

6/20/2002

M/N:5106 S/N:2292

|          | raw<br>dBm | amplitude<br>mW^2 | frequency(Hz) | raw<br>dBm | amplitude<br>mW^2 | frequency(H<br>z) | raw<br>dBm | amplitude<br>mW^2 | frequency(Hz) | raw<br>dBm | amplitude<br>mW^2 | frequency(H<br>z) | raw<br>dBm | amplitude<br>mW^2 | frequency(H<br>z) |
|----------|------------|-------------------|---------------|------------|-------------------|-------------------|------------|-------------------|---------------|------------|-------------------|-------------------|------------|-------------------|-------------------|
| 9.60E+08 | -8.12E+01  | 5.75E-17          | 1.03E+09      | -7.12E+01  | 5.75E-15          | 1.11E+09          | -6.96E+01  | 1.20E-14          | 1.15E+09      | -7.46E+01  | 1.20E-15          | 1.26E+09          | -8.63E+01  | 5.50E-18          | 1.41E+09          |
| 9.60E+08 | -8.12E+01  | 5.75E-17          | 1.03E+09      | -7.12E+01  | 5.75E-15          | 1.11E+09          | -6.96E+01  | 1.20E-14          | 1.15E+09      | -7.46E+01  | 1.20E-15          | 1.26E+09          | -8.63E+01  | 5.50E-18          | 1.41E+09          |
| 9.60E+08 | -7.15E+01  | 5.01E-15          | 1.03E+09      | -7.81E+01  | 2.40E-16          | 1.11E+09          | -6.96E+01  | 1.20E-14          | 1.15E+09      | -7.46E+01  | 1.20E-15          | 1.26E+09          | -8.63E+01  | 5.50E-18          | 1.41E+09          |
| 9.60E+08 | -7.15E+01  | 5.01E-15          | 1.03E+09      | -7.81E+01  | 2.40E-16          | 1.11E+09          | -6.96E+01  | 1.20E-14          | 1.15E+09      | -7.46E+01  | 1.20E-15          | 1.26E+09          | -8.63E+01  | 5.50E-18          | 1.41E+09          |
| 9.60E+08 | -7.15E+01  | 5.01E-15          | 1.03E+09      | -7.81E+01  | 2.40E-16          | 1.11E+09          | -6.96E+01  | 1.20E-14          | 1.15E+09      | -7.46E+01  | 1.20E-15          | 1.26E+09          | -8.63E+01  | 5.50E-18          | 1.41E+09          |
| 9.60E+08 | -7.15E+01  | 5.01E-15          | 1.03E+09      | -7.81E+01  | 2.40E-16          | 1.11E+09          | -8.33E+01  | 2.19E-17          | 1.15E+09      | -7.13E+01  | 5.50E-15          | 1.26E+09          | -8.63E+01  | 5.50E-18          | 1.41E+09          |
| 9.60E+08 | -7.15E+01  | 5.01E-15          | 1.03E+09      | -7.81E+01  | 2.40E-16          | 1.11E+09          | -8.33E+01  | 2.19E-17          | 1.15E+09      | -7.13E+01  | 5.50E-15          | 1.26E+09          | -6.82E+01  | 2.29E-14          | 1.41E+09          |
| 9.60E+08 | -7.15E+01  | 5.01E-15          | 1.03E+09      | -7.81E+01  | 2.40E-16          | 1.11E+09          | -8.33E+01  | 2.19E-17          | 1.15E+09      | -7.13E+01  | 5.50E-15          | 1.26E+09          | -6.82E+01  | 2.29E-14          | 1.41E+09          |
| 9.60E+08 | -7.40E+01  | 1.58E-15          | 1.03E+09      | -7.71E+01  | 3.80E-16          | 1.11E+09          | -8.33E+01  | 2.19E-17          | 1.15E+09      | -7.13E+01  | 5.50E-15          | 1.26E+09          | -6.82E+01  | 2.29E-14          | 1.41E+09          |
| 9.60E+08 | -7.40E+01  | 1.58E-15          | 1.03E+09      | -7.71E+01  | 3.80E-16          | 1.11E+09          | -8.33E+01  | 2.19E-17          | 1.15E+09      | -7.13E+01  | 5.50E-15          | 1.26E+09          | -6.82E+01  | 2.29E-14          | 1.41E+09          |
| 9.60E+08 | -7.40E+01  | 1.58E-15          | 1.03E+09      | -7.71E+01  | 3.80E-16          | 1.11E+09          | -8.25E+01  | 3.16E-17          | 1.15E+09      | -7.37E+01  | 1.82E-15          | 1.26E+09          | -6.82E+01  | 2.29E-14          | 1.41E+09          |
| 9.60E+08 | -7.40E+01  | 1.58E-15          | 1.03E+09      | -7.71E+01  | 3.80E-16          | 1.11E+09          | -8.25E+01  | 3.16E-17          | 1.15E+09      | -7.37E+01  | 1.82E-15          | 1.26E+09          | -7.34E+01  | 2.09E-15          | 1.41E+09          |
| 9.60E+08 | -7.40E+01  | 1.58E-15          | 1.03E+09      | -7.71E+01  | 3.80E-16          | 1.11E+09          | -8.25E+01  | 3.16E-17          | 1.15E+09      | -7.37E+01  | 1.82E-15          | 1.26E+09          | -7.34E+01  | 2.09E-15          | 1.41E+09          |
| 9.60E+08 | -6.51E+01  | 9.55E-14          | 1.03E+09      | -6.31E+01  | 2.40E-13          | 1.11E+09          | -8.25E+01  | 3.16E-17          | 1.15E+09      | -7.37E+01  | 1.82E-15          | 1.26E+09          | -7.34E+01  | 2.09E-15          | 1.41E+09          |
| 9.60E+08 | -6.51E+01  | 9.55E-14          | 1.03E+09      | -6.31E+01  | 2.40E-13          | 1.11E+09          | -8.25E+01  | 3.16E-17          | 1.15E+09      | -7.37E+01  | 1.82E-15          | 1.26E+09          | -7.34E+01  | 2.09E-15          | 1.41E+09          |
| 9.60E+08 | -6.51E+01  | 9.55E-14          | 1.03E+09      | -6.31E+01  | 2.40E-13          | 1.11E+09          | -8.25E+01  | 3.16E-17          | 1.15E+09      | -7.28E+01  | 2.75E-15          | 1.26E+09          | -7.34E+01  | 2.09E-15          | 1.41E+09          |
| 9.60E+08 | -6.51E+01  | 9.55E-14          | 1.03E+09      | -6.31E+01  | 2.40E-13          | 1.11E+09          | -7.82E+01  | 2.29E-16          | 1.15E+09      | -7.28E+01  | 2.75E-15          | 1.26E+09          | -8.29E+01  | 2.63E-17          | 1.41E+09          |
| 9.60E+08 | -6.51E+01  | 9.55E-14          | 1.03E+09      | -6.31E+01  | 2.40E-13          | 1.11E+09          | -7.82E+01  | 2.29E-16          | 1.15E+09      | -7.28E+01  | 2.75E-15          | 1.26E+09          | -8.29E+01  | 2.63E-17          | 1.41E+09          |
