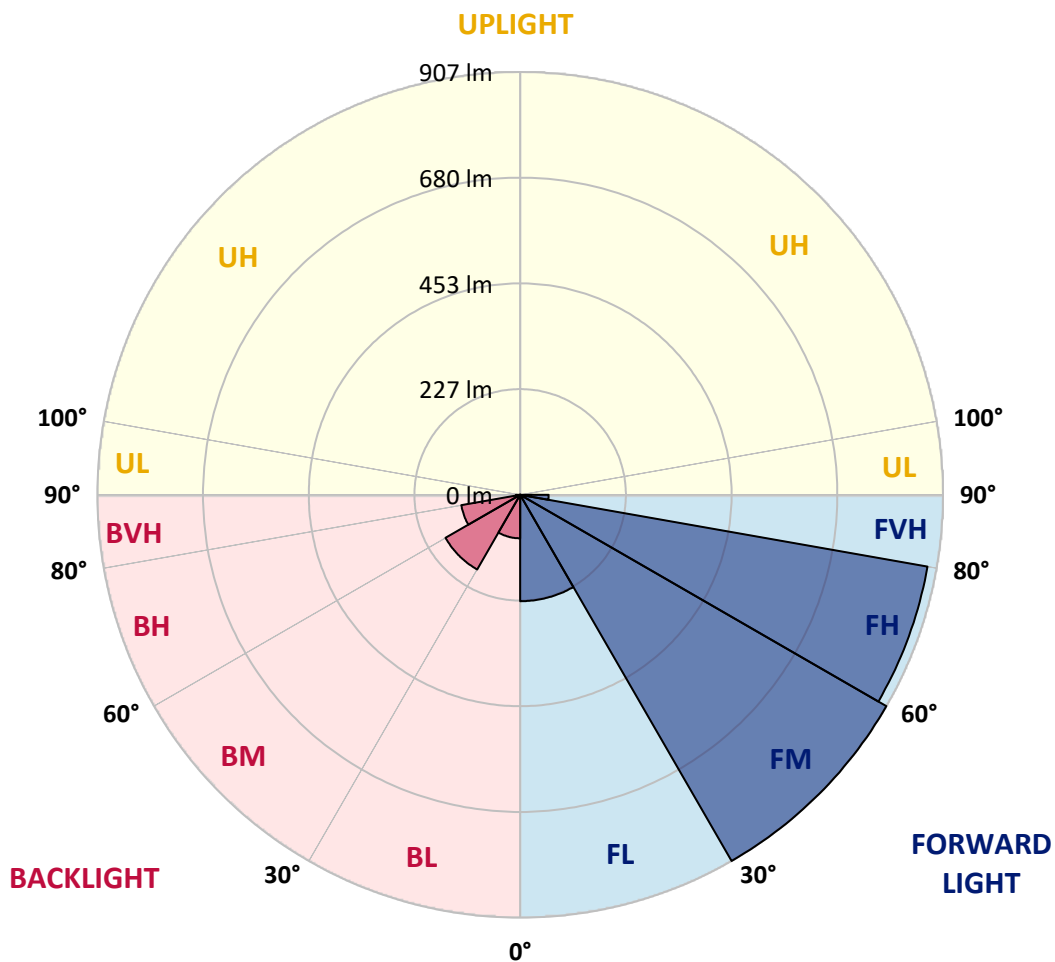
CATALOG NUMBER: ISS-AF-450-LED-E1-SLR-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	228.2	9.1			
FM	(30°-60°)	906.6	36.3			
FH	(60°-80°)	886.8	35.5			G1/1800
FVH	(80°-90°)	61.1	2.4			G1/100
BL	(0°-30°)	93.3	3.7	B0/110		
BM	(30°-60°)	184.9	7.4	B0/220		
BH	(60°-80°)	128.2	5.1	B1/500		G1/500
BVH	(80°-90°)	9.0	0.4			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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	1°	5°	15°	25°	35°	37.5°	40°	42.5°	45°	47.5°
0°	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3
2.5°	733.8	727.9	716.0	692.3	667.6	643.8	639.9	631.0	632.0	627.0	625.0
5°	710.1	702.2	677.4	628.0	585.5	542.0	539.0	521.2	523.2	512.3	506.4
7.5°	657.7	646.8	619.1	550.9	491.5	434.2	428.2	407.5	404.5	393.6	384.7
10°	606.2	595.4	560.8	482.6	414.4	371.9	364.9	355.0	347.1	342.2	333.3
12.5°	573.6	567.7	526.1	436.1	382.7	348.1	339.2	329.3	321.4	312.5	303.6
15°	566.7	554.8	512.3	421.3	359.0	316.5	305.6	294.7	285.8	276.9	264.1
17.5°	585.5	573.6	526.1	414.4	332.3	280.9	267.0	252.2	243.3	232.4	218.6
20°	630.0	611.2	552.8	404.5	303.6	239.3	222.5	204.7	194.8	176.0	166.1
22.5°	701.2	677.4	598.3	404.5	276.9	195.8	177.0	161.2	150.3	133.5	122.6
25°	803.0	782.3	672.5	415.4	253.2	159.2	140.4	124.6	113.7	101.9	94.9
27.5°	898.0	865.4	751.6	431.2	234.4	133.5	114.7	101.9	94.0	88.0	84.1
30°	969.2	942.5	820.9	442.1	206.7	111.8	99.9	92.0	88.0	85.1	83.1
32.5°	1034.5	1003.8	870.3	449.0	189.9	94.9	84.1	78.1	74.2	70.2	69.2
35°	1103.7	1074.0	928.6	448.0	179.0	87.0	76.2	69.2	65.3	64.3	62.3
37.5°	1199.6	1159.1	995.9	448.0	175.0	84.1	71.2	64.3	61.3	59.3	58.3
40°	1292.6	1247.1	1070.1	451.0	171.1	82.1	71.2	64.3	59.3	57.4	55.4
42.5°	1379.6	1329.2	1137.3	455.9	169.1	76.2	67.3	63.3	61.3	57.4	54.4
45°	1445.9	1406.3	1189.7	465.8	169.1	72.2	63.3	60.3	59.3	59.3	58.3
47.5°	1510.2	1465.7	1250.1	484.6	172.1	69.2	60.3	56.4	56.4	56.4	57.4
50°	1593.2	1540.8	1333.1	523.2	172.1	68.2	57.4	53.4	52.4	54.4	54.4
52.5°	1706.0	1668.4	1454.8	578.6	170.1	67.3	56.4	50.4	49.4	50.4	52.4
55°	1865.2	1822.7	1602.1	646.8	168.1	65.3	54.4	49.4	47.5	46.5	47.5
57.5°	2002.7	1966.1	1737.6	701.2	163.2	60.3	52.4	48.5	45.5	44.5	43.5
60°	2063.0	2032.3	1824.7	737.8	154.3	55.4	49.4	46.5	43.5	42.5	41.5
62.5°	2072.9	2034.3	1825.7	745.7	144.4	50.4	46.5	43.5	41.5	40.5	39.6
65°	2034.3	1990.8	1753.5	697.2	136.5	50.4	44.5	41.5	38.6	37.6	36.6
67.5°	1947.3	1880.0	1570.5	591.4	129.6	51.4	43.5	38.6	36.6	35.6	34.6
