

# Bluetooth Antenna Specification

2006.4.14  
FUJITSU Limited

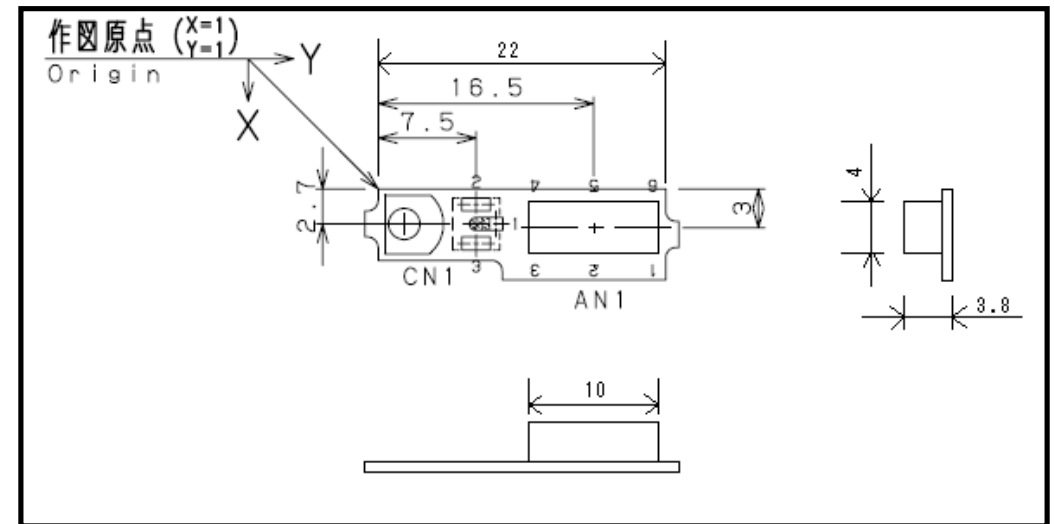
Model: CP218771

Antenna Type: Inverted F

Appearance:



Dimension:



Features:

Impedance	50Ω
Frequency Band	2400 ~ 2500MHz

MAX Gain: 3.20dBi

VSWR: 1.17

To : FUJITSU LIMITED

Application : For Bluetooth

Measurement Institution : Yokowo No.3 Radio Measuring Site

Antenna Model : YCE-5250

Date : 2006/03/10

Measurement Condition : Clio Disp.-Open

Measured by : M.Matsuzaki

Antenna Matching : Non

Correction of Cable Loss : Non (include Loss 0.55dB)

**f=2400MHz**

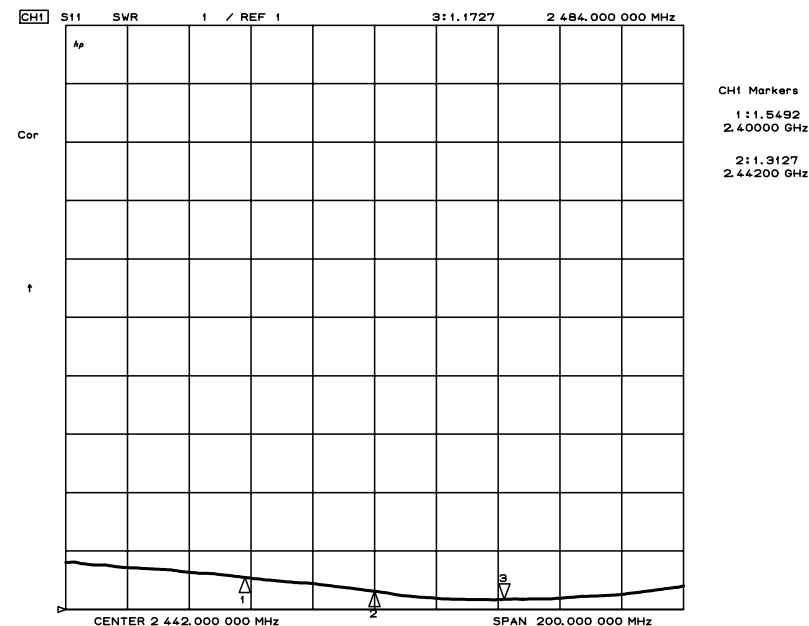
Plane	Tx	Peak. Gain [dBi]	Avg. Gain [dBi]	Tx H & V Avg. [dBi]	Each Freq. Avg. [dBi]
X-Y	Horizontal	-1.44	-8.32	-7.72	-6.27
	Vertical	-1.83	-7.20		
Y-Z	Horizontal	3.20	-4.29	-5.99	
	Vertical	-3.50	-8.82		
Z-X	Horizontal	-4.19	-8.96	-5.42	
	Vertical	3.19	-3.50		

