

*No Boundary! No Limitation!
The Most Appropriate Antenna for Your Best Design!*

**3-10GHz UWB Report
@ 60mm, 120mm, 150mm**



**Prepared by Wireless Division
May, 2008**

1.Frequency : 3~10GHz

2.PHOTO

3.RL / VSWR

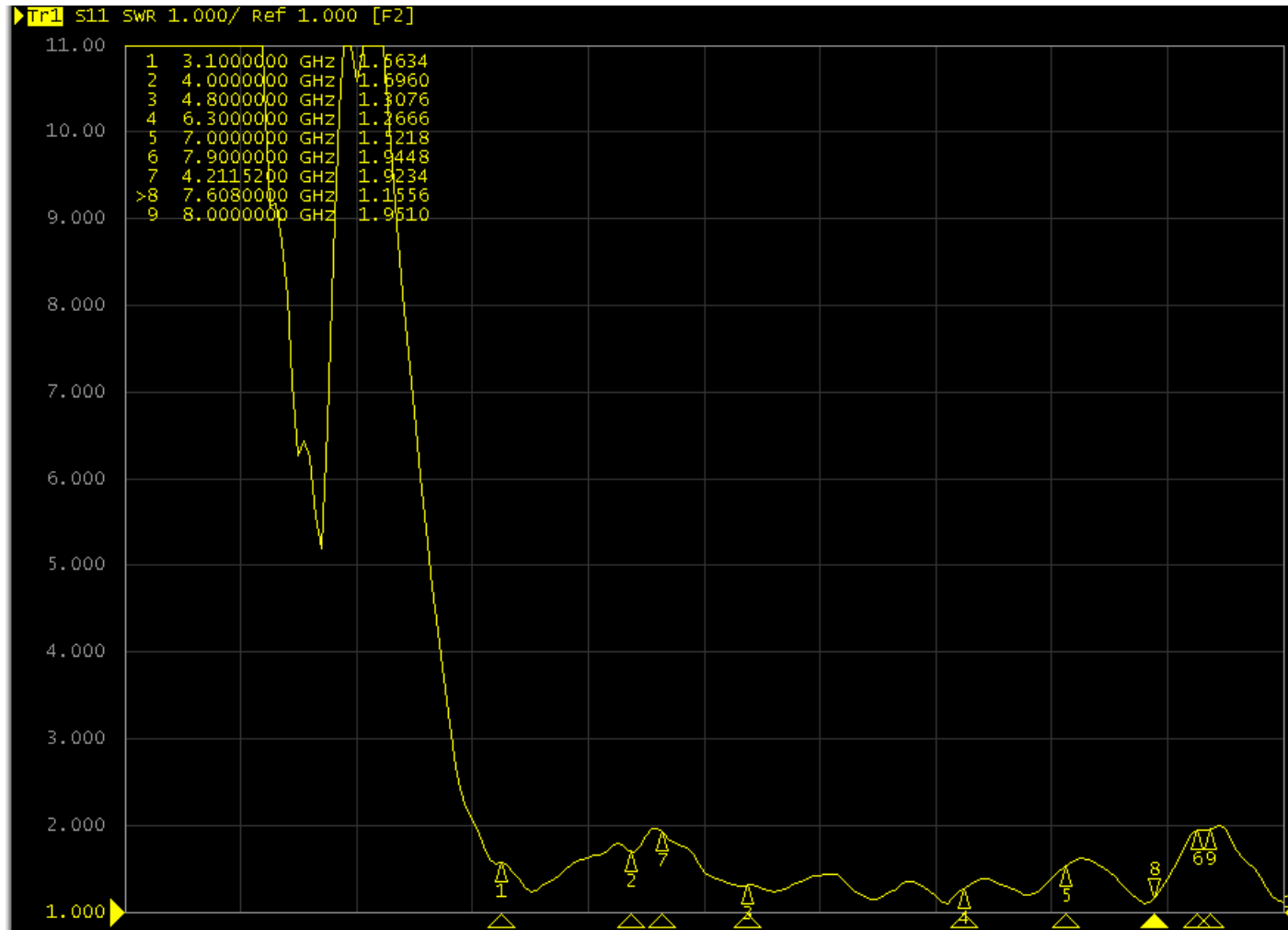
4.Radiation Pattern Elevation Gain Plot

5.Peak / avg. gain

Antenna Photo



VSWR_ 60mm

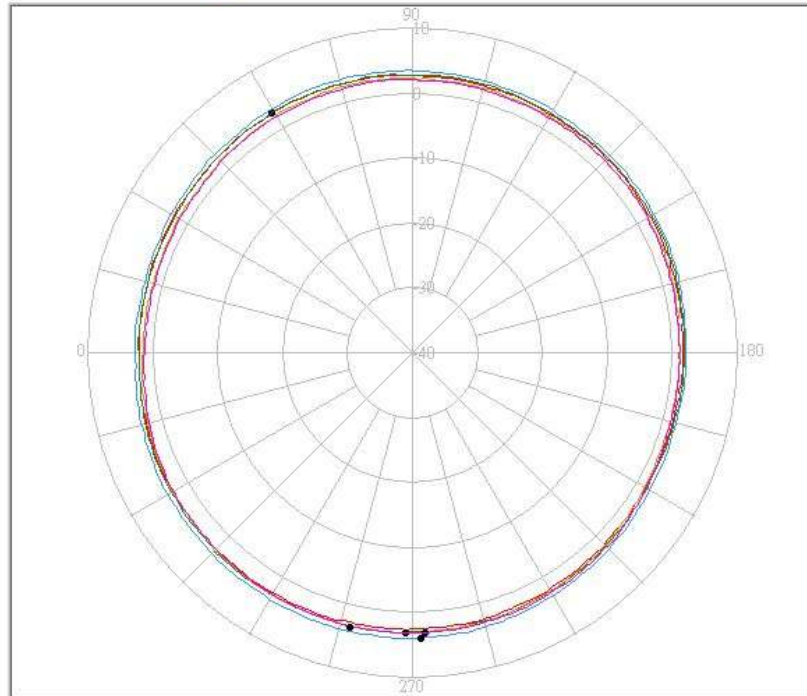


Radiation Pattern Elevation Gain Plot (Hor.)_(1/3)

