

Antenna Summary (YCE-5008)

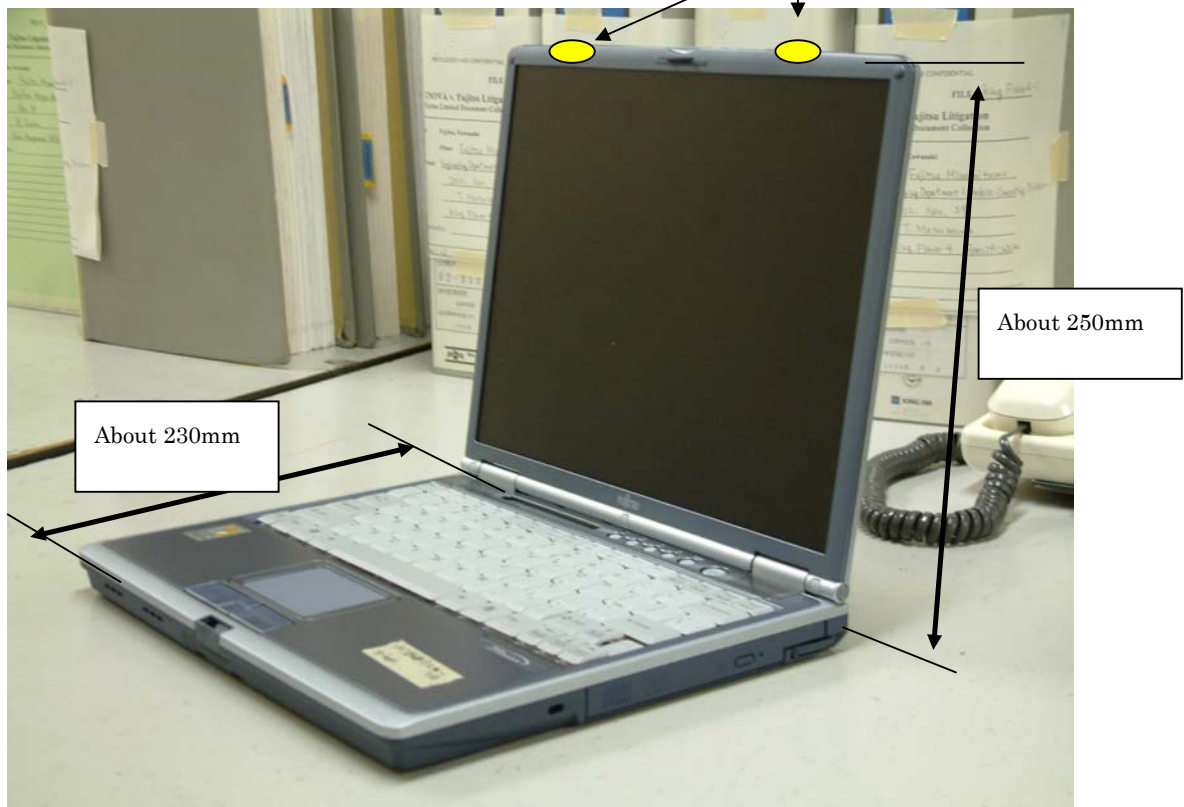
Antenna Type	Monopole Ceramic Chip
Cable type (length)	Coax(450mm)
P/N	YCE-5008
Gain	MAX : 2.08(dBi) *see Note

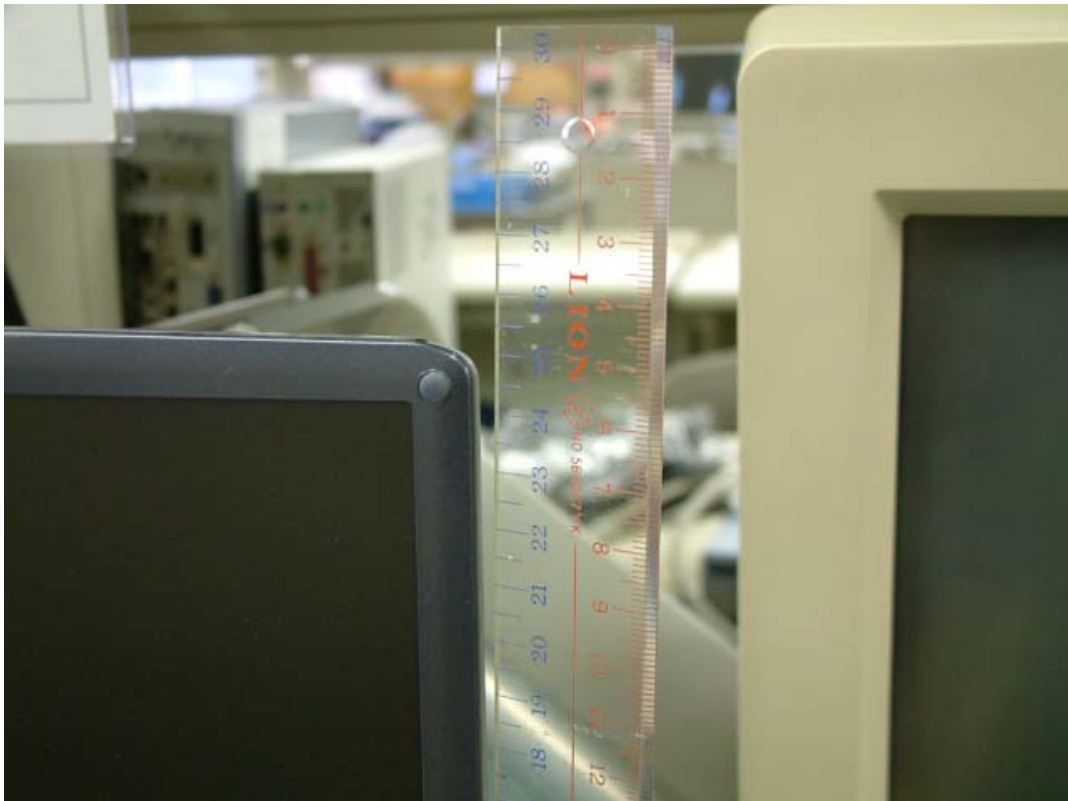
* Note:

