

Conducted RF Power Output, 96281-x05N and 96281-x05W Transmitters

This report gives conducted power measurements of FCC ID CM6-670-1187-608 transmitters. The power is measured at each antenna feed.

The measurements were made on 15th August 2012 at Spacelabs Healthcare, 43 Moray Place, Edinburgh, EH3 6BT, UK.

Item under Test and Equipment Used

| Description | Manufacturer | Model | Serial | Cal to |
|----------------------|--------------------|-------------------|--------|-------------|
| PCBA, 96281, 608MHz | Spacelabs | 670-1187-00 rev F | 6007 | N/A |
| Semi-rigid SMA tail | Atlantic Microwave | AS6108-80mm | N/A | N/A |
| Resistor 50 ohm 0.1% | Vishay | FC0402-50BWCT-ND | N/A | N/A |
| Spectrum Analyser | Rhode & Schwarz | FSV7 | 101996 | 13 Feb 2013 |

Test Description

The PCBA was modified by disconnecting the two antenna matching networks and connecting an SMA tail and a 50 ohm termination at the lead-wire antenna feed and the ceramic antenna feed respectively. The lead-wire feed power was measured using a spectrum analyser with the PCBA set to low, mid and high channels for both narrowband and wideband modulation. The tail and resistor were swapped and the measurement repeated at the ceramic antenna feed.

Measurement Uncertainty

The FSV7 has +/- 0.28 dB power measurement uncertainty under these measurement conditions. There is also an uncertainty in the insertion loss of the tail connection. We consider the overall uncertainty of the results to be +/- 0.5 dB.

Results

| Frequency, MHz | Lead-wire Antenna, dBm | | Ceramic Antenna, dBm | |
|----------------|------------------------|----------|----------------------|----------|
| | Narrowband | Wideband | Narrowband | Wideband |
| 608.0375 | -6.17 | -6.19 | -0.35 | -0.35 |
| 610.9875 | -6.25 | -6.22 | -0.47 | -0.45 |
| 613.9875 | -6.56 | -6.54 | -0.6 | -0.6 |

0.07dB has been added to the FSV7 indications, to compensate estimated cable loss.



Figure 1. Measurement at lead-wire feed

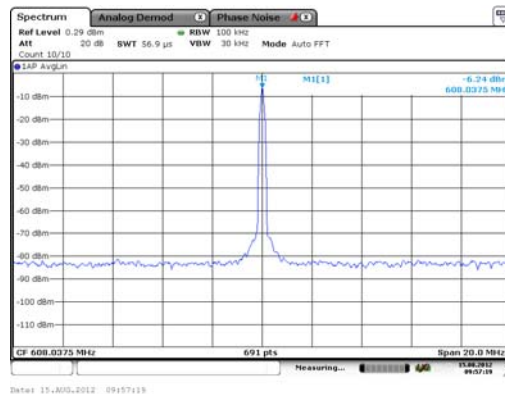


Figure 2. Typical measurement result

Jonathan Scott, 16th August 2012.

Senior Engineer, Spacelabs Healthcare Diagnostic Cardiology, Edinburgh