60mm



Antenna Pattern & EIRP Measurement

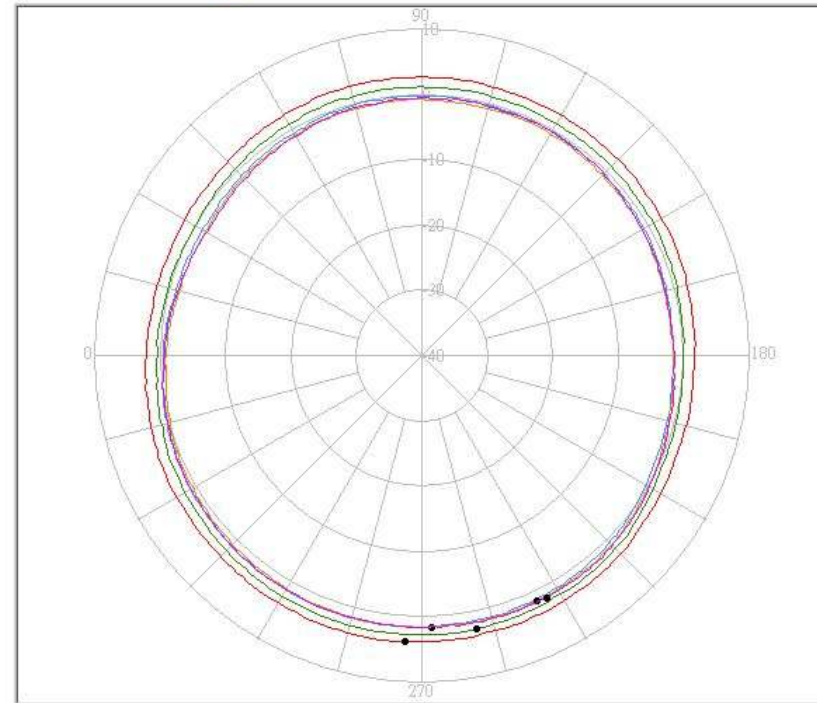


Model No.	Test Mode	Freq(MHz)	Source Pol.	Peak gain(dBi)	Avg. gain(dBi)	Peak angle	Date
970508_UWB_60	H	3100	Ver.	2.81	2.33	59.56	2008/5/9
970508_UWB_60	H	3200	Ver.	3.14	2.53	271.30	2008/5/9
970508_UWB_60	H	3300	Ver.	3.97	3.13	268.36	2008/5/9
970508_UWB_60	H	3400	Ver.	3.13	2.11	267.35	2008/5/9
970508_UWB_60	H	3500	Ver.	3.30	2.07	282.95	2008/5/9

3100~3500MHz



Antenna Pattern & EIRP Measurement



Model No.	Test Mode	Freq(MHz)	Source Pol.	Peak gain(dBi)	Avg. gain(dBi)	Peak angle	Date
970508_UWB_60	H	3600	Ver.	3.95	2.71	273.28	2008/5/9
970508_UWB_60	H	3700	Ver.	2.77	1.30	258.63	2008/5/9
970508_UWB_60	H	3800	Ver.	1.58	0.02	268.00	2008/5/9
970508_UWB_60	H	3900	Ver.	1.57	-0.14	244.85	2008/5/9
970508_UWB_60	H	4000	Ver.	1.72	0.01	242.64	2008/5/9

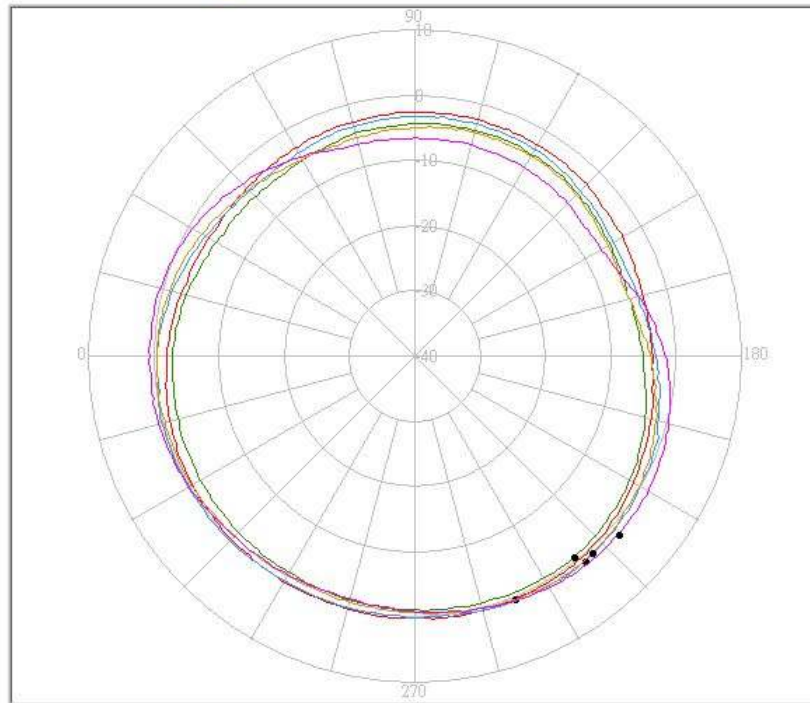
3600~4000MHz

Radiation Pattern Elevation Gain Plot (Hor.)_(2/3)

60mm



Antenna Pattern & EIRP Measurement

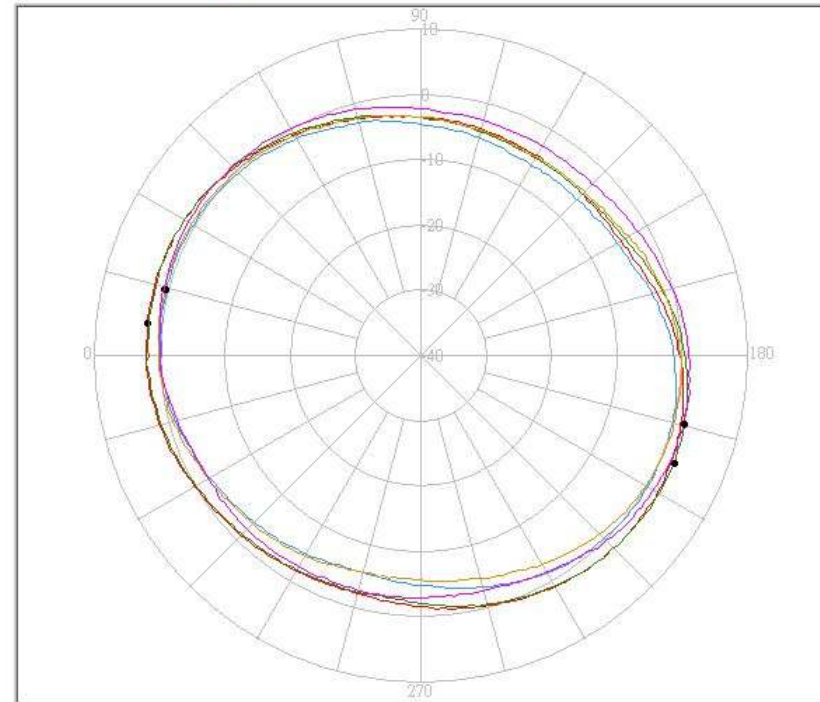


Model No.	Test Mode	Freq(MHz)	Source Pol.	Peak gain(dBi)	Avg. gain(dBi)	Peak angle	Date
970508_UWB_60	H	4100	Ver.	0.39	-1.64	247.50	2008/5/9
970508_UWB_60	H	4200	Ver.	-0.62	-2.98	231.71	2008/5/9
970508_UWB_60	H	4300	Ver.	0.88	-1.41	230.29	2008/5/9
970508_UWB_60	H	4400	Ver.	0.70	-1.93	228.13	2008/5/9
970508_UWB_60	H	4500	Ver.	1.53	-1.37	221.24	2008/5/9