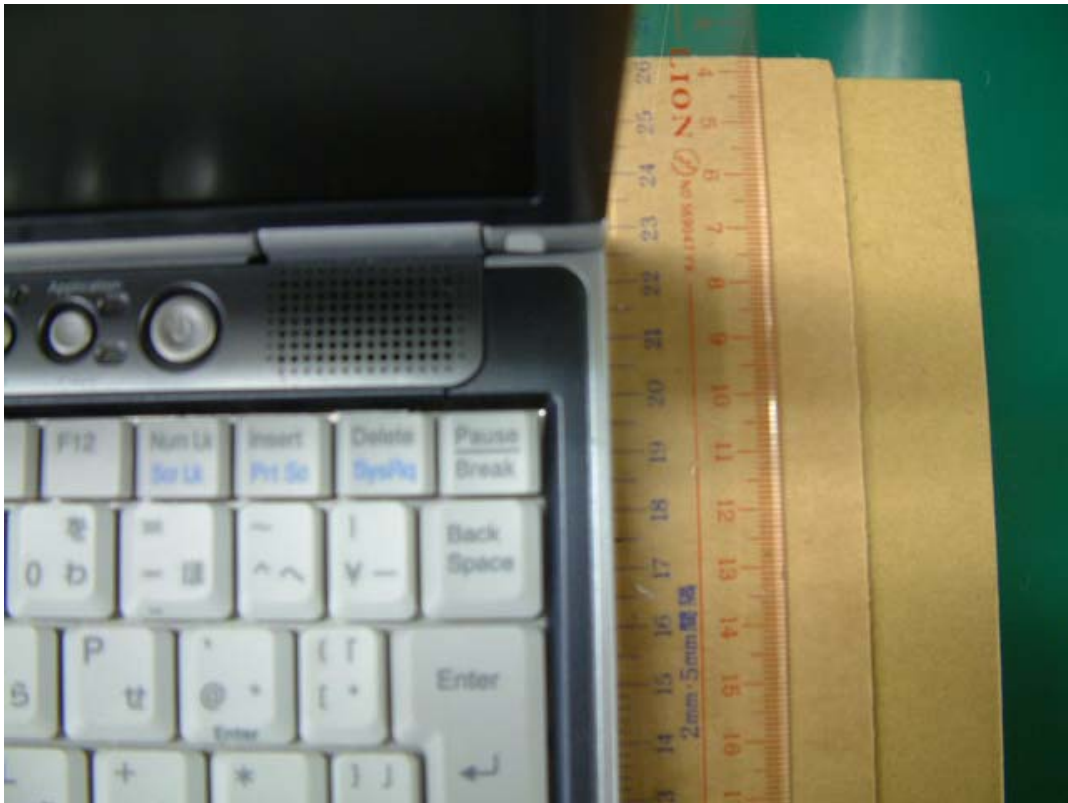
1. Included all cable losses.

Antenna Position

Picture:







Left-Side Antenna



Right-Side Antenna



Application: ForW-LAN(IEEE-802.11b,g)
Antennamodel: YCE-5008(008L00196)
Measurementcondition: A-unitRightside
Antennamatching: ShuntL(3.3nH)
Correctionofcableloss: Non(includeloss1.5dB)

Measurementinstitution:YokowoNo.3radiomeasuringsite
Date:2003/10/22
Measuredby:S.Yoshida

f=2400MHz

Plane	Tx	Peak.gain [dBi]	Averagegain [dBi]	TxH&Vaverage [dBi]	Eachfrequencyaverage [dBi]
X-Y	Horizontal	1.46	-4.18	-5.0	-5.6
	Vertical	-0.71	-6.00		
Y-Z	Horizontal	2.08	-4.19	-5.3	
	Vertical	0.03	-6.88		
Z-X	Horizontal	-3.42	-8.97	-6.6	
	Vertical	-1.75	-5.06		

X-Yplaneallaverage(allfrequency)	-5.2 dBi
Y-Zplaneallaverage(allfrequency)	-5.6 dBi
Z-Xplaneallaverage(allfrequency)	-6.6 dBi
Allplane&allfrequencyaverage	-5.8 dBi

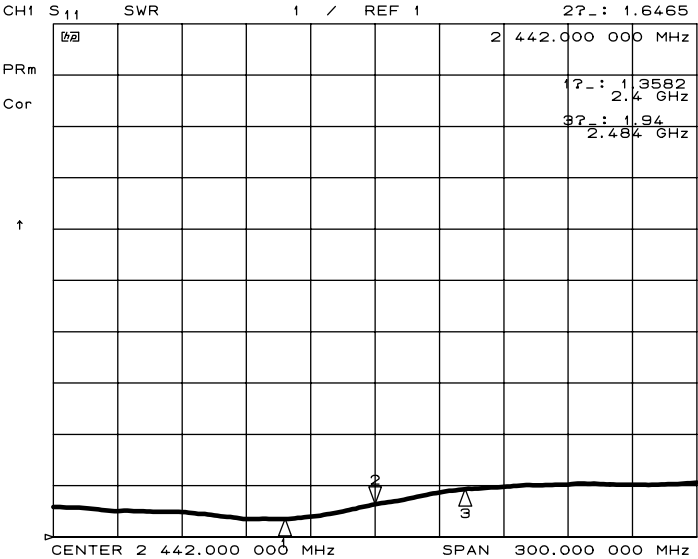
f=2442MHz

Plane	Tx	Peak.gain [dBi]	Averagegain [dBi]	TxH&Vaverage [dBi]	Eachfrequencyaverage [dBi]
X-Y	Horizontal	1.42	-4.35	-5.2	-5.7
	Vertical	-0.67	-6.38		
Y-Z	Horizontal	1.49	-4.32	-5.5	
	Vertical	-0.30	-7.23		
Z-X	Horizontal	-3.40	-9.82	-6.5	
	Vertical	-1.46	-4.61		

f=2484MHz

Plane	Tx	Peak.gain [dBi]	Averagegain [dBi]	TxH&Vaverage [dBi]	Eachfrequencyaverage [dBi]
X-Y	Horizontal	1.23	-4.61	-5.5	-6.0
	Vertical	-1.01	-6.63		
Y-Z	Horizontal	0.54	-4.71	-5.9	
	Vertical	-0.43	-7.49		
Z-X	Horizontal	-4.96	-10.75	-6.8	
	Vertical	-1.45	-4.71		

VSWR



Application: ForW-LAN(IEEE-802.11a)
 Antennamodel: YCE-5008(008L00196)
 Measurementcondition: A-unitRightside
 Antennamatching: ShuntL(3.3nH)
 Correctionofcableloss: Non(includeloss2.3dB)