X-Y Plane All Avg. (All Freq.)	-7.6 dBi
Y-Z Plane All Avg. (All Freq.)	-6.4 dBi
Z-X Plane All Avg. (All Freq.)	-5.4 dBi
All Plane & All Freq. Avg.	-6.4 dBi

**f=2442MHz**

Plane	Tx	Peak. Gain [dBi]	Avg. Gain [dBi]	Tx H & V Avg. [dBi]	Each Freq. Avg. [dBi]
X-Y	Horizontal	-1.62	-8.33	-7.83	-6.65
	Vertical	-2.04	-7.38		
Y-Z	Horizontal	1.80	-4.99	-6.75	
	Vertical	-4.82	-9.76		
Z-X	Horizontal	-3.86	-8.89	-5.64	
	Vertical	2.80	-3.80		

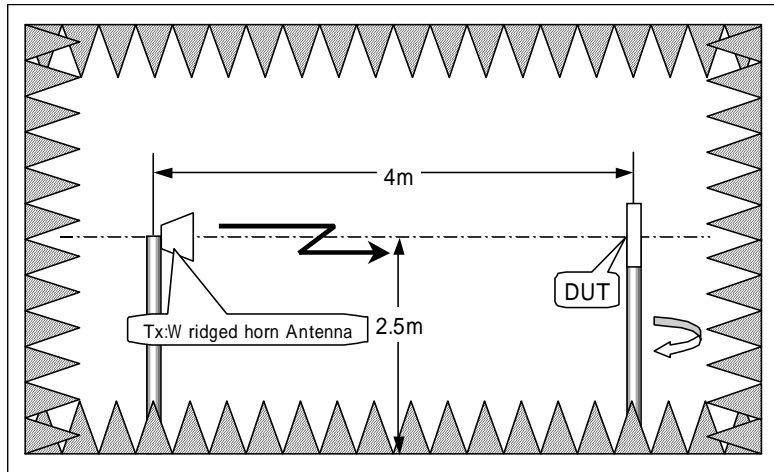
**VSWR**



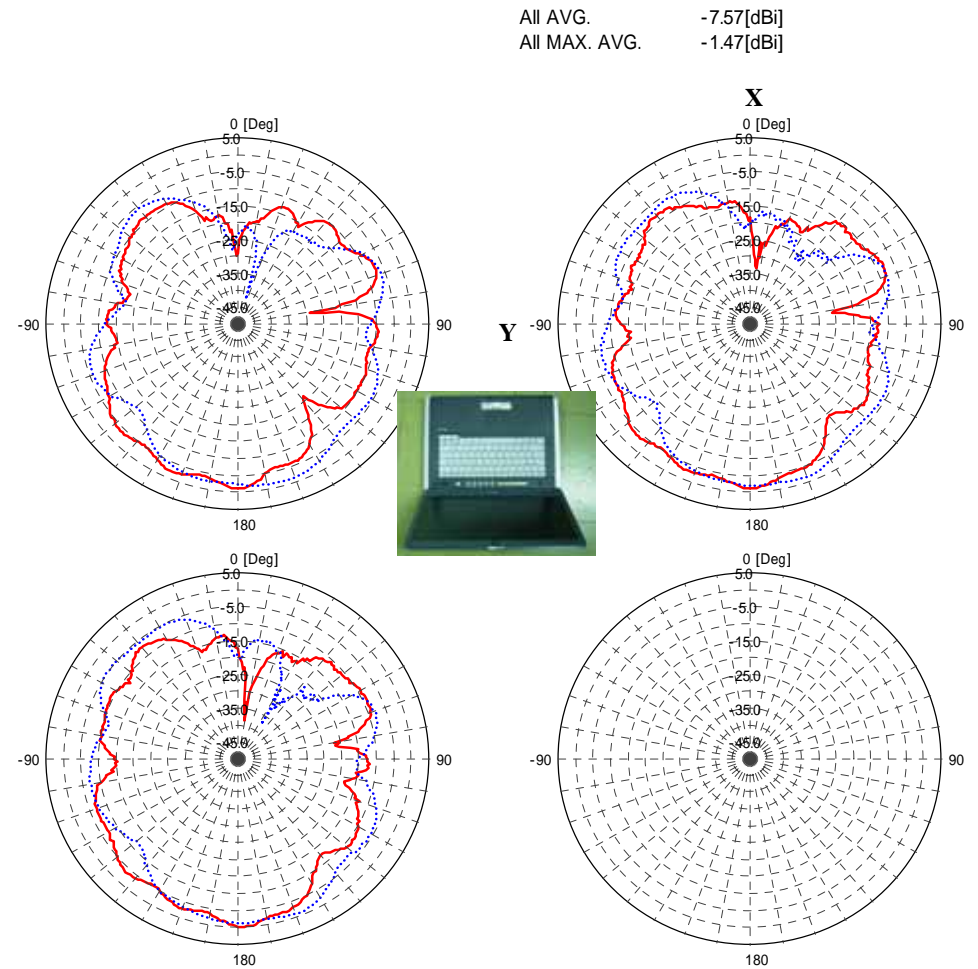
**f=2484MHz**

Plane	Tx	Peak. Gain [dBi]	Avg. Gain [dBi]	Tx H & V Avg. [dBi]	Each Freq. Avg. [dBi]
X-Y	Horizontal	-0.58	-7.72	-7.18	-6.25
	Vertical	-1.45	-6.70		
Y-Z	Horizontal	2.09	-4.75	-6.64	
	Vertical	-4.36	-10.07		
Z-X	Horizontal	-2.72	-8.43	-5.17	
	Vertical	3.16	-3.33		

Measurement Condition



Field Pattern X-Y Plane



All AVG. -7.57[dBi]  
All MAX. AVG. -1.47[dBi]

