

[DEMOSU1] - 150ft self-supporting tower analysis - October 2004

MAST GEOMETRY

X 4 .0 60.0 17.0 11.0 20.0  
,, 60.0 120.0 11.0 5.0 10.0  
,, 120.0 150.0 5.0 5.0 5.0

MEMBER PROPERTIES

LE .0 20.0 11.908, 0, 29000, 0  
, 20.0 60.0 8.399  
, 60.0 80.0 5.581  
, 80.0 100.0 4.407  
, 100.0 120.0 3.016  
, 120.0 150.0 1.704  
DI, .0 60.0 2.228  
, 60.0 120.0 .799  
, 120.0 150.0 .621  
HO, 40.0 60.0 1.805  
, 70.0 100.0 .844  
, 100.0 120.0 .969  
, 125.0 150.0 1.242

BARE - 100 mph wind AT AZIMUTH 0

MAST LOADING

D 0 0 0 0 .2008 .2669 .0446 .213  
, 80,,,, .1798 .137 .0141 .0737  
,,,, .1626 .121 .0108 .0572  
, 150,,,, .1525 .0693 .0023 -.0166  
C 32. 3.182 0,, .1332 .1296 0 0  
, 45. 9. 225,,, .2403 .0592  
, 90. 4.5 45,, .0374 .0324  
, 125,,,, .0974 .0648  
, 128. 9. 225,,, .3171 .0579

ANTENNA LOADING

STD	125.00	27.00	4.50	45.00	1.775	.016	.168	.25
HP	90.00	90.00	6.70	45.00	-.015	-.069	.043	-.02
HP	32.00	45.00	11.00	45.00	1.512	-.376	.447	.46
HP	32.00	300.00	11.00	315.00	.717	.287	.281	-.03

SUPPRESS PRINTING

8\*0

BARE - 100 mph wind AT AZIMUTH 90

MAST LOADING

D 0 0 0 90 .2008 .2669 .0446 -.1618  
, 80,,,, .1798 .137 .0141 -.0737  
,,,, .1626 .121 .0108 -.0572  
, 150,,,, .1525 .0693 .0023 .0166  
C 32. 3.182,,, .1332 .1296  
, 45. 9. 225,,, .2403 .0592  
, 90., 4.5, 45,, .0374 .0324  
, 125,,,, .0974 .0648  
, 128. 9. 225,,, .3171 .0579

ANTENNA LOADING

STD	125.00	27.00	4.50	45.00	1.837	.404	.168	-.54
HP	90.00	90.00	6.70	45.00	.145	.000	.043	.00
HP	32.00	45.00	11.00	45.00	1.512	.376	.447	-.46
HP	32.00	300.00	11.00	315.00	-.769	.098	.281	.25

suppress printing

0,1,1,1,4\*0

BARE - 100 mph wind AT AZIMUTH 180

MAST LOADING

D 0 0 0 180. .2008 .2669 .0446 -.213  
, 80,,,, .1798 .137 .0141 -.0737  
,,,, .1626 .121 .0108 -.0572  
, 150,,,, .1525 .0693 .0023 .0166  
C 32. 3.182 0,, .1332 .1296 0 0  
, 45. 9. 225,,, .2403 .0592  
, 90. 4.5 45,, .0374 .0324

, 125.0000, .0974 .0648  
, 128.9. 225.000, .3171 .0579

ANTENNA LOADING

STD	125.00	27.00	4.50	45.00	-.879	.439	.168	.71
HP	90.00	90.00	6.70	45.00	-.015	.069	.043	.02
HP	32.00	45.00	11.00	45.00	-1.302	.295	.447	.88
HP	32.00	300.00	11.00	315.00	-.573	-.302	.281	-.46