

Mint(Mint2,Mint3,Mint4) Antenna Data

1A Antenna Part Number	1B Manufacture	1C Antenna Type	1D Cable Assembly Part Number and Information	1E Peak Gain W/i Cable loss (dBi)	1F Peak Gain w/o Cable Loss (dBi)	1G VSWR	1H Cable Loss (dBi)
(P/N:YCE-5008) Main antenna Right	Yokowo Co.Ltd	Monopole	(P/N: U.FL-2LP -5016-A-480) 50 ohm Coaxial. length: 48cm diameter: 1.1mm Connector: U.FL	2400-2500MHz 0.81 dBi (peak)	2400-2500MHz 2.11 dBi (peak)	2400-2500MHz 1.20 max	2400-2500MHz 1.30 dBi (peak)
				5150-5350MHz -0.26 dBi (peak)	5150-5350MHz 1.74 dBi (peak)	5150-5350MHz 2.10 max	5150-5350MHz 2.00 dBi (peak)
				5470-5725MHz -1.62 dBi (peak)	5470-5725MHz 0.38 dBi (peak)	5470-5725MHz 2.40 max	5470-5725MHz 2.00 dBi (peak)
				5725-5850MHz 1.45 dBi (peak)	5725-5850MHz 3.45 dBi (peak)	5725-5850MHz 2.50 max	5725-5850MHz 2.00 dBi (peak)
(P/N:YCE-5008) Auxiliary antenna Left	Yokowo Co.Ltd	Monopole	Example: (P/N: U.FL-2LP -5016-A-410) 50 ohm Coaxial. length: 41cm diameter: 1.1mm Connector: U.FL	2400-2500MHz 2.85 dBi (peak)	2400-2500MHz 4.15 dBi (peak)	2400-2500MHz 1.20 max	2400-2500MHz 1.30 dBi (peak)
				5150-5350MHz 0.63 dBi (peak)	5150-5350MHz 2.63 dBi (peak)	5150-5350MHz 2.50 max	5150-5350MHz 2.00 dBi (peak)
				5470-5725MHz -1.69 dBi (peak)	5470-5725MHz 0.31 dBi (peak)	5470-5725MHz 2.80 max	5470-5725MHz 2.00 dBi (peak)
				5725-5850MHz -0.16 dBi (peak)	5725-5850MHz 1.84 dBi (peak)	5725-5850MHz 2.90 max	5725-5850MHz 2.00 dBi (peak)

Ceramic antenna test data**yokowo****To : FUJITSU LIMITED****Application : For W-LAN (IEEE-802.11a,b,g)**

Measurement institution : Yokowo No.3 radio measuring site

Antenna model : YCE-5008

Date : 2003/3/20

Measurement condition : Mint,Mint2,Mint3,Mint4 (Disp. Upper Left)

Measured by : S.Yoshida

Antenna matching : Shunt L (2.2nH)**Correction of cable loss : Non (include loss 1.3dB)****f=2400MHz**

Plane	Tx	Peak. gain [dBi]	Average gain [dBi]	Tx H & V average [dBi]	Each frequency average [dBi]
X-Y	Horizontal	0.74	-5.67	-7.0	-8.3
	Vertical	-3.28	-8.87		
Y-Z	Horizontal	0.26	-6.51	-7.6	
	Vertical	-1.55	-9.08		
Z-X	Horizontal	-9.83	-14.47	-11.3	
	Vertical	-4.59	-9.55		

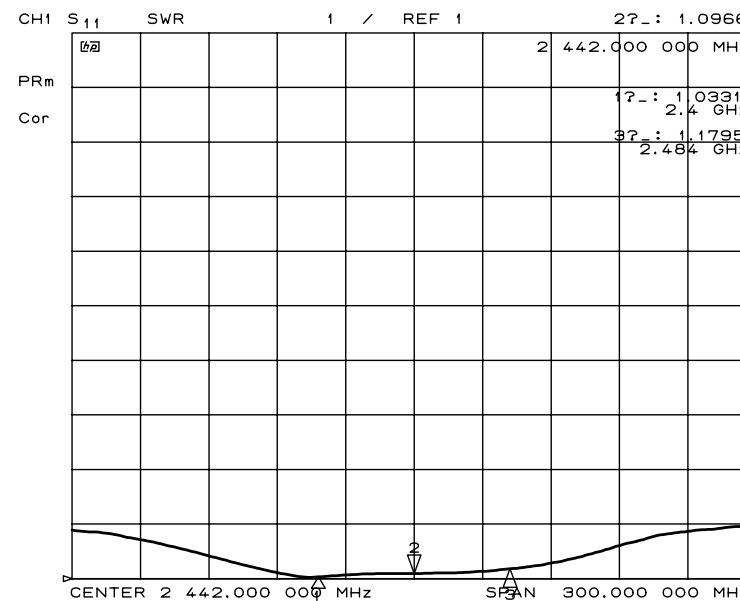
X-Y plane all average (all frequency)	-6.9 dBi
Y-Z plane all average (all frequency)	-6.9 dBi
Z-X plane all average (all frequency)	-10.8 dBi
All plane & all frequency average	-7.8 dBi

f=2442MHz

Plane	Tx	Peak. gain [dBi]	Average gain [dBi]	Tx H & V average [dBi]	Each frequency average [dBi]
X-Y	Horizontal	0.39	-5.69	-6.9	-7.9
	Vertical	-2.70	-8.59		
Y-Z	Horizontal	0.81	-5.64	-6.8	
	Vertical	-1.41	-8.38		
Z-X	Horizontal	-6.71	-11.63	-11.2	
	Vertical	-5.63	-10.73		

f=2484MHz

Plane	Tx	Peak. gain [dBi]	Average gain [dBi]	Tx H & V average [dBi]	Each frequency average [dBi]
X-Y	Horizontal	0.17	-5.73	-6.8	-7.4
	Vertical	-2.57	-8.35		
Y-Z	Horizontal	0.80	-5.17	-6.4	
	Vertical	-1.44	-8.00		
Z-X	Horizontal	-6.27	-11.04	-9.9	
	Vertical	-3.97	-9.03		

VSWR**yokowo co.,ltd.**

Ceramic antenna test data**yokowo****Application : For W-LAN (IEEE-802.11a,b,g)**