Measurementinstitution:YokowoNo.3radiomeasuringsite
 Date:2003/10/22
 Measuredby:S.Yoshida

f=4900MHz

Plane	Tx	Peak.gain [dBi]	Averagegain [dBi]	TxH&Vaverage [dBi]	Eachfrequencyaverage [dBi]
X-Y	Horizontal	1.66	-4.19	-5.3	-5.9
	Vertical	-1.00	-6.66		
Y-Z	Horizontal	1.18	-4.28	-5.2	
	Vertical	0.73	-6.50		
Z-X	Horizontal	-3.26	-7.95	-7.5	
	Vertical	-2.45	-7.07		

X-Yplaneallaverage(allfrequency)	-6.1 dBi
Y-Zplaneallaverage(allfrequency)	-6.2 dBi
Z-Xplaneallaverage(allfrequency)	-9.1 dBi
Allplane&allfrequencyaverage	-6.9 dBi

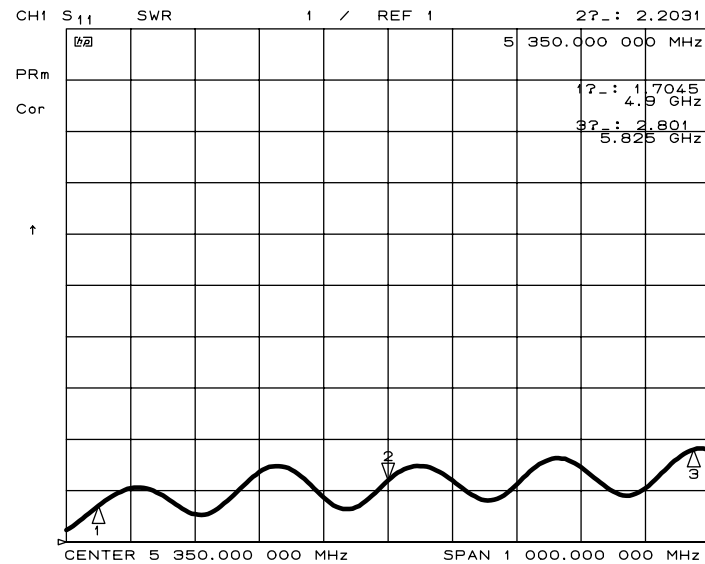
f=5350MHz

Plane	Tx	Peak.gain [dBi]	Averagegain [dBi]	TxH&Vaverage [dBi]	Eachfrequencyaverage [dBi]
X-Y	Horizontal	0.59	-5.70	-6.9	-7.8
	Vertical	-1.87	-8.44		
Y-Z	Horizontal	0.29	-5.84	-7.0	
	Vertical	-1.91	-8.64		
Z-X	Horizontal	-6.94	-11.47	-10.2	
	Vertical	-4.26	-9.16		

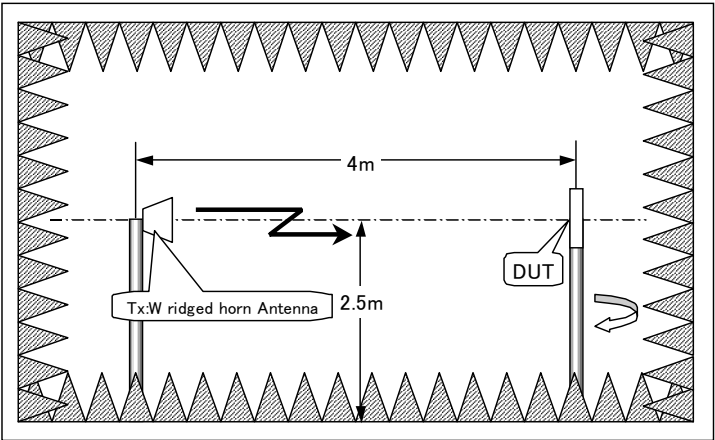
f=5825MHz

Plane	Tx	Peak.gain [dBi]	Averagegain [dBi]	TxH&Vaverage [dBi]	Eachfrequencyaverage [dBi]
X-Y	Horizontal	1.24	-4.79	-6.3	-7.3
	Vertical	-0.34	-8.73		
Y-Z	Horizontal	1.09	-5.26	-6.4	
	Vertical	-1.52	-7.91		
Z-X	Horizontal	-6.06	-12.63	-10.2	
	Vertical	-4.19	-8.59		

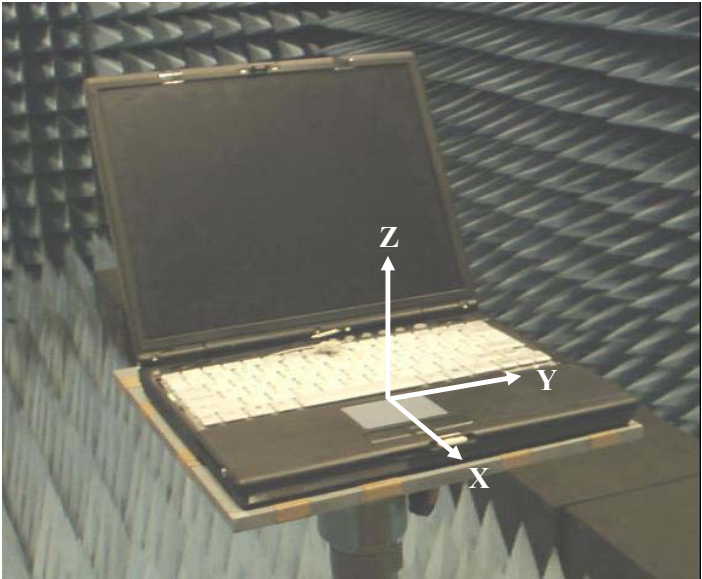
VSWR



Measurementcondition



Antennacoordinated



yokowo co.,ltd.

