

**APPENDIX 2: Data of EMI test**

**Conducted Emission**

**Dual Band Diversity Antenna, 11a, Tx 5180MHz, 54Mbps, Ant:A, High power**

**DATA OF CONDUCTED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber  
Date : 2007/02/01

Company	: OMRON Corporation	Report No.	: 27DE0139-HO
Kind of EUT	: FA Wireless LAN Unit	Power	: AC 120V / 60Hz (DC power supply in)
Model No.	: WE70-AP	Temp./Humi.	: 25deg. C / 30%
Serial No.	: 279651000201	Operator	: Kenichi Adachi

Mode / Remarks: 11a, Tx5180MHz, 54Mbps, L Angle Ant., Ant:A,

LIMIT : FCC15.207 QP  
FCC15.207 AV

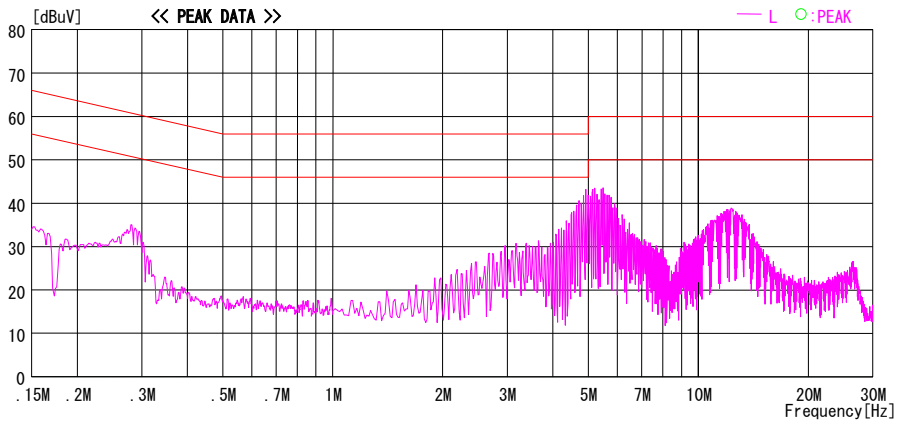
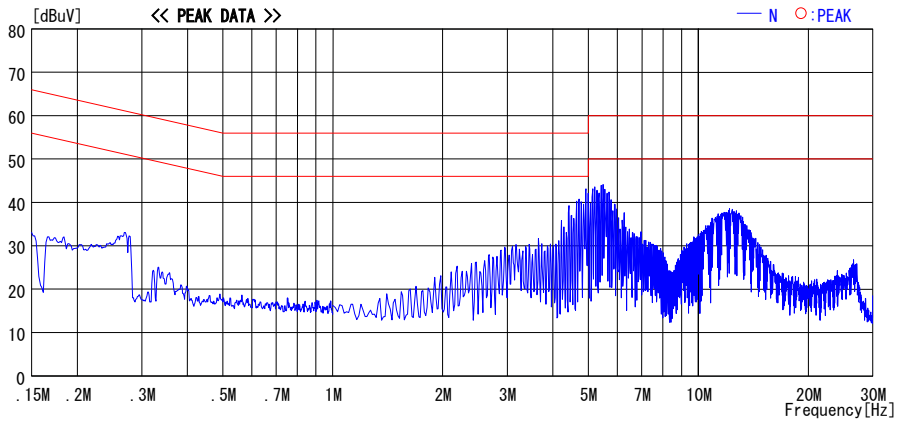


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION: RESULT=READING+C.F (LISN LOSS+CABLE LO  
Except for the above table : adequate margin data below the limits.

**Conducted Emission**  
**Dual Band Diversity Antenna, 11a, Tx 5260MHz, 54Mbps, Ant:A, High power**  
**DATA OF CONDUCTED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber  
 Date : 2007/02/01

Company	: OMRON Corporation	Report No.	: 27DE0139-HO
Kind of EUT	: FA Wireless LAN Unit	Power	: AC 120V / 60Hz (DC power supply in)
Model No.	: WE70-AP	Temp./Humi.	: 25deg.C / 30%
Serial No.	: 279651000201	Operator	: Kenichi Adachi

Mode / Remarks: 11a, Tx5260MHz, 54Mbps, L Angle Ant., Ant:A,

LIMIT : FCC15.207 QP  
FCC15.207 AV

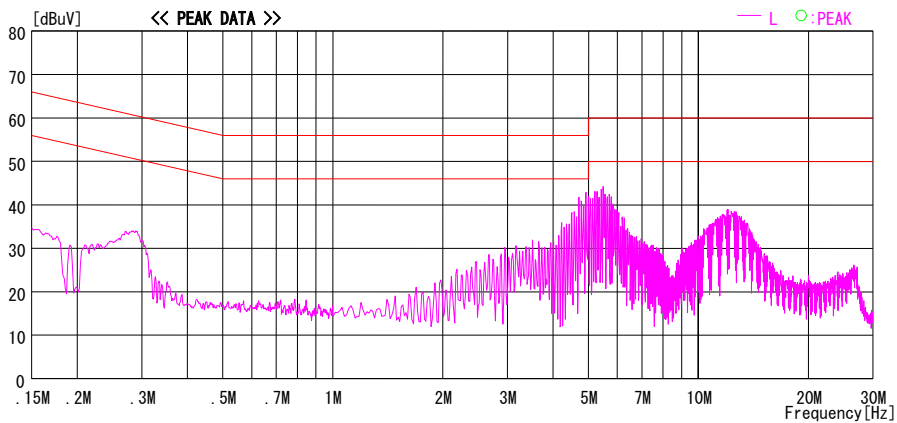
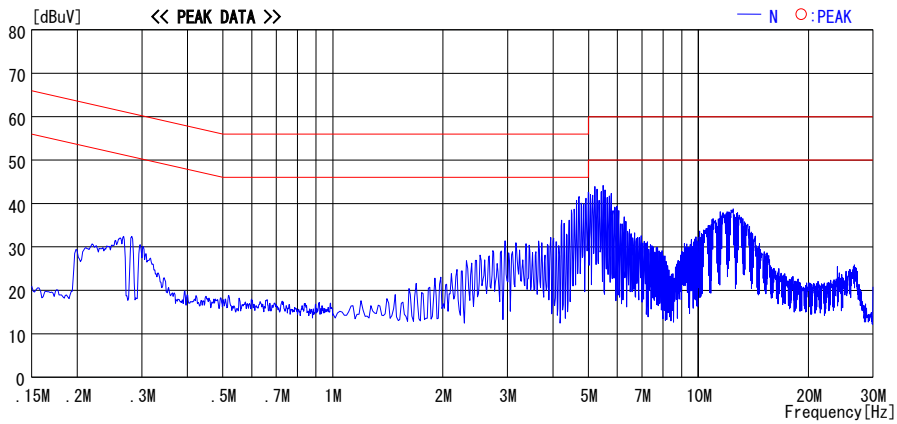


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION: RESULT=READING+C.F(LISN LOSS+CABLE LO  
 Except for the above table : adequate margin data below the limits.

**Conducted Emission**  
**Dual Band Diversity Antenna, 11a, Tx 5320MHz, 54Mbps, Ant:A, High power**  
**DATA OF CONDUCTED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Date : 2007/02/01

Company	: OMRON Corporation	Report No.	: 27DE0139-HO
Kind of EUT	: FA Wireless LAN Unit	Power	: AC 120V / 60Hz (DC power supply in)
Model No.	: WE70-AP	Temp./Humi.	: 25deg.C / 30%
Serial No.	: 279651000201	Operator	: Kenichi Adachi

Mode / Remarks: 11a, Tx5320MHz, 54Mbps, L Angle Ant., Ant:A,

LIMIT : FCC15.207 QP  
FCC15.207 AV

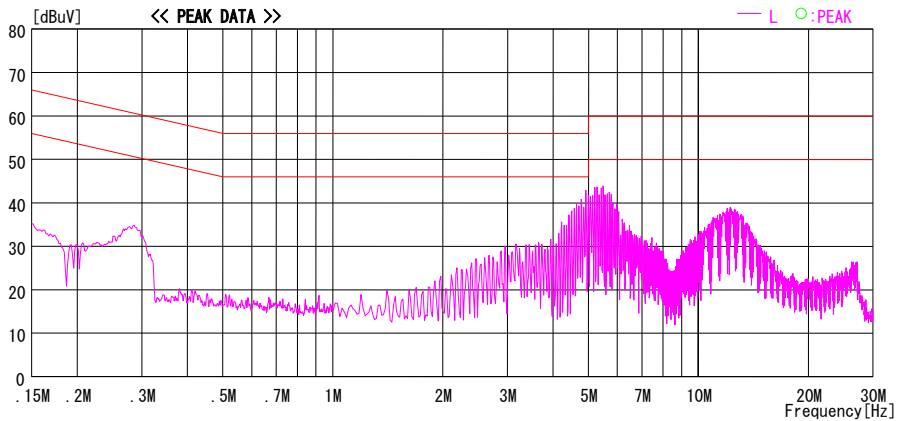
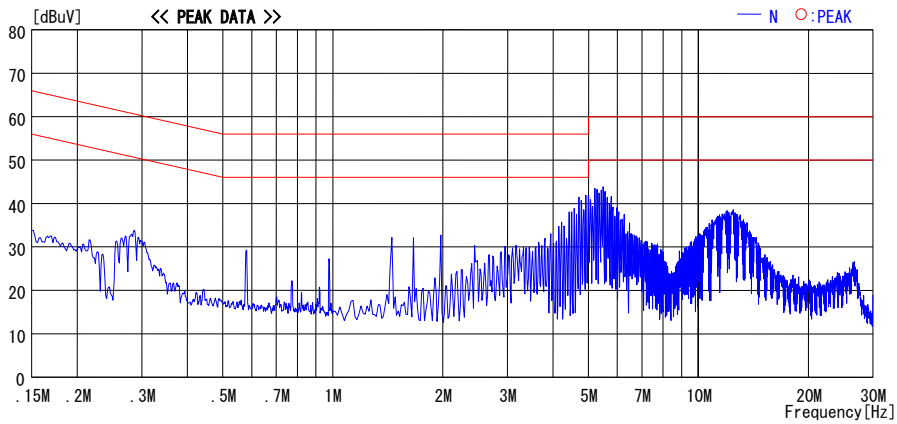


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F(LISSN LOSS+CABLE LO  
Except for the above table : adequate margin data below the limits.

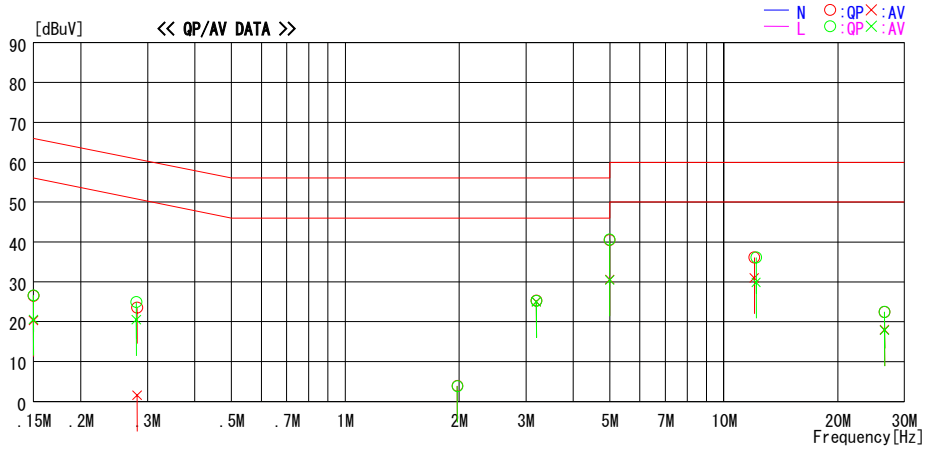
**Conducted Emission**  
**Dual Band Diversity Antenna, 11a, Tx 5320MHz, 54Mbps, Ant:A, High power**  
**DATA OF CONDUCTED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Date : 2007/02/01

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-HO  
Power : AC 120V / 60Hz (DC power supply in)  
Temp./Humi. : 25deg.C / 30%  
Operator : Kenichi Adachi

Mode / Remarks : 11a, Tx5320MHz, 54Mbps, L Angle Ant., Ant:A

LIMIT : FCC15.207 QP  
FCC15.207 AV



Frequency [MHz]	Reading Level		Corr. Factor	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15000	26.3	20.1	0.2	26.5	20.3	66.0	56.0	39.5	35.7	N	
0.28157	23.3	1.3	0.3	23.6	1.6	60.8	50.8	37.2	49.2	N	
1.97676	3.4	---	0.5	3.9	---	56.0	---	52.1	---	N	
3.19912	24.6	24.3	0.7	25.3	25.0	56.0	46.0	30.7	21.0	N	
4.99564	39.5	29.6	1.0	40.5	30.6	56.0	46.0	15.5	15.4	N	
12.04512	34.6	29.5	1.5	36.1	31.0	60.0	50.0	23.9	19.0	N	
0.15000	26.4	20.4	0.2	26.6	20.6	66.0	56.0	39.4	35.4	L	
0.28015	24.6	20.2	0.3	24.9	20.5	60.8	50.8	35.9	30.3	L	
1.97676	3.3	---	0.5	3.8	---	56.0	---	52.2	---	L	
3.19928	24.5	24.3	0.7	25.2	25.0	56.0	46.0	30.8	21.0	L	
4.99547	39.6	29.5	1.0	40.6	30.5	56.0	46.0	15.4	15.5	L	
12.17684	34.6	28.4	1.5	36.1	29.9	60.0	50.0	23.9	20.1	L	
26.59842	20.0	15.6	2.4	22.4	18.0	60.0	50.0	37.6	32.0	N	
26.59842	20.1	15.5	2.4	22.5	17.9	60.0	50.0	37.5	32.1	L	

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

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

**Conducted Emission**  
**Dual Band Diversity Antenna, 11a, Tx 5500MHz, 54Mbps, Ant:A, High power**  
**DATA OF CONDUCTED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Date : 2007/02/01

Company	: OMRON Corporation	Report No.	: 27DE0139-HO
Kind of EUT	: FA Wireless LAN Unit	Power	: AC 120V / 60Hz (DC power supply in)
Model No.	: WE70-AP	Temp./Humi.	: 25deg.C / 30%
Serial No.	: 279651000201	Operator	: Kenichi Adachi

Mode / Remarks: 11a, Tx5500MHz, 54Mbps, L Angle Ant., Ant:A,

LIMIT : FCC15.207 QP  
FCC15.207 AV

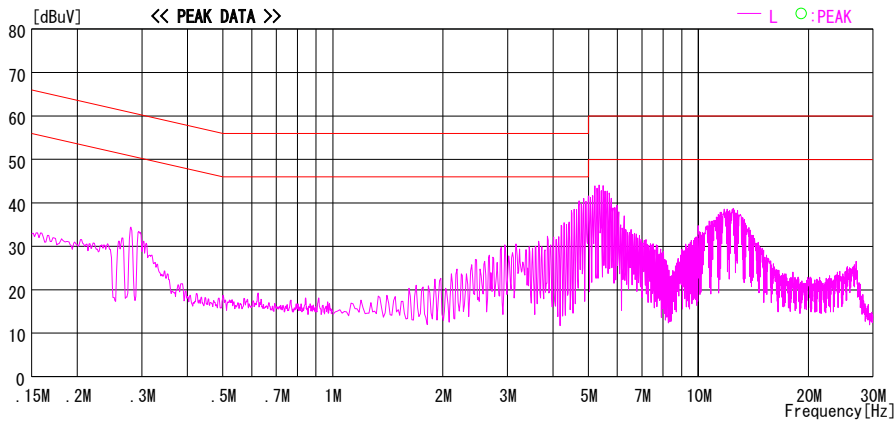
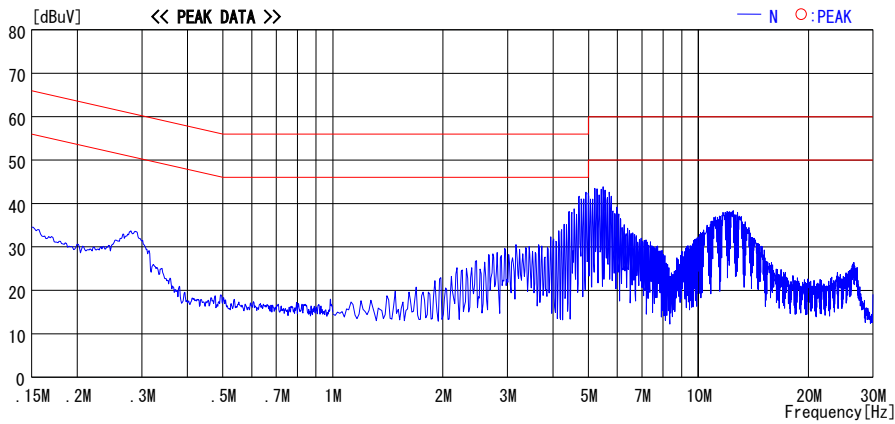


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION: RESULT=READING+C.F(LISN LOSS+CABLE LO  
Except for the above table : adequate margin data below the limits.

### Conducted Emission

Dual Band Diversity Antenna, 11a, Tx 5600MHz, 54Mbps, Ant:A, High power

#### DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber  
Date : 2007/02/01

Company	: OMRON Corporation	Report No.	: 27DE0139-HO
Kind of EUT	: FA Wireless LAN Unit	Power	: AC 120V / 60Hz (DC power supply in)
Model No.	: WE70-AP	Temp./Humi.	: 25deg. C / 30%
Serial No.	: 279651000201	Operator	: Kenichi Adachi

Mode / Remarks: 11a, Tx5600MHz, 54Mbps, L Angle Ant., Ant:A,

LIMIT : FCC15.207 QP  
FCC15.207 AV

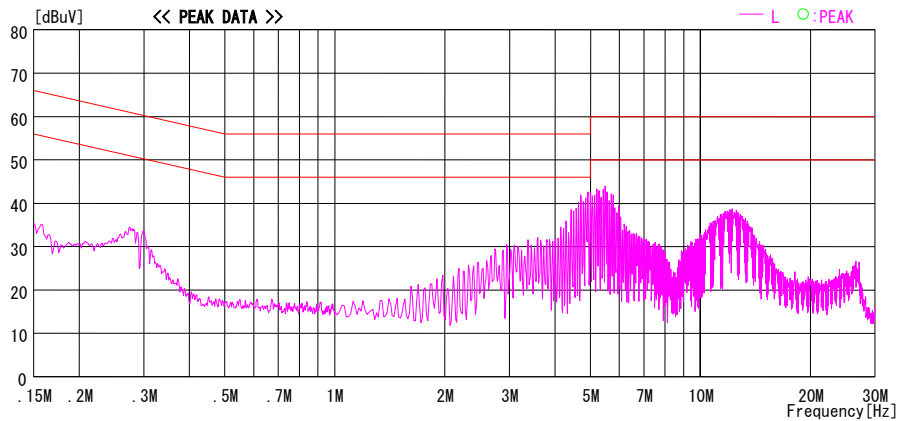
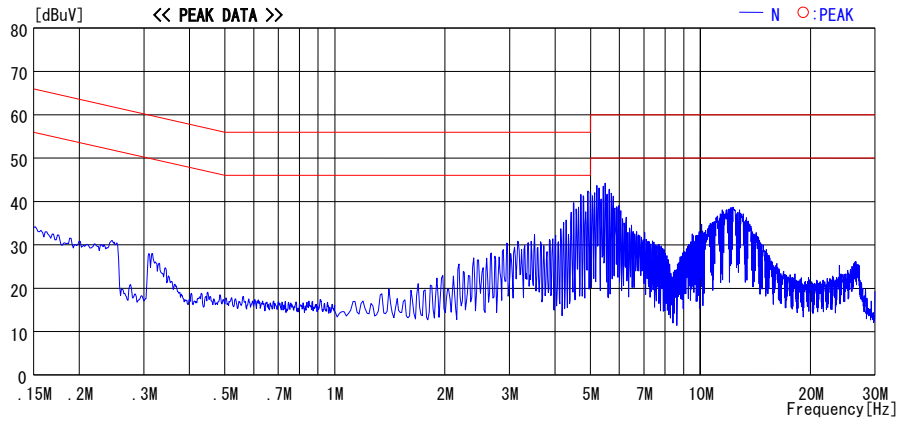


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F (LISN LOSS+CABLE)  
Except for the above table : adequate margin data below the

### Conducted Emission

Dual Band Diversity Antenna, 11a, Tx 5700MHz, 54Mbps, Ant:A, High power

#### DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Date : 2007/02/01

Company	: OMRON Corporation	Report No.	: 27DE0139-HO
Kind of EUT	: FA Wireless LAN Unit	Power	: AC 120V / 60Hz (DC power supply in)
Model No.	: WE70-AP	Temp./Humi.	: 25deg.C / 30%
Serial No.	: 279651000201	Operator	: Kenichi Adachi

Mode / Remarks: 11a, Tx5700MHz, 54Mbps, L Angle Ant., Ant:A,

LIMIT : FCC15.207 QP  
FCC15.207 AV

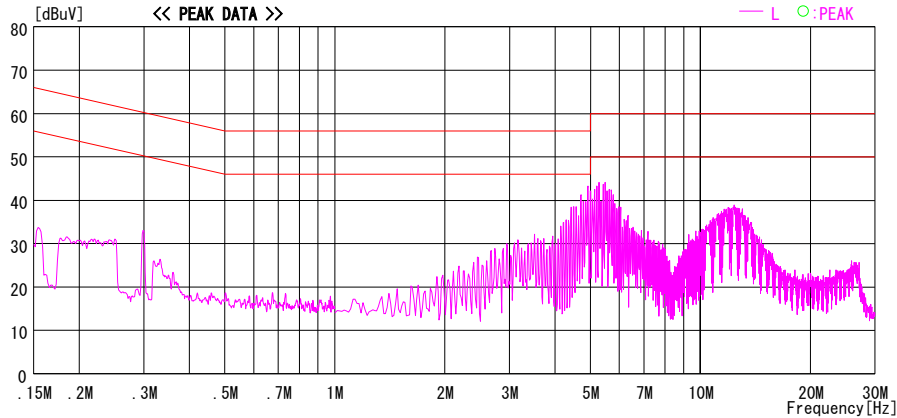
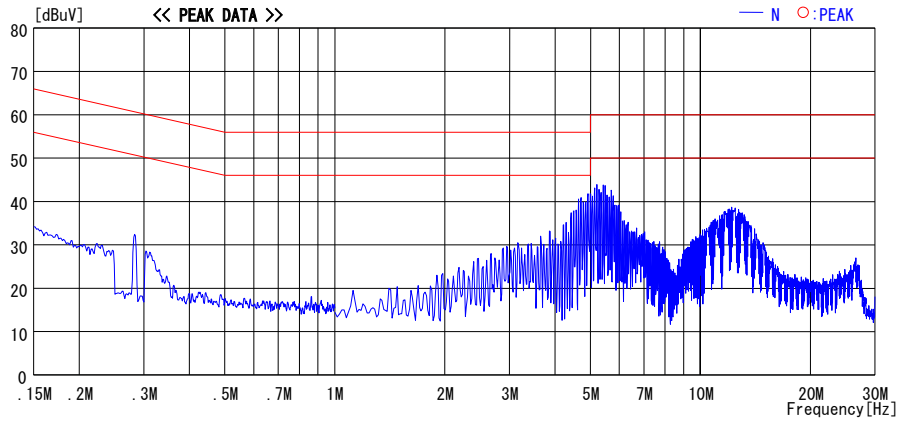


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F (LISN LOSS+CABLE  
Except for the above table : adequate margin data below the

### Conducted Emission

Dual Band Diversity Antenna, 11a, Tx 5700MHz, 54Mbps, Ant:A, High power

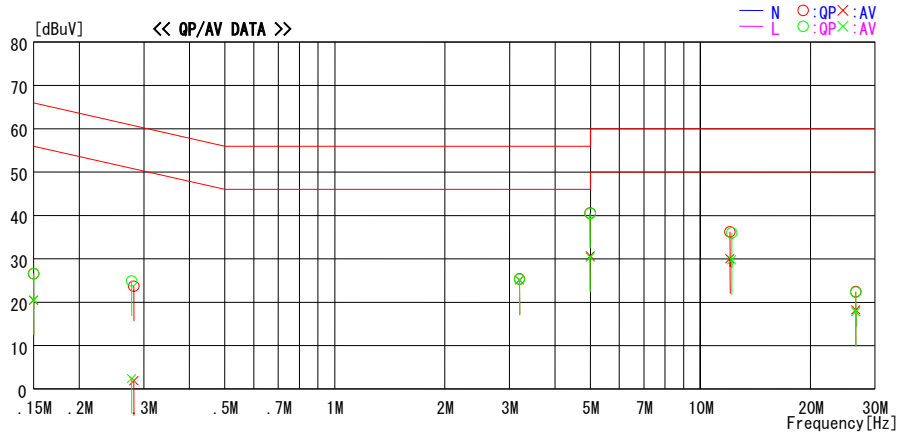
#### DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber  
Date : 2007/02/01

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-HO  
Power : AC 120V / 60Hz (DC power supply in)  
Temp./Humi. : 25deg.C / 30%  
Operator : Kenichi Adachi

Mode / Remarks: 11a, Tx5700MHz, 54Mbps, L Angle Ant., Ant:A

LIMIT : FCC15.207 QP  
FCC15.207 AV



Frequency [MHz]	Reading Level		Corr Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15000	26.4	20.2	0.2	26.6	20.4	66.0	56.0	39.4	35.6	N	
0.28156	23.3	1.5	0.4	23.7	1.9	60.8	50.8	37.1	48.9	N	
3.19892	24.7	24.4	0.7	25.4	25.1	56.0	46.0	30.6	20.9	N	
4.99554	39.6	29.7	1.0	40.6	30.7	56.0	46.0	15.4	15.3	N	*
12.04514	34.7	28.5	1.5	36.2	30.0	60.0	50.0	23.8	20.0	N	
26.59844	20.0	15.8	2.4	22.4	18.2	60.0	50.0	37.6	31.8	N	
0.15000	26.4	20.3	0.2	26.6	20.5	66.0	56.0	39.4	35.5	L	
0.27790	24.5	2.0	0.4	24.9	2.4	60.9	50.9	36.0	48.5	L	
3.19892	24.6	24.4	0.7	25.3	25.1	56.0	46.0	30.7	20.9	L	
4.99554	39.5	29.4	1.0	40.5	30.4	56.0	46.0	15.5	15.6	L	
12.17514	34.5	28.3	1.5	36.0	29.8	60.0	50.0	24.0	20.2	L	
26.59844	19.9	15.4	2.4	22.3	17.8	60.0	50.0	37.7	32.2	L	

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

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.