70°	1737.6	1662.5	1326.2	469.8	126.6	52.4	43.5	36.6	33.6	32.6	32.6
72.5°	1392.5	1306.4	1034.5	354.1	121.6	53.4	42.5	34.6	31.6	29.7	29.7
75°	942.5	867.3	701.2	239.3	100.9	46.5	38.6	31.6	27.7	25.7	24.7
77.5°	525.1	500.4	446.0	126.6	64.3	34.6	29.7	25.7	22.7	21.8	20.8
80°	308.6	295.7	263.1	70.2	39.6	19.8	17.8	16.8	14.8	14.8	14.8
82.5°	188.9	176.0	163.2	31.6	18.8	9.9	9.9	7.9	7.9	6.9	6.9
85°	51.4	47.5	66.3	6.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	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):

	50°	52.5°	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°
0°	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3
2.5°	617.1	615.1	615.1	600.3	600.3	592.4	590.4	590.4	593.4	591.4	579.5
5°	496.5	490.5	486.6	468.8	463.8	454.9	451.0	450.0	453.0	448.0	432.2
7.5°	373.8	368.9	363.0	349.1	343.2	342.2	330.3	327.4	325.4	321.4	311.5
10°	326.4	319.4	314.5	304.6	297.7	292.7	282.8	277.9	273.9	268.0	265.0
12.5°	293.7	286.8	279.9	267.0	258.1	252.2	246.3	236.4	232.4	225.5	221.5
15°	253.2	245.3	237.4	223.5	211.6	205.7	193.8	187.9	183.9	176.0	172.1
17.5°	203.7	192.9	183.9	171.1	165.2	155.3	148.3	138.5	130.5	127.6	124.6
20°	153.3	143.4	135.5	124.6	118.7	110.8	106.8	99.9	95.9	94.0	92.0
22.5°	112.7	104.8	99.9	94.0	91.0	88.0	86.0	84.1	82.1	81.1	81.1
25°	89.0	86.0	84.1	82.1	81.1	80.1	78.1	77.1	76.2	75.2	75.2
27.5°	81.1	79.1	78.1	77.1	76.2	74.2	74.2	72.2	71.2	71.2	70.2
30°	82.1	82.1	82.1	80.1	79.1	77.1	76.2	73.2	71.2	69.2	68.2
32.5°	67.3	67.3	66.3	64.3	63.3	62.3	62.3	60.3	59.3	59.3	61.3
35°	61.3	60.3	59.3	57.4	56.4	54.4	53.4	52.4	51.4	50.4	50.4
37.5°	58.3	57.4	56.4	54.4	53.4	52.4	51.4	49.4	48.5	48.5	47.5
40°	55.4	55.4	55.4	53.4	52.4	50.4	49.4	48.5	47.5	46.5	46.5
42.5°	53.4	53.4	53.4	52.4	51.4	50.4	48.5	47.5	46.5	45.5	44.5
45°	54.4	53.4	53.4	52.4	51.4	49.4	48.5	46.5	45.5	44.5	43.5
47.5°	58.3	57.4	55.4	53.4	51.4	49.4	47.5	45.5	44.5	43.5	42.5
50°	55.4	59.3	60.3	57.4	52.4	49.4	47.5	45.5	43.5	42.5	41.5
52.5°	54.4	55.4	59.3	59.3	54.4	50.4	47.5	45.5	43.5	41.5	40.5
55°	49.4	52.4	53.4	54.4	53.4	49.4	46.5	43.5	42.5	40.5	38.6
57.5°	43.5	45.5	46.5	48.5	49.4	48.5	44.5	41.5	40.5	38.6	36.6
60°	40.5	40.5	40.5	41.5	46.5	50.4	46.5	40.5	37.6	36.6	34.6
62.5°	37.6	37.6	36.6	37.6	38.6	43.5	42.5	38.6	36.6	35.6	33.6
65°	36.6	35.6	34.6	34.6	34.6	34.6	34.6	34.6	33.6	33.6	32.6
67.5°	33.6	32.6	32.6	31.6	31.6	31.6	31.6	31.6	30.7	30.7	29.7
70°	31.6	30.7	29.7	29.7	29.7	28.7	28.7	28.7	27.7	27.7	27.7
