

G600 Bluetooth Antenna test report

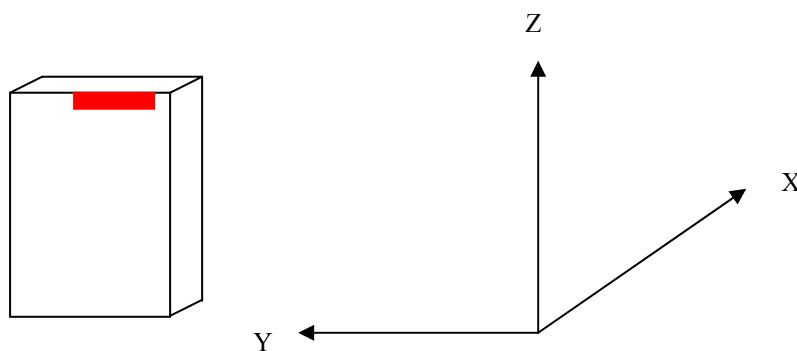
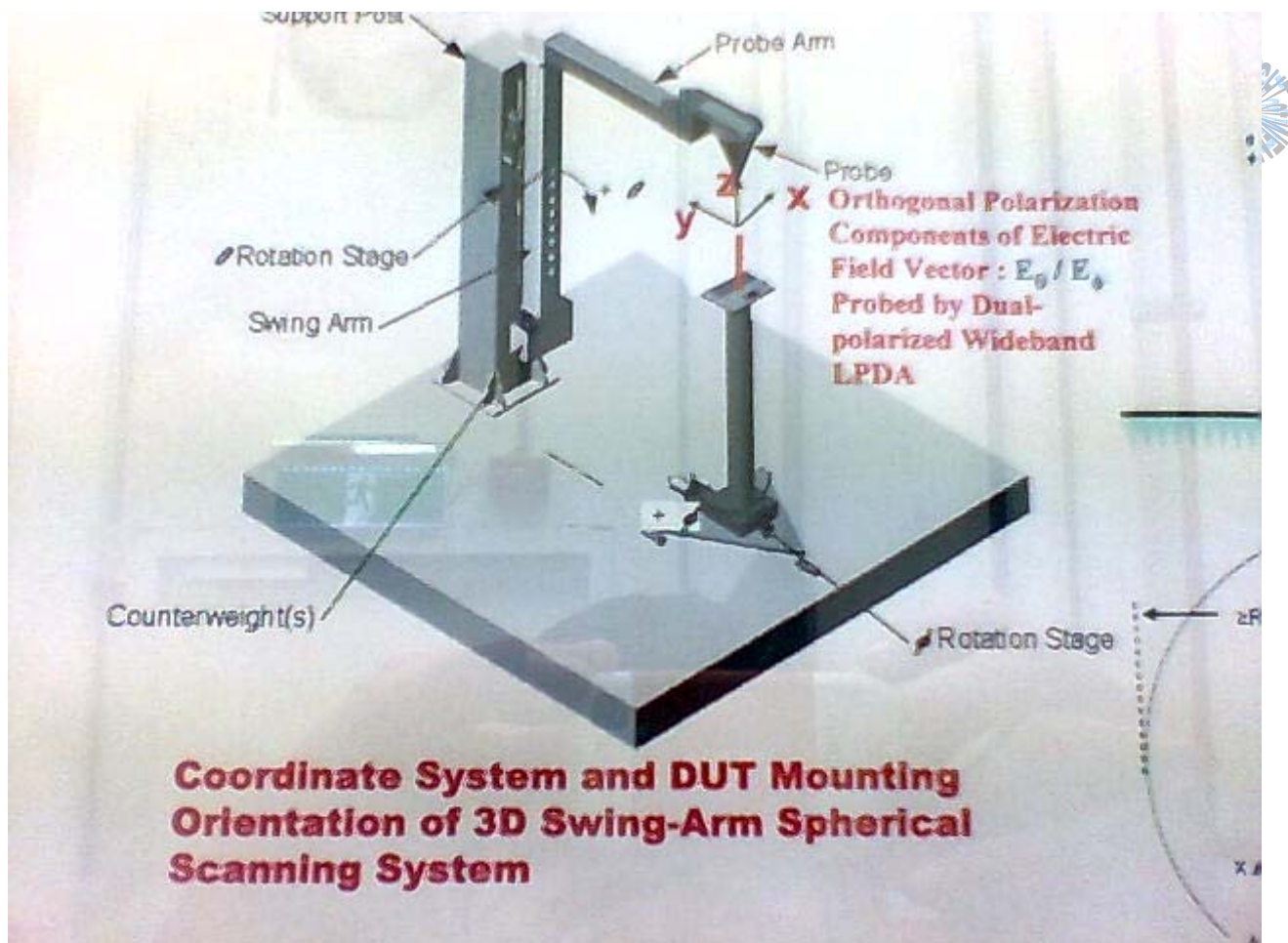
2007/4/13
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1. Test purpose:
G600 Bluetooth antenna in housing pattern measurement.
2. Test setting:



