

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: P299502

Luminaire Tested: **GLNA-AF-08-LED-E1-SLR-7060-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299502
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-7060-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 5700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND 90° Spill
Light Eliminator Right OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27527 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

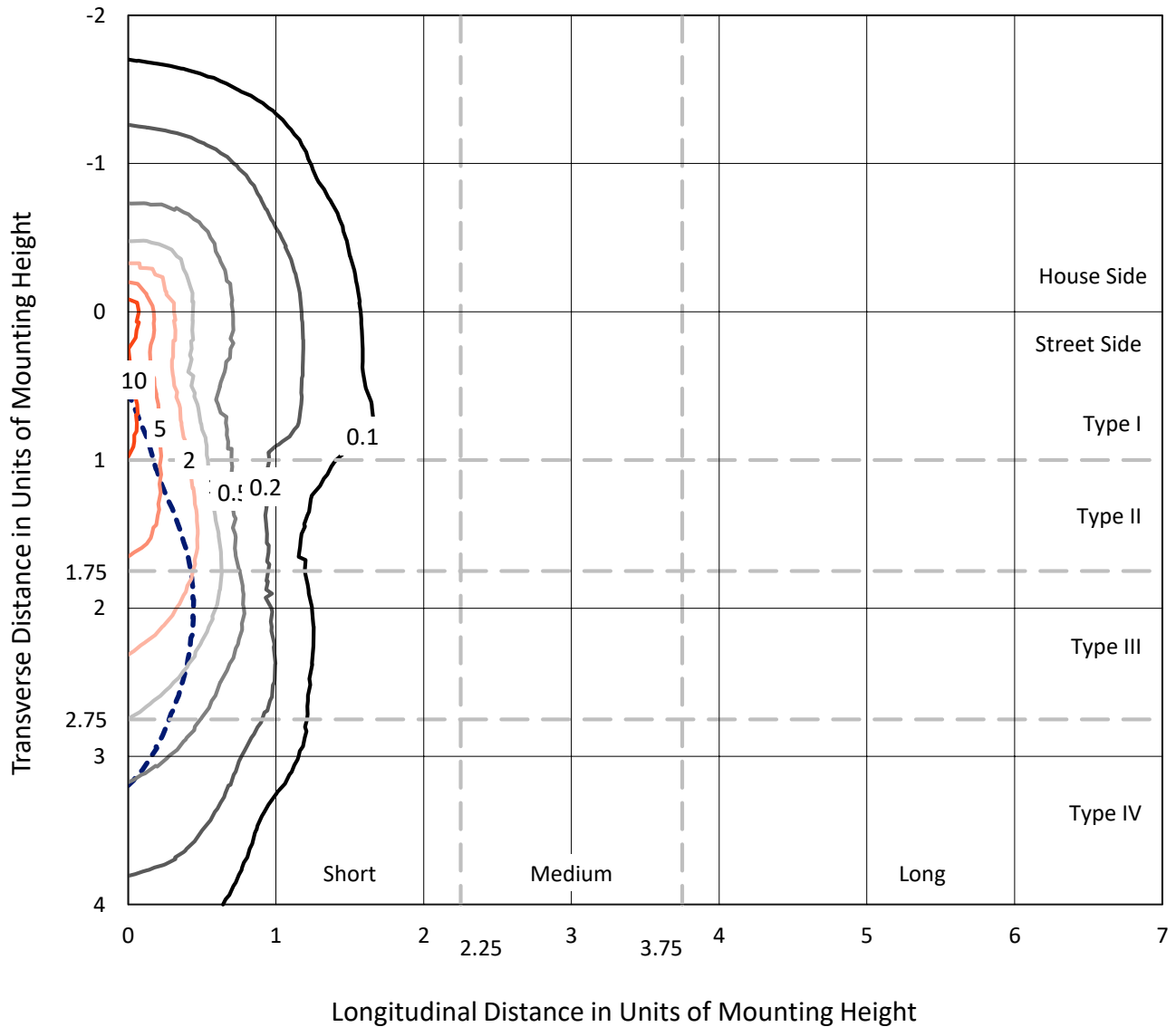
Input Watts (W): 257
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

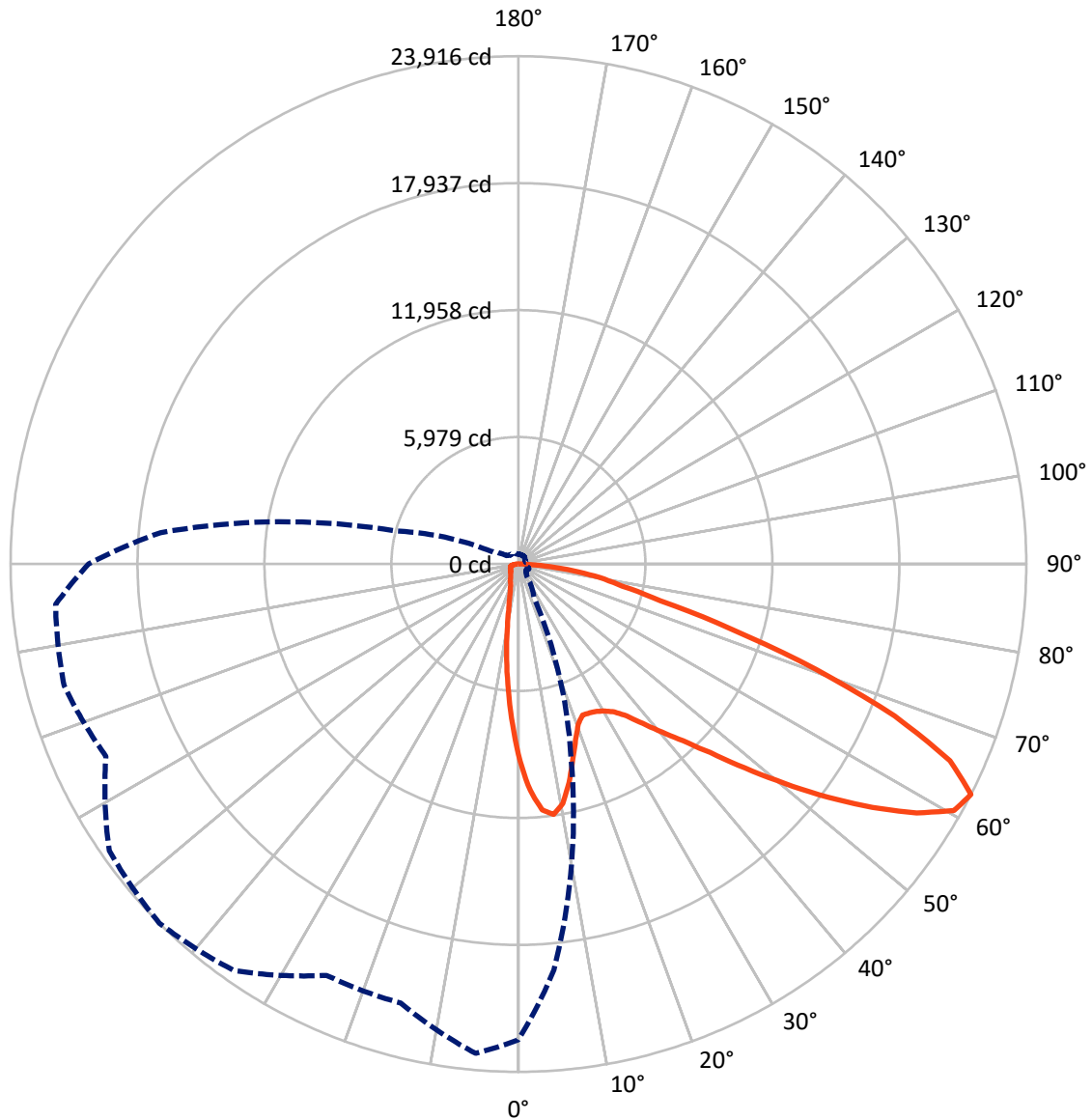
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.9 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	4555.4	0.0	4555.4
	% Fixture	16.5	0.0	16.5
Street Side	Lumens	22971.7	0.0	22971.7
	% Fixture	83.5	0.0	83.5
Total	Lumens	27527.0	0.0	27527.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	677.0	2.5
10°-20°	1241.4	4.5
20°-30°	1810.0	6.6
30°-40°	2787.7	10.1
40°-50°	4102.8	14.9
50°-60°	6017.9	21.9
60°-70°	6727.1	24.4
70°-80°	3293.5	12.0
80°-90°	869.6	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°	27527.0	100.0
0°-180°	27527.0	100.0



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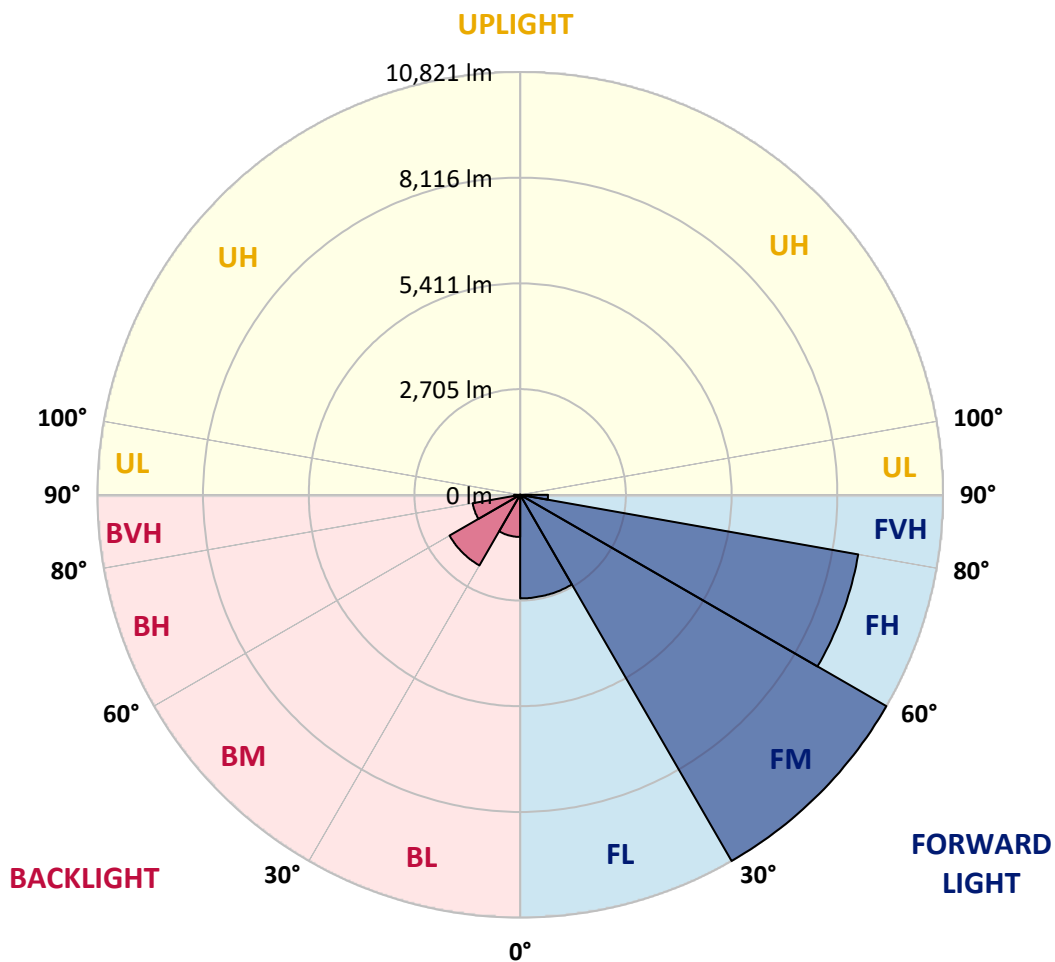
CATALOG NUMBER: GLNA-AF-08-LED-E1-SLR-7060-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2650.8	9.6			
FM (30°-60°)	10821.1	39.3			
FH (60°-80°)	8785.7	31.9			G4/12000
FVH (80°-90°)	714.1	2.6			G4/750
BL (0°-30°)	1077.7	3.9	B3/2500		
BM (30°-60°)	2087.2	7.6	B2/2500		
BH (60°-80°)	1235.0	4.5	B3/2500		G3/2500
BVH (80°-90°)	155.4	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-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3