72.5°	28.7	27.7	27.7	27.7	26.7	26.7	26.7	25.7	25.7	24.7	24.7
75°	24.7	24.7	23.7	23.7	23.7	22.7	22.7	22.7	22.7	21.8	21.8
77.5°	20.8	19.8	20.8	19.8	19.8	19.8	19.8	19.8	18.8	18.8	17.8
80°	13.8	13.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8	13.8
82.5°	7.9	6.9	7.9	7.9	7.9	8.9	8.9	9.9	8.9	8.9	7.9
85°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	2.0	2.0	2.0	2.0
87.5°	0.0	0.0	0.0	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):

	77.5°	80°	85°	90°	95°	100°	102.5°	105°	107.5°	110°	112.5°
0°	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3
2.5°	585.5	584.5	574.6	576.6	573.6	567.7	568.7	569.7	571.6	567.7	565.7
5°	440.1	441.1	428.2	432.2	429.2	428.2	431.2	436.1	439.1	438.1	435.2
7.5°	312.5	313.5	302.6	301.6	298.7	297.7	301.6	306.6	309.5	308.6	309.5
10°	258.1	255.2	245.3	238.3	231.4	225.5	224.5	224.5	224.5	222.5	220.5
12.5°	213.6	210.7	198.8	192.9	186.9	179.0	178.0	177.0	174.1	171.1	167.1
15°	166.1	163.2	153.3	149.3	144.4	141.4	140.4	140.4	138.5	136.5	134.5
17.5°	120.7	118.7	112.7	108.8	107.8	108.8	109.8	111.8	112.7	113.7	113.7
20°	91.0	90.0	88.0	88.0	89.0	92.0	93.0	95.9	96.9	98.9	100.9
22.5°	80.1	80.1	79.1	79.1	81.1	84.1	86.0	87.0	88.0	89.0	89.0
25°	74.2	74.2	73.2	75.2	78.1	78.1	78.1	78.1	76.2	75.2	75.2
27.5°	70.2	70.2	70.2	71.2	70.2	69.2	69.2	69.2	68.2	68.2	67.3
30°	67.3	67.3	67.3	66.3	66.3	65.3	65.3	64.3	64.3	63.3	63.3
32.5°	62.3	60.3	62.3	60.3	60.3	59.3	60.3	60.3	58.3	58.3	58.3
35°	49.4	48.5	48.5	48.5	47.5	48.5	50.4	50.4	50.4	50.4	50.4
37.5°	46.5	46.5	45.5	44.5	44.5	43.5	44.5	43.5	43.5	43.5	44.5
40°	45.5	44.5	43.5	43.5	42.5	41.5	41.5	41.5	41.5	41.5	41.5
42.5°	43.5	43.5	41.5	40.5	40.5	39.6	39.6	39.6	39.6	39.6	39.6
45°	42.5	41.5	40.5	39.6	38.6	38.6	38.6	38.6	38.6	38.6	37.6
47.5°	41.5	40.5	39.6	38.6	37.6	36.6	36.6	36.6	36.6	36.6	36.6
50°	40.5	39.6	37.6	37.6	36.6	35.6	35.6	35.6	35.6	35.6	35.6
52.5°	38.6	38.6	36.6	35.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6
55°	36.6	36.6	34.6	33.6	32.6	32.6	32.6	32.6	33.6	33.6	33.6
57.5°	35.6	34.6	32.6	32.6	30.7	30.7	30.7	31.6	31.6	32.6	32.6
60°	33.6	32.6	31.6	30.7	30.7	29.7	29.7	29.7	29.7	30.7	30.7
62.5°	32.6	31.6	29.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7	28.7
65°	30.7	30.7	28.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
67.5°	28.7	28.7	26.7	25.7	25.7	25.7	26.7	25.7	25.7	25.7	25.7
70°	26.7	25.7	24.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7
