

APPENDIX 2: Data of EMI test

**Conducted Emission
(IEEE802.11a Ch High)**

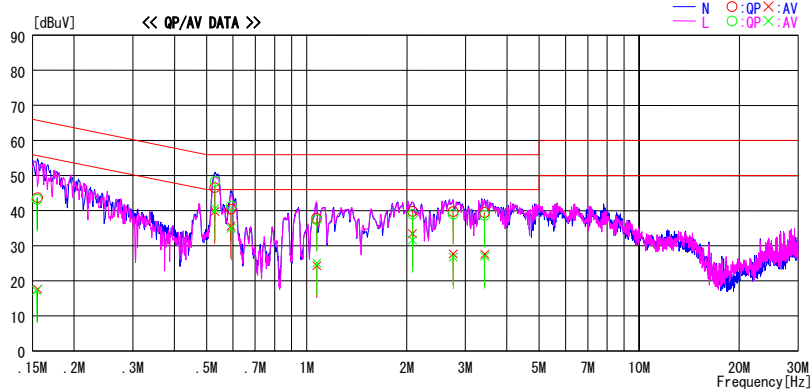
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.3 Semi Anechoic Chamber
Date : 2007/03/15

Company : FURUNO SYSTEMS CO.,LTD
Kind of EUT : WLAN Module
Model No. : SS21M
Serial No. : C0695230007DC01
Report No. : 26GE0203-HO
Power : AC 120V / 60Hz
Temp./Humi. : 25deg. C / 34%
Operator : Shinya Watanabe

Mode / Remarks : Transmitting 11a/24Mbps/5825MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency [MHz]	Reading Level		Corr. Factor	Results		Limit		Margin		Phase
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]	
0.15510	43.5	17.4	0.2	43.7	17.6	65.7	55.7	22.0	38.1	N
0.52910	46.4	39.5	0.2	46.6	39.7	56.0	46.0	9.4	6.3	N
0.59200	40.2	35.2	0.3	40.5	35.5	56.0	46.0	15.5	10.5	N
1.07200	37.5	24.0	0.3	37.8	24.3	56.0	46.0	18.2	21.7	N
2.07999	39.4	33.0	0.4	39.8	33.4	56.0	46.0	16.2	12.6	N
2.75500	39.3	27.3	0.4	39.7	27.7	56.0	46.0	16.3	18.3	N
3.43000	38.9	27.0	0.5	39.5	27.6	56.0	46.0	16.5	18.4	N
0.15425	43.1	17.0	0.2	43.3	17.2	65.8	55.8	22.5	38.6	L
0.52995	48.2	40.4	0.2	48.4	40.6	56.0	46.0	7.6	5.4	L
0.59285	41.1	34.7	0.3	41.4	35.0	56.0	46.0	14.6	11.0	L
1.07200	37.2	24.8	0.3	37.5	25.1	56.0	46.0	18.5	20.9	L
2.07999	38.6	31.2	0.4	39.0	31.6	56.0	46.0	17.0	14.4	L
2.75500	38.6	26.4	0.4	39.0	26.8	56.0	46.0	17.0	19.2	L
3.43000	38.1	26.4	0.6	38.7	27.0	56.0	46.0	17.3	19.0	L

CHART: WITH FACTOR. Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission
(IEEE802.11b Ch Low)
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 3 Semi Anechoic Chamber
Date : 2007/03/15

Company : FURUNO SYSTEMS CO.,LTD
Kind of EUT : WLAN Module
Model No. : SS21M
Serial No. : C0695230007DC01

Report No. : 26GE0203-HO
Power : AC 120V / 60Hz
Temp./Humi. : 25deg. C / 34%
Operator : Shinya Watanabe

Mode / Remarks : Transmitting 11b/11Mbps/2412MHz

LIMIT : FCC15.207 QP
FCC15.207 AV

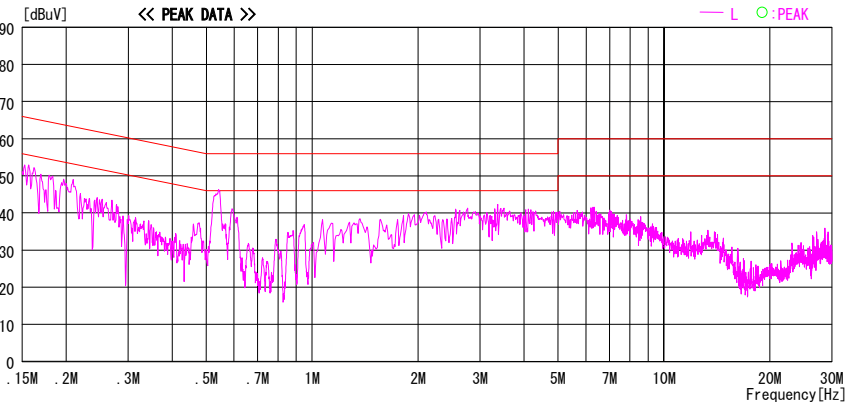
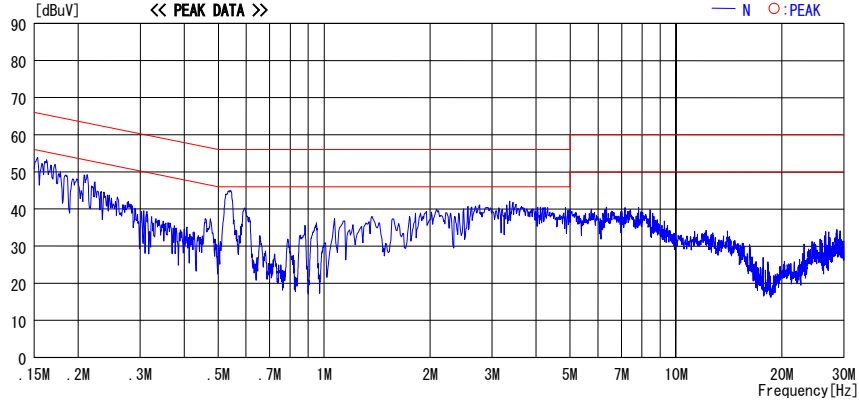


CHART: WITH FACTOR. Peak hold data. Data is uncorrected. CALCURATION: RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission
(IEEE802.11b Ch Mid)
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 3 Semi Anechoic Chamber
 Date : 2007/03/15

Company : FURUNO SYSTEMS CO.,LTD
 Kind of EUT : WLAN Module
 Model No. : SS21M
 Serial No. : C0695230007DC01

Report No. : 26GE0203-HO
 Power : AC 120V / 60Hz
 Temp./Humi. : 25deg. C / 34%
 Operator : Shinya Watanabe

Mode / Remarks : Transmitting 11b/11Mbps/2437MHz

LIMIT : FCC15.207 QP
 FCC15.207 AV

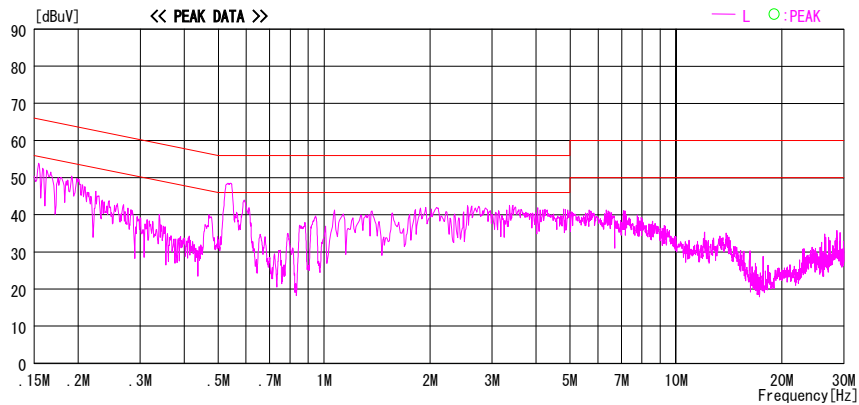
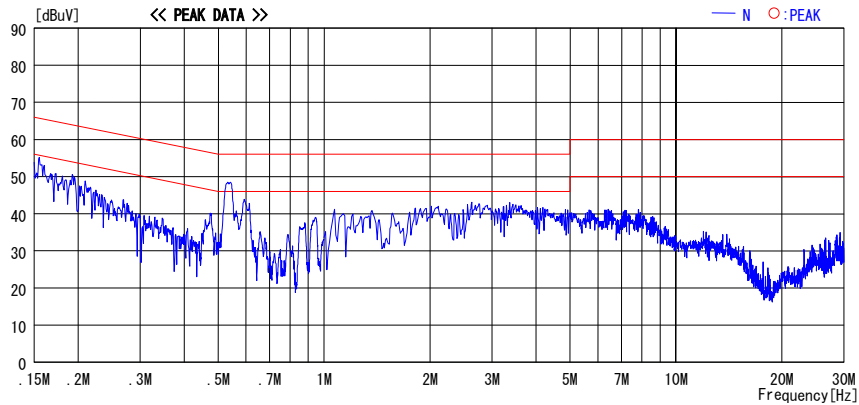


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

Conducted Emission
(IEEE802.11b Ch High)
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 3 Semi Anechoic Chamber
 Date : 2007/03/15

Company : FURUNO SYSTEMS CO.,LTD
 Kind of EUT : WLAN Module
 Model No. : SS21M
 Serial No. : C0695230007DC01

Report No. : 26GE0203-HO
 Power : AC 120V / 60Hz
 Temp./Humi. : 25deg. C / 34%
 Operator : Shinya Watanabe

Mode / Remarks : Transmitting 11b/11Mbps/2462MHz

LIMIT : FCC15.207 QP
 FCC15.207 AV

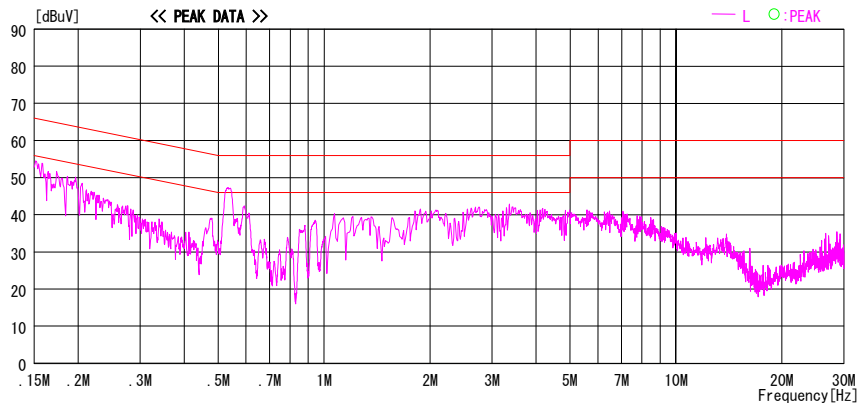
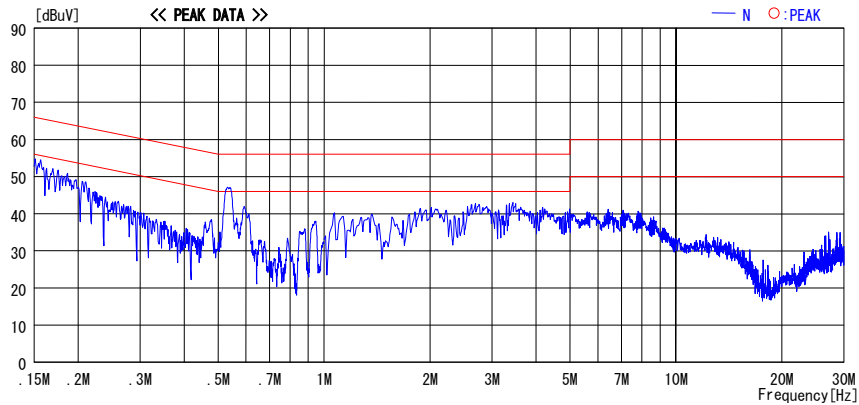


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

Conducted Emission
(IEEE802.11g Ch Low)
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 3 Semi Anechoic Chamber
 Date : 2007/03/15

Company : FURUNO SYSTEMS CO.,LTD
 Kind of EUT : WLAN Module
 Model No. : SS21M
 Serial No. : C0695230007DC01

Report No. : 26GE0203-HO
 Power : AC 120V / 60Hz
 Temp./Humi. : 25deg. C / 34%
 Operator : Shinya Watanabe

Mode / Remarks : Transmitting 11g/54Mbps/2412MHz

LIMIT : FCC15.207 QP
 FCC15.207 AV

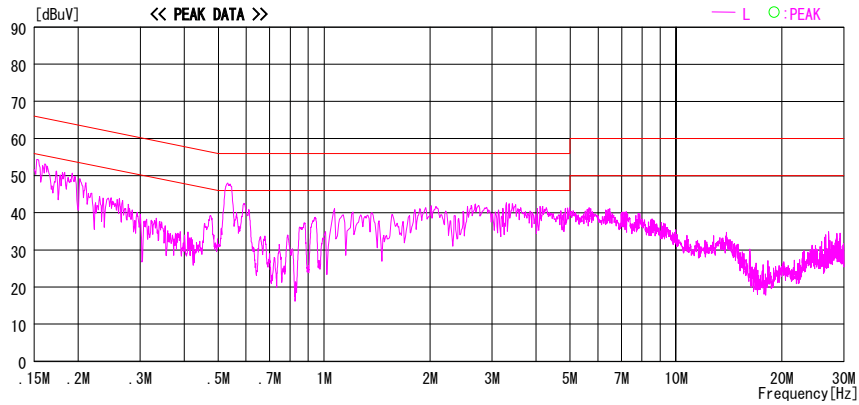
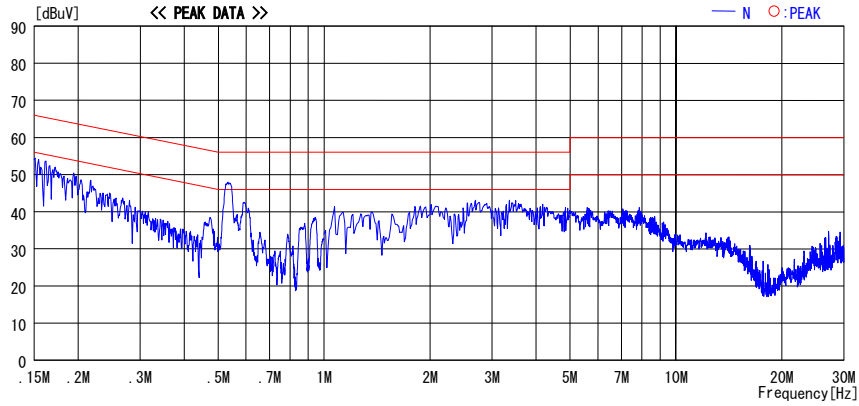


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

Conducted Emission
(IEEE802.11g Ch Mid)
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 3 Semi Anechoic Chamber
 Date : 2007/03/15

Company : FURUNO SYSTEMS CO.,LTD
 Kind of EUT : WLAN Module
 Model No. : SS21M
 Serial No. : C0695230007DC01

Report No. : 26GE0203-HO
 Power : AC 120V / 60Hz
 Temp./Humi. : 25deg. C / 34%
 Operator : Shinya Watanabe

Mode / Remarks : Transmitting 11g/54Mbps/2437MHz

LIMIT : FCC15.207 QP
 FCC15.207 AV

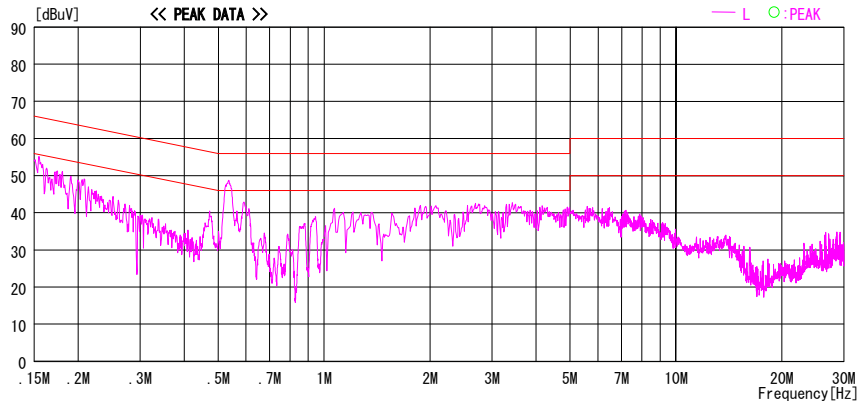
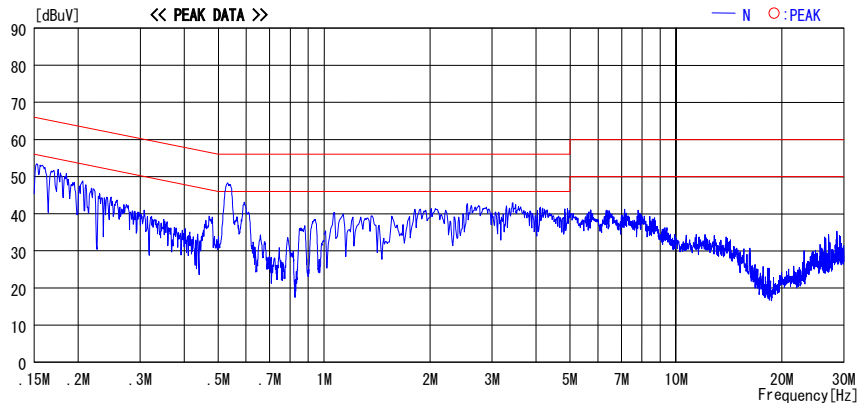


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

Conducted Emission
(IEEE802.11g Ch High)
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 3 Semi Anechoic Chamber
 Date : 2007/03/15

Company : FURUNO SYSTEMS CO.,LTD
 Kind of EUT : WLAN Module
 Model No. : SS21M
 Serial No. : C0695230007DC01

Report No. : 26GE0203-HO
 Power : AC 120V / 60Hz
 Temp./Humi. : 25deg. C / 34%
 Operator : Shinya Watanabe

Mode / Remarks : Transmitting 11g/54Mbps/2462MHz

LIMIT : FCC15.207 QP
 FCC15.207 AV

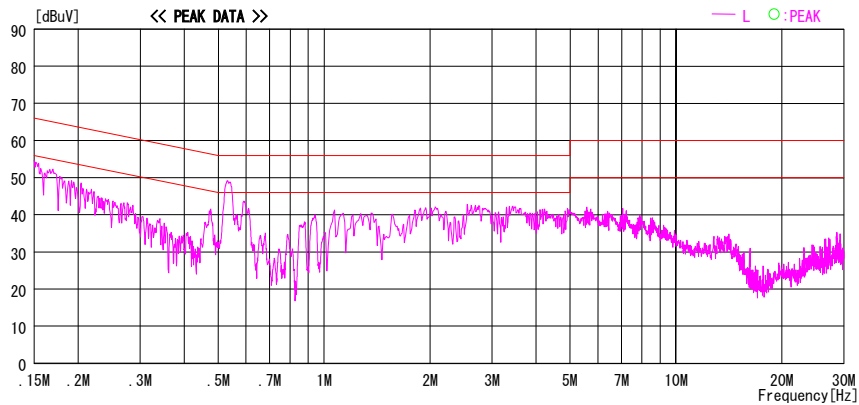
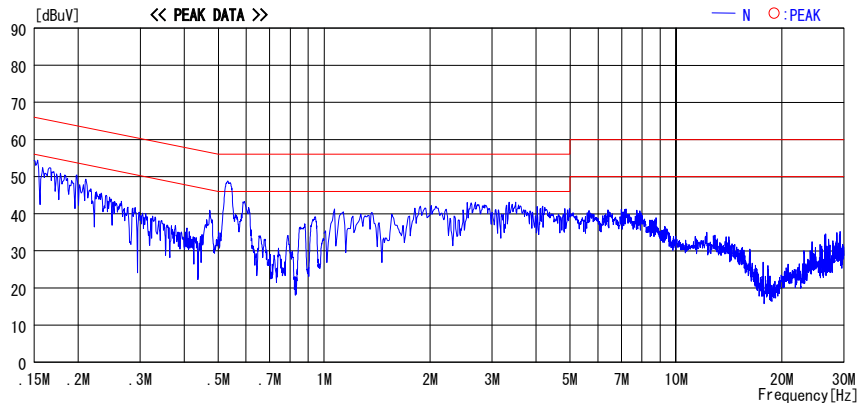