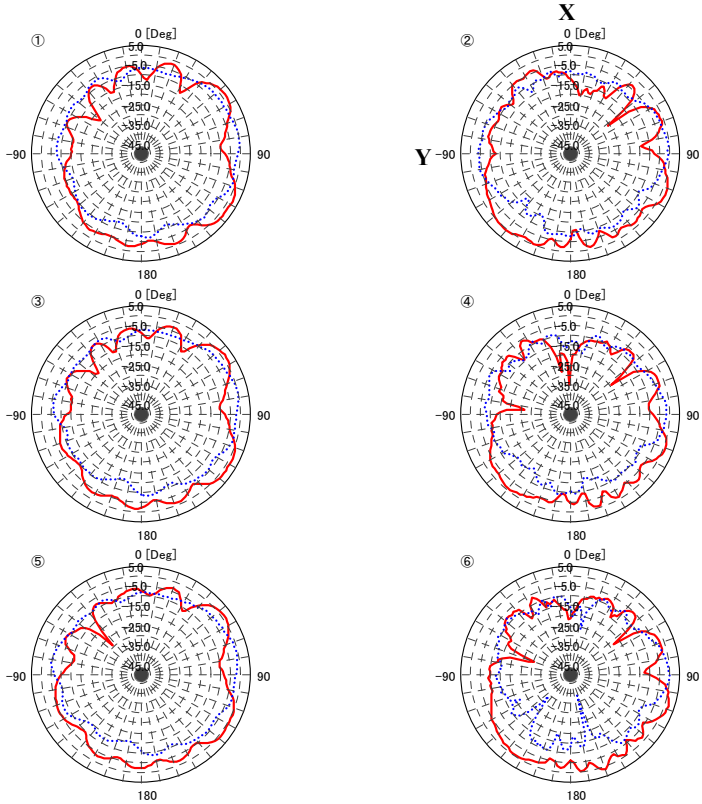
1112,Kanohara,Tomioka-shiGunma,370-2495,JAPANAntennaEngineeringDept.TEL+81274-62-2127FAX+81274-62-2031

FieldpatternX-Yplane

FJ-031022-009
S.Yoshida
03/10/22

All AVG. -5.65[dBi]
All MAX. AVG. 0.32[dBi]

YCE-5008 Right X-Y



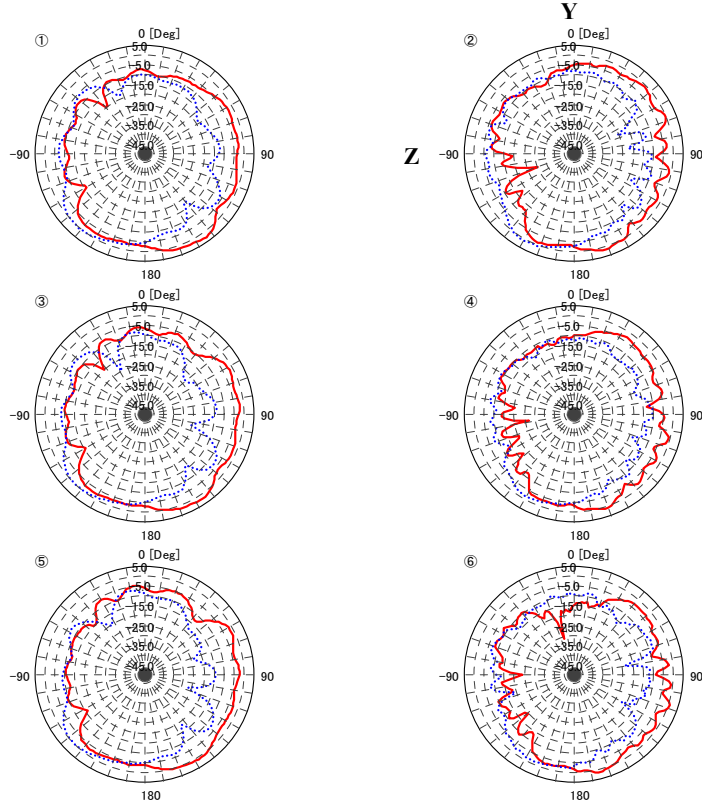
Line	No.	Frequency[MHz]	MEMO	MAX Gain[dBi]	AVG Gain[dBi]
1	①	2400.00	Tx-H	1.46	-4.18
2	①	2400.00	Tx-V	-0.71	-6.00
3	③	2442.00	Tx-H	1.42	-4.35
4	③	2442.00	Tx-V	-0.67	-6.38
5	⑤	2484.00	Tx-H	1.23	-4.61
6	⑤	2484.00	Tx-V	-1.01	-6.63
7	②	4900.00	Tx-H	1.66	-4.19
8	②	4900.00	Tx-V	-1.00	-6.66
9	④	5350.00	Tx-H	0.59	-5.70
10	④	5350.00	Tx-V	-1.87	-8.44
11	⑥	5825.00	Tx-H	1.24	-4.79
12	⑥	5825.00	Tx-V	-0.34	-8.73

FieldpatternY-Zplane

Fj-031022-013
S.Yoshida
03/10/22

All AVG. -5.86[dBi]
All MAX. AVG. 0.41[dBi]

YCE-5008 Right Y-Z



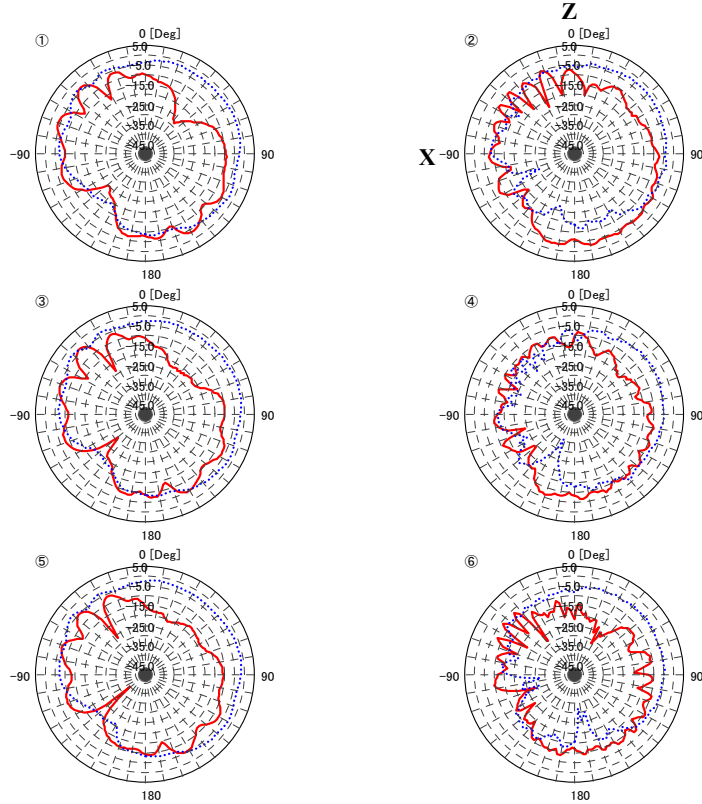
	Line	No.	Frequency[MHz]	MEMO	MAX. Gain[dBi]	AVG. Gain[dBi]
1	-----	①	2400.00	Tx-H	2.08	-4.19
2	-----	①	2400.00	Tx-V	0.03	-6.88
3	-----	③	2442.00	Tx-H	1.49	-4.32
4	-----	③	2442.00	Tx-V	-0.30	-7.23
5	-----	⑤	2484.00	Tx-H	0.54	-4.71
6	-----	⑤	2484.00	Tx-V	-0.43	-7.49
7	-----	②	4900.00	Tx-H	1.18	-4.28
8	-----	②	4900.00	Tx-V	0.73	-6.50
9	-----	④	5350.00	Tx-H	0.29	-5.84
10	-----	④	5350.00	Tx-V	-1.91	-8.64
11	-----	⑥	5825.00	Tx-H	1.09	-5.26
12	-----	⑥	5825.00	Tx-V	-1.52	-7.91