72.5°	23.7	23.7	22.7	21.8	21.8	21.8	21.8	21.8	21.8	21.8	22.7
75°	20.8	19.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8	18.8
77.5°	17.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	16.8
80°	12.9	11.9	11.9	11.9	11.9	12.9	12.9	12.9	12.9	12.9	12.9
82.5°	7.9	6.9	6.9	6.9	7.9	8.9	8.9	8.9	8.9	9.9	9.9
85°	2.0	2.0	2.0	2.0	4.0	4.9	4.9	4.9	5.9	4.9	4.9
87.5°	0.0	0.0	0.0	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):

	115°	117.5°	120°	122.5°	125°	127.5°	130°	135°	145°	155°	165°
0°	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3
2.5°	563.7	575.6	575.6	567.7	571.6	567.7	566.7	573.6	577.6	590.4	598.3
5°	436.1	451.0	452.0	448.0	453.0	450.0	453.0	461.9	468.8	477.7	485.6
7.5°	311.5	325.4	328.3	325.4	334.3	333.3	335.3	345.2	351.1	356.0	357.0
10°	219.6	221.5	229.4	227.5	233.4	232.4	235.4	243.3	251.2	254.2	256.1
12.5°	165.2	163.2	166.1	162.2	165.2	165.2	166.1	171.1	181.0	184.9	194.8
15°	133.5	131.5	131.5	129.6	129.6	128.6	129.6	133.5	140.4	146.4	154.3
17.5°	113.7	113.7	113.7	112.7	111.8	111.8	112.7	114.7	118.7	122.6	126.6
20°	101.9	103.8	104.8	105.8	106.8	107.8	108.8	111.8	110.8	106.8	101.9
22.5°	89.0	89.0	90.0	90.0	89.0	89.0	89.0	89.0	89.0	92.0	94.9
25°	74.2	74.2	74.2	75.2	74.2	74.2	75.2	75.2	76.2	78.1	81.1
27.5°	67.3	67.3	67.3	67.3	67.3	67.3	67.3	68.2	69.2	72.2	74.2
30°	62.3	62.3	61.3	61.3	61.3	60.3	61.3	61.3	62.3	66.3	69.2
32.5°	57.4	56.4	56.4	56.4	55.4	55.4	55.4	57.4	58.3	60.3	63.3
35°	50.4	50.4	50.4	51.4	51.4	51.4	51.4	53.4	53.4	54.4	54.4
37.5°	45.5	45.5	46.5	47.5	47.5	48.5	48.5	49.4	50.4	49.4	48.5
40°	41.5	42.5	42.5	44.5	44.5	44.5	45.5	46.5	47.5	45.5	45.5
42.5°	39.6	39.6	39.6	40.5	40.5	40.5	41.5	42.5	43.5	43.5	43.5
45°	37.6	37.6	37.6	38.6	37.6	37.6	37.6	38.6	40.5	40.5	41.5
47.5°	36.6	36.6	36.6	35.6	35.6	35.6	35.6	36.6	37.6	39.6	40.5
50°	35.6	34.6	34.6	34.6	34.6	34.6	34.6	35.6	36.6	37.6	39.6
52.5°	33.6	33.6	33.6	33.6	33.6	33.6	33.6	34.6	35.6	36.6	37.6
55°	33.6	33.6	32.6	32.6	33.6	33.6	33.6	34.6	35.6	36.6	36.6
57.5°	32.6	31.6	31.6	32.6	32.6	32.6	32.6	33.6	34.6	35.6	35.6
60°	30.7	30.7	30.7	30.7	31.6	31.6	32.6	33.6	33.6	34.6	34.6
62.5°	28.7	29.7	29.7	29.7	30.7	30.7	31.6	32.6	33.6	34.6	33.6
65°	27.7	28.7	28.7	28.7	29.7	29.7	29.7	31.6	32.6	32.6	33.6
67.5°	26.7	26.7	26.7	27.7	27.7	28.7	28.7	30.7	30.7	31.6	32.6
70°	24.7	24.7	24.7	25.7	25.7	26.7	27.7	28.7	28.7	29.7	30.7
72.5°	22.7	22.7	22.7	23.7	23.7	24.7	25.7	27.7	26.7	27.7	27.7