## Conducted Emission

Dual Band Diversity Antenna, 11a, Tx 5745MHz, 54Mbps, Ant:A, High power

### DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber  
Date : 2007/02/01

Company : OMRON Corporation	Report No. : 27DE0139-HO
Kind of EUT : FA Wireless LAN Unit	Power : AC 120V / 60Hz (DC power supply in)
Model No. : WE70-AP	Temp./Humi. : 25deg. C / 30%
Serial No. : 279651000201	Operator : Kenichi Adachi

Mode / Remarks: 11a, Tx5745MHz, 54Mbps, L Angle Ant., Ant:A,

LIMIT : FCC15.207 QP  
FCC15.207 AV

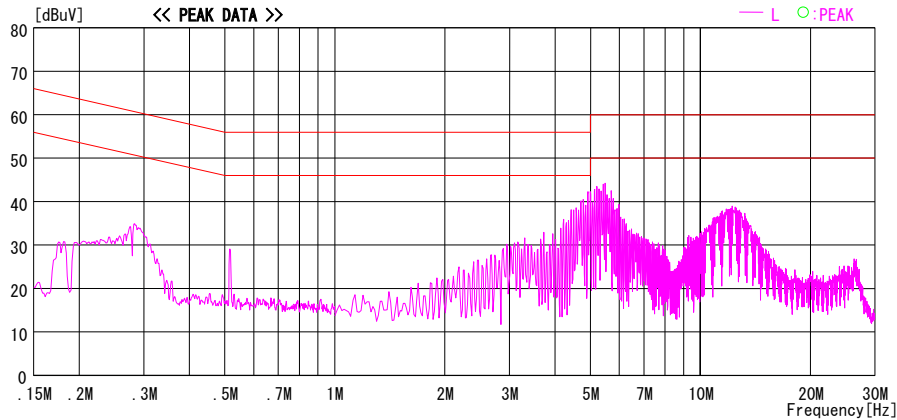
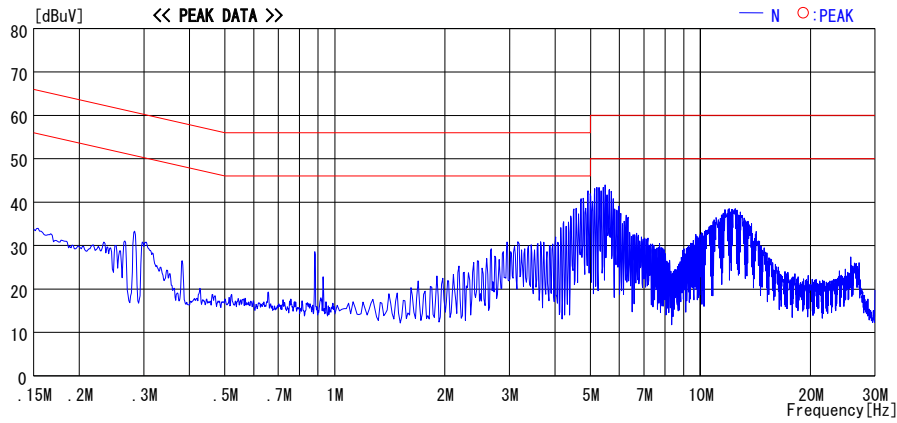


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION: RESULT=READING+C.F (LISN LOSS+CABLE)  
Except for the above table : adequate margin data below the

**Conducted Emission**  
**Dual Band Diversity Antenna, 11a, Tx 5745MHz, 54Mbps, Ant:A, High power**

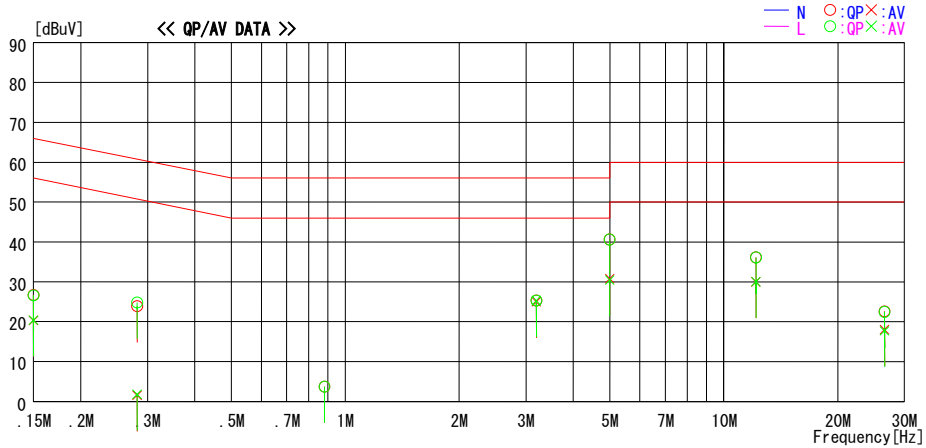
**DATA OF CONDUCTED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Date : 2007/02/01

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-HO  
Power : AC 120V / 60Hz (DC power supply in)  
Temp./Humi. : 25deg.C / 30%  
Operator : Kenichi Adachi

Mode / Remarks : 11a, Tx5745MHz, 54Mbps, L Angle Ant., Ant:A

LIMIT : FCC15.207 QP  
FCC15.207 AV



Frequency [MHz]	Reading Level		Corr. Factor	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15000	26.5	20.1	0.2	26.7	20.3	66.0	56.0	39.3	35.7	N	
0.28159	23.5	1.2	0.4	23.9	1.6	60.8	50.8	36.9	49.2	N	
0.88152	3.3	---	0.4	3.7	---	56.0	---	52.3	---	N	
3.19892	24.6	24.3	0.7	25.3	25.0	56.0	46.0	30.7	21.0	N	
4.99547	39.6	29.8	1.0	40.6	30.8	56.0	46.0	15.4	15.2	N	
12.14675	34.6	28.5	1.5	36.1	30.0	60.0	50.0	23.9	20.0	N	
26.59854	20.2	15.6	2.4	22.6	18.0	60.0	50.0	37.4	32.0	N	
0.15000	26.4	20.2	0.2	26.6	20.4	66.0	56.0	39.4	35.6	L	
0.28159	24.4	1.4	0.4	24.8	1.8	60.8	50.8	36.0	49.0	L	
0.88152	3.3	---	0.4	3.7	---	56.0	---	52.3	---	L	
3.19892	24.6	24.5	0.7	25.3	25.2	56.0	46.0	30.7	20.8	L	
4.99547	39.6	29.5	1.0	40.6	30.5	56.0	46.0	15.4	15.5	L	
12.16795	34.6	28.5	1.5	36.1	30.0	60.0	50.0	23.9	20.0	L	
26.59854	20.1	15.3	2.4	22.5	17.7	60.0	50.0	37.5	32.3	L	

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

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

### Conducted Emission

Dual Band Diversity Antenna, 11a, Tx 5765MHz, 54Mbps, Ant:A, High power

#### DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber  
Date : 2007/02/01

Company	: OMRON Corporation	Report No.	: 27DE0139-HO
Kind of EUT	: FA Wireless LAN Unit	Power	: AC 120V / 60Hz (DC power supply in)
Model No.	: WE70-AP	Temp./Humi.	: 25deg.C / 30%
Serial No.	: 279651000201	Operator	: Kenichi Adachi

Mode / Remarks: 11a, Tx5765MHz, 54Mbps, L Angle Ant., Ant:A,

LIMIT : FCC15.207 QP  
FCC15.207 AV

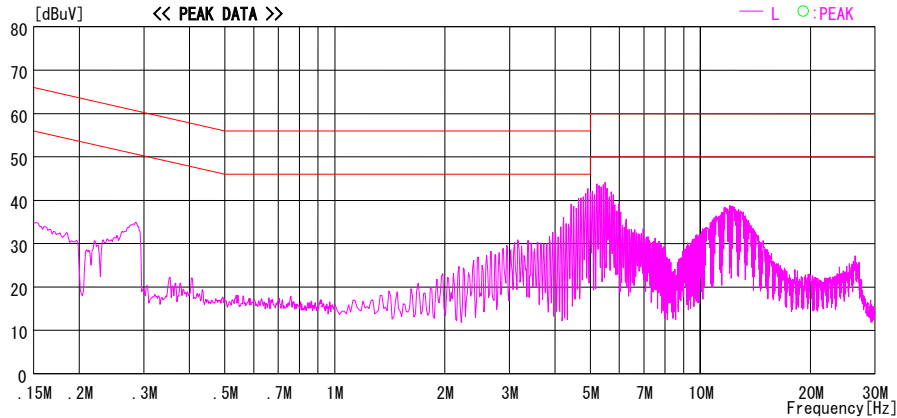
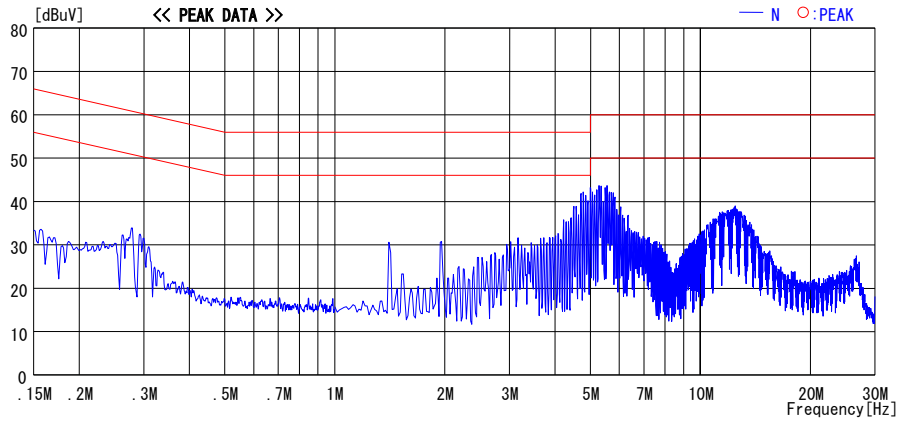


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F (LISN LOSS+CABLE)  
Except for the above table : adequate margin data below the

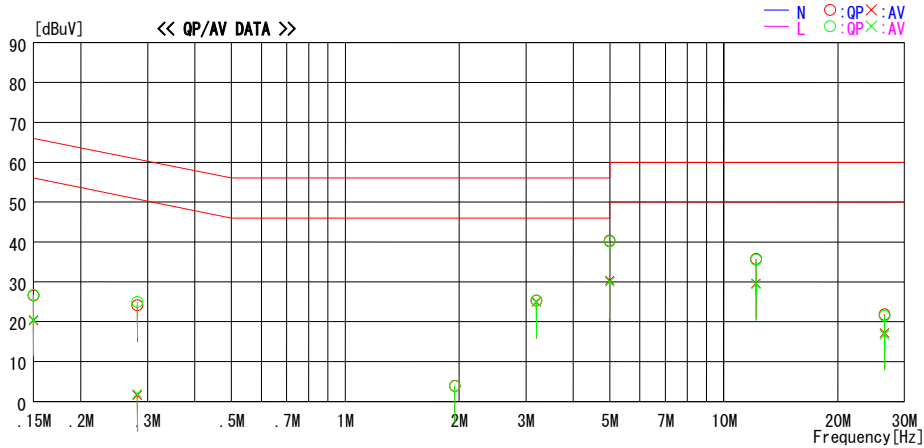
**Conducted Emission**  
**Dual Band Diversity Antenna, 11a, Tx 5765MHz, 54Mbps, Ant:A, High power**  
**DATA OF CONDUCTED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Date : 2007/02/01

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-HO  
Power : AC 120V / 60Hz (DC power supply in)  
Temp./Humi. : 25deg.C / 30%  
Operator : Kenichi Adachi

Mode / Remarks : 11a, Tx5765MHz, 54Mbps, L Angle Ant., Ant:A

LIMIT : FCC15.207 QP  
FCC15.207 AV



Frequency [MHz]	Reading Level		Corr. Factor	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15000	26.4	20.1	0.2	26.6	20.3	66.0	56.0	39.4	35.7	N	
0.28189	23.8	1.3	0.3	24.1	1.6	60.8	50.8	36.7	49.2	N	
1.94579	3.4	---	0.5	3.9	---	56.0	---	52.1	---	N	
3.19975	24.7	24.3	0.6	25.3	24.9	56.0	46.0	30.7	21.1	N	
4.99540	39.6	29.7	0.7	40.3	30.4	56.0	46.0	15.7	15.6	N	
12.16637	34.8	28.6	1.0	35.8	29.6	60.0	50.0	24.2	20.4	N	
26.59847	20.3	15.7	1.5	21.8	17.2	60.0	50.0	38.2	32.8	N	
0.15000	26.5	20.3	0.2	26.7	20.5	66.0	56.0	39.3	35.5	L	
0.28189	24.6	1.6	0.3	24.9	1.9	60.8	50.8	35.9	48.9	L	
1.94579	3.3	---	0.5	3.8	---	56.0	---	52.2	---	L	
3.19975	24.7	24.5	0.6	25.3	25.1	56.0	46.0	30.7	20.9	L	
4.99540	39.4	29.3	0.7	40.1	30.0	56.0	46.0	15.9	16.0	L	
12.16637	34.6	28.4	1.0	35.6	29.4	60.0	50.0	24.4	20.6	L	
26.59847	20.0	15.3	1.5	21.5	16.8	60.0	50.0	38.5	33.3	L	

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

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

## Conducted Emission

Dual Band Diversity Antenna, 11a, Tx 5805MHz, 54Mbps, Ant:A, High power

### DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber  
Date : 2007/02/01

Company : OMRON Corporation	Report No. : 27DE0139-HO
Kind of EUT : FA Wireless LAN Unit	Power : AC 120V / 60Hz (DC power supply in)
Model No. : WE70-AP	Temp./Humi. : 25deg. C / 30%
Serial No. : 279651000201	Operator : Kenichi Adachi

Mode / Remarks: 11a, Tx5805MHz, 54Mbps, L Angle Ant., Ant:A,

LIMIT : FCC15.207 QP  
FCC15.207 AV

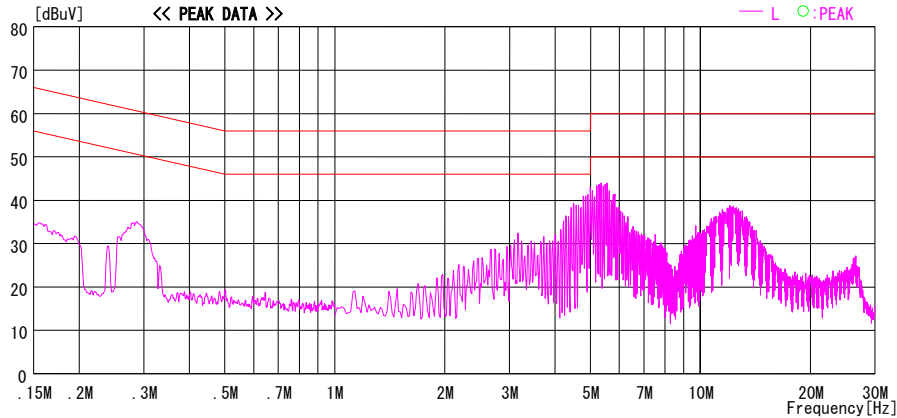
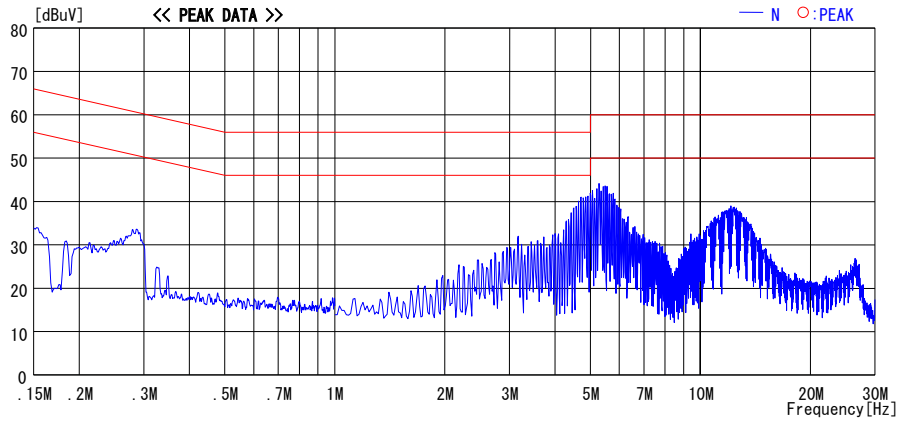


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F (LISN LOSS+CABLE)  
Except for the above table : adequate margin data below the

**Conducted Emission**  
**Dual Band Diversity Antenna, 11a, Rx 5260MHz, Ant:A, High power**

**DATA OF CONDUCTED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber  
 Date : 2007/02/01

Company	: OMRON Corporation	Report No.	: 27DE0139-HO
Kind of EUT	: FA Wireless LAN Unit	Power	: AC 120V / 60Hz (DC power supply in)
Model No.	: WE70-AP	Temp./Humi.	: 25deg. C / 30%
Serial No.	: 279651000201	Operator	: Kenichi Adachi

Mode / Remarks: 11a, Rx5260MHz, L Angle Ant., Ant:A,

LIMIT : FCC15.207 QP  
FCC15.207 AV

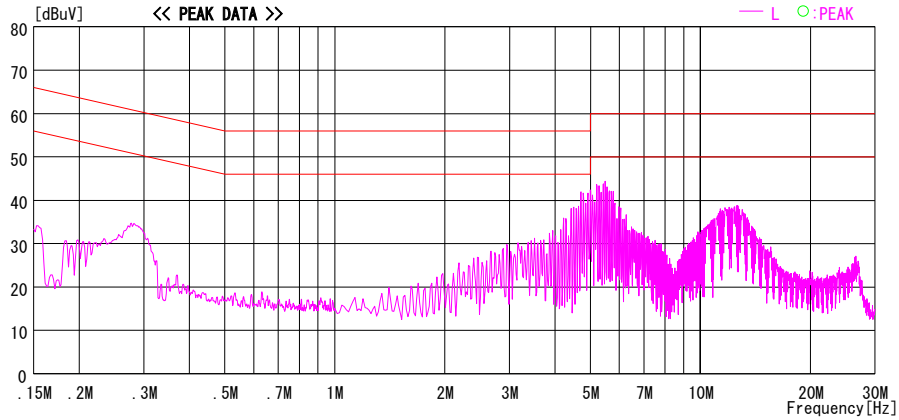
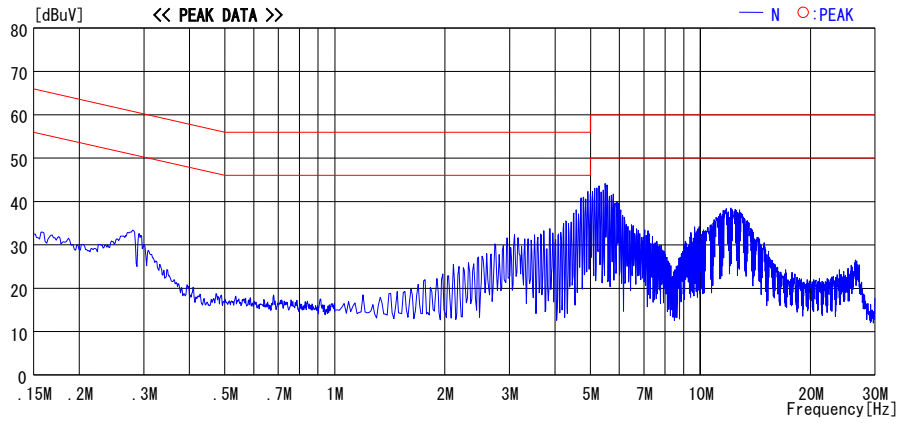


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F (LISN LOSS+CABLE)  
 Except for the above table : adequate margin data below the

**Conducted Emission**  
**Dual Band Diversity Antenna, 11a, Rx 5600MHz, Ant:A, High power**

**DATA OF CONDUCTED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber  
 Date : 2007/02/01

Company	: OMRON Corporation	Report No.	: 27DE0139-HO
Kind of EUT	: FA Wireless LAN Unit	Power	: AC 120V / 60Hz (DC power supply in)
Model No.	: WE70-AP	Temp./Humi.	: 25deg. C / 30%
Serial No.	: 279651000201	Operator	: Kenichi Adachi

Mode / Remarks: 11a, Rx5600MHz, L Angle Ant., Ant:A,

LIMIT : FCC15.207 QP  
FCC15.207 AV

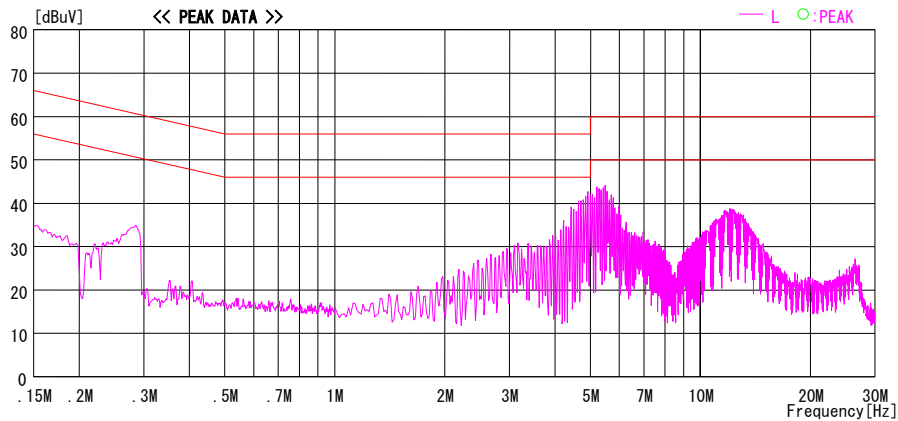
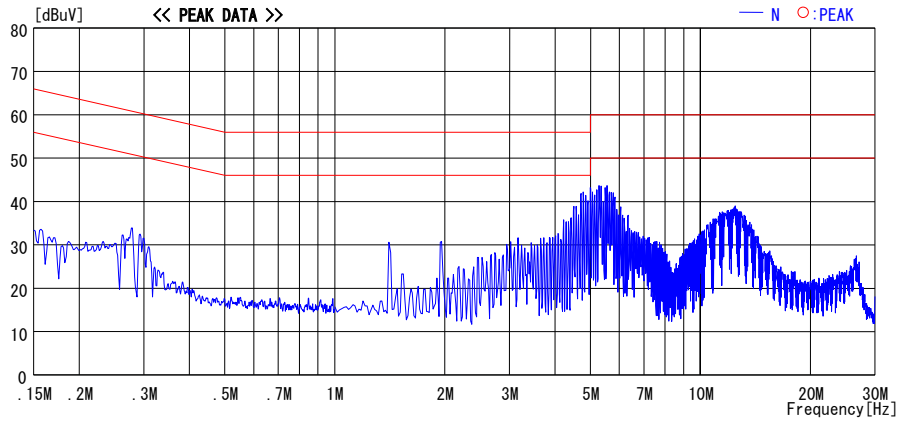


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F (L ISN LOSS+CABLE)  
 Except for the above table : adequate margin data below the

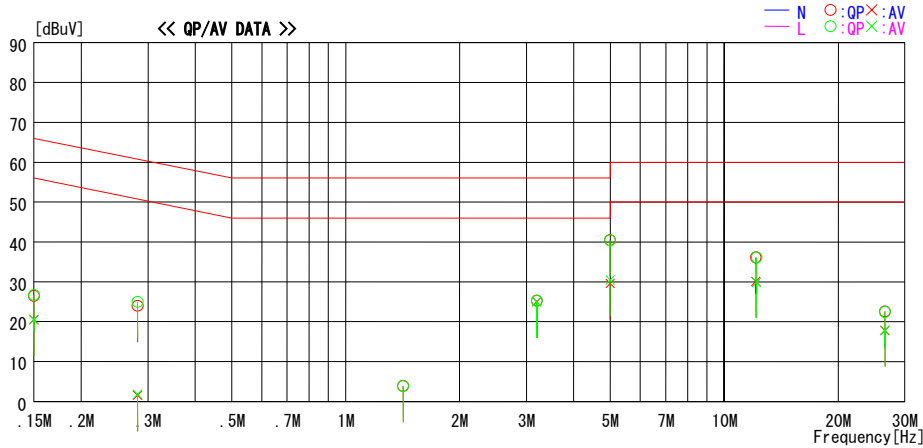
**Conducted Emission**  
**Dual Band Diversity Antenna, 11a, Rx 5600MHz, Ant:A, High power**  
**DATA OF CONDUCTED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Date : 2007/02/01

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-HO  
Power : AC 120V / 60Hz (DC power supply in)  
Temp./Humi. : 25deg. C / 30%  
Operator : Kenichi Adachi

Mode / Remarks : 11a, Rx5600MHz, L Angle Ant., Ant:A

LIMIT : FCC15.207 QP  
FCC15.207 AV



Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15000	26.3	20.3	0.2	26.5	20.5	66.0	56.0	39.5	35.5	N	
0.28169	23.6	1.2	0.4	24.0	1.6	60.8	50.8	36.8	49.2	N	
1.41681	3.4	---	0.5	3.9	---	56.0	---	52.1	---	N	
3.19846	24.6	24.3	0.7	25.3	25.0	56.0	46.0	30.7	21.0	N	
4.99547	39.5	28.6	1.0	40.5	29.6	56.0	46.0	15.5	16.4	N	
12.11568	34.6	28.6	1.5	36.1	30.1	60.0	50.0	23.9	19.9	N	
26.59834	20.2	15.4	2.4	22.6	17.8	60.0	50.0	37.4	32.2	N	
0.15000	26.5	20.3	0.2	26.7	20.5	66.0	56.0	39.3	35.5	L	
0.28169	24.6	1.4	0.4	25.0	1.8	60.8	50.8	35.8	49.0	L	
1.41681	3.3	---	0.5	3.8	---	56.0	---	52.2	---	L	
3.19846	24.5	24.3	0.7	25.2	25.0	56.0	46.0	30.8	21.0	L	
4.99547	39.4	29.5	1.0	40.4	30.5	56.0	46.0	15.6	15.5	L	
12.17568	34.6	28.4	1.5	36.1	29.9	60.0	50.0	23.9	20.1	L	
26.59834	20.1	15.5	2.4	22.5	17.9	60.0	50.0	37.5	32.1	L	

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

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.