BT antenna Location

3. Test item:
S11 return loss, SWR, Impedance, Antenna Gain, Radiation Pattern.

S11 return loss:

Frequency (GHz)	2.4 (Mark 2)	2.441(Mark 1)	2.5(Mark 3)
Return loss (dB)	-15.620	-29.263	-14.107

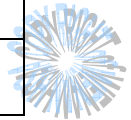


Table 1

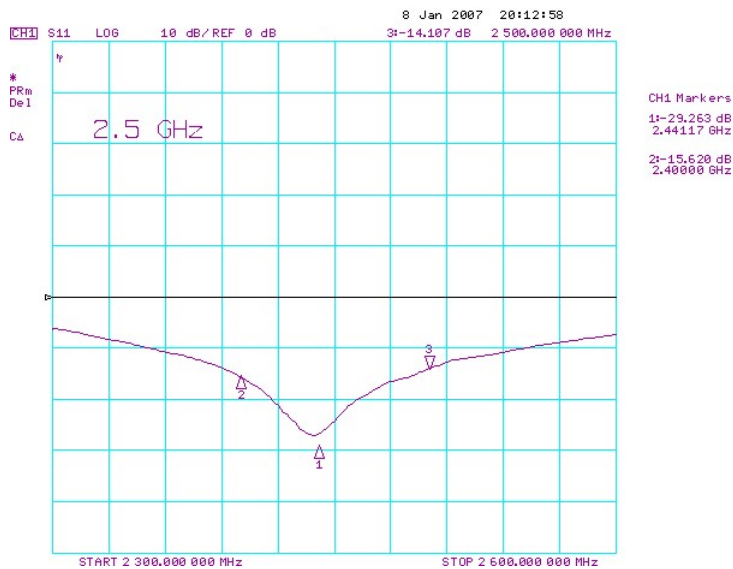


Fig. 2 return loss

SWR (modify bandwidth in 2.4~2.5)