2.5°	9663.1	9466.6	9139.5	8799.1	8592.1	8349.7	8160.5	7994.2	7661.2	7596.2	7655.2
5°	9086.8	8691.9	8075.8	7455.5	7042.3	6598.9	6253.9	5977.2	5554.9	5480.7	5570.0
7.5°	8162.4	7690.1	6876.0	6084.4	5500.4	4946.5	4574.5	4277.7	3947.9	3805.9	3814.6
10°	7364.8	6832.0	5869.6	5008.8	4530.6	4156.8	3843.4	3539.3	3204.8	2985.4	2924.9
12.5°	6918.2	6305.7	5196.2	4427.5	3984.1	3591.0	3253.4	2928.2	2570.8	2346.8	2283.6
15°	6841.2	6175.1	4943.8	4055.5	3499.9	3002.4	2604.3	2241.0	1873.2	1691.7	1653.7
17.5°	7175.6	6408.3	4861.8	3723.9	3044.5	2430.2	1941.4	1536.0	1236.4	1145.7	1137.9
20°	7817.0	6856.3	4851.2	3412.4	2595.1	1875.0	1352.8	1057.7	926.3	900.2	902.0
22.5°	8717.6	7550.8	4981.3	3177.8	2181.9	1398.1	1017.0	885.0	833.7	809.5	809.5
25°	9882.5	8507.3	5280.9	3006.9	1823.2	1116.8	897.4	818.6	770.1	753.6	756.8
27.5°	11011.7	9437.7	5629.1	2872.3	1588.7	1013.8	850.2	779.2	737.1	720.1	727.9
30°	11892.2	10264.1	5919.5	2689.0	1469.1	984.9	867.2	794.3	733.9	708.2	709.6
32.5°	12621.5	10987.4	6163.2	2557.1	1363.3	844.3	747.6	715.5	708.2	678.0	662.9
35°	13553.7	11775.8	6326.8	2560.3	1313.4	753.6	665.6	609.7	569.0	534.1	534.1
37.5°	14646.3	12680.6	6500.8	2595.1	1295.5	700.4	637.2	580.9	543.3	509.9	503.9
40°	15726.4	13567.4	6659.8	2628.6	1284.5	668.8	614.3	563.0	528.2	494.7	485.6
42.5°	16645.4	14296.7	6801.8	2645.0	1248.3	665.6	597.8	550.6	517.6	481.0	472.3
45°	17324.7	14907.8	6954.8	2670.7	1212.1	678.0	597.8	549.3	508.5	473.7	464.5
47.5°	17931.3	15625.2	7210.4	2670.7	1168.1	655.1	617.5	550.6	507.1	470.5	463.1
50°	18743.9	16608.7	7694.6	2608.9	1106.3	630.8	650.5	544.7	493.4	464.5	455.3
52.5°	19863.5	17869.4	8463.3	2501.2	1011.0	584.1	645.9	541.9	479.6	449.4	438.9
55°	21187.9	19219.0	9301.6	2375.7	868.6	550.6	623.5	534.1	464.5	431.1	420.5
57.5°	22221.3	20148.0	9891.7	2181.9	744.4	532.8	552.5	526.8	446.2	411.4	402.7