**Conducted Emission**  
**Dual Band Diversity Antenna, 11a, Rx 5765MHz, Ant:A, High power**

**DATA OF CONDUCTED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber  
 Date : 2007/02/01

Company	: OMRON Corporation	Report No.	: 27DE0139-HO
Kind of EUT	: FA Wireless LAN Unit	Power	: AC 120V / 60Hz (DC power supply in)
Model No.	: WE70-AP	Temp./Humi.	: 25deg. C / 30%
Serial No.	: 279651000201	Operator	: Kenichi Adachi

Mode / Remarks: 11a, Rx5765MHz, 54Mbps, L Angle Ant., Ant:A,

LIMIT : FCC15.207 QP  
FCC15.207 AV

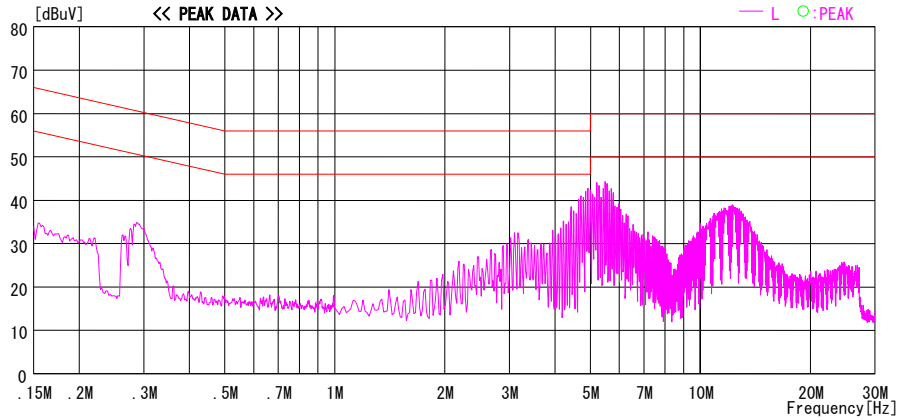
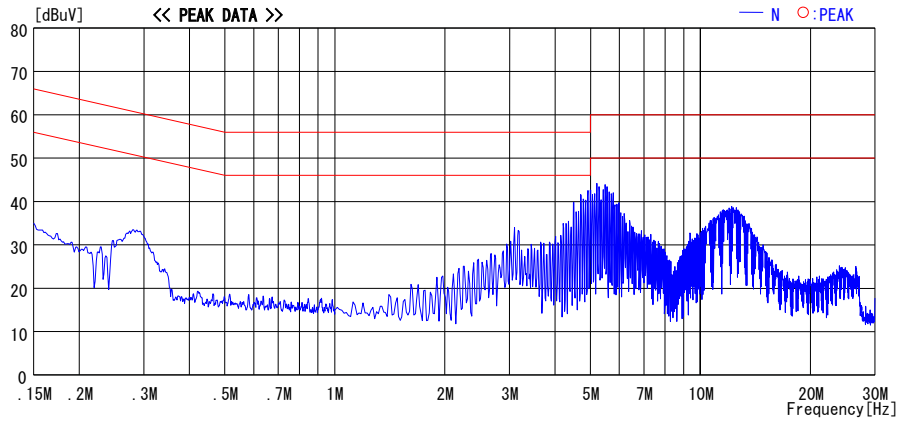


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F (LISN LOSS+CABLE)  
 Except for the above table : adequate margin data below the

**Conducted Emission**  
**Magnetic Pedestal Antenna, 11a, Tx 5260MHz, 54Mbps, Ant:A, High power**  
**DATA OF CONDUCTED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.4 Semi Anechoic Chamber  
 Date : 2007/03/03

Company	: OMRON Corporation	Report No.	: 27DE0139-HO
Kind of EUT	: FA Wireless LAN Unit	Power	: AC 120V / 60Hz (DC power supply in)
Model No.	: WE70-AP	Temp./Humi.	: 25deg. C / 32%
Serial No.	: 279651000201	Operator	: Kenichi Adachi

Mode / Remarks : 11a Tx5260MHz, 54Mbps, Dual-band Omni-Directional Antenna, Ant:A

LIMIT : FCC15.207 QP  
FCC15.207 AV

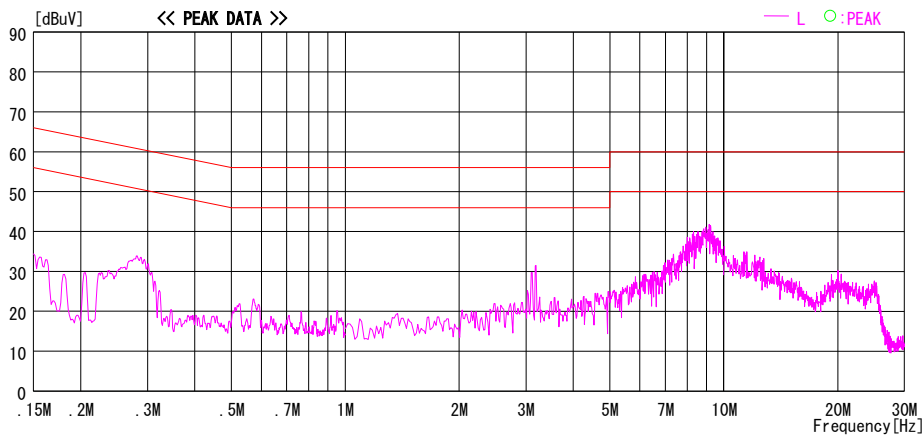
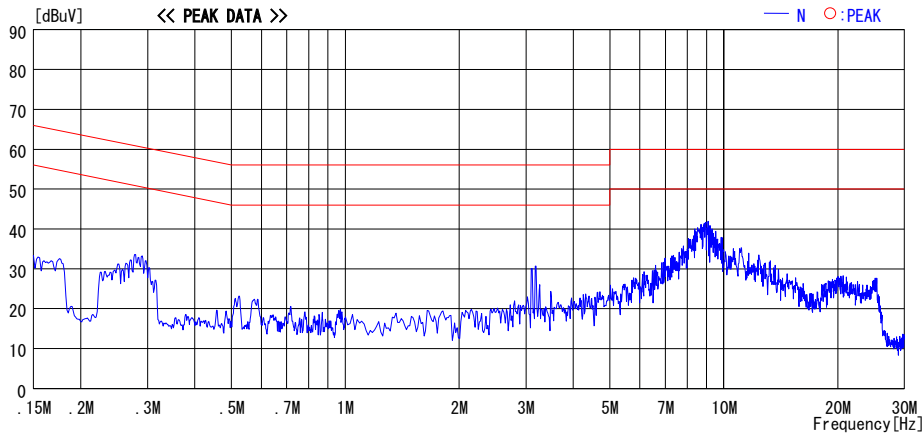


CHART:WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE  
 Except for the above table : adequate margin data below the limits.

**Conducted Emission**  
**Magnetic Pedestal Antenna, 11a, Tx 5600MHz, 54Mbps, Ant:A, High power**  
**DATA OF CONDUCTED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.4 Semi Anechoic Chamber  
 Date : 2007/03/03

Company	: OMRON Corporation	Report No.	: 27DE0139-H0
Kind of EUT	: FA Wireless LAN Unit	Power	: AC 120V / 60Hz (DC power supply in)
Model No.	: WE70-AP	Temp./Humi.	: 25deg.C / 32%
Serial No.	: 279651000201	Operator	: Kenichi Adachi

Mode / Remarks : 11a Tx5600MHz, 54Mbps, Dual-band Omni-Directional Antenna, Ant:A

LIMIT : FCC15.207 QP  
FCC15.207 AV

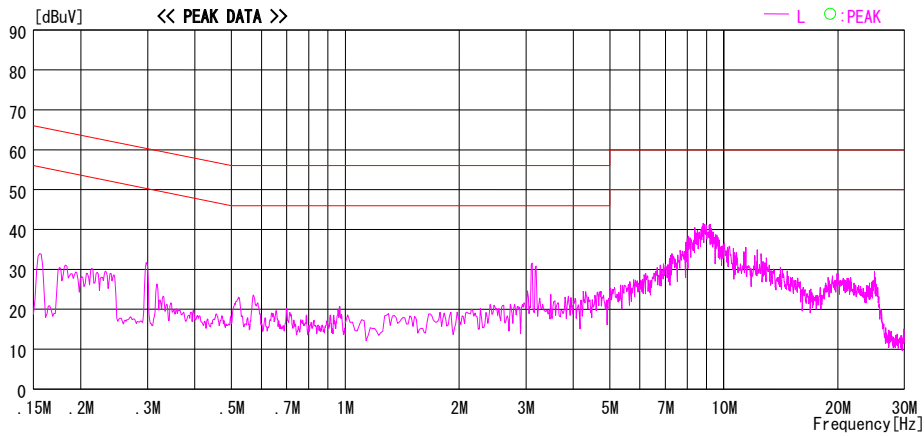
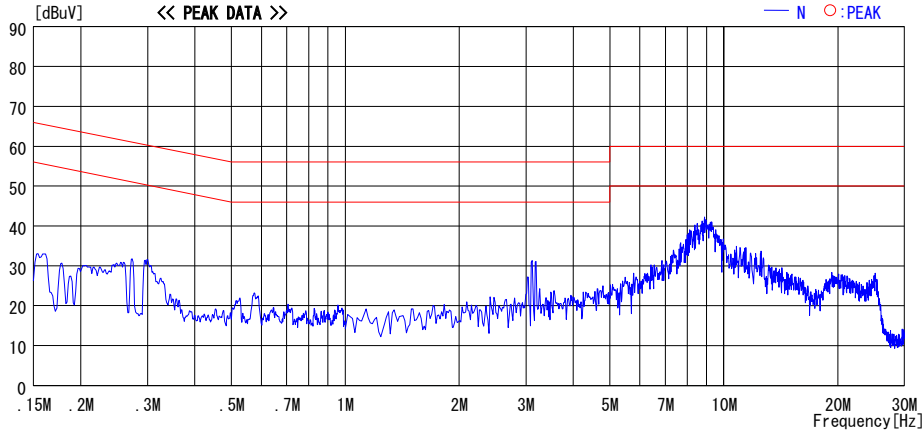


CHART:WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE  
 Except for the above table : adequate margin data below the limits.

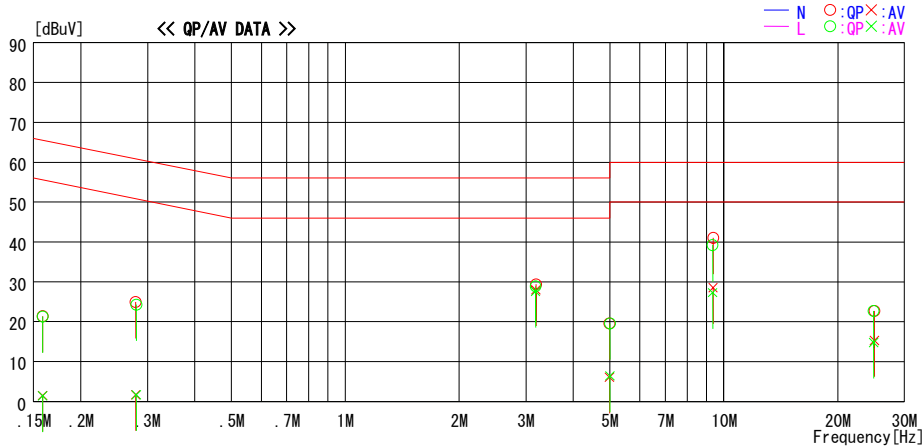
**Conducted Emission**  
**Magnetic Pedestal Antenna, 11a, Tx 5600MHz, 54Mbps, Ant:A, High power**  
**DATA OF CONDUCTED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.4 Semi Anechoic Chamber  
Date : 2007/03/03

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-HO  
Power : AC 120V / 60Hz (DC power supply in)  
Temp./Humi. : 25deg.C / 32%  
Operator : Kenichi Adachi

Mode / Remarks : 11a Tx5600MHz, 54Mbps, Dual-band Omni-Directional Antenna, Ant:A

LIMIT : FCC15.207 QP  
FCC15.207 AV



Frequency [MHz]	Reading Level		Corr. Factor	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.15850	21.2	1.3	0.2	21.4	1.5	65.5	55.5	44.1	54.0	N	
0.15850	21.1	1.2	0.2	21.3	1.4	65.5	55.5	44.2	54.1	L	
0.28012	24.0	1.4	0.3	24.3	1.7	60.8	50.8	36.5	49.1	L	
0.27923	24.6	1.4	0.3	24.9	1.7	60.8	50.8	35.9	49.1	N	
3.19001	28.8	27.4	0.6	29.4	28.0	56.0	46.0	26.6	18.0	N	
3.18334	28.3	27.0	0.6	28.9	27.6	56.0	46.0	27.1	18.4	L	
4.99990	18.9	5.7	0.7	19.6	6.4	56.0	46.0	36.4	39.6	L	
4.98772	18.9	5.4	0.7	19.6	6.1	56.0	46.0	36.4	39.9	N	
9.33955	38.3	26.4	0.9	39.2	27.3	60.0	50.0	20.8	22.7	L	
24.87600	21.2	13.3	1.5	22.7	14.8	60.0	50.0	37.3	35.2	L	
9.37230	40.1	27.7	0.9	41.0	28.6	60.0	50.0	19.0	21.4	N	
24.99920	21.2	13.8	1.5	22.7	15.3	60.0	50.0	37.3	34.7	N	

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

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

**Conducted Emission**  
**Magnetic Pedestal Antenna, 11a, Tx 5765MHz, 54Mbps, Ant:A, High power**

**DATA OF CONDUCTED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.4 Semi Anechoic Chamber  
 Date : 2007/03/03

Company	: OMRON Corporation	Report No.	: 27DE0139-H0
Kind of EUT	: FA Wireless LAN Unit	Power	: AC 120V / 60Hz (DC power supply in)
Model No.	: WE70-AP	Temp./Humi.	: 25deg.C / 32%
Serial No.	: 279651000201	Operator	: Kenichi Adachi

Mode / Remarks : 11a Tx5765MHz, 54Mbps, Dual-band Omni-Directional Antenna, Ant:A

LIMIT : FCC15.207 QP  
FCC15.207 AV

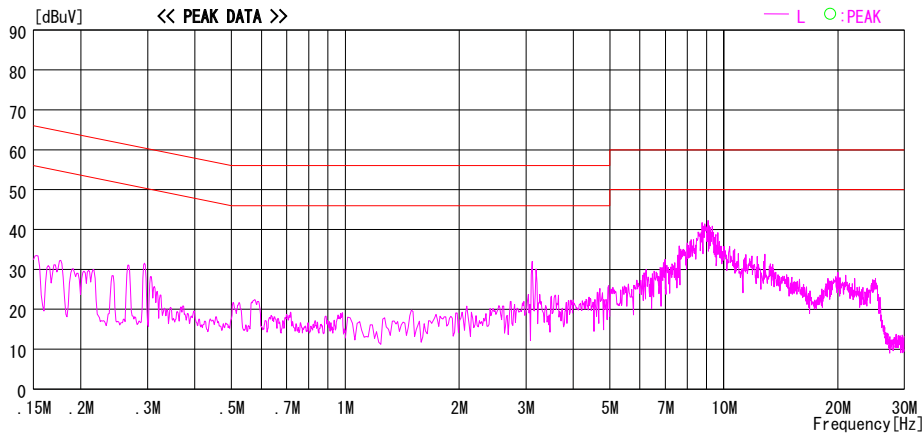
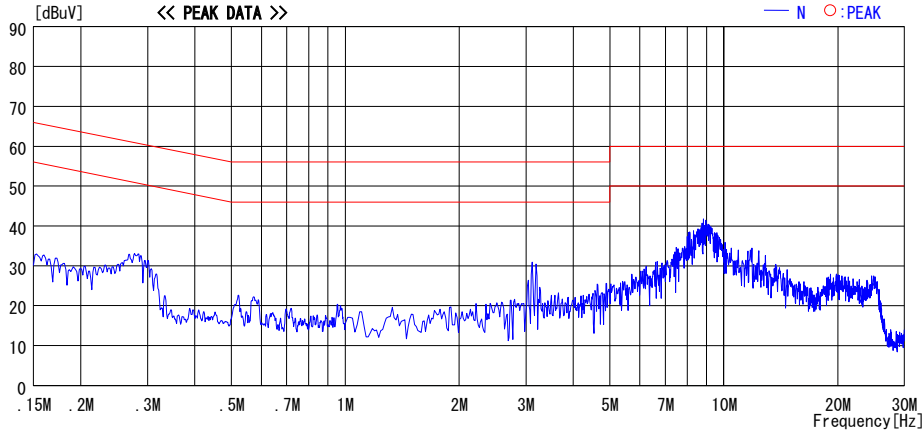


CHART:WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE  
 Except for the above table : adequate margin data below the limits.

## 26dB Emission Bandwidth

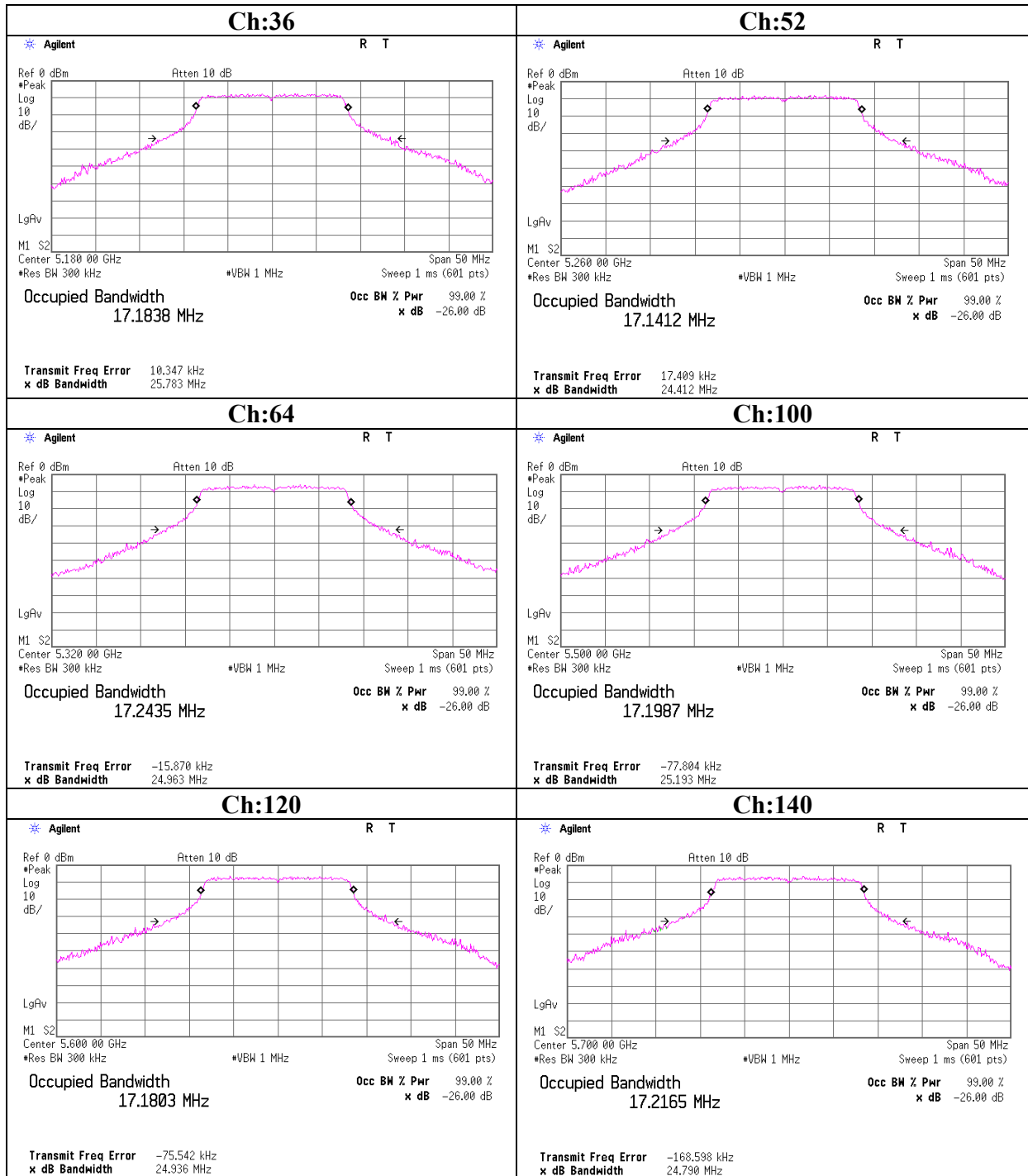
UL-Apex Co., Ltd.  
Head Office EMC Lab. No.7 Shielded room

Company OMRON Corporation  
Equipment FA Wireless LAN Unit  
Model WE70-AP  
S/N 279651000202  
Power DC 24V  
Mode IEEE 802.11a, Tx, 54Mbps, Ant:A  
High power