Measurement institution : Yokowo No.3 radio measuring site

Antenna model : YCE-5008

Date : 2003/3/20

Measurement condition : Mint,Mint2,Mint3,Mint4 (Disp. Upper Left)

Measured by : S.Yoshida

Antenna matching : Shunt L (2.2nH)**Correction of cable loss : Non (include loss 2.0dB)****f=4900MHz**

Plane	Tx	Peak. gain [dBi]	Average gain [dBi]	Tx H & V average [dBi]	Each frequency average [dBi]
X-Y	Horizontal	-0.33	-4.79	-5.8	-6.6
	Vertical	-2.03	-7.13		
Y-Z	Horizontal	-0.26	-5.18	-6.3	
	Vertical	-1.89	-7.71		
Z-X	Horizontal	-3.50	-10.05	-8.1	
	Vertical	-1.55	-6.75		

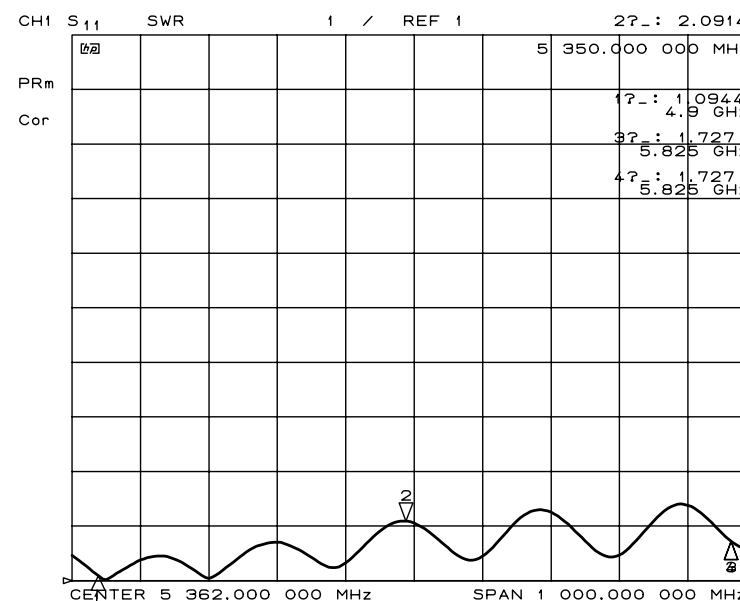
X-Y plane all average (all frequency)	-6.5 dBi
Y-Z plane all average (all frequency)	-6.9 dBi
Z-X plane all average (all frequency)	-7.0 dBi
All plane & all frequency average	-6.8 dBi

f=5350MHz

Plane	Tx	Peak. gain [dBi]	Average gain [dBi]	Tx H & V average [dBi]	Each frequency average [dBi]
X-Y	Horizontal	-1.62	-6.39	-8.0	-8.4
	Vertical	-5.03	-10.59		
Y-Z	Horizontal	-2.04	-6.74	-8.1	
	Vertical	-3.76	-9.97		
Z-X	Horizontal	-3.76	-10.09	-9.3	
	Vertical	-3.09	-8.57		

f=5825MHz

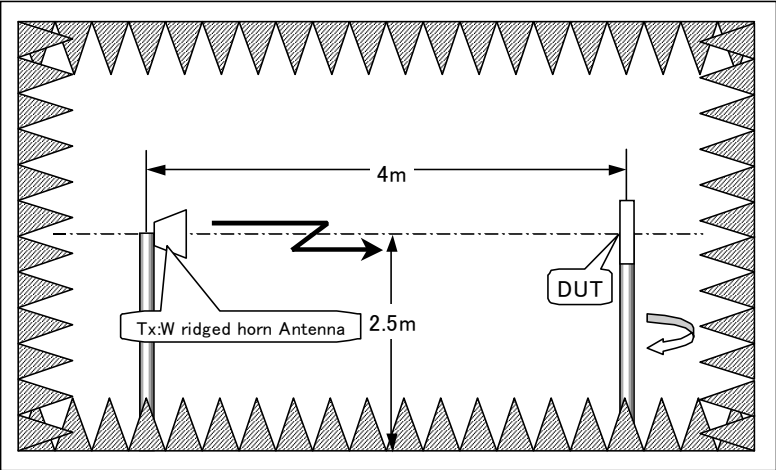
Plane	Tx	Peak. gain [dBi]	Average gain [dBi]	Tx H & V average [dBi]	Each frequency average [dBi]
X-Y	Horizontal	0.96	-4.43	-6.1	-5.8
	Vertical	-3.31	-8.94		
Y-Z	Horizontal	0.61	-4.63	-6.6	
	Vertical	-5.25	-10.12		
Z-X	Horizontal	-4.22	-9.47	-4.8	
	Vertical	1.45	-2.59		

