| | | |
|---|---|---|
| Test date: | 8/2/2006 | |
| Test Site: | 6600 Congress Ave, Boca Raton, FL | |
| Product: | AMS 3030 hybrid floor max antenna with AMS 9040 Controller | |
| Set-Up: | 1 panel 7' cable, Is=15.5A, (0-peak) | |
| Line In: | 120vac 60hz | |
| Duty Cycle: | 0.144144 | |
| Test Distance | 10 | |
| TX on time: | 1.6 | |
| TX total time: | 11.1 | 45Hz = 22.2msec |
| A d1 - A' d2 | 16.2 | 90Hz = 11.1msec |
| d2 / d1 | 2 | |
| 20xP | 6.02 | |
| P | 2.69 | |
| DCF 1 | -79.59 | |
| DCF 2 | -25.71 | |
| File name: | | |

| | | | |
|---|---|---|---|
| d1 [m] | 10 | | Measure fundamental at d1 and d2 to calculate rolloff - d2 is typically 2*d1 [e.g. 10 / 20m] |
| d2 [m] | 20 | phase | |
| 58 @ d1 | 65.6 | | |
| 58 @ d2 | 49.4 | | |

| Freq<br>kHz | **S.A.**<br>dBuV | **Det** | **BW** | **Ant Fact**<br>dB | **F Fact**<br>dB | **DCCF**<br>dB | **DCF**<br>dB | **Pk Cor**<br>dBuV/m | **Actual**<br>dBuV/m | **FCC Limit**<br>dBuV/m | | **Margin Limit**<br>dB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 58(pwr-15%) | 102 vac | 65.01 | | | | | | | | | | |
| 58(pwr+10%) | 132 vac | 66.16 | | | | | | | | | | |
| 58 | 65.6 | pk | 9kHz | 62.3 | | -16.82 | -79.59 | 48.3 | 31.5 | 32.3 | @300m | 0.8 |
| 116 | 25.7 | pk | 9kHz | 56.7 | 1.9 | -16.82 | -79.59 | 4.7 | -12.1 | 26.3 | @300m | 38.4 |
| 174 | 41.9 | pk | 9kHz | 53.2 | 0.8 | -16.82 | -79.59 | 16.3 | -0.6 | 22.8 | @300m | 23.4 |
| 232 | 15.5 | pk | 9kHz | 50.6 | 0.5 | -16.82 | -79.59 | -13.0 | -29.9 | 20.3 | @300m | 50.2 |
| 290 | 31.0 | pk | 9kHz | 48.7 | 0.4 | -16.82 | -79.59 | 0.5 | -16.3 | 18.4 | @300m | 34.7 |
| 348 | 10.8 | pk | 9kHz | 47.3 | 0.4 | -16.82 | -79.59 | -21.1 | -37.9 | 16.8 | @300m | 54.7 |
| 406 | 22.9 | pk | 9kHz | 46.1 | 0.4 | -16.82 | -79.59 | -10.2 | -27.0 | 15.4 | @300m | 42.4 |
| 464 | 5.6 | pk | 9kHz | 45.2 | 0.2 | -16.82 | -79.59 | -28.6 | -45.5 | 14.3 | @300m | 59.8 |
| 522 | 15.9 | qp | 9kHz | 44.4 | 0.2 | -16.82 | -25.71 | 34.8 | 18.0 | 33.3 | @30m | 15.3 |
| 580 | 9.5 | qp | 9kHz | 43.6 | 0.2 | -16.82 | -25.71 | 27.6 | 10.7 | 32.3 | @30m | 21.6 |

F Fact:  Filter Factor:  Insertion loss of High Pass Filter, excluding fundamental.

DCCF:  (duty cycle correction factor) = 20 log (duty cycle) = 20 log (pulse duration/pulse repetition period)
= 20 log (on time / repeat time)

DCF:  Use square law (40 dB).  If "Actual" is non-compliant, determine actual correction factor per formula below.

Dist_Corr_Factor = 20 log( Test Dist / 300)P  =  20 P log ( Test Dist / 300 )

Where P is the roll-off exponent .  P is  found as follows:

P =  (Level(at Distance 1) - Level(at Distance 2))  /  20 log (Distance 2 / Distance 1)

Pk Cor:  Peak Corrected Value -- Must be less than 20 dB greater than "Actual" value.

Test requirements:
22 degree radials
rotation of measurement loop about the vertical axis at each radial
horizontal polarization of measurement loop at each radial
worst case antenna configuration