

[DEMOGU1] - 300 FT GUYED TOWER ANALYSIS - OCTOBER 2004

MAST DATA

120.0 4 3 2.5 1.25 3.98 .44 .061 29000.0 .0000116
 160.0 3 2* 1.666 3.98 .79 .093
 260.0 4 2* 1.25 3.14 .44 .051
 300.0 3 2* 1.666 3.14 .79 .082

GUY GEOMETRY

45.0 0. .4375 45.0 230.0 1.44 0. 1.95 2 120 120
 90.0 0. .4375 90.0 230.0 1.44 0. 1.95
 140.0 0. .50 140.0 230.0 8.08 60. 2.55
 140.0 120. .50 140.0 230.0 8.08 60. 2.55
 185.0 0. .50 185.0 230.0 1.44 0. 2.55
 230.0 0. .625 230.0 230.0 1.44 0. 4.03
 280.0 0. .75 280.0 230.0 8.08 60. 6.80
 280.0 120. .75 280.0 230.0 8.08 60. 6.80

GUY MATERIAL PROPERTIES

45.0 0. 19.50 .388 .115 26800. .000012 0 2 120
 90.0 0. 19.50 .388 .115 26800. .000012
 140.0 0. 25.50 .525 .15 25500. .000012
 140.0 120. 25.50 .525 .15 25500. .000012
 185.0 0. 25.50 .525 .15 25500. .000012
 230.0 0. 40.30 .819 .234 25500. .000012
 280.0 0. 68.0 1.18 .338 24200. .000012
 280.0 120. 68.0 1.18 .338 24200. .000012

Bare tower 100 mph wind at azimuth 0 deg

MAST LOADING

D 300. -.0815 0 .081 -.0036 0 0
 D 280 -.0822 0 .0811 -.0036 0 .0006
 D 280 -.0888 0 .0815 -.0038 -.0002 .0032
 D 260. -.0979 0 .0822 -.0041 -.0002 .0031
 D 260. -.0821 0 .0501 -.0041 -.0002 .0032
 D 160. -.0774 0 .0506 -.0042 -.0002 .0028
 D 160. -.0921 0 .0918 -.0042 -.0002 .0027
 D 120. -.0974 0 .0933 -.0048 .0006 -.0032
 D 120. -.0825 0 .061 -.0048 .0006 -.0031
 D 0 -.0571 0 .061 -.0048 .0006 -.0021
 C 300. -.0467 0 .0109 0 0 0
 C 287. -.2125 0 .1285 .1904 -.0596 .1093
 C 280. -1.2568 0 .9115 0 0 0
 C 272. -.3633 0 .235 .1619 .0937 -.1299
 C 236. -.1479 0 .1065 -.0285 .1533 -.1895
 C 151. -.2248 0 .1065 -.1185 -.1013 .2766
 C 140. -1.031 0 .9115 0 0 0
 C 131. -.0566 0 .0441 -.0567 -.0675 .0867
 c 287.00 -2.530 .604 .442 1.08 .00 -.65 296.00
 c 272.00 -2.397 1.162 .541 -.66 1.15 -7.91 105.00
 c 272.00 -1.759 1.354 .447 1.10 .00 -3.25 296.00
 c 236.00 -2.306 1.118 .541 -.66 1.15 -7.61 105.00
 c 151.00 -2.001 -.420 .342 -.42 -.73 8.36 241.00

GUY LOADING

0 100. 0 0 0 56 .01 1 1 1.00 1.00 1.00

SUPPRESS PRINTING

8*0

Bare tower 100 mph wind at azimuth 90 deg

MAST LOADING

D 300. 0 -.0698 .081 -.0036 0 -.0093
 D 280 0 -.0705 .0811 -.0036 0 -.0096
 D 280 0 -.0766 .0815 -.0038 -.0002 -.0116
 D 260. 0 -.0844 .0822 -.0041 -.0002 -.0143
 D 260. 0 -.0686 .0501 -.0041 -.0002 -.0144
 D 160. 0 -.0687 .0506 -.0042 -.0002 -.0152
 D 160. 0 -.0841 .0918 -.0042 -.0002 -.015
 D 120. 0 -.09 .0933 -.0048 .0006 -.018
 D 120. 0 -.0752 .061 -.0048 .0006 -.0175

D 0 0 -.0521 .061 -.0048 .0006 -.0121
 C 300. 0 -.0467 .0109 0 0 0
 C 287. 0 -.2883 .1285 .1904 -.0596 .463
 C 280. 0 -1.2568 .9115 0 0 1.1311
 C 272. 0 -.5126 .235 .1619 .0937 .3546
 C 236. 0 -.2196 .1065 -.0285 .1533 -.0854
 C 151. 0 -.0987 .1065 -.1185 -.1013 -.0928
 C 140. 0 -1.031 .9115 0 0 .9279
 C 131. 0 -.0566 .0441 -.0567 -.0675 -.0727
 c 287.00 -.022 -2.390 .442 1.08 .00 7.43 296.00
 c 272.00 .681 -4.673 .541 -.66 1.15 -2.94 105.00
 c 272.00 .410 -1.145 .447 1.10 .00 3.26 296.00
 c 236.00 .654 -4.488 .541 -.66 1.15 -2.82 105.00
 c 151.00 -.032 -2.722 .342 -.42 -.73 -6.78 241.00

GUY LOADING

90. 100. 0 0 0 56 .01 1 1 1.00 1.00 1.00

SUPPRESS PRINTING

0,1,1,1,4*0

Bare tower 100 mph wind at azimuth 180 deg

MAST LOADING

D 300. .0815 0 .081 -.0036 0 0
 D 280 .0822 0 .0811 -.0036 0 -.0006
 D 280 .0888 0 .0815 -.0038 -.0002 -.0032
 D 260. .0979 0 .0822 -.0041 -.0002 -.0031
 D 260. .0821 0 .0501 -.0041 -.0002 -.0032
 D 160. .0774 0 .0506 -.0042 -.0002 -.0028
 D 160. .0921 0 .0918 -.0042 -.0002 -.0027
 D 120. .0974 0 .0933 -.0048 .0006 .0032
 D 120. .0825 0 .061 -.0048 .0006 .0031
 D 0 .0571 0 .061 -.0048 .0006 .0021
 C 300. .0467 0 .0109 0 0 0
 C 287. .2125 0 .1285 .1904 -.0596 -.1093
 C 280. 1.2568 0 .9115 0 0 0
 C 272. .3633 0 .235 .1619 .0937 .1299
 C 236. .1479 0 .1065 -.0285 .1533 .1894
 C 151. .2248 0 .1065 -.1185 -.1013 -.2766
 C 140. 1.031 0 .9115 0 0 0
 C 131. .0566 0 .0441 -.0567 -.0675 -.0867
 c 287.00 1.555 .309 .442 1.08 .00 -7.28 296.00
 c 272.00 2.405 -1.179 .541 -.66 1.15 5.51 105.00
 c 272.00 1.653 -.989 .447 1.10 .00 .41 296.00
 c 236.00 2.310 -1.133 .541 -.66 1.15 5.29 105.00
 c 151.00 3.443 4.148 .342 -.42 -.73 .43 241.00

GUY LOADING

180. 100. 0 0 0 56 .01 1 1 1.00 1.00 1.00