

**Table II**

**Computation of Signal Level  
on the Ground  
from Proposed W286AX FM Translator  
Salisbury, Maryland**

**November, 2005**

| Depression<br>Angle, Degrees | Relative Field | ERP Watts | dBk   | Distance to the<br>Ground in<br>Kilometers | Free Space<br>Signal |
|------------------------------|----------------|-----------|-------|--|----------------------|
| 90                           | 0.001          | 0.0000    | -75.2 | 0.0560                                     | 56.7                 |
| 85                           | 0.023          | 0.0159    | -48.0 | 0.0562                                     | 83.9                 |
| 80                           | 0.048          | 0.0691    | -41.6 | 0.0569                                     | 90.2                 |
| 75                           | 0.077          | 0.1779    | -37.5 | 0.0580                                     | 94.2                 |
| 70                           | 0.112          | 0.3763    | -34.2 | 0.0596                                     | 97.2                 |
| 65                           | 0.156          | 0.7301    | -31.4 | 0.0618                                     | 99.7                 |
| 60                           | 0.208          | 1.2979    | -28.9 | 0.0647                                     | 101.8                |
| 55                           | 0.271          | 2.2032    | -26.6 | 0.0684                                     | 103.7                |
| 50                           | 0.342          | 3.5089    | -24.5 | 0.0731                                     | 105.1                |
| 45                           | 0.422          | 5.3425    | -22.7 | 0.0792                                     | 106.2                |
| 40                           | 0.508          | 7.7419    | -21.1 | 0.0871                                     | 107.0                |
| 35                           | 0.593          | 10.5495   | -19.8 | 0.0976                                     | 107.4                |
| 30                           | 0.685          | 14.0768   | -18.5 | 0.1120                                     | 107.4                |
| 25                           | 0.770          | 17.7870   | -17.5 | 0.1325                                     | 107.0                |
| 20                           | 0.846          | 21.4715   | -16.7 | 0.1637                                     | 106.0                |
| 15                           | 0.921          | 25.4472   | -15.9 | 0.2164                                     | 104.3                |
| 10                           | 0.959          | 27.5904   | -15.6 | 0.3225                                     | 101.2                |
| 5                            | 0.990          | 29.4030   | -15.3 | 0.6425                                     | 95.4                 |

**Notes:**

Antenna radiation center above ground (meters): 56  
Maximum ERP (watts) at 0° Depression angle: 30  
Free Space Signal =  $106.92 - 20 \cdot \log(\text{distance in km}) + \text{dBk}$   
Relative field based on 2 bay 0.5 wavelength interbay spac antenna - Shively 6812B-2