FieldpatternZ-Xplane

Fj-031022-025
S.Yoshida
03/10/22

All AVG. -7.67[dBi]
All MAX. AVG. -3.33[dBi]

YCE-5008 Right Z-X



	Line	No.	Frequency[MHz]	MEMO	MAX. Gain[dBi]	AVG. Gain[dBi]
1	-----	①	2400.00	Tx-H	-3.42	-8.97
2	-----	①	2400.00	Tx-V	-1.75	-5.06
3	-----	③	2442.00	Tx-H	-3.40	-8.82
4	-----	③	2442.00	Tx-V	-1.46	-4.61
5	-----	⑤	2484.00	Tx-H	-4.96	-10.75
6	-----	⑤	2484.00	Tx-V	-1.45	-4.71
7	-----	②	4900.00	Tx-H	-3.26	-7.95
8	-----	②	4900.00	Tx-V	-2.45	-7.07
9	-----	④	5350.00	Tx-H	-6.94	-11.47
10	-----	④	5350.00	Tx-V	-4.26	-9.16
11	-----	⑥	5825.00	Tx-H	-6.06	-12.63
12	-----	⑥	5825.00	Tx-V	-4.19	-8.59

Specification for IEEE802.11b,g Ceramic Chip Antenna

Customer's PartNo. CP159328-01

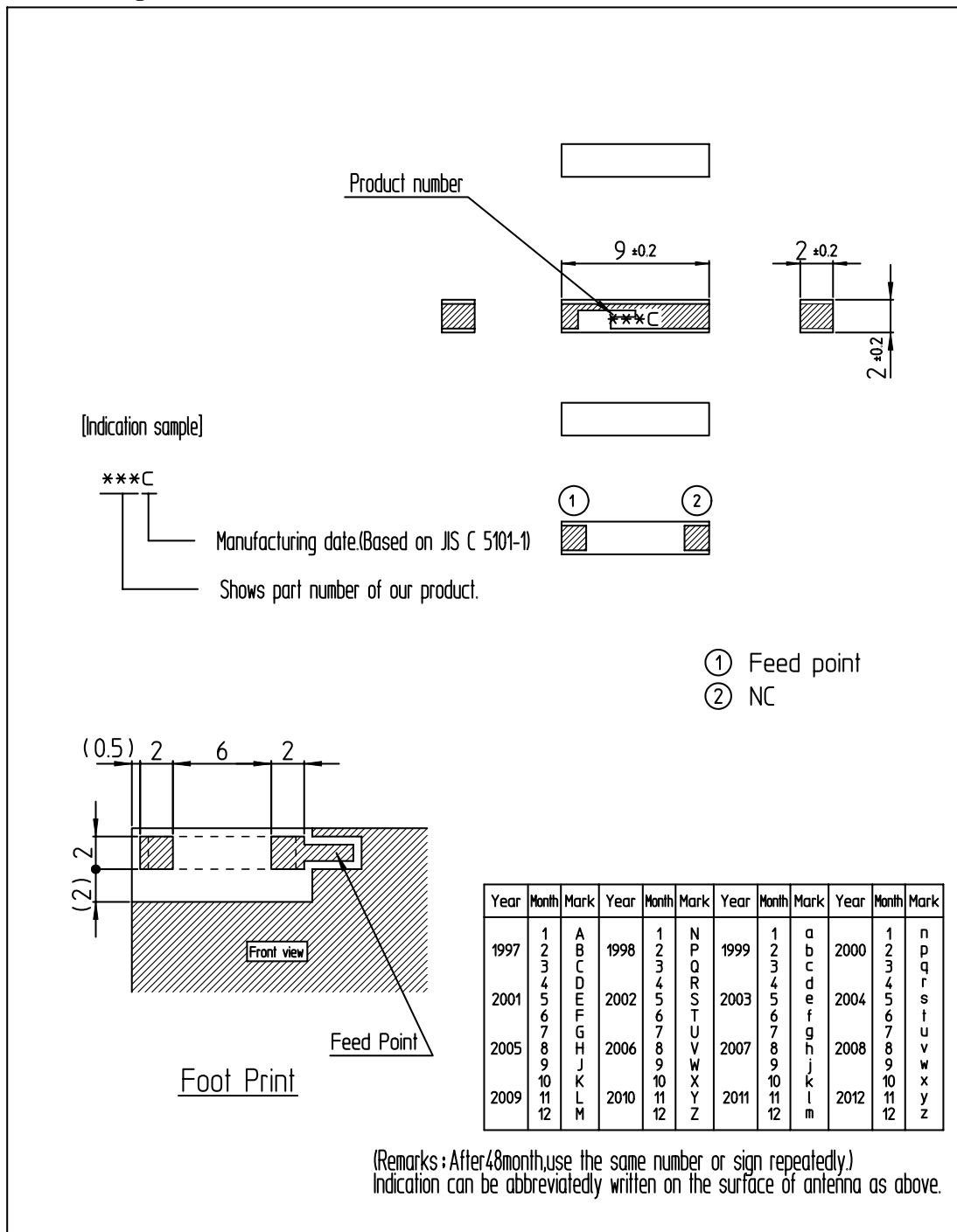
Model Series YCE-5008

PartNo. 008L00196

1.0	Electrical Specification		
	1.1	Feed point impedance	50ohms(Ω)
	1.2	Frequency range	2.400-2.484GHz
	1.3	Peak Gain* ¹ (Performance of only antenna)	2.08dBimax.
	1.4	VSWR* ²	3.0max.
	*1: Section 1.3, peak gain on electrical specifications shall be highest gain of horizontal and vertical polarization on X-Y, Y-Z and Z-X plane that measured in actual sample. *2: Section 1.4, VSWR on electrical specifications shall be value of VSWR measured in actual sample.		

Data Issued: Oct.23,2003
Issued by: S.Yoshida
Antenna Engineering Dept.
Yokowoco.,ltd.