75°	19.8	19.8	20.8	20.8	21.8	22.7	23.7	23.7	23.7	23.7	23.7
77.5°	16.8	16.8	17.8	17.8	18.8	19.8	19.8	19.8	20.8	19.8	19.8
80°	13.8	13.8	14.8	14.8	14.8	14.8	15.8	14.8	15.8	14.8	15.8
82.5°	9.9	9.9	10.9	9.9	10.9	9.9	9.9	8.9	10.9	9.9	9.9
85°	4.0	4.9	4.9	4.9	4.9	4.0	4.0	3.0	4.0	4.0	3.0
87.5°	0.0	0.0	0.0	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°	185°	195°	205°	215°	225°	230°	235°	240°	245°
0°	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3
2.5°	601.3	600.3	615.1	626.0	632.9	659.6	671.5	686.4	693.3	703.2	713.1
5°	486.6	484.6	502.4	516.2	528.1	566.7	589.4	610.2	627.0	642.8	665.6
7.5°	348.1	344.2	356.0	367.9	383.7	425.3	464.8	492.5	517.2	543.9	573.6
10°	257.1	260.1	272.0	289.8	310.5	342.2	373.8	393.6	415.4	445.0	480.6
12.5°	205.7	217.6	227.5	249.2	273.9	309.5	343.2	359.0	374.8	389.7	408.4
15°	165.2	172.1	180.0	200.8	230.4	272.0	311.5	329.3	348.1	365.9	382.7
17.5°	127.6	130.5	134.5	149.3	176.0	225.5	269.0	291.7	313.5	338.2	361.0
20°	101.9	101.9	102.9	109.8	128.6	167.1	220.5	249.2	276.9	308.6	341.2
22.5°	89.0	88.0	89.0	92.0	100.9	123.6	172.1	205.7	241.3	280.9	321.4
25°	84.1	83.1	82.1	84.1	89.0	99.9	134.5	170.1	206.7	254.2	303.6
27.5°	76.2	77.1	78.1	80.1	84.1	90.0	111.8	138.5	179.0	231.4	290.8
30°	71.2	72.2	73.2	75.2	82.1	89.0	101.9	118.7	153.3	204.7	271.0
32.5°	65.3	66.3	67.3	68.2	70.2	78.1	87.0	100.9	130.5	181.0	250.2
35°	53.4	53.4	54.4	57.4	61.3	69.2	78.1	89.0	116.7	165.2	237.4
37.5°	49.4	49.4	50.4	53.4	57.4	64.3	72.2	82.1	110.8	159.2	225.5
40°	46.5	47.5	47.5	50.4	54.4	62.3	67.3	79.1	107.8	150.3	213.6
42.5°	44.5	44.5	45.5	48.5	53.4	59.3	66.3	77.1	99.9	142.4	206.7
45°	42.5	43.5	43.5	46.5	52.4	57.4	67.3	73.2	94.9	136.5	200.8
47.5°	41.5	41.5	42.5	45.5	51.4	58.3	65.3	69.2	90.0	131.5	195.8
50°	39.6	40.5	41.5	44.5	50.4	64.3	62.3	66.3	86.0	127.6	192.9
52.5°	38.6	39.6	40.5	43.5	50.4	65.3	60.3	62.3	83.1	123.6	190.9
55°	37.6	37.6	38.6	42.5	50.4	60.3	56.4	60.3	77.1	117.7	185.9
57.5°	35.6	36.6	37.6	40.5	49.4	55.4	53.4	57.4	71.2	107.8	179.0
60°	35.6	35.6	36.6	39.6	49.4	49.4	50.4	54.4	64.3	95.9	167.1
62.5°	34.6	34.6	35.6	39.6	50.4	44.5	47.5	51.4	59.3	86.0	152.3
65°	33.6	33.6	34.6	37.6	43.5	42.5	45.5	48.5	57.4	79.1	139.4
67.5°	31.6	31.6	32.6	35.6	38.6	39.6	43.5	46.5	56.4	78.1	127.6
70°	29.7	29.7	29.7	32.6	34.6	37.6	40.5	44.5	56.4	77.1	118.7
72.5°	27.7	26.7	27.7	29.7	31.6	33.6	36.6	41.5	55.4	78.1	114.7
75°	23.7	23.7	23.7	25.7	27.7	29.7	32.6	38.6	52.4	73.2	102.9
