Bandwidth Measurement Exhibit to STA Request

STA Confirmation Number: EL252618

STA File Number: 0651-EX-ST-2012

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Waveform Bandwidths

- **The radar system is designed to have at least a 1.25 m range resolution**

  - **Required bandwidth**

$$B = \frac{c}{2\Delta R} = \frac{3 \times 10^8\, m/s}{2(1.25\, m)} = 120 MHz$$

  - **The pulse is linear FM**

- **Measurements on the transmitter were taken in the lab and tabulated below**

Measurement Point	Bandwidth
-3 dB	130 MHz
-20 dB	150 MHz
-40 dB	250 MHz
-60 dB	400 MHz

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