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

Conducted Emission
(IEEE802.11a Ch Low)
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 3 Semi Anechoic Chamber
 Date : 2007/03/15

Company : FURUNO SYSTEMS CO.,LTD
 Kind of EUT : WLAN Module
 Model No. : SS21M
 Serial No. : C0695230007DC01

Report No. : 26GE0203-HO
 Power : AC 120V / 60Hz
 Temp./Humi. : 25deg. C / 34%
 Operator : Shinya Watanabe

Mode / Remarks : Transmitting 11a/24Mbps/5745MHz

LIMIT : FCC15.207 QP
 FCC15.207 AV

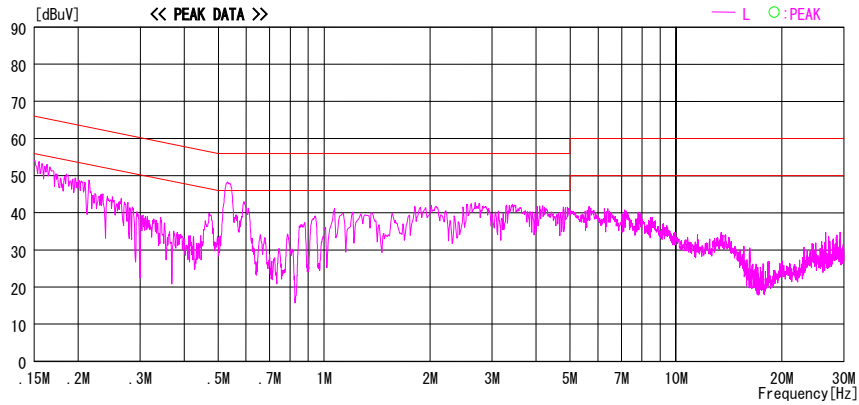
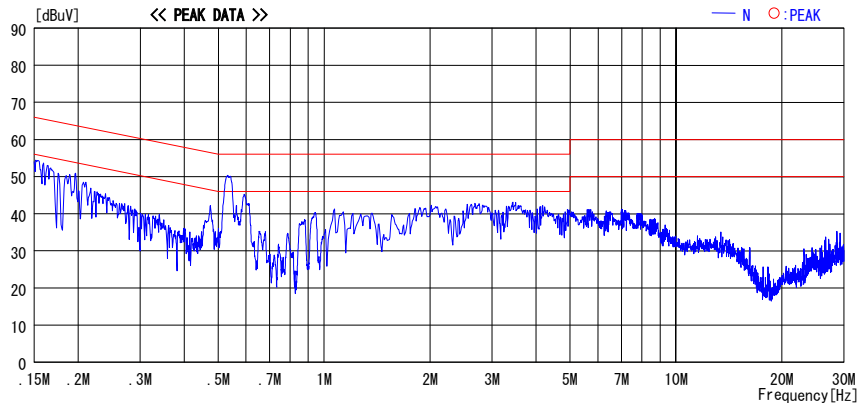


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

Conducted Emission
(IEEE802.11a Ch Mid)
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 3 Semi Anechoic Chamber
 Date : 2007/03/15

Company : FURUNO SYSTEMS CO.,LTD
 Kind of EUT : WLAN Module
 Model No. : SS21M
 Serial No. : C0695230007DC01

Report No. : 26GE0203-HO
 Power : AC 120V / 60Hz
 Temp./Humi. : 25deg. C / 34%
 Operator : Shinya Watanabe

Mode / Remarks : Transmitting 11a/24Mbps/5785MHz

LIMIT : FCC15.207 QP
 FCC15.207 AV

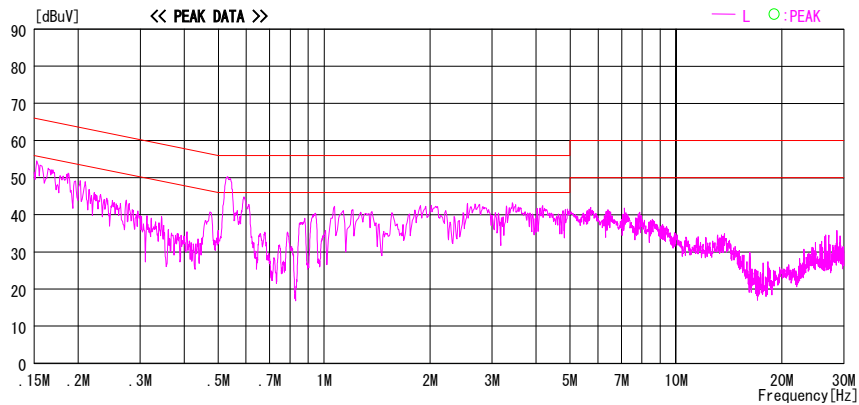
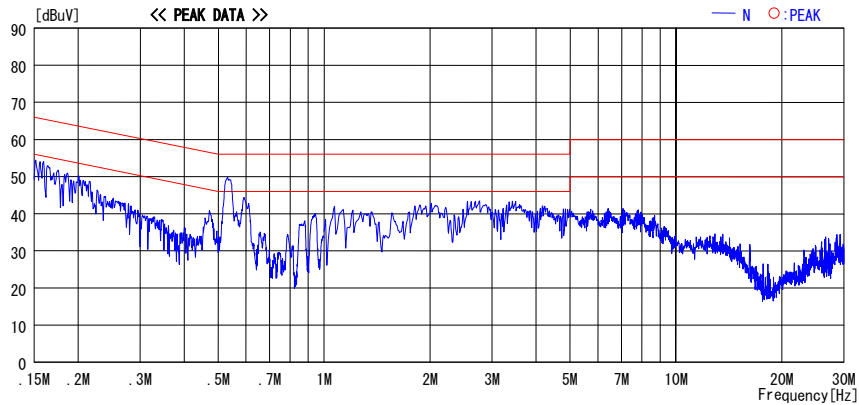


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

Conducted Emission
(IEEE802.11a Ch High)
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 3 Semi Anechoic Chamber
 Date : 2007/03/15

Company : FURUNO SYSTEMS CO.,LTD
 Kind of EUT : WLAN Module
 Model No. : SS21M
 Serial No. : C0695230007DC01

Report No. : 26GE0203-HO
 Power : AC 120V / 60Hz
 Temp./Humi. : 25deg. C / 34%
 Operator : Shinya Watanabe

Mode / Remarks : Transmitting 11a/24Mbps/5825MHz

LIMIT : FCC15.207 QP
 FCC15.207 AV

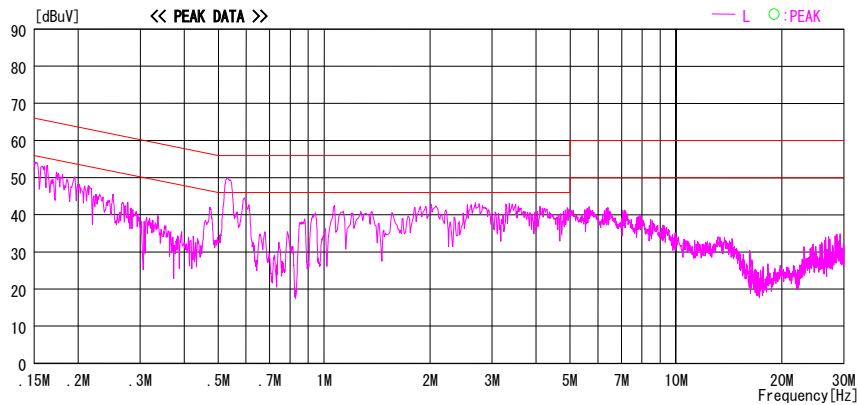
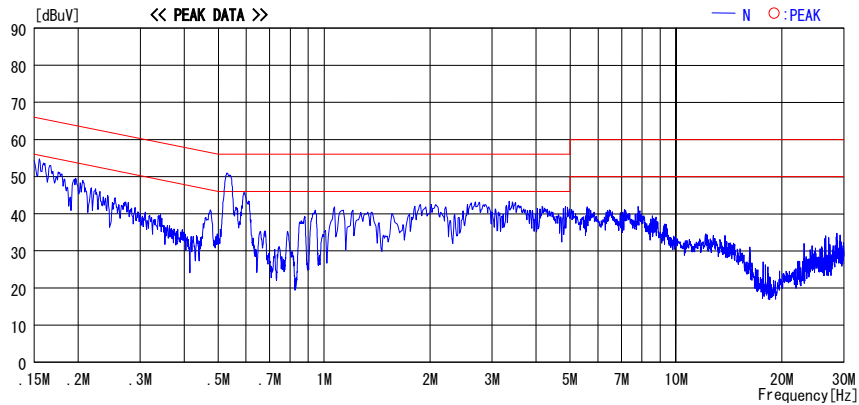


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

6dB Bandwidth

UL Apex Co., Ltd.
Head Office EMC Lab. No.7 Shielded Room

Company	: FURUNO SYSTEMS Co., Ltd.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: FCC Part15 Subpart C 15.247(a)(2)
Model	: SS21M	TEST DISTANCE	: -
Sample No.	: C0695230007DC01	DATE	: 08/03/2006 03/08/2007
Power	: DC 3.3V	TEMPERATURE	: 25°C 24°C
Mode	: Tx	HUMIDITY	: 54% 31%
		ENGINEER	: Shinya Watanabe

[IEEE802.11b] 11Mbps (Worst)

Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	11.083	500.0
Mid	2437.0	11.266	500.0
High	2462.0	11.217	500.0

[IEEE802.11g] 54Mbps (Worst)

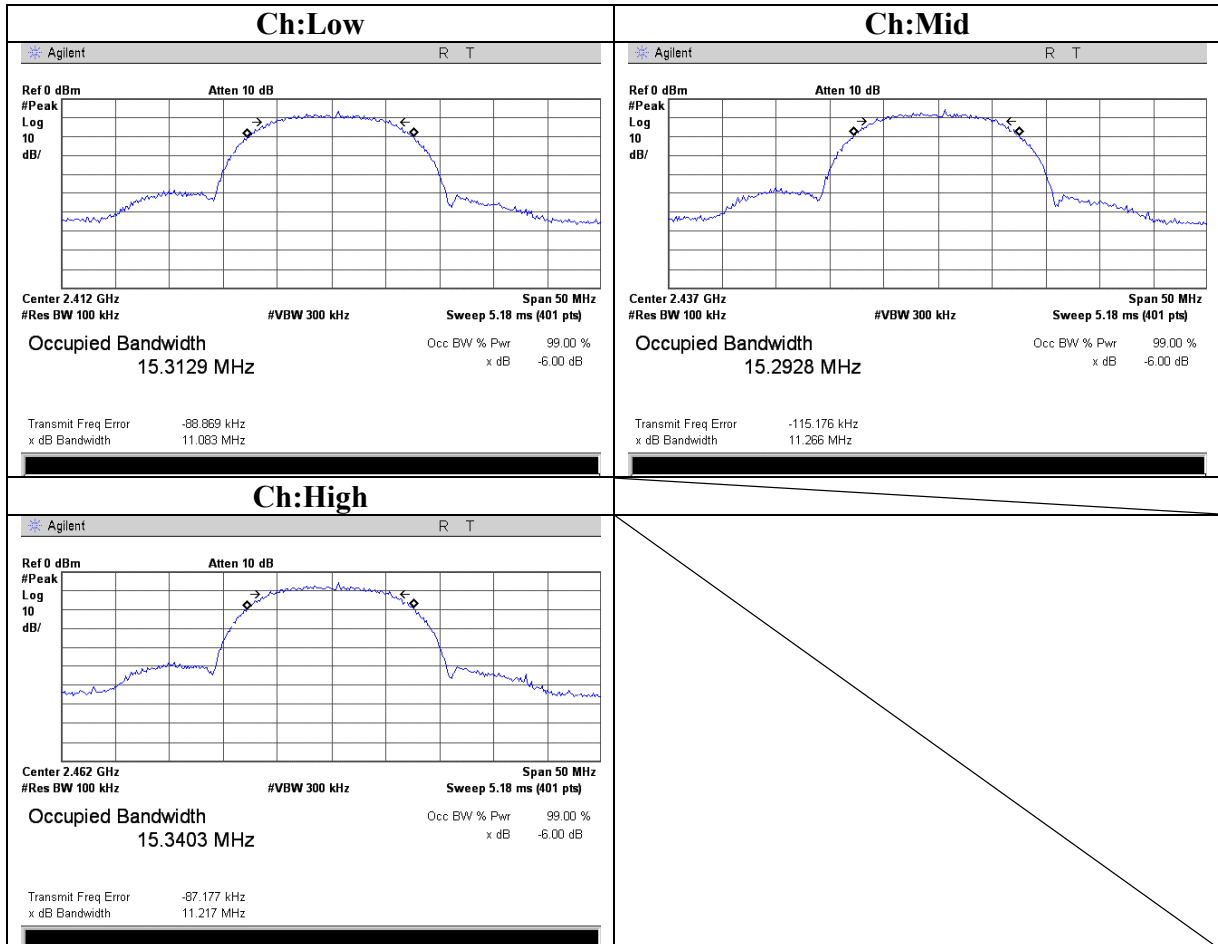
Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	16.582	500.0
Mid	2437.0	16.532	500.0
High	2462.0	16.547	500.0

[IEEE802.11a] 24Mbps (Worst)

Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2412.0	16.542	500.0
Mid	2437.0	16.490	500.0
High	2462.0	16.518	500.0

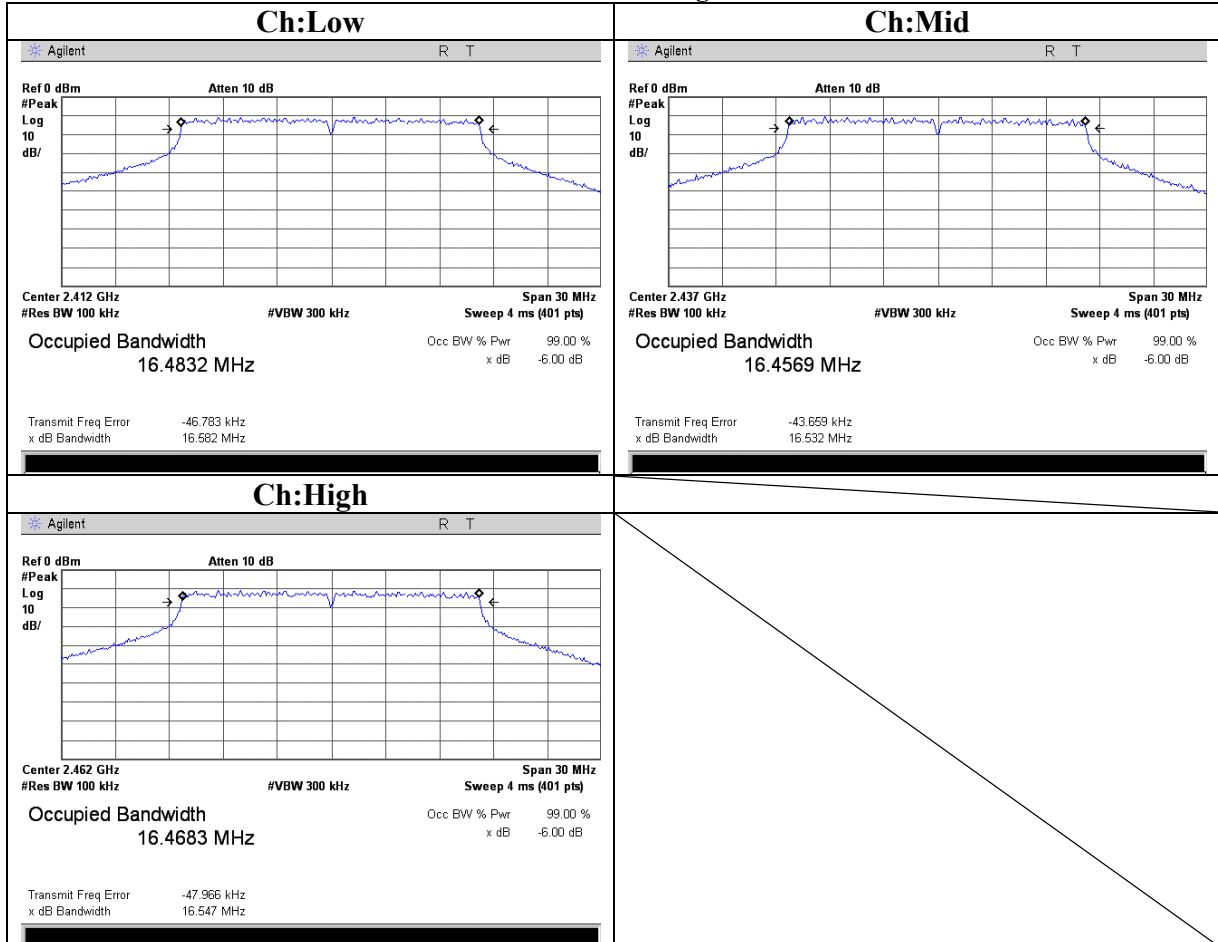
6dB Bandwidth

IEEE802.11b



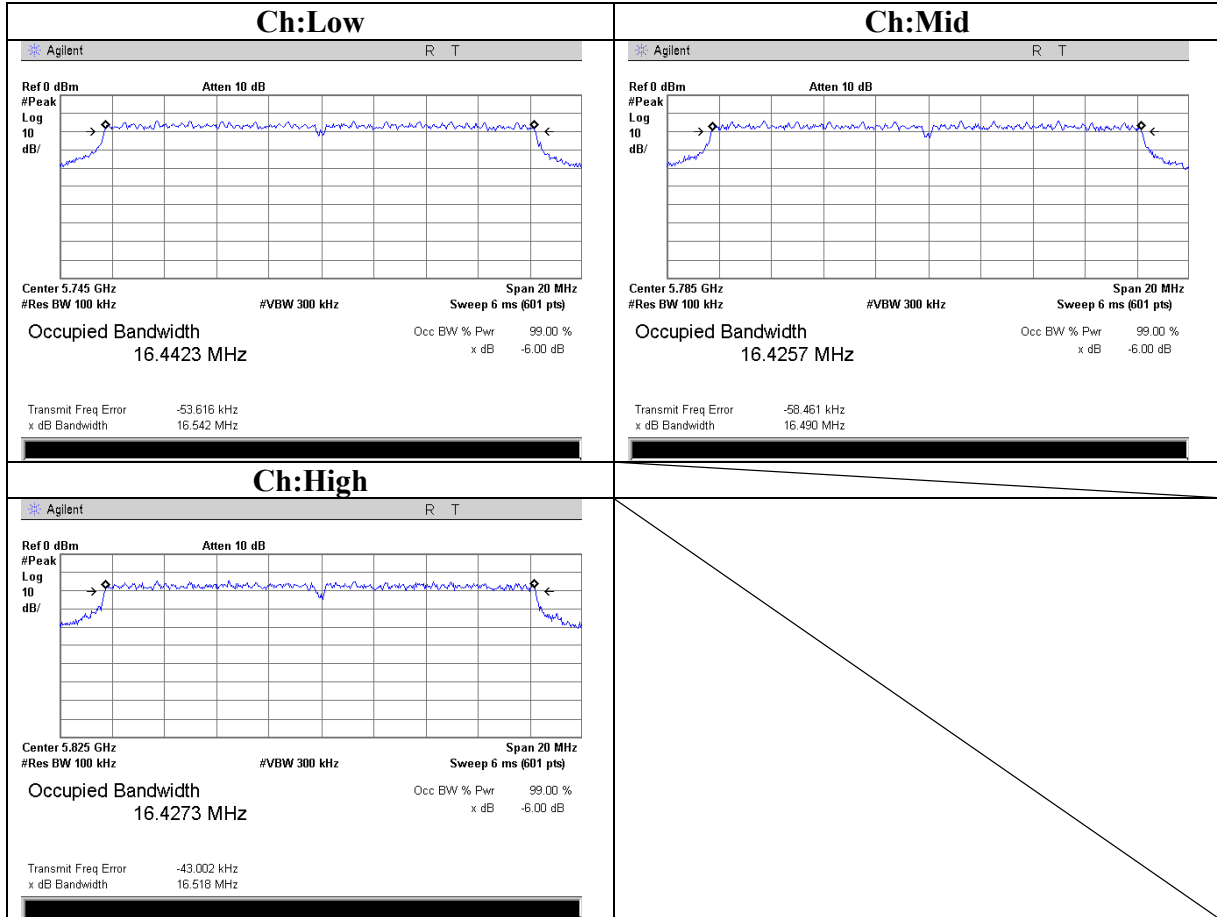
6dB Bandwidth

IEEE802.11g



6dB Bandwidth

IEEE802.11a



Maximum Peak Output Power

UL Apex Co., Ltd.
Head Office EMC Lab. No.7 Shielded Room

Company : FURUNO SYSTEMS Co., Ltd.	REPORT NO : 26GE0203-HO
Equipment : WLAN Module	REGULATION : FCC Part15 Subpart C 15.247(b)(3)
Model : SS21M	TEST DISTANCE : -
Sample No. : C0695230007DC01	DATE : 08/03/2006 03/08/2007
Power : DC 3.3V	TEMPERATURE : 25°C 24°C
Mode : Tx	HUMIDITY : 54% 31%
	ENGINEER : Shinya Watanabe