77.5°	19.8	19.8	18.8	21.8	23.7	24.7	27.7	33.6	45.5	62.3	83.1
80°	14.8	13.8	13.8	16.8	17.8	19.8	21.8	25.7	35.6	45.5	61.3
82.5°	8.9	7.9	7.9	10.9	11.9	12.9	16.8	18.8	23.7	29.7	41.5
85°	3.0	3.0	3.0	4.9	5.9	6.9	9.9	10.9	14.8	18.8	21.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.0	3.0	4.9	5.9	4.9
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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REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	250°	255°	260°	265°	270°	275°	280°	285°	290°	295°	300°	
0°	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	0°
2.5°	724.9	734.8	747.7	759.5	768.4	776.3	786.2	786.2	798.1	802.1	810.0	2.5°
5°	683.4	702.2	729.9	752.6	780.3	807.0	831.7	845.6	869.3	885.1	901.0	5°
7.5°	599.3	625.0	659.6	691.3	731.8	775.4	815.9	853.5	893.0	926.7	951.4	7.5°
10°	511.3	546.9	583.5	624.0	667.6	714.0	763.5	813.9	861.4	908.9	949.4	10°
12.5°	439.1	479.7	521.2	571.6	622.1	671.5	729.9	773.4	822.8	870.3	909.9	12.5°
15°	408.4	444.1	492.5	547.9	601.3	651.7	706.1	750.6	797.1	835.7	863.4	15°
17.5°	395.6	441.1	496.5	554.8	612.2	673.5	722.0	759.5	794.1	812.0	815.9	17.5°
20°	381.7	444.1	518.2	589.4	659.6	723.9	759.5	784.3	790.2	789.2	774.4	20°
22.5°	373.8	453.9	545.9	645.8	733.8	809.0	833.7	828.8	804.0	772.4	747.7	22.5°
25°	371.9	476.7	593.4	725.9	833.7	908.9	922.7	895.0	839.6	778.3	736.8	25°
27.5°	373.8	502.4	652.7	812.0	938.5	1015.7	1010.7	969.2	890.1	804.0	737.8	27.5°
30°	364.9	529.1	712.1	887.1	1012.7	1077.0	1057.2	994.9	906.9	820.9	750.6	30°
32.5°	350.1	548.9	764.5	947.4	1089.9	1138.3	1102.7	1035.5	944.5	856.5	784.3	32.5°
35°	333.3	557.8	802.1	1003.8	1172.9	1198.6	1141.3	1073.0	990.0	901.0	822.8	35°
37.5°	315.5	558.8	837.7	1063.2	1253.0	1263.9	1180.8	1107.7	1026.6	946.5	875.2	37.5°
40°	305.6	554.8	874.3	1136.3	1339.1	1324.2	1222.4	1136.3	1056.2	994.9	936.6	40°
42.5°	301.6	547.9	901.0	1191.7	1413.2	1380.6	1260.9	1165.0	1092.8	1041.4	1000.8	42.5°
45°	301.6	541.0	925.7	1233.3	1468.6	1426.1	1297.5	1192.7	1128.4	1096.8	1077.0	45°
47.5°	302.6	543.9	955.4	1300.5	1516.1	1469.6	1326.2	1233.3	1177.9	1166.0	1172.9	47.5°
50°	307.6	577.6	1005.8	1374.7	1575.4	1516.1	1364.8	1278.7	1245.1	1257.0	1296.5	50°
52.5°	315.5	631.0	1092.8	1462.7	1667.4	1590.3	1429.1	1344.0	1328.2	1370.7	1445.9	52.5°
55°	323.4	685.4	1206.6	1610.1	1815.8	1724.8	1542.8	1457.8	1439.0	1504.2	1612.0	55°
57.5°	330.3	725.9	1317.3	1756.4	1944.3	1875.1	1693.1	1590.3	1582.4	1652.6	1770.3	57.5°