VSWR**yokowo co.,ltd.**

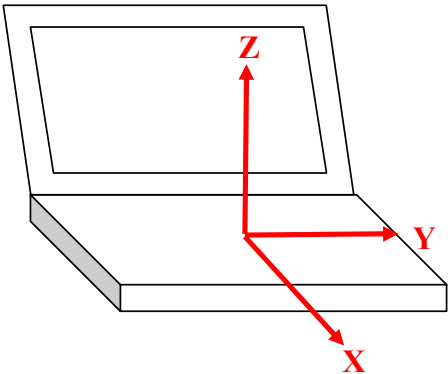
Ceramic antenna test data



Measurement condition



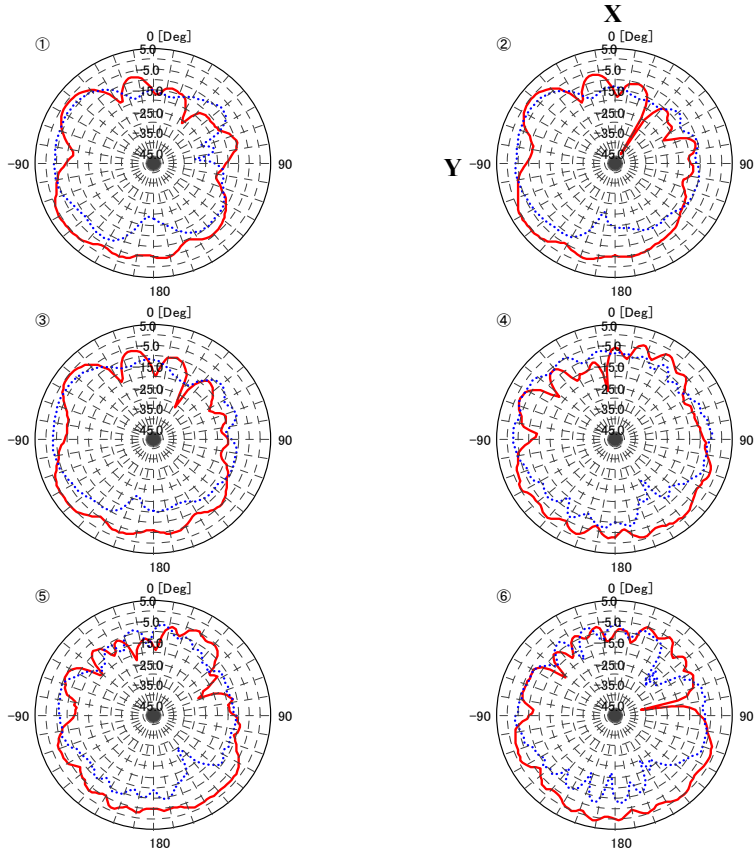
Antenna coordinated



Field pattern X-Y plane

FJ-030320-005.ant
S.Yoshida
03/03/20
Mint with YCE-5008 L-ANT X-Y

All AVG. -6.72[dBi]
All MAX. AVG. -1.18[dBi]



	Line	No.	Frequency[MHz]	MEMO	MAX. Gain[dBi]	AVG. Gain[dBi]
1	=====	(1)	2400.00	Tx-H	0.74	-5.67
2		(1)	2400.00	Tx-V	-3.28	-8.87
3	=====	(2)	2442.00	Tx-H	0.39	-5.69
4		(2)	2442.00	Tx-V	-2.70	-8.59
5	=====	(3)	2484.00	Tx-H	0.17	-5.73
6		(3)	2484.00	Tx-V	-2.57	-8.35
7	=====	(4)	4900.00	Tx-H	-0.33	-4.79
8		(4)	4900.00	Tx-V	-2.03	-7.13
9	=====	(5)	5350.00	Tx-H	-1.62	-6.39
10		(5)	5350.00	Tx-V	-5.03	-10.59
11	=====	(6)	5825.00	Tx-H	0.96	-4.43
12		(6)	5825.00	Tx-V	-3.31	-8.94

Ceramic antenna test data

yokowo

Field pattern Y-Z plane

Fj-030320-007.ant

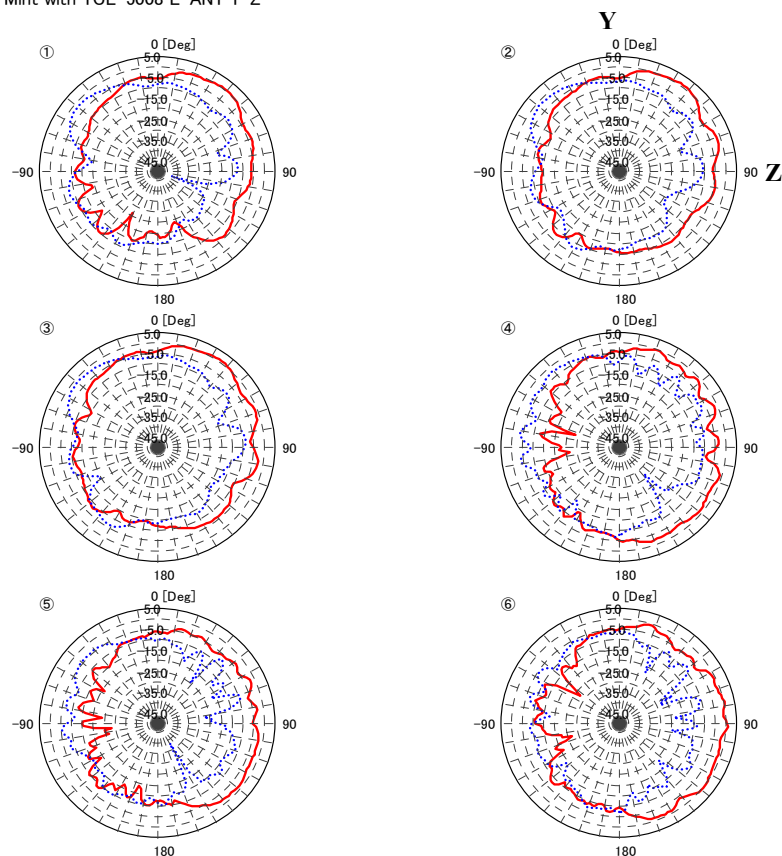
S.Yoshida

03/03/20

Mint with YCE-5008 L-ANT Y-Z

All AVG. -6.89[dBi]

All MAX. AVG. -0.93[dBi]



	Line	No.	Frequency[MHz]	MEMO	MAX. Gain[dBi]	AVG. Gain[dBi]
1	—————	①	2400.00	Tx-H	0.26	-6.51
2		①	2400.00	Tx-V	-1.55	-9.08
3	—————	②	2442.00	Tx-H	0.81	-5.64
4		②	2442.00	Tx-V	-1.41	-8.38
5	—————	③	2484.00	Tx-H	0.80	-5.17
6		③	2484.00	Tx-V	-1.44	-8.00
7	—————	④	4900.00	Tx-H	-0.26	-5.18
8		④	4900.00	Tx-V	-1.89	-7.71
9	—————	⑤	5350.00	Tx-H	-2.04	-6.74
10		⑤	5350.00	Tx-V	-3.76	-9.97
11	—————	⑥	5825.00	Tx-H	0.61	-4.63
12		⑥	5825.00	Tx-V	-5.25	-10.12