[IEEE802.11b] 11Mbps (Worst) 08/03/2006

Ch	Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result		Limit		Margin [dB]
					[dBm]	[mW]	[dBm]	[mW]	
Low	2412.0	5.76	2.13	10.14	18.03	63.53	30.00	1000	11.97
Mid	2437.0	6.44	2.14	10.14	18.72	74.47	30.00	1000	11.28
High	2462.0	5.45	2.00	10.14	17.59	57.41	30.00	1000	12.41

Sample Calculation:

Result = Reading + Cable Loss + Attenuator

* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

[IEEE802.11g] 54Mbps (Worst) 08/03/2006

Ch	Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result		Limit		Margin [dB]
					[dBm]	[mW]	[dBm]	[mW]	
Low	2412.0	9.98	2.13	10.14	22.25	167.88	30.00	1000	7.75
Mid	2437.0	10.24	2.14	10.14	22.52	178.65	30.00	1000	7.48
High	2462.0	10.44	2.00	10.14	22.58	181.13	30.00	1000	7.42

Sample Calculation:

Result = Reading + Cable Loss + Attenuator

* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

[IEEE802.11a] 24Mbps (Worst) 03/08/2007

Ch	Freq. [MHz]	P/M Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result		Limit		Margin [dB]
					[dBm]	[mW]	[dBm]	[mW]	
Low	5745.0	9.11	2.90	9.89	21.90	154.88	30.00	1000	8.10
Mid	5785.0	9.16	2.92	9.89	21.97	157.40	30.00	1000	8.03
High	5825.0	9.14	2.93	9.90	21.97	157.40	30.00	1000	8.03

Sample Calculation:

Result = Reading + Cable Loss + Attenuator

* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

**Radiated Spurious Emission Below 1GHz
(IEEE802.11b Tx Ch Low)**

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chambe

Company : FURUNO SYSTEMS CO.,LTD. REPORT NO : 26GE0203-HO
Equipment : WLAN Module REGULATION : Fcc Part15 Subpart C 15.247(d)
Model : SS21M TEST DISTANCE : 3m
Sample No. : C0695230007DC01 DATE : 03/12/2007
Power : DC3.3V TEMPERATURE : 24deg.C
Mode : 11b 11Mbps, Tx 2412MHz HUMIDITY : 25%
Remarks : Hor Y , Ver Y-axis ENGINEER : Takumi Shimada

QP DETECT

No.	FREQ [MHz]	Receiver READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV]	VER [dBuV]					HOR [dBuV/m]	VER [dBuV/m]		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	128.0	42.4	47.8	13.4	28.4	7.5	0.0	34.9	40.3	43.5	8.6	3.2
2*	160.0	54.1	50.4	15.2	28.2	7.8	0.0	48.9	45.2	43.5	-	-
3*	192.0	49.8	49.9	17.1	28.1	8.0	0.0	46.8	46.9	43.5	-	-
4	221.3	42.0	42.5	17.1	27.9	8.2	0.0	39.4	39.9	46.0	6.6	6.1
5*	384.0	47.3	43.7	17.4	28.4	9.1	0.0	45.4	41.8	46.0	-	-
6	416.0	41.1	37.9	18.0	28.6	9.2	0.0	39.7	36.5	46.0	6.3	9.5
7*	928.0	42.7	41.1	22.4	27.8	11.0	0.0	48.3	46.7	46.0	-	-

* Reference data

20dBc(Fundamental 2412MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR [dBuV]	VER [dBuV]					HOR [dBuV/m]	VER [dBuV/m]		HOR [dB]	VER [dB]
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	2412.0	102.6	100.9	27.1	32.3	3.3	0.0	100.7	99.0	-	-	-
2	160.0	55.6	51.9	15.2	28.2	7.8	0.0	50.4	46.7	Funda-20dB	30.3	32.3
3	192.0	51.5	51.4	17.1	28.1	8.0	0.0	48.5	48.4	Funda-20dB	32.2	30.6
5	384.0	49.2	46.1	17.4	28.4	9.1	0.0	47.3	44.2	Funda-20dB	33.4	34.8
7	928.0	43.7	42.4	22.4	27.8	11.0	0.0	49.3	48.0	Funda-20dB	31.4	31.0

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission Below 1GHz
(IEEE802.11b Tx Ch Mid)

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m
Sample No.	: C0695230007DC01	DATE	: 03/12/2007
Power	: DC3.3V	TEMPERATURE	: 24deg.C
Mode	: 11b 11Mbps, Tx 2437MHz	HUMIDITY	: 25%
Remarks	: Hor Y, Ver Y-axis	ENGINEER	: Takumi Shimada

QP DETECT

No.	FREQ [MHz]	Receiver READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]		[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	128.0	43.8	48.7	13.4	28.4	7.5	0.0	36.3	41.2	43.5	7.2	2.3
2*	160.0	55.8	53.0	15.2	28.2	7.8	0.0	50.6	47.8	43.5	-	-
3*	192.0	49.8	50.7	17.1	28.1	8.0	0.0	46.8	47.7	43.5	-	-
4	221.3	41.6	43.7	17.1	27.9	8.2	0.0	39.0	41.1	46.0	7.0	4.9
5*	384.0	47.7	44.5	17.4	28.4	9.1	0.0	45.8	42.6	46.0	-	-
6	416.0	41.2	38.6	18.0	28.6	9.2	0.0	39.8	37.2	46.0	6.2	8.8
7*	928.0	42.7	41.5	22.4	27.8	11.0	0.0	48.3	47.1	46.0	-	-

* Reference data

20dBc(Fundamental 2437MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]		[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	2437.0	102.6	100.6	27.2	32.3	3.3	0.0	100.8	98.8	-	-	-
2	160.0	57.1	54.6	15.2	28.2	7.8	0.0	51.9	49.4	Funda-20dB	28.9	29.4
3	192.0	51.5	52.2	17.1	28.1	8.0	0.0	48.5	49.2	Funda-20dB	32.3	29.6
5	384.0	49.2	46.4	17.4	28.4	9.1	0.0	47.3	44.5	Funda-20dB	33.5	34.3
7	928.0	44.1	42.7	22.4	27.8	11.0	0.0	49.7	48.3	Funda-20dB	31.1	30.5

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

**Radiated Spurious Emission Below 1GHz
(IEEE802.11b Tx Ch High)**

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m
Sample No.	: C0695230007DC01	DATE	: 03/12/2007
Power	: DC3.3V	TEMPERATURE	: 24deg.C
Mode	: 11b 11Mbps, Tx 2462MHz	HUMIDITY	: 25%
Remarks	: Hor Y, Ver Y-axis	ENGINEER	: Takumi Shimada

QP DETECT

No.	FREQ [MHz]	Receiver READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]		[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	128.0	46.0	49.8	13.4	28.4	7.5	0.0	38.5	42.3	43.5	5.0	1.2
2*	160.0	55.4	55.8	15.2	28.2	7.8	0.0	50.2	50.6	43.5	-	-
3*	192.0	50.3	50.9	17.1	28.1	8.0	0.0	47.3	47.9	43.5	-	-
4	221.3	42.4	44.2	17.1	27.9	8.2	0.0	39.8	41.6	46.0	6.2	4.4
5*	384.0	46.5	43.1	17.4	28.4	9.1	0.0	44.6	41.2	46.0	-	-
6	416.0	41.0	38.9	18.0	28.6	9.2	0.0	39.6	37.5	46.0	6.4	8.5
7*	928.0	43.8	41.2	22.4	27.8	11.0	0.0	49.4	46.8	46.0	-	-

* Reference data

20dBc(Fundamental 2462MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]		[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	2462.0	101.4	101.6	27.2	32.3	3.2	0.0	99.5	99.7	-	-	-
2	160.0	57.1	57.0	15.2	28.2	7.8	0.0	51.9	51.8	Funda-20dB	27.6	27.9
3	192.0	51.9	52.8	17.1	28.1	8.0	0.0	48.9	49.8	Funda-20dB	30.6	29.9
5	384.0	47.9	45.2	17.4	28.4	9.1	0.0	46.0	43.3	Funda-20dB	33.5	36.4
7	928.0	44.4	42.5	22.4	27.8	11.0	0.0	50.0	48.1	Funda-20dB	29.5	31.6

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission Below 1GHz
(IEEE802.11g Tx Ch Low)

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m
Sample No.	: C0695230007DC01	DATE	: 03/14/2007
Power	: DC3.3V	TEMPERATURE	: 24deg.C
Mode	: 11g 54Mbps, Tx 2412MHz	HUMIDITY	: 24%
Remarks	: Hor Y , Ver Y-axis	ENGINEER	: Shinya Watanabe

QP DETECT

No.	FREQ [MHz]	Receiver READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]		[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	128.1	45.9	50.1	13.4	28.4	7.5	0.0	38.4	42.6	43.5	5.1	0.9
2*	160.0	50.3	51.4	15.2	28.2	7.8	0.0	45.1	46.2	43.5	-	-
3*	178.8	49.1	48.8	16.4	28.1	7.9	0.0	45.3	45.0	43.5	-	-
4*	192.0	48.9	51.3	17.1	28.1	8.0	0.0	45.9	48.3	43.5	-	-
5	384.0	44.4	40.8	17.4	28.4	9.1	0.0	42.5	38.9	46.0	3.5	7.1
6	416.0	40.4	36.7	18.0	28.6	9.2	0.0	39.0	35.3	46.0	7.0	10.7
7*	928.0	43.3	41.8	22.4	27.8	11.0	0.0	48.9	47.4	46.0	-	-

* Reference data

20dBc(Fundamental 2412MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]		[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	2412.0	98.7	96.9	27.1	32.3	3.3	0.0	96.8	95.0	-	-	-
2	160.0	52.2	52.3	15.2	28.2	7.8	0.0	47.0	47.1	Funda-20dB	29.8	27.9
3	178.8	51.8	50.8	16.4	28.1	7.9	0.0	48.0	47.0	Funda-20dB	28.8	28.0
4	192.0	49.7	52.1	17.1	28.1	8.0	0.0	46.7	49.1	Funda-20dB	30.1	25.9
7	928.0	44.3	43.1	22.4	27.8	11.0	0.0	49.9	48.7	Funda-20dB	26.9	26.3

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission Below 1GHz
(IEEE802.11g Tx Ch Mid)

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m
Sample No.	: C0695230007DC01	DATE	: 03/14/2007
Power	: DC3.3V	TEMPERATURE	: 24deg.C
Mode	: 11g 54Mbps, Tx 2437MHz	HUMIDITY	: 24%
Remarks	: Hor Y, Ver Y-axis	ENGINEER	: Shinya Watanabe

QP DETECT

No.	FREQ [MHz]	Receiver READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]		[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	128.1	46.5	49.7	13.4	28.4	7.5	0.0	39.0	42.2	43.5	4.5	1.3
2*	160.0	52.2	51.7	15.2	28.2	7.8	0.0	47.0	46.5	43.5	-	-
3*	178.8	50.3	48.8	16.4	28.1	7.9	0.0	46.5	45.0	43.5	-	-
4*	192.0	51.8	47.8	17.1	28.1	8.0	0.0	48.8	44.8	43.5	-	-
5	384.0	44.4	41.2	17.4	28.4	9.1	0.0	42.5	39.3	46.0	3.5	6.7
6	416.0	40.3	36.5	18.0	28.6	9.2	0.0	38.9	35.1	46.0	7.1	10.9
7*	928.0	42.8	41.4	22.4	27.8	11.0	0.0	48.4	47.0	46.0	-	-

* Reference data

20dBc(Fundamental 2437MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]		[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	2437.0	100.0	98.1	27.2	32.3	3.3	0.0	98.2	96.3	-	-	-
2	160.0	53.0	52.5	15.2	28.2	7.8	0.0	47.8	47.3	Funda-20dB	30.4	29.0
3	178.8	53.6	50.8	16.4	28.1	7.9	0.0	49.8	47.0	Funda-20dB	28.4	29.3
4	192.0	52.3	48.5	17.1	28.1	8.0	0.0	49.3	45.5	Funda-20dB	28.9	30.8
7	928.0	43.9	42.6	22.4	27.8	11.0	0.0	49.5	48.2	Funda-20dB	28.7	28.1

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

**Radiated Spurious Emission Below 1GHz
(IEEE802.11g Tx Ch High)**

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m
Sample No.	: C0695230007DC01	DATE	: 03/14/2007
Power	: DC3.3V	TEMPERATURE	: 24deg.C
Mode	: 11g 54Mbps, Tx 2462MHz	HUMIDITY	: 24%
Remarks	: Hor Y , Ver Y-axis	ENGINEER	: Shinya Watanabe

QP DETECT

No.	FREQ [MHz]	Receiver READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]		[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	128.1	46.5	50.2	13.4	28.4	7.5	0.0	39.0	42.7	43.5	4.5	0.8
2*	160.0	52.7	50.7	15.2	28.2	7.8	0.0	47.5	45.5	43.5	-	-
3*	178.8	48.7	48.6	16.4	28.1	7.9	0.0	44.9	44.8	43.5	-	-
4*	192.0	48.9	50.6	17.1	28.1	8.0	0.0	45.9	47.6	43.5	-	-
5	384.0	43.3	40.9	17.4	28.4	9.1	0.0	41.4	39.0	46.0	4.6	7.0
6	416.0	40.4	35.7	18.0	28.6	9.2	0.0	39.0	34.3	46.0	7.0	11.7
7*	928.0	43.7	42.4	22.4	27.8	11.0	0.0	49.3	48.0	46.0	-	-

* Reference data

20dBc(Fundamental 2462MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]		[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	2462.0	98.9	98.5	27.2	32.3	3.2	0.0	97.0	96.6	-	-	-
2	160.0	53.2	51.2	15.2	28.2	7.8	0.0	48.0	46.0	Funda-20dB	29.0	30.6
3	178.8	51.6	51.5	16.4	28.1	7.9	0.0	47.8	47.7	Funda-20dB	29.2	28.9
4	192.0	49.7	51.2	17.1	28.1	8.0	0.0	46.7	48.2	Funda-20dB	30.3	28.4
7	928.0	44.9	43.9	22.4	27.8	11.0	0.0	50.5	49.5	Funda-20dB	26.5	27.1

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission Below 1GHz
(IEEE802.11a Tx Ch Low)

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m
Sample No.	: C0695230007DC01	DATE	: 03/02/2007
Power	: DC3.3V	TEMPERATURE	: 25deg.C
Mode	: 11a 24Mbps, Tx 5745MHz	HUMIDITY	: 34%
Remarks	: Hor Y , Ver Y-axis	ENGINEER	: Shinya Watanabe

QP DETECT

No.	FREQ [MHz]	Receiver READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	128.1	46.4	47.3	13.4	28.4	7.5	0.0	38.9	39.8	43.5	4.6	3.7
2*	160.0	54.3	49.0	15.2	28.2	7.8	0.0	49.1	43.8	43.5	-	-
3*	179.4	51.2	45.0	16.5	28.1	7.9	0.0	47.5	41.3	43.5	-	-
4*	192.0	52.6	41.2	17.1	28.1	8.0	0.0	49.6	38.2	43.5	-	-
5	416.0	40.5	38.4	18.0	28.6	9.2	0.0	39.1	37.0	46.0	6.9	9.0
6*	928.0	42.8	43.0	22.4	27.8	11.0	0.0	48.4	48.6	46.0	-	-

* Reference data

20dBc(Fundamental 5745MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	5745.0	87.6	86.0	32.1	31.4	4.8	0.0	93.1	91.5	-	-	-
2	160.0	55.6	50.9	15.2	28.2	7.8	0.0	50.4	45.7	Funda-20dB	22.7	25.8
3	179.4	53.3	46.6	16.5	28.1	7.9	0.0	49.6	42.9	Funda-20dB	23.5	28.6
4	192.0	53.8	44.2	17.1	28.1	8.0	0.0	50.8	41.2	Funda-20dB	22.3	30.3
6	928.0	43.8	44.2	22.4	27.8	11.0	0.0	49.4	49.8	Funda-20dB	23.7	21.7

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

**Radiated Spurious Emission Below 1GHz
(IEEE802.11a Tx Ch Mid)**

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m
Sample No.	: C0695230007DC01	DATE	: 03/02/2007
Power	: DC3.3V	TEMPERATURE	: 25deg.C
Mode	: 11a 24Mbps, Tx 5785MHz	HUMIDITY	: 34%
Remarks	: Hor Y , Ver Y-axis	ENGINEER	: Shinya Watanabe

QP DETECT

No.	FREQ [MHz]	Receiver READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	128.1	46.1	48.2	13.4	28.4	7.5	0.0	38.6	40.7	43.5	4.9	2.8
2*	160.0	54.4	50.2	15.2	28.2	7.8	0.0	49.2	45.0	43.5	-	-
3*	179.4	50.5	44.8	16.5	28.1	7.9	0.0	46.8	41.1	43.5	-	-
4*	192.0	51.7	46.0	17.1	28.1	8.0	0.0	48.7	43.0	43.5	-	-
5	416.0	40.8	37.6	18.0	28.6	9.2	0.0	39.4	36.2	46.0	6.6	9.8
6*	928.0	42.3	42.4	22.4	27.8	11.0	0.0	47.9	48.0	46.0	-	-