4100~4500MHz



Antenna Pattern & EIRP Measurement



Model No.	Test Mode	Freq(MHz)	Source Pol.	Peak gain(dBi)	Avg. gain(dBi)	Peak angle	Date
970508_UWB_60	H	4600	Ver.	2.17	-0.37	6.59	2008/5/9
970508_UWB_60	H	4700	Ver.	2.14	-0.32	203.08	2008/5/9
970508_UWB_60	H	4800	Ver.	0.29	-2.20	14.51	2008/5/9
970508_UWB_60	H	4900	Ver.	0.59	-1.90	14.51	2008/5/9
970508_UWB_60	H	5200	Ver.	1.67	-0.80	194.56	2008/5/9

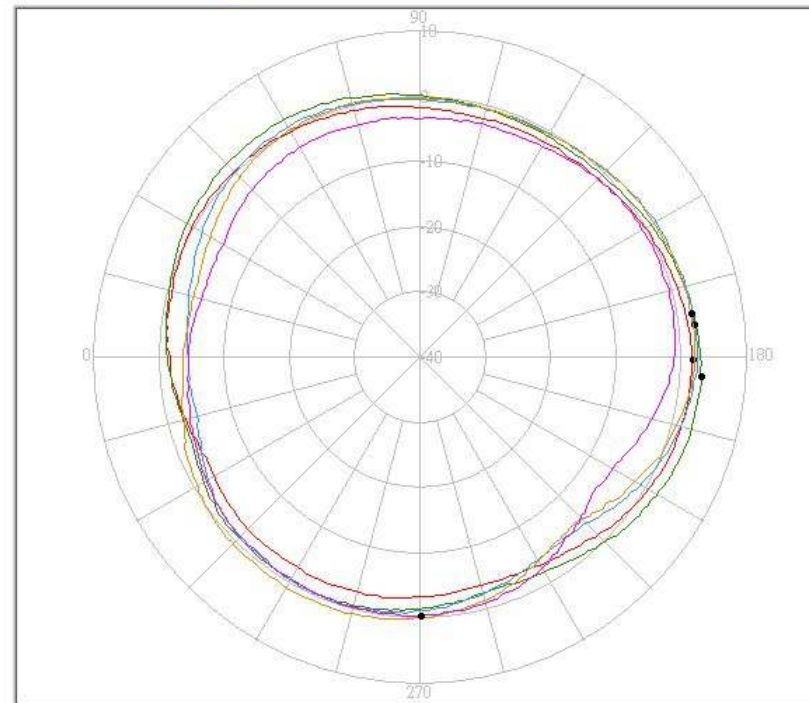
4600~5200MHz

Radiation Pattern Elevation Gain Plot (Hor.)_(3/3)