| 9.60E+08 | -7.79E+01  | 2.63E-16          | 1.03E+09      | -7.94E+01  | 1.32E-16          | 1.11E+09          | -7.82E+01  | 2.29E-16          | 1.15E+09      | -7.28E+01  | 2.75E-15          | 1.26E+09          | -8.29E+01  | 2.63E-17          | 1.41E+09          |
| 9.60E+08 | -7.79E+01  | 2.63E-16          | 1.03E+09      | -7.94E+01  | 1.32E-16          | 1.11E+09          | -7.82E+01  | 2.29E-16          | 1.15E+09      | -7.28E+01  | 2.75E-15          | 1.26E+09          | -8.29E+01  | 2.63E-17          | 1.41E+09          |
| 9.60E+08 | -7.79E+01  | 2.63E-16          | 1.03E+09      | -7.94E+01  | 1.32E-16          | 1.11E+09          | -7.82E+01  | 2.29E-16          | 1.15E+09      | -6.16E+01  | 4.79E-13          | 1.26E+09          | -8.29E+01  | 2.63E-17          | 1.41E+09          |
| 9.60E+08 | -7.79E+01  | 2.63E-16          | 1.03E+09      | -7.94E+01  | 1.32E-16          | 1.11E+09          | -6.16E+01  | 4.79E-13          | 1.15E+09      | -6.16E+01  | 4.79E-13          | 1.26E+09          | -6.32E+01  | 2.29E-13          | 1.41E+09          |
| 9.60E+08 | -7.79E+01  | 2.63E-16          | 1.03E+09      | -7.94E+01  | 1.32E-16          | 1.11E+09          | -6.16E+01  | 4.79E-13          | 1.15E+09      | -6.16E+01  | 4.79E-13          | 1.26E+09          | -6.32E+01  | 2.29E-13          | 1.41E+09          |
| 9.60E+08 | -6.12E+01  | 5.75E-13          | 1.03E+09      | -6.10E+01  | 6.31E-13          | 1.11E+09          | -6.16E+01  | 4.79E-13          | 1.15E+09      | -6.16E+01  | 4.79E-13          | 1.26E+09          | -6.32E+01  | 2.29E-13          | 1.41E+09          |
| 9.60E+08 | -6.12E+01  | 5.75E-13          | 1.03E+09      | -6.10E+01  | 6.31E-13          | 1.11E+09          | -6.16E+01  | 4.79E-13          | 1.15E+09      | -6.16E+01  | 4.79E-13          | 1.26E+09          | -6.32E+01  | 2.29E-13          | 1.41E+09          |
| 9.60E+08 | -6.12E+01  | 5.75E-13          | 1.03E+09      | -6.10E+01  | 6.31E-13          | 1.11E+09          | -6.16E+01  | 4.79E-13          | 1.15E+09      | -6.16E+01  | 4.79E-13          | 1.26E+09          | -6.32E+01  | 2.29E-13          | 1.41E+09          |
| 9.60E+08 | -6.12E+01  | 5.75E-13          | 1.03E+09      | -6.10E+01  | 6.31E-13          | 1.11E+09          | -8.19E+01  | 4.17E-17          | 1.15E+09      | -7.36E+01  | 1.91E-15          | 1.26E+09          | -7.26E+01  | 3.02E-15          | 1.41E+09          |
| 9.60E+08 | -6.12E+01  | 5.75E-13          | 1.03E+09      | -6.10E+01  | 6.31E-13          | 1.11E+09          | -8.19E+01  | 4.17E-17          | 1.15E+09      | -7.36E+01  | 1.91E-15          | 1.26E+09          | -7.26E+01  | 3.02E-15          | 1.41E+09          |
| 9.60E+08 | -7.31E+01  | 2.40E-15          | 1.03E+09      | -6.97E+01  | 1.15E-14          | 1.11E+09          | -8.19E+01  | 4.17E-17          | 1.15E+09      | -7.36E+01  | 1.91E-15          | 1.26E+09          | -7.26E+01  | 3.02E-15          | 1.41E+09          |
| 9.60E+08 | -7.31E+01  | 2.40E-15          | 1.03E+09      | -6.97E+01  | 1.15E-14          | 1.11E+09          | -8.19E+01  | 4.17E-17          | 1.15E+09      | -7.36E+01  | 1.91E-15          | 1.26E+09          | -7.26E+01  | 3.02E-15          | 1.41E+09          |
| 9.60E+08 | -7.31E+01  | 2.40E-15          | 1.03E+09      | -6.97E+01  | 1.15E-14          | 1.11E+09          | -8.19E+01  | 4.17E-17          | 1.15E+09      | -7.36E+01  | 1.91E-15          | 1.26E+09          | -7.26E+01  | 3.02E-15          | 1.41E+09          |
| 9.60E+08 | -7.31E+01  | 2.40E-15          | 1.03E+09      | -6.97E+01  | 1.15E-14          | 1.11E+09          | -8.19E+01  | 4.17E-17          | 1.15E+09      | -7.36E+01  | 1.91E-15          | 1.26E+09          | -7.26E+01  | 3.02E-15          | 1.41E+09          |
| 9.60E+08 | -7.31E+01  | 2.40E-15          | 1.03E+09      | -6.97E+01  | 1.15E-14          | 1.11E+09          | -6.74E+01  | 3.31E-14          | 1.15E+09      | -6.32E+01  | 2.29E-13          | 1.26E+09          | -7.26E+01  | 3.02E-15          | 1.41E+09          |
| 9.60E+08 | -7.31E+01  | 2.40E-15          | 1.03E+09      | -6.97E+01  | 1.15E-14          | 1.11E+09          | -6.74E+01  | 3.31E-14          | 1.15E+09      | -6.32E+01  | 2.29E-13          | 1.26E+09          | -7.67E+01  | 4.57E-16          | 1.41E+09          |
| 9.60E+08 | -7.31E+01  | 2.40E-15          | 1.03E+09      | -6.97E+01  | 1.15E-14          | 1.11E+09          | -6.74E+01  | 3.31E-14          | 1.15E+09      | -6.32E+01  | 2.29E-13          | 1.26E+09          | -7.67E+01  | 4.57E-16          | 1.41E+09          |
| 9.60E+08 | -6.64E+01  | 5.25E-14          | 1.03E+09      | -6.46E+01  | 1.20E-13          | 1.11E+09          | -6.74E+01  | 3.31E-14          | 1.15E+09      | -6.32E+01  | 2.29E-13          | 1.26E+09          | -7.67E+01  | 4.57E-16          | 1.41E+09          |
| 9.60E+08 | -6.64E+01  | 5.25E-14          | 1.03E+09      | -6.46E+01  | 1.20E-13          | 1.11E+09          | -6.74E+01  | 3.31E-14          | 1.15E+09      | -6.32E+01  | 2.29E-13          | 1.26E+09          | -7.67E+01  | 4.57E-16          | 1.41E+09          |
| 9.60E+08 | -6.64E+01  | 5.25E-14          | 1.03E+09      | -6.46E+01  | 1.20E-13          | 1.11E+09          | -7.49E+01  | 1.05E-15          | 1.15E+09      | -8.20E+01  | 3.98E-17          | 1.26E+09          | -7.67E+01  | 4.57E-16          | 1.41E+09          |
| 9.60E+08 | -6.64E+01  | 5.25E-14          | 1.03E+09      | -6.46E+01  | 1.20E-13          | 1.11E+09          | -7.49E+01  | 1.05E-15          | 1.15E+09      | -8.20E+01  | 3.98E-17          | 1.26E+09          | -8.45E+01  | 1.26E-17          | 1.41E+09          |