* Reference data

20dBc(Fundamental 5785MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	5785.0	88.1	86.6	32.1	31.4	4.8	0.0	93.6	92.1	-	-	-
2	160.0	55.6	51.3	15.2	28.2	7.8	0.0	50.4	46.1	Funda-20dB	23.2	26.0
3	179.4	52.9	47.0	16.5	28.1	7.9	0.0	49.2	43.3	Funda-20dB	24.4	28.8
4	192.0	52.9	47.8	17.1	28.1	8.0	0.0	49.9	44.8	Funda-20dB	23.7	27.3
6	928.0	43.5	43.6	22.4	27.8	11.0	0.0	49.1	49.2	Funda-20dB	24.5	22.9

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

Radiated Spurious Emission Below 1GHz
(IEEE802.11a Tx Ch High)

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m
Sample No.	: C0695230007DC01	DATE	: 03/02/2007
Power	: DC3.3V	TEMPERATURE	: 25deg.C
Mode	: 11a 24Mbps, Tx 5825MHz	HUMIDITY	: 34%
Remarks	: Hor Y , Ver Y-axis	ENGINEER	: Shinya Watanabe

QP DETECT

No.	FREQ [MHz]	Receiver READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	128.1	45.5	46.6	13.4	28.4	7.5	0.0	38.0	39.1	43.5	5.5	4.4
2*	160.0	52.8	53.1	15.2	28.2	7.8	0.0	47.6	47.9	43.5	-	-
3*	179.4	49.9	42.8	16.5	28.1	7.9	0.0	46.2	39.1	43.5	-	-
4*	192.0	51.4	43.6	17.1	28.1	8.0	0.0	48.4	40.6	43.5	-	-
5	416.0	40.4	37.0	18.0	28.6	9.2	0.0	39.0	35.6	46.0	7.0	10.4
6*	928.0	44.5	41.9	22.4	27.8	11.0	0.0	50.1	47.5	46.0	-	-

* Reference data

20dBc(Fundamental 5825MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	5825.0	88.3	84.3	32.2	31.4	4.8	0.0	93.9	89.9	-	-	-
2	160.0	55.1	54.7	15.2	28.2	7.8	0.0	49.9	49.5	Funda-20dB	24.0	20.4
3	179.4	52.3	45.7	16.5	28.1	7.9	0.0	48.6	42.0	Funda-20dB	25.3	27.9
4	192.0	52.4	45.5	17.1	28.1	8.0	0.0	49.4	42.5	Funda-20dB	24.5	27.4
6	928.0	45.4	43.3	22.4	27.8	11.0	0.0	51.0	48.9	Funda-20dB	22.9	21.0

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

**Radiated Spurious Emission Above 1GHz
(IEEE802.11b Tx Ch Low)**

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m/1m
Sample No.	: C0695230007DC01	DATE	: 03/14/2007
Power	: DC3.3V	TEMPERATURE	: 24deg.C
Mode	: 11b 11Mbps, Tx 2412MHz	HUMIDITY	: 24%
Remarks	: Hor Z, Ver Y-axis	ENGINEER	: Hidekazu Tanaka

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	57.9	56.6	27.1	32.3	3.2	0.0	55.9	54.6	74.0	18.1	19.4
2*	2400.0	68.1	67.1	27.1	32.3	3.3	0.0	66.2	65.2	74.0	-	-
3	2688.0	52.0	50.8	27.7	32.3	3.3	0.0	50.7	49.5	74.0	23.3	24.5
4	4824.0	41.6	42.1	31.3	31.6	4.5	0.1	45.9	46.4	74.0	28.1	27.6
5	7236.0	42.5	42.2	35.8	31.4	5.3	0.4	52.6	52.3	74.0	21.4	21.7
6	9648.0	43.5	43.3	38.6	31.9	6.2	0.7	57.1	56.9	74.0	16.9	17.1
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
7	24120.0	NS	NS	40.7	30.7	10.4	0.0	-	-	74.0	-	-

* Reference data

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	44.2	43.4	27.1	32.3	3.2	0.0	42.2	41.4	54.0	11.8	12.6
2*	2400.0	58.3	57.2	27.1	32.3	3.3	0.0	56.4	55.3	54.0	-	-
3	2688.0	48.1	46.3	27.7	32.3	3.3	0.0	46.8	45.0	54.0	7.2	9.0
4	4824.0	28.8	28.9	31.3	31.6	4.5	0.1	33.1	33.2	54.0	20.9	20.8
5	7236.0	29.2	29.2	35.8	31.4	5.3	0.4	39.3	39.3	54.0	14.7	14.7
6	9648.0	29.6	29.5	38.6	31.9	6.2	0.7	43.2	43.1	54.0	10.8	10.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
7	24120.0	NS	NS	40.7	30.7	10.4	0.0	-	-	54.0	-	-

* Reference data

20dBc(Fundamental 2412MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	2412.0	102.6	100.9	27.1	32.3	3.3	0.0	100.7	99.0	-	-	-
2	2400.0	60.6	59.8	27.1	32.3	3.3	0.0	58.7	57.9	Funda-20dB	22.0	21.1

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

*NS:Non Signal

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(19.04.06)

Radiated Spurious Emission Above 1GHz
(IEEE802.11b Tx Ch Mid)

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m/1m
Sample No.	: C0695230007DC01	DATE	: 03/14/2007
Power	: DC3.3V	TEMPERATURE	: 24deg.C
Mode	: 11b 11Mbps, Tx 2437MHz	HUMIDITY	: 24%
Remarks	: Hor Z, Ver Y-axis	ENGINEER	: Hidekazu Tanaka

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1824.3	54.7	58.1	26.3	32.7	2.7	0.0	51.0	54.4	74.0	23.0	19.6
2	4874.0	42.8	43.8	31.4	31.6	4.5	0.0	47.1	48.1	74.0	26.9	25.9
3	7311.0	43.3	43.3	35.9	31.4	5.3	0.4	53.5	53.5	74.0	20.5	20.5
4	9748.0	43.3	43.4	38.7	32.0	6.2	0.7	56.9	57.0	74.0	17.1	17.0
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	24370.0	NS	NS	40.7	30.6	10.4	0.0	-	-	74.0	-	-

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1824.3	41.0	43.6	26.3	32.7	2.7	0.0	37.3	39.9	54.0	16.7	14.1
2	4874.0	28.9	28.9	31.4	31.6	4.5	0.0	33.2	33.2	54.0	20.8	20.8
3	7311.0	29.2	29.3	35.9	31.4	5.3	0.4	39.4	39.5	54.0	14.6	14.5
4	9748.0	29.2	29.2	38.7	32.0	6.2	0.7	42.8	42.8	54.0	11.2	11.2
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	24370.0	NS	NS	40.7	30.6	10.4	0.0	-	-	54.0	-	-

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

*NS:Non Signal

Radiated Spurious Emission Above 1GHz
(IEEE802.11b Tx Ch High)

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m/1m
Sample No.	: C0695230007DC01	DATE	: 03/14/2007
Power	: DC3.3V	TEMPERATURE	: 24deg.C
Mode	: 11b 11Mbps, Tx 2462MHz	HUMIDITY	: 24%
Remarks	: Hor Z, Ver Y-axis	ENGINEER	: Hidekazu Tanaka

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]		[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1824.3	54.6	58.0	26.3	32.7	2.7	0.0	50.9	54.3	74.0	23.1	19.7
2	2483.5	54.8	55.4	27.2	32.3	3.1	0.0	52.8	53.4	74.0	21.2	20.6
3	2688.0	52.9	51.8	27.7	32.3	3.3	0.0	51.6	50.5	74.0	22.4	23.5
4	4924.0	43.4	43.5	31.5	31.6	4.6	0.0	47.9	48.0	74.0	26.1	26.0
5	7386.0	43.6	43.8	36.1	31.4	5.4	0.5	54.2	54.4	74.0	19.8	19.6
6	9848.0	43.8	43.4	38.8	32.0	6.2	0.7	57.5	57.1	74.0	16.5	16.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
7	24620.0	NS	NS	40.8	30.6	10.6	0.0	-	-	74.0	-	-

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]		[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1824.3	41.1	43.3	26.3	32.7	2.7	0.0	37.4	39.6	54.0	16.6	14.4
2	2483.5	40.9	41.3	27.2	32.3	3.1	0.0	38.9	39.3	54.0	15.1	14.7
3	2688.0	48.7	47.3	27.7	32.3	3.3	0.0	47.4	46.0	54.0	6.6	8.0
4	4924.0	29.2	29.4	31.5	31.6	4.6	0.0	33.7	33.9	54.0	20.3	20.1
5	7386.0	29.4	29.5	36.1	31.4	5.4	0.5	40.0	40.1	54.0	14.0	13.9
6	9848.0	29.6	29.4	38.8	32.0	6.2	0.7	43.3	43.1	54.0	10.7	10.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
7	24620.0	NS	NS	40.8	30.6	10.6	0.0	-	-	54.0	-	-

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB
*Except for the above table : All other spurious emissions were less than 20dB for the limit.
*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.
*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.
*Hi-Pass Fiter was not used for factor 0.0dB of the above table.
*NS: Non Signal

**Radiated Spurious Emission Above 1GHz
(IEEE802.11g Tx Ch Low)**

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m/1m
Sample No.	: C0695230007DC01	DATE	: 03/14/2007
Power	: DC3.3V	TEMPERATURE	: 24deg.C
Mode	: 11g 54Mbps, Tx 2412MHz	HUMIDITY	: 24%
Remarks	: Hor Z, Ver Y-axis	ENGINEER	: Hidekazu Tanaka

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1824.3	54.1	58.5	26.3	32.7	2.7	0.0	50.4	54.8	74.0	23.6	19.2
2	2390.0	67.5	66.3	27.1	32.3	3.2	0.0	65.5	64.3	74.0	8.5	9.7
3*	2400.0	85.7	84.2	27.1	32.3	3.3	0.0	83.8	82.3	74.0	-	-
4	2688.0	53.8	52.2	27.7	32.3	3.3	0.0	52.5	50.9	74.0	21.5	23.1
5	4824.0	42.5	43.3	31.3	31.6	4.5	0.1	46.8	47.6	74.0	27.2	26.4
6	7236.0	43.1	43.0	35.8	31.4	5.3	0.4	53.2	53.1	74.0	20.8	20.9
7	9648.0	43.6	43.7	38.6	31.9	6.2	0.7	57.2	57.3	74.0	16.8	16.7
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
8	24120.0	NS	NS	40.7	30.7	10.4	0.0	-	-	74.0	-	-

* Reference data

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1824.3	40.3	44.0	26.3	32.7	2.7	0.0	36.6	40.3	54.0	17.4	13.7
2	2390.0	46.5	45.4	27.1	32.3	3.2	0.0	44.5	43.4	54.0	9.5	10.6
3*	2400.0	59.6	58.0	27.1	32.3	3.3	0.0	57.7	56.1	54.0	-	-
4	2688.0	48.8	47.4	27.7	32.3	3.3	0.0	47.5	46.1	54.0	6.5	7.9
5	4824.0	28.8	28.8	31.3	31.6	4.5	0.1	33.1	33.1	54.0	20.9	20.9
6	7236.0	29.1	29.2	35.8	31.4	5.3	0.4	39.2	39.3	54.0	14.8	14.7
7	9648.0	29.4	29.5	38.6	31.9	6.2	0.7	43.0	43.1	54.0	11.0	10.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
8	24120.0	NS	NS	40.7	30.7	10.4	0.0	-	-	54.0	-	-

* Reference data

20dBc(Fundamental 2412MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	2412.0	98.7	96.9	27.1	32.3	3.3	0.0	96.8	95.0	-	-	-
3	2400.0	69.1	68.0	27.1	32.3	3.3	0.0	67.2	66.1	Funda-20dB	9.6	8.9

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Filter was not used for factor 0.0dB of the above table.

*NS: Non Signal

Radiated Spurious Emission Above 1GHz
(IEEE802.11g Tx Ch Mid)

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m/1m
Sample No.	: C0695230007DC01	DATE	: 03/14/2007
Power	: DC3.3V	TEMPERATURE	: 24deg.C
Mode	: 11g 54Mbps, Tx 2437MHz	HUMIDITY	: 24%
Remarks	: Hor Z, Ver Y-axis	ENGINEER	: Hidekazu Tanaka

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2688.0	53.1	52.2	27.7	32.3	3.3	0.0	51.8	50.9	74.0	22.2	23.1
2	4874.0	42.8	42.1	31.4	31.6	4.5	0.0	47.1	46.4	74.0	26.9	27.6
3	7311.0	43.6	43.1	35.9	31.4	5.3	0.4	53.8	53.3	74.0	20.2	20.7
4	9748.0	42.8	42.8	38.7	32.0	6.2	0.7	56.4	56.4	74.0	17.6	17.6
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	24370.0	NS	NS	40.7	30.6	10.4	0.0	-	-	74.0	-	-

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2688.0	47.9	47.3	27.7	32.3	3.3	0.0	46.6	46.0	54.0	7.4	8.0
2	4874.0	29.0	28.9	31.4	31.6	4.5	0.0	33.3	33.2	54.0	20.7	20.8
3	7311.0	29.2	29.3	35.9	31.4	5.3	0.4	39.4	39.5	54.0	14.6	14.5
4	9748.0	29.2	29.2	38.7	32.0	6.2	0.7	42.8	42.8	54.0	11.2	11.2
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	24370.0	NS	NS	40.7	30.6	10.4	0.0	-	-	54.0	-	-

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

*NS:Non Signal

Radiated Spurious Emission Above 1GHz
(IEEE802.11g Tx Ch High)

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m/1m
Sample No.	: C0695230007DC01	DATE	: 03/14/2007
Power	: DC3.3V	TEMPERATURE	: 24deg.C
Mode	: 11g 54Mbps, Tx 2462MHz	HUMIDITY	: 24%
Remarks	: Hor Z, Ver Y-axis	ENGINEER	: Hidekazu Tanaka

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]		[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	66.3	67.0	27.2	32.3	3.1	0.0	64.3	65.0	74.0	9.7	9.0
2	4924.0	43.4	42.4	31.5	31.6	4.6	0.0	47.9	46.9	74.0	26.1	27.1
3	7386.0	42.6	42.6	36.1	31.4	5.4	0.5	53.2	53.2	74.0	20.8	20.8
4	9848.0	42.9	43.4	38.8	32.0	6.2	0.7	56.6	57.1	74.0	17.4	16.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	24620.0	NS	NS	40.8	30.6	10.6	0.0	-	-	74.0	-	-

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]		[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	43.8	45.1	27.2	32.3	3.1	0.0	41.8	43.1	54.0	12.2	10.9
2	4924.0	29.2	29.3	31.5	31.6	4.6	0.0	33.7	33.8	54.0	20.3	20.2
3	7386.0	29.5	29.5	36.1	31.4	5.4	0.5	40.1	40.1	54.0	13.9	13.9
4	9848.0	29.5	29.4	38.8	32.0	6.2	0.7	43.2	43.1	54.0	10.8	10.9
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	24620.0	NS	NS	40.8	30.6	10.6	0.0	-	-	54.0	-	-

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

*NS:Non Signal

**Radiated Spurious Emission Above 1GHz
(IEEE802.11a Tx Ch Low)**

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m/1m
Sample No.	: C0695230007DC01	DATE	: 03/01/2007
Power	: DC3.3V	TEMPERATURE	: 25deg.C
Mode	: 11a 24Mbps, Tx 5745MHz	HUMIDITY	: 34%
Remarks	: Hor Z, Ver Y-axis	ENGINEER	: Shinya Watanabe

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	3830.0	55.9	56.2	29.5	32.0	4.0	0.0	57.4	57.7	74.0	16.6	16.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
2	11490.0	41.6	40.8	40.2	31.1	6.7	0.7	48.6	47.8	74.0	25.4	26.2
3	17235.0	NS	NS	46.4	32.3	12.1	0.8	-	-	74.0	-	-
4	22980.0	NS	NS	45.9	32.1	13.5	1.2	-	-	74.0	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	28725.0	NS	NS	39.5	31.8	15.6	0.0	-	-	74.0	-	-
6	34470.0	NS	NS	39.8	32.3	16.4	0.0	-	-	74.0	-	-

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	3830.0	50.5	51.1	29.5	32.0	4.0	0.0	52.0	52.6	54.0	2.0	1.4
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
2	11490.0	30.0	30.1	40.2	31.1	6.7	0.7	37.0	37.1	54.0	17.0	16.9
3	17235.0	NS	NS	46.4	32.3	12.1	0.8	-	-	54.0	-	-
4	22980.0	NS	NS	45.9	32.1	13.5	1.2	-	-	54.0	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	28725.0	NS	NS	39.5	31.8	15.6	0.0	-	-	54.0	-	-
6	34470.0	NS	NS	39.8	32.3	16.4	0.0	-	-	54.0	-	-

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the third harmonic, the noise from the EUT was not seen.The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

*NS:Non Signal

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(19.04.06)

**Radiated Spurious Emission Above 1GHz
(IEEE802.11a Tx Ch Mid)**

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m/1m
Sample No.	: C0695230007DC01	DATE	: 03/01/2007
Power	: DC3.3V	TEMPERATURE	: 25deg.C
Mode	: 11a 24Mbps, Tx 5785MHz	HUMIDITY	: 34%
Remarks	: Hor Z, Ver Y-axis	ENGINEER	: Shinya Watanabe

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	3856.7	54.1	55.4	29.5	32.0	4.0	0.0	55.6	56.9	74.0	18.4	17.1
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
2	11570.0	40.4	42.0	40.0	31.1	6.7	0.7	47.2	48.8	74.0	26.8	25.2
3	17355.0	NS	NS	46.4	32.3	12.1	0.8	-	-	74.0	-	-
4	23140.0	NS	NS	45.9	32.1	13.5	1.2	-	-	74.0	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	28925.0	NS	NS	39.5	31.8	15.6	0.0	-	-	74.0	-	-
6	34710.0	NS	NS	39.8	32.3	16.4	0.0	-	-	74.0	-	-

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	3856.7	49.4	51.8	29.5	32.0	4.0	0.0	50.9	53.3	54.0	3.1	0.7
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
2	11570.0	30.3	30.3	40.0	31.1	6.7	0.7	37.1	37.1	54.0	16.9	16.9
3	17355.0	NS	NS	46.4	32.3	12.1	0.8	-	-	54.0	-	-
4	23140.0	NS	NS	45.9	32.1	13.5	1.2	-	-	54.0	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	28925.0	NS	NS	39.5	31.8	15.6	0.0	-	-	54.0	-	-
6	34710.0	NS	NS	39.8	32.3	16.4	0.0	-	-	54.0	-	-

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the third harmonic, the noise from the EUT was not seen.The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

*NS:Non Signal

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(19.04.06)

**Radiated Spurious Emission Above 1GHz
(IEEE802.11a Tx Ch High)**

UL Apex Co., Ltd.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: FURUNO SYSTEMS CO.,LTD.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: Fcc Part15 Subpart C 15.247(d)
Model	: SS21M	TEST DISTANCE	: 3m/1m
Sample No.	: C0695230007DC01	DATE	: 03/01/2007
Power	: DC3.3V	TEMPERATURE	: 25deg.C
Mode	: 11a 24Mbps, Tx 5825MHz	HUMIDITY	: 34%
Remarks	: Hor Z, Ver Y-axis	ENGINEER	: Shinya Watanabe

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	3883.3	53.2	53.9	29.5	32.0	4.0	0.0	54.7	55.4	74.0	19.3	18.6
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
2	11650.0	41.2	41.3	39.9	31.1	6.8	0.7	48.0	48.1	74.0	26.0	25.9
3	17475.0	NS	NS	46.4	32.3	12.1	0.8	-	-	74.0	-	-
4	23300.0	NS	NS	45.9	32.1	13.5	1.2	-	-	74.0	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	29125.0	NS	NS	39.5	31.8	15.6	0.0	-	-	74.0	-	-
6	34950.0	NS	NS	39.8	32.3	16.4	0.0	-	-	74.0	-	-