60°	337.2	757.6	1381.6	1821.7	2002.7	1995.8	1848.4	1753.5	1741.6	1806.9	1918.6	60°
62.5°	333.3	745.7	1399.4	1789.1	1997.7	2055.1	1975.0	1907.7	1867.2	1921.6	2030.4	62.5°
65°	318.5	683.4	1343.0	1676.3	1925.5	2019.5	2026.4	2010.6	1937.4	1941.4	2018.5	65°
67.5°	277.9	574.6	1170.0	1498.3	1784.1	1895.9	2012.6	2007.6	1914.7	1832.6	1848.4	67.5°
70°	230.4	451.0	954.4	1275.8	1583.4	1679.3	1865.2	1902.8	1770.3	1617.0	1544.8	70°
72.5°	193.8	337.2	733.8	988.0	1268.9	1380.6	1656.5	1709.0	1528.0	1312.4	1200.6	72.5°
75°	161.2	238.3	516.2	680.4	875.2	1022.6	1445.9	1450.8	1240.2	1032.5	911.8	75°
77.5°	119.7	162.2	373.8	475.7	601.3	727.9	1169.0	1181.8	984.0	783.3	679.4	77.5°
80°	80.1	99.9	238.3	332.3	404.5	487.6	857.4	803.0	649.8	542.9	516.2	80°
82.5°	48.5	58.3	137.5	232.4	255.2	303.6	539.0	503.4	428.2	391.6	401.5	82.5°
85°	26.7	36.6	84.1	152.3	118.7	166.1	294.7	287.8	270.0	236.4	205.7	85°
87.5°	6.9	7.9	18.8	6.9	3.0	8.9	57.4	37.6	37.6	21.8	7.9	87.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90°

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REPORT NUMBER: P
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DISTRIBUTION (continued):											CANDELA DISTRIBUTION	
305°	310°	315°	325°	335°	340°	342.5°	345°	347.5°	350°	352.5°		355°
691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	691.3	0°	691.3
803.0	806.0	805.0	798.1	780.3	773.4	770.4	762.5	753.6	753.6	745.7	2.5°	743.7
900.0	904.9	899.0	882.2	836.7	814.9	802.1	786.2	773.4	761.5	749.6	5°	732.8
968.2	972.2	962.3	923.7	842.6	806.0	786.2	767.4	751.6	730.9	712.1	7.5°	695.3
981.1	990.0	979.1	923.7	829.8	784.3	762.5	741.7	719.0	697.2	670.5	10°	649.8
944.5	963.3	955.4	914.8	823.8	775.4	749.6	724.9	697.2	674.5	643.8	12.5°	624.0
888.1	890.1	895.0	894.0	812.9	765.5	739.8	714.0	689.3	667.6	640.9	15°	616.1
825.8	823.8	829.8	848.5	810.0	772.4	755.6	730.9	713.1	688.3	667.6	17.5°	639.9
769.4	766.5	772.4	791.2	798.1	789.2	782.3	767.4	753.6	737.8	721.0	20°	694.3
733.8	723.9	722.9	750.6	804.0	827.8	832.7	830.7	829.8	817.9	806.0	22.5°	775.4
714.0	703.2	708.1	739.8	828.8	873.3	896.0	903.9	914.8	914.8	914.8	25°	885.1
708.1	696.2	703.2	738.8	854.5	928.6	961.3	981.1	1001.8	1010.7	1016.7	27.5°	997.9
712.1	700.2	703.2	745.7	867.3	941.5	980.1	1008.8	1041.4	1063.2	1078.0	30°	1063.2
734.8	714.0	712.1	766.5	891.1	970.2	1010.7	1043.4	1080.0	1104.7	1131.4	32.5°	1129.4
765.5	735.8	731.8	800.1	921.7	1006.8	1047.3	1076.0	1113.6	1147.2	1185.8	35°	1199.6