60°	22632.7	20111.8	10053.8	1923.1	683.9	517.6	482.8	590.0	431.1	396.3	385.7
62.5°	22410.5	19182.8	9599.9	1741.7	670.2	498.0	452.6	546.1	419.2	385.7	370.6
65°	21383.0	17536.4	8396.9	1693.1	709.6	478.3	432.9	428.3	402.7	370.6	355.5
67.5°	19144.8	15075.9	6723.0	1697.7	759.5	458.6	413.2	392.1	379.8	354.1	340.4
70°	15593.6	11919.7	5011.6	1710.1	785.2	435.6	392.1	369.2	355.5	329.8	320.7
72.5°	11465.7	9186.7	3640.9	1631.3	789.8	410.0	363.3	343.6	329.8	302.8	295.0
75°	7844.4	7027.2	2525.5	1351.4	688.5	373.8	331.2	313.3	304.2	270.7	266.2
77.5°	5730.3	5275.0	1616.2	1003.2	530.9	328.5	292.3	278.5	272.6	235.9	230.0
80°	4598.8	4173.3	1011.0	687.1	388.9	275.3	245.1	237.8	231.3	195.1	190.6
82.5°	3189.7	2794.8	649.1	446.2	292.3	213.5	193.8	190.6	181.4	148.4	143.8
85°	1682.6	1517.7	411.4	304.2	211.6	146.6	134.7	134.7	130.1	98.5	95.3
87.5°	214.8	349.5	208.9	159.0	116.4	65.0	65.0	63.7	68.3	55.9	48.6
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3
2.5°	7516.0	7588.8	7519.2	7523.8	7600.7	7830.7	7935.1	8021.3	8113.8	8174.3	8201.3
5°	5447.7	5617.2	5674.4	5795.4	5974.0	6267.7	6384.0	6468.8	6525.1	6558.1	6571.8
7.5°	3725.7	3828.3	3943.3	4138.4	4527.4	4700.1	4777.0	4757.3	4694.1	4671.2	4648.8
10°	2808.6	2767.8	2746.3	2853.9	3168.7	3342.7	3397.2	3344.1	3309.3	3317.1	3354.6
12.5°	2176.0	2105.0	2018.8	2006.5	2214.0	2369.7	2404.5	2407.3	2471.0	2526.9	2610.2
15°	1585.9	1578.1	1536.0	1510.3	1628.1	1755.4	1770.5	1797.6	1855.3	1896.1	1968.4
17.5°	1118.2	1159.0	1192.4	1208.9	1298.2	1388.9	1372.5	1358.7	1348.2	1348.2	1383.0
20°	902.0	929.0	971.6	1019.7	1110.9	1174.1	1133.3	1078.8	1039.4	1027.5	1032.1
22.5°	812.7	833.7	858.0	900.2	982.2	1026.1	982.2	942.8	903.4	889.6	885.0
25°	767.3	794.3	817.2	848.9	909.3	939.6	897.4	868.6	844.3	827.8	815.4