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass or ATT [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	3883.3	48.4	49.1	29.5	32.0	4.0	0.0	49.9	50.6	54.0	4.1	3.4
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
2	11650.0	30.4	30.4	39.9	31.1	6.8	0.7	37.2	37.2	54.0	16.8	16.8
3	17475.0	NS	NS	46.4	32.3	12.1	0.8	-	-	54.0	-	-
4	23300.0	NS	NS	45.9	32.1	13.5	1.2	-	-	54.0	-	-
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	29125.0	NS	NS	39.5	31.8	15.6	0.0	-	-	54.0	-	-
6	34950.0	NS	NS	39.8	32.3	16.4	0.0	-	-	54.0	-	-

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the third harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

*NS:Non Signal

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

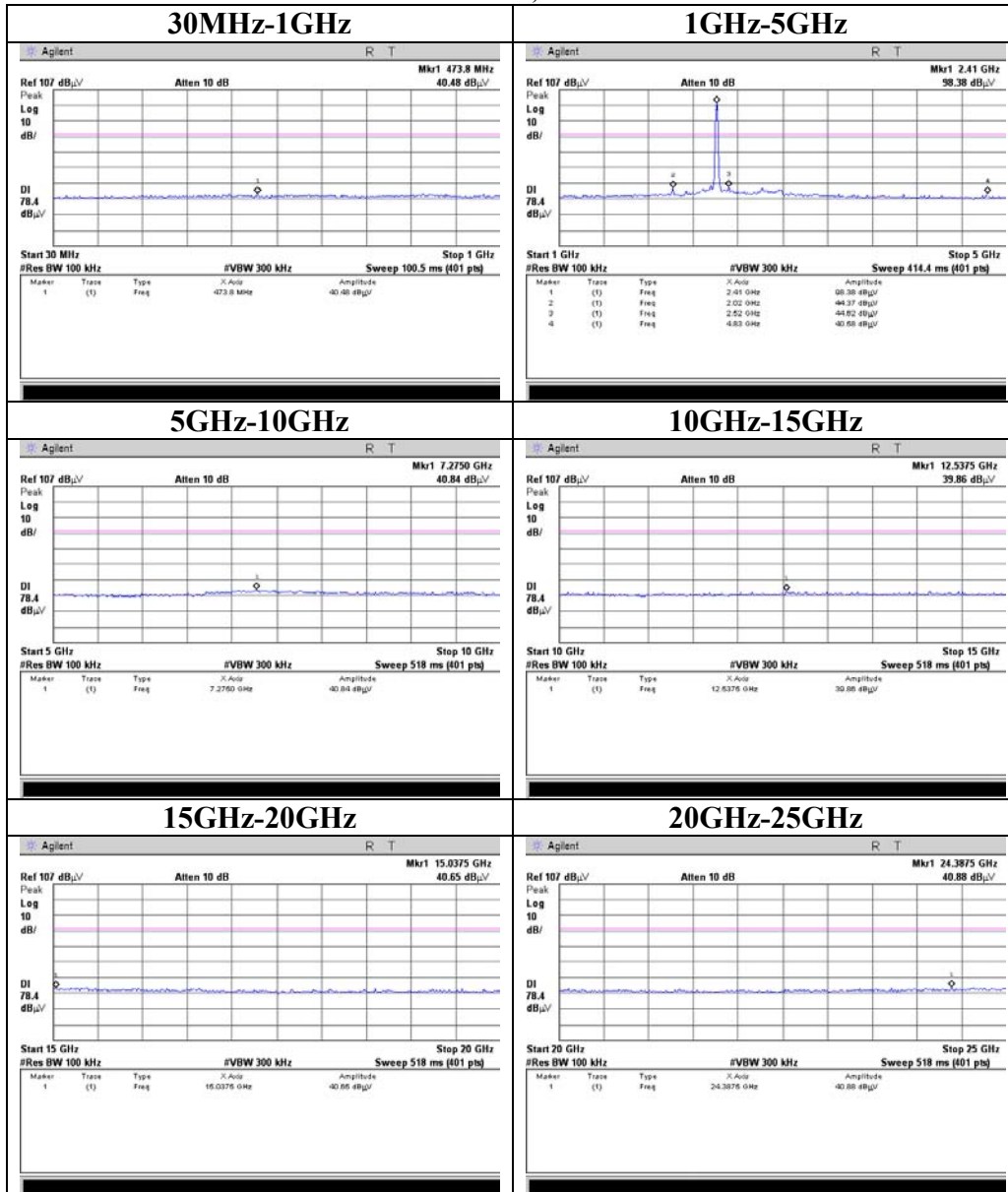
Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(19.04.06)