Frequency (GHz)	2.4 (Mark 2)	2.441(Mark 1)	2.5(Mark 3)
SWR	1.3265	1.0161	1.3663

Table 2

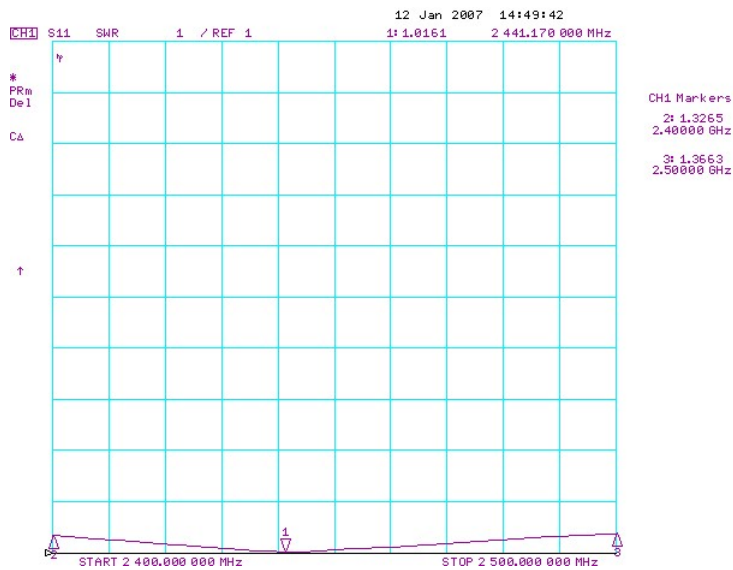
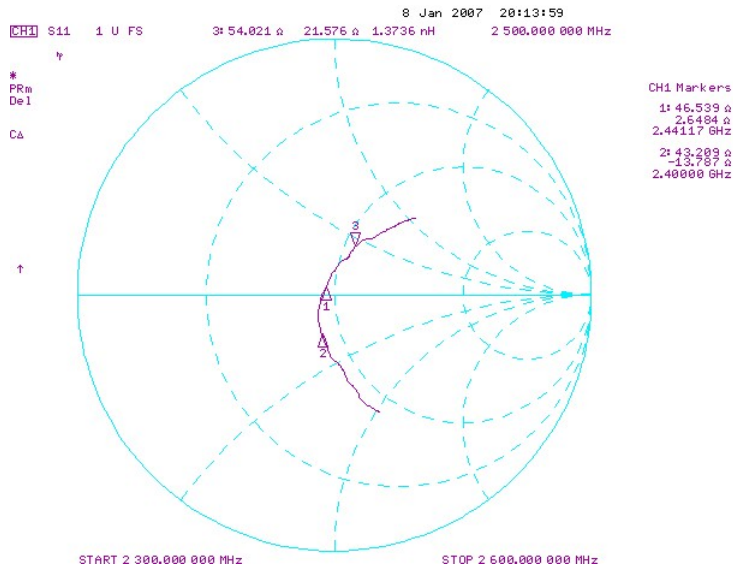


Fig. 3 SWR

Impedance

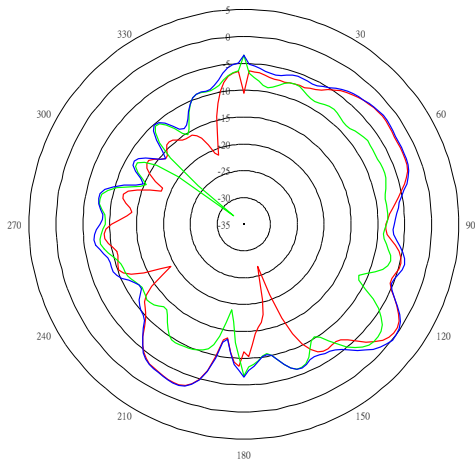
Frequency (GHz)	2.4 (Mark 2)	2.45(Mark 1)	2.5(Mark 3)
impdrence	43.209-j13.787	46.539+j2.6484	54.021+j2.6484

