

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: P299437

Luminaire Tested: **GLNA-AF-08-LED-E1-SLR-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299437
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194679)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-08-LED-E1-SLR-7027-800
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill
Light Eliminator Right OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29330.2 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

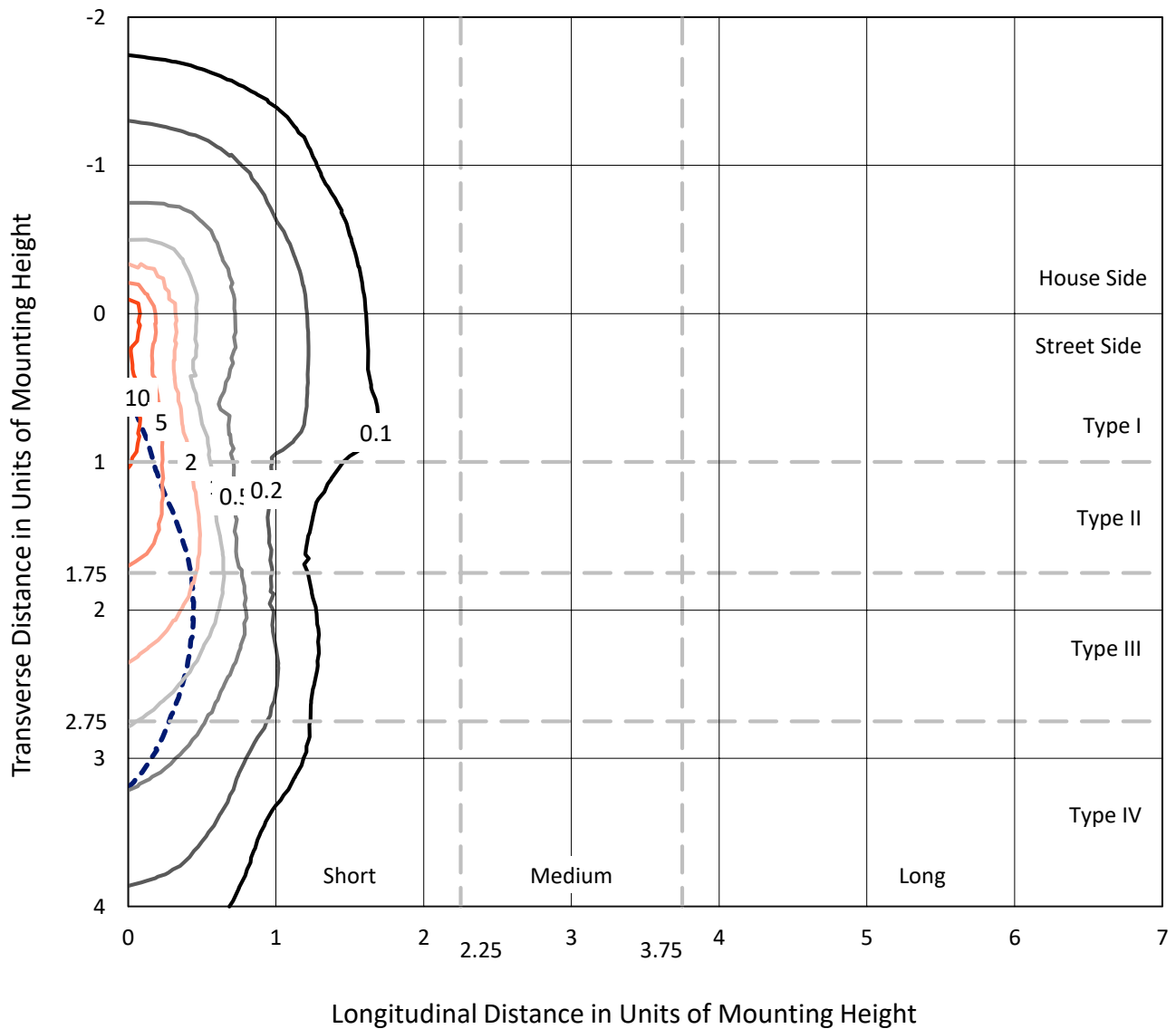
Input Watts (W): 334
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

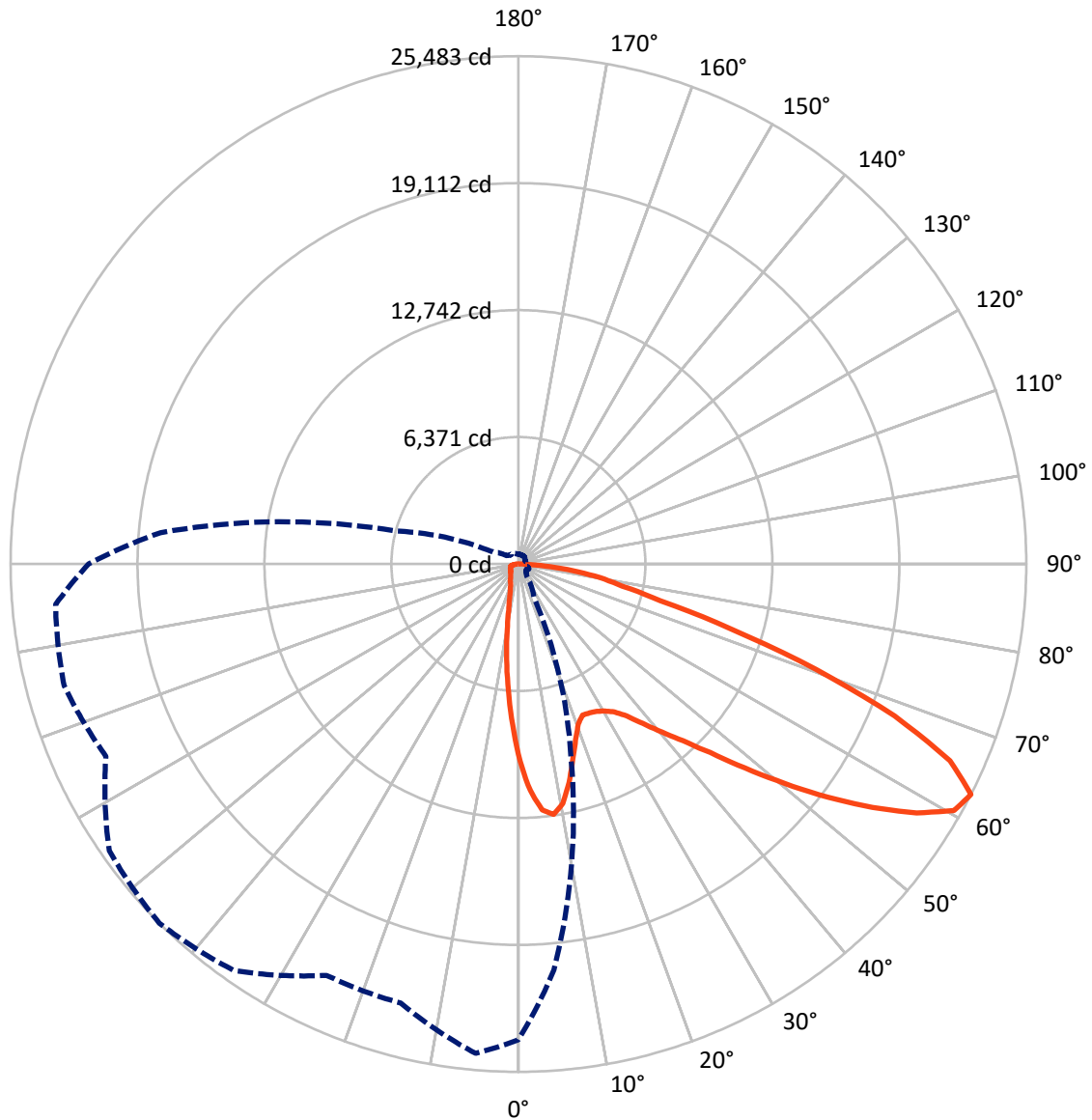
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.9 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 315-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4853.8	0.0	4853.8
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	24476.5	0.0	24476.5
	% Fixture	83.5	0.0	83.5
Total	Lumens	29330.2	0.0	29330.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	721.4	2.5
10°-20°	1322.8	4.5
20°-30°	1928.6	6.6
30°-40°	2970.3	10.1
40°-50°	4371.5	14.9
50°-60°	6412.1	21.9
60°-70°	7167.8	24.4
70°-80°	3509.3	12.0
80°-90°	926.5	3.2
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°	29330.2	100.0
0°-180°	29330.2	100.0

Coefficient of Utilization



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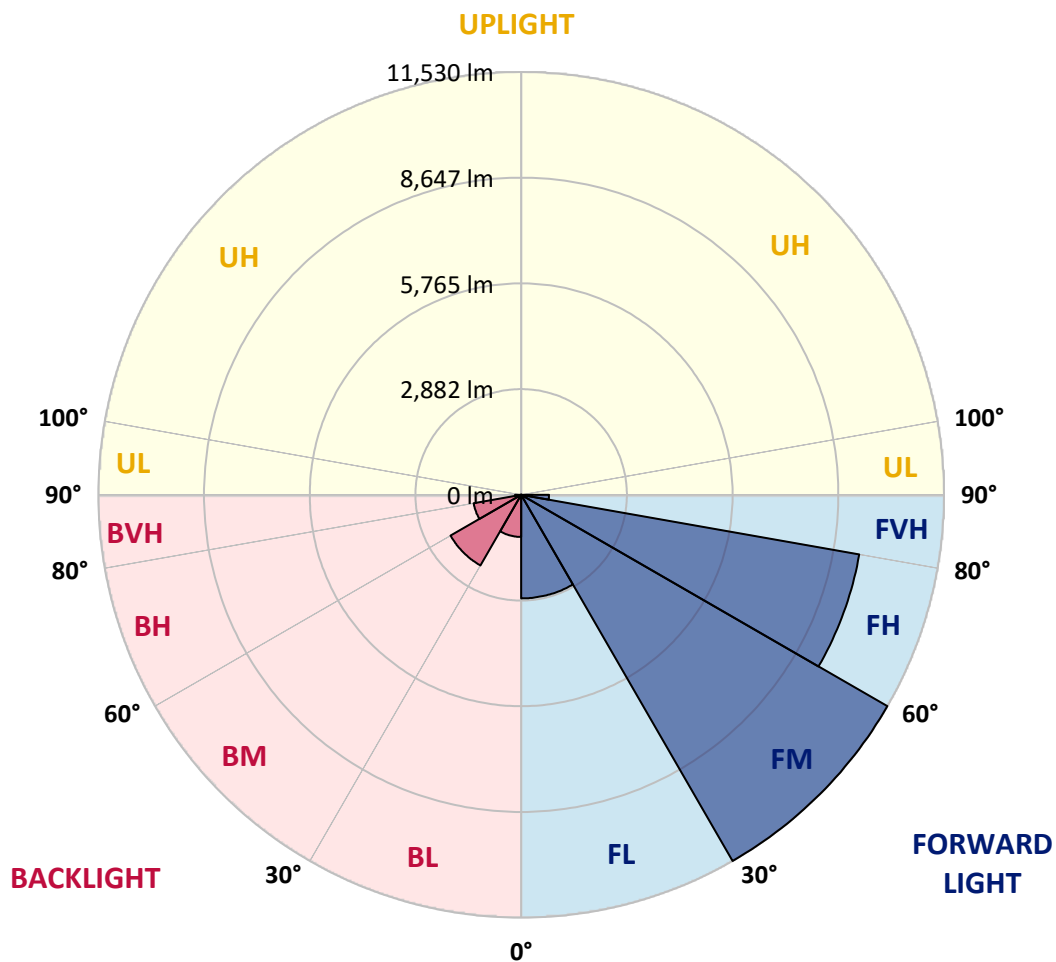
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2824.4	9.6			
FM	(30°-60°)	11530.0	39.3			
FH	(60°-80°)	9361.2	31.9			G4/12000
FVH	(80°-90°)	760.9	2.6			G5
BL	(0°-30°)	1148.3	3.9	B3/2500		
BM	(30°-60°)	2224.0	7.6	B2/2500		
BH	(60°-80°)	1315.9	4.5	B3/2500		G3/2500
BVH	(80°-90°)	165.6	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5