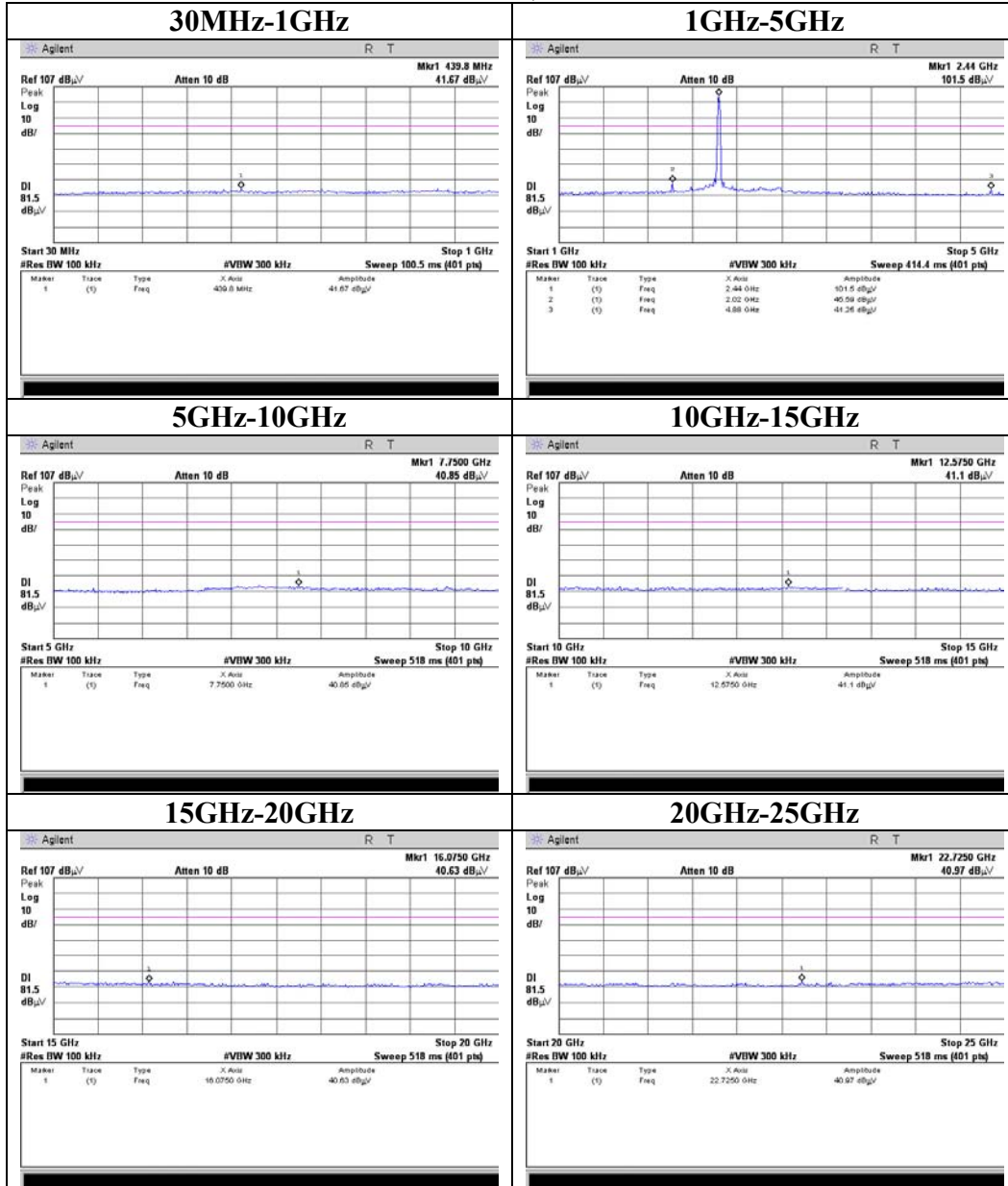
Conducted Spurious Emission

IEEE802.11b, Ch: Low



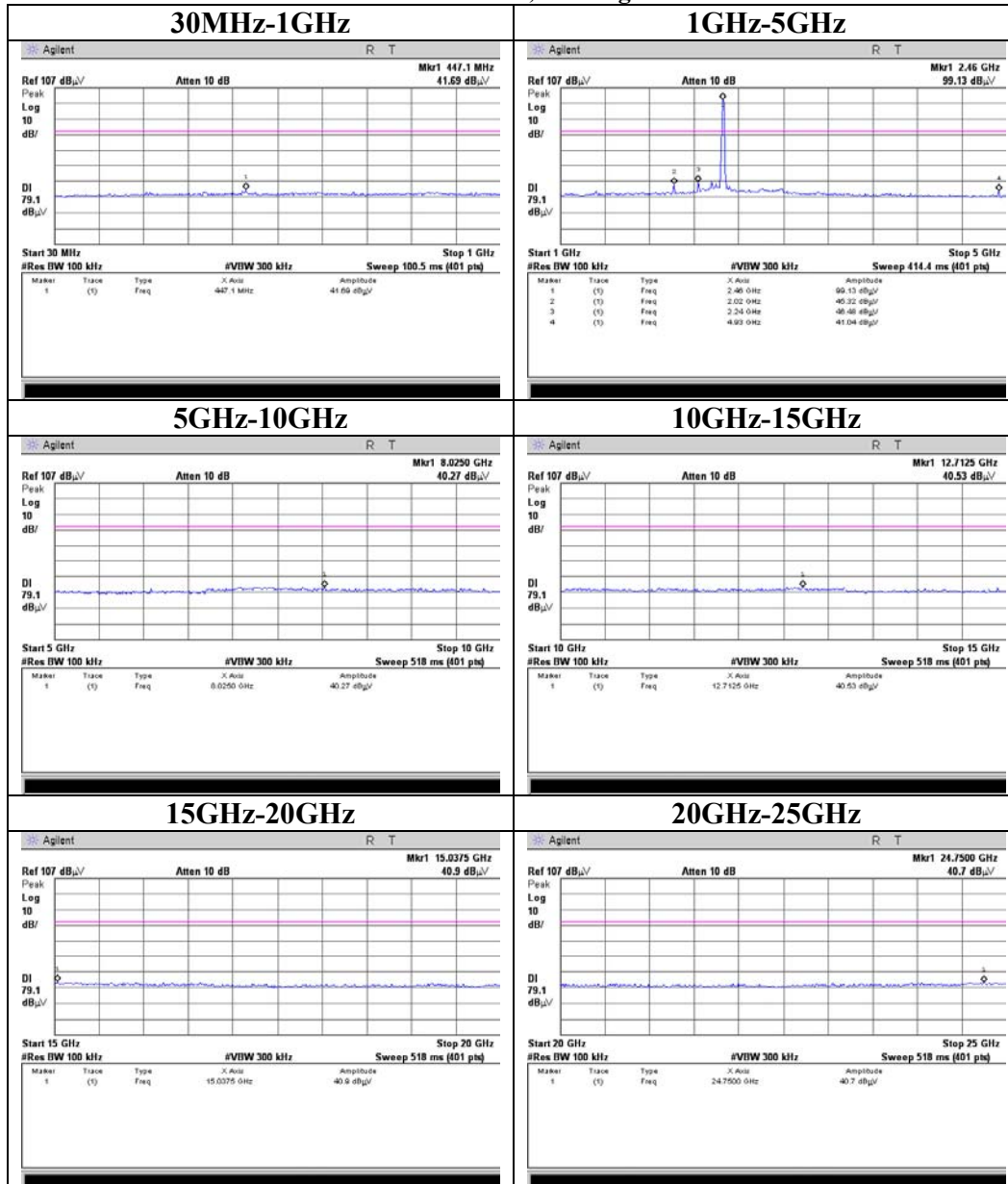
Conducted Spurious Emission

IEEE802.11b, Ch: Mid



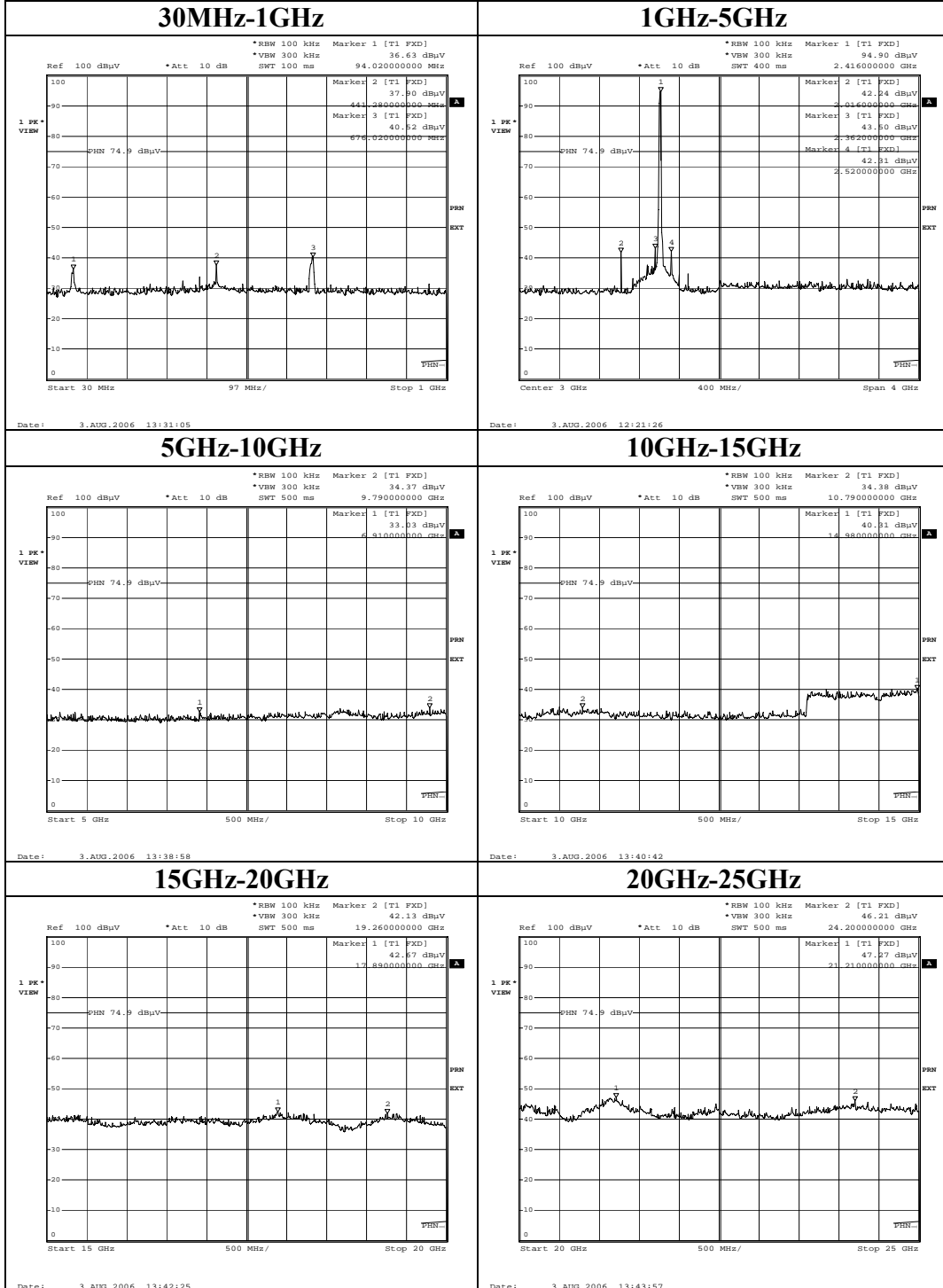
Conducted Spurious Emission

IEEE802.11b, Ch: High



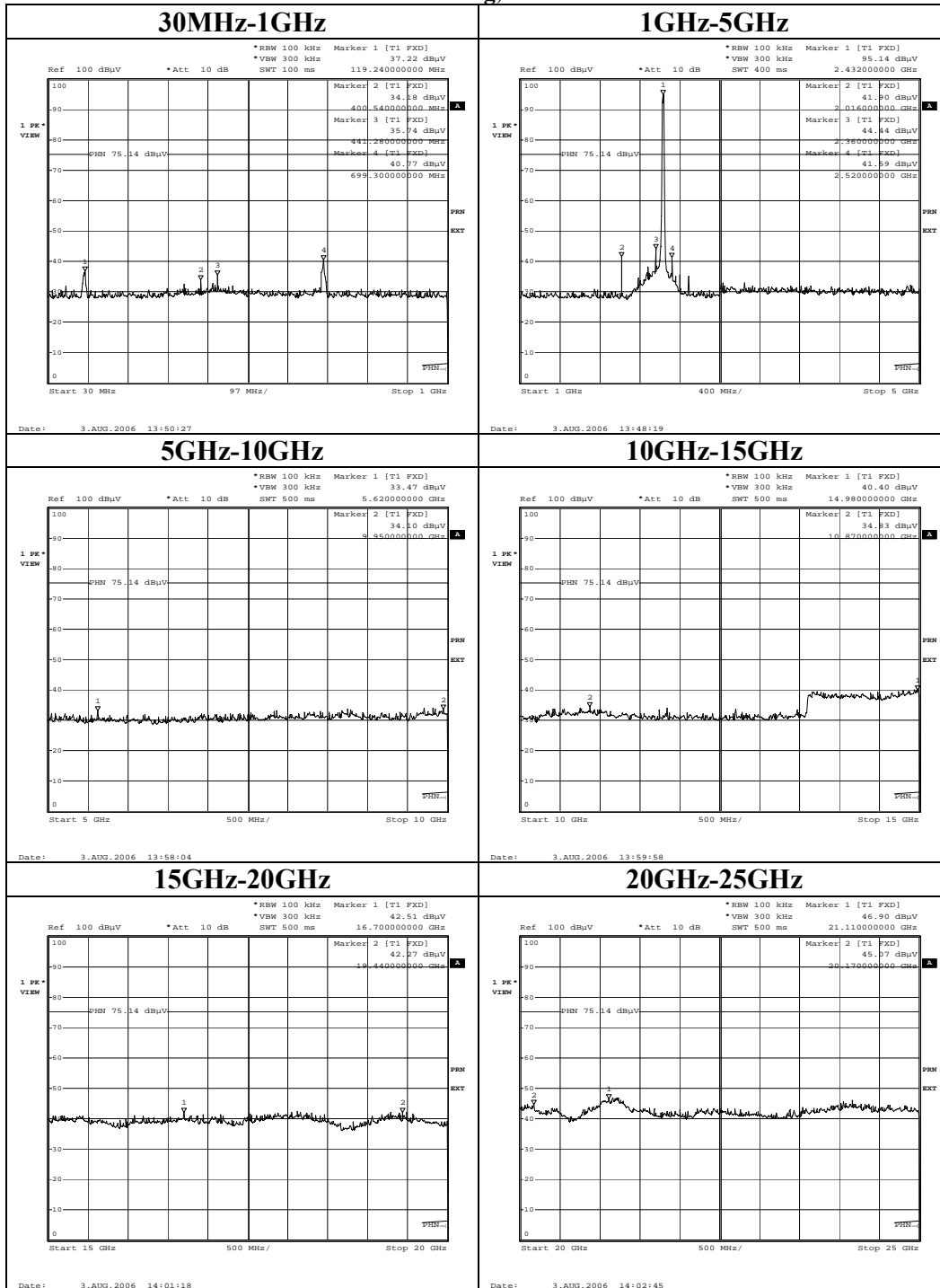
Conducted Spurious Emission

IEEE802.11g, Ch: Low



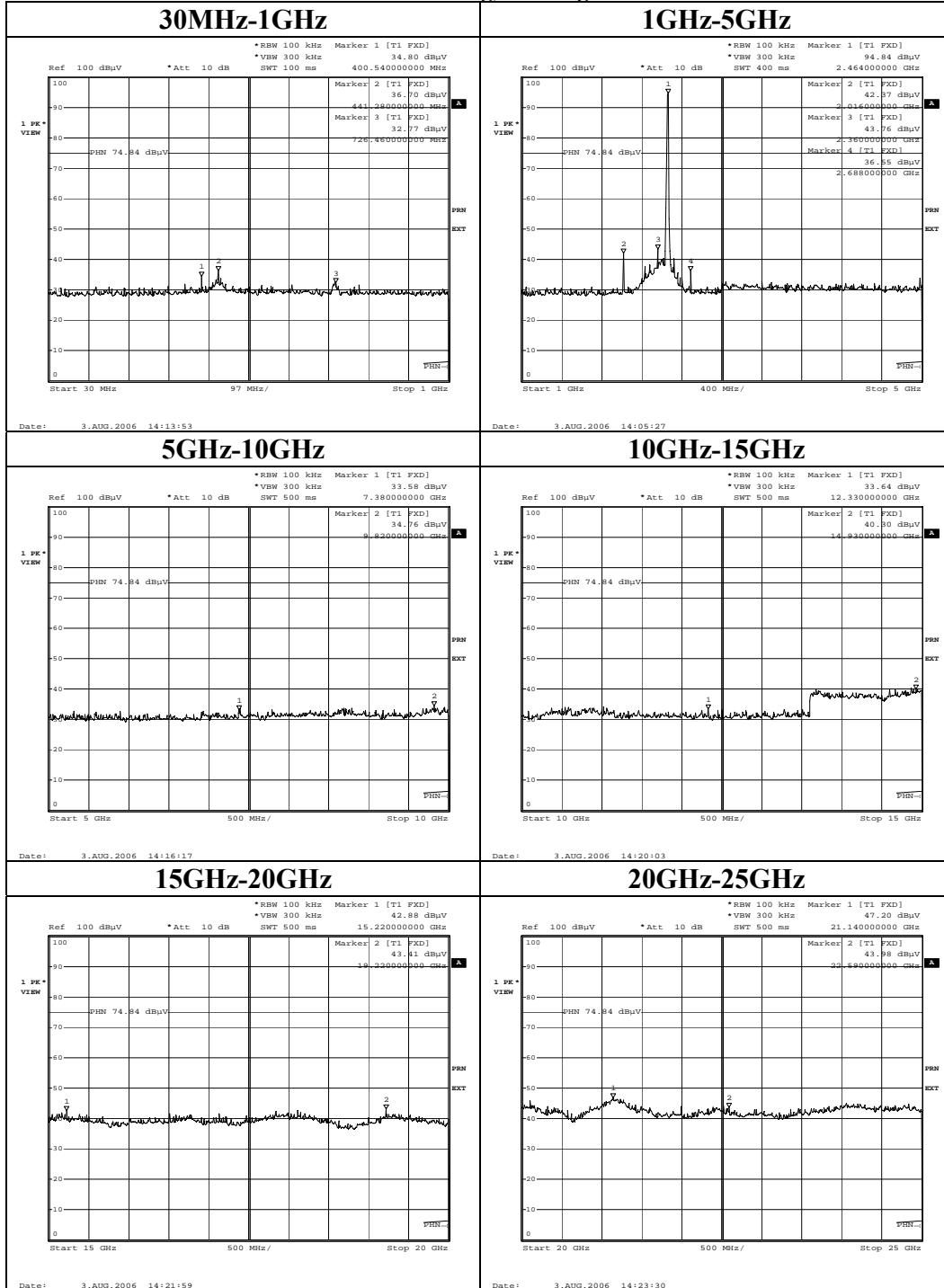
Conducted Spurious Emission

IEEE802.11g, Ch: Mid



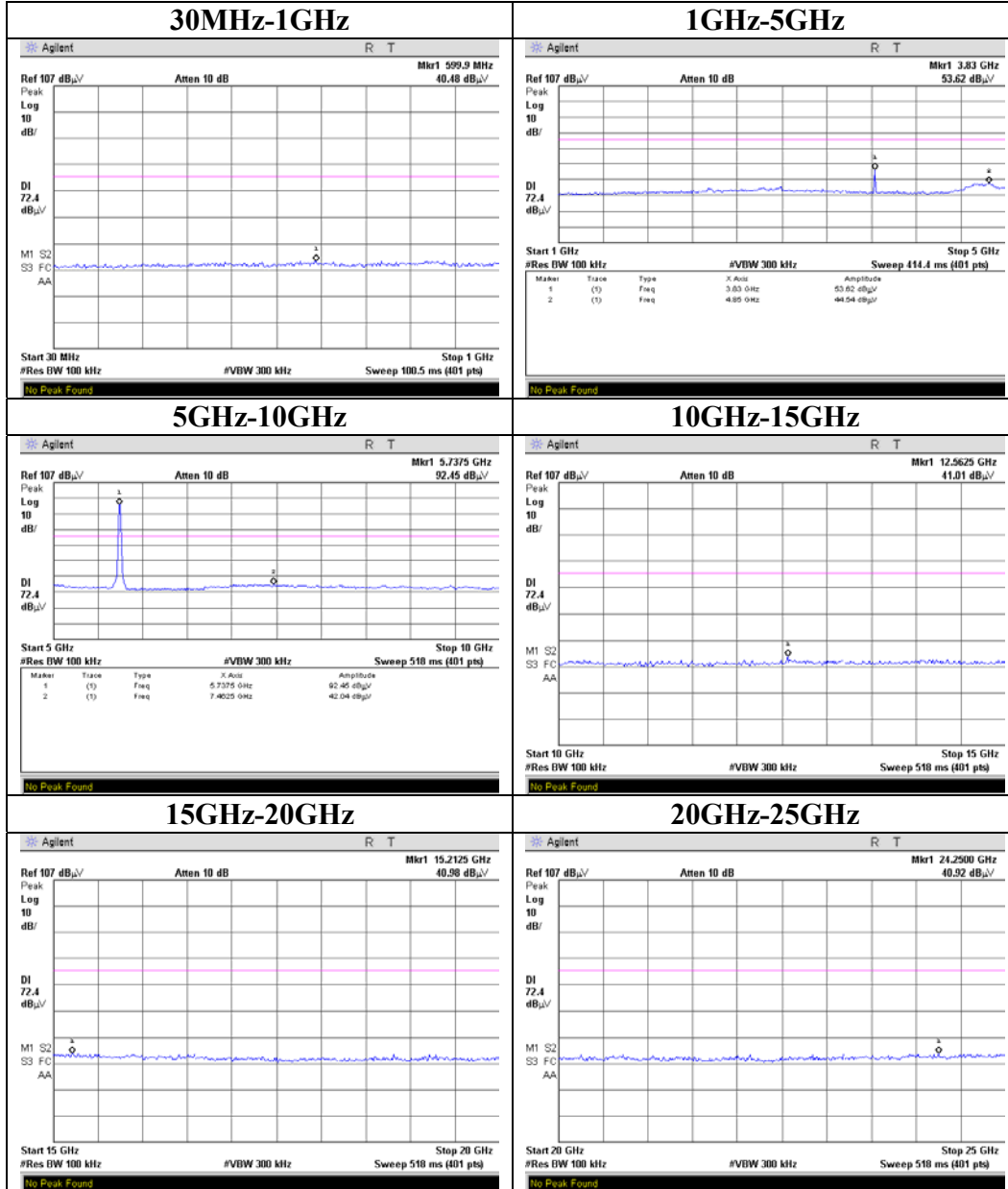
Conducted Spurious Emission

IEEE802.11g, Ch: High



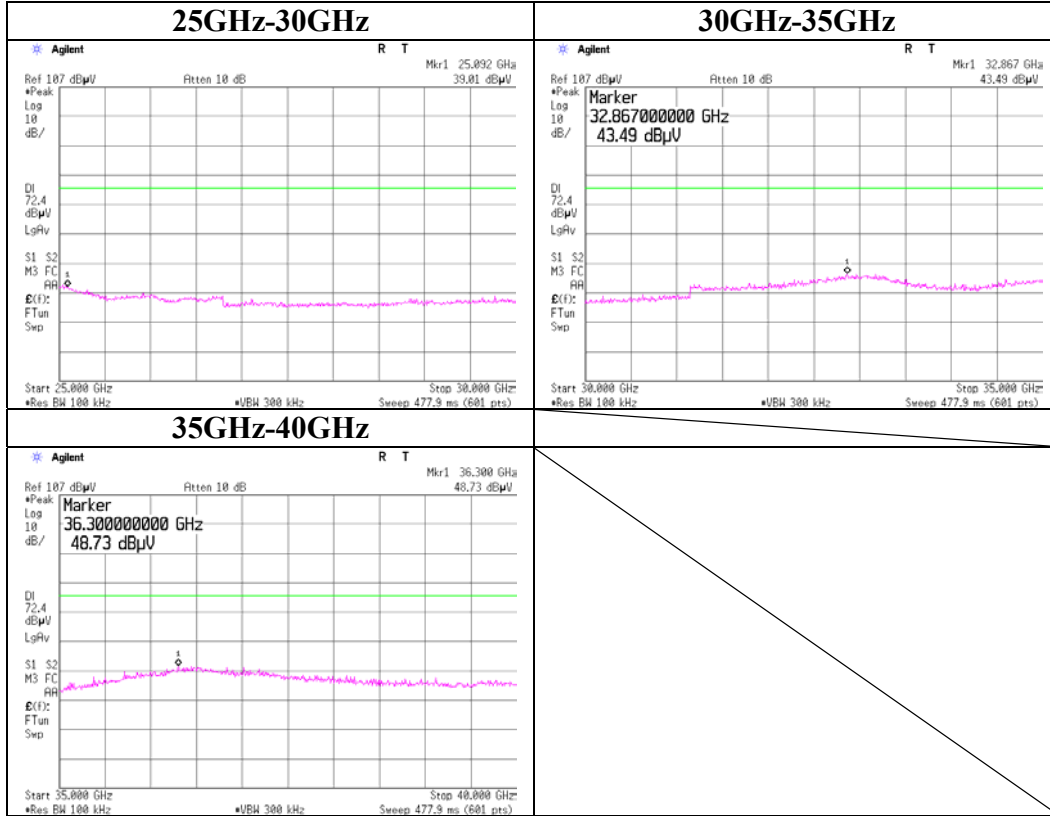
Conducted Spurious Emission

IEEE802.11a, Ch: Low



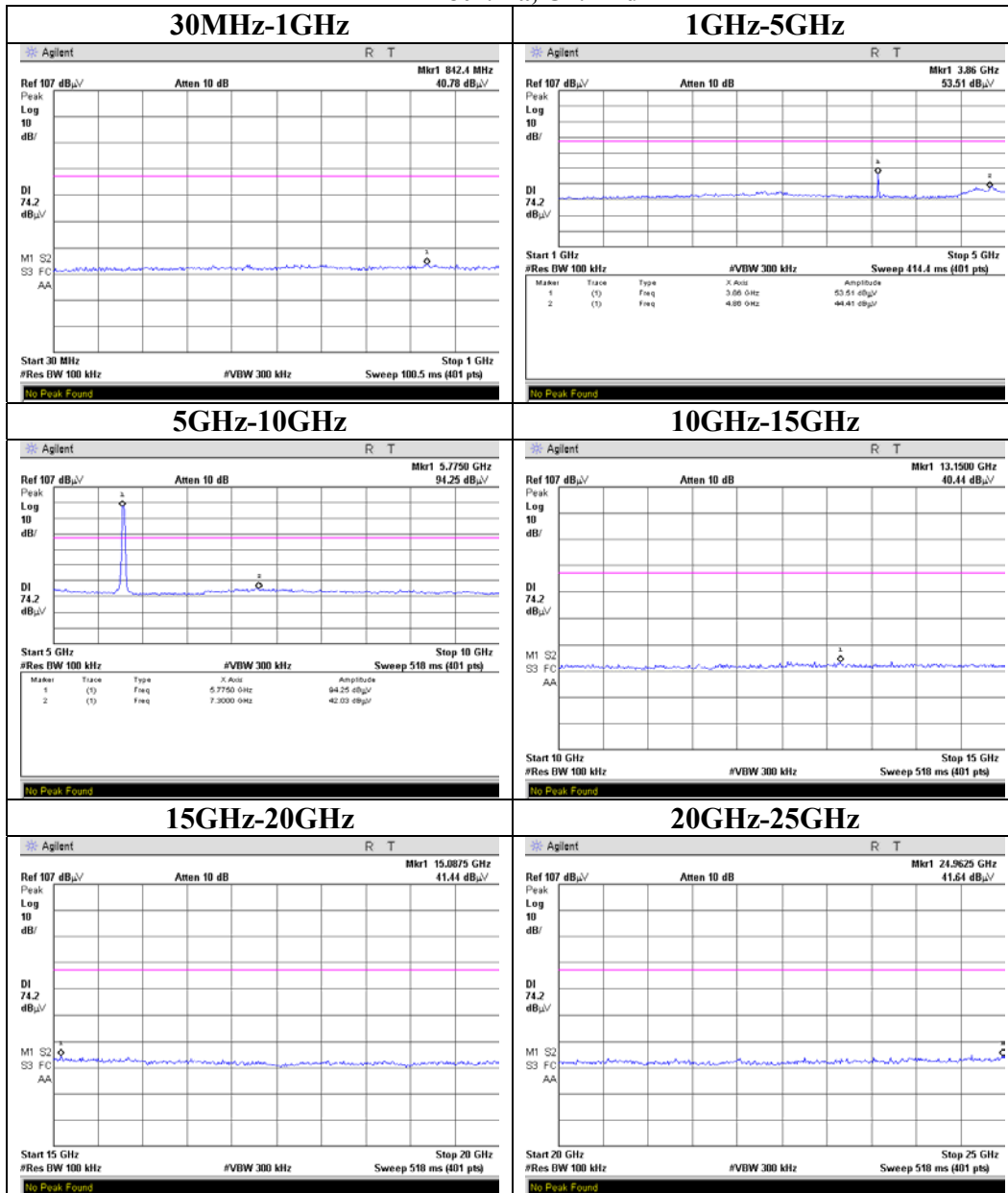
Conducted Spurious Emission

IEEE802.11a, Ch: Low



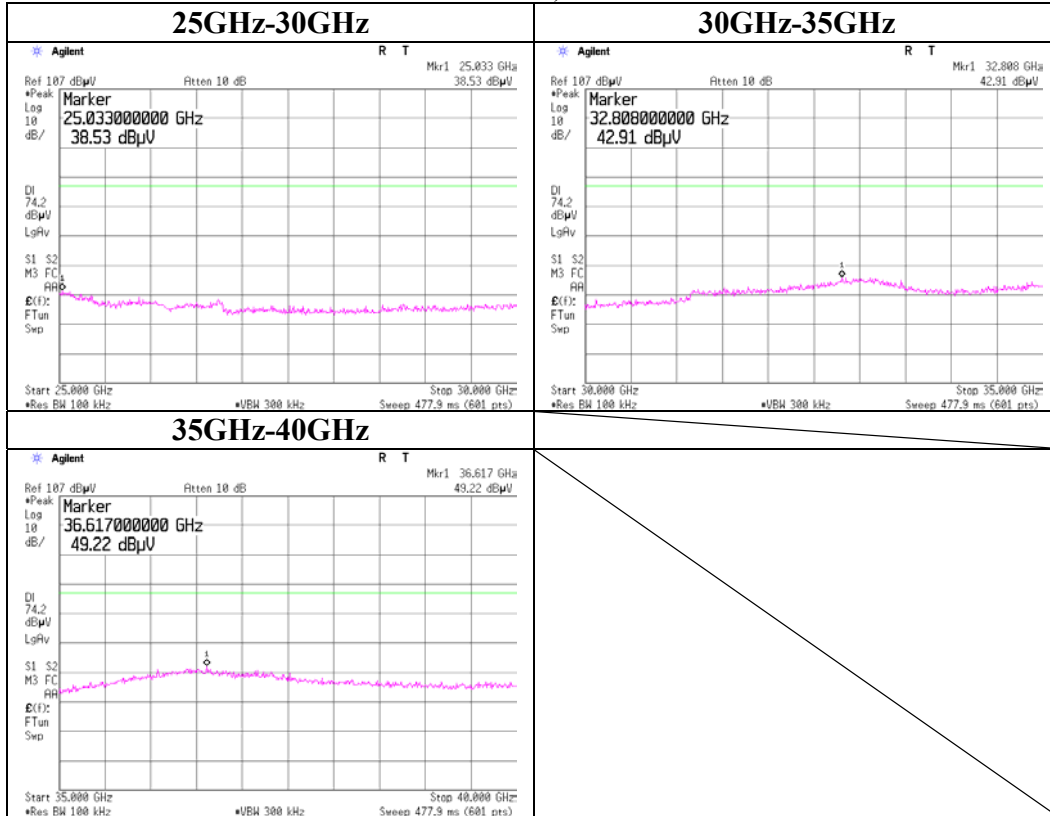
Conducted Spurious Emission

IEEE802.11a, Ch: Mid



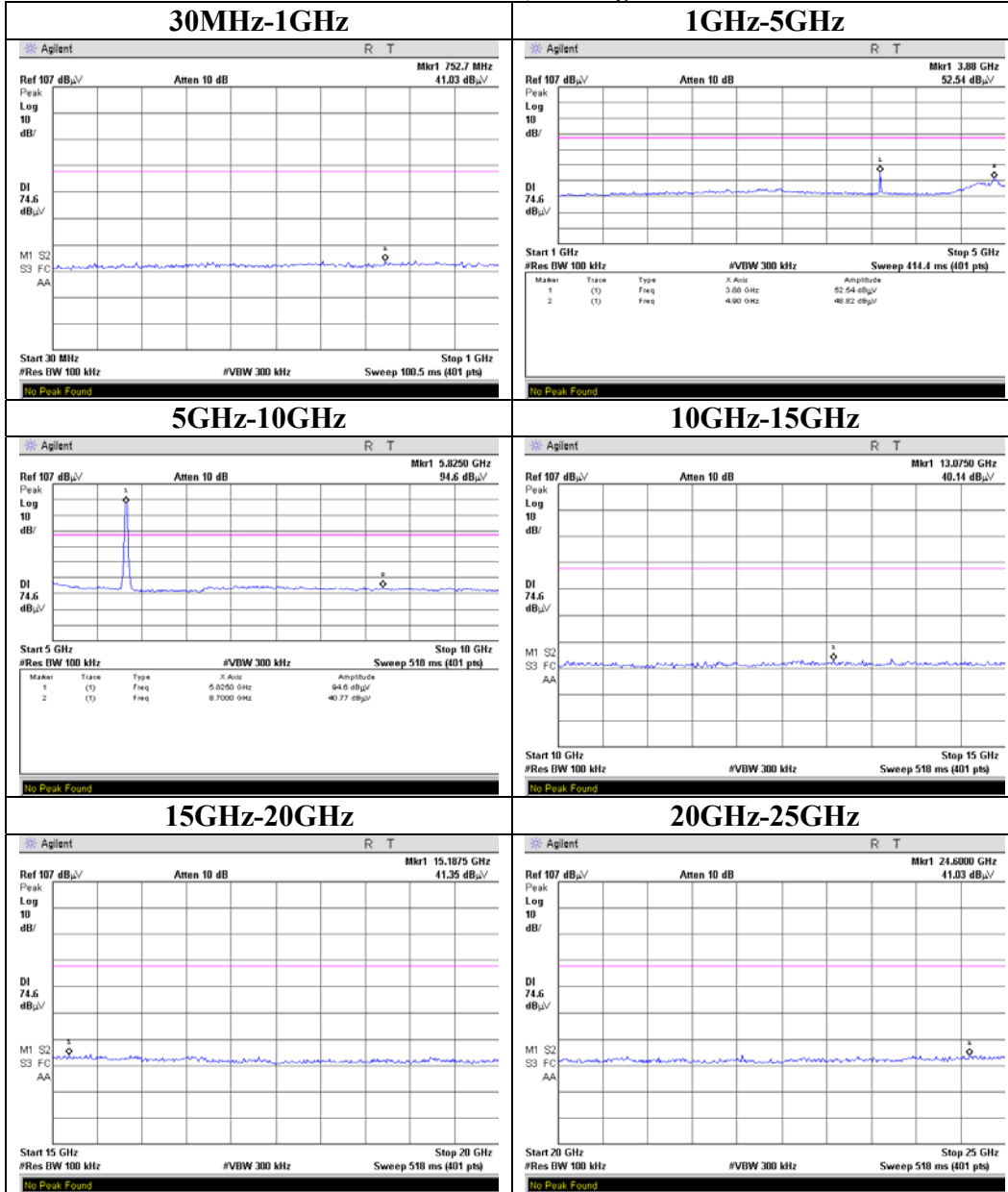
Conducted Spurious Emission

IEEE802.11a, Ch: Mid



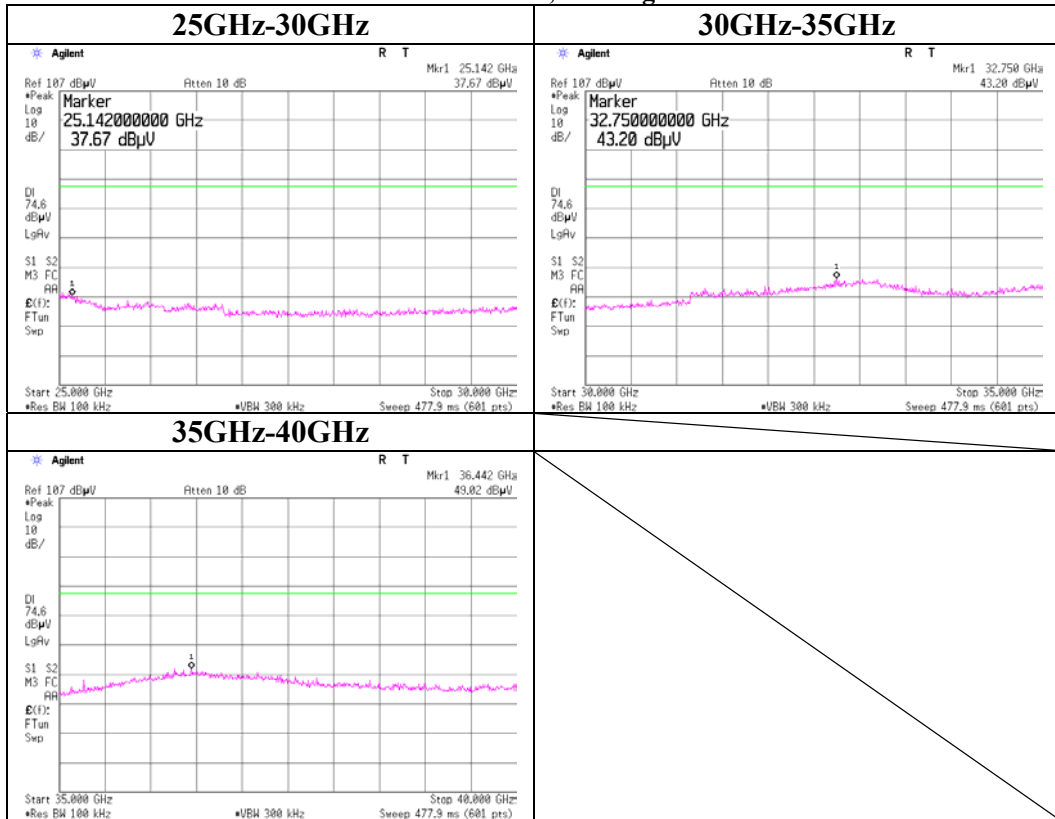
Conducted Spurious Emission

IEEE802.11a, Ch: High



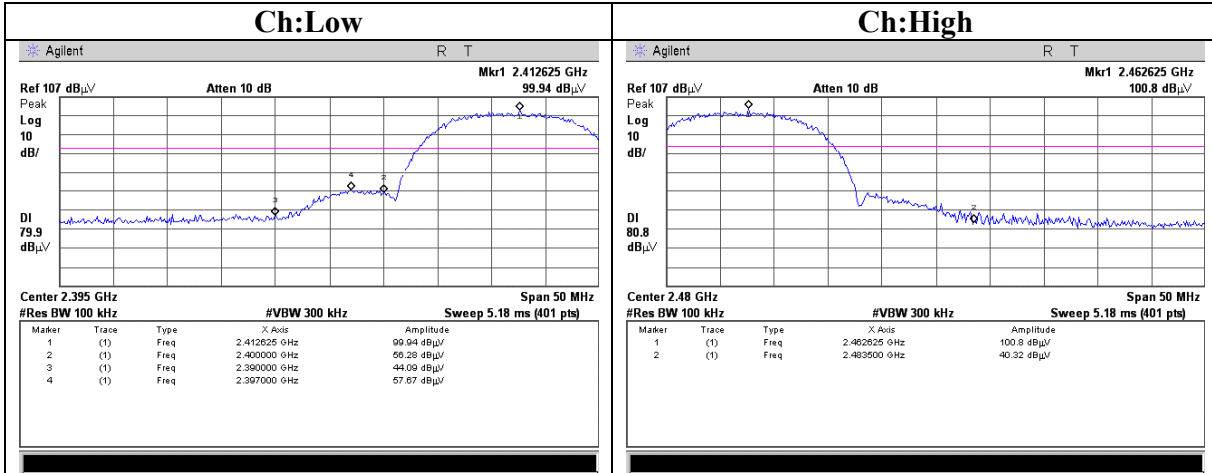
Conducted Spurious Emission

IEEE802.11a, Ch: High



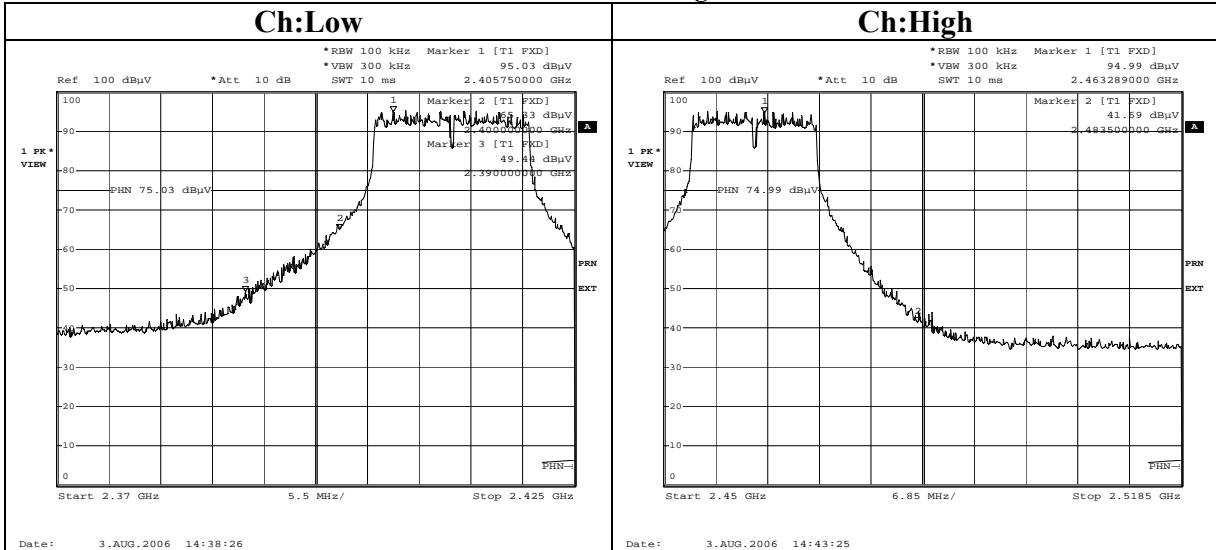
Conducted emission Band Edge compliance

IEEE802.11b

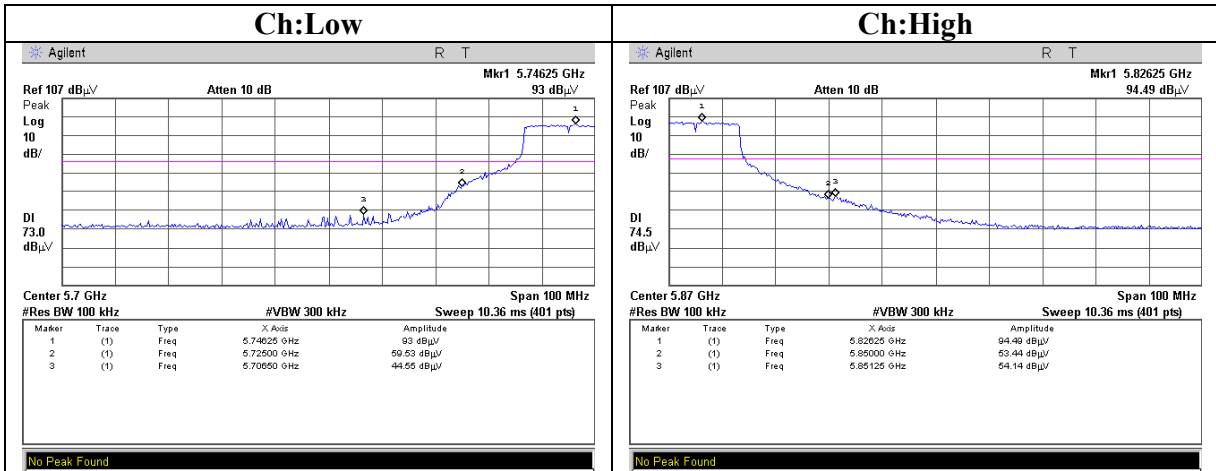


Conducted emission Band Edge compliance

IEEE802.11g



IEEE802.11a



Power Density

UL Apex Co., Ltd.
Head Office EMC Lab. No.7 Shielded Room