27.5°	741.7	765.5	771.9	787.0	838.3	865.3	844.3	832.4	817.2	802.1	787.0
30°	714.2	709.6	699.1	700.4	741.7	768.7	767.3	770.1	768.7	764.1	761.4
32.5°	652.3	643.2	634.0	643.2	680.7	705.0	706.8	712.8	712.8	711.4	723.3
35°	543.3	559.8	570.3	597.8	643.2	664.2	655.1	640.0	612.9	596.0	594.6
37.5°	502.5	505.3	523.6	561.2	611.6	630.8	617.5	582.7	564.4	561.2	565.7
40°	482.8	485.6	496.1	530.9	580.9	600.6	588.7	563.0	546.1	544.7	552.5
42.5°	469.1	472.3	478.3	502.5	543.3	567.6	569.0	550.6	530.9	532.8	540.1
45°	461.3	463.1	461.3	473.7	511.2	540.1	552.5	540.1	523.6	526.8	535.5
47.5°	459.9	455.3	449.4	452.6	492.0	520.4	535.5	530.9	523.6	526.8	534.1
50°	454.0	443.4	435.6	434.3	473.7	503.9	517.6	517.6	520.4	526.8	534.1
52.5°	435.6	423.7	423.7	419.2	461.3	490.2	499.3	500.7	505.3	515.8	526.8
55°	413.2	408.6	413.2	405.4	452.6	479.6	484.2	487.4	490.2	499.3	514.4
57.5°	393.5	387.5	398.1	394.9	444.8	469.1	469.1	475.0	475.0	487.4	499.3
60°	383.0	370.6	375.2	378.4	434.3	459.9	457.2	463.1	465.9	476.9	485.6
62.5°	369.2	358.7	358.7	366.0	422.4	446.2	444.8	449.4	461.3	464.5	473.7
65°	352.7	348.2	343.6	352.7	410.0	431.1	432.9	438.9	449.4	452.6	459.9
67.5°	335.8	337.6	328.5	337.6	399.5	416.0	416.0	428.3	432.9	438.9	446.2
70°	317.9	319.3	311.5	322.5	392.1	399.5	398.1	414.6	417.8	422.4	429.7
72.5°	295.0	295.0	292.3	307.4	379.8	383.0	379.8	393.5	394.9	399.5	402.7
75°	270.7	270.7	268.0	289.1	372.4	364.6	355.5	366.0	369.2	372.4	372.4
77.5°	239.1	242.3	242.3	268.0	346.3	357.3	326.6	333.0	337.6	339.0	334.4
80°	199.7	207.5	210.3	243.7	290.4	329.8	292.3	296.4	298.2	298.2	292.3
82.5°	153.0	166.3	174.1	210.3	222.6	276.7	254.2	258.8	254.2	245.1	242.3
85°	105.8	124.1	133.3	160.3	168.1	213.5	211.6	211.6	202.9	190.6	189.2
87.5°	57.7	68.3	74.2	95.3	115.0	143.8	155.8	151.2	143.8	136.1	137.9