2.5°	10296.1	10086.7	9738.2	9375.5	9154.9	8896.7	8695.1	8517.9	8163.1	8093.8	8156.7
5°	9682.1	9261.3	8604.8	7943.9	7503.6	7031.2	6663.6	6368.8	5918.8	5839.7	5934.9
7.5°	8697.1	8193.8	7326.5	6483.0	5860.7	5270.6	4874.2	4557.9	4206.5	4055.2	4064.5
10°	7847.3	7279.6	6254.1	5336.9	4827.4	4429.1	4095.2	3771.1	3414.8	3181.0	3116.6
12.5°	7371.4	6718.8	5536.6	4717.5	4245.1	3826.3	3466.5	3120.0	2739.2	2500.6	2433.2
15°	7289.4	6579.7	5267.6	4321.2	3729.1	3199.0	2774.9	2387.8	1995.9	1802.6	1762.1
17.5°	7645.7	6828.1	5180.3	3967.8	3243.9	2589.4	2068.6	1636.6	1317.4	1220.8	1212.5
20°	8329.0	7305.5	5169.0	3635.9	2765.1	1997.8	1441.4	1127.0	986.9	959.1	961.1
22.5°	9288.6	8045.4	5307.7	3386.0	2324.8	1489.7	1083.6	943.0	888.4	862.5	862.5
25°	10529.9	9064.6	5626.9	3203.9	1942.7	1190.0	956.2	872.2	820.5	802.9	806.3
27.5°	11733.1	10055.9	5997.8	3060.4	1692.7	1080.2	905.9	830.3	785.4	767.3	775.6
30°	12671.2	10936.5	6307.3	2865.2	1565.4	1049.4	924.0	846.4	781.9	754.6	756.1
32.5°	13448.3	11707.2	6567.0	2724.6	1452.6	899.6	796.6	762.4	754.6	722.4	706.3
35°	14441.6	12547.2	6741.2	2728.0	1399.4	802.9	709.2	649.7	606.2	569.1	569.1
37.5°	15605.7	13511.2	6926.7	2765.1	1380.4	746.3	679.0	618.9	578.9	543.3	536.9
40°	16756.7	14456.2	7096.1	2800.7	1368.6	712.6	654.5	599.9	562.8	527.2	517.4
42.5°	17735.8	15233.3	7247.4	2818.3	1330.1	709.2	637.0	586.7	551.6	512.5	503.2
45°	18459.7	15884.4	7410.4	2845.7	1291.5	722.4	637.0	585.2	541.8	504.7	494.9
47.5°	19105.9	16648.8	7682.8	2845.7	1244.7	698.0	658.0	586.7	540.3	501.3	493.5
50°	19971.8	17696.7	8198.7	2779.8	1178.8	672.1	693.1	580.4	525.7	494.9	485.2
52.5°	21164.7	19040.0	9017.7	2665.1	1077.2	622.3	688.2	577.4	511.0	478.8	467.6
55°	22575.8	20478.0	9911.0	2531.3	925.4	586.7	664.3	569.1	494.9	459.3	448.1
57.5°	23677.0	21467.8	10539.7	2324.8	793.2	567.7	588.7	561.3	475.4	438.3	429.0
