## **USRP Readings**

## 21/05 -

- 1 Tx, 1 Rx
- No obstacle
- Unmodulated
- 100kHz cosine wave
- 320k sample rate
- 2.4 G center frequency
- Same gain on both Tx and Rx

| Distance (cm) | Frequency<br>(kHz) | Tx Gain (dB) | Rx Gain (dB) | Power (dB) |
|---------------|--------------------|--------------|--------------|------------|
| 105           | 98.76              | 0            | 0            | 68.38      |
| 105           | 98.76              | 10           | 10           | 48.13      |
| 105           | 98.58              | 20           | 20           | 26.00      |
| 105           | 98.95              | 30           | 30           | 15.13      |
| 165           | 98.95              | 0            | 0            | 74.38      |
| 165           | 98.95              | 0            | 10           | 65.00      |
| 165           | 98.95              | 0            | 20           | 54.50      |
| 165           | 98.95              | 0            | 30           | 45.50      |
| 165           | 98.76              | 0            | 40           | 37.63      |
| 165           | 98.95              | 10           | 0            | 68.38      |
| 165           | 98.76              | 10           | 10           | 60.50      |
| 165           | 98.95              | 10           | 20           | 50.00      |
| 165           | 98.76              | 10           | 30           | 37.25      |
| 165           | 98.76              | 10           | 40           | 26.00      |
| 165           | 98.76              | 20           | 0            | 57.50      |

USRP Readings

| 165 | 98.58 | 20 | 10 | 47.00 |
|-----|-------|----|----|-------|
| 165 | 98.58 | 20 | 20 | 35.00 |
| 165 | 98.76 | 20 | 30 | 25.63 |
| 165 | 98.76 | 20 | 40 | 17.38 |
| 165 | 98.76 | 30 | 0  | 56.38 |
| 165 | 98.58 | 30 | 10 | 41.75 |
| 165 | 98.58 | 30 | 20 | 31.63 |
| 165 | 98.58 | 30 | 30 | 21.13 |
| 165 | 98.76 | 30 | 40 | 15.50 |