|                |           |          |          |           |          |          |           |          |          |           |          |          |           |          |          |
|----------------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|
| 9.60E+08       | -6.64E+01 | 5.25E-14 | 1.03E+09 | -6.46E+01 | 1.20E-13 | 1.11E+09 | -7.49E+01 | 1.05E-15 | 1.15E+09 | -8.20E+01 | 3.98E-17 | 1.26E+09 | -8.45E+01 | 1.26E-17 | 1.41E+09 |
| 9.60E+08       | -7.18E+01 | 4.37E-15 | 1.03E+09 | -7.22E+01 | 3.63E-15 | 1.11E+09 | -7.49E+01 | 1.05E-15 | 1.15E+09 | -8.20E+01 | 3.98E-17 | 1.26E+09 | -8.45E+01 | 1.26E-17 | 1.41E+09 |
| 9.60E+08       | -7.18E+01 | 4.37E-15 | 1.03E+09 | -7.22E+01 | 3.63E-15 | 1.11E+09 | -7.49E+01 | 1.05E-15 | 1.15E+09 | -8.20E+01 | 3.98E-17 | 1.26E+09 | -8.45E+01 | 1.26E-17 | 1.41E+09 |
| 9.60E+08       | -7.18E+01 | 4.37E-15 | 1.03E+09 | -7.22E+01 | 3.63E-15 | 1.11E+09 | -7.49E+01 | 1.05E-15 | 1.15E+09 | -7.47E+01 | 1.15E-15 | 1.26E+09 | -8.45E+01 | 1.26E-17 | 1.41E+09 |
| 9.60E+08       | -7.18E+01 | 4.37E-15 | 1.03E+09 | -7.22E+01 | 3.63E-15 | 1.11E+09 | -7.26E+01 | 3.02E-15 | 1.15E+09 | -7.47E+01 | 1.15E-15 | 1.26E+09 | -7.49E+01 | 1.05E-15 | 1.41E+09 |
| 9.60E+08       | -7.18E+01 | 4.37E-15 | 1.03E+09 | -7.22E+01 | 3.63E-15 | 1.11E+09 | -7.26E+01 | 3.02E-15 | 1.15E+09 | -7.47E+01 | 1.15E-15 | 1.26E+09 | -7.49E+01 | 1.05E-15 | 1.41E+09 |
| 9.60E+08       | -7.14E+01 | 5.25E-15 | 1.03E+09 | -6.89E+01 | 1.66E-14 | 1.11E+09 | -7.26E+01 | 3.02E-15 | 1.15E+09 | -7.47E+01 | 1.15E-15 | 1.26E+09 | -7.49E+01 | 1.05E-15 | 1.41E+09 |
| 9.60E+08       | -7.14E+01 | 5.25E-15 | 1.03E+09 | -6.89E+01 | 1.66E-14 | 1.11E+09 | -7.26E+01 | 3.02E-15 | 1.15E+09 | -7.47E+01 | 1.15E-15 | 1.26E+09 | -7.49E+01 | 1.05E-15 | 1.41E+09 |
| 9.60E+08       | -7.14E+01 | 5.25E-15 | 1.03E+09 | -6.89E+01 | 1.66E-14 | 1.11E+09 | -7.26E+01 | 3.02E-15 | 1.15E+09 | -7.53E+01 | 8.71E-16 | 1.26E+09 | -7.49E+01 | 1.05E-15 | 1.41E+09 |
| 9.60E+08       | -7.14E+01 | 5.25E-15 | 1.03E+09 | -6.89E+01 | 1.66E-14 | 1.11E+09 | -7.53E+01 | 8.71E-16 | 1.15E+09 | -7.53E+01 | 8.71E-16 | 1.26E+09 | -7.69E+01 | 4.17E-16 | 1.41E+09 |
| 9.60E+08       | -7.14E+01 | 5.25E-15 |          |           |          | 1.11E+09 | -7.53E+01 | 8.71E-16 | 1.15E+09 | -7.53E+01 | 8.71E-16 | 1.26E+09 | -7.69E+01 | 4.17E-16 | 1.41E+09 |
|                |           |          |          |           |          | 1.11E+09 | -7.53E+01 | 8.71E-16 | 1.15E+09 | -7.53E+01 | 8.71E-16 | 1.26E+09 | -7.69E+01 | 4.17E-16 | 1.41E+09 |
| # points       | 4.90E+01  |          | 4.80E+01 |           |          | 5.10E+01 |           |          | 5.10E+01 |           |          | 5.10E+01 |           |          |          |
| freq           | 9.60E+08  |          | 1.03E+09 |           |          | 1.11E+09 |           |          | 1.15E+09 |           |          | 1.26E+09 |           |          |          |
| sum of squares | 3.72E-12  |          | 5.12E-12 |           |          | 2.65E-12 |           |          | 4.09E-12 |           |          | 1.30E-12 |           |          |          |
| RMS (mW)       | 2.75E-07  |          | 3.27E-07 |           |          | 2.28E-07 |           |          | 2.83E-07 |           |          | 1.60E-07 |           |          |          |

| raw<br>dBm | amplitude<br>mW^2 | frequency(H<br>z) | raw<br>dBm | amplitude<br>mW^2 | frequency(H<br>z) | raw<br>dBm | amplitude<br>mW^2 | frequency(H<br>z) | raw<br>dBm | amplitude<br>mW^2 | frequency(H<br>z) | raw<br>dBm | amplitude<br>mW^2 | frequency(H<br>z) | raw<br>dBm |
|------------|-------------------|-------------------|------------|-------------------|-------------------|------------|-------------------|-------------------|------------|-------------------|-------------------|------------|-------------------|-------------------|------------|
| -7.58E+01  | 6.92E-16          | 1.58E+09          | -8.07E+01  | 7.24E-17          | 1.78E+09          | -7.11E+01  | 6.03E-15          | 2.00E+09          | -6.99E+01  | 1.05E-14          | 2.51E+09          | -6.63E+01  | 5.50E-14          | 3.16E+09          | -7.70E+01  |
| -7.58E+01  | 6.92E-16          | 1.58E+09          | -8.07E+01  | 7.24E-17          | 1.78E+09          | -7.11E+01  | 6.03E-15          | 2.00E+09          | -6.99E+01  | 1.05E-14          | 2.51E+09          | -6.63E+01  | 5.50E-14          | 3.16E+09          | -7.48E+01  |
| -7.58E+01  | 6.92E-16          | 1.58E+09          | -8.07E+01  | 7.24E-17          | 1.78E+09          | -7.11E+01  | 6.03E-15          | 2.00E+09          | -6.99E+01  | 1.05E-14          | 2.51E+09          | -6.63E+01  | 5.50E-14          | 3.16E+09          | -7.48E+01  |
| -7.58E+01  | 6.92E-16          | 1.58E+09          | -8.07E+01  | 7.24E-17          | 1.78E+09          | -7.11E+01  | 6.03E-15          | 2.00E+09          | -6.99E+01  | 1.05E-14          | 2.51E+09          | -6.63E+01  | 5.50E-14          | 3.16E+09          | -7.48E+01  |
| -7.58E+01  | 6.92E-16          | 1.58E+09          | -8.07E+01  | 7.24E-17          | 1.78E+09          | -7.11E+01  | 6.03E-15          | 2.00E+09          | -6.99E+01  | 1.05E-14          | 2.51E+09          | -6.63E+01  | 5.50E-14          | 3.16E+09          | -7.48E+01  |
| -7.09E+01  | 6.61E-15          | 1.58E+09          | -7.77E+01  | 2.88E-16          | 1.78E+09          | -7.52E+01  | 9.12E-16          | 2.00E+09          | -6.99E+01  | 1.05E-14          | 2.51E+09          | -7.02E+01  | 9.12E-15          | 3.16E+09          | -7.48E+01  |