60°	24115.3	21429.3	10712.4	2049.1	728.7	551.6	514.5	628.7	459.3	422.2	411.0
62.5°	23878.6	20439.4	10228.7	1855.8	714.1	530.6	482.2	581.8	446.6	411.0	394.9
65°	22783.8	18685.2	8947.0	1804.0	756.1	509.6	461.3	456.4	429.0	394.9	378.8
67.5°	20398.9	16063.5	7163.4	1808.9	809.3	488.6	440.3	417.8	404.6	377.3	362.7
70°	16615.1	12700.5	5339.9	1822.1	836.6	464.2	417.8	393.4	378.8	351.4	341.7
72.5°	12216.8	9788.5	3879.5	1738.1	841.5	436.9	387.1	366.1	351.4	322.6	314.3
75°	8358.3	7487.5	2690.9	1439.9	733.6	398.3	352.9	333.9	324.1	288.5	283.6
77.5°	6105.7	5620.5	1722.0	1069.0	565.7	350.0	311.4	296.8	290.4	251.4	245.0
80°	4900.1	4446.6	1077.2	732.2	414.4	293.4	261.1	253.3	246.5	207.9	203.1
82.5°	3398.7	2977.9	691.6	475.4	311.4	227.5	206.5	203.1	193.3	158.1	153.3
85°	1792.8	1617.1	438.3	324.1	225.5	156.2	143.5	143.5	138.6	104.9	101.5
87.5°	228.9	372.4	222.6	169.4	124.0	69.3	69.3	67.8	72.7	59.5	51.7
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5
2.5°	8008.3	8086.0	8011.8	8016.6	8098.6	8343.7	8455.0	8546.7	8645.3	8709.8	8738.5
5°	5804.5	5985.1	6046.2	6175.0	6365.4	6678.3	6802.2	6892.5	6952.6	6987.7	7002.4
7.5°	3969.8	4079.1	4201.6	4409.5	4823.9	5008.0	5090.0	5069.0	5001.6	4977.2	4953.3
10°	2992.6	2949.1	2926.2	3040.9	3376.2	3561.7	3619.8	3563.2	3526.1	3534.4	3574.4
12.5°	2318.5	2242.8	2151.1	2137.9	2359.0	2525.0	2562.1	2565.0	2632.8	2692.4	2781.2
15°	1689.8	1681.5	1636.6	1609.3	1734.7	1870.4	1886.5	1915.3	1976.8	2020.3	2097.4
17.5°	1191.5	1234.9	1270.5	1288.1	1383.3	1479.9	1462.4	1447.7	1436.5	1436.5	1473.6
20°	961.1	989.9	1035.3	1086.5	1183.7	1251.0	1207.6	1149.5	1107.5	1094.8	1099.7
22.5°	865.9	888.4	914.2	959.1	1046.5	1093.4	1046.5	1004.5	962.5	947.9	943.0
25°	817.6	846.4	870.8	904.5	968.9	1001.1	956.2	925.4	899.6	882.0	868.8
27.5°	790.2	815.6	822.5	838.6	893.2	922.0	899.6	886.9	870.8	854.7	838.6