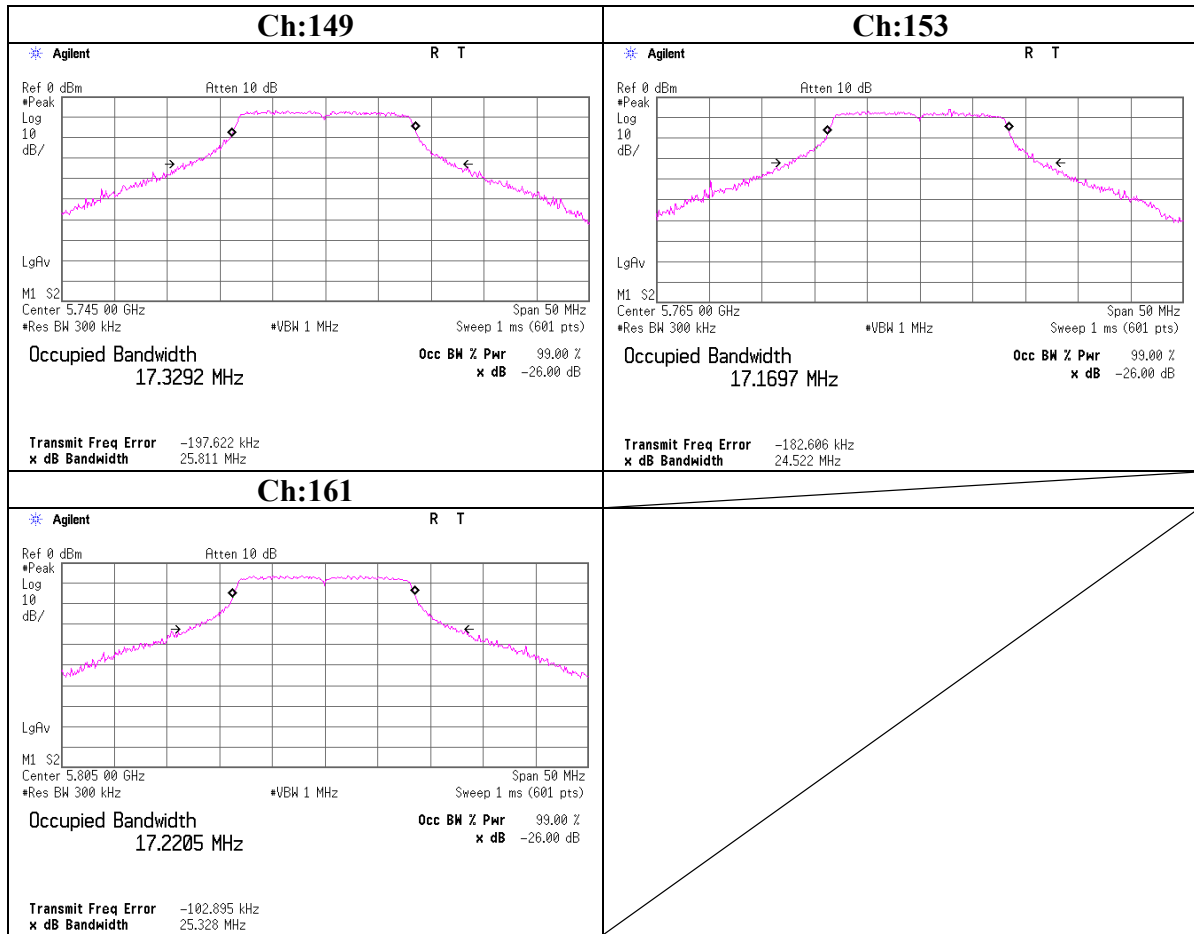
Regulation FCC Section 15.407(a)(1)(2)(3) / RSS-210 A9.2  
Test Distance -  
Date 02/06/2007  
Temperature 25 deg.C.  
Humidity 31 %  
Engineer Kenichi Adachi

Ch	Freq. [MHz]	26dB Bandwidth [MHz]	Limit [MHz]
36	5180.0	25.783	-
52	5260.0	24.412	-
64	5320.0	24.963	-
100	5500.0	25.193	-
120	5600.0	24.936	-
140	5700.0	24.790	-
149	5745.0	25.811	-
153	5765.0	24.522	-
161	5805.0	25.328	-

### 26dB Emission Bandwidth



### 26dB Emission Bandwidth





### Maximum Peak Output Power

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

Company	OMRON Corporation	Regulation	FCC Section 15.407(a)(1)(2)(3) / RSS-210 A9.2(1)(2)
Equipment	FA Wireless LAN Unit	Test Distance	-
Model	WE70-AP	Date	02/06/2007
S/N	279651000202	Temperature	25 deg.C.
Power	DC 24V	Humidity	31 %
Mode	IEEE802.11a ,Tx, 54Mbps(Worst)	Engineer	Kenichi Adachi
	High power		

**ANT:A (Worst), 54Mbps(Worst)**

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
36	5180.0	2.13	0.65	10.09	12.87	17.00	<b>4.13</b>
52	5260.0	1.71	0.65	10.10	12.46	17.00	4.54
64	5320.0	2.04	0.65	10.11	12.80	17.00	4.20
100	5500.0	2.94	0.66	10.13	13.73	30.00	16.27
120	5600.0	2.32	0.67	10.14	13.13	30.00	16.87
140	5700.0	2.67	0.67	10.15	13.49	30.00	16.51
149	5745.0	1.77	0.67	10.15	12.59	30.00	17.41
153	5765.0	2.33	0.68	10.15	13.16	30.00	16.84
161	5805.0	2.49	0.68	10.16	13.33	30.00	16.67

**ANT:B, 54Mbps**

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
36	5180.0	2.09	0.65	10.09	12.83	17.00	<b>4.17</b>
52	5260.0	0.54	0.65	10.10	11.29	17.00	5.71
64	5320.0	1.92	0.65	10.11	12.68	17.00	4.32
100	5500.0	1.41	0.66	10.13	12.20	30.00	17.80
120	5600.0	1.89	0.67	10.14	12.70	30.00	17.30
140	5700.0	1.89	0.67	10.15	12.71	30.00	17.29
149	5745.0	1.64	0.67	10.15	12.46	30.00	17.54
153	5765.0	1.34	0.68	10.15	12.17	30.00	17.83
161	5805.0	2.31	0.68	10.16	13.15	30.00	16.85

Sample Calculation:

Result = Reading + Cable Loss + Attenuator

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

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

\*ANT B data is a preliminary test data (reference data).

**UL Apex Co., Ltd.**

**Head Office EMC Lab.**

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

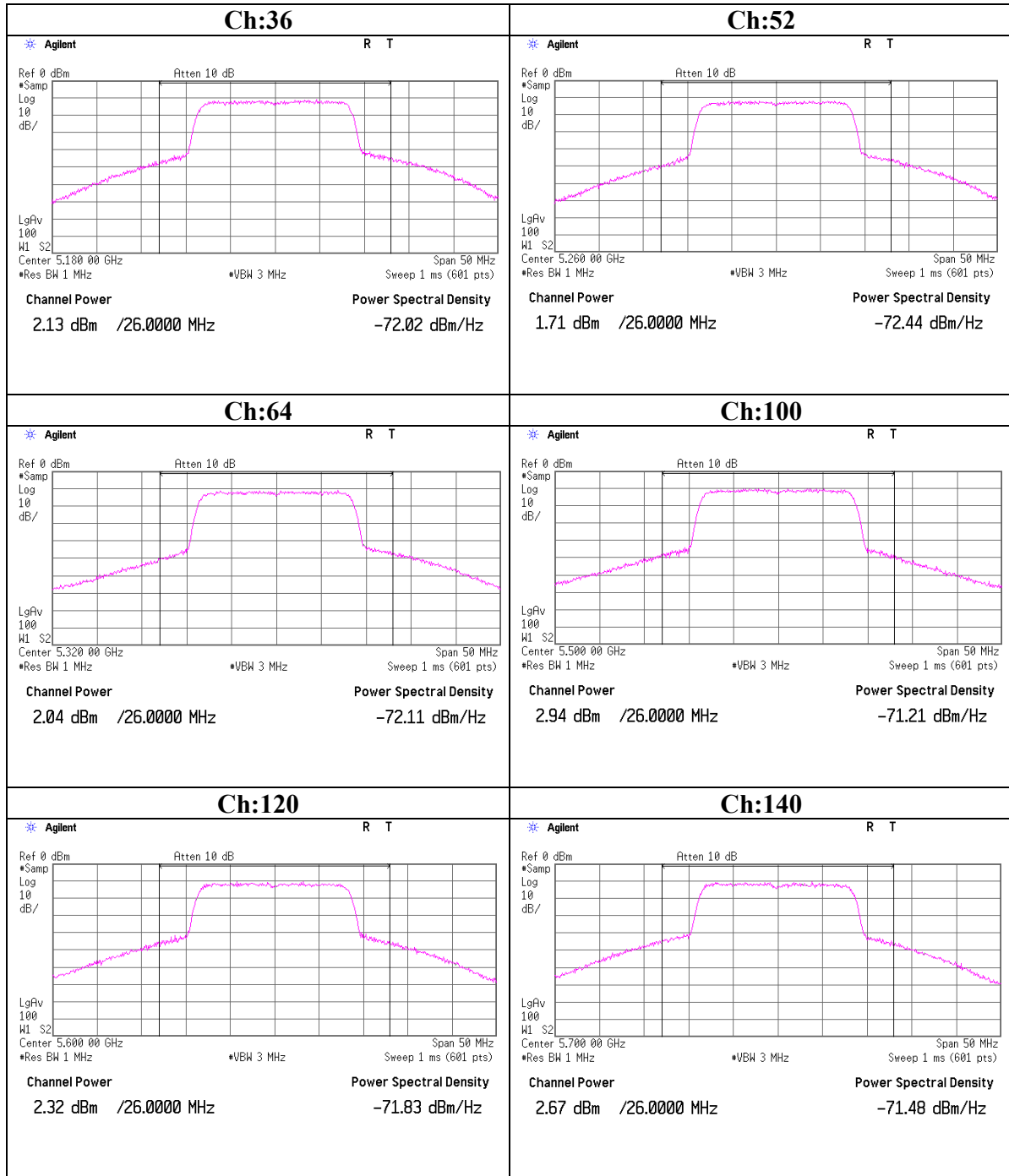
Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

MF060b(14.06.06)

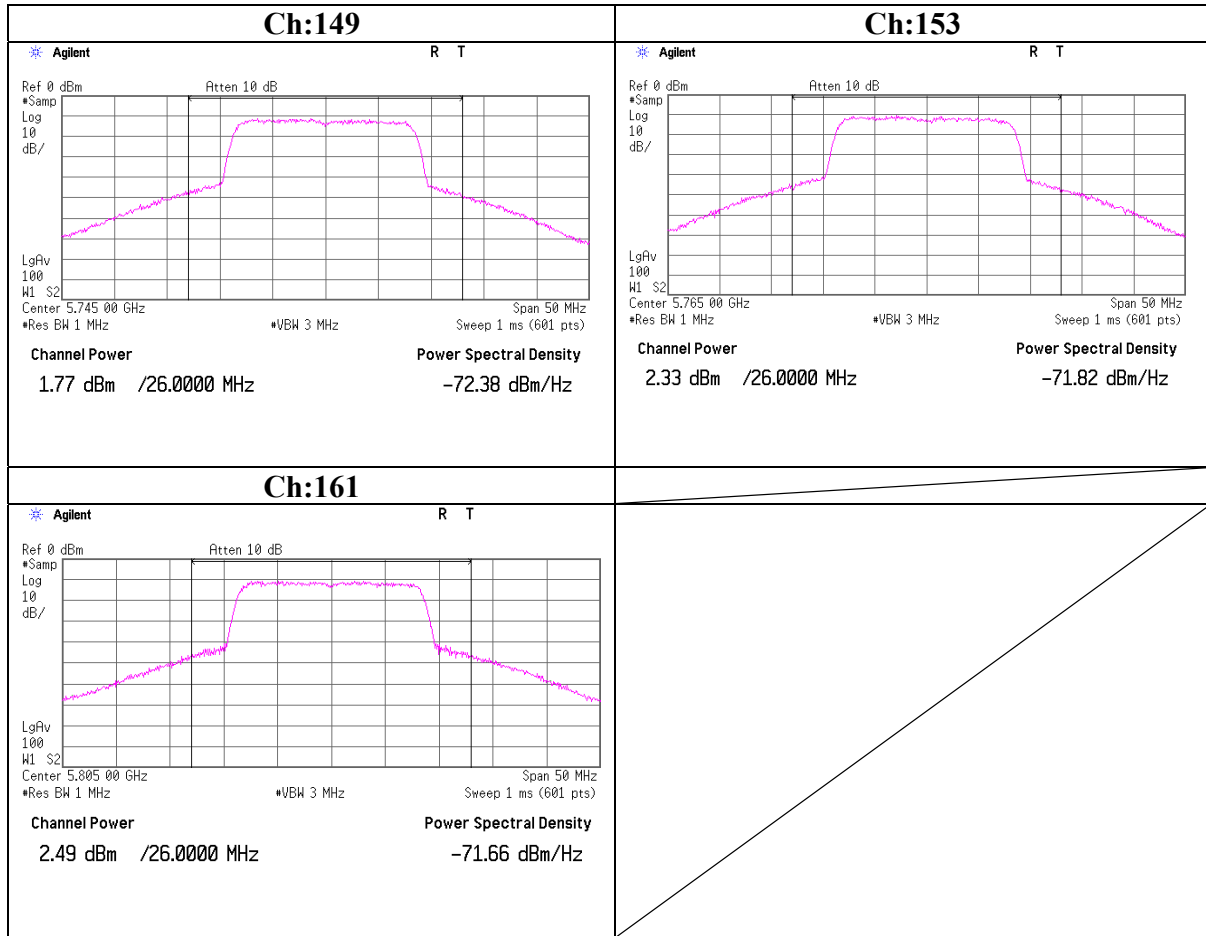
**Maximum Peak Output Power**

Ant A

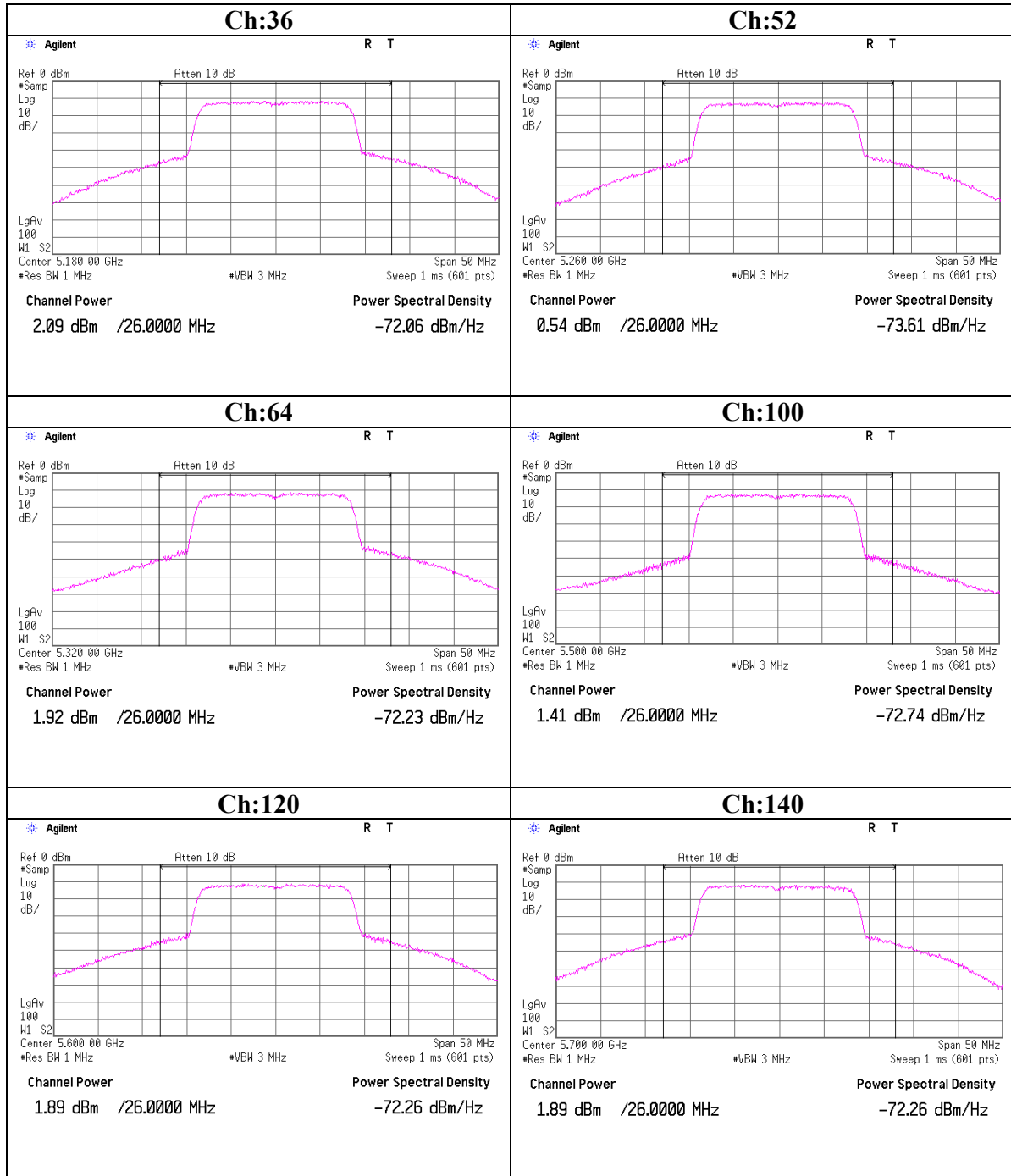


**Maximum Peak Output Power**

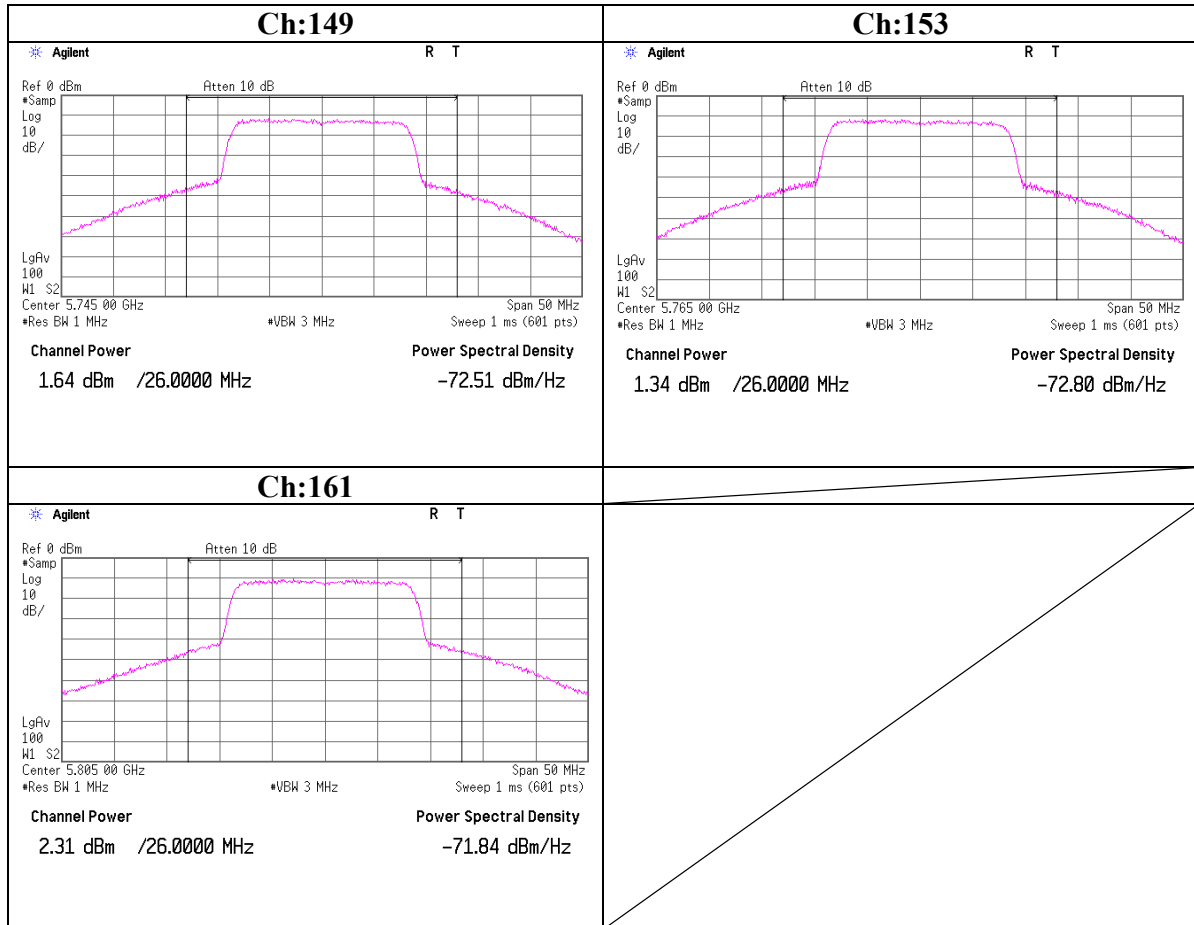
Ant A



**Maximum Peak Output Power**  
**Ant B**



**Maximum Peak Output Power**  
**Ant B**



**Maximum Peak Output Power (Transmitter Power Control (Low power))**

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

Company	OMRON Corporation	Regulation	FCC Section 15.407(a)(2), (h)(1) / RSS-210
Equipment	FA Wireless LAN Unit		A9.2(1)(2)
Model	WE70-AP	Test Distance	-
S/N	279651000202	Date	02/06/2007
Power	DC 24V	Temperature	25 deg.C.
Mode	IEEE802.11a ,Tx, 54Mbps(Worst)	Humidity	31 %
	Low power	Engineer	Kenichi Adachi

**ANT:A (Worst) 54Mbps(Worst)**

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
52	5260.0	-5.68	0.65	10.10	5.07	24.00	18.93
64	5320.0	-3.50	0.65	10.11	7.26	24.00	16.74
100	5500.0	-2.91	0.66	10.13	7.88	24.00	16.12
120	5600.0	-2.51	0.67	10.14	8.30	24.00	<b>15.70</b>
140	5700.0	-2.62	0.67	10.15	8.20	24.00	15.80

Sample Calculation:

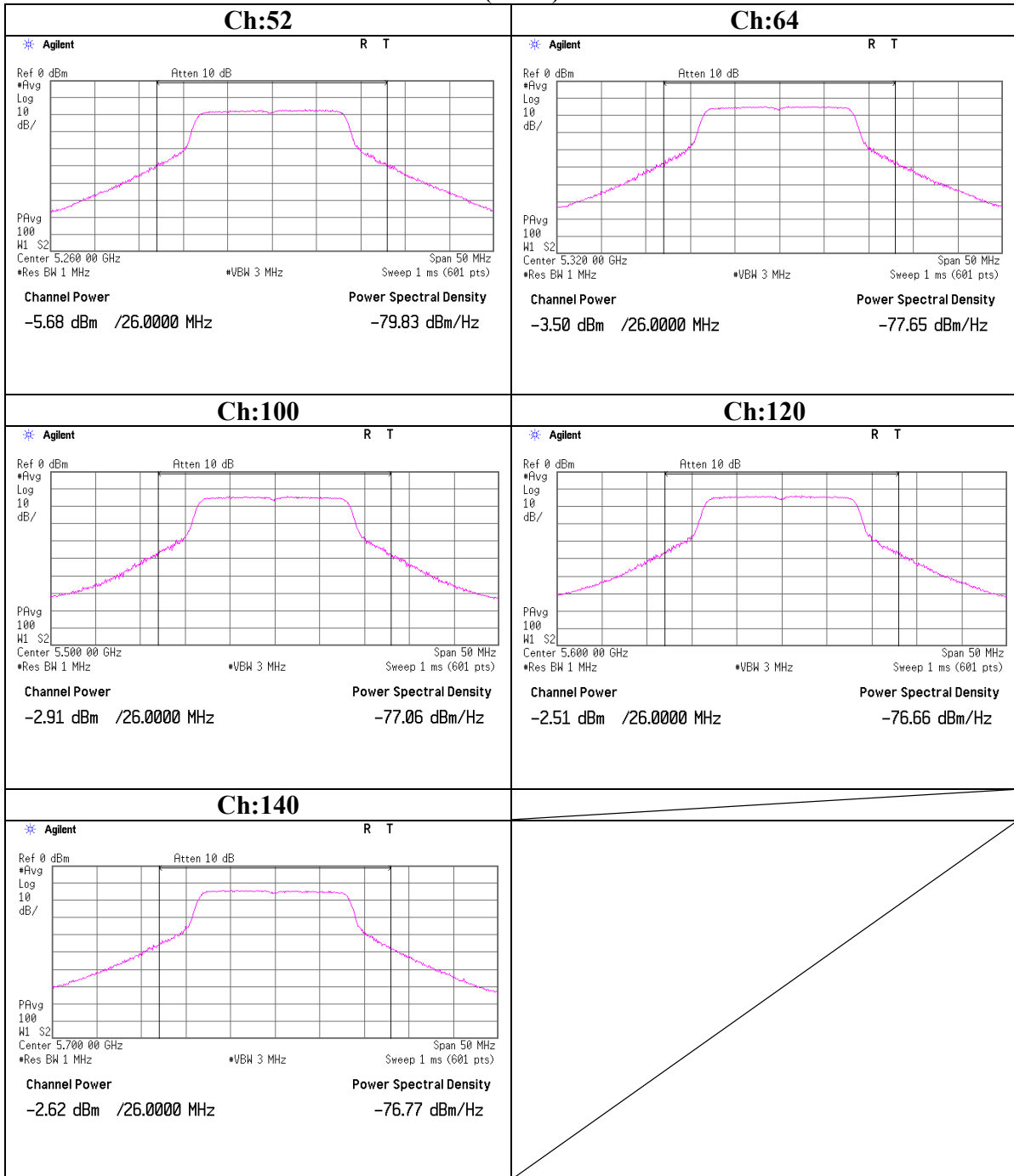
Result = Reading + Cable Loss + Attenuator