| -7.09E+01  | 6.61E-15          | 1.58E+09          | -7.77E+01  | 2.88E-16          | 1.78E+09          | -7.52E+01  | 9.12E-16          | 2.00E+09          | -7.11E+01  | 6.03E-15          | 2.51E+09          | -7.02E+01  | 9.12E-15          | 3.16E+09          | -7.96E+01  |
| -7.09E+01  | 6.61E-15          | 1.58E+09          | -7.77E+01  | 2.88E-16          | 1.78E+09          | -7.52E+01  | 9.12E-16          | 2.00E+09          | -7.11E+01  | 6.03E-15          | 2.51E+09          | -7.02E+01  | 9.12E-15          | 3.16E+09          | -7.96E+01  |
| -7.09E+01  | 6.61E-15          | 1.58E+09          | -7.77E+01  | 2.88E-16          | 1.78E+09          | -7.52E+01  | 9.12E-16          | 2.00E+09          | -7.11E+01  | 6.03E-15          | 2.51E+09          | -7.02E+01  | 9.12E-15          | 3.16E+09          | -7.96E+01  |
| -7.12E+01  | 5.75E-15          | 1.58E+09          | -7.50E+01  | 1.00E-15          | 1.78E+09          | -7.34E+01  | 2.09E-15          | 2.00E+09          | -7.11E+01  | 6.03E-15          | 2.51E+09          | -6.97E+01  | 1.15E-14          | 3.16E+09          | -7.96E+01  |
| -7.12E+01  | 5.75E-15          | 1.58E+09          | -7.50E+01  | 1.00E-15          | 1.78E+09          | -7.34E+01  | 2.09E-15          | 2.00E+09          | -8.50E+01  | 1.00E-17          | 2.51E+09          | -6.97E+01  | 1.15E-14          | 3.16E+09          | -7.69E+01  |
| -7.12E+01  | 5.75E-15          | 1.58E+09          | -7.50E+01  | 1.00E-15          | 1.78E+09          | -7.34E+01  | 2.09E-15          | 2.00E+09          | -8.50E+01  | 1.00E-17          | 2.51E+09          | -6.97E+01  | 1.15E-14          | 3.16E+09          | -7.69E+01  |
| -7.12E+01  | 5.75E-15          | 1.58E+09          | -7.50E+01  | 1.00E-15          | 1.78E+09          | -7.34E+01  | 2.09E-15          | 2.00E+09          | -8.50E+01  | 1.00E-17          | 2.51E+09          | -6.97E+01  | 1.15E-14          | 3.16E+09          | -7.69E+01  |
| -7.12E+01  | 5.75E-15          | 1.58E+09          | -7.50E+01  | 1.00E-15          | 1.78E+09          | -7.34E+01  | 2.09E-15          | 2.00E+09          | -8.50E+01  | 1.00E-17          | 2.51E+09          | -6.97E+01  | 1.15E-14          | 3.16E+09          | -7.69E+01  |
| -7.12E+01  | 5.75E-15          | 1.58E+09          | -7.50E+01  | 1.00E-15          | 1.78E+09          | -7.34E+01  | 2.09E-15          | 2.00E+09          | -8.50E+01  | 1.00E-17          | 2.51E+09          | -7.38E+01  | 1.74E-15          | 3.16E+09          | -7.69E+01  |
| -8.51E+01  | 9.55E-18          | 1.58E+09          | -7.17E+01  | 4.57E-15          | 1.78E+09          | -7.02E+01  | 9.12E-15          | 2.00E+09          | -7.20E+01  | 3.98E-15          | 2.51E+09          | -7.38E+01  | 1.74E-15          | 3.16E+09          | -8.41E+01  |
| -8.51E+01  | 9.55E-18          | 1.58E+09          | -7.17E+01  | 4.57E-15          | 1.78E+09          | -7.02E+01  | 9.12E-15          | 2.00E+09          | -7.20E+01  | 3.98E-15          | 2.51E+09          | -7.38E+01  | 1.74E-15          | 3.16E+09          | -8.41E+01  |
| -8.51E+01  | 9.55E-18          | 1.58E+09          | -7.17E+01  | 4.57E-15          | 1.78E+09          | -7.02E+01  | 9.12E-15          | 2.00E+09          | -7.20E+01  | 3.98E-15          | 2.51E+09          | -7.38E+01  | 1.74E-15          | 3.16E+09          | -8.41E+01  |
| -8.51E+01  | 9.55E-18          | 1.58E+09          | -7.17E+01  | 4.57E-15          | 1.78E+09          | -7.02E+01  | 9.12E-15          | 2.00E+09          | -7.20E+01  | 3.98E-15          | 2.51E+09          | -7.38E+01  | 1.74E-15          | 3.16E+09          | -8.41E+01  |
| -8.51E+01  | 9.55E-18          | 1.58E+09          | -7.17E+01  | 4.57E-15          | 1.78E+09          | -7.02E+01  | 9.12E-15          | 2.00E+09          | -7.20E+01  | 3.98E-15          | 2.51E+09          | -7.38E+01  | 1.74E-15          | 3.16E+09          | -8.41E+01  |
| -7.60E+01  | 6.31E-16          | 1.58E+09          | -7.20E+01  | 3.98E-15          | 1.78E+09          | -7.74E+01  | 3.31E-16          | 2.00E+09          | -7.69E+01  | 4.17E-16          | 2.51E+09          | -8.13E+01  | 5.50E-17          | 3.16E+09          | -7.47E+01  |
| -7.60E+01  | 6.31E-16          | 1.58E+09          | -7.20E+01  | 3.98E-15          | 1.78E+09          | -7.74E+01  | 3.31E-16          | 2.00E+09          | -7.69E+01  | 4.17E-16          | 2.51E+09          | -8.13E+01  | 5.50E-17          | 3.16E+09          | -7.47E+01  |
| -7.60E+01  | 6.31E-16          | 1.58E+09          | -7.20E+01  | 3.98E-15          | 1.78E+09          | -7.74E+01  | 3.31E-16          | 2.00E+09          | -7.69E+01  | 4.17E-16          | 2.51E+09          | -8.13E+01  | 5.50E-17          | 3.16E+09          | -7.47E+01  |
| -7.60E+01  | 6.31E-16          | 1.58E+09          | -7.20E+01  | 3.98E-15          | 1.78E+09          | -7.74E+01  | 3.31E-16          | 2.00E+09          | -7.69E+01  | 4.17E-16          | 2.51E+09          | -8.13E+01  | 5.50E-17          | 3.16E+09          | -7.47E+01  |
| -7.60E+01  | 6.31E-16          | 1.58E+09          | -7.20E+01  | 3.98E-15          | 1.78E+09          | -7.74E+01  | 3.31E-16          | 2.00E+09          | -7.69E+01  | 4.17E-16          | 2.51E+09          | -8.13E+01  | 5.50E-17          | 3.16E+09          | -7.47E+01  |
| -8.68E+01  | 4.37E-18          | 1.58E+09          | -7.04E+01  | 8.32E-15          | 1.78E+09          | -7.38E+01  | 1.74E-15          | 2.00E+09          | -7.16E+01  | 4.79E-15          | 2.51E+09          | -8.00E+01  | 1.00E-16          | 3.16E+09          | -7.47E+01  |