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°	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3
2.5°	8343.8	8549.5	8877.9	9128.9	9381.8	9625.5	9888.9	10090.0	10260.9	10327.8	10530.3
5°	6709.7	6966.7	7276.9	7836.7	8233.4	8670.4	9176.1	9844.9	10101.9	10457.9	11040.1
7.5°	4744.0	4976.8	5476.1	5928.7	6490.3	7109.2	7791.3	8714.4	9052.0	9622.3	10571.0
10°	3542.5	3813.2	4214.0	4595.6	5090.4	5723.0	6506.8	7538.9	7948.9	8567.8	9660.3
12.5°	2853.9	3173.2	3598.3	3957.0	4340.0	4786.2	5547.5	6679.0	7228.8	7770.2	8874.7
15°	2192.4	2526.9	2922.2	3377.5	3799.5	4280.9	5078.5	6316.2	6948.4	7513.2	8455.5
17.5°	1517.7	1803.5	2301.5	2776.5	3317.1	3932.8	4948.4	6393.2	7148.1	7799.1	8528.4
20°	1076.1	1239.2	1647.8	2198.9	2872.3	3645.1	4924.1	6798.6	7780.8	8523.8	8994.3
22.5°	904.7	965.2	1203.0	1708.2	2486.1	3430.2	5008.8	7367.6	8634.2	9582.9	9737.3
25°	824.6	861.2	984.9	1340.8	2142.5	3274.5	5294.7	8215.0	9690.6	10642.5	10615.0
27.5°	780.6	818.6	900.2	1132.0	1884.1	3177.8	5580.5	9220.1	10898.1	11792.3	11453.3
30°	767.3	818.6	904.7	1066.9	1699.5	3024.8	5815.1	10101.9	11827.1	12568.8	11834.9
32.5°	756.8	764.1	803.5	919.9	1523.6	2846.2	5974.0	10893.5	12736.5	13307.2	12384.2
35°	611.6	649.1	712.8	824.6	1421.0	2739.0	5974.0	11576.1	13632.5	14053.0	12907.8
37.5°	588.7	622.1	678.0	773.3	1363.3	2685.8	5854.5	12234.4	14547.8	14899.1	13338.8
40°	576.7	603.8	656.9	733.9	1339.0	2625.3	5680.4	12815.2	15442.0	15746.1	13741.5
42.5°	567.6	591.9	641.8	709.6	1307.4	2558.9	5539.8	13281.1	16218.4	16469.5	14125.9
45°	563.0	588.7	643.2	722.0	1243.7	2471.0	5493.0	13785.0	16857.0	17073.2	14541.8
47.5°	563.0	593.2	650.5	747.6	1168.1	2380.3	5639.6	14449.7	17460.8	17566.6	15032.0
50°	558.4	591.9	672.0	722.0	1057.7	2265.3	5984.6	15286.2	18114.5	18126.4	15652.7
52.5°	549.3	588.7	723.3	706.8	930.4	2114.1	6450.9	16360.9	19081.5	19153.9	16623.9