Company	: FURUNO SYSTEMS Co., Ltd.	REPORT NO	: 26GE0203-HO
Equipment	: WLAN Module	REGULATION	: FCC Part15 Subpart C 15.247(e)
Model	: SS21M	TEST DISTANCE	: -
Sample No.	: C0695230007DC01	DATE	: 08/03/2006 03/08/2007
Power	: DC 3.3V	TEMPERATURE	: 25°C 24°C
Mode	: Tx	HUMIDITY	: 54% 31%
		ENGINEER	: Shinya Watanabe

[IEEE802.11b] 11Mbps (Worst) 08/03/2006

Ch	Freq. [MHz]	Reading [dBm]	Cable [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2412.7	-22.57	2.36	9.91	-10.3	8.0	18.3
Mid	2437.7	-21.88	2.41	9.91	-9.6	8.0	17.6
High	2462.4	-22.03	2.51	9.91	-9.6	8.0	17.6

Sample Calculation:

Result = Reading + Cable Loss (supplied by customer) + Attenuator

[IEEE802.11g] 54Mbps (Worst) 08/03/2006

Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2412.4	-25.03	2.36	9.91	-12.8	8.0	20.8
Mid	2437.6	-24.80	2.41	9.91	-12.5	8.0	20.5
High	2461.4	-25.32	2.51	9.91	-12.9	8.0	20.9

Sample Calculation:

Result = Reading + Cable Loss (supplied by customer)+ Attenuator

[IEEE802.11a] 24Mbps (Worst) 03/08/2007

Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	5745.0	-25.43	2.90	9.89	-12.6	8.0	20.6
Mid	5785.0	-25.15	2.92	9.89	-12.3	8.0	20.3
High	5825.0	-24.60	2.93	9.90	-11.8	8.0	19.8

Sample Calculation:

Result = Reading + Cable Loss (supplied by customer)+ Attenuator

UL Apex Co., Ltd.

Head Office EMC Lab.

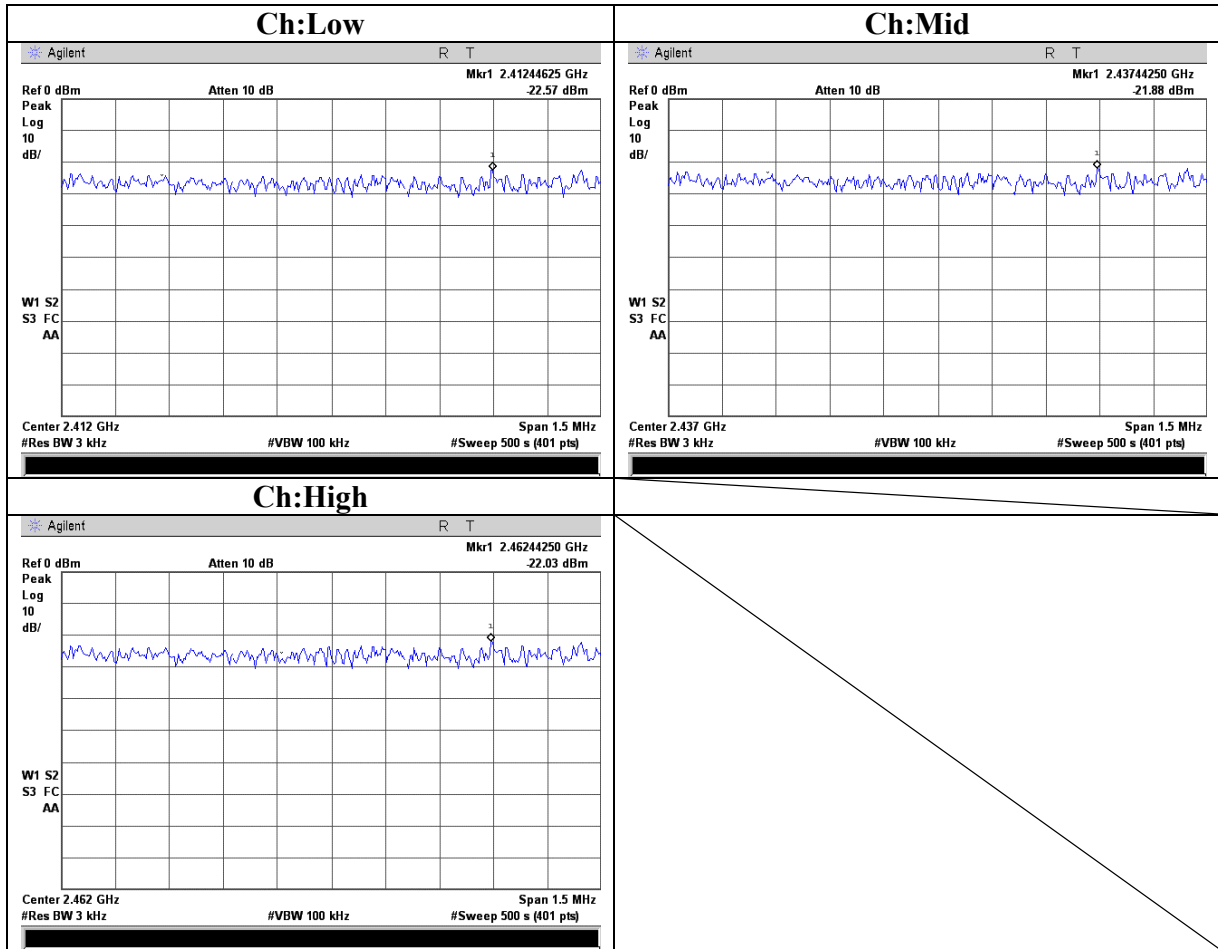
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

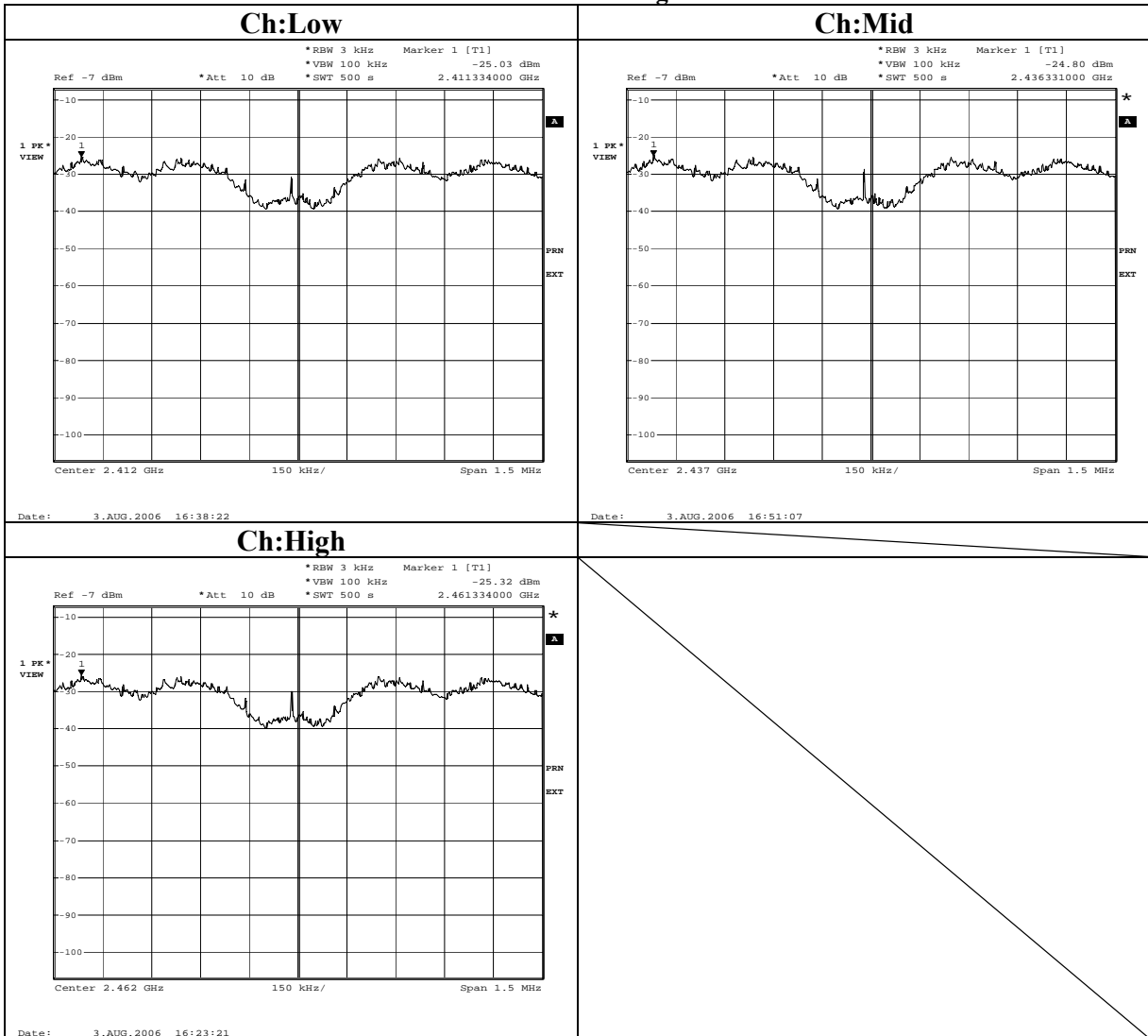
MF060b(19.04.06)