Antenna Coordinated



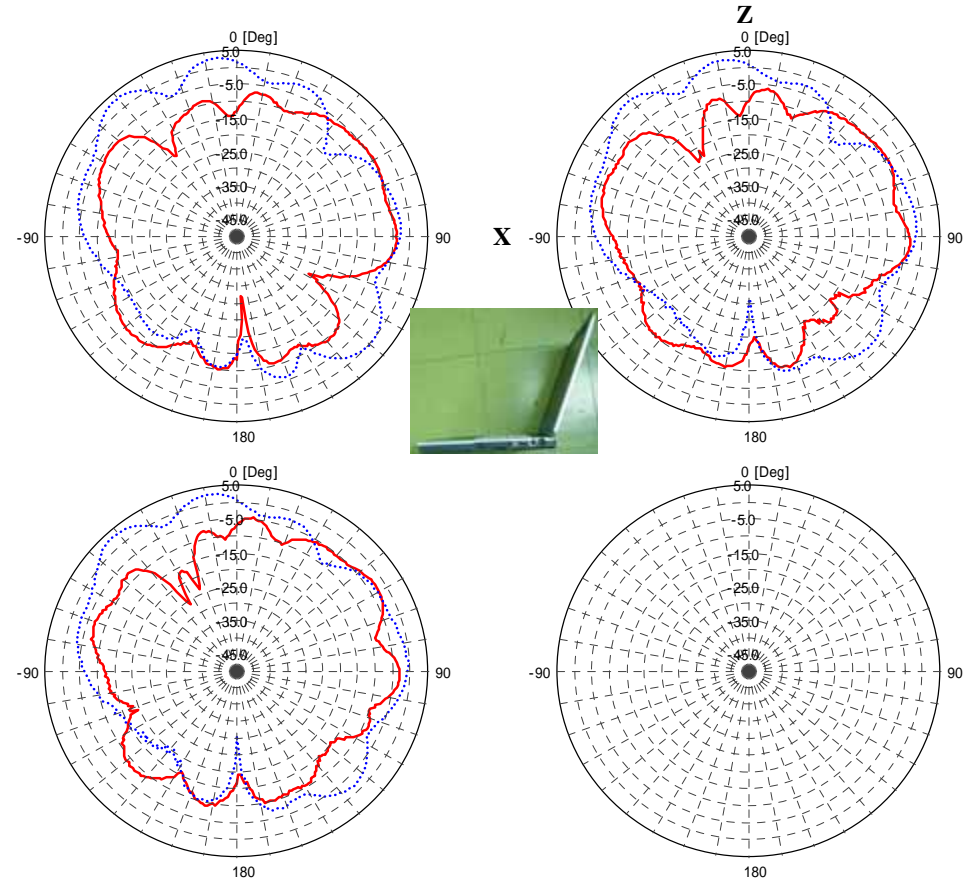
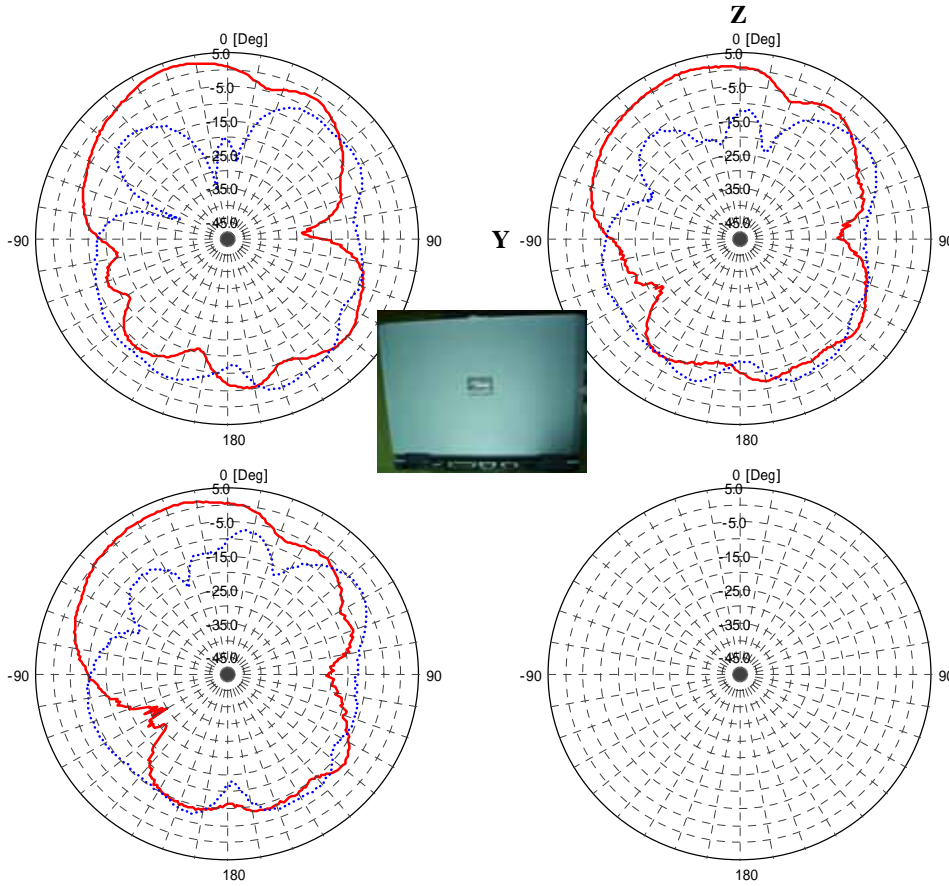
	Line	No.	Frequency[MHz]	MEMO	MAX. Gain[dBi]	AVG. Gain[dBi]
1	—————		2400.00	Horizontal	-1.43	-8.32
2	—————		2442.00		-1.63	-8.33
3	—————		2484.00		-0.57	-7.72
4	.....		2400.00	Vertical	-1.83	-7.20
5	.....		2442.00		-2.04	-7.39
6	.....		2484.00		-1.45	-6.69

Field Pattern Z-Y Plane

Field Pattern Z-X Plane

All AVG. -6.45[dBi]  
All MAX. AVG. 0.26[dBi]

All AVG. -5.40[dBi]  
All MAX. AVG. 0.91[dBi]



Line	No.	Frequency[MHz]	MEMO	MAX. Gain[dBi]	AVG. Gain[dBi]
1	—	2400.00	Horizontal	3.20	-4.29
2	—	2442.00		1.80	-5.00
3	—	2484.00		2.10	-4.75
4	.....	2400.00	Vertical	-3.49	-8.81
5	.....	2442.00		-4.82	-9.76
6	.....	2484.00		-4.36	-10.07

Line	No.	Frequency[MHz]	MEMO	MAX. Gain[dBi]	AVG. Gain[dBi]
1	—	2400.00	Horizontal	-4.19	-8.95
2	—	2442.00		-3.86	-8.90
3	—	2484.00		-2.71	-8.42
4	.....	2400.00	Vertical	3.19	-3.49
5	.....	2442.00		2.80	-3.80
6	.....	2484.00		3.17	-3.32