816.9	780.3	774.4	856.5	963.3	1037.4	1078.0	1115.6	1156.1	1199.6	1249.1	37.5°	1281.7
886.1	849.5	849.5	928.6	1019.6	1080.0	1124.5	1164.0	1208.5	1266.9	1327.2	40°	1379.6
964.3	940.5	944.5	1015.7	1083.9	1133.4	1175.9	1218.4	1264.9	1323.3	1393.5	42.5°	1460.7
1068.1	1055.2	1075.0	1125.5	1149.2	1182.8	1220.4	1258.0	1308.4	1368.7	1448.9	45°	1520.1
1189.7	1200.6	1228.3	1244.1	1215.5	1233.3	1262.9	1297.5	1356.9	1418.2	1497.3	47.5°	1574.5
1342.0	1370.7	1397.4	1393.5	1297.5	1291.6	1319.3	1346.0	1405.3	1475.6	1559.6	50°	1642.7
1517.1	1554.7	1573.5	1551.7	1389.5	1354.9	1377.6	1414.2	1479.5	1559.6	1653.6	52.5°	1734.7
1695.1	1740.6	1734.7	1709.9	1489.4	1442.9	1456.8	1500.3	1580.4	1671.4	1790.0	55°	1870.2
1856.3	1891.9	1907.7	1854.3	1611.0	1549.7	1565.6	1611.0	1696.1	1798.0	1919.6	57.5°	1998.7
1983.9	2022.5	2022.5	1970.0	1743.6	1672.4	1699.1	1743.6	1816.8	1917.6	2031.4	60°	2099.6
2076.9	2107.5	2096.6	2046.2	1857.3	1802.9	1823.7	1885.0	1951.3	2026.4	2116.4	62.5°	2151.0
2069.9	2072.9	2061.0	2042.2	1925.5	1919.6	1959.2	2006.6	2062.0	2090.7	2141.1	65°	2154.0
1875.1	1876.1	1899.8	1891.9	1874.1	1947.3	1998.7	2038.3	2086.7	2086.7	2080.8	67.5°	2086.7
1536.9	1552.7	1593.2	1581.4	1672.4	1822.7	1882.0	1942.4	1984.9	1984.9	1934.4	70°	1905.8
1170.0	1179.9	1228.3	1217.4	1341.1	1506.2	1636.8	1737.6	1779.2	1804.9	1740.6	72.5°	1601.2
851.5	850.5	871.3	855.5	1011.7	1195.7	1330.2	1455.8	1524.0	1545.8	1429.1	75°	1173.9
655.7	637.9	633.9	635.9	717.0	869.3	976.1	1056.2	1065.1	1068.1	910.8	77.5°	711.1
529.1	529.1	523.2	501.4	439.1	508.3	562.7	626.0	648.8	681.4	545.9	80°	400.5
422.3	405.5	375.8	333.3	281.9	300.6	326.4	350.1	388.7	402.5	332.3	82.5°	227.5
210.7	204.7	179.0	148.3	123.6	164.2	183.0	184.9	184.9	171.1	139.4	85°	93.0
1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	87.5°	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	90°	0.0

'228618
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TION (continued):

359°	360°
691.3	691.3
731.8	733.8
716.0	710.1
666.6	657.7
613.2	606.2
582.5	573.6
576.6	566.7
597.3	585.5
643.8	630.0
718.0	701.2
819.9	803.0
919.7	898.0
991.0	969.2
1060.2	1034.5
1129.4	1103.7
1222.4	1199.6
1325.2	1292.6
1410.3	1379.6
1477.5	1445.9
1541.8	1510.2
1615.0	1593.2
1724.8	1706.0
1891.9	1865.2
2014.5	2002.7
2077.8	2063.0
2097.6	2072.9
2071.9	2034.3
1990.8	1947.3
1795.0	1737.6
1431.1	1392.5
965.2	942.5
554.8	525.1
318.5	308.6
179.0	188.9
46.5	51.4
0.0	0.0
0.0	0.0

(END OF REPORT)