60mm



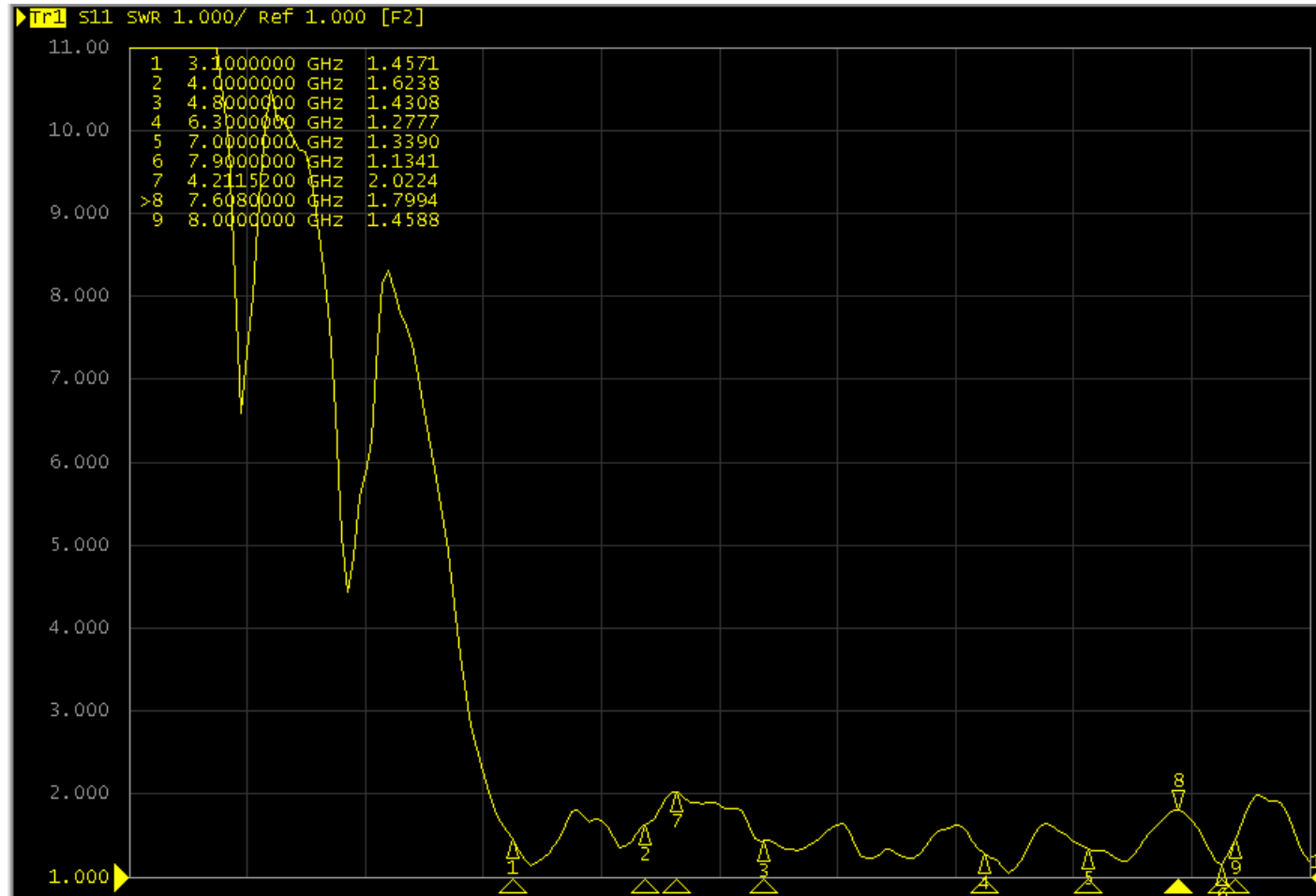
Antenna Pattern & EIRP Measurement



Model No.	Test Mode	Freq(MHz)	Source Pol.	Peak gain(dBi)	Avg. gain(dBi)	Peak angle	Date
970508_UWB_60	H	5400	Ver.	1.80	-1.04	180.66	2008/5/9
970508_UWB_60	H	5600	Ver.	3.21	0.34	183.97	2008/5/9
970508_UWB_60	H	5800	Ver.	2.44	-0.56	173.43	2008/5/9
970508_UWB_60	H	6000	Ver.	2.17	-0.44	170.80	2008/5/9
970508_UWB_60	H	6300	Ver.	-0.33	-2.36	269.67	2008/5/9

5400~6300MHz

VSWR _ 120mm

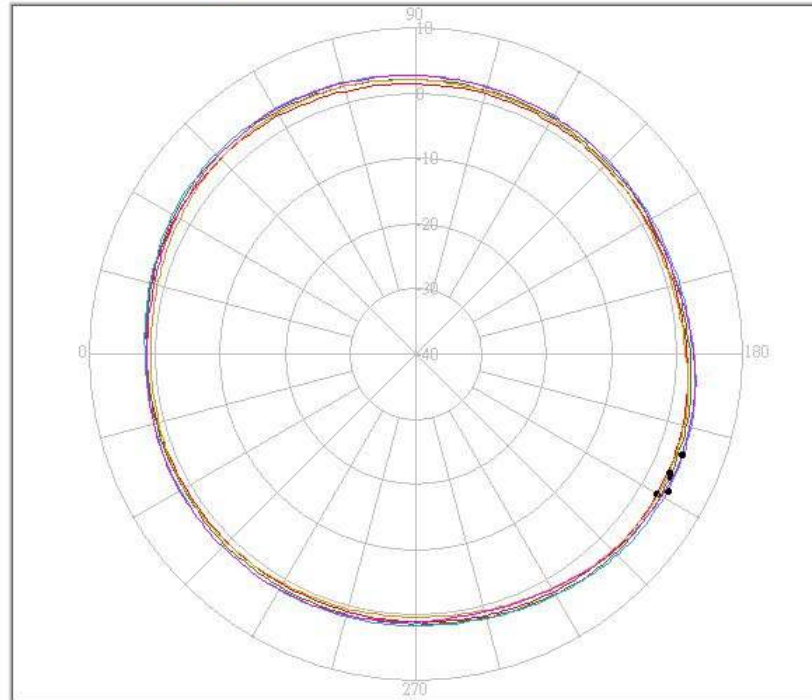


Radiation Pattern Elevation Gain Plot (Hor.)_(1/3)

120mm



Antenna Pattern & EIRP Measurement

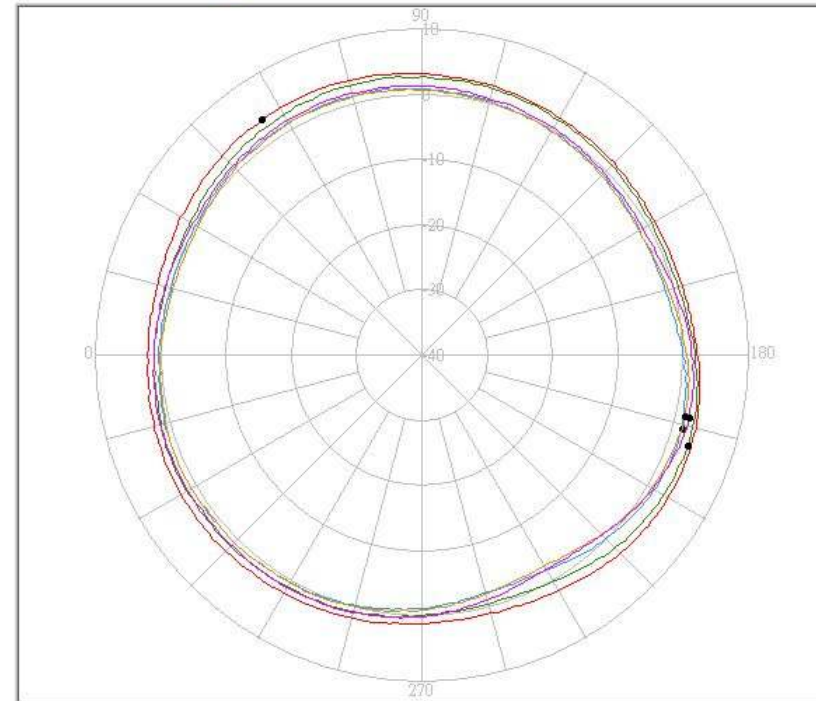


Model No.	Test Mode	Freq(MHz)	Source Pol.	Peak gain(dBi)	Avg. gain(dBi)	Peak angle	Date
970508_UWB_120	H	3100	Ver.	2.81	1.54	210.22	2008/5/8
970508_UWB_120	H	3200	Ver.	3.31	2.01	205.90	2008/5/8
970508_UWB_120	H	3300	Ver.	3.97	2.43	208.56	2008/5/8
970508_UWB_120	H	3400	Ver.	2.97	1.47	205.15	2008/5/8
970508_UWB_120	H	3500	Ver.	3.63	2.12	200.59	2008/5/8

3100~3500MHz



Antenna Pattern & EIRP Measurement



Model No.	Test Mode	Freq(MHz)	Source Pol.	Peak gain(dBi)	Avg. gain(dBi)	Peak angle	Date
970508_UWB_120	H	3600	Ver.	3.61	2.40	55.88	2008/5/8
970508_UWB_120	H	3700	Ver.	3.10	1.48	198.98	2008/5/8
970508_UWB_120	H	3800	Ver.	1.42	0.04	195.88	2008/5/8
970508_UWB_120	H	3900	Ver.	1.41	-0.08	193.24	2008/5/8
970508_UWB_120	H	4000	Ver.	2.05	0.62	193.14	2008/5/8