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

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

**Maximum Peak Output Power**  
**Ant A (Worst)**



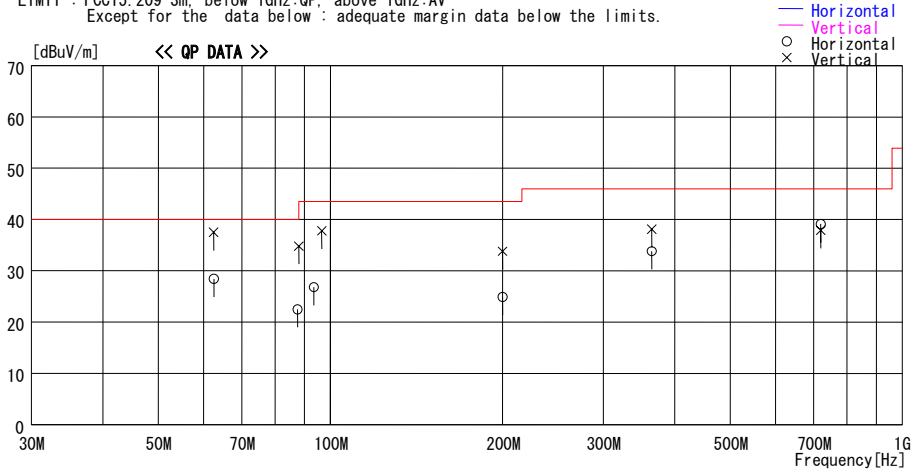
**Radiated Spurious Emission (below 1GHz)**  
**Dual Band Diversity Antenna, 11a, Tx 5180MHz, 54Mbps, Ant:A, High power**  
**DATA OF RADIATED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Date : 2007/01/22

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-HO  
Power : DC 24V  
Temp./Humi. : 22deg.C. / 37%  
Operator : Kenichi Adachi

Mode / Remarks : 11a Tx 5180MHz, 54Mbps(Worst), ANT:A(Worst), Worst-axis: EUT:X, Hor: Ant:X, Ver:

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:AV  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Gain [dB]							
62.501	51.4	QP	7.9	-21.8	37.5	124	100	Vert.	40.0	2.5	
62.504	42.3	QP	7.9	-21.8	28.4	303	400	Hori.	40.0	11.6	
87.533	36.6	QP	7.3	-21.4	22.5	120	270	Hori.	40.0	17.5	
88.000	48.9	QP	7.3	-21.4	34.8	121	100	Vert.	40.0	5.2	
93.543	39.7	QP	8.5	-21.4	26.8	119	272	Hori.	43.5	16.7	
96.570	49.9	QP	9.2	-21.3	37.8	210	100	Vert.	43.5	5.7	
199.998	36.5	QP	17.4	-20.1	33.8	119	100	Vert.	43.5	9.7	
200.000	27.6	QP	17.4	-20.1	24.9	104	165	Hori.	43.5	18.6	
364.491	36.7	QP	16.8	-19.7	33.8	270	100	Hori.	46.0	12.2	
364.496	41.0	QP	16.8	-19.7	38.1	185	100	Vert.	46.0	7.9	
720.009	36.0	QP	20.7	-18.8	37.9	351	100	Vert.	46.0	8.1	
720.011	37.2	QP	20.7	-18.8	39.1	171	116	Hori.	46.0	6.9	

CHART: WITH FACTOR ANT TYPE: -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz-  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.



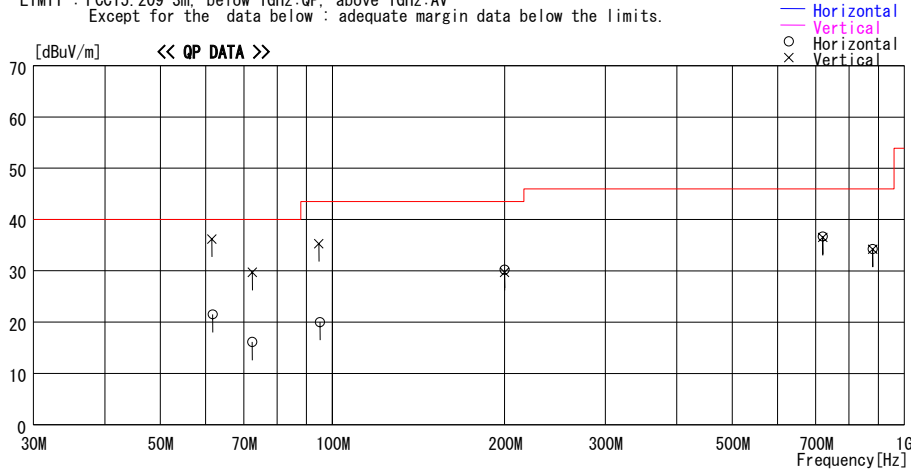
**Radiated Spurious Emission (below 1GHz)**  
**Dual Band Diversity Antenna, 11a, Tx 5260MHz, 54Mbps, Ant:A, High power**  
**DATA OF RADIATED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Date : 2007/01/22

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-H0  
Power : DC 24V  
Temp./Humi. : 22deg. C. / 37%  
Operator : Kenichi Adachi

Mode / Remarks : 11a Tx 5260MHz, 54Mbps (Worst), ANT:A (Worst), Worst-axis: EUT:X, Hor: Ant:X, Ver:

LIMIT : FCC15.209 3m. below 1GHz:QP, above 1GHz:AV  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Gain [dB]							
61.520	49.9	QP	8.1	-21.8	36.2	135	100	Vert.	40.0	3.8	
61.732	35.3	QP	8.0	-21.8	21.5	261	400	Hori.	40.0	18.5	
72.381	30.9	QP	6.8	-21.6	16.1	255	214	Hori.	40.0	23.9	
72.396	44.5	QP	6.8	-21.6	29.7	130	100	Vert.	40.0	10.3	
94.623	48.0	QP	8.7	-21.4	35.3	168	100	Vert.	43.5	8.2	
95.042	32.6	QP	8.8	-21.4	20.0	106	235	Hori.	43.5	23.5	
199.998	32.4	QP	17.4	-20.1	29.7	139	100	Vert.	43.5	13.8	
200.003	32.9	QP	17.4	-20.1	30.2	73	151	Hori.	43.5	13.3	
720.001	34.8	QP	20.7	-18.8	36.7	156	123	Hori.	46.0	9.3	
720.006	34.6	QP	20.7	-18.8	36.5	28	100	Vert.	46.0	9.5	
879.999	29.7	QP	22.0	-17.5	34.2	208	117	Vert.	46.0	11.8	
880.008	29.8	QP	22.0	-17.5	34.3	247	100	Hori.	46.0	11.7	

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz-  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

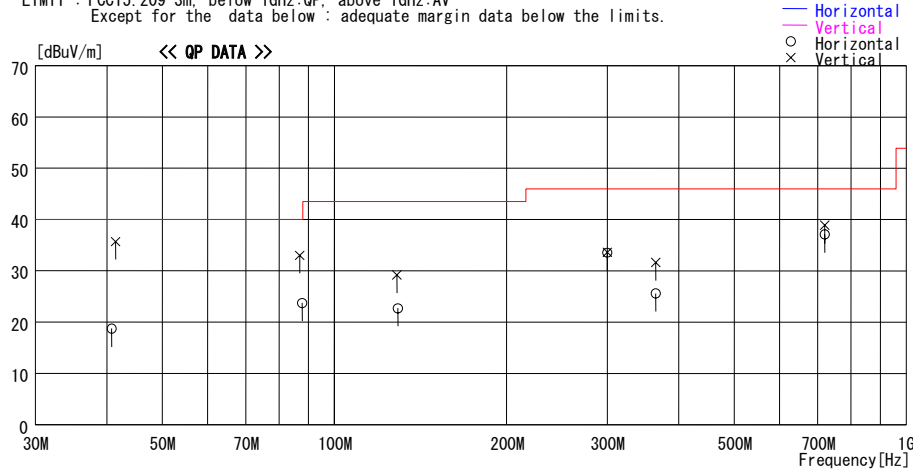
**Radiated Spurious Emission (below 1GHz)**  
**Dual Band Diversity Antenna, 11a, Tx 5320MHz, 54Mbps, Ant:A, High power**  
**DATA OF RADIATED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Date : 2007/01/22

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-H0  
Power : DC 24V  
Temp./Humi. : 22deg.C. / 37%  
Operator : Kenichi Adachi

Mode / Remarks : 11a Tx 5320MHz, 54Mbps (Worst), ANT:A (Worst), Worst-axis: EUT:X, Hor: Ant:X, Ver:

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:AV  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss& Gain [dB]							
40.792	27.2	QP	13.5	-22.0	18.7	110	351	Hori.	40.0	21.3	
41.425	44.5	QP	13.2	-22.0	35.7	139	100	Vert.	40.0	4.3	
86.935	47.1	QP	7.3	-21.4	33.0	170	100	Vert.	40.0	7.0	
87.772	37.8	QP	7.3	-21.4	23.7	91	217	Hori.	40.0	16.3	
128.572	36.7	QP	13.4	-20.9	29.2	328	100	Vert.	43.5	14.3	
128.933	30.1	QP	13.5	-20.9	22.7	210	301	Hori.	43.5	20.8	
299.988	32.6	QP	20.1	-19.2	33.5	103	338	Hori.	46.0	12.5	
299.988	32.7	QP	20.1	-19.2	33.6	359	100	Vert.	46.0	12.4	
364.494	34.5	QP	16.8	-19.7	31.6	174	100	Vert.	46.0	14.4	
364.510	28.5	QP	16.8	-19.7	25.6	272	100	Hori.	46.0	20.4	
720.006	35.2	QP	20.7	-18.8	37.1	150	121	Hori.	46.0	8.9	
720.008	37.0	QP	20.7	-18.8	38.9	357	100	Vert.	46.0	7.1	

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz-  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

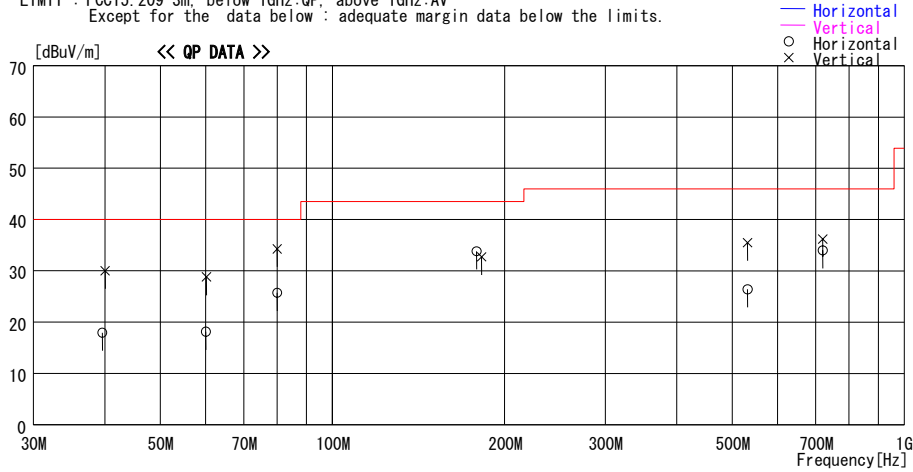
**Radiated Spurious Emission (below 1GHz)**  
**Dual Band Diversity Antenna, 11a, Tx 5500MHz, 54Mbps, Ant:A, High power**  
**DATA OF RADIATED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Date : 2007/01/22

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-H0  
Power : DC 24V  
Temp./Humi. : 22deg. C. / 37%  
Operator : Kenichi Adachi

Mode / Remarks : 11a Tx 5500MHz, 54Mbps (Worst), ANT:A (Worst), Worst-axis: EUT:X, Hor: Ant:X, Ver:

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:AV  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Gain [dB]							
39.568	25.9	QP	14.0	-22.0	17.9	9	400	Hori.	40.0	22.1	
40.042	38.2	QP	13.8	-22.0	30.0	77	100	Vert.	40.0	10.0	
60.067	31.6	QP	8.3	-21.8	18.1	246	388	Hori.	40.0	21.9	
60.230	42.3	QP	8.3	-21.8	28.8	143	100	Vert.	40.0	11.2	
79.999	40.5	QP	6.7	-21.5	25.7	221	221	Hori.	40.0	14.3	
80.015	49.1	QP	6.7	-21.5	34.3	141	100	Vert.	40.0	5.7	
178.570	37.7	QP	16.4	-20.3	33.8	275	155	Hori.	43.5	9.7	
182.256	36.4	QP	16.6	-20.3	32.7	171	100	Vert.	43.5	10.8	
531.825	36.6	QP	18.8	-19.9	35.5	185	100	Vert.	46.0	10.5	
531.884	27.5	QP	18.8	-19.9	26.4	258	217	Hori.	46.0	19.6	
720.010	34.3	QP	20.7	-18.8	36.2	359	100	Vert.	46.0	9.8	
720.016	32.1	QP	20.7	-18.8	34.0	317	100	Hori.	46.0	12.0	

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz-  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

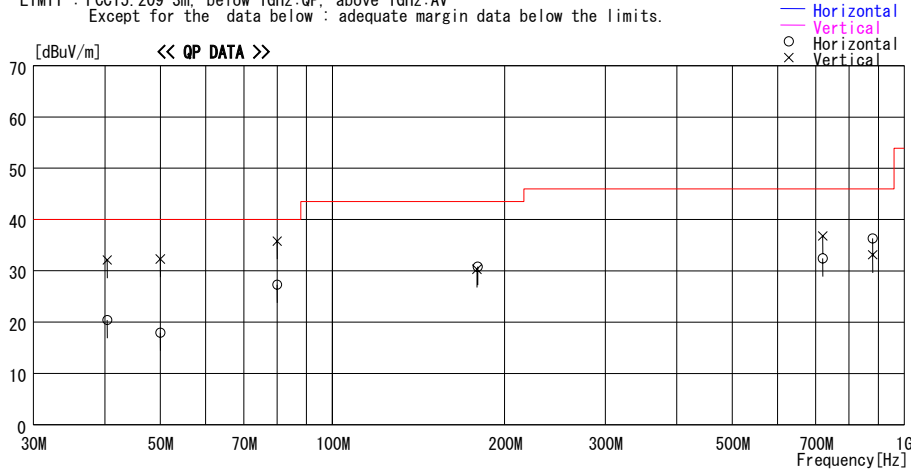
**Radiated Spurious Emission (below 1GHz)**  
**Dual Band Diversity Antenna, 11a, Tx 5600MHz, 54Mbps, Ant:A, High power**  
**DATA OF RADIATED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Date : 2007/01/22

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-H0  
Power : DC 24V  
Temp./Humi. : 22deg. C. / 37%  
Operator : Kenichi Adachi

Mode / Remarks : 11a Tx 5600MHz, 54Mbps (Worst), ANT:A (Worst), Worst-axis: EUT:X, Hor: Ant:X, Ver:

LIMIT : FCC15.209 3m. below 1GHz:QP, above 1GHz:AV  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss & Gain [dB]							
40.381	28.8	QP	13.6	-22.0	20.4	7	400	Hori.	40.0	19.6	
40.393	40.5	QP	13.6	-22.0	32.1	140	100	Vert.	40.0	7.9	
49.987	29.7	QP	10.3	-22.1	17.9	274	368	Hori.	40.0	22.1	
49.989	44.1	QP	10.3	-22.1	32.3	113	100	Vert.	40.0	7.7	
80.001	42.1	QP	6.7	-21.5	27.3	236	219	Hori.	40.0	12.7	
80.005	50.6	QP	6.7	-21.5	35.8	125	100	Vert.	40.0	4.2	
178.830	34.2	QP	16.4	-20.3	30.3	148	100	Vert.	43.5	13.2	
179.575	34.6	QP	16.5	-20.3	30.8	277	100	Hori.	43.5	12.7	
720.004	30.5	QP	20.7	-18.8	32.4	310	100	Hori.	46.0	13.6	
720.017	34.9	QP	20.7	-18.8	36.8	2	100	Vert.	46.0	9.2	
880.005	28.6	QP	22.0	-17.5	33.1	297	100	Vert.	46.0	12.9	
880.007	31.8	QP	22.0	-17.5	36.3	249	100	Hori.	46.0	9.7	

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz-  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (below 1GHz)**  
**Dual Band Diversity Antenna, 11a, Tx 5700MHz, 54Mbps, Ant:A, High power**

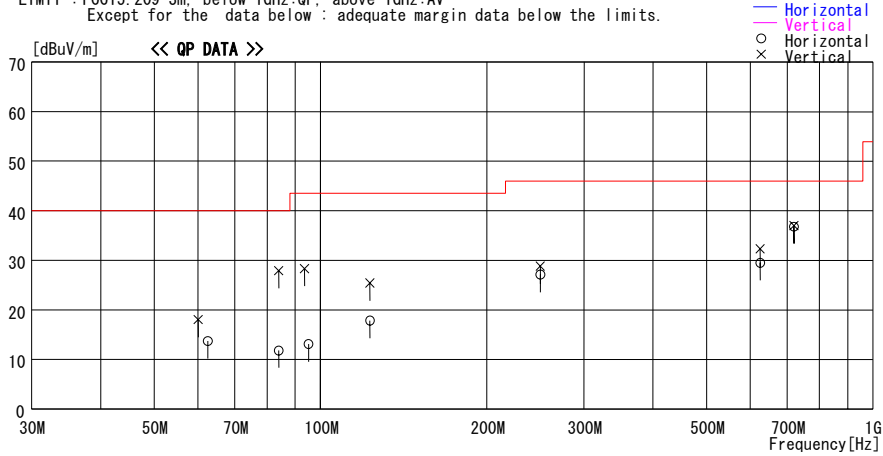
**DATA OF RADIATED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic  
Date : 2007/01/26

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-HO  
Power : DC 24V  
Temp./Humi. : 22deg.C. / 30%  
Operator : Kenichi Adachi

Mode / Remarks: 11a Tx 5700MHz, 54Mbps, L angle Ant., ANT:A, Worst-axis: Hor: EUT:X, Ant:X, Ver: EUT:X,

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:AV  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Gain [dB]						
62.530	27.6	QP	7.9	-21.8	13.7	349	364	Hori.	40.0	26.3
60.086	31.5	QP	8.3	-21.8	18.0	52	100	Vert.	40.0	22.0
84.068	26.3	QP	7.0	-21.5	11.8	87	299	Hori.	40.0	28.2
84.026	42.4	QP	7.0	-21.5	27.9	156	100	Vert.	40.0	12.1
95.197	25.6	QP	8.9	-21.4	13.1	87	299	Hori.	43.5	30.4
93.604	41.2	QP	8.5	-21.4	28.3	208	100	Vert.	43.5	15.2
122.882	25.6	QP	13.1	-20.9	17.8	153	218	Hori.	43.5	25.7
122.921	33.2	QP	13.1	-20.9	25.4	258	100	Vert.	43.5	18.1
250.004	30.0	QP	16.7	-19.6	27.1	93	138	Hori.	46.0	18.9
250.004	31.7	QP	16.7	-19.6	28.8	299	100	Vert.	46.0	17.2
625.001	29.2	QP	19.7	-19.4	29.5	129	248	Hori.	46.0	16.5
625.001	32.0	QP	19.7	-19.4	32.3	61	100	Vert.	46.0	13.7
720.009	34.9	QP	20.7	-18.8	36.8	130	119	Hori.	46.0	9.2
720.009	35.1	QP	20.7	-18.8	37.0	78	100	Vert.	46.0	9.0

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz-  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (below 1GHz)**  
**Dual Band Diversity Antenna, 11a, Tx 5745MHz, 54Mbps, Ant:A, High power**

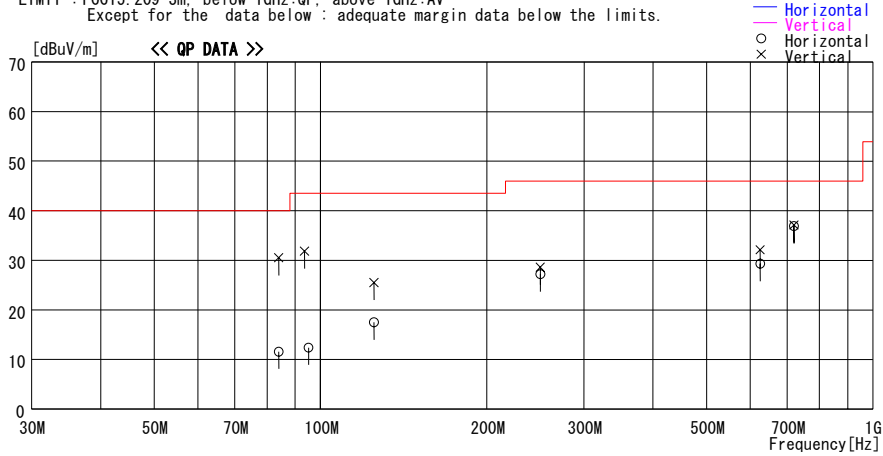
**DATA OF RADIATED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic  
Date : 2007/01/26

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-HO  
Power : DC 24V  
Temp./Humi. : 22deg.C. / 30%  
Operator : Kenichi Adachi

Mode / Remarks: 11a Tx 5745MHz, 54Mbps, L angle Ant., ANT:A, Worst-axis: Hor: EUT:X, Ant:X, Ver: EUT:X,

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:AV  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Gain [dB]						
84.014	26.1	QP	7.0	-21.5	11.6	92	295	Hori.	40.0	28.4
84.026	45.0	QP	7.0	-21.5	30.5	153	100	Vert.	40.0	9.5
95.110	24.9	QP	8.9	-21.4	12.4	92	295	Hori.	43.5	31.1
93.620	44.7	QP	8.5	-21.4	31.8	210	100	Vert.	43.5	11.7
125.012	25.2	QP	13.2	-20.9	17.5	161	224	Hori.	43.5	26.0
125.002	33.2	QP	13.2	-20.9	25.5	256	100	Vert.	43.5	18.0
250.003	30.1	QP	16.7	-19.6	27.2	98	134	Hori.	46.0	18.8
250.003	31.5	QP	16.7	-19.6	28.6	303	100	Vert.	46.0	17.4
625.001	29.0	QP	19.7	-19.4	29.3	247	126	Hori.	46.0	16.7
625.001	31.8	QP	19.7	-19.4	32.1	65	100	Vert.	46.0	13.9
720.002	35.0	QP	20.7	-18.8	36.9	134	121	Hori.	46.0	9.1
720.005	35.2	QP	20.7	-18.8	37.1	99	100	Vert.	46.0	8.9

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz-  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (below 1GHz)**  
**Dual Band Diversity Antenna, 11a, Tx 5765MHz, 54Mbps, Ant:A, High power**

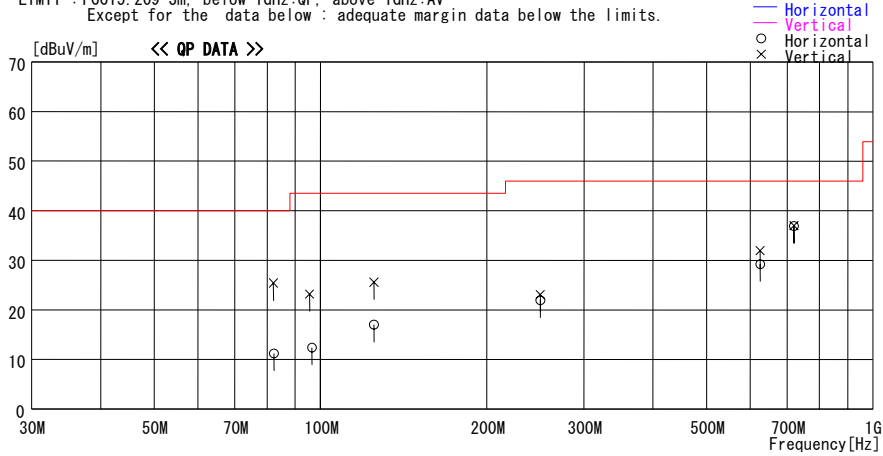
**DATA OF RADIATED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic  
Date : 2007/01/26

