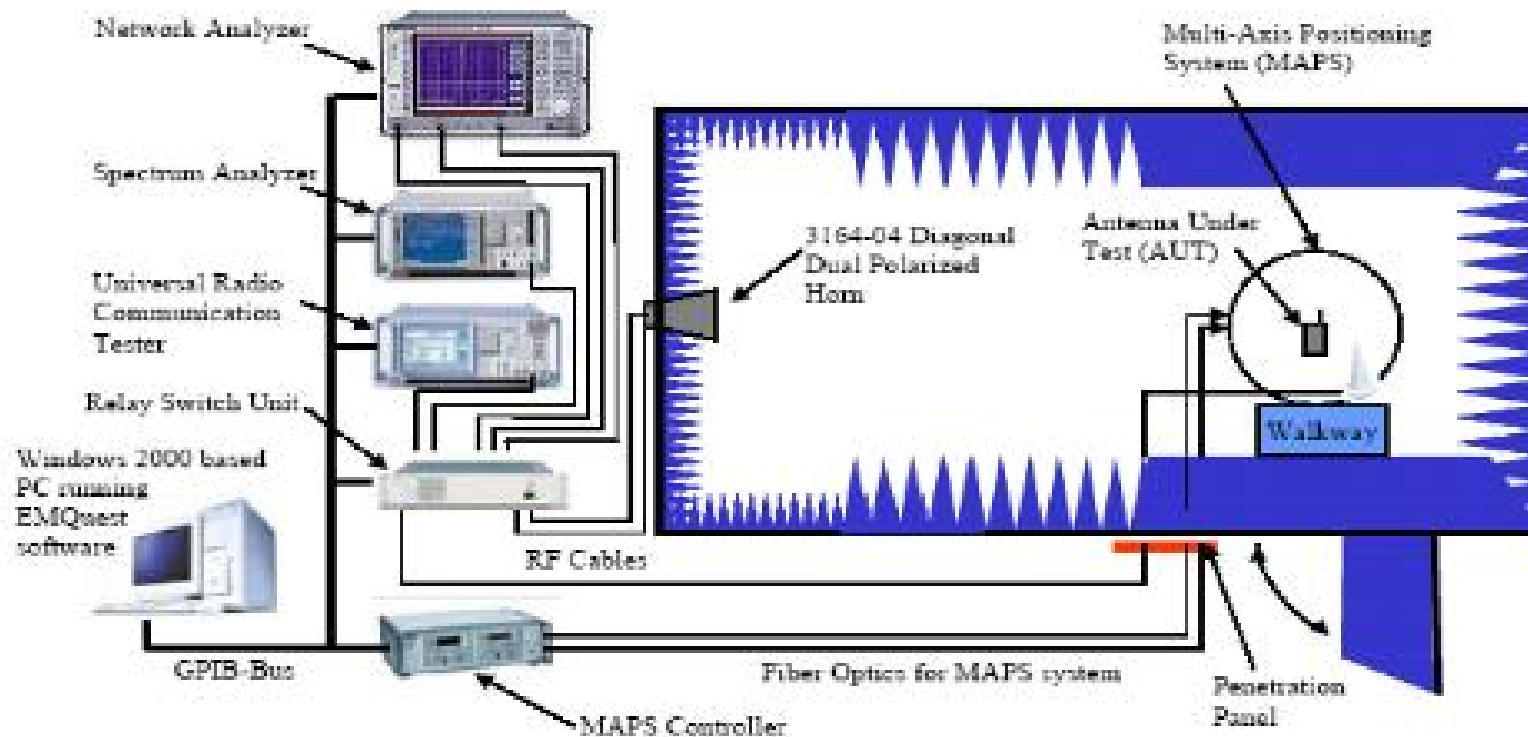


BT Antenna Specification

2014.4.16

CW Cheng

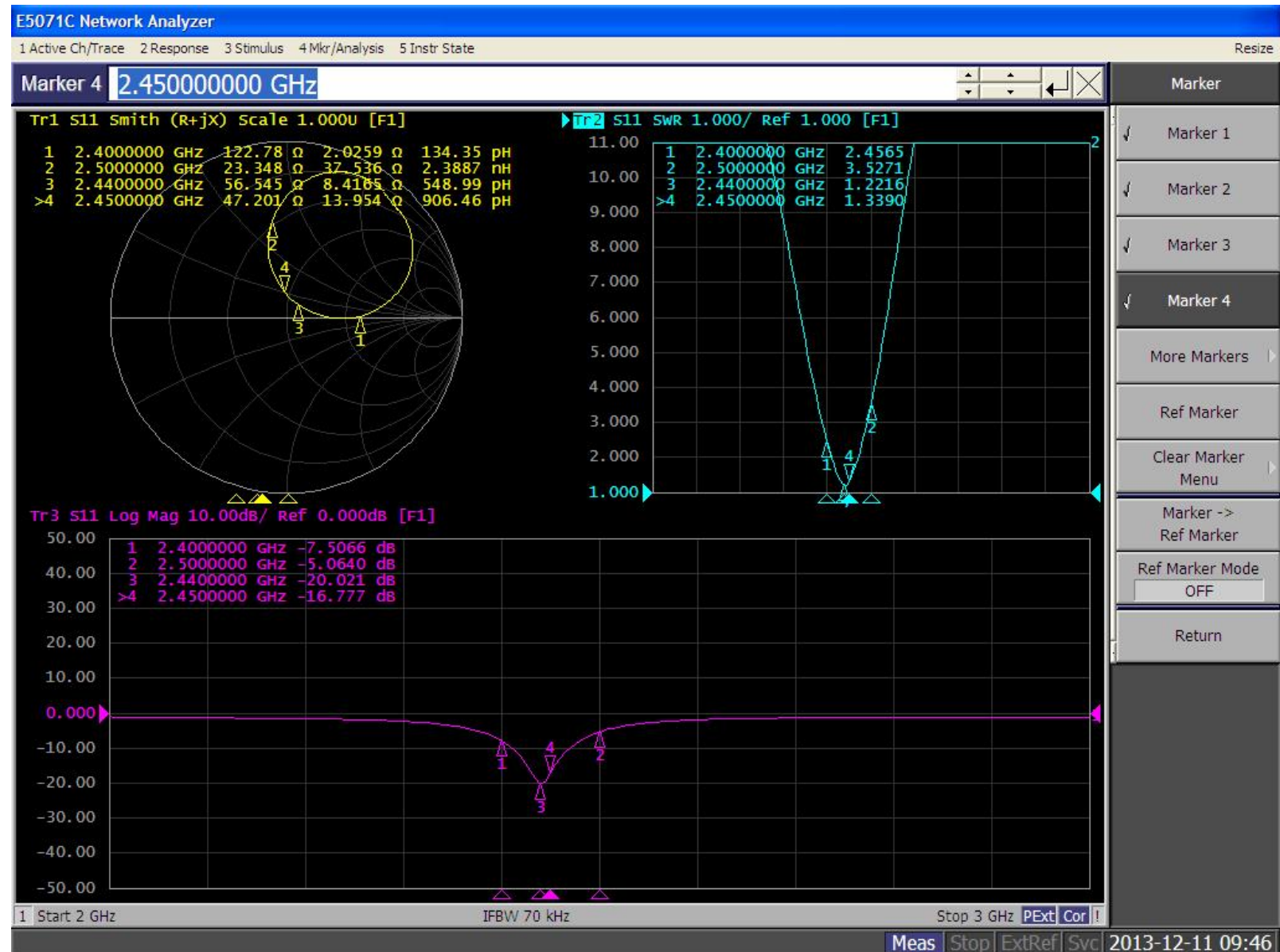
Typical AMS-8500 System Schematic



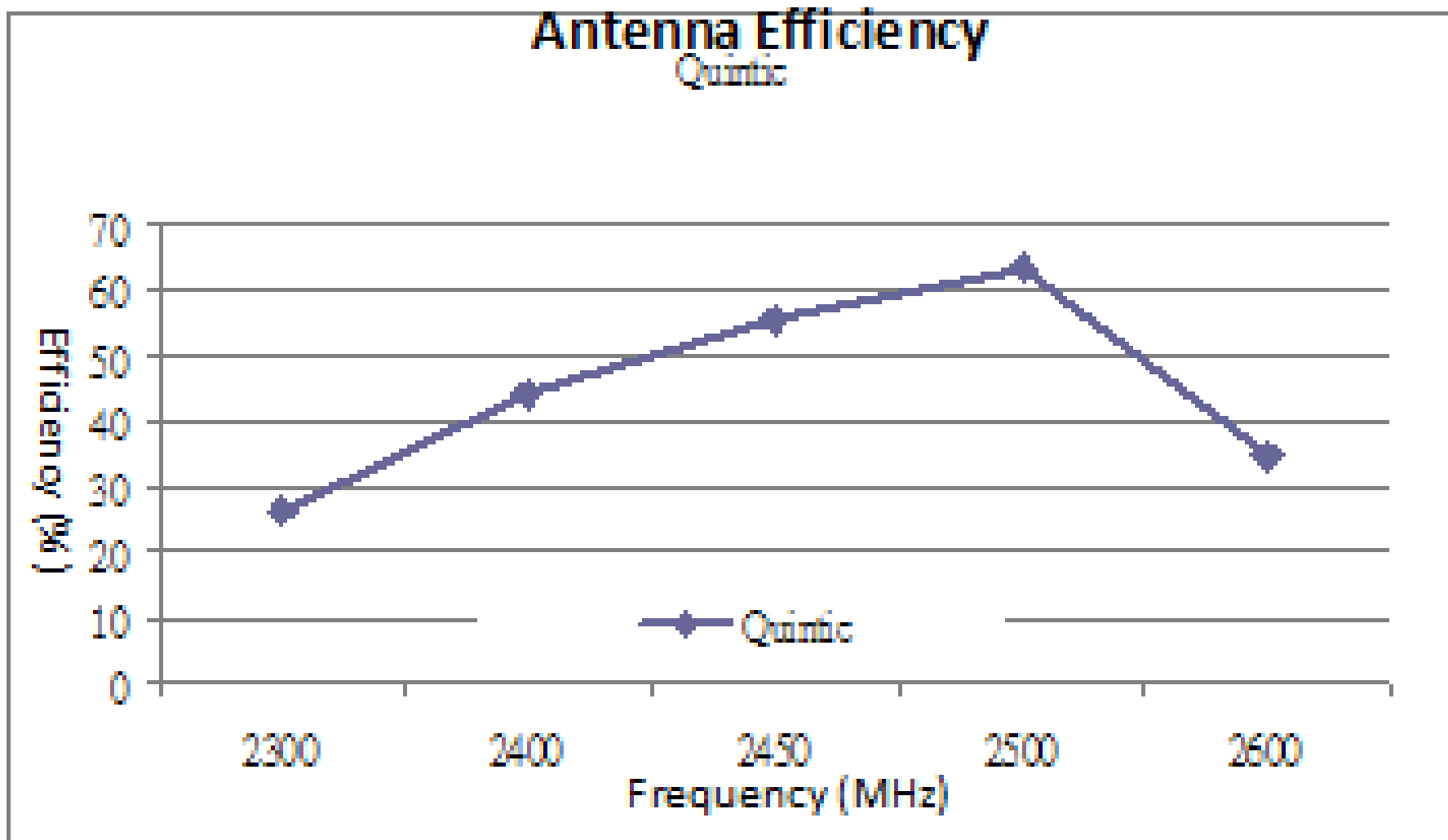
Laboratory Equipment



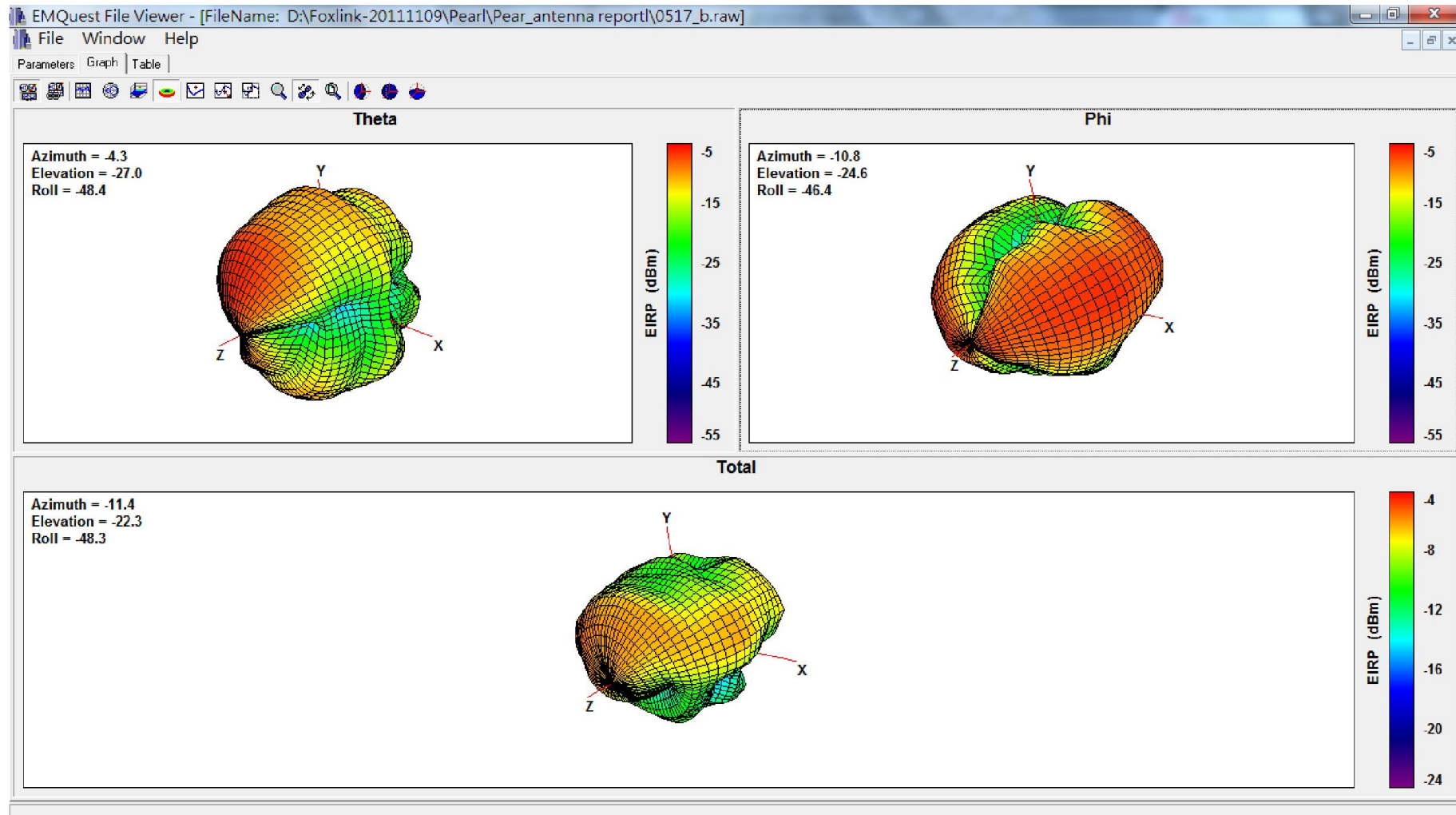
S11 Log Mag



Antenna Efficiency



Radiation pattern



Passive efficiency

quintic																						
Frequency (MHz)	2300	2320	2340	2360	2380	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2500	2520	2540	2560	2580	2600
Point Values																						