Table 3



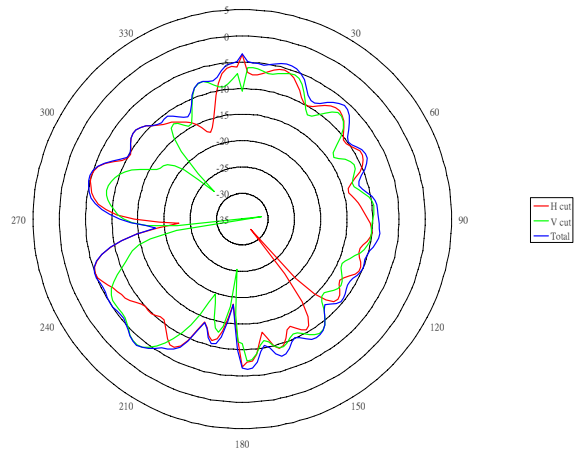
**4. Pattern:
2.4G Hz:**

X-Z plane



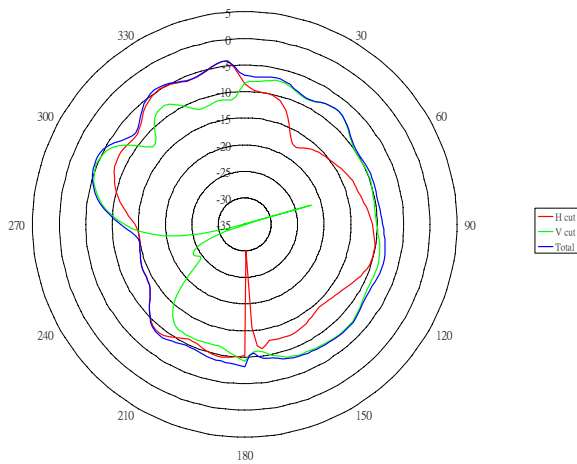
Average gain	-6.5dBi
Peak gain	0.08dBi
Efficiency	29.77%

Y-Z plane



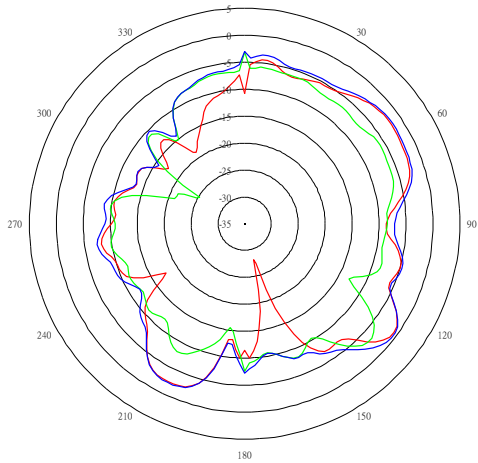
Average gain	-7.7dBi
Peak gain	-3.49dBi
Efficiency	29.77%

X-Y plane



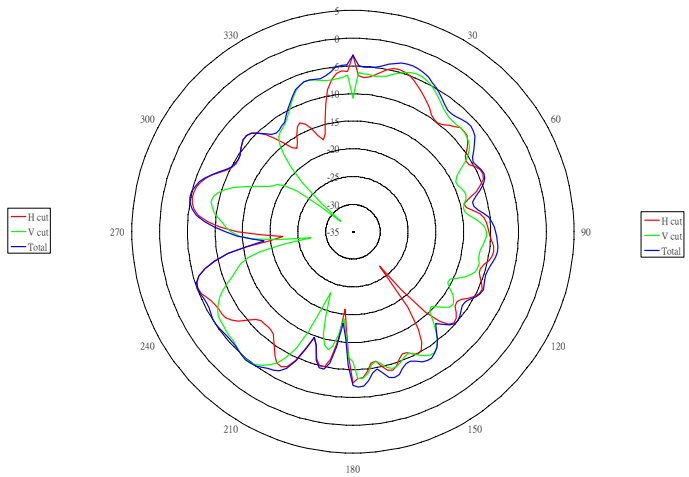
Average gain	-7.9 dBi
Peak gain	-4.01dBi
Efficiency	29.77%