OutlineDrawing



	質量 MASS	材質 MATERIAL	表面処理 FINISH	機種 MODEL No	図番 DWG.NO
				YCE-5008	M8-00139F-00
△*			設計 DESIGNED	製図 DRAWING	検図 CHECKED
△*			2003-03-18	2003-03-18	2003-03-18
△*			承認 APPROVED	指定公差 LIMITS	品名 DESCRIPTION
			Yoshida	S.Mori	Chigira
			S.Toriyama		OUTLINE
記号 MARK	年月日 DATE	来歴 REVISION RECORD	担当 DR	承認 APPR	尺度 SCALE
					N.T.S.
					単位 UNIT
					m
					A4
					3角法 3RD ANGLE
					PROJECTION

Application: ForW-LAN(IEEE-802.11b,g)
 Antennamodel: YCE-5008(008L00196)
 Measurementcondition: A-unitLeftside
 Antennamatching: ShuntL(3.3nH)
 Correctionofcableloss: Non(includeloss1.5dB)

Measurementinstitution:YokowoNo.3radiomeasuringsite
 Date:2003/10/22
 Measuredby:S.Yoshida

f=2400MHz

Plane	Tx	Peak.gain [dBi]	Averagegain [dBi]	TxH&Vaverage [dBi]	Eachfrequencyaverage [dBi]
X-Y	Horizontal	1.02	-4.54	-5.3	-5.9
	Vertical	-1.70	-6.24		
Y-Z	Horizontal	0.51	-4.23	-5.5	
	Vertical	0.35	-7.28		
Z-X	Horizontal	-5.71	-10.04	-7.0	
	Vertical	-1.70	-5.28		

X-Yplaneallaverage(allfrequency)	-5.6 dBi
Y-Zplaneallaverage(allfrequency)	-5.8 dBi
Z-Xplaneallaverage(allfrequency)	-7.5 dBi
Allplane&allfrequencyaverage	-6.2 dBi

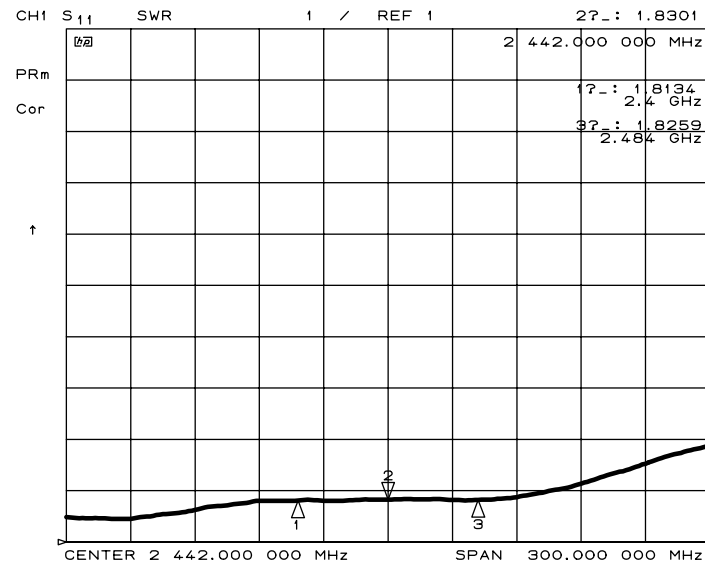
f=2442MHz

Plane	Tx	Peak.gain [dBi]	Averagegain [dBi]	TxH&Vaverage [dBi]	Eachfrequencyaverage [dBi]
X-Y	Horizontal	1.11	-4.83	-5.5	-6.3
	Vertical	-1.55	-6.40		
Y-Z	Horizontal	1.28	-4.69	-5.8	
	Vertical	0.42	-7.27		
Z-X	Horizontal	-4.73	-8.78	-7.8	
	Vertical	-3.73	-7.04		

f=2484MHz

Plane	Tx	Peak.gain [dBi]	Averagegain [dBi]	TxH&Vaverage [dBi]	Eachfrequencyaverage [dBi]
X-Y	Horizontal	0.64	-5.15	-5.8	-6.4
	Vertical	-1.11	-6.63		
Y-Z	Horizontal	1.40	-4.94	-6.0	
	Vertical	-0.05	-7.41		
Z-X	Horizontal	-5.67	-9.42	-7.6	
	Vertical	-3.44	-6.25		

VSWR



Application: ForW-LAN(IEEE-802.11a)
 Antennamodel: YCE-5008(008L00196)
 Measurementcondition: A-unitLeftside
 Antennamatching: ShuntL(3.3nH)
 Correctionofcableloss: Non(includeloss2.3dB)

Measurementinstitution:YokowoNo.3radiomeasuringsite
 Date:2003/10/22
 Measuredby:S.Yoshida

f=4900MHz

Plane	Tx	Peak.gain [dBi]	Averagegain [dBi]	TxH&Vaverage [dBi]	Eachfrequencyaverage [dBi]
X-Y	Horizontal	1.20	-4.57	-5.7	-6.5
	Vertical	-1.51	-7.29		
Y-Z	Horizontal	0.10	-4.57	-5.8	
	Vertical	-0.36	-7.43		
Z-X	Horizontal	-2.38	-8.41	-8.4	
	Vertical	-4.14	-8.34		

X-Yplaneallaverage(allfrequency)	-6.2 dBi
Y-Zplaneallaverage(allfrequency)	-6.3 dBi
Z-Xplaneallaverage(allfrequency)	-9.5 dBi
Allplane&allfrequencyaverage	-7.1 dBi

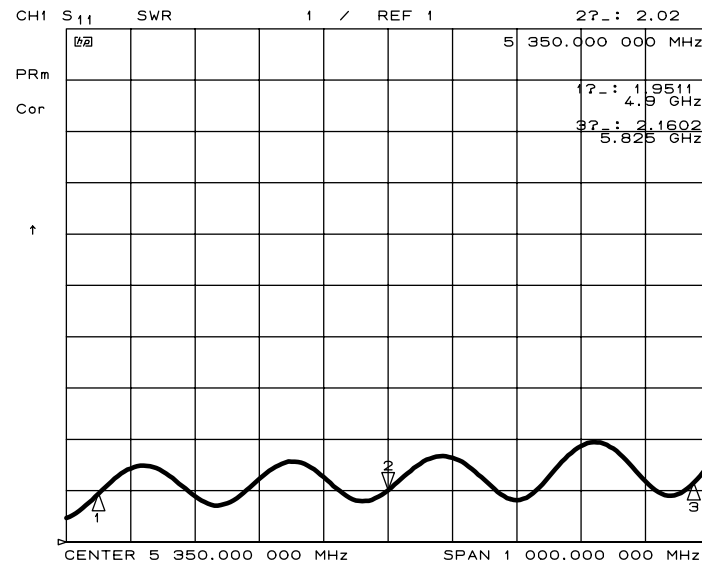
f=5350MHz

Plane	Tx	Peak.gain [dBi]	Averagegain [dBi]	TxH&Vaverage [dBi]	Eachfrequencyaverage [dBi]
X-Y	Horizontal	-0.22	-5.90	-7.1	-7.9
	Vertical	-2.08	-8.69		
Y-Z	Horizontal	-0.24	-5.97	-7.3	
	Vertical	-2.51	-9.09		
Z-X	Horizontal	-6.17	-11.30	-10.1	
	Vertical	-4.72	-9.15		