Field pattern Z-X plane

Fj-030320-013

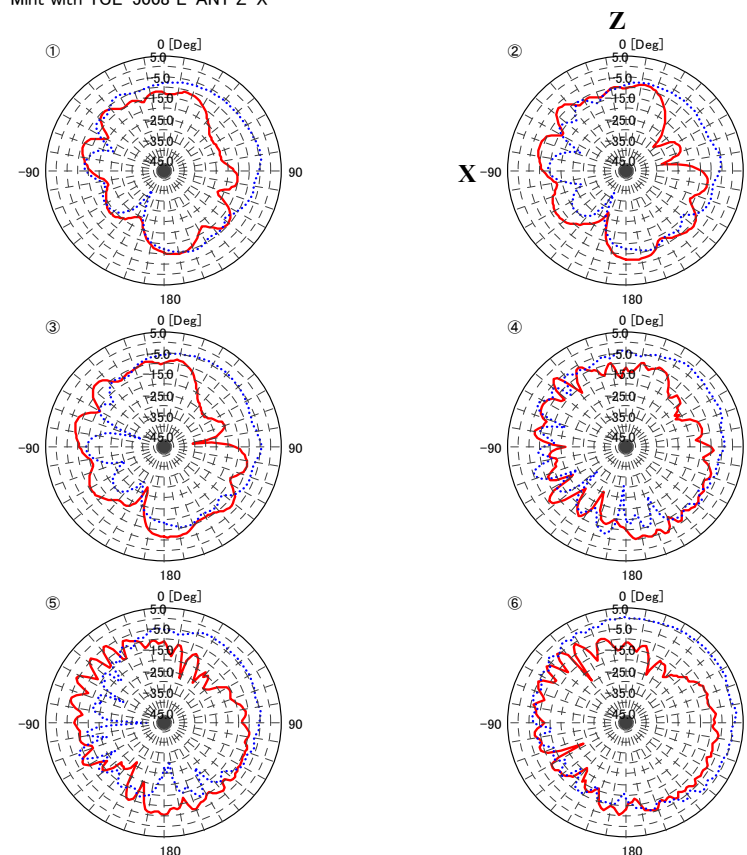
S.Yoshida

03/03/20

Mint with YCE-5008 L-ANT Z-X

All AVG. -8.45[dBi]

All MAX. AVG. -3.46[dBi]



	Line	No.	Frequency[MHz]	MEMO	MAX. Gain[dBi]	AVG. Gain[dBi]
1	—————	①	2400.00	Tx-H	-9.83	-14.47
2		①	2400.00	Tx-V	-4.59	-9.55
3	—————	②	2442.00	Tx-H	-6.71	-11.63
4		②	2442.00	Tx-V	-5.63	-10.73
5	—————	③	2484.00	Tx-H	-6.27	-11.04
6		③	2484.00	Tx-V	-3.97	-9.03
7	—————	④	4900.00	Tx-H	-3.50	-10.05
8		④	4900.00	Tx-V	-1.55	-6.75
9	—————	⑤	5350.00	Tx-H	-3.76	-10.09
10		⑤	5350.00	Tx-V	-3.09	-8.57
11	—————	⑥	5825.00	Tx-H	-4.22	-9.47
12		⑥	5825.00	Tx-V	1.45	-2.59

yokowo co.,ltd.

1112, Kanohara, Tomioka-shi Gunma, 370-2495, JAPAN Personal Communication Antenna TEL +81 274-62-2127 FAX +81 274-62-2031

Ceramic antenna test data**yokowo****To : FUJITSU LIMITED****Application : For W-LAN (IEEE-802.11a,b,g)**

Measurement institution : Yokowo No.3 radio measuring site

Antenna model : YCE-5008

Date : 2003/3/20

Measurement condition : Mint,Mint2,Mint3,Mint4 (Disp. Upper Right)

Measured by : S.Yoshida

Antenna matching : Shunt L (2.2nH)**Correction of cable loss : Non (include loss 1.3dB)****f=2400MHz**

Plane	Tx	Peak. gain [dBi]	Average gain [dBi]	Tx H & V average [dBi]	Each frequency average [dBi]
X-Y	Horizontal	2.44	-4.45	-5.3	-6.6
	Vertical	-0.44	-6.47		
Y-Z	Horizontal	2.36	-4.19	-6.0	
	Vertical	-0.98	-9.21		
Z-X	Horizontal	-3.30	-10.19	-9.4	
	Vertical	-4.75	-8.71		

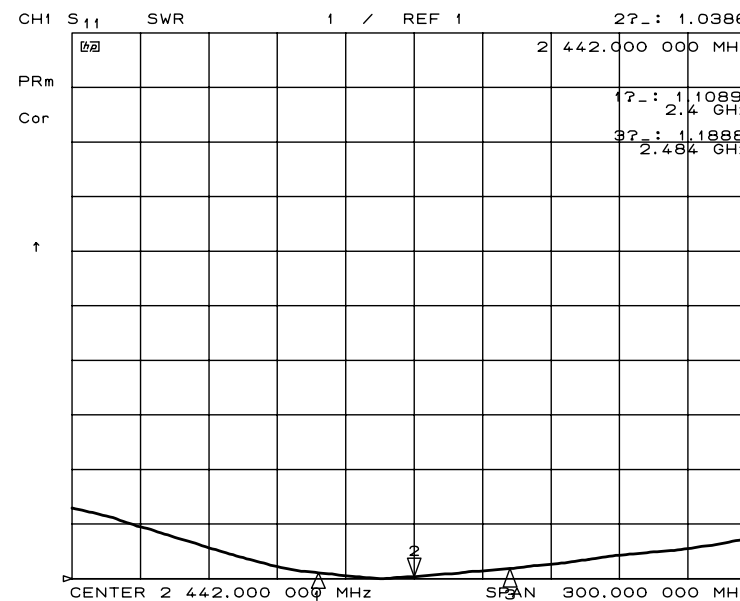
X-Y plane all average (all frequency)	-5.1 dBi
Y-Z plane all average (all frequency)	-5.7 dBi
Z-X plane all average (all frequency)	-8.5 dBi
All plane & all frequency average	-6.2 dBi

f=2442MHz

Plane	Tx	Peak. gain [dBi]	Average gain [dBi]	Tx H & V average [dBi]	Each frequency average [dBi]
X-Y	Horizontal	2.63	-4.10	-5.0	-6.1
	Vertical	-0.09	-6.17		
Y-Z	Horizontal	2.26	-3.87	-5.6	
	Vertical	-1.03	-8.48		
Z-X	Horizontal	-3.40	-9.36	-8.6	
	Vertical	-3.65	-8.02		

f=2484MHz

Plane	Tx	Peak. gain [dBi]	Average gain [dBi]	Tx H & V average [dBi]	Each frequency average [dBi]
X-Y	Horizontal	2.85	-3.92	-4.9	-5.9
	Vertical	-0.03	-6.27		
Y-Z	Horizontal	2.05	-3.99	-5.6	
	Vertical	-0.32	-8.30		
Z-X	Horizontal	-3.68	-9.76	-7.6	
	Vertical	-1.86	-6.19		