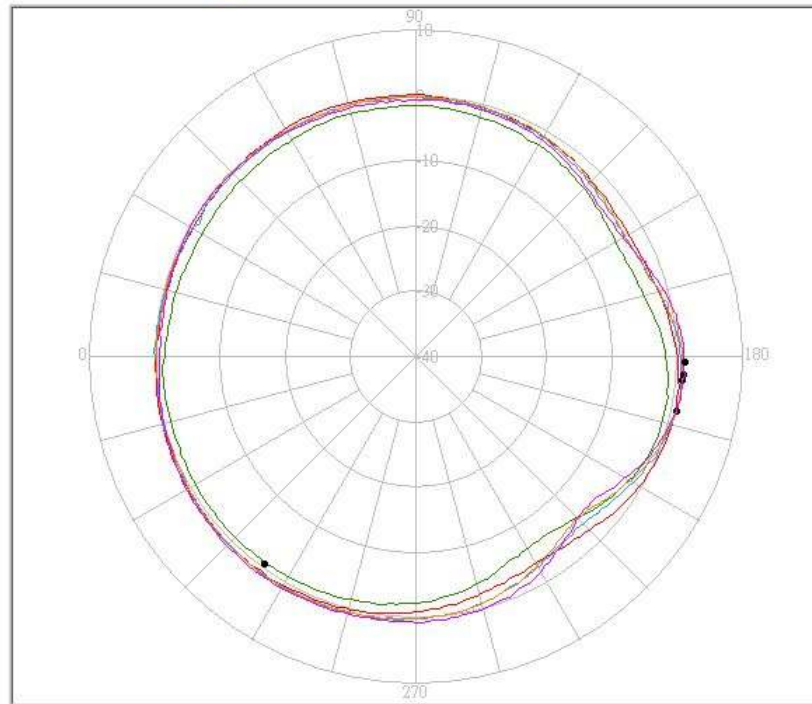
3600~4000MHz

Radiation Pattern Elevation Gain Plot (Hor.)_(2/3)

120mm



Antenna Pattern & EIRP Measurement

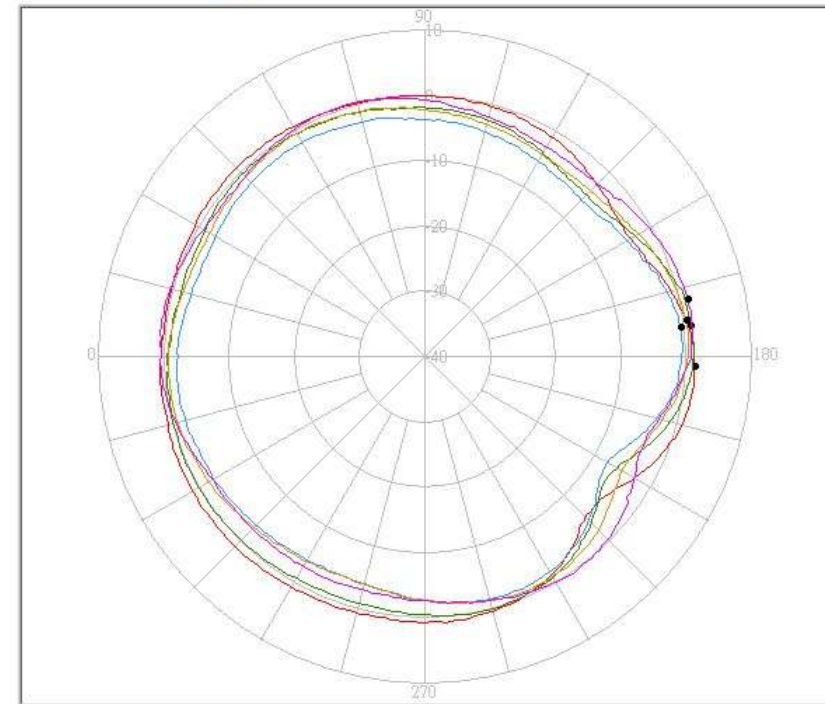


Model No.	Test Mode	Freq(MHz)	Source Pol.	Peak gain(dBi)	Avg. gain(dBi)	Peak angle	Date
970508_UWB_120	H	4100	Ver.	0.72	-0.53	191.91	2008/5/8
970508_UWB_120	H	4200	Ver.	-0.79	-2.18	306.13	2008/5/8
970508_UWB_120	H	4300	Ver.	0.88	-0.55	185.26	2008/5/8
970508_UWB_120	H	4400	Ver.	1.03	-0.54	183.94	2008/5/8
970508_UWB_120	H	4500	Ver.	1.20	-0.52	181.32	2008/5/8

4100~4500MHz



Antenna Pattern & EIRP Measurement



Model No.	Test Mode	Freq(MHz)	Source Pol.	Peak gain(dBi)	Avg. gain(dBi)	Peak angle	Date
970508_UWB_120	H	4600	Ver.	1.34	-0.09	181.99	2008/5/8
970508_UWB_120	H	4700	Ver.	1.14	-1.17	173.43	2008/5/8
970508_UWB_120	H	4800	Ver.	-0.55	-3.06	173.43	2008/5/8
970508_UWB_120	H	4900	Ver.	0.42	-1.96	172.06	2008/5/8
970508_UWB_120	H	5200	Ver.	1.34	-1.03	167.56	2008/5/8

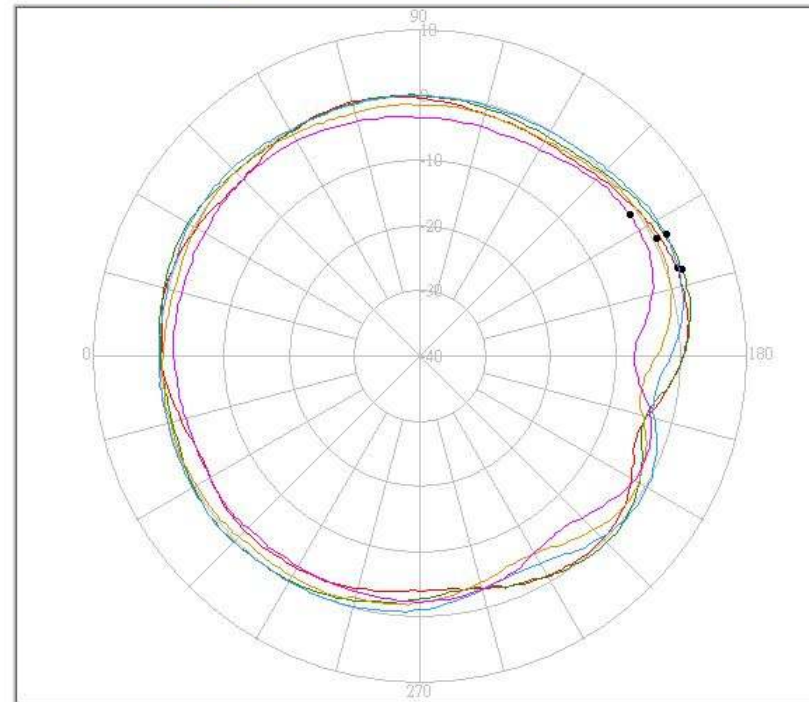
4600~5200MHz

Radiation Pattern Elevation Gain Plot (Hor.)_(3/3)