Power Density
IEEE802.11b



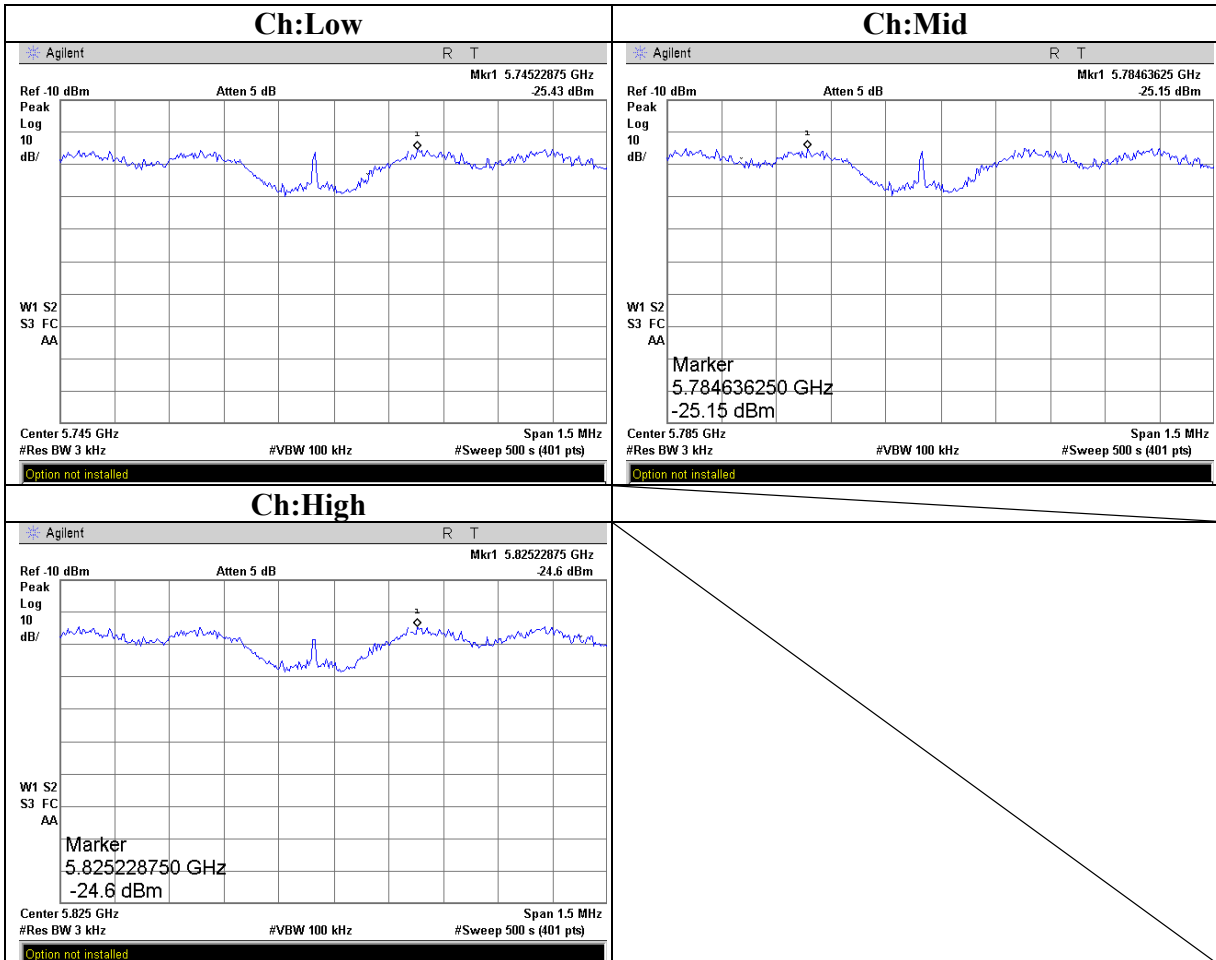
Power Density

IEEE802.11g



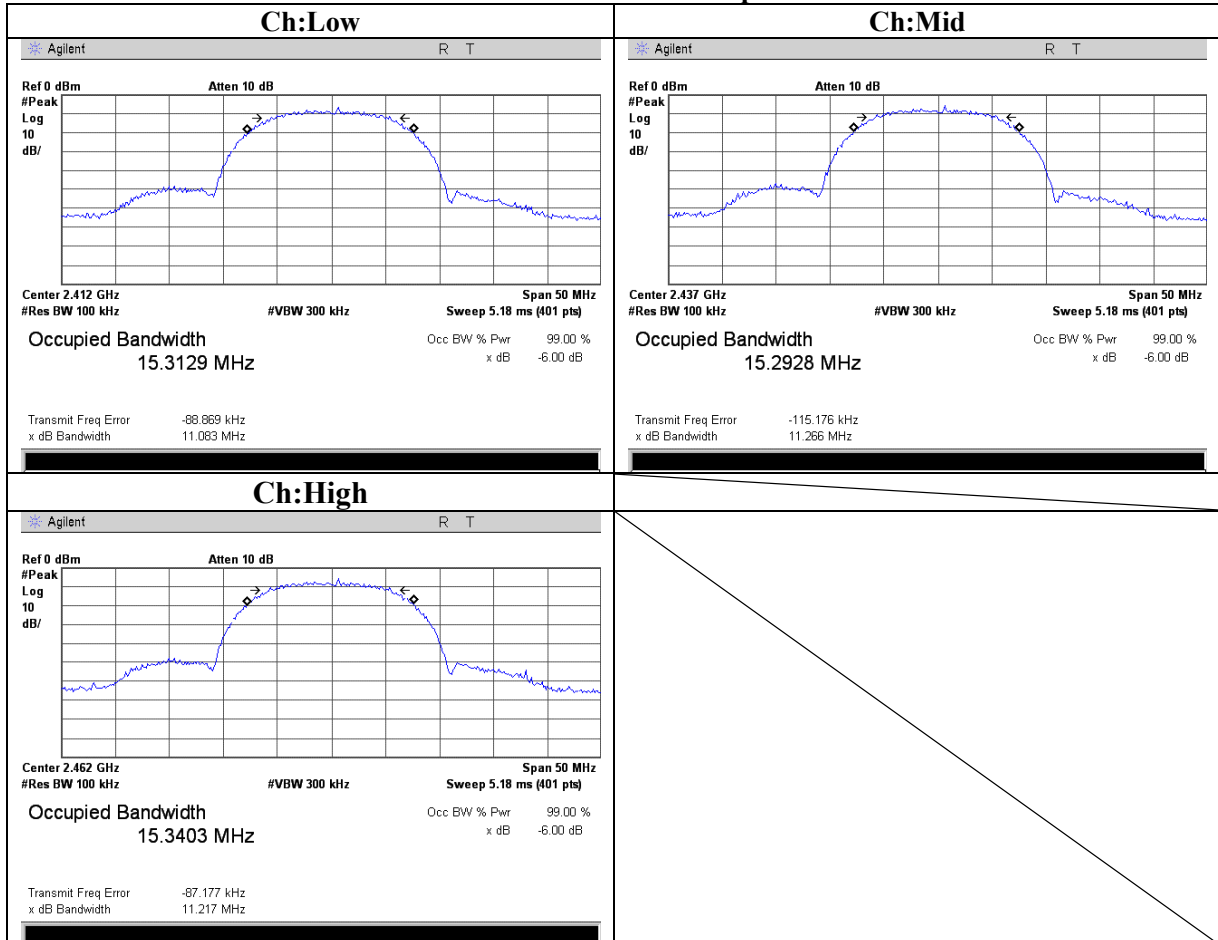
Power Density

IEEE802.11a



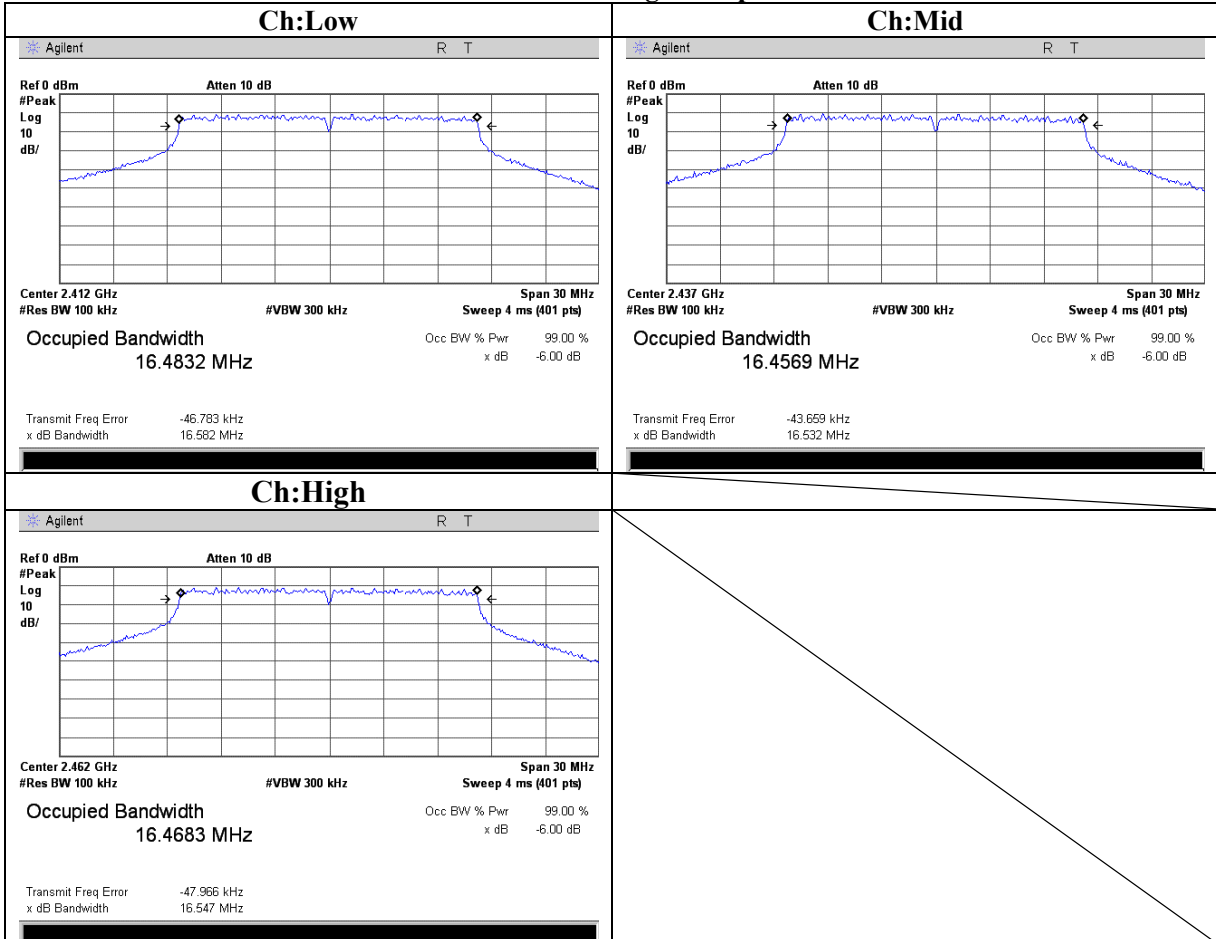
99% Occupied Bandwidth

IEEE802.11b 11Mbps



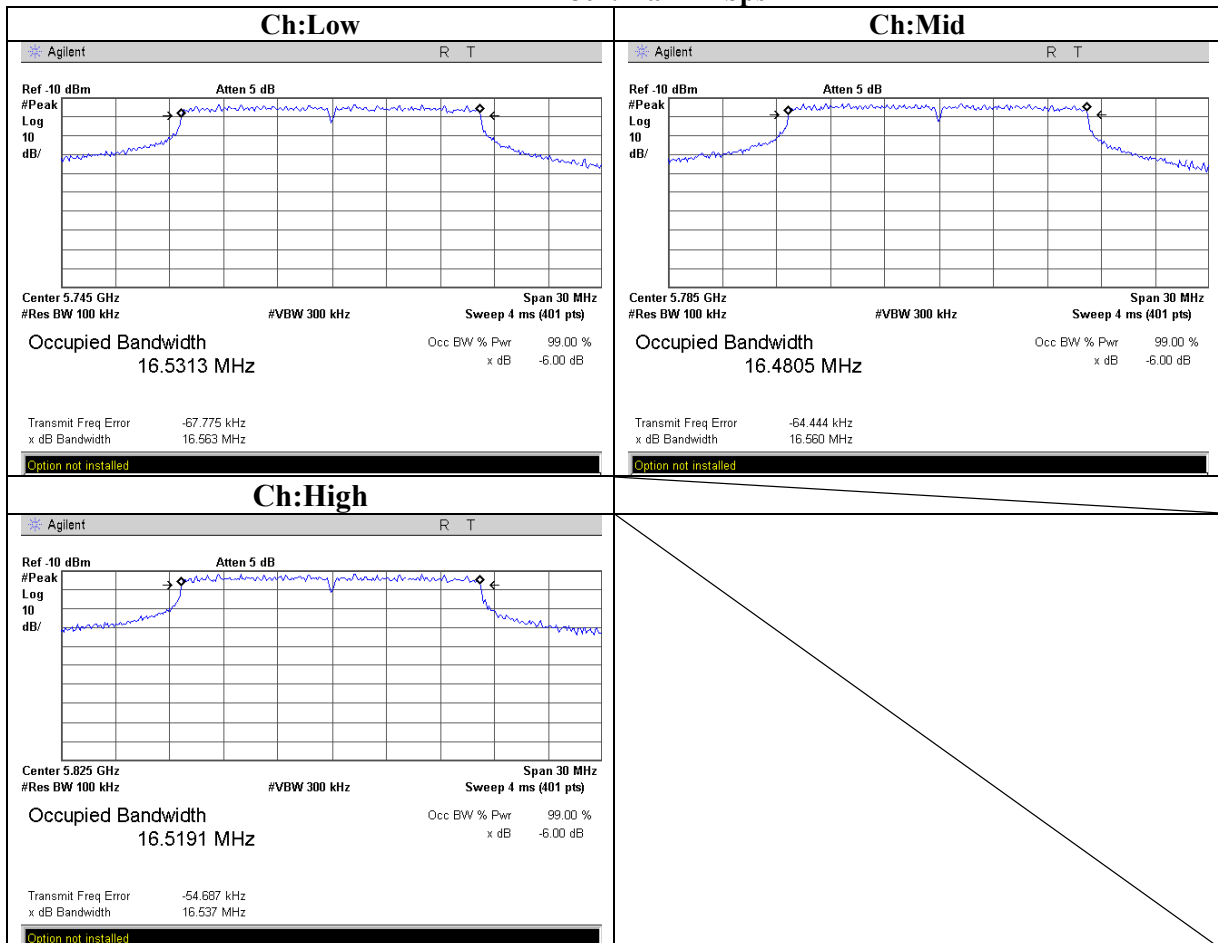
99%Occupied Bandwidth

IEEE802.11g 54Mbps



99%Occupied Bandwidth

IEEE802.11a 24Mbps



APPENDIX 3:Test instruments

EMI test equipment (1/2)

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE	2006/04/10 * 12
MSA-04	Spectrum Analyzer	Agilent	E4448A	RE/AT	2006/06/02 * 12
MCC-47	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	RE	2006/08/29 * 12
MCC-16	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	RE	2007/02/22 * 12
MPA-10	Pre Amplifier	Agilent	8449B	RE	2006/09/11 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2007/01/30 * 12
MHF-09	High Pass Filter 7-30GHz	TOKIMEC	TF37NCCA	RE	2006/06/21 * 12
MCC-27	Microwave Cable 1G-40GHz	Suhner	SUCOFLEX101	RE	2006/08/30 * 12
MCC-28	Microwave Cable 1G-40GHz	Suhner	SUCOFLEX101	RE	2006/08/30 * 12
MHA-02	Horn Antenna	EMCO	3160-09	RE	2007/01/30 * 12
MHA-03	Horn Antenna 26.5-40GHz	EMCO	3160-10	RE	2007/01/30 * 12
MPA-03	Microwave System Power Amplifier	Agilent	83050A	RE	2006/05/16 * 12
MSTW-14	EMI measurement program	TSJ	TEPTO-DV	RE/CE	-
MOS-02	Digital Humidity Indicator	N.T	NT-1800	RE	2006/11/27 * 12
MJM-05	Measure	PROMART	SEN1955	RE	-
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	RE	2006/10/07 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2006/10/07 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	RE	2007/02/27 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	RE	2006/12/27 * 12
MPA-09	Pre Amplifier	Agilent	8447D	RE	2006/09/07 * 12
MSA-05	Spectrum Analyzer	Advantest	R3273	RE	2006/05/20 * 12
MTR-03	Test Receiver	Rohde & Schwarz	ESCI	RE	2007/03/01 * 12
MSA-09	Spectrum Analyzer	Advantest	R3273	RE	2006/12/08 * 12
MHF-06	High Pass Filter 3.5-24GHz	Tokimec	TF323DCA	RE	2006/05/20 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	RE	2006/09/13 * 12
MSA-06	Spectrum Analyzer	Agilent	E4407B	AT	2006/05/24 * 12
MCC-26	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	AT	2006/08/29 * 12
MCC-37	Microwave Cable	Hirose Electric	U.FL-2LP-066-A-(200)	AT	2006/11/13 * 12
MAT-23	Attenuator(10dB) DC-18GHz	Orient Microwave	BX10-0476-00	AT	2007/03/07 * 12
MPM-09	Power Meter	Anritsu	ML2495A	AT	2006/09/20 * 12
MPSE-12	Power sensor	Anritsu	MA2411B	AT	2006/09/20 * 12
MOS-04	Digital Humidity Indicator	N.T	NT-1800	AT	2006/11/27 * 12
MBTR10	Spectrum Analyzer	Rohde & Schwarz	FSP30	AT	2005/11/01 * 12

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(19.04.06)

EMI test equipment (2/2)

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-03	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	CE	2007/03/05 * 12
MSA-09	Spectrum Analyzer	Advantest	R3273	CE	2006/12/08 * 12
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	CE	2007/02/03 * 12
MCC-51	Coaxial cable	UL Apex	-	CE	2007/03/05 * 12
MLS-07	LISN(AMN)	Schwarzbeck	NSLK8127	CE (EUT)	2007/02/22 * 12
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	CE (AE)	2007/02/22 * 12
MTA-06	Terminator	MCL	BTRM-50	CE	2007/02/01 * 12
MOS-12	Thermo-Hygrometer	Custom	CTH-180	CE	2006/01/19 * 24
MJM-06	Measure	PROMART	SEN1955	CE	-

The expiration date of the calibration is the end of the expired month.

All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

Test Item:

CE: Conducted Emissions

RE: Radiated Emissions

AT: Antenna Terminal Conducted test

* Some calibrations were performed after the tested dates, however those EMI test equipment have been controlled by means of unbroken chains of calibrations.

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(19.04.06)