VSWR**yokowo co.,ltd.**

Ceramic antenna test data**yokowo**

Application : For W-LAN (IEEE-802.11a,b,g)
 Antenna model : YCE-5008
 Measurement condition : Mint,Mint2,Mint3,Mint4 (Disp. Upper Right)
 Antenna matching : Shunt L (2.2nH)
 Correction of cable loss : Non (include loss 2.0dB)

Measurement institution : Yokowo No.3 radio measuring site

Date : 2003/3/20

Measured by : S.Yoshida

f=4900MHz

Plane	Tx	Peak. gain [dBi]	Average gain [dBi]	Tx H & V average [dBi]	Each frequency average [dBi]
X-Y	Horizontal	-0.75	-4.56	-5.2	-5.8
	Vertical	-2.03	-5.97		
Y-Z	Horizontal	0.63	-4.50	-5.6	
	Vertical	-0.04	-6.96		
Z-X	Horizontal	-0.28	-6.23	-7.0	
	Vertical	-3.81	-7.85		

0.63

X-Y plane all average (all frequency)	-6.5 dBi
Y-Z plane all average (all frequency)	-6.7 dBi
Z-X plane all average (all frequency)	-6.9 dBi
All plane & all frequency average	-6.7 dBi

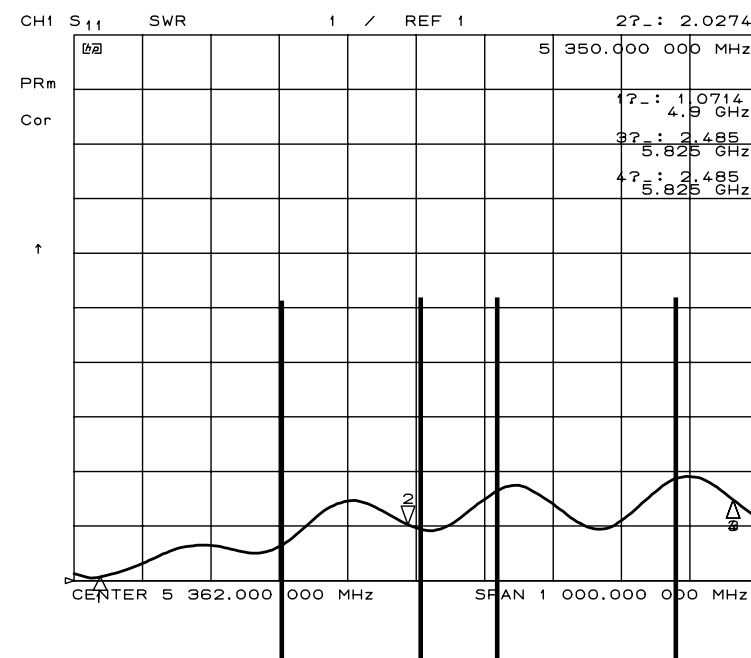
f=5350MHz

Plane	Tx	Peak. gain [dBi]	Average gain [dBi]	Tx H & V average [dBi]	Each frequency average [dBi]
X-Y	Horizontal	-2.78	-7.06	-8.2	-8.4
	Vertical	-4.44	-9.67		
Y-Z	Horizontal	-1.69	-6.64	-8.2	
	Vertical	-4.26	-10.67		
Z-X	Horizontal	-2.94	-8.08	-8.8	
	Vertical	-5.00	-9.68		

-1.69

f=5825MHz

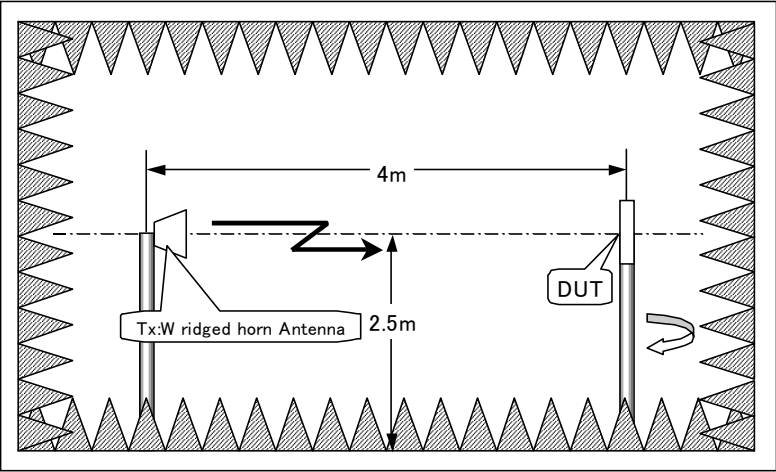
Plane	Tx	Peak. gain [dBi]	Average gain [dBi]	Tx H & V average [dBi]	Each frequency average [dBi]
X-Y	Horizontal	-0.97	-5.17	-6.5	-6.2
	Vertical	-2.23	-8.47		
Y-Z	Horizontal	-0.27	-4.71	-6.8	
	Vertical	-3.79	-10.77		
Z-X	Horizontal	-1.31	-8.78	-5.5	
	Vertical	-0.16	-3.65		