120mm



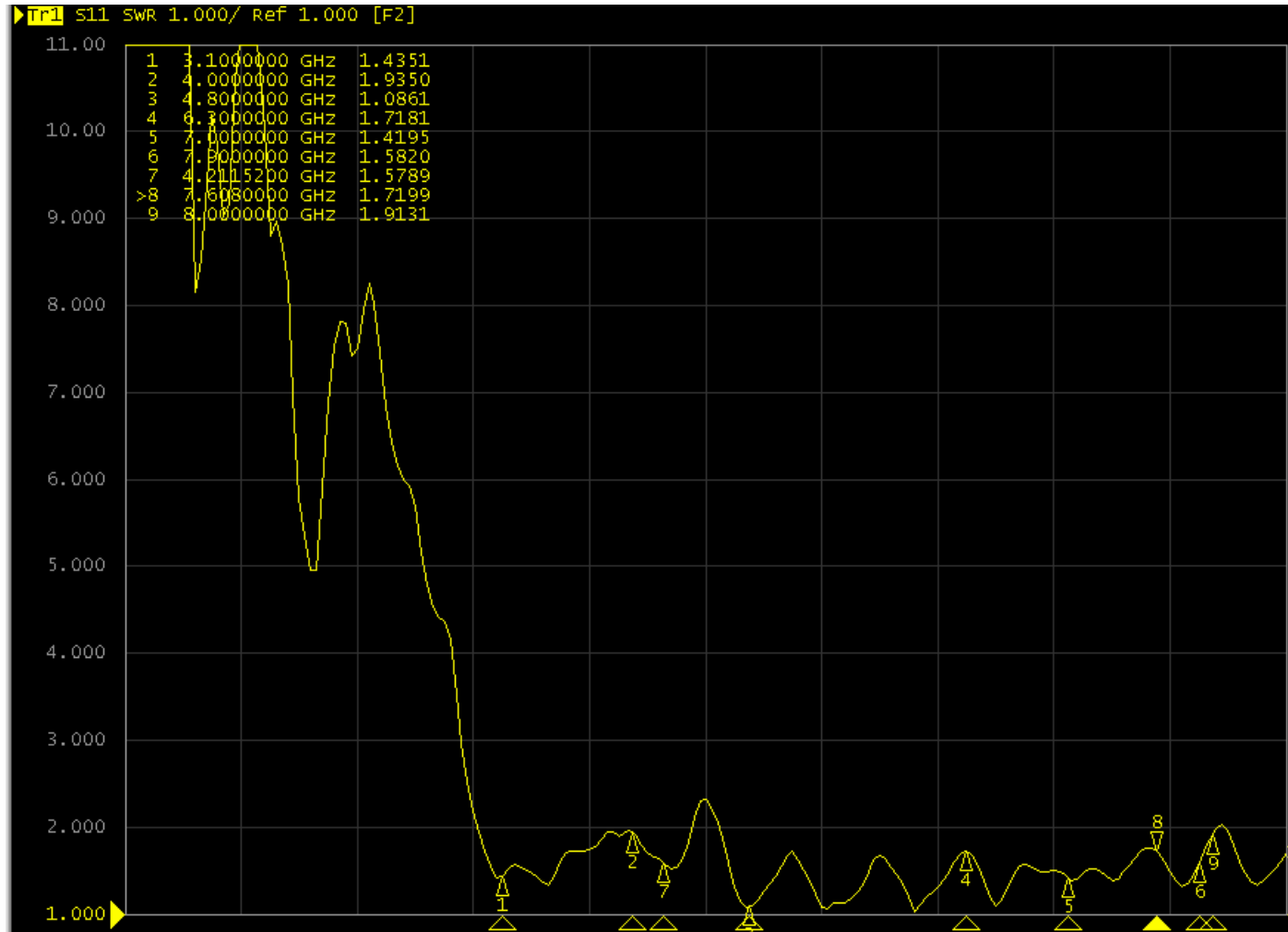
Antenna Pattern & EIRP Measurement



Model No.	Test Mode	Freq(MHz)	Source Pol.	Peak gain(dBi)	Avg. gain(dBi)	Peak angle	Date
970508_UWB_120	H	5400	Ver.	1.63	-1.14	161.16	2008/5/8
970508_UWB_120	H	5600	Ver.	2.38	-0.26	161.61	2008/5/8
970508_UWB_120	H	5800	Ver.	2.11	-0.16	153.72	2008/5/8
970508_UWB_120	H	6000	Ver.	0.51	-1.35	153.53	2008/5/8
970508_UWB_120	H	6300	Ver.	-1.16	-2.84	146.13	2008/5/8

5400~6300MHz

VSWR _ 150mm

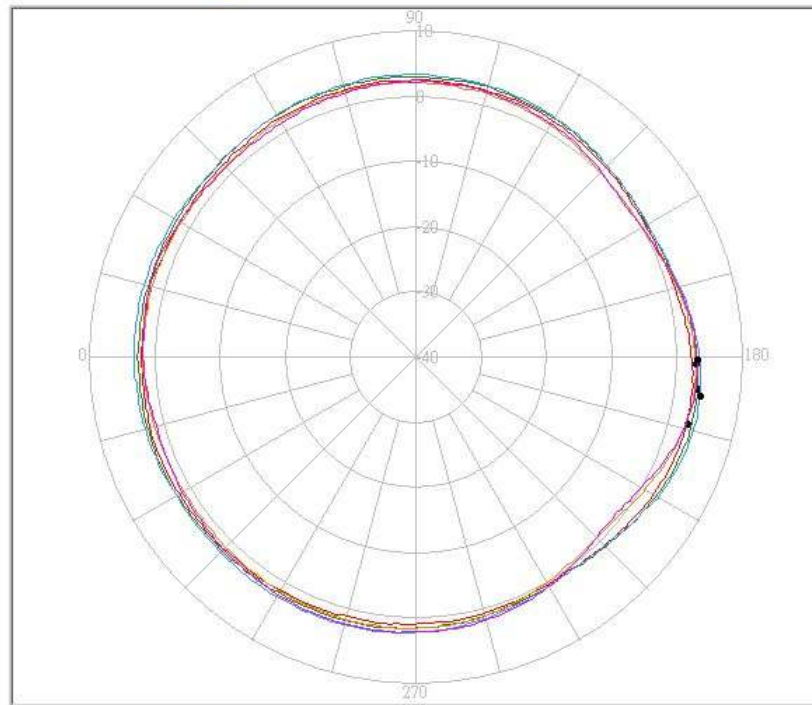


Radiation Pattern Elevation Gain Plot (Hor.)_(1/3)