| -8.68E+01  | 4.37E-18          | 1.58E+09          | -7.04E+01  | 8.32E-15          | 1.78E+09          | -7.38E+01  | 1.74E-15          | 2.00E+09          | -7.16E+01  | 4.79E-15          | 2.51E+09          | -8.00E+01  | 1.00E-16          | 3.16E+09          | -8.07E+01  |
| -8.68E+01  | 4.37E-18          | 1.58E+09          | -7.04E+01  | 8.32E-15          | 1.78E+09          | -7.38E+01  | 1.74E-15          | 2.00E+09          | -7.16E+01  | 4.79E-15          | 2.51E+09          | -8.00E+01  | 1.00E-16          | 3.16E+09          | -8.07E+01  |
| -8.68E+01  | 4.37E-18          | 1.58E+09          | -7.04E+01  | 8.32E-15          | 1.78E+09          | -7.38E+01  | 1.74E-15          | 2.00E+09          | -7.16E+01  | 4.79E-15          | 2.51E+09          | -8.00E+01  | 1.00E-16          | 3.16E+09          | -8.07E+01  |
| -8.68E+01  | 4.37E-18          | 1.58E+09          | -7.04E+01  | 8.32E-15          | 1.78E+09          | -7.38E+01  | 1.74E-15          | 2.00E+09          | -7.16E+01  | 4.79E-15          | 2.51E+09          | -8.00E+01  | 1.00E-16          | 3.16E+09          | -8.07E+01  |
| -8.71E+01  | 3.80E-18          | 1.58E+09          | -8.28E+01  | 2.75E-17          | 1.78E+09          | -7.67E+01  | 4.57E-16          | 2.00E+09          | -7.16E+01  | 4.79E-15          | 2.51E+09          | -7.06E+01  | 7.59E-15          | 3.16E+09          | -8.07E+01  |
| -8.71E+01  | 3.80E-18          | 1.58E+09          | -8.28E+01  | 2.75E-17          | 1.78E+09          | -7.67E+01  | 4.57E-16          | 2.00E+09          | -6.99E+01  | 1.05E-14          | 2.51E+09          | -7.06E+01  | 7.59E-15          | 3.16E+09          | -7.08E+01  |
| -8.71E+01  | 3.80E-18          | 1.58E+09          | -8.28E+01  | 2.75E-17          | 1.78E+09          | -7.67E+01  | 4.57E-16          | 2.00E+09          | -6.99E+01  | 1.05E-14          | 2.51E+09          | -7.06E+01  | 7.59E-15          | 3.16E+09          | -7.08E+01  |
| -8.71E+01  | 3.80E-18          | 1.58E+09          | -8.28E+01  | 2.75E-17          | 1.78E+09          | -7.67E+01  | 4.57E-16          | 2.00E+09          | -6.99E+01  | 1.05E-14          | 2.51E+09          | -7.06E+01  | 7.59E-15          | 3.16E+09          | -7.08E+01  |
| -8.71E+01  | 3.80E-18          | 1.58E+09          | -8.28E+01  | 2.75E-17          | 1.78E+09          | -7.67E+01  | 4.57E-16          | 2.00E+09          | -6.99E+01  | 1.05E-14          | 2.51E+09          | -7.06E+01  | 7.59E-15          | 3.16E+09          | -7.08E+01  |
| -7.28E+01  | 2.75E-15          | 1.58E+09          | -8.28E+01  | 2.75E-17          | 1.78E+09          | -7.67E+01  | 4.57E-16          | 2.00E+09          | -6.99E+01  | 1.05E-14          | 2.51E+09          | -7.36E+01  | 1.91E-15          | 3.16E+09          | -7.08E+01  |
| -7.28E+01  | 2.75E-15          | 1.58E+09          | -7.62E+01  | 5.75E-16          | 1.78E+09          | -8.21E+01  | 3.80E-17          | 2.00E+09          | -7.27E+01  | 2.88E-15          | 2.51E+09          | -7.36E+01  | 1.91E-15          | 3.16E+09          | -7.26E+01  |

|           |          |          |           |          |          |           |          |          |           |          |          |           |          |          |           |
|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|
| -7.28E+01 | 2.75E-15 | 1.58E+09 | -7.62E+01 | 5.75E-16 | 1.78E+09 | -8.21E+01 | 3.80E-17 | 2.00E+09 | -7.27E+01 | 2.88E-15 | 2.51E+09 | -7.36E+01 | 1.91E-15 | 3.16E+09 | -7.26E+01 |
| -7.28E+01 | 2.75E-15 | 1.58E+09 | -7.62E+01 | 5.75E-16 | 1.78E+09 | -8.21E+01 | 3.80E-17 | 2.00E+09 | -7.27E+01 | 2.88E-15 | 2.51E+09 | -7.36E+01 | 1.91E-15 | 3.16E+09 | -7.26E+01 |
| -7.28E+01 | 2.75E-15 | 1.58E+09 | -7.62E+01 | 5.75E-16 | 1.78E+09 | -8.21E+01 | 3.80E-17 | 2.00E+09 | -7.27E+01 | 2.88E-15 | 2.51E+09 | -7.36E+01 | 1.91E-15 | 3.16E+09 | -7.26E+01 |
| -7.28E+01 | 2.75E-15 | 1.58E+09 | -7.62E+01 | 5.75E-16 | 1.78E+09 | -8.21E+01 | 3.80E-17 | 2.00E+09 | -7.27E+01 | 2.88E-15 | 2.51E+09 | -7.87E+01 | 1.82E-16 | 3.16E+09 | -7.26E+01 |
| -7.17E+01 | 4.57E-15 | 1.58E+09 | -8.03E+01 | 8.71E-17 | 1.78E+09 | -6.94E+01 | 1.32E-14 | 2.00E+09 | -7.14E+01 | 5.25E-15 | 2.51E+09 | -7.87E+01 | 1.82E-16 | 3.16E+09 | -8.02E+01 |
| -7.17E+01 | 4.57E-15 | 1.58E+09 | -8.03E+01 | 8.71E-17 | 1.78E+09 | -6.94E+01 | 1.32E-14 | 2.00E+09 | -7.14E+01 | 5.25E-15 | 2.51E+09 | -7.87E+01 | 1.82E-16 | 3.16E+09 | -8.02E+01 |
| -7.17E+01 | 4.57E-15 | 1.58E+09 | -8.03E+01 | 8.71E-17 | 1.78E+09 | -6.94E+01 | 1.32E-14 | 2.00E+09 | -7.14E+01 | 5.25E-15 | 2.51E+09 | -7.87E+01 | 1.82E-16 | 3.16E+09 | -8.02E+01 |
| -7.17E+01 | 4.57E-15 | 1.58E+09 | -8.03E+01 | 8.71E-17 | 1.78E+09 | -6.94E+01 | 1.32E-14 | 2.00E+09 | -7.14E+01 | 5.25E-15 | 2.51E+09 | -7.87E+01 | 1.82E-16 | 3.16E+09 | -8.02E+01 |
| -7.17E+01 | 4.57E-15 | 1.58E+09 | -8.03E+01 | 8.71E-17 | 1.78E+09 | -6.94E+01 | 1.32E-14 | 2.00E+09 | -7.14E+01 | 5.25E-15 | 2.51E+09 | -7.87E+01 | 1.82E-16 | 3.16E+09 | -8.02E+01 |
| -8.32E+01 | 2.29E-17 | 1.58E+09 | -8.74E+01 | 3.31E-18 | 1.78E+09 | -7.29E+01 | 2.63E-15 | 2.00E+09 | -8.24E+01 | 3.31E-17 | 2.51E+09 | -8.37E+01 | 1.82E-17 | 3.16E+09 | -8.02E+01 |
| -8.32E+01 | 2.29E-17 | 1.58E+09 | -8.74E+01 | 3.31E-18 | 1.78E+09 | -7.29E+01 | 2.63E-15 | 2.00E+09 | -8.24E+01 | 3.31E-17 | 2.51E+09 | -8.37E+01 | 1.82E-17 | 3.16E+09 | -7.34E+01 |
| -8.32E+01 | 2.29E-17 | 1.58E+09 | -8.74E+01 | 3.31E-18 | 1.78E+09 | -7.29E+01 | 2.63E-15 | 2.00E+09 | -8.24E+01 | 3.31E-17 | 2.51E+09 | -8.37E+01 | 1.82E-17 | 3.16E+09 | -7.34E+01 |