VSWR**yokowo co.,ltd.**

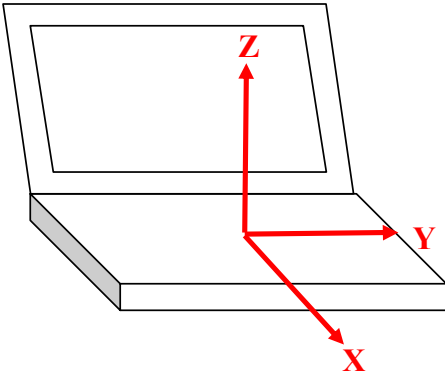
Ceramic antenna test data



Measurement condition



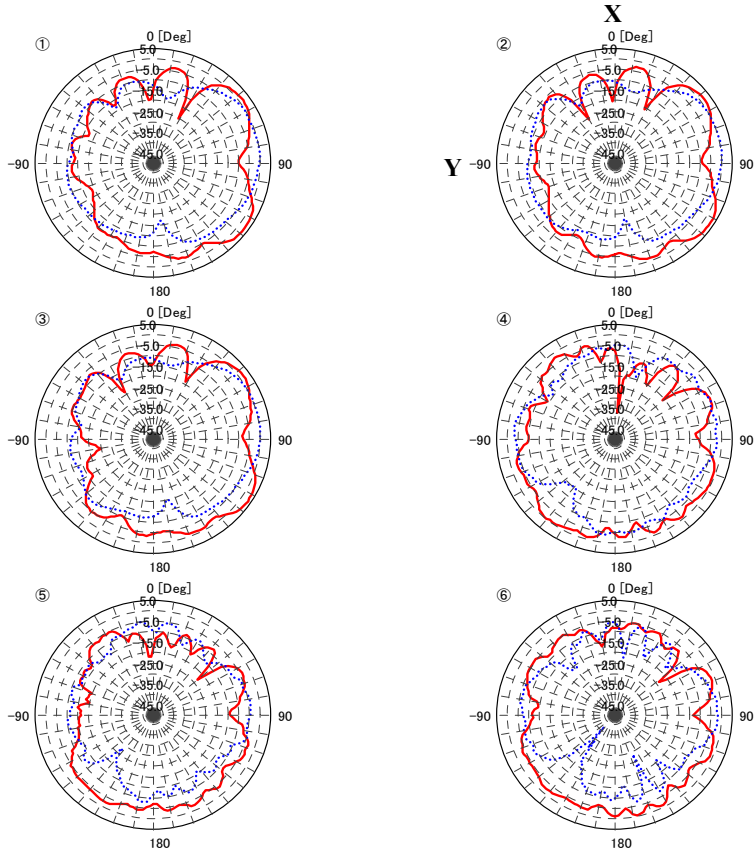
Antenna coordinated



Field pattern X-Y plane

FJ-030320-003.ant
S.Yoshida
03/03/20
Mint with YCE-5008 R-ANT X-Y

All AVG. -5.73[dBi]
All MAX. AVG. 0.05[dBi]



	Line	No.	Frequency[MHz]	MEMO	MAX. Gain[dBi]	AVG. Gain[dBi]
1	—————	(1)	2400.00	Tx-H	2.44	-4.45
2		(1)	2400.00	Tx-V	-0.44	-6.47
3	—————	(2)	2442.00	Tx-H	2.63	-4.10
4		(2)	2442.00	Tx-V	-0.09	-6.17
5	—————	(3)	2484.00	Tx-H	2.85	-3.92
6		(3)	2484.00	Tx-V	-0.03	-6.27
7	—————	(4)	4900.00	Tx-H	-0.75	-4.56
8		(4)	4900.00	Tx-V	-2.03	-5.97
9	—————	(5)	5350.00	Tx-H	-2.78	-7.06
10		(5)	5350.00	Tx-V	-4.44	-9.67
11	—————	(6)	5825.00	Tx-H	-0.97	-5.17
12		(6)	5825.00	Tx-V	-2.23	-8.47

Ceramic antenna test data



Field pattern Y-Z plane

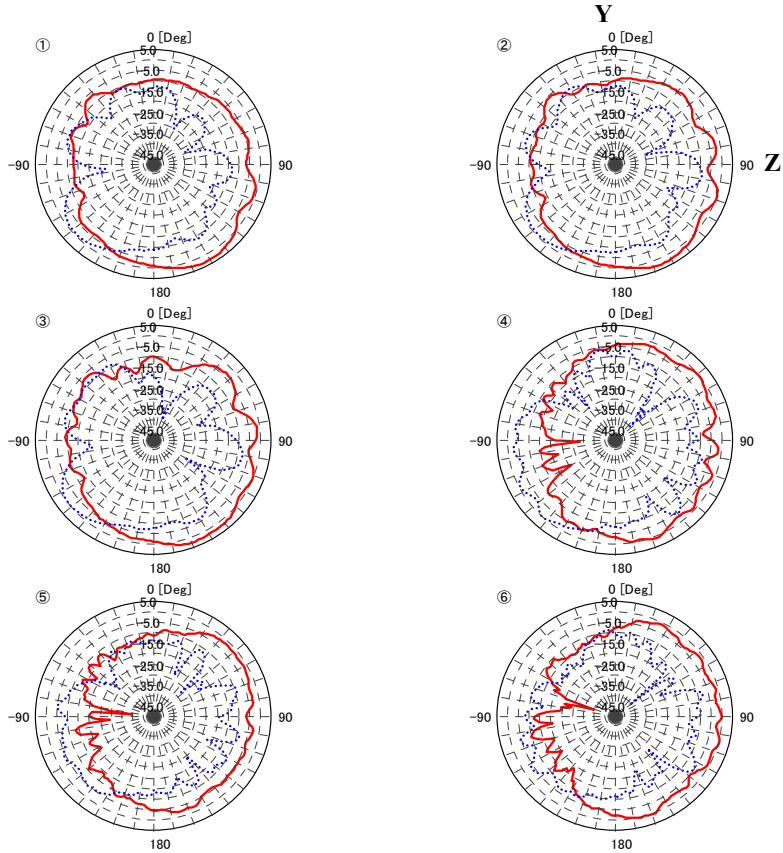
FJ-030320-009.ant

S.Yoshida

03/03/20

Mint with YCE-5008 R-ANT Y-Z

All AVG. -6.20[dBi]
All MAX. AVG. 0.03[dBi]



	Line	No.	Frequency[MHz]	MEMO	MAX. Gain[dBi]	AVG. Gain[dBi]
1	—————	①	2400.00	Tx-H	2.36	-4.19
2	—————	①	2400.00	Tx-V	-0.98	-9.21
3	—————	②	2442.00	Tx-H	2.26	-3.87
4	—————	②	2442.00	Tx-V	-1.03	-8.48
5	—————	③	2484.00	Tx-H	2.05	-3.99
6	—————	③	2484.00	Tx-V	-0.32	-8.30
7	—————	④	4900.00	Tx-H	0.63	-4.50
8	—————	④	4900.00	Tx-V	-0.04	-6.96
9	—————	⑤	5350.00	Tx-H	-1.69	-6.64
10	—————	⑤	5350.00	Tx-V	-4.26	-10.67
11	—————	⑥	5825.00	Tx-H	-0.27	-4.71
12	—————	⑥	5825.00	Tx-V	-3.79	-10.77