55°	538.7	584.1	709.6	672.0	826.4	1934.1	6832.0	17666.5	20440.3	20641.4	18052.7
57.5°	525.0	578.1	687.1	623.5	758.1	1702.3	6969.9	18623.0	21389.0	21894.3	19662.4
60°	513.1	573.5	620.3	594.6	715.5	1507.1	6703.3	18433.8	21323.9	22413.3	21089.4
62.5°	500.7	578.1	565.7	576.7	695.8	1381.6	6007.5	16918.9	20245.1	21877.8	22147.1
65°	487.4	537.3	534.1	561.2	691.7	1331.7	4980.0	14647.6	18159.9	20184.6	22396.8
67.5°	469.1	496.1	511.2	541.9	706.8	1287.7	4018.9	12082.7	15261.9	17646.8	21095.3
70°	449.4	472.3	488.8	517.6	697.7	1268.0	3342.7	9528.4	12110.2	14463.0	18527.7
72.5°	423.7	443.4	458.6	485.6	688.5	1257.5	2823.7	7673.6	9041.4	10743.7	15064.0
75°	393.5	411.4	422.4	449.4	659.7	1151.7	2219.9	6493.1	6765.6	7473.8	11998.0
77.5°	358.7	372.4	381.1	411.4	584.1	957.9	1605.6	5008.8	5253.9	5426.2	9198.6
80°	317.9	331.2	335.8	364.6	484.2	749.0	1047.2	3699.6	3929.5	3968.9	6007.5
82.5°	270.7	284.5	284.5	311.5	396.3	538.7	687.1	2534.6	2580.0	2713.3	4246.1
85°	218.1	228.6	228.6	242.3	307.4	402.7	472.3	1272.6	1258.8	1437.5	3678.5
87.5°	155.8	163.5	170.9	174.1	219.4	266.2	284.5	387.5	255.6	293.6	2361.9
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):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3	9300.3
2.5°	10683.3	10769.4	10681.4	10618.2	10344.3	10118.9	9817.5	9663.1
5°	11483.6	11703.0	11628.8	11362.6	10790.5	10147.3	9416.6	9086.8
7.5°	11386.9	11896.8	11908.7	11411.2	10568.3	9620.9	8631.4	8162.4
10°	10633.3	11285.2	11471.6	10988.8	10094.6	9035.5	7900.3	7364.8
12.5°	9791.8	10430.4	10572.9	10406.1	9659.0	8594.8	7443.6	6918.2
15°	9103.3	9389.6	9558.6	9704.3	9285.2	8419.4	7417.5	6841.2
17.5°	8684.1	8652.5	8701.1	8953.5	9024.5	8620.5	7811.0	7175.6
20°	8533.0	8047.4	8035.0	8383.2	8902.2	9100.5	8579.7	7817.0
22.5°	8616.3	7829.3	7729.5	8142.7	8967.2	9791.8	9587.5	8717.6