|           |          |          |           |          |          |           |          |          |           |          |          |           |          |          |           |
| 5.00E+01  |          | 5.00E+01 |           | 5.00E+01 |          | 5.00E+01  |          | 5.00E+01 |           | 5.00E+01 |          | 5.00E+01  |          | 5.00E+01 |           |
| 1.41E+09  |          | 1.58E+09 |           | 1.78E+09 |          | 2.00E+09  |          | 2.51E+09 |           | 3.16E+09 |          |           |          |          |           |
| 1.14E-13  |          | 9.56E-14 |           | 1.80E-13 |          | 2.37E-13  |          | 4.38E-13 |           | 7.03E-14 |          |           |          |          |           |
| 4.77E-08  |          | 4.37E-08 |           | 6.00E-08 |          | 6.88E-08  |          | 9.36E-08 |           | 3.75E-08 |          |           |          |          |           |

| amplitude<br>mW^2 | frequency(H<br>z) | raw<br>dBm | amplitude<br>mW^2 | frequency(H<br>z) | raw<br>dBm | amplitude<br>mW^2 | frequency(H<br>z) | raw<br>dBm | amplitude<br>mW^2 | frequency(H<br>z) | raw<br>dBm | amplitude<br>mW^2 | frequency(H<br>z) | raw<br>dBm | amplitude<br>mW^2 |
|-------------------|-------------------|------------|-------------------|-------------------|------------|-------------------|-------------------|------------|-------------------|-------------------|------------|-------------------|-------------------|------------|-------------------|
| 3.98E-16          | 3.98E+09          | -7.66E+01  | 4.79E-16          | 5.01E+09          | -7.41E+01  | 1.51E-15          | 6.31E+09          | -8.01E+01  | 9.55E-17          | 7.94E+09          | -7.46E+01  | 1.20E-15          | 9.60E+09          | -7.46E+01  | 1.20E-15          |
| 1.10E-15          | 3.98E+09          | -7.66E+01  | 4.79E-16          | 5.01E+09          | -7.64E+01  | 5.25E-16          | 6.31E+09          | -8.01E+01  | 9.55E-17          | 7.94E+09          | -7.38E+01  | 1.74E-15          | 9.60E+09          | -7.19E+01  | 4.17E-15          |
| 1.10E-15          | 3.98E+09          | -7.66E+01  | 4.79E-16          | 5.01E+09          | -7.64E+01  | 5.25E-16          | 6.31E+09          | -8.01E+01  | 9.55E-17          | 7.94E+09          | -7.38E+01  | 1.74E-15          | 9.60E+09          | -7.19E+01  | 4.17E-15          |
| 1.10E-15          | 3.98E+09          | -7.66E+01  | 4.79E-16          | 5.01E+09          | -7.64E+01  | 5.25E-16          | 6.31E+09          | -8.01E+01  | 9.55E-17          | 7.94E+09          | -7.38E+01  | 1.74E-15          | 9.60E+09          | -7.19E+01  | 4.17E-15          |
| 1.10E-15          | 3.98E+09          | -7.66E+01  | 4.79E-16          | 5.01E+09          | -7.64E+01  | 5.25E-16          | 6.31E+09          | -8.01E+01  | 9.55E-17          | 7.94E+09          | -7.38E+01  | 1.74E-15          | 9.60E+09          | -7.19E+01  | 4.17E-15          |
| 1.10E-15          | 3.98E+09          | -7.66E+01  | 4.79E-16          | 5.01E+09          | -7.64E+01  | 5.25E-16          | 6.31E+09          | -8.01E+01  | 9.55E-17          | 7.94E+09          | -7.38E+01  | 1.74E-15          | 9.60E+09          | -7.19E+01  | 4.17E-15          |
| 1.20E-16          | 3.98E+09          | -7.51E+01  | 9.55E-16          | 5.01E+09          | -7.64E+01  | 5.25E-16          | 6.31E+09          | -7.07E+01  | 7.24E-15          | 7.94E+09          | -7.38E+01  | 1.74E-15          | 9.60E+09          | -7.19E+01  | 4.17E-15          |
| 1.20E-16          | 3.98E+09          | -7.51E+01  | 9.55E-16          | 5.01E+09          | -7.18E+01  | 4.37E-15          | 6.31E+09          | -7.07E+01  | 7.24E-15          | 7.94E+09          | -7.44E+01  | 1.32E-15          | 9.60E+09          | -6.72E+01  | 3.63E-14          |
| 1.20E-16          | 3.98E+09          | -7.51E+01  | 9.55E-16          | 5.01E+09          | -7.18E+01  | 4.37E-15          | 6.31E+09          | -7.07E+01  | 7.24E-15          | 7.94E+09          | -7.44E+01  | 1.32E-15          | 9.60E+09          | -6.72E+01  | 3.63E-14          |
| 1.20E-16          | 3.98E+09          | -7.51E+01  | 9.55E-16          | 5.01E+09          | -7.18E+01  | 4.37E-15          | 6.31E+09          | -7.07E+01  | 7.24E-15          | 7.94E+09          | -7.44E+01  | 1.32E-15          | 9.60E+09          | -6.72E+01  | 3.63E-14          |
| 1.20E-16          | 3.98E+09          | -7.51E+01  | 9.55E-16          | 5.01E+09          | -7.18E+01  | 4.37E-15          | 6.31E+09          | -7.07E+01  | 7.24E-15          | 7.94E+09          | -7.44E+01  | 1.32E-15          | 9.60E+09          | -6.72E+01  | 3.63E-14          |
| 1.20E-16          | 3.98E+09          | -6.84E+01  | 2.09E-14          | 5.01E+09          | -7.18E+01  | 4.37E-15          | 6.31E+09          | -7.07E+01  | 7.24E-15          | 7.94E+09          | -7.44E+01  | 1.32E-15          | 9.60E+09          | -6.72E+01  | 3.63E-14          |
| 4.17E-16          | 3.98E+09          | -6.84E+01  | 2.09E-14          | 5.01E+09          | -6.79E+01  | 2.63E-14          | 6.31E+09          | -8.01E+01  | 9.55E-17          | 7.94E+09          | -7.46E+01  | 1.20E-15          | 9.60E+09          | -7.45E+01  | 1.26E-15          |
| 4.17E-16          | 3.98E+09          | -6.84E+01  | 2.09E-14          | 5.01E+09          | -6.79E+01  | 2.63E-14          | 6.31E+09          | -8.01E+01  | 9.55E-17          | 7.94E+09          | -7.46E+01  | 1.20E-15          | 9.60E+09          | -7.45E+01  | 1.26E-15          |