150mm



Antenna Pattern & EIRP Measurement

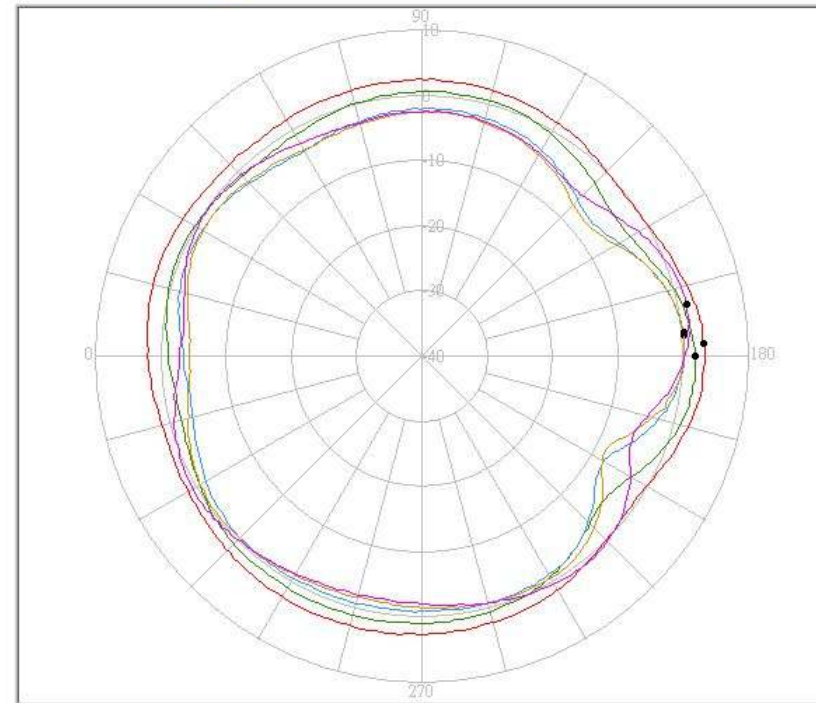


Model No.	Test Mode	Freq(MHz)	Source Pol.	Peak gain(dBi)	Avg. gain(dBi)	Peak angle	Date
970508_UWB_150	H	3100	Ver.	2.81	1.65	193.85	2008/5/8
970508_UWB_150	H	3200	Ver.	3.48	2.15	186.57	2008/5/8
970508_UWB_150	H	3300	Ver.	3.97	2.49	187.88	2008/5/8
970508_UWB_150	H	3400	Ver.	2.97	1.35	181.32	2008/5/8
970508_UWB_150	H	3500	Ver.	3.13	1.53	180.66	2008/5/8

3100~3500MHz



Antenna Pattern & EIRP Measurement



Model No.	Test Mode	Freq(MHz)	Source Pol.	Peak gain(dBi)	Avg. gain(dBi)	Peak angle	Date
970508_UWB_150	H	3600	Ver.	3.28	1.83	177.37	2008/5/8
970508_UWB_150	H	3700	Ver.	1.94	-0.26	180.00	2008/5/8
970508_UWB_150	H	3800	Ver.	0.25	-2.16	175.38	2008/5/8
970508_UWB_150	H	3900	Ver.	0.24	-2.33	174.71	2008/5/8
970508_UWB_150	H	4000	Ver.	1.39	-1.40	168.79	2008/5/8

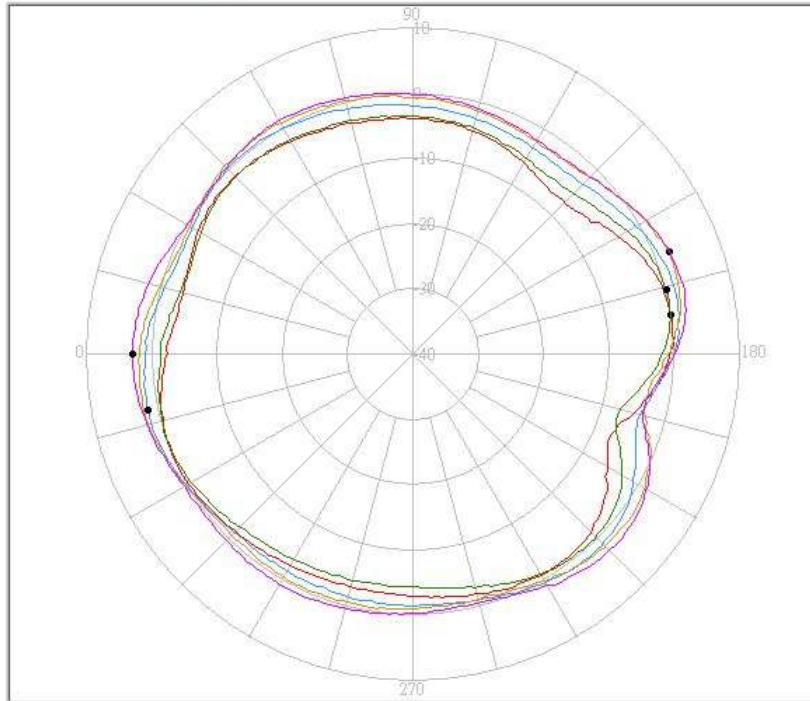
3600~4000MHz

Radiation Pattern Elevation Gain Plot (Hor.)_(2/3)