30°	761.0	756.1	744.8	746.3	790.2	819.0	817.6	820.5	819.0	814.2	811.2
32.5°	695.1	685.3	675.5	685.3	725.3	751.2	753.1	759.5	759.5	758.0	770.7
35°	578.9	596.5	607.7	637.0	685.3	707.8	698.0	681.9	653.1	635.0	633.6
37.5°	535.5	538.4	557.9	597.9	651.6	672.1	658.0	620.9	601.3	597.9	602.8
40°	514.5	517.4	528.6	565.7	618.9	639.9	627.2	599.9	581.8	580.4	588.7
42.5°	499.8	503.2	509.6	535.5	578.9	604.8	606.2	586.7	565.7	567.7	575.5
45°	491.5	493.5	491.5	504.7	544.7	575.5	588.7	575.5	557.9	561.3	570.6
47.5°	490.1	485.2	478.8	482.2	524.2	554.5	570.6	565.7	557.9	561.3	569.1
50°	483.7	472.5	464.2	462.7	504.7	536.9	551.6	551.6	554.5	561.3	569.1
52.5°	464.2	451.5	451.5	446.6	491.5	522.3	532.0	533.5	538.4	549.6	561.3
55°	440.3	435.4	440.3	432.0	482.2	511.0	515.9	519.3	522.3	532.0	548.1
57.5°	419.3	412.9	424.2	420.7	474.0	499.8	499.8	506.2	506.2	519.3	532.0
60°	408.1	394.9	399.8	403.2	462.7	490.1	487.1	493.5	496.4	508.1	517.4
62.5°	393.4	382.2	382.2	390.0	450.0	475.4	474.0	478.8	491.5	494.9	504.7
65°	375.8	371.0	366.1	375.8	436.9	459.3	461.3	467.6	478.8	482.2	490.1
67.5°	357.8	359.7	350.0	359.7	425.6	443.2	443.2	456.4	461.3	467.6	475.4
70°	338.7	340.2	331.9	343.6	417.8	425.6	424.2	441.7	445.2	450.0	457.8
72.5°	314.3	314.3	311.4	327.5	404.6	408.1	404.6	419.3	420.7	425.6	429.0
75°	288.5	288.5	285.5	308.0	396.8	388.5	378.8	390.0	393.4	396.8	396.8
77.5°	254.8	258.2	258.2	285.5	369.0	380.7	348.0	354.9	359.7	361.2	356.3
80°	212.8	221.1	224.0	259.7	309.5	351.4	311.4	315.8	317.8	317.8	311.4
82.5°	163.0	177.2	185.5	224.0	237.2	294.8	270.9	275.8	270.9	261.1	258.2
85°	112.8	132.3	142.0	170.8	179.1	227.5	225.5	225.5	216.2	203.1	201.6
87.5°	61.5	72.7	79.1	101.5	122.5	153.3	166.0	161.1	153.3	145.0	146.9
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):