25°	8903.6	7847.6	7767.0	8166.9	9203.2	10528.9	10675.5	9882.5
27.5°	9356.2	7962.6	7856.4	8266.8	9516.5	11147.8	11747.0	11011.7
30°	9785.9	8162.4	8030.4	8463.3	9802.3	11392.9	12403.9	11892.2
32.5°	10308.1	8536.2	8304.4	8824.8	10156.5	11783.2	12989.3	12621.5
35°	10819.3	9068.5	8781.2	9383.2	10551.3	12269.2	13658.1	13553.7
37.5°	11380.9	9764.8	9527.0	10105.1	11091.9	12727.3	14511.6	14646.3
40°	11980.1	10687.8	10406.1	11158.3	11930.2	13302.7	15403.0	15726.4
42.5°	12583.9	11712.1	11376.4	12138.6	12851.4	13869.8	16165.3	16645.4
45°	13275.2	12824.4	12665.4	13490.0	13736.9	14410.3	16728.3	17324.7
47.5°	14080.5	14086.5	14342.1	14671.9	14629.8	15021.4	17294.5	17931.3
50°	15020.1	15661.4	16226.2	16445.2	15549.6	15678.3	18079.7	18743.9
52.5°	16148.8	17545.5	18244.6	18100.8	16540.9	16480.0	19323.4	19863.5
55°	17560.7	19540.1	20234.6	20131.5	17680.2	17572.6	20873.2	21187.9
57.5°	19194.7	21472.3	22110.9	21647.8	19048.1	18771.4	22154.9	22221.3
60°	20630.8	23003.8	23563.6	23050.5	20428.3	20046.8	22955.2	22632.7
62.5°	21429.7	23522.8	23916.3	23363.8	21373.9	21405.5	23130.7	22410.5
65°	21072.9	22210.8	22337.7	22292.3	21130.1	22193.8	22499.9	21383.0
67.5°	19117.7	18893.7	19107.2	19402.2	19042.1	21155.8	20751.8	19144.8
70°	15673.8	14443.3	14868.9	15066.8	15230.3	18205.2	18011.4	15593.6
72.5°	11812.0	10118.9	10454.7	10413.9	11170.2	14602.3	14007.7	11465.7
75°	8369.4	6860.9	6903.1	6886.6	7794.5	11424.5	10143.2	7844.4
77.5°	5855.8	4970.8	4993.7	5087.2	5240.2	8616.3	7246.6	5730.3
80°	4026.7	3772.4	3897.9	3905.7	3631.8	5788.0	5353.8	4598.8
82.5°	2999.2	2622.1	2591.9	2635.9	2846.2	4689.5	4114.2	3189.7
85°	2455.9	1552.5	1248.3	1564.9	2522.3	4644.2	2733.0	1682.6
87.5°	1383.0	737.1	333.0	617.5	1006.4	3074.7	789.8	214.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)