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-HO  
Power : DC 24V  
Temp./Humi. : 22deg.C. / 30%  
Operator : Kenichi Adachi

Mode / Remarks: 11a Tx 5765MHz, 54Mbps, L angle Ant., ANT:A, Worst-axis: Hor: EUT:X, Ant:X, Ver: EUT:X,

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:AV  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Gain [dB]						
82.356	25.8	QP	6.9	-21.5	11.2	104	299	Hori.	40.0	28.8
82.256	40.0	QP	6.9	-21.5	25.4	174	100	Vert.	40.0	14.6
96.500	24.5	QP	9.2	-21.3	12.4	103	250	Hori.	43.5	31.1
95.567	35.6	QP	9.0	-21.4	23.2	178	100	Vert.	43.5	20.3
125.002	24.7	QP	13.2	-20.9	17.0	89	213	Hori.	43.5	26.5
125.002	33.3	QP	13.2	-20.9	25.6	258	100	Vert.	43.5	17.9
250.004	24.8	QP	16.7	-19.6	21.9	103	137	Hori.	46.0	24.1
250.004	26.0	QP	16.7	-19.6	23.1	167	100	Vert.	46.0	22.9
625.000	28.9	QP	19.7	-19.4	29.2	253	127	Hori.	46.0	16.8
625.000	31.6	QP	19.7	-19.4	31.9	73	100	Vert.	46.0	14.1
720.002	35.0	QP	20.7	-18.8	36.9	109	120	Hori.	46.0	9.1
720.002	35.1	QP	20.7	-18.8	37.0	98	100	Vert.	46.0	9.0

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz-  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (below 1GHz)**  
**Dual Band Diversity Antenna, 11a, Tx 5805MHz, 54Mbps, Ant:A, High power**

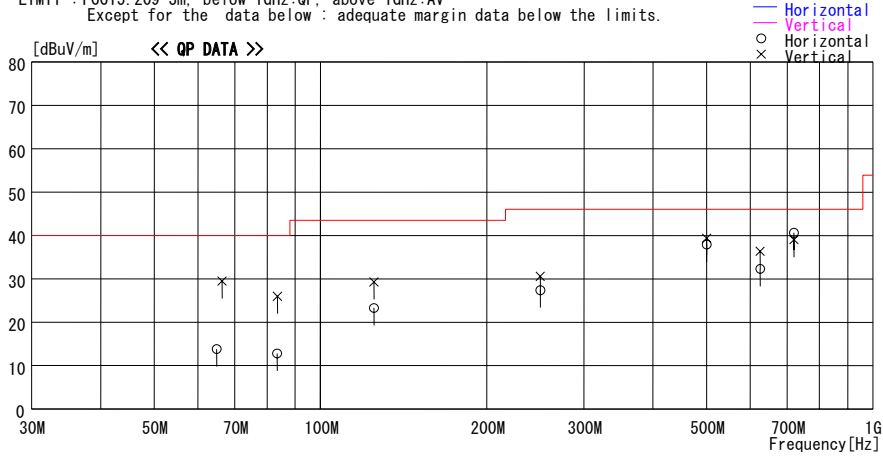
**DATA OF RADIATED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2007/01/29

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-HO  
Power : DC 24V  
Temp./Humi. : 24deg.C. / 28%  
Operator : Kenichi Adachi

Mode / Remarks: 11a Tx 5805MHz, 54Mbps(Worst), ANT:A(Worst), Worst-axis: EUT:X, Hor: Ant:X, Ver:

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:AV  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Gain [dB]						
64.853	26.0	QP	7.6	-19.8	13.8	338	262	Hori.	40.0	26.2
66.310	41.9	QP	7.4	-19.8	29.5	102	100	Vert.	40.0	10.5
83.524	25.3	QP	7.0	-19.5	12.8	89	316	Hori.	40.0	27.2
83.578	38.5	QP	7.0	-19.5	26.0	119	100	Vert.	40.0	14.0
124.988	28.9	QP	13.2	-18.8	23.3	196	255	Hori.	43.5	20.2
124.988	34.9	QP	13.2	-18.8	29.3	90	100	Vert.	43.5	14.2
249.984	27.5	QP	16.8	-16.9	27.4	89	298	Hori.	46.0	18.6
249.984	30.7	QP	16.8	-16.9	30.6	151	100	Vert.	46.0	15.4
499.981	35.8	QP	18.6	-16.5	37.9	45	100	Hori.	46.0	8.1
499.981	37.3	QP	18.6	-16.5	39.4	74	135	Vert.	46.0	6.6
624.950	27.7	QP	19.8	-15.2	32.3	302	134	Hori.	46.0	13.7
624.958	31.7	QP	19.8	-15.2	36.3	9	100	Vert.	46.0	9.7
719.996	34.2	QP	21.1	-14.6	40.7	48	116	Hori.	46.0	5.3
719.996	32.5	QP	21.1	-14.6	39.0	56	164	Vert.	46.0	7.0

CHART: WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.



**Radiated Spurious Emission (below 1GHz)**  
**Dual Band Diversity Antenna, 11a, Rx 5260MHz, Ant:A**

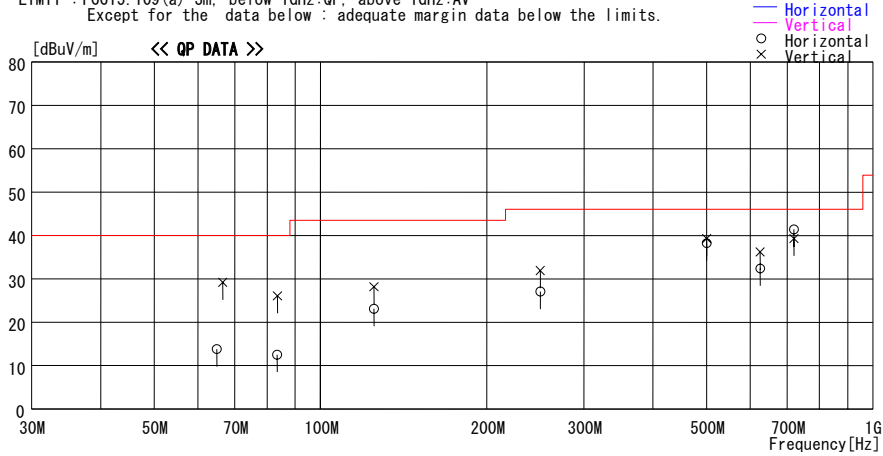
**DATA OF RADIATED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Date : 2007/01/29

Company : OMRON Corporation Report No. : 27DE0139-HO  
Kind of EUT : FA Wireless LAN Unit Power : DC 24V  
Model No. : WE70-AP Temp./Humi. : 24deg.C. / 28%  
Serial No. : 279651000201 Operator : Kenichi Adachi

Mode / Remarks: 11a Rx 5260MHz, ANT:A(Worst), Worst-axis: EUT:X, Hor: Ant:X, Ver:

LIMIT : FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:AV  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Loss & Gain [dB]						
64.927	26.0	QP	7.6	-19.8	13.8	339	263	Hori.	40.0	26.2
66.524	41.7	QP	7.3	-19.8	29.2	66	100	Vert.	40.0	10.8
83.539	25.0	QP	7.0	-19.5	12.5	92	312	Hori.	40.0	27.5
83.589	38.6	QP	7.0	-19.5	26.1	99	100	Vert.	40.0	13.9
124.973	28.7	QP	13.2	-18.8	23.1	197	251	Hori.	43.5	20.4
124.973	33.8	QP	13.2	-18.8	28.2	302	100	Vert.	43.5	15.3
249.972	27.2	QP	16.8	-16.9	27.1	94	301	Hori.	46.0	18.9
249.972	32.0	QP	16.8	-16.9	31.9	143	100	Vert.	46.0	14.1
499.986	36.1	QP	18.6	-16.5	38.2	46	100	Hori.	46.0	7.8
499.986	37.2	QP	18.6	-16.5	39.3	76	131	Vert.	46.0	6.7
624.963	27.8	QP	19.8	-15.2	32.4	298	134	Hori.	46.0	13.6
624.963	31.6	QP	19.8	-15.2	36.2	8	100	Vert.	46.0	9.8
719.981	34.9	QP	21.1	-14.6	41.4	53	113	Hori.	46.0	4.6
719.981	32.8	QP	21.1	-14.6	39.3	51	165	Vert.	46.0	6.7

CHART: WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (below 1GHz)**  
**Dual Band Diversity Antenna, 11a, Rx 5600MHz, Ant:A**

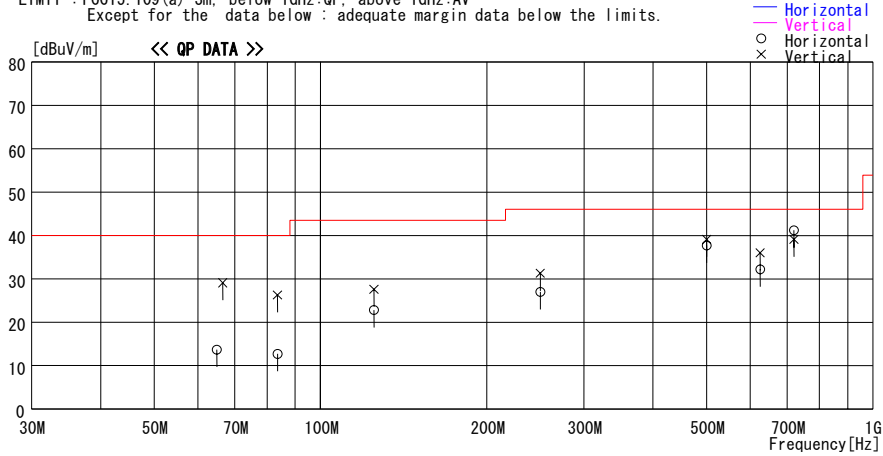
**DATA OF RADIATED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Date : 2007/01/29

Company : OMRON Corporation Report No. : 27DE0139-HO  
Kind of EUT : FA Wireless LAN Unit Power : DC 24V  
Model No. : WE70-AP Temp./Humi. : 24deg.C. / 28%  
Serial No. : 279651000201 Operator : Kenichi Adachi

Mode / Remarks: 11a Rx 5600MHz, ANT:A(Worst), Worst-axis: EUT:X, Hor: Ant:X, Ver:

LIMIT : FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:AV  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Loss & Gain [dB]						
64.939	25.9	QP	7.6	-19.8	13.7	343	259	Hori.	40.0	26.3
66.527	41.6	QP	7.3	-19.8	29.1	60	100	Vert.	40.0	10.9
83.637	25.2	QP	7.0	-19.5	12.7	89	310	Hori.	40.0	27.3
83.567	38.8	QP	7.0	-19.5	26.3	98	100	Vert.	40.0	13.7
124.974	28.4	QP	13.2	-18.8	22.8	202	253	Hori.	43.5	20.7
124.974	33.2	QP	13.2	-18.8	27.6	304	100	Vert.	43.5	15.9
249.974	27.1	QP	16.8	-16.9	27.0	89	298	Hori.	46.0	19.0
249.974	31.4	QP	16.8	-16.9	31.3	147	100	Vert.	46.0	14.7
499.988	35.6	QP	18.6	-16.5	37.7	47	100	Hori.	46.0	8.3
499.988	37.0	QP	18.6	-16.5	39.1	67	132	Vert.	46.0	6.9
624.965	27.6	QP	19.8	-15.2	32.2	287	135	Hori.	46.0	13.8
624.965	31.4	QP	19.8	-15.2	36.0	10	100	Vert.	46.0	10.0
719.984	34.7	QP	21.1	-14.6	41.2	49	118	Hori.	46.0	4.8
719.984	32.6	QP	21.1	-14.6	39.1	53	168	Vert.	46.0	6.9

CHART: WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (below 1GHz)**  
**Dual Band Diversity Antenna, 11a, Rx 5765MHz, Ant:A**

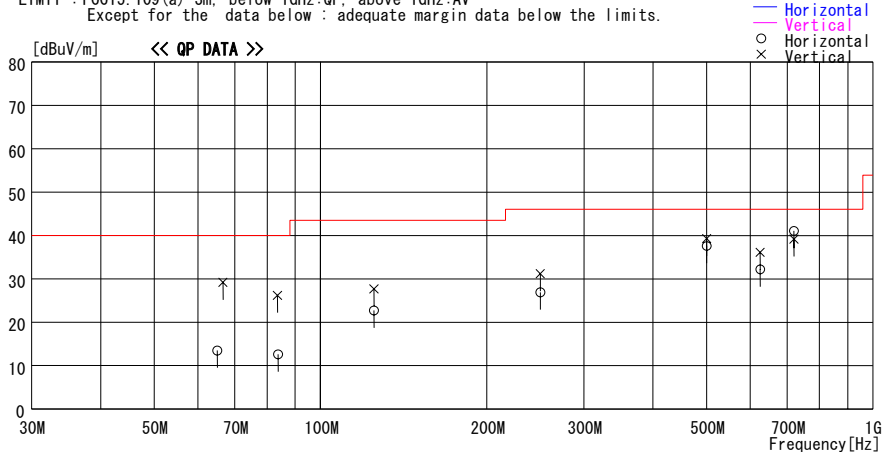
**DATA OF RADIATED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2007/01/29

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-HO  
Power : DC 24V  
Temp./Humi. : 24deg.C. / 28%  
Operator : Kenichi Adachi

Mode / Remarks: 11a Rx 5765MHz, ANT:A(Worst), Worst-axis: EUT:X, Hor: Ant:X, Ver:

LIMIT : FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:AV  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Gain [dB]						
64.967	25.7	QP	7.6	-19.8	13.5	348	265	Hori.	40.0	26.5
66.594	41.7	QP	7.3	-19.8	29.2	68	100	Vert.	40.0	10.8
83.789	25.1	QP	7.0	-19.5	12.6	105	304	Hori.	40.0	27.4
83.567	38.7	QP	7.0	-19.5	26.2	154	100	Vert.	40.0	13.8
124.987	28.3	QP	13.2	-18.8	22.7	210	247	Hori.	43.5	20.8
124.987	33.3	QP	13.2	-18.8	27.7	300	100	Vert.	43.5	15.8
249.971	27.0	QP	16.8	-16.9	26.9	92	287	Hori.	46.0	19.1
249.971	31.3	QP	16.8	-16.9	31.2	142	100	Vert.	46.0	14.8
499.989	35.5	QP	18.6	-16.5	37.6	44	100	Hori.	46.0	8.4
499.989	37.2	QP	18.6	-16.5	39.3	77	131	Vert.	46.0	6.7
624.959	27.6	QP	19.8	-15.2	32.2	279	134	Hori.	46.0	13.8
624.959	31.5	QP	19.8	-15.2	36.1	8	100	Vert.	46.0	9.9
719.986	34.6	QP	21.1	-14.6	41.1	45	116	Hori.	46.0	4.9
719.986	32.7	QP	21.1	-14.6	39.2	50	169	Vert.	46.0	6.8

CHART: WITH FACTOR ANT TYPE: -30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

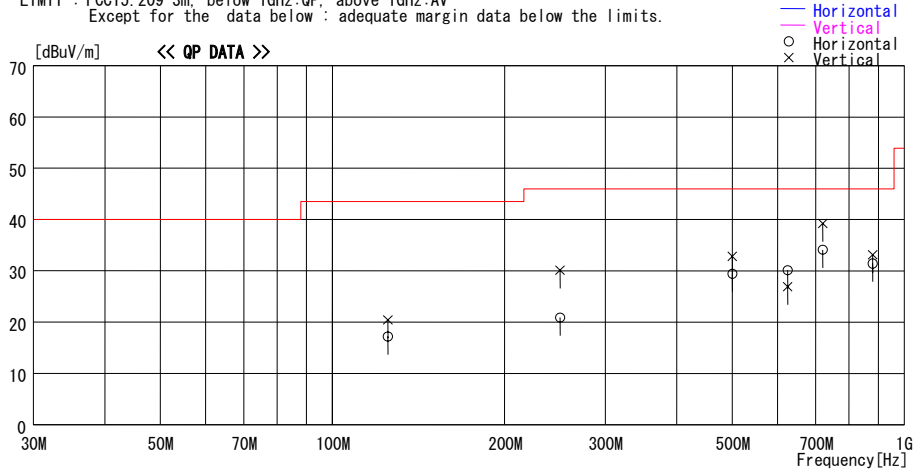
**Radiated Spurious Emission (below 1GHz)**  
**Magnetic Pedestal Antenna, 11a, Tx 5260MHz, 54Mbps, Ant:A, High power**  
**DATA OF RADIATED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No. 4 Semi Anechoic Chamber  
Date : 2007/03/02

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 2796510000201  
Report No. : 27DE0139-H0  
Power : DC 24V  
Temp./Humi. : 25deg. C. / 32%  
Operator : Kenichi Adachi

Mode / Remarks : 11a Tx 5260MHz, 54Mbps (Worst), ANT:A (Worst), Worst-axis: EUT:X, Hor:ANT:X,

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:AV  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Gain [dB]							
125.004	27.1	QP	13.5	-23.4	17.2	249	150	Hori.	43.5	26.3	
125.004	30.3	QP	13.5	-23.4	20.4	330	100	Vert.	43.5	23.1	
250.007	25.9	QP	17.2	-22.2	20.9	144	300	Hori.	46.0	25.1	
250.003	35.1	QP	17.2	-22.2	30.1	153	100	Vert.	46.0	15.9	
500.000	30.6	QP	19.5	-20.7	29.4	160	100	Hori.	46.0	16.6	
500.000	34.0	QP	19.5	-20.7	32.8	180	100	Vert.	46.0	13.2	
625.013	30.0	QP	20.3	-20.2	30.1	218	220	Hori.	46.0	15.9	
625.001	26.8	QP	20.3	-20.2	26.9	170	100	Vert.	46.0	19.1	
720.000	32.2	QP	21.5	-19.6	34.1	136	220	Hori.	46.0	11.9	
720.000	37.3	QP	21.5	-19.6	39.2	352	190	Vert.	46.0	6.8	
879.992	26.3	QP	23.3	-18.2	31.4	136	180	Hori.	46.0	14.6	
880.003	28.0	QP	23.3	-18.2	33.1	352	175	Vert.	46.0	12.9	

CHART: WITH FACTOR ANT TYPE: 30MHz: LOOP, 30-300MHz: BICONICAL, 300MHz-1000MHz: LOGPERIODIC, 1000MHz-  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

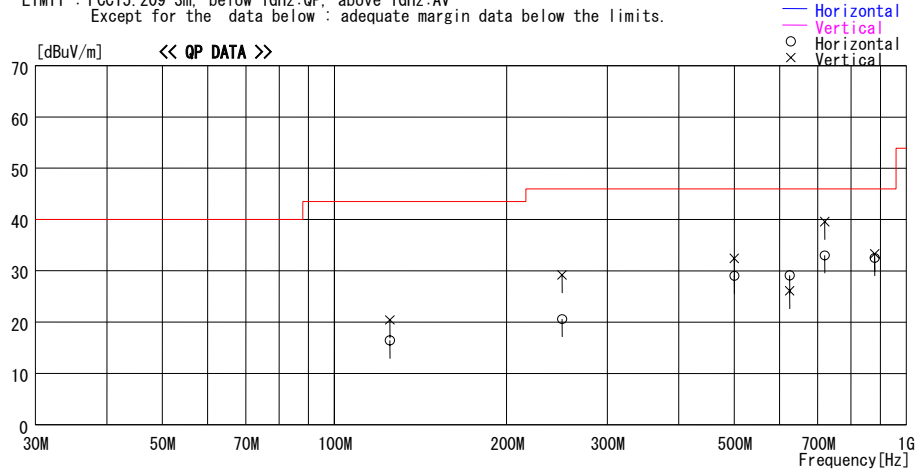
**Radiated Spurious Emission (below 1GHz)**  
**Magnetic Pedestal Antenna, 11a, Tx 5600MHz, 54Mbps, Ant:A, High power**  
**DATA OF RADIATED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No. 4 Semi Anechoic Chamber  
Date : 2007/03/02

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 2796510000201  
Report No. : 27DE0139-H0  
Power : DC 24V  
Temp./Humi. : 25deg. C. / 32%  
Operator : Kenichi Adachi

Mode / Remarks : 11a Tx 5600MHz, 54Mbps (Worst), ANT:A (Worst), Worst-axis: EUT:X, Hor:ANT:X,

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:AV  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Gain [dB]							
125.000	26.3	QP	13.5	-23.4	16.4	229	150	Hori.	43.5	27.1	
125.000	30.3	QP	13.5	-23.4	20.4	330	100	Vert.	43.5	23.1	
250.000	25.6	QP	17.2	-22.2	20.6	120	300	Hori.	46.0	25.4	
250.001	34.2	QP	17.2	-22.2	29.2	210	100	Vert.	46.0	16.8	
500.000	30.2	QP	19.5	-20.7	29.0	147	100	Hori.	46.0	17.0	
500.000	33.6	QP	19.5	-20.7	32.4	167	100	Vert.	46.0	13.6	
625.000	29.0	QP	20.3	-20.2	29.1	177	220	Hori.	46.0	16.9	
625.000	26.0	QP	20.3	-20.2	26.1	180	100	Vert.	46.0	19.9	
720.000	31.1	QP	21.5	-19.6	33.0	344	230	Hori.	46.0	13.0	
720.000	37.7	QP	21.5	-19.6	39.6	180	100	Vert.	46.0	6.4	
880.000	27.4	QP	23.3	-18.2	32.5	147	100	Hori.	46.0	13.5	
880.000	28.2	QP	23.3	-18.2	33.3	171	100	Vert.	46.0	12.7	

CHART:WITH FACTOR ANT TYPE:-30MHz:LOOP, 30-300MHz:BICONICAL, 300MHz-1000MHz:LOGPERIODIC, 1000MHz-  
CALCULATION:RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

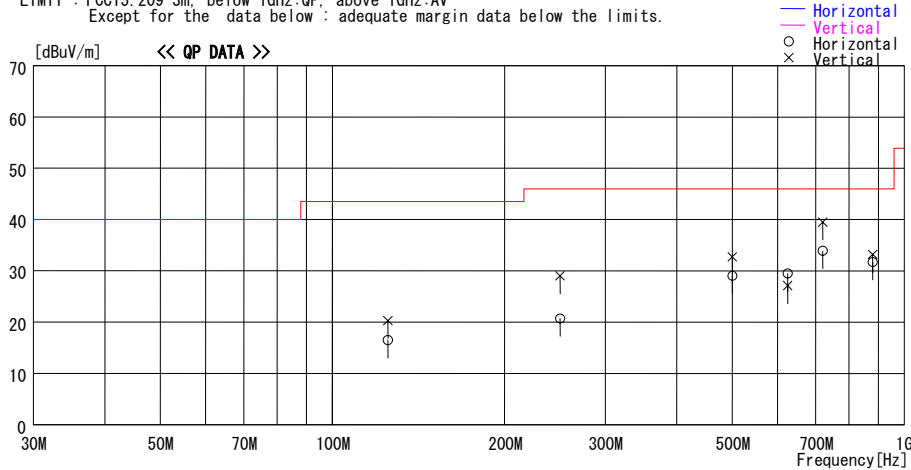
**Radiated Spurious Emission (below 1GHz)**  
**Magnetic Pedestal Antenna, 11a, Tx 5765MHz, 54Mbps, Ant:A, High power**  
**DATA OF RADIATED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No. 4 Semi Anechoic Chamber  
Date : 2007/03/02

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 2796510000201  
Report No. : 27DE0139-H0  
Power : DC 24V  
Temp./Humi. : 25deg. C. / 32%  
Operator : Kenichi Adachi

Mode / Remarks : 11a Tx 5765MHz, 11Mbps (Worst), ANT:A (Worst), Worst-axis: EUT:X, Hor:ANT:X,