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5
2.5°	8890.3	9109.5	9459.5	9727.0	9996.4	10256.1	10536.7	10751.0	10933.1	11004.3	11220.1
5°	7149.3	7423.1	7753.6	8350.0	8772.7	9238.4	9777.2	10489.9	10763.7	11143.0	11763.3
7.5°	5054.8	5302.8	5834.8	6317.1	6915.5	7574.9	8301.7	9285.2	9645.0	10252.7	11263.5
10°	3774.5	4063.0	4490.1	4896.7	5423.8	6097.9	6933.0	8032.7	8469.6	9129.0	10293.2
12.5°	3040.9	3381.1	3834.1	4216.3	4624.3	5099.7	5911.0	7116.6	7702.3	8279.2	9456.1
15°	2336.1	2692.4	3113.6	3598.8	4048.3	4561.3	5411.1	6730.0	7403.6	8005.4	9009.4
17.5°	1617.1	1921.7	2452.2	2958.4	3534.4	4190.4	5272.5	6812.0	7616.4	8310.0	9087.1
20°	1146.6	1320.3	1755.7	2342.9	3060.4	3883.9	5246.6	7244.0	8290.5	9082.2	9583.5
22.5°	964.0	1028.4	1281.8	1820.1	2648.9	3654.9	5336.9	7850.2	9199.8	10210.7	10375.2
25°	878.6	917.6	1049.4	1428.7	2282.9	3489.0	5641.5	8753.2	10325.4	11339.7	11310.4
27.5°	831.7	872.2	959.1	1206.1	2007.6	3386.0	5946.1	9824.1	11612.0	12564.8	12203.6
30°	817.6	872.2	964.0	1136.8	1810.9	3223.0	6196.0	10763.7	12601.9	13392.1	12610.2
32.5°	806.3	814.2	856.1	980.1	1623.4	3032.6	6365.4	11607.1	13570.8	14179.0	13195.4
35°	651.6	691.6	759.5	878.6	1514.1	2918.4	6365.4	12334.4	14525.5	14973.6	13753.3
37.5°	627.2	662.8	722.4	823.9	1452.6	2861.8	6238.0	13035.8	15500.8	15875.1	14212.6
40°	614.5	643.3	699.9	781.9	1426.7	2797.3	6052.5	13654.7	16453.5	16777.6	14641.7
42.5°	604.8	630.6	683.8	756.1	1393.1	2726.6	5902.7	14151.1	17280.9	17548.4	15051.2
45°	599.9	627.2	685.3	769.3	1325.2	2632.8	5852.9	14688.1	17961.3	18191.7	15494.4
47.5°	599.9	632.1	693.1	796.6	1244.7	2536.2	6009.1	15396.3	18604.6	18717.4	16016.7
50°	595.0	630.6	716.1	769.3	1127.0	2413.7	6376.6	16287.6	19301.1	19313.8	16678.1
52.5°	585.2	627.2	770.7	753.1	991.3	2252.6	6873.5	17432.7	20331.5	20408.7	17712.9