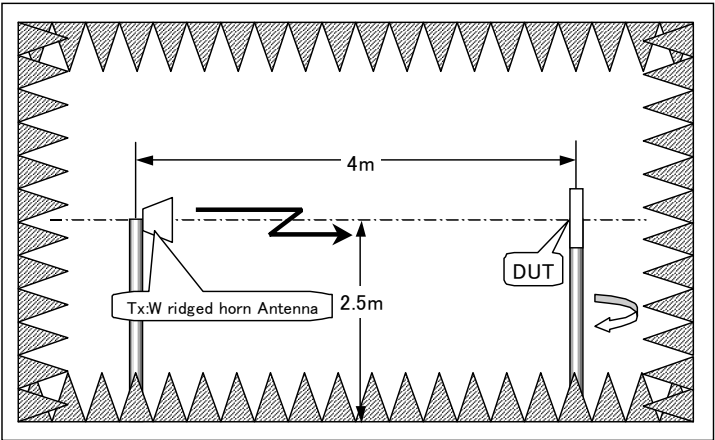
f=5825MHz

Plane	Tx	Peak.gain [dBi]	Averagegain [dBi]	TxH&Vaverage [dBi]	Eachfrequencyaverage [dBi]
X-Y	Horizontal	1.79	-4.40	-5.9	-7.0
	Vertical	0.11	-8.13		
Y-Z	Horizontal	1.67	-4.78	-6.1	
	Vertical	-2.16	-8.04		
Z-X	Horizontal	-6.39	-12.54	-10.2	
	Vertical	-3.80	-8.73		

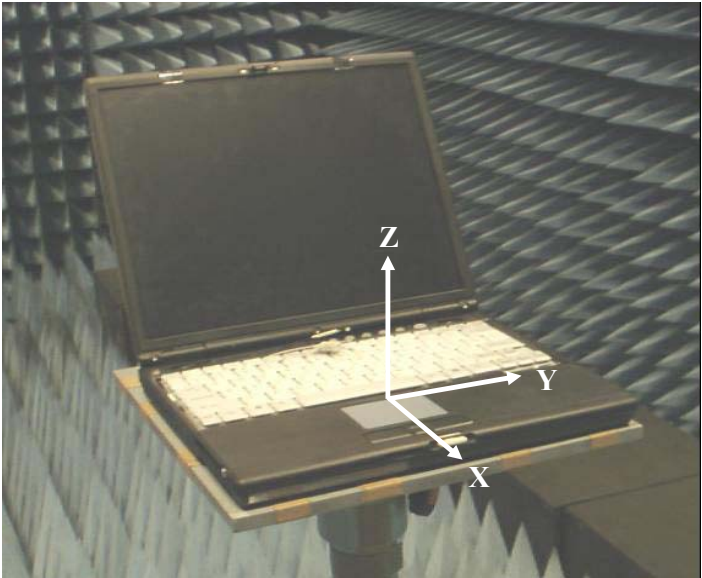
VSWR



Measurementcondition



Antennacoordinated



yokowo co.,ltd.

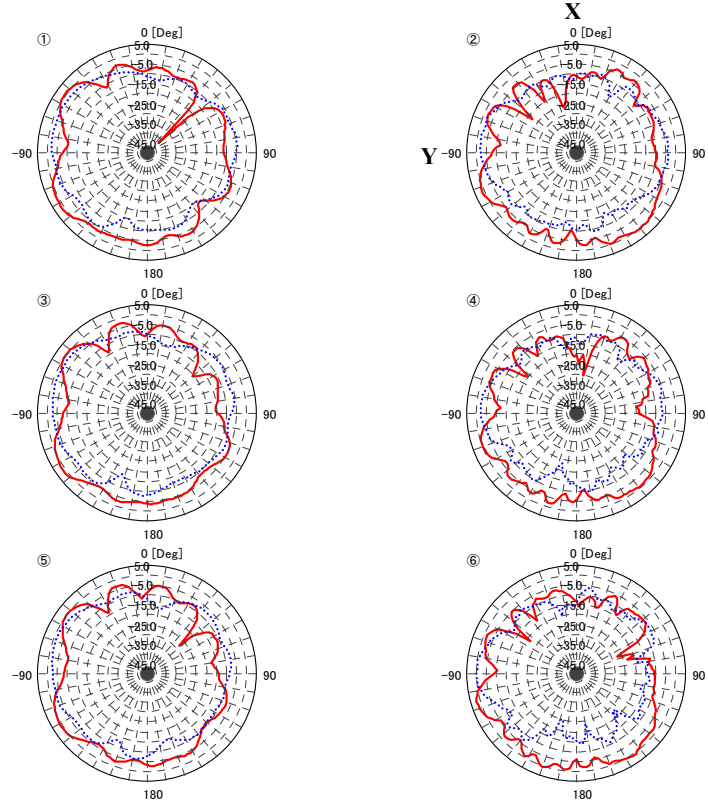
1112,Kanohara,Tomioka-shiGunma,370-2495,JAPANAntennaEngineeringDept.TEL+81274-62-2127FAX+81274-62-2031

FieldpatternX-Yplane

Fj-031022-005
S.Yoshida
03/10/22

All AVG. -5.86[dBi]
All MAX. AVG. -0.00[dBi]