LIMIT : FCC15.209 3m, below 1GHz:QP, above 1GHz:AV  
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Gain [dB]							
125.010	26.4	QP	13.5	-23.4	16.5	229	177	Hori.	43.5	27.0	
125.011	30.2	QP	13.5	-23.4	20.3	330	100	Vert.	43.5	23.2	
250.002	25.7	QP	17.2	-22.2	20.7	120	320	Hori.	46.0	25.3	
250.002	34.0	QP	17.2	-22.2	29.0	139	100	Vert.	46.0	17.0	
500.000	30.2	QP	19.5	-20.7	29.0	166	110	Hori.	46.0	17.0	
500.000	33.9	QP	19.5	-20.7	32.7	185	100	Vert.	46.0	13.3	
625.004	29.4	QP	20.3	-20.2	29.5	220	100	Hori.	46.0	16.5	
625.004	27.0	QP	20.3	-20.2	27.1	185	100	Vert.	46.0	18.9	
720.000	32.0	QP	21.5	-19.6	33.9	329	220	Hori.	46.0	12.1	
720.000	37.6	QP	21.5	-19.6	39.5	180	100	Vert.	46.0	6.5	
880.010	26.6	QP	23.3	-18.2	31.7	179	270	Hori.	46.0	14.3	
879.994	28.1	QP	23.3	-18.2	33.2	185	120	Vert.	46.0	12.8	

CHART:WITH FACTOR ANT TYPE:-30MHz:LOOP, 30-300MHz:BICONICAL, 300MHz-1000MHz:LOGPERIODIC, 1000MHz-  
CALCULATION:RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (above 1GHz:Inside of the restricted band)**

**Dual Band Diversity Antenna, 11a, Tx 5180MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	3m (below 10GHz), 1m (above 10GHz)
Model	WE70-AP	Date	01/24/2007      01/25/2007      01/25/2007
S/N	279651000201	Temperature	23 deg.C.      23 deg.C.      23 deg.C.
Power	DC 24V	Humidity	30 %      30 %      30 %
Mode	11a Tx 5180MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi      Kenichi Adachi      Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit PK [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	5119.9	44.0	44.6	36.7	31.5	4.3	0.0	53.5	54.1	73.9	20.4	19.8
2	5150.0	48.5	48.1	36.7	31.5	4.3	0.0	58.0	57.6	73.9	15.9	16.3
3	5439.9	42.0	42.7	36.4	31.5	4.5	0.0	51.4	52.1	73.9	22.5	21.8
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
4	15540.0	43.4	44.7	40.4	30.6	7.9	0.7	52.3	53.6	73.9	21.6	20.3
5	20720.0	45.4	45.6	39.2	31.0	9.0	0.0	53.1	53.3	73.9	20.8	20.6

**AV DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit AV [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	5119.9	33.8	34.6	36.7	31.5	4.3	0.0	43.3	44.1	53.9	10.6	9.8
2	5150.0	34.0	33.7	36.7	31.5	4.3	0.0	43.5	43.2	53.9	10.4	10.7
3	5439.9	30.9	31.5	36.4	31.5	4.5	0.0	40.3	40.9	53.9	13.6	13.0
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
4	15540.0	31.9	33.1	40.4	30.6	7.9	0.7	40.8	42.0	53.9	13.1	11.9
5	20720.0	32.8	32.7	39.2	31.0	9.0	0.0	40.5	40.4	53.9	13.4	13.5

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB

\* Except for the above table : All other spurious emissions were less than 20dB for the limit.  
\* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.  
\*The limit is rounded down to one decimal place.  
\*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (above 1GHz:Inside of the restricted band)**

**Dual Band Diversity Antenna, 11a, Tx 5260MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	3m (below 10GHz), 1m (above 10GHz), 0.5m (above26.5GHz)
Model	WE70-AP	Date	01/24/2007      01/25/2007      01/25/2007
S/N	279651000201	Temperature	23 deg.C.      23 deg.C.      23 deg.C.
Power	DC 24V	Humidity	30 %      30 %      30 %
Mode	11a Tx 5260MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi      Kenichi Adachi      Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit PK [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	5119.9	44.1	45.0	36.7	31.5	4.3	0.0	53.6	54.5	73.9	20.3	19.4
2	5439.9	43.0	44.1	36.4	31.5	4.5	0.0	52.4	53.5	73.9	21.5	20.4
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
3	15781.1	44.7	47.0	41.3	30.8	8.0	0.7	54.4	56.7	73.9	19.5	17.2
4	21040.0	45.5	45.6	39.1	31.1	9.1	0.0	53.1	53.2	73.9	20.8	20.7
<b>Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>												
5	31560.0	48.4	48.1	44.1	25.2	7.9	0.0	59.7	59.4	73.9	14.2	14.5

**AV DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit AV [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	5120.1	33.6	33.8	36.7	31.5	4.3	0.0	43.1	43.3	53.9	10.8	10.6
2	5439.9	30.8	31.9	36.4	31.5	4.5	0.0	40.2	41.3	53.9	13.7	12.6
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
3	15781.1	33.3	35.0	41.3	30.8	8.0	0.7	43.0	44.7	53.9	10.9	9.2
4	21040.0	33.3	33.2	39.1	31.1	9.1	0.0	40.9	40.8	53.9	13.0	13.1
<b>Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>												
5	31560.0	35.9	35.8	44.1	25.2	7.9	0.0	47.2	47.1	53.9	6.7	6.8

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB

Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) = 15.5 dB

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

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

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

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MF060b(14.06.06)



**Radiated Spurious Emission (above 1GHz:Inside of the restricted band)**

**Dual Band Diversity Antenna, 11a, Tx 5320MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	3m (below 10GHz), 1m (above 10GHz)
Model	WE70-AP	Date	01/24/2007      01/25/2007      01/25/2007
S/N	279651000201	Temperature	23 deg.C.      23 deg.C.      23 deg.C.
Power	DC 24V	Humidity	30 %      30 %      30 %
Mode	11a Tx 5320MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi      Kenichi Adachi      Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK DETECT**

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit PK [dBuV/m]	Margin	
		HOR [dBuV]	VER [dBuV]					HOR [dBuV/m]	VER [dBuV/m]		HOR [dB]	VER [dB]
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	5119.9	44.4	44.5	36.7	31.5	4.3	0.0	53.9	54.0	73.9	20.0	19.9
2	5350.0	51.9	51.7	36.5	31.5	4.4	0.0	61.3	61.1	73.9	12.6	12.8
3	5439.9	42.3	42.6	36.4	31.5	4.5	0.0	51.7	52.0	73.9	22.2	21.9
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
4	10640.0	47.1	44.7	36.6	31.4	6.1	0.2	49.1	46.7	73.9	24.8	27.2
5	15958.8	46.1	45.8	41.9	30.9	8.1	0.7	56.4	56.1	73.9	17.5	17.8
6	21280.0	45.9	46.0	39.2	31.0	9.2	0.0	53.8	53.9	73.9	20.1	20.0

**AV DETECT**

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit AV [dBuV/m]	Margin	
		HOR [dBuV]	VER [dBuV]					HOR [dBuV/m]	VER [dBuV/m]		HOR [dB]	VER [dB]
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	5119.9	34.0	33.9	36.7	31.5	4.3	0.0	43.5	43.4	53.9	10.4	10.5
2	5350.0	35.5	34.9	36.5	31.5	4.4	0.0	44.9	44.3	53.9	9.0	9.6
3	5439.9	30.8	31.1	36.4	31.5	4.5	0.0	40.2	40.5	53.9	13.7	13.4
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
4	10360.2	35.5	33.7	36.6	31.4	6.1	0.2	37.5	35.7	53.9	16.4	18.2
5	15958.8	34.0	34.0	41.9	30.9	8.1	0.7	44.3	44.3	53.9	9.6	9.6
6	21280.0	33.3	33.2	39.2	31.0	9.2	0.0	41.2	41.1	53.9	12.7	12.8

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB

- \* Except for the above table : All other spurious emissions were less than 20dB for the limit.
- \* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.
- \*The limit is rounded down to one decimal place.
- \*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (above 1GHz:Inside of the restricted band)**

**Dual Band Diversity Antenna, 11a, Tx 5500MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	3m (below 10GHz), 1m (above 10GHz)
Model	WE70-AP	Date	01/21/2007 01/24/2007 01/25/2007
S/N	279651000201	Temperature	23 deg.C. 23 deg.C. 23 deg.C.
Power	DC 24V	Humidity	33 % 30 % 30 %
Mode	11a Tx 5500MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi Kenichi Adachi Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit PK [dBuV/m]	Margin [dB]	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	3666.6	46.2	45.3	28.5	31.9	2.7	0.0	45.5	44.6	73.9	28.4	29.3
2	5460.0	47.0	45.3	31.6	30.8	3.4	0.0	51.2	49.5	73.9	22.7	24.4
3	5470.0	56.1	52.0	31.6	30.8	3.4	0.0	60.3	56.2	73.9	13.6	17.7
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
4	11000.4	46.8	47.2	37.1	31.1	6.2	0.6	50.1	50.5	73.9	23.8	23.4

**AV DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit AV [dBuV/m]	Margin [dB]	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	3666.6	38.7	36.3	28.5	31.9	2.7	0.0	38.0	35.6	53.9	15.9	18.3
2	5460.0	33.0	33.0	31.6	30.8	3.4	0.0	37.2	37.2	53.9	16.7	16.7
3	5470.0	34.1	33.0	31.6	30.8	3.4	0.0	38.3	37.2	53.9	15.6	16.7
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
4	11000.4	34.8	35.8	37.1	31.1	6.2	0.6	38.1	39.1	53.9	15.8	14.8

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) =

9.5 dB

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

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

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

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MF060b(14.06.06)

**Radiated Spurious Emission (above 1GHz:Inside of the restricted band)**

**Dual Band Diversity Antenna, 11a, Tx 5600MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	3m (below 10GHz), 1m (above 10GHz) , 0.5m (above26.5GHz)
Model	WE70-AP	Date	01/24/2007 01/25/2007 01/25/2007
S/N	279651000201	Temperature	23 deg.C. 23 deg.C. 23 deg.C.
Power	DC 24V	Humidity	30 % 30 % 30 %
Mode	11a Tx 5600MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi Kenichi Adachi Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit PK [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	3733.3	48.2	48.1	32.3	32.1	3.7	0.0	52.1	52.0	73.9	21.8	21.9
2	7466.4	44.9	44.3	38.3	31.4	5.2	0.0	57.0	56.4	73.9	16.9	17.5
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
3	11199.9	46.7	47.1	37.6	31.1	6.3	0.7	50.7	51.1	73.9	23.2	22.8
4	22400.0	46.3	46.2	39.5	30.7	9.4	0.0	55.0	54.9	73.9	18.9	19.0
<b>Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>												
5	39200.0	44.4	44.2	45.0	22.7	8.5	0.0	59.7	59.5	73.9	14.2	14.4

**AV DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit AV [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	3733.3	41.6	41.4	32.3	32.1	3.7	0.0	45.5	45.3	53.9	8.4	8.6
2	7466.4	32.8	32.8	38.3	31.4	5.2	0.0	44.9	44.9	53.9	9.0	9.0
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
3	11199.9	34.7	35.8	37.6	31.1	6.3	0.7	38.7	39.8	53.9	15.2	14.1
4	22400.0	34.1	34.1	39.5	30.7	9.4	0.0	42.8	42.8	53.9	11.1	11.1
<b>Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>												
5	39200.0	31.2	31.2	45.0	22.7	8.5	0.0	46.5	46.5	53.9	7.4	7.4

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5 dB  
Test Distance 0.5m : Distance Factor(Dfac) = 20log(3/0.5) = 15.5 dB

\* Except for the above table : All other spurious emissions were less than 20dB for the limit.  
\* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.  
\*The limit is rounded down to one decimal place.  
\*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (above 1GHz:Inside of the restricted band)**

**Dual Band Diversity Antenna, 11a, Tx 5700MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	3m (below 10GHz), 1m (above 10GHz), 0.5m (above26.5GHz)
Model	WE70-AP	Date	01/21/2007      01/24/2007      01/25/2007
S/N	279651000201	Temperature	23 deg.C.      23 deg.C.      23 deg.C.
Power	DC 24V	Humidity	33 %      30 %      30 %
Mode	11a Tx 5700MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi      Kenichi Adachi      Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit PK [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	3800.0	47.9	48.3	28.7	31.8	2.8	0.0	47.6	48.0	73.9	26.3	25.9
2	5725.0	58.1	57.4	32.0	30.5	3.4	0.0	63.0	62.3	73.9	10.9	11.6
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
3	11399.9	45.6	44.1	38.1	31.1	6.3	0.7	50.1	48.6	73.9	23.8	25.3
4	22800.0	46.8	46.6	39.7	30.7	9.5	0.0	55.8	55.6	73.9	18.1	18.3
<b>Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>												
5	39900.0	45.3	45.2	46.1	22.2	9.1	0.0	62.8	62.7	73.9	11.1	11.2

**AV DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit AV [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	3800.0	43.7	43.2	28.7	31.8	2.8	0.0	43.4	42.9	53.9	10.5	11.0
2	5725.0	35.9	35.3	32.0	30.5	3.4	0.0	40.8	40.2	53.9	13.1	13.7
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
3	11399.9	33.8	32.0	38.1	31.1	6.3	0.7	38.3	36.5	53.9	15.6	17.4
4	22800.0	34.4	34.4	39.7	30.7	9.5	0.0	43.4	43.4	53.9	10.5	10.5
<b>Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>												
5	39900.0	31.6	31.5	46.1	22.2	9.1	0.0	49.1	49.0	53.9	4.8	4.9

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB  
Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) = 15.5 dB  
\* Except for the above table : All other spurious emissions were less than 20dB for the limit.  
\* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.  
\*The limit is rounded down to one decimal place.  
\*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (above 1GHz:Inside of the restricted band)**

**Dual Band Diversity Antenna, 11a, Tx 5745MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	3m (below 10GHz), 1m (above 10GHz)
Model	WE70-AP	Date	01/24/2007 01/25/2007 01/25/2007
S/N	279651000201	Temperature	23 deg.C. 23 deg.C. 23 deg.C.
Power	DC 24V	Humidity	30 % 30 % 30 %
Mode	11a Tx 5745MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi Kenichi Adachi Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit PK [dBuV/m]	Margin [dB]	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	3829.9	48.5	48.2	32.7	32.0	3.8	0.0	53.0	52.7	73.9	20.9	21.2
2	7659.9	44.5	44.2	37.9	31.4	5.5	0.0	56.5	56.2	73.9	17.4	17.7
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
3	11489.7	42.5	42.5	38.4	31.1	6.4	0.7	47.4	47.4	73.9	26.5	26.5
4	22980.0	46.3	45.9	39.8	30.7	9.6	0.0	55.5	55.1	73.9	18.4	18.8

**AV DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit AV [dBuV/m]	Margin [dB]	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	3829.9	41.2	41.0	32.7	32.0	3.8	0.0	45.7	45.5	53.9	8.2	8.4
2	7659.9	32.8	32.7	37.9	31.4	5.5	0.0	44.8	44.7	53.9	9.1	9.2
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
3	11489.7	31.1	31.4	38.4	31.1	6.4	0.7	36.0	36.3	53.9	17.9	17.6
4	22980.0	33.7	33.7	39.8	30.7	9.6	0.0	42.9	42.9	53.9	11.0	11.0

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) =

9.5 dB

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

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

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

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MF060b(14.06.06)

**Radiated Spurious Emission (above 1GHz:Inside of the restricted band)**

**Dual Band Diversity Antenna, 11a, Tx 5765MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	3m (below 10GHz), 1m (above 10GHz)
Model	WE70-AP	Date	01/24/2007      01/25/2007      01/25/2007
S/N	279651000201	Temperature	23 deg.C.      23 deg.C.      23 deg.C.
Power	DC 24V	Humidity	30 %      30 %      30 %
Mode	11a Tx 5765MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi      Kenichi Adachi      Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit PK [dBuV/m]	Margin [dB]	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	3843.3	48.9	48.6	32.8	32.0	3.8	0.0	53.5	53.2	73.9	20.4	20.7
2	7686.6	44.2	44.1	37.8	31.4	5.5	0.0	56.1	56.0	73.9	17.8	17.9
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
3	11529.5	42.9	45.6	38.5	31.1	6.4	0.7	47.9	50.6	73.9	26.0	23.3
4	23060.0	46.6	46.7	39.8	30.7	9.6	0.0	55.8	55.9	73.9	18.1	18.0

**AV DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit AV [dBuV/m]	Margin [dB]	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	3843.3	43.9	43.5	32.8	32.0	3.8	0.0	48.5	48.1	53.9	5.4	5.8
2	7686.6	32.4	32.1	37.8	31.4	5.5	0.0	44.3	44.0	53.9	9.6	9.9
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
3	10360.2	31.5	32.8	38.5	31.1	6.4	0.7	36.5	37.8	53.9	17.4	16.1
4	23060.0	34.5	34.4	39.8	30.7	9.6	0.0	43.7	43.6	53.9	10.2	10.3

Test Distance 1.0m : Distance Factor(Dfac(1m))= 20log(3/1.0) = 9.5 dB

\* Except for the above table : All other spurious emissions were less than 20dB for the limit.  
\* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.  
\*The limit is rounded down to one decimal place.  
\*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (above 1GHz:Inside of the restricted band)**

**Dual Band Diversity Antenna, 11a, Tx 5805MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	3m (below 10GHz), 1m (above 10GHz)
Model	WE70-AP	Date	01/24/2007      01/25/2007      01/25/2007
S/N	279651000201	Temperature	23 deg.C.      23 deg.C.      23 deg.C.
Power	DC 24V	Humidity	30 %      30 %      30 %
Mode	11a Tx 5805MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi      Kenichi Adachi      Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit PK [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	3869.9	48.3	48.0	32.9	32.0	3.8	0.0	53.0	52.7	73.9	20.9	21.2
2	5119.9	44.3	44.1	36.7	31.5	4.3	0.0	53.8	53.6	73.9	20.1	20.3
3	5439.9	42.2	42.4	36.4	31.5	4.5	0.0	51.6	51.8	73.9	22.3	22.1
4	7739.9	44.7	44.2	37.6	31.4	5.5	0.0	56.4	55.9	73.9	17.5	18.0
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
5	11610.3	46.1	47.1	38.8	31.1	6.5	0.7	51.5	52.5	73.9	22.4	21.4

**AV DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit AV [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	3869.9	41.3	41.0	32.9	32.0	3.8	0.0	46.0	45.7	53.9	7.9	8.2
2	5119.9	33.8	33.7	36.7	31.5	4.3	0.0	43.3	43.2	53.9	10.6	10.7
3	5439.9	30.9	31.0	36.4	31.5	4.5	0.0	40.3	40.4	53.9	13.6	13.5
4	7739.9	32.9	32.6	37.6	31.4	5.5	0.0	44.6	44.3	53.9	9.3	9.6
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
5	11610.3	34.4	35.3	38.8	31.1	6.5	0.7	39.8	40.7	53.9	14.1	13.2

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) =

9.5 dB

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

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

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

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MF060b(14.06.06)

**Radiated Spurious Emission (above 1GHz:Inside of the restricted band)**

**Magnetic Pedestal Antenna, 11a, Tx 5260MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.3 and No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	3m (below 10GHz), 1m (above 10GHz), 0.5m (above26.5GHz)
Model	WE70-AP	Date	02/26/2007      03/01/2007
S/N	279651000201	Temperature	23deg.C.      24deg.C.
Power	DC 24V	Humidity	30%      30%
Mode	11a Tx 5260MHz, 54Mbps (Worst)	Engineer	Takahiro Hatakeda      Mitsuru Fujimura
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK DETECT**

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit PK [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	5120.1	48.0	48.7	33.8	31.6	3.6	0.0	53.8	54.5	73.9	20.1	19.4
2	5439.9	48.2	49.0	33.9	31.7	3.7	0.0	54.1	54.9	73.9	19.8	19.0
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
3	15780.0	45.4	46.9	37.7	30.8	8.3	0.7	51.8	53.3	73.9	22.1	20.6
4	21040.0	45.3	45.7	40.2	31.1	9.7	0.0	54.6	55.0	73.9	19.3	18.9
<b>Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>												
5	31560.0	37.5	37.7	42.9	29.1	15.9	0.0	51.7	51.9	73.9	22.2	22.0

**AV DETECT**

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit AV [dBuV/m]	Margin	
		HOR [dBuV]	VER					HOR [dBuV/m]	VER		HOR [dB]	VER [dB]
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	5120.1	34.9	37.0	33.8	31.6	3.6	0.0	40.7	42.8	53.9	13.2	11.1
2	5439.9	35.3	35.9	33.9	31.7	3.7	0.0	41.2	41.8	53.9	12.7	12.1
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
3	15780.0	34.0	35.2	37.7	30.8	8.3	0.7	40.4	41.6	53.9	13.5	12.3
4	21040.0	33.7	33.7	40.2	31.1	9.7	0.0	43.0	43.0	53.9	10.9	10.9
<b>Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>												
5	31560.0	25.6	25.6	42.9	29.1	15.9	0.0	39.8	39.8	53.9	14.1	14.1

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB  
Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) = 15.5 dB

\* Except for the above table : All other spurious emissions were less than 20dB for the limit.  
\* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.  
\*The limit is rounded down to one decimal place.  
\*The test result is round off to one or two decimal places, so some differences might be observed.



**Radiated Spurious Emission (above 1GHz:Inside of the restricted band)**  
**Magnetic Pedestal Antenna, 11a, Tx 5600MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	3m (below 10GHz), 1m (above 10GHz), 0.5m (above26.5GHz)
Model	WE70-AP	Date	02/26/2007 03/01/2007
S/N	279651000201	Temperature	23deg.C. 24deg.C.
Power	DC 24V	Humidity	30% 30%
Mode	11a Tx 5600MHz, 54Mbps (Worst)	Engineer	Takahiro Hatakeda Mitsuru Fujimura
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit PK [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	3733.3	44.4	45.1	31.3	32.0	3.0	0.0	46.7	47.4	73.9	27.2	26.5
2	7466.7	44.4	43.9	37.6	32.3	4.3	0.0	54.0	53.5	73.9	19.9	20.4
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
3	11200.7	44.0	45.0	40.2	31.1	6.4	0.7	50.7	51.7	73.9	23.2	22.2
4	22400.0	45.0	46.0	40.7	30.7	9.8	0.0	55.3	56.3	73.9	18.6	17.6
<b>Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>												
5	39200.0	41.9	42.3	44.2	27.5	18.4	0.0	61.5	61.9	73.9	12.4	12.0

**AV DETECT**

No.	Freq. [MHz]	Reading [dBuV]		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result [dBuV/m]		Limit AV [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	3733.3	31.8	36.5	31.3	32.0	3.0	0.0	34.1	38.8	53.9	19.8	15.1
2	7466.7	30.6	30.3	37.6	32.3	4.3	0.0	40.2	39.9	53.9	13.7	14.0
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
3	11200.7	32.1	32.4	40.2	31.1	6.4	0.7	38.8	39.1	53.9	15.1	14.8
4	22400.0	33.8	33.8	40.7	30.7	9.8	0.0	44.1	44.1	53.9	9.8	9.8
<b>Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>												
5	39200.0	29.8	29.8	44.2	27.5	18.4	0.0	49.4	49.4	53.9	4.5	4.5

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB  
Test Distance 0.5m : Distance Factor(Dfac(0.5m)) = 20log(3/0.5) = 15.5 dB

- \* Except for the above table : All other spurious emissions were less than 20dB for the limit.
- \* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.
- \*The limit is rounded down to one decimal place.
- \*The test result is round off to one or two decimal places, so some differences might be observed.