Field pattern Z-X plane

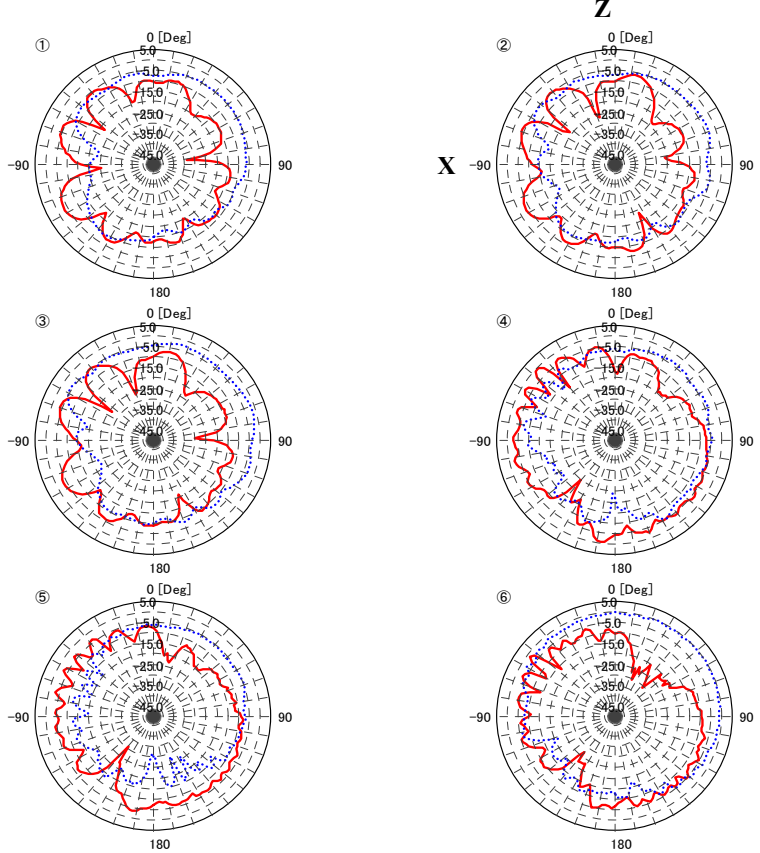
FJ-030320-011.ant

S.Yoshida

03/03/20

Mint with YCE-5008 R-ANT Z-X

All AVG. -7.61[dBi]
All MAX. AVG. -2.56[dBi]



	Line	No.	Frequency[MHz]	MEMO	MAX. Gain[dBi]	AVG. Gain[dBi]
1	—————	①	2400.00	Tx-H	-3.30	-10.19
2	—————	①	2400.00	Tx-V	-4.75	-8.71
3	—————	②	2442.00	Tx-H	-3.40	-9.36
4	—————	②	2442.00	Tx-V	-3.65	-8.02
5	—————	③	2484.00	Tx-H	-3.68	-9.76
6	—————	③	2484.00	Tx-V	-1.86	-6.19
7	—————	④	4900.00	Tx-H	-0.28	-6.23
8	—————	④	4900.00	Tx-V	-3.81	-7.85
9	—————	⑤	5350.00	Tx-H	-2.94	-8.08
10	—————	⑤	5350.00	Tx-V	-5.00	-9.68
11	—————	⑥	5825.00	Tx-H	-1.31	-8.78
12	—————	⑥	5825.00	Tx-V	-0.16	-3.65

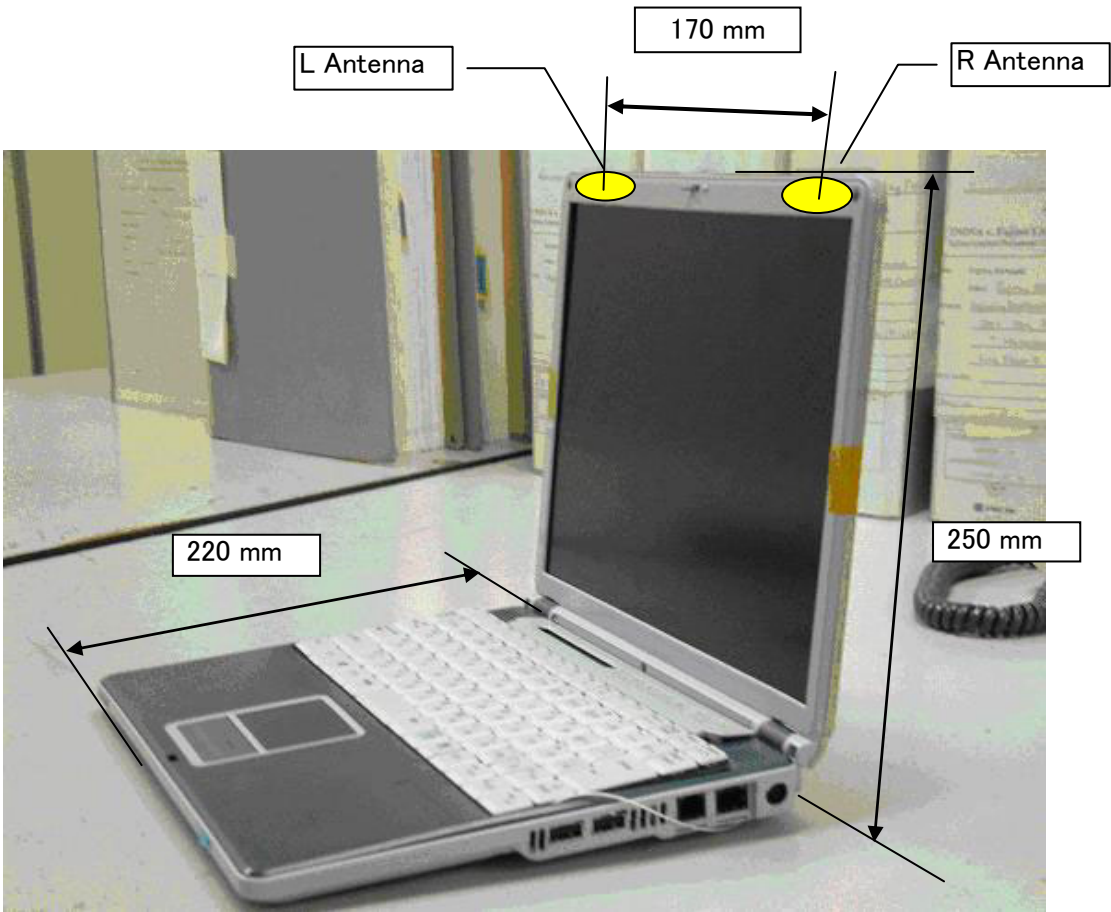
Mint,Mint2,Mint3,Mint4 Antenna Summary

Designator Manufacture	Fujitsu
Antenna Type	Monopole
Cable type (length)	Coax(480mm)
P/N	YCE-5008
Gain	MAX : 2.85(dBi) *see Note

Note:
1. Includes all cable losses.