55°	574.0	622.3	756.1	716.1	880.5	2060.8	7279.6	18823.8	21779.3	21993.5	19235.3
57.5°	559.4	616.0	732.2	664.3	807.8	1813.8	7426.5	19842.9	22790.1	23328.5	20950.5
60°	546.7	611.1	660.9	633.6	762.4	1605.9	7142.4	19641.4	22720.8	23881.5	22470.9
62.5°	533.5	616.0	602.8	614.5	741.4	1472.1	6401.0	18027.2	21571.3	23310.9	23597.9
65°	519.3	572.5	569.1	597.9	737.0	1418.9	5306.2	15607.2	19349.5	21506.9	23864.0
67.5°	499.8	528.6	544.7	577.4	753.1	1372.1	4282.1	12874.3	16261.7	18802.8	22477.2
70°	478.8	503.2	520.8	551.6	743.4	1351.1	3561.7	10152.6	12903.6	15410.5	19741.4
72.5°	451.5	472.5	488.6	517.4	733.6	1339.8	3008.7	8176.3	9633.7	11447.5	16050.9
75°	419.3	438.3	450.0	478.8	702.9	1227.1	2365.4	6918.4	7208.8	7963.4	12784.0
77.5°	382.2	396.8	406.1	438.3	622.3	1020.6	1710.8	5336.9	5598.1	5781.6	9801.2
80°	338.7	352.9	357.8	388.5	515.9	798.1	1115.8	3941.9	4187.0	4228.9	6401.0
82.5°	288.5	303.1	303.1	331.9	422.2	574.0	732.2	2700.7	2749.0	2891.0	4524.2
85°	232.3	243.6	243.6	258.2	327.5	429.0	503.2	1356.0	1341.3	1531.7	3919.5
87.5°	166.0	174.3	182.1	185.5	233.8	283.6	303.1	412.9	272.4	312.9	2516.7
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):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5	9909.5
2.5°	11383.1	11474.9	11381.2	11313.8	11021.9	10781.8	10460.6	10296.1
5°	12235.8	12469.6	12390.6	12107.0	11497.3	10812.0	10033.5	9682.1
7.5°	12132.8	12676.1	12688.8	12158.7	11260.6	10251.2	9196.9	8697.1
10°	11329.9	12024.5	12223.1	11708.7	10755.9	9627.4	8417.9	7847.3
12.5°	10433.3	11113.7	11265.5	11087.8	10291.7	9157.8	7931.2	7371.4
15°	9699.6	10004.7	10184.8	10340.0	9893.4	8970.9	7903.4	7289.4
17.5°	9253.0	9219.3	9271.1	9540.0	9615.7	9185.2	8322.7	7645.7
20°	9091.9	8574.5	8561.4	8932.3	9485.4	9696.7	9141.7	8329.0
22.5°	9180.8	8342.2	8235.8	8676.1	9554.7	10433.3	10215.6	9288.6