150mm



Antenna Pattern & EIRP Measurement

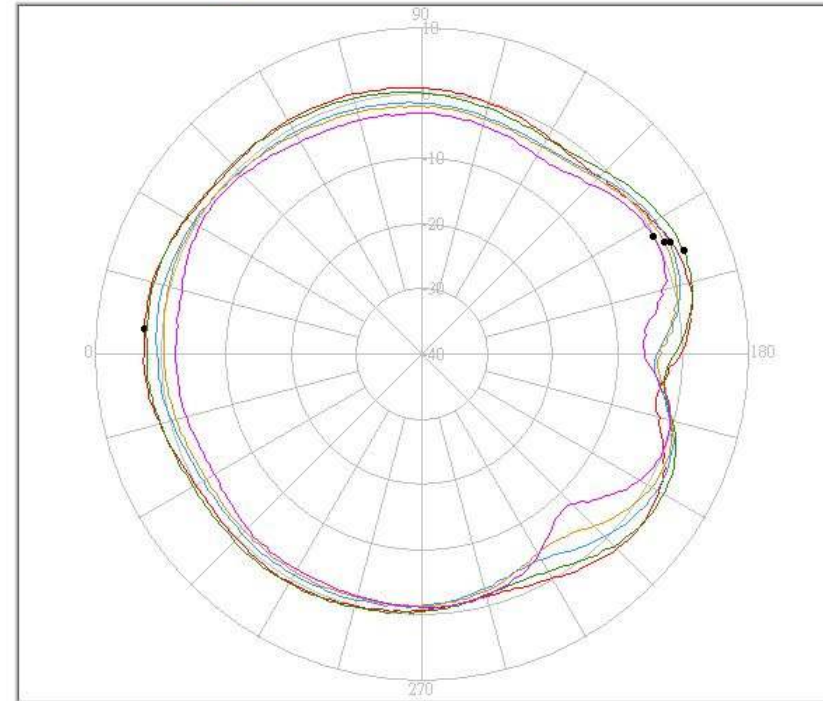


Model No.	Test Mode	Freq(MHz)	Source Pol.	Peak gain(dBi)	Avg. gain(dBi)	Peak angle	Date
970508_UWB_150	H	4100	Ver.	0.05	-2.46	171.37	2008/5/8
970508_UWB_150	H	4200	Ver.	0.04	-2.44	165.76	2008/5/8
970508_UWB_150	H	4300	Ver.	1.54	-0.65	348.13	2008/5/8
970508_UWB_150	H	4400	Ver.	2.20	0.06	158.24	2008/5/8
970508_UWB_150	H	4500	Ver.	2.87	0.68	0.00	2008/5/8

4100~4500MHz



Antenna Pattern & EIRP Measurement



Model No.	Test Mode	Freq(MHz)	Source Pol.	Peak gain(dBi)	Avg. gain(dBi)	Peak angle	Date
970508_UWB_150	H	4600	Ver.	2.67	0.69	5.20	2008/5/8
970508_UWB_150	H	4700	Ver.	3.14	0.77	158.40	2008/5/8
970508_UWB_150	H	4800	Ver.	1.62	-0.71	155.60	2008/5/8
970508_UWB_150	H	4900	Ver.	0.92	-1.25	155.22	2008/5/8
970508_UWB_150	H	5200	Ver.	-0.16	-2.36	152.97	2008/5/8

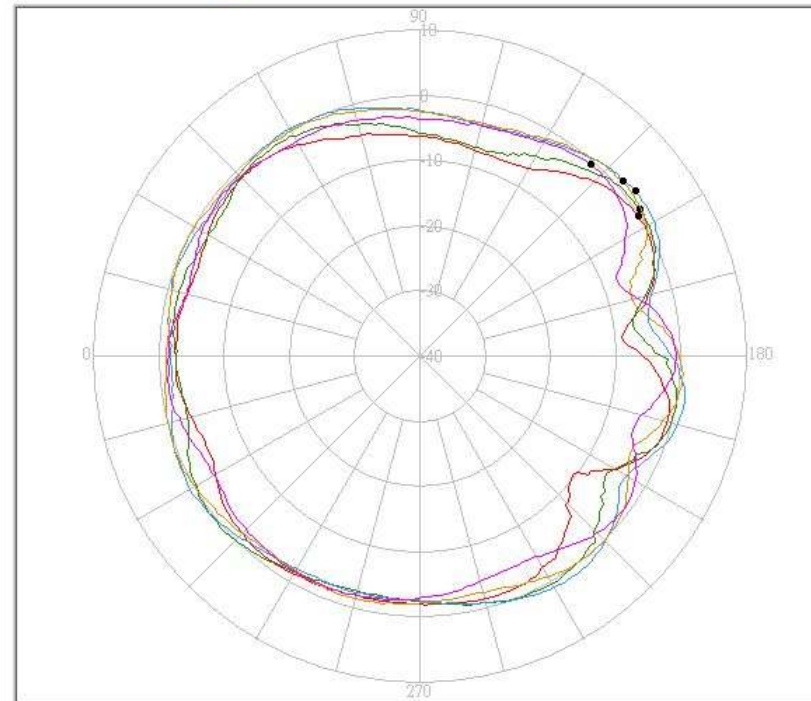
4600~5200MHz

Radiation Pattern Elevation Gain Plot (Hor.)_(3/3)

150mm



Antenna Pattern & EIRP Measurement



Model No.	Test Mode	Freq(MHz)	Source Pol.	Peak gain(dBi)	Avg. gain(dBi)	Peak angle	Date
970508_UWB_150	H	5400	Ver.	-0.20	-2.95	147.39	2008/5/8
970508_UWB_150	H	5600	Ver.	0.55	-1.95	146.37	2008/5/8
970508_UWB_150	H	5800	Ver.	1.61	-0.84	142.69	2008/5/8
970508_UWB_150	H	6000	Ver.	1.01	-1.18	139.27	2008/5/8
970508_UWB_150	H	6300	Ver.	-0.66	-2.46	131.87	2008/5/8

5400~6300MHz

Peak Gain & Avg Gain

	60mm		120mm		150mm	
Frequency (GHz)	Peak Gain (dBi)	Avg. Gain (dBi)	Peak Gain (dBi)	Avg. Gain (dBi)	Peak Gain (dBi)	Avg. Gain (dBi)
3100	2.81	2.33	2.81	1.54	2.81	1.65
3200	3.14	2.53	3.31	2.01	3.48	2.15
3300	3.97	3.13	3.97	2.43	3.97	2.49
3400	3.13	2.11	2.97	1.47	2.97	1.35
3500	3.3	2.07	3.63	2.12	3.13	1.53
3600	3.95	2.71	3.61	2.4	3.28	1.83
3700	2.77	1.3	3.1	1.48	1.94	-0.26
3800	1.58	0.02	1.42	0.04	0.25	-2.16
3900	1.57	-0.14	1.41	-0.08	0.24	-2.33
4000	1.72	0.01	2.05	0.62	1.39	-1.4
4100	0.39	-1.64	0.72	-0.53	0.05	-2.46
4200	-0.62	-2.98	-0.79	-2.18	0.04	-2.44
4300	0.88	-1.41	0.88	-0.55	1.54	-0.65
4400	0.7	-1.93	1.03	-0.54	2.2	0.06
4500	1.53	-1.37	1.2	-0.52	2.87	0.68
4600	2.17	-0.37	1.34	-0.09	2.67	5.2
4700	2.14	-0.32	1.14	-1.17	3.14	0.77
4800	0.29	-2.2	-0.55	-3.06	1.62	-0.71
4900	0.59	-1.9	0.42	-1.96	0.92	-1.25
5200	1.67	-0.8	1.34	-1.03	-0.16	-2.36
5400	1.8	-1.04	1.63	-1.14	-0.2	-2.95
5600	3.21	0.34	2.38	-0.26	0.55	-1.95
5800	2.44	-0.56	2.11	-0.16	1.61	-0.84
6000	2.17	-0.44	0.51	-1.35	1.01	-1.18
6300	-0.33	-2.36	-1.16	-2.84	-0.66	-2.46