

RFI Test
AccuRange 3000
Luis Quintero, 6 Apr 2011

1 Equipment list

Equipment:

- AccuRange 3000.

Spectrum Analyzer:

- Agilent E4445A Spectrum Analyzer, 601 channels, pre-amp on.

ETS Model 7405 probes[1]:

- Magnetic field, No. 902, Res. Freq. 1.5GHz.
- Magnetic field, No. 903, Res. Freq. 2.3GHz.
- Electric field, No. 904, Res. Freq. > 1GHz.

2 Frequency Ranges

Table 1 shows ranges to generate the plots based on the receivers bandwidth. Additional plots at different ranges (user defined) are also provided.

3 Results

Please, check the results in these files:

- Probe No. 902:
20110406_laser_AccuRange3000_902.pdf
- Probe No. 903:
20110406_laser_AccuRange3000_903.pdf
- Probe No. 904:
20110406_laser_AccuRange3000_904.pdf

Figure 1 shows in the red circles the hot spots of the device.

Table 2 shows a list of peaks identified from results; this is just a reference, and may not include all the peaks. All these measurements are approximate. A more detailed scan (less channel bandwidth around peaks) is required to take a decision.

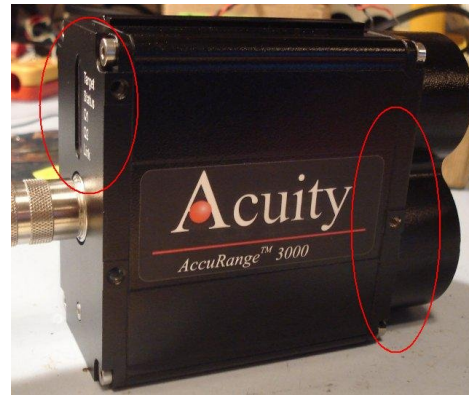


Figure 1: AccuRange3000 - hot spots.

Table 2: Frequency Peaks

Freq (MHz)	Power (-dBm)
405.51	81.32
442.67	80.00
479.34	79.51
294.78	66.00
331.78	83.00
553.30	78.31
637.50	77.69
847.50	79.03
800.00	80.00
847.50	79.03
885.00	77.40
921.70	77.84
995.80	75.00
999.70	78.40
1031.7	75.22
1063.7	73.02
1069.2	74.14
1076.2	73.81

References

[1] ETS LINDGREN, *ETS Near-Field Probe Set Model 7405*.

Table 1: Frequency Ranges

Receiver	Freq. Range (GHz)	Center Freq (GHz)	Bandwidth (GHz)
327-MHz	0.31050-0.34350	0.3270	0.0330
CH-430-MHz	0.42450-0.43550	0.4300	0.0110
430-MHz	0.42100-0.44300	0.4320	0.0220
800-MHz	0.70025-0.80475	0.7525	0.1045
ALFA	1.21000-1.54000	1.3750	0.3300
L-wide	1.12100-1.75900	1.4400	0.6380
S-low	1.73500-3.16500	2.4500	1.4300
S-narrow	2.32500-2.43500	2.3800	0.1100
S-high	2.95000-4.05000	3.5000	1.1000
C	3.74250-6.10750	4.9250	2.3650
C-high	5.79000-8.21000	7.0000	2.4200
X	7.68000-10.3200	9.0000	2.6400