25°	9486.8	8361.7	8275.8	8701.9	9806.0	11218.6	11374.8	10529.9
27.5°	9969.1	8484.2	8371.0	8808.3	10139.9	11878.0	12516.5	11733.1
30°	10426.9	8697.1	8556.5	9017.7	10444.5	12139.2	13216.4	12671.2
32.5°	10983.3	9095.4	8848.4	9402.9	10821.8	12555.0	13840.2	13448.3
35°	11528.1	9662.5	9356.5	9997.9	11242.5	13072.9	14552.9	14441.6
37.5°	12126.5	10404.5	10151.1	10767.1	11818.5	13561.0	15462.2	15605.7
40°	12764.9	11388.0	11087.8	11889.3	12711.7	14174.1	16412.1	16756.7
42.5°	13408.3	12479.4	12121.6	12933.8	13693.3	14778.4	17224.3	17735.8
45°	14144.8	13664.5	13495.1	14373.7	14636.8	15354.3	17824.1	18459.7
47.5°	15002.9	15009.2	15281.6	15633.0	15588.1	16005.5	18427.4	19105.9
50°	16004.0	16687.3	17289.2	17522.5	16568.2	16705.4	19264.1	19971.8
52.5°	17206.7	18694.9	19439.8	19286.5	17624.5	17559.6	20589.3	21164.7
55°	18711.0	20820.1	21560.1	21450.3	18838.4	18723.7	22240.5	22575.8
57.5°	20452.1	22879.0	23559.4	23065.9	20295.9	20001.1	23606.2	23677.0
60°	21982.3	24510.7	25107.2	24560.5	21766.6	21360.0	24459.0	24115.3
62.5°	22833.6	25063.7	25483.0	24894.3	22774.0	22807.7	24645.9	23878.6
65°	22453.3	23665.8	23801.0	23752.7	22514.3	23647.7	23973.8	22783.8
67.5°	20370.1	20131.4	20358.9	20673.2	20289.6	22541.7	22111.2	20398.9
70°	16700.5	15389.5	15842.9	16053.8	16228.0	19397.8	19191.3	16615.1
72.5°	12585.8	10781.8	11139.5	11096.1	11902.0	15558.8	14925.3	12216.8
75°	8917.7	7310.4	7355.3	7337.7	8305.1	12172.9	10807.6	8358.3
77.5°	6239.4	5296.4	5320.8	5420.4	5583.4	9180.8	7721.3	6105.7
80°	4290.4	4019.5	4153.3	4161.6	3869.7	6167.2	5704.5	4900.1
82.5°	3195.6	2793.9	2761.7	2808.6	3032.6	4996.7	4383.7	3398.7
85°	2616.7	1654.2	1330.1	1667.4	2687.5	4948.4	2912.0	1792.8
87.5°	1473.6	785.4	354.9	658.0	1072.4	3276.2	841.5	228.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)