| 4.17E-16          | 3.98E+09          | -6.84E+01  | 2.09E-14          | 5.01E+09          | -6.79E+01  | 2.63E-14          | 6.31E+09          | -8.01E+01  | 9.55E-17          | 7.94E+09          | -7.46E+01  | 1.20E-15          | 9.60E+09          | -7.45E+01  | 1.26E-15          |
| 4.17E-16          | 3.98E+09          | -6.84E+01  | 2.09E-14          | 5.01E+09          | -6.79E+01  | 2.63E-14          | 6.31E+09          | -8.01E+01  | 9.55E-17          | 7.94E+09          | -7.46E+01  | 1.20E-15          | 9.60E+09          | -7.45E+01  | 1.26E-15          |
| 4.17E-16          | 3.98E+09          | -6.84E+01  | 2.09E-14          | 5.01E+09          | -6.79E+01  | 2.63E-14          | 6.31E+09          | -8.01E+01  | 9.55E-17          | 7.94E+09          | -7.46E+01  | 1.20E-15          | 9.60E+09          | -7.45E+01  | 1.26E-15          |
| 1.51E-17          | 3.98E+09          | -7.55E+01  | 7.94E-16          | 5.01E+09          | -7.52E+01  | 9.12E-16          | 6.31E+09          | -7.81E+01  | 2.40E-16          | 7.94E+09          | -8.43E+01  | 1.38E-17          | 9.60E+09          | -7.82E+01  | 2.29E-16          |
| 1.51E-17          | 3.98E+09          | -7.55E+01  | 7.94E-16          | 5.01E+09          | -7.52E+01  | 9.12E-16          | 6.31E+09          | -7.81E+01  | 2.40E-16          | 7.94E+09          | -8.43E+01  | 1.38E-17          | 9.60E+09          | -7.82E+01  | 2.29E-16          |
| 1.51E-17          | 3.98E+09          | -7.55E+01  | 7.94E-16          | 5.01E+09          | -7.52E+01  | 9.12E-16          | 6.31E+09          | -7.81E+01  | 2.40E-16          | 7.94E+09          | -8.43E+01  | 1.38E-17          | 9.60E+09          | -7.82E+01  | 2.29E-16          |
| 1.51E-17          | 3.98E+09          | -7.55E+01  | 7.94E-16          | 5.01E+09          | -7.52E+01  | 9.12E-16          | 6.31E+09          | -7.81E+01  | 2.40E-16          | 7.94E+09          | -8.43E+01  | 1.38E-17          | 9.60E+09          | -7.82E+01  | 2.29E-16          |
| 1.51E-17          | 3.98E+09          | -7.55E+01  | 7.94E-16          | 5.01E+09          | -7.52E+01  | 9.12E-16          | 6.31E+09          | -7.81E+01  | 2.40E-16          | 7.94E+09          | -8.43E+01  | 1.38E-17          | 9.60E+09          | -7.82E+01  | 2.29E-16          |
| 1.15E-15          | 3.98E+09          | -7.20E+01  | 3.98E-15          | 5.01E+09          | -7.52E+01  | 9.12E-16          | 6.31E+09          | -6.55E+01  | 7.94E-14          | 7.94E+09          | -8.43E+01  | 1.38E-17          | 9.60E+09          | -7.82E+01  | 2.29E-16          |
| 1.15E-15          | 3.98E+09          | -7.20E+01  | 3.98E-15          | 5.01E+09          | -6.81E+01  | 2.40E-14          | 6.31E+09          | -6.55E+01  | 7.94E-14          | 7.94E+09          | -7.57E+01  | 7.24E-16          | 9.60E+09          | -7.60E+01  | 6.31E-16          |
| 1.15E-15          | 3.98E+09          | -7.20E+01  | 3.98E-15          | 5.01E+09          | -6.81E+01  | 2.40E-14          | 6.31E+09          | -6.55E+01  | 7.94E-14          | 7.94E+09          | -7.57E+01  | 7.24E-16          | 9.60E+09          | -7.60E+01  | 6.31E-16          |
| 1.15E-15          | 3.98E+09          | -7.20E+01  | 3.98E-15          | 5.01E+09          | -6.81E+01  | 2.40E-14          | 6.31E+09          | -6.55E+01  | 7.94E-14          | 7.94E+09          | -7.57E+01  | 7.24E-16          | 9.60E+09          | -7.60E+01  | 6.31E-16          |
| 1.15E-15          | 3.98E+09          | -7.20E+01  | 3.98E-15          | 5.01E+09          | -6.81E+01  | 2.40E-14          | 6.31E+09          | -6.55E+01  | 7.94E-14          | 7.94E+09          | -7.57E+01  | 7.24E-16          | 9.60E+09          | -7.60E+01  | 6.31E-16          |
| 1.15E-15          | 3.98E+09          | -6.89E+01  | 1.66E-14          | 5.01E+09          | -6.81E+01  | 2.40E-14          | 6.31E+09          | -8.47E+01  | 1.15E-17          | 7.94E+09          | -7.57E+01  | 7.24E-16          | 9.60E+09          | -7.60E+01  | 6.31E-16          |
| 7.24E-17          | 3.98E+09          | -6.89E+01  | 1.66E-14          | 5.01E+09          | -6.88E+01  | 1.74E-14          | 6.31E+09          | -8.47E+01  | 1.15E-17          | 7.94E+09          | -7.74E+01  | 3.31E-16          | 9.60E+09          | -7.21E+01  | 3.80E-15          |
| 7.24E-17          | 3.98E+09          | -6.89E+01  | 1.66E-14          | 5.01E+09          | -6.88E+01  | 1.74E-14          | 6.31E+09          | -8.47E+01  | 1.15E-17          | 7.94E+09          | -7.74E+01  | 3.31E-16          | 9.60E+09          | -7.21E+01  | 3.80E-15          |
| 7.24E-17          | 3.98E+09          | -6.89E+01  | 1.66E-14          | 5.01E+09          | -6.88E+01  | 1.74E-14          | 6.31E+09          | -8.47E+01  | 1.15E-17          | 7.94E+09          | -7.74E+01  | 3.31E-16          | 9.60E+09          | -7.21E+01  | 3.80E-15          |
| 7.24E-17          | 3.98E+09          | -6.89E+01  | 1.66E-14          | 5.01E+09          | -6.88E+01  | 1.74E-14          | 6.31E+09          | -8.47E+01  | 1.15E-17          | 7.94E+09          | -7.74E+01  | 3.31E-16          | 9.60E+09          | -7.21E+01  | 3.80E-15          |
| 7.24E-17          | 3.98E+09          | -7.75E+01  | 3.16E-16          | 5.01E+09          | -6.88E+01  | 1.74E-14          | 6.31E+09          | -8.47E+01  | 1.15E-17          | 7.94E+09          | -7.74E+01  | 3.31E-16          | 9.60E+09          | -7.21E+01  | 3.80E-15          |