YCE-5008 Left X-Y



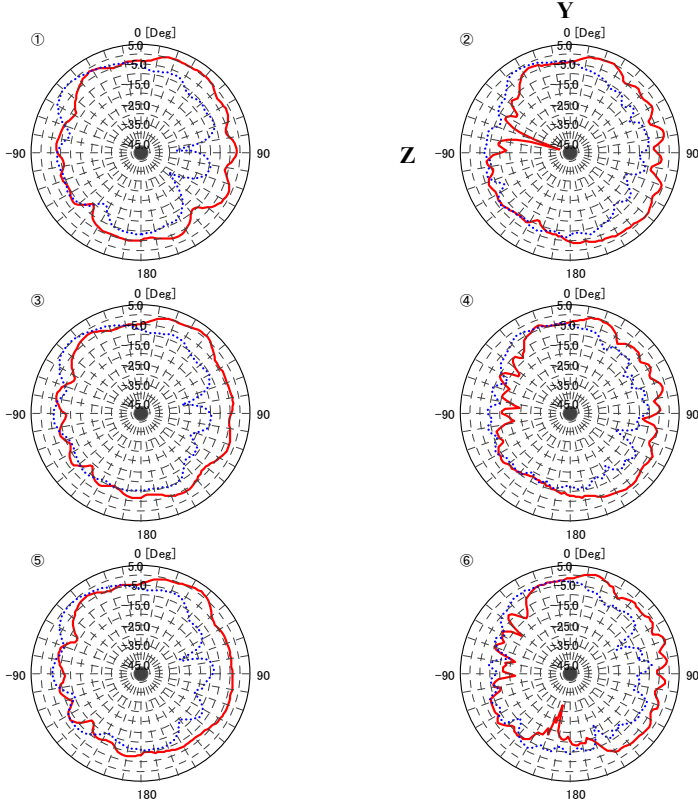
Line	No.	Frequency[MHz]	MEMO	MAX Gain[dBi]	AVG Gain[dBi]
1	①	2400.00	Tx-H	1.02	-4.54
2	①	2400.00	Tx-V	-1.70	-6.24
3	③	2442.00	Tx-H	1.11	-4.83
4	③	2442.00	Tx-V	-1.55	-6.40
5	⑤	2484.00	Tx-H	0.64	-5.15
6	⑤	2484.00	Tx-V	-1.11	-6.63
7	②	4900.00	Tx-H	1.20	-4.57
8	②	4900.00	Tx-V	-1.51	-7.29
9	④	5350.00	Tx-H	-0.22	-5.90
10	④	5350.00	Tx-V	-2.08	-8.69
11	⑥	5825.00	Tx-H	1.79	-4.40
12	⑥	5825.00	Tx-V	0.11	-8.13

FieldpatternY-Zplane

Fj-031022-017
S.Yoshida
03/10/22

All AVG. -6.04[dBi]
All MAX. AVG. 0.20[dBi]

YCE-5008 Left Y-Z

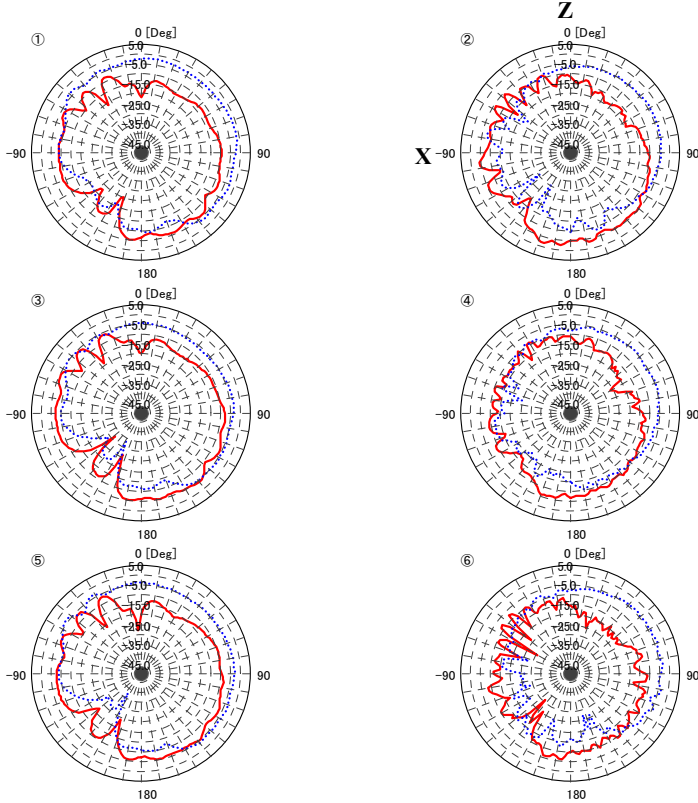


FieldpatternZ-Xplane

Fj-031022-021
S.Yoshida
03/10/22

All AVG. -8.35[dBi]
All MAX. AVG. -4.15[dBi]

YCE-5008 Left Z-X



	Line	No.	Frequency[MHz]	MEMO	MAX. Gain[dBi]	AVG. Gain[dBi]
1	-----	①	2400.00	Tx-H	0.51	-4.23
2	-----	①	2400.00	Tx-V	0.35	-7.28
3	-----	③	2442.00	Tx-H	1.28	-4.69
4	-----	③	2442.00	Tx-V	0.42	-7.27
5	-----	⑤	2484.00	Tx-H	1.40	-4.94
6	-----	⑤	2484.00	Tx-V	-0.05	-7.41
7	-----	②	4900.00	Tx-H	0.10	-4.57
8	-----	②	4900.00	Tx-V	-0.36	-7.43
9	-----	④	5350.00	Tx-H	-0.24	-5.97
10	-----	④	5350.00	Tx-V	-2.51	-9.09
11	-----	⑥	5825.00	Tx-H	1.67	-4.78
12	-----	⑥	5825.00	Tx-V	-2.16	-8.04

	Line	No.	Frequency[MHz]	MEMO	MAX. Gain[dBi]	AVG. Gain[dBi]
1	-----	①	2400.00	Tx-H	-5.71	-10.04
2	-----	①	2400.00	Tx-V	-1.70	-5.28
3	-----	③	2442.00	Tx-H	-4.73	-8.78
4	-----	③	2442.00	Tx-V	-3.73	-7.04
5	-----	⑤	2484.00	Tx-H	-5.67	-9.42
6	-----	⑤	2484.00	Tx-V	-3.44	-6.25
7	-----	②	4900.00	Tx-H	-2.38	-8.41
8	-----	②	4900.00	Tx-V	-4.14	-8.34
9	-----	④	5350.00	Tx-H	-6.17	-11.30
10	-----	④	5350.00	Tx-V	-4.72	-9.15
11	-----	⑥	5825.00	Tx-H	-6.39	-12.54
12	-----	⑥	5825.00	Tx-V	-3.80	-8.73

yokowo co.,ltd.

1112,Kanohara,Tomioka-shiGunma,370-2495,JAPANAntennaEngineeringDept.TEL+81274-62-2127FAX+81274-62-2031