2.45G Hz
X-Z plane



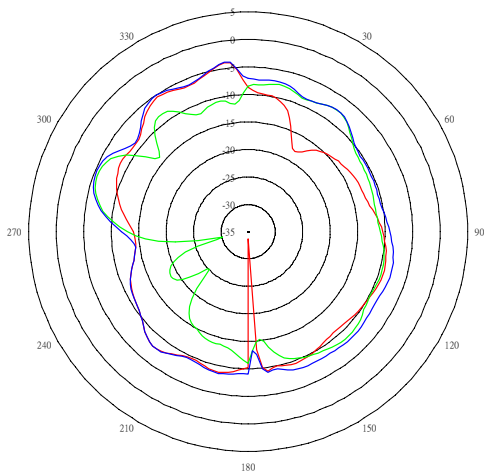
Average gain	-5.5dBi
Peak gain	-0.43dBi
Efficiency	30.05%

Y-Z plane



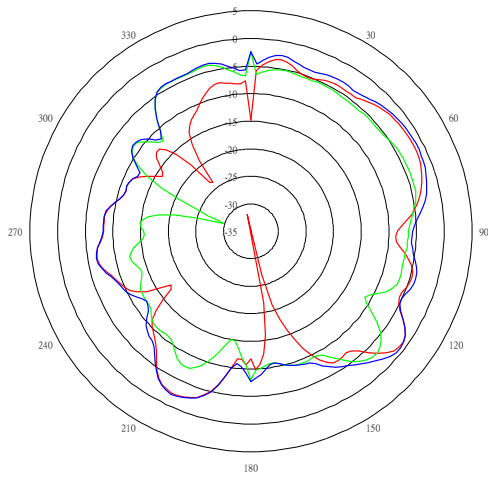
Average gain	-7.48dBi
Peak gain	-3.08dBi
Efficiency	30.05%

X-Y plane



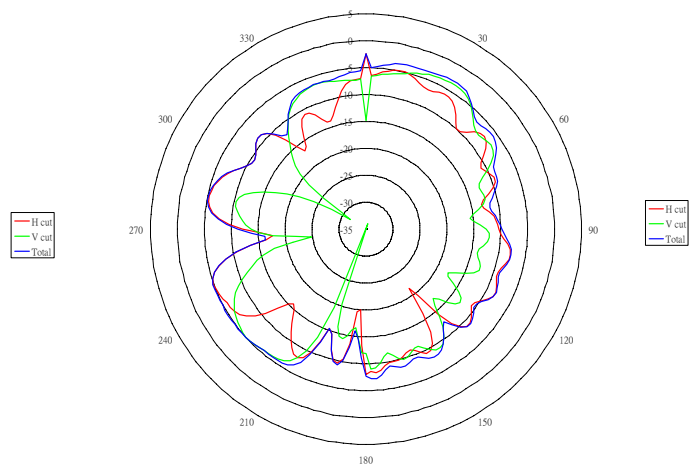
Average gain	-8.1dBi
Peak gain	-3.88dBi
Efficiency	30.05%

2.5G Hz
X-Z plane



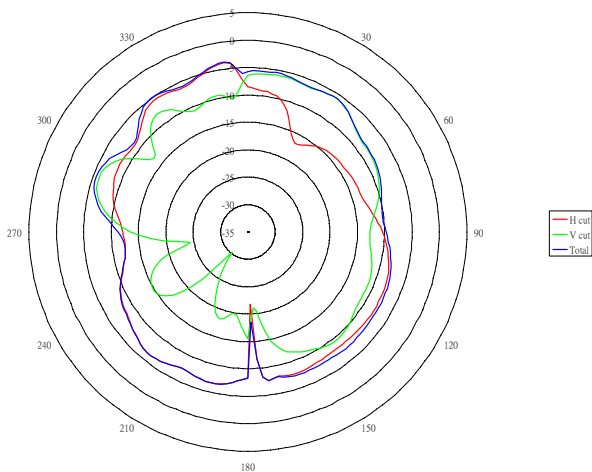
Average gain	-4.79dBi
Peak gain	-0.62dBi
Efficiency	34.42%

Y-Z plane



Average gain	-6.97dBi
Peak gain	-2.41dBi
Efficiency	34.42%

X-Y plane



Average gain	-7.19dBi
Peak gain	-3.67dBi
Efficiency	34.42%