| 6.92E-15          | 3.98E+09          | -7.75E+01  | 3.16E-16          | 5.01E+09          | -8.35E+01  | 2.00E-17          | 6.31E+09          | -6.98E+01  | 1.10E-14          | 7.94E+09          | -7.13E+01  | 5.50E-15          | 9.60E+09          | -7.62E+01  | 5.75E-16          |
| 6.92E-15          | 3.98E+09          | -7.75E+01  | 3.16E-16          | 5.01E+09          | -8.35E+01  | 2.00E-17          | 6.31E+09          | -6.98E+01  | 1.10E-14          | 7.94E+09          | -7.13E+01  | 5.50E-15          | 9.60E+09          | -7.62E+01  | 5.75E-16          |
| 6.92E-15          | 3.98E+09          | -7.75E+01  | 3.16E-16          | 5.01E+09          | -8.35E+01  | 2.00E-17          | 6.31E+09          | -6.98E+01  | 1.10E-14          | 7.94E+09          | -7.13E+01  | 5.50E-15          | 9.60E+09          | -7.62E+01  | 5.75E-16          |
| 6.92E-15          | 3.98E+09          | -7.75E+01  | 3.16E-16          | 5.01E+09          | -8.35E+01  | 2.00E-17          | 6.31E+09          | -6.98E+01  | 1.10E-14          | 7.94E+09          | -7.13E+01  | 5.50E-15          | 9.60E+09          | -7.62E+01  | 5.75E-16          |
| 6.92E-15          | 3.98E+09          | -7.09E+01  | 6.61E-15          | 5.01E+09          | -8.35E+01  | 2.00E-17          | 6.31E+09          | -6.98E+01  | 1.10E-14          | 7.94E+09          | -7.13E+01  | 5.50E-15          | 9.60E+09          | -7.62E+01  | 5.75E-16          |
| 3.02E-15          | 3.98E+09          | -7.09E+01  | 6.61E-15          | 5.01E+09          | -7.88E+01  | 1.74E-16          | 6.31E+09          | -6.91E+01  | 1.51E-14          | 7.94E+09          | -7.46E+01  | 1.20E-15          | 9.60E+09          | -7.52E+01  | 9.12E-16          |

|          |          |           |          |          |           |          |          |           |          |          |           |          |          |           |          |
|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|----------|-----------|----------|
| 3.02E-15 | 3.98E+09 | -7.09E+01 | 6.61E-15 | 5.01E+09 | -7.88E+01 | 1.74E-16 | 6.31E+09 | -6.91E+01 | 1.51E-14 | 7.94E+09 | -7.46E+01 | 1.20E-15 | 9.60E+09 | -7.52E+01 | 9.12E-16 |
| 3.02E-15 | 3.98E+09 | -7.09E+01 | 6.61E-15 | 5.01E+09 | -7.88E+01 | 1.74E-16 | 6.31E+09 | -6.91E+01 | 1.51E-14 | 7.94E+09 | -7.46E+01 | 1.20E-15 | 9.60E+09 | -7.52E+01 | 9.12E-16 |
| 3.02E-15 | 3.98E+09 | -7.09E+01 | 6.61E-15 | 5.01E+09 | -7.88E+01 | 1.74E-16 | 6.31E+09 | -6.91E+01 | 1.51E-14 | 7.94E+09 | -7.46E+01 | 1.20E-15 | 9.60E+09 | -7.52E+01 | 9.12E-16 |
| 3.02E-15 | 3.98E+09 | -7.09E+01 | 6.61E-15 | 5.01E+09 | -7.88E+01 | 1.74E-16 | 6.31E+09 | -6.91E+01 | 1.51E-14 | 7.94E+09 | -7.46E+01 | 1.20E-15 | 9.60E+09 | -7.52E+01 | 9.12E-16 |
| 9.12E-17 | 3.98E+09 | -7.91E+01 | 1.51E-16 | 5.01E+09 | -6.94E+01 | 1.32E-14 | 6.31E+09 | -7.01E+01 | 9.55E-15 | 7.94E+09 | -7.50E+01 | 1.00E-15 | 9.60E+09 | -8.15E+01 | 5.01E-17 |
| 9.12E-17 | 3.98E+09 | -7.91E+01 | 1.51E-16 | 5.01E+09 | -6.94E+01 | 1.32E-14 | 6.31E+09 | -7.01E+01 | 9.55E-15 | 7.94E+09 | -7.50E+01 | 1.00E-15 | 9.60E+09 | -8.15E+01 | 5.01E-17 |
| 9.12E-17 | 3.98E+09 | -7.91E+01 | 1.51E-16 | 5.01E+09 | -6.94E+01 | 1.32E-14 | 6.31E+09 | -7.01E+01 | 9.55E-15 | 7.94E+09 | -7.50E+01 | 1.00E-15 | 9.60E+09 | -8.15E+01 | 5.01E-17 |
| 9.12E-17 | 3.98E+09 | -7.91E+01 | 1.51E-16 | 5.01E+09 | -6.94E+01 | 1.32E-14 | 6.31E+09 | -7.01E+01 | 9.55E-15 | 7.94E+09 | -7.50E+01 | 1.00E-15 | 9.60E+09 | -8.15E+01 | 5.01E-17 |
| 9.12E-17 | 3.98E+09 | -7.91E+01 | 1.51E-16 | 5.01E+09 | -6.94E+01 | 1.32E-14 | 6.31E+09 | -7.01E+01 | 9.55E-15 | 7.94E+09 | -7.50E+01 | 1.00E-15 | 9.60E+09 | -8.15E+01 | 5.01E-17 |
| 9.12E-17 | 3.98E+09 | -7.80E+01 | 2.51E-16 | 5.01E+09 | -6.94E+01 | 1.32E-14 | 6.31E+09 | -7.09E+01 | 6.61E-15 | 7.94E+09 | -7.50E+01 | 1.00E-15 | 9.60E+09 | -8.15E+01 | 5.01E-17 |
| 2.09E-15 | 3.98E+09 | -7.80E+01 | 2.51E-16 | 5.01E+09 | -7.01E+01 | 9.55E-15 | 6.31E+09 | -7.09E+01 | 6.61E-15 | 7.94E+09 | -7.38E+01 | 1.74E-15 | 9.60E+09 | -7.10E+01 | 6.31E-15 |
| 2.09E-15 | 3.98E+09 | -7.80E+01 | 2.51E-16 | 5.01E+09 | -7.01E+01 | 9.55E-15 | 6.31E+09 | -7.09E+01 | 6.61E-15 | 7.94E+09 | -7.38E+01 | 1.74E-15 | 9.60E+09 | -7.10E+01 | 6.31E-15 |
|          |          |           |          | 5.01E+09 | -7.01E+01 | 9.55E-15 | 6.31E+09 | -7.09E+01 | 6.61E-15 | 7.94E+09 | -7.38E+01 | 1.74E-15 | 9.60E+09 | -7.10E+01 | 6.31E-15 |
|          |          |           |          | 5.01E+09 | -7.01E+01 | 9.55E-15 |          |           |          | 7.94E+09 | -7.38E+01 | 1.74E-15 | 9.60E+09 | -7.10E+01 | 6.31E-15 |
|          |          |           |          |          |           |          |          |           |          |          |           |          |          |           |          |
|          |          | 5.00E+01  |          |          | 5.20E+01  |          |          | 5.10E+01  |          |          | 5.20E+01  |          |          | 5.20E+01  |          |
|          |          | 3.98E+09  |          |          | 5.01E+09  |          |          | 6.31E+09  |          |          | 7.94E+09  |          |          | 9.60E+09  |          |
|          |          |           |          |          |           |          |          |           |          |          |           |          |          |           |          |
|          |          | 2.82E-13  |          |          | 4.88E-13  |          |          | 6.48E-13  |          |          | 7.43E-14  |          |          | 2.66E-13  |          |
|          |          | 7.51E-08  |          |          | 9.69E-08  |          |          | 1.13E-07  |          |          | 3.78E-08  |          |          | 7.16E-08  |          |