Picture:

Front View



Fujitsu Confidential

Rear View

L Antenna

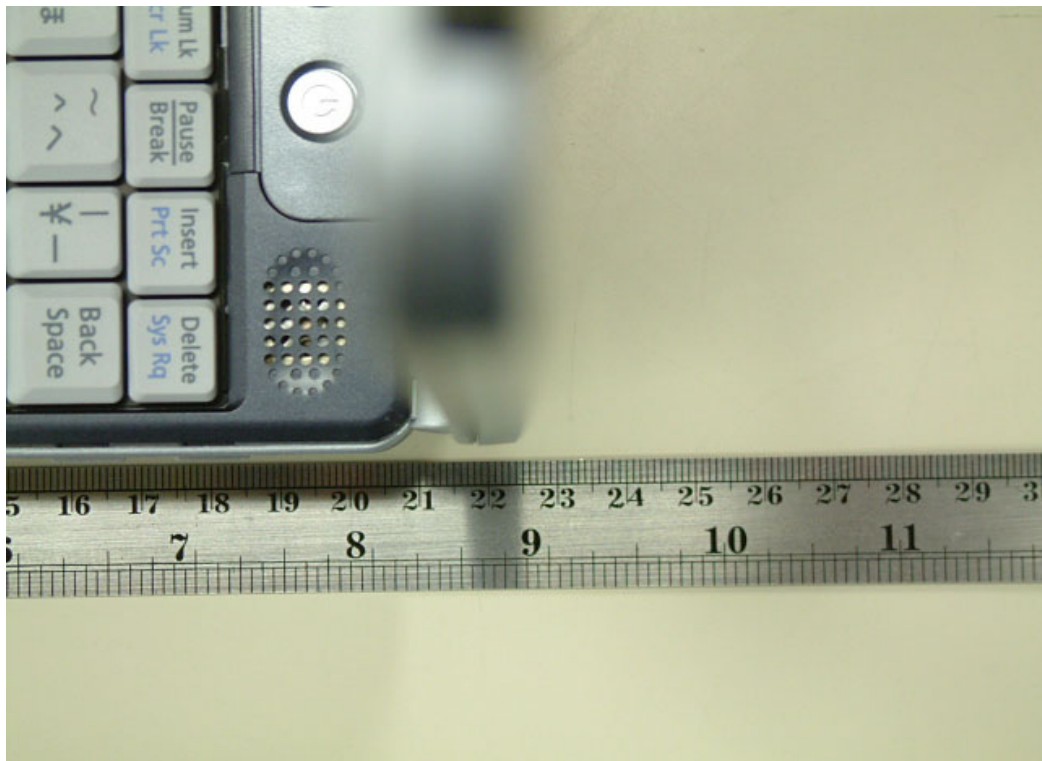
R Antenna



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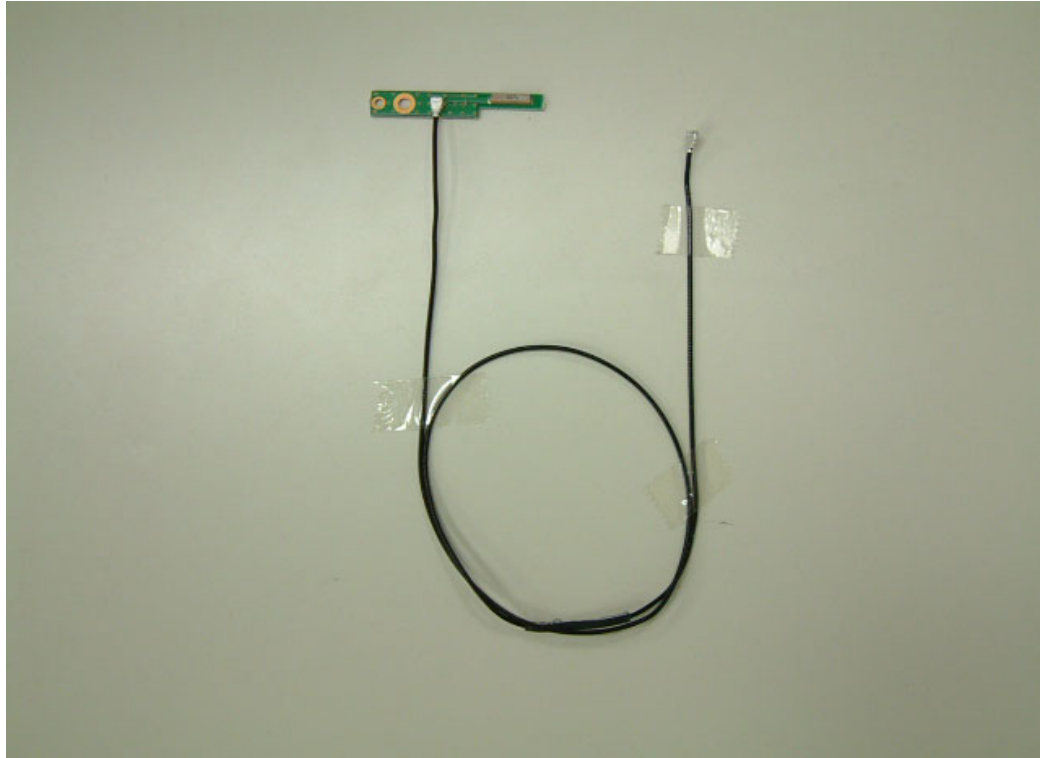


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Left-Side Antenna



Right-Side Antenna