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MF060b(14.06.06)

**Radiated Spurious Emission (above 1GHz:Inside of the restricted band)**

**Magnetic Pedestal Antenna, 11a, Tx 5765MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.3 and No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	3m (below 10GHz), 1m (above 10GHz)
Model	WE70-AP	Date	02/26/2007      03/01/2007
S/N	279651000201	Temperature	23deg.C.      24deg.C.
Power	DC 24V	Humidity	30%      30%
Mode	11a Tx 5765MHz, 54Mbps (Worst)	Engineer	Takahiro Hatakeda      Mitsuru Fujimura
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK DETECT**

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit PK [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	3843.3	45.2	45.2	31.5	32.0	3.1	0.0	47.8	47.8	73.9	26.1	26.1
2	7686.5	43.5	44.0	37.8	32.4	4.4	0.0	53.3	53.8	73.9	20.6	20.1
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
3	11528.4	42.5	42.1	40.1	31.1	6.7	0.7	49.4	49.0	73.9	24.5	24.9
4	23060.0	43.3	43.3	41.0	30.7	10.1	0.0	54.2	54.2	73.9	19.7	19.7

**AV DETECT**

No.	Freq. [MHz]	Reading		Ant. Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	Atten. or Filter [dB]	Result		Limit AV [dBuV/m]	Margin	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter)</b>												
1	3843.3	36.0	33.9	31.5	32.0	3.1	0.0	38.6	36.5	53.9	15.3	17.4
2	7686.5	31.0	30.9	37.8	32.4	4.4	0.0	40.8	40.7	53.9	13.1	13.2
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>												
3	11528.4	30.8	30.7	40.1	31.1	6.7	0.7	37.7	37.6	53.9	16.2	16.3
4	23060.0	31.5	31.5	41.0	30.7	10.1	0.0	42.4	42.4	53.9	11.5	11.5

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) =

9.5 dB

- \* Except for the above table : All other spurious emissions were less than 20dB for the limit.
- \* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.
- \*The limit is rounded down to one decimal place.
- \*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (above 1GHz:Outside of the restricted band)**

**\*used conversion formula**

**Dual Band Diversity Antenna, 11a, Tx 5180MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	1m (above 10GHz), 0.5m (above 26.5GHz)
Model	WE70-AP	Date	01/24/2007      01/25/2007      01/25/2007
S/N	279651000201	Temperature	23 deg.C.      23 deg.C.      23 deg.C.
Power	DC 24V	Humidity	30 %      30 %      30 %
Mode	11a Tx 5180MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi      Kenichi Adachi      Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK detect**

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Limit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
<b>Test distance 1meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>														
1	10360.00	47.7	46.4	36.4	31.7	6.0	0.0	48.9	47.6	-46.3	-47.6	-27.0	19.3	20.6
2	25900.00	48.8	49.3	39.4	30.2	10.5	0.0	59.0	59.5	-36.2	-35.7	-27.0	9.2	8.7
<b>Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>														
3	31080.00	45.7	45.5	45.7	25.0	7.9	0.0	58.8	58.6	-36.4	-36.6	-27.0	9.4	9.6
4	36260.00	45.5	45.2	44.7	23.6	7.7	0.0	58.8	58.5	-36.4	-36.7	-27.0	9.4	9.7

Result(EIRP[dBm])=10\*LOG((( 10 ^ ( Electric Field Strength [dBuV/m] / 20 ) \* 10 ^ (-6) \* Distance:3[m] ) ^ 2 ) / 30) \*10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB  
Test Distance 1.0m : Distance Factor(Dfac(0.5m)) = 20log(3/1.0) = 15.5 dB

\* Except for the above table : All other spurious emissions were less than 20dB for the limit.  
\* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.  
\*The limit is rounded down to one decimal place.  
\*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (above 1GHz:Outside of the restricted band)**

**\*used conversion formula**

**Dual Band Diversity Antenna, 11a, Tx 5260MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	1m (above 10GHz), 0.5m (above 26.5GHz)
Model	WE70-AP	Date	01/24/2007      01/25/2007      01/25/2007
S/N	279651000201	Temperature	23 deg.C.      23 deg.C.      23 deg.C.
Power	DC 24V	Humidity	30 %      30 %      30 %
Mode	11a Tx 5260MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi      Kenichi Adachi      Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK detect**

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Limit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
<b>Test distance 1meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>														
1	10518.83	45.3	46.2	36.4	31.5	6.1	0.0	46.8	47.7	-48.4	-47.5	-27.0	21.4	20.5
2	26300.00	49.0	49.1	39.1	29.8	10.7	0.0	59.5	59.6	-35.7	-35.6	-27.0	8.7	8.6
<b>Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>														
3	36820.00	46.3	46.0	44.1	23.6	7.9	0.0	59.2	58.9	-36.0	-36.3	-27.0	9.0	9.3

Result(EIRP[dBm])=10\*LOG((( 10 ^ ( Electric Field Strength [dBuV/m] / 20 ) \* 10 ^ (-6) \* Distance:3[m] ) ^ 2 ) / 30) \*10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB

Test Distance 1.0m : Distance Factor(Dfac(0.5m)) = 20log(3/1.0) = 15.5 dB

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

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

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

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MF060b(14.06.06)

**Radiated Spurious Emission (above 1GHz:Outside of the restricted band)**

**\*used conversion formula**

**Dual Band Diversity Antenna, 11a, Tx 5320MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	0.5m (above 26.5GHz)
Model	WE70-AP	Date	01/24/2007      01/25/2007
S/N	279651000201	Temperature	23 deg.C.      23 deg.C.
Power	DC 24V	Humidity	30 %      30 %
Mode	11a Tx 5320MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi      Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK detect**

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
<b>Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>														
1	26600.00	45.8	45.6	43.1	24.1	6.2	0.0	55.5	55.3	-39.7	-39.9	-27.0	12.7	12.9
2	31920.00	49.2	49.3	44.0	25.3	7.9	0.0	60.3	60.4	-34.9	-34.8	-27.0	7.9	<b>7.8</b>
3	37240.00	46.5	46.3	43.9	23.6	8.0	0.0	59.3	59.1	-35.9	-36.1	-27.0	8.9	9.1

Result(EIRP[dBm])=10\*LOG(( { 10 ^ ( Electric Field Strength [dBuV/m] / 20 ) \* 10 ^ (-6) \* Distance:3[m] ) ^ 2 } / 30) \*10^3)

Test Distance 1.0m : Distance Factor(Dfac(0.5m)) = 20log(3/1.0) = 15.5 dB

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

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

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

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MF060b(14.06.06)

**Radiated Spurious Emission (above 1GHz:Outside of the restricted band)**

**\*used conversion formula**

**Dual Band Diversity Antenna, 11a, Tx 5500MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	1m (above 10GHz), 0.5m (above 26.5GHz)
Model	WE70-AP	Date	01/24/2007      01/25/2007      01/25/2007
S/N	279651000201	Temperature	23 deg.C.      23 deg.C.      23 deg.C.
Power	DC 24V	Humidity	30 %      30 %      30 %
Mode	11a Tx 5500MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi      Kenichi Adachi      Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK detect**

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
<b>Test distance 1meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>														
1	16500.42	43.6	44.5	46.8	30.4	8.1	0.9	59.5	60.4	-35.7	-34.8	-27.0	8.7	<b>7.8</b>
2	22000.00	46.9	47.3	39.6	30.7	9.3	0.0	55.6	56.0	-39.6	-39.2	-27.0	12.6	12.2
<b>Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>														
3	27500.00	42.2	41.9	44.1	24.1	6.4	0.0	53.1	52.8	-42.1	-42.4	-27.0	15.1	15.4
4	33000.00	42.3	42.2	44.3	25.2	7.8	0.0	53.7	53.6	-41.5	-41.6	-27.0	14.5	14.6
5	38500.00	44.0	43.9	44.3	23.2	8.4	0.0	58.0	57.9	-37.2	-37.3	-27.0	10.2	10.3

Result(EIRP[dBm])=10\*LOG((10 ^ ( Electric Field Strength [dBuV/m] / 20 ) \* 10 ^ (-6) \* Distance:3[m] ) ^ 2 } / 30) \*10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB

Test Distance 1.0m : Distance Factor(Dfac(0.5m)) = 20log(3/1.0) = 15.5 dB

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

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

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

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MF060b(14.06.06)

**Radiated Spurious Emission (above 1GHz:Outside of the restricted band)**

**\*used conversion formula**

**Dual Band Diversity Antenna, 11a, Tx 5600MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	1m (above 10GHz), 0.5m (above 26.5GHz)
Model	WE70-AP	Date	01/24/2007      01/25/2007      01/25/2007
S/N	279651000201	Temperature	23 deg.C.      23 deg.C.      23 deg.C.
Power	DC 24V	Humidity	30 %      30 %      30 %
Mode	11a Tx 5600MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi      Kenichi Adachi      Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK detect**

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
<b>Test distance 1meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>														
1	16800.00	43.4	43.0	46.4	30.1	8.1	0.8	59.1	58.7	-36.1	-36.5	-27.0	9.1	9.5
<b>Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>														
2	28000.00	43.2	43.0	43.9	24.1	6.4	0.0	53.9	53.7	-41.3	-41.5	-27.0	14.3	14.5
3	33600.00	40.7	40.5	43.9	25.1	7.6	0.0	51.6	51.4	-43.6	-43.8	-27.0	16.6	16.8

Result(EIRP[dBm])=10\*LOG((( 10 ^ ( Electric Field Strength [dBuV/m] / 20 ) \* 10 ^ (-6) \* Distance:3[m] ) ^ 2 ) / 30) \*10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB

Test Distance 1.0m : Distance Factor(Dfac(0.5m)) = 20log(3/1.0) = 15.5 dB

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

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

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

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MF060b(14.06.06)

**Radiated Spurious Emission (above 1GHz:Outside of the restricted band)**

**\*used conversion formula**

**Dual Band Diversity Antenna, 11a, Tx 5700MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	1m (above 10GHz), 0.5m (above 26.5GHz)
Model	WE70-AP	Date	01/24/2007      01/25/2007      01/25/2007
S/N	279651000201	Temperature	23 deg.C.      23 deg.C.      23 deg.C.
Power	DC 24V	Humidity	30 %      30 %      30 %
Mode	11a Tx 5700MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi      Kenichi Adachi      Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK detect**

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
<b>Test distance 1meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>														
1	17100.00	43.8	44.7	46.1	30.0	8.2	0.8	59.4	60.3	-35.8	-34.9	-27.0	8.8	7.9
<b>Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>														
2	28500.00	44.1	43.9	44.5	24.2	6.6	0.0	55.5	55.3	-39.7	-39.9	-27.0	12.7	12.9
3	34200.00	40.2	40.0	43.1	24.8	7.6	0.0	50.6	50.4	-44.6	-44.8	-27.0	17.6	17.8

Result(EIRP[dBm])=10\*LOG((( 10 ^ ( Electric Field Strength [dBuV/m] / 20 ) \* 10 ^ (-6) \* Distance:3[m] ) ^ 2 ) / 30) \*10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB

Test Distance 1.0m : Distance Factor(Dfac(0.5m)) = 20log(3/1.0) = 15.5 dB

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

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

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

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MF060b(14.06.06)



**Radiated Spurious Emission (above 1GHz:Outside of the restricted band)**

**\*used conversion formula**

**Dual Band Diversity Antenna, 11a, Tx 5745MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	1m (above 10GHz), 0.5m (above 26.5GHz)
Model	WE70-AP	Date	01/24/2007      01/25/2007      01/25/2007
S/N	279651000201	Temperature	23 deg.C.      23 deg.C.      23 deg.C.
Power	DC 24V	Humidity	30 %      30 %      30 %
Mode	11a Tx 5745MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi      Kenichi Adachi      Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK detect**

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
<b>Test distance 1meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>														
1	17235.00	44.8	44.2	46.2	30.0	8.3	0.8	60.6	60.0	-34.6	-35.2	-27.0	7.6	8.2
<b>Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>														
2	28725.00	43.9	43.7	44.5	24.3	6.7	0.0	55.3	55.1	-39.9	-40.1	-27.0	12.9	13.1
3	34470.00	41.1	40.9	42.1	24.7	7.6	0.0	50.6	50.4	-44.6	-44.8	-27.0	17.6	17.8

Result(EIRP[dBm])=10\*LOG((( 10 ^ ( Electric Field Strength [dBuV/m] / 20 ) \* 10 ^ (-6) \* Distance:3[m] ) ^ 2 ) / 30) \*10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB

Test Distance 1.0m : Distance Factor(Dfac(0.5m)) = 20log(3/1.0) = 15.5 dB

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

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

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

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MF060b(14.06.06)

**Radiated Spurious Emission (above 1GHz:Outside of the restricted band)**

**\*used conversion formula**

**Dual Band Diversity Antenna, 11a, Tx 5765MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	1m (above 10GHz), 0.5m (above 26.5GHz)
Model	WE70-AP	Date	01/24/2007      01/25/2007      01/25/2007
S/N	279651000201	Temperature	23 deg.C.      23 deg.C.      23 deg.C.
Power	DC 24V	Humidity	30 %      30 %      30 %
Mode	11a Tx 5765MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi      Kenichi Adachi      Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK detect**

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
<b>Test distance 1meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>														
1	17295.00	45.1	44.7	46.2	30.0	8.3	0.8	60.9	60.5	-34.3	-34.7	-27.0	7.3	7.7
<b>Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>														
2	28825.00	44.0	44.0	44.5	24.3	6.8	0.0	55.5	55.5	-39.7	-39.7	-27.0	12.7	12.7
3	34590.00	40.5	40.3	42.4	24.6	7.6	0.0	50.4	50.2	-44.8	-45.0	-27.0	17.8	18.0

Result(EIRP[dBm])=10\*LOG((( 10 ^ ( Electric Field Strength [dBuV/m] / 20 ) \* 10 ^ (-6) \* Distance:3[m] ) ^ 2 ) / 30) \*10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB

Test Distance 1.0m : Distance Factor(Dfac(0.5m)) = 20log(3/1.0) = 15.5 dB

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

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

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

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MF060b(14.06.06)

**Radiated Spurious Emission (above 1GHz:Outside of the restricted band)**

**\*used conversion formula**

**Dual Band Diversity Antenna, 11a, Tx 5805MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	1m (above 10GHz), 0.5m (above 26.5GHz)
Model	WE70-AP	Date	01/24/2007      01/25/2007      01/25/2007
S/N	279651000201	Temperature	23 deg.C.      23 deg.C.      23 deg.C.
Power	DC 24V	Humidity	30 %      30 %      30 %
Mode	11a Tx 5805MHz, 54Mbps (Worst)	Engineer	Kenichi Adachi      Kenichi Adachi      Kenichi Adachi
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK detect**

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
<b>Test distance 1meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>														
1	17415.00	43.8	43.4	46.2	30.1	8.4	0.8	59.6	59.2	-35.6	-36.0	-27.0	8.6	9.0
2	23220.00	48.1	47.8	39.6	30.7	9.6	0.0	57.1	56.8	-38.1	-38.4	-27.0	11.1	11.4
<b>Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>														
3	29025.00	44.3	44.0	44.5	24.3	6.9	0.0	55.9	55.6	-39.3	-39.6	-27.0	12.3	12.6
4	34830.00	41.9	41.7	43.5	24.4	7.6	0.0	53.1	52.9	-42.1	-42.3	-27.0	15.1	15.3

Result(EIRP[dBm])=10\*LOG(( { 10 ^ ( Electric Field Strength [dBuV/m] / 20 ) \* 10 ^ (-6) \* Distance:3[m] } ^ 2 ) / 30) \*10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB

Test Distance 1.0m : Distance Factor(Dfac(0.5m)) = 20log(3/1.0) = 15.5 dB

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

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

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

**UL Apex Co., Ltd.**

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MF060b(14.06.06)

**Radiated Spurious Emission (above 1GHz:Outside of the restricted band)**

**\*used conversion formula**

**Magnetic Pedestal Antenna, 11a, Tx 5260MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	1m (above 10GHz), 0.5m (above 26.5GHz)
Model	WE70-AP	Date	03/01/2007
S/N	279651000201	Temperature	24deg.C.
Power	DC 24V	Humidity	30%
Mode	11a Tx 5260MHz, 54Mbps (Worst)	Engineer	Mitsuru Fujimura
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK detect**

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
<b>Test distance 1meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>														
1	10519.75	46.0	45.9	39.8	31.5	6.0	0.4	51.2	51.1	-44.0	-44.1	-27.0	17.0	17.1
2	26300.00	46.1	46.9	40.7	29.8	11.2	0.0	58.7	59.5	-36.5	-35.7	-27.0	9.5	8.7
<b>Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>														
3	36820.00	46.5	45.7	43.8	27.7	17.3	0.0	64.4	63.6	-30.8	-31.6	-27.0	3.8	4.6

Result(EIRP[dBm])=10\*LOG(( { 10 ^ ( Electric Field Strength [dBuV/m] / 20 ) \* 10 ^ (-6) \* Distance:3[m] ) ^ 2 } / 30) \*10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB

Test Distance 1.0m : Distance Factor(Dfac(0.5m)) = 20log(3/1.0) = 15.5 dB

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

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

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

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MF060b(14.06.06)

**Radiated Spurious Emission (above 1GHz:Outside of the restricted band)**

**\*used conversion formula**

**Magnetic Pedestal Antenna, 11a, Tx 5600MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	1m (above 10GHz), 0.5m (above 26.5GHz)
Model	WE70-AP	Date	03/01/2007
S/N	279651000201	Temperature	24deg.C.
Power	DC 24V	Humidity	30%
Mode	11a Tx 5600MHz, 54Mbps (Worst)	Engineer	Mitsuru Fujimura
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK detect**

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
<b>Test distance 1meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>														
1	16800.00	43.6	43.3	39.5	30.1	8.6	0.8	52.9	52.6	-42.3	-42.6	-27.0	15.3	15.6
<b>Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>														
2	28000.00	31.5	31.5	42.9	29.3	15.4	0.0	45.0	45.0	-50.2	-50.2	-27.0	23.2	23.2
3	33600.00	38.6	39.1	43.5	28.5	16.1	0.0	54.2	54.7	-41.0	-40.5	-27.0	14.0	13.5

Result(EIRP[dBm])=10\*LOG(( 10 ^ ( Electric Field Strength [dBuV/m] / 20 ) \* 10 ^ (-6) \* Distance:3[m] ) ^ 2 ) / 30) \*10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB  
Test Distance 1.0m : Distance Factor(Dfac(0.5m)) = 20log(3/1.0) = 15.5 dB

- \* Except for the above table : All other spurious emissions were less than 20dB for the limit.
- \* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.
- \*The limit is rounded down to one decimal place.
- \*The test result is round off to one or two decimal places, so some differences might be observed.

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MF060b(14.06.06)

**Radiated Spurious Emission (above 1GHz:Outside of the restricted band)**

**\*used conversion formula**

**Magnetic Pedestal Antenna, 11a, Tx 5765MHz, Ant:A, High power**

UL-Apex Co., Ltd.

Head Office EMC Lab. No.2 Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Part15 Subpart C 15.209 / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	1m (above 10GHz), 0.5m (above 26.5GHz)
Model	WE70-AP	Date	03/01/2007
S/N	279651000201	Temperature	24deg.C.
Power	DC 24V	Humidity	30%
Mode	11a Tx 5765MHz, 54Mbps (Worst)	Engineer	Mitsuru Fujimura
EUT-Axis	(Worst) H: X-axis, V: X-axis		
Ant-Axis	(Worst) H: X-axis, V: Y-axis		

**PK detect**

No.	Freq. [MHz]	S/A Reading [dBuV]		Antenna Factor [dB/m]	Amp. Gain [dB]	Cable Loss [dB]	ATT or Filter Loss [dB]	Electric Field Strength [dBuV/m]		Result (EIRP) [dBm]		Lmit [dBm]	Margin [dB]	
		HOR	VER					HOR	VER	HOR	VER		HOR	VER
<b>Test distance 1meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(1m)</b>														
1	17295.00	44.4	45.3	43.0	30.0	9.5	0.0	57.4	58.3	-37.8	-36.9	-27.0	10.8	9.9
<b>Test distance 0.5meters, Electric Field Strength =Reading + ANT Factor - Amp Gain + CABLE LOSS + Attenuator (or Filter) - Dfac(0.5m)</b>														
2	28825.00	32.0	32.2	43.1	29.5	15.5	0.0	45.6	45.8	-49.6	-49.4	-27.0	22.6	22.4
3	34590.00	38.5	38.4	43.3	28.2	16.4	0.0	54.5	54.4	-40.7	-40.8	-27.0	13.7	13.8

Result(EIRP[dBm])=10\*LOG((( 10 ^ ( Electric Field Strength [dBuV/m] / 20 ) \* 10 ^ (-6) \* Distance:3[m] ) ^ 2 ) / 30) \*10^3)

Test Distance 1.0m : Distance Factor(Dfac(1m)) = 20log(3/1.0) = 9.5 dB

Test Distance 1.0m : Distance Factor(Dfac(0.5m)) = 20log(3/1.0) = 15.5 dB

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

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

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

**UL Apex Co., Ltd.**

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MF060b(14.06.06)

**Radiated Spurious Emission (above 1GHz, Receiving)**  
**Dual Band Diversity Antenna, 11a, Rx 5260MHz, Ant:A**  
**DATA OF RADIATED EMISSION TEST**

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber  
Date : 2007/01/24

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-H0  
Power : DC 24V  
Temp./Humi. : 23deg.C. / 30%  
Operator : Kenichi Adachi

Mode / Remarks : 11a Rx 5260MHz, ANT:A, Worst-axis: EUT:X, Hor:Ant:X, Ver:Ant:Y, with L angle Ant.

LIMIT : FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:PK  
FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:AV

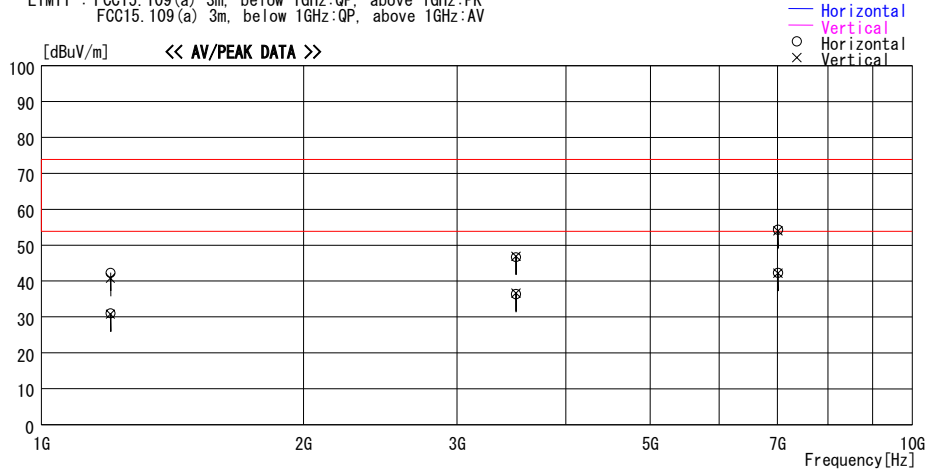


CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz-  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (above 1GHz, Receiving)**

**Dual Band Diversity Antenna, 11a, Rx 5260MHz, Ant:A**

**DATA OF RADIATED EMISSION TEST**

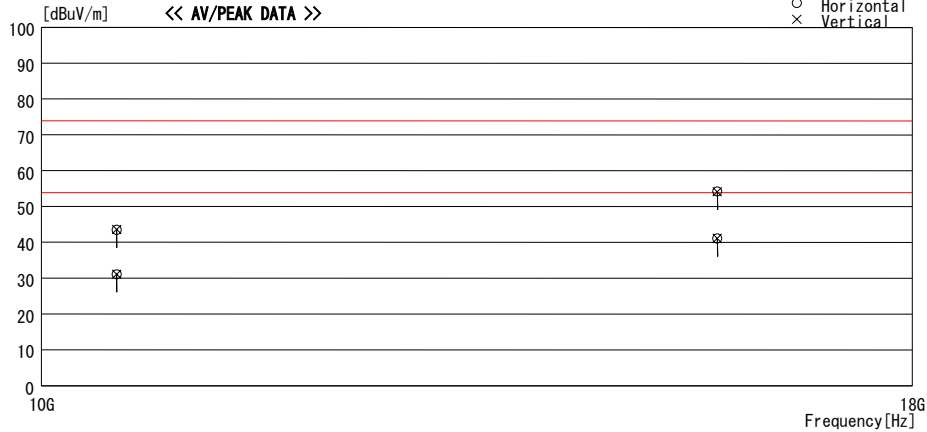
UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber  
Date : 2007/01/25

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-H0  
Power : DC 24V  
Temp./Humi. : 23deg.C. / 30%  
Operator : Kenichi Adachi

Mode / Remarks : 11a Rx 5260MHz, ANT:A, Worst-axis: EUT:X, Hor:Ant:X, Ver:Ant:Y, with L angle Ant.

LIMIT : FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:PK  
FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:AV

— Horizontal  
— Vertical  
○ Horizontal  
× Vertical



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Polar.	Limit	Margin
			Factor [dB/m]	Gain [dB]			[dBuV/m]	[dB]
10519.890	42.1	PK	36.4	-35.0	43.5	Hori.	73.9	30.4
10519.890	29.7	AV	36.4	-35.0	31.1	Hori.	53.9	22.8
10519.890	42.2	PK	36.4	-35.0	43.6	Vert.	73.9	30.3
10519.890	29.7	AV	36.4	-35.0	31.1	Vert.	53.9	22.8
15780.000	45.2	PK	41.3	-32.3	54.2	Hori.	73.9	19.7
15780.000	32.1	AV	41.3	-32.3	41.1	Hori.	53.9	12.8
15780.000	45.1	PK	41.3	-32.3	54.1	Vert.	73.9	19.8
15780.000	32.1	AV	41.3	-32.3	41.1	Vert.	53.9	12.8

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz-  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.



**Radiated Spurious Emission (above 1GHz, Receiving)**

**Dual Band Diversity Antenna, 11a, Rx 5600MHz, Ant:A**

**DATA OF RADIATED EMISSION TEST**