Ant. Port Input Pwr. (dBm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot. Rad. Pwr. (dBm)	-5.81	-5.30	-4.73	-4.47	-4.10	-3.55	-3.31	-3.12	-2.93	-2.72	-2.57	-2.38	-2.20	-2.05	-1.96	-1.99	-1.99	-2.16	-2.48	-2.95	-3.77	-4.60
Peak EIRP (dBm)	-1.12	-0.77	-0.28	0.14	0.55	1.08	1.29	1.40	1.59	1.78	1.86	2.00	2.11	2.21	2.42	2.45	2.45	2.32	1.96	1.45	0.60	-0.33
Directivity (dBi)	4.70	4.53	4.45	4.62	4.65	4.62	4.59	4.52	4.52	4.49	4.43	4.38	4.31	4.27	4.38	4.44	4.44	4.48	4.44	4.40	4.37	4.26
Efficiency (dB)	-5.81	-5.30	-4.73	-4.47	-4.10	-3.55	-3.31	-3.12	-2.93	-2.72	-2.57	-2.38	-2.20	-2.05	-1.96	-1.99	-1.99	-2.16	-2.48	-2.95	-3.77	-4.60
Efficiency (%)	26.22	29.52	33.62	35.69	38.94	44.20	46.70	48.77	50.94	53.49	55.32	57.86	60.21	62.30	63.70	63.27	63.27	60.86	56.46	50.70	42.01	34.70
Gain (dBi)	-1.12	-0.77	-0.28	0.14	0.55	1.08	1.29	1.40	1.59	1.78	1.86	2.00	2.11	2.21	2.42	2.45	2.45	2.32	1.96	1.45	0.60	-0.33
NHPRP \pm Pi/4 (dBm)	-7.48	-6.96	-6.39	-6.12	-5.73	-5.16	-4.90	-4.70	-4.50	-4.27	-4.11	-3.90	-3.72	-3.56	-3.46	-3.47	-3.47	-3.62	-3.95	-4.42	-5.22	-6.04
NHPRP \pm Pi/6 (dBm)	-9.14	-8.57	-7.96	-7.66	-7.27	-6.71	-6.47	-6.28	-6.08	-5.86	-5.71	-5.50	-5.32	-5.16	-5.05	-5.05	-5.05	-5.17	-5.46	-5.88	-6.66	-7.46
NHPRP \pm Pi/8 (dBm)	-10.36	-9.76	-9.12	-8.81	-8.40	-7.82	-7.58	-7.40	-7.21	-6.99	-6.84	-6.65	-6.47	-6.31	-6.20	-6.21	-6.21	-6.33	-6.61	-7.03	-7.80	-8.58
Upper Hem. PRP (dBm)	-9.40	-8.92	-8.33	-8.08	-7.67	-7.07	-6.82	-6.62	-6.43	-6.23	-6.08	-5.89	-5.71	-5.57	-5.49	-5.52	-5.52	-5.69	-5.98	-6.39	-7.15	-7.93
Lower Hem. PRP (dBm)	-8.32	-7.78	-7.23	-6.96	-6.61	-6.10	-5.87	-5.69	-5.50	-5.28	-5.14	-4.94	-4.77	-4.61	-4.51	-4.53	-4.53	-4.70	-5.05	-5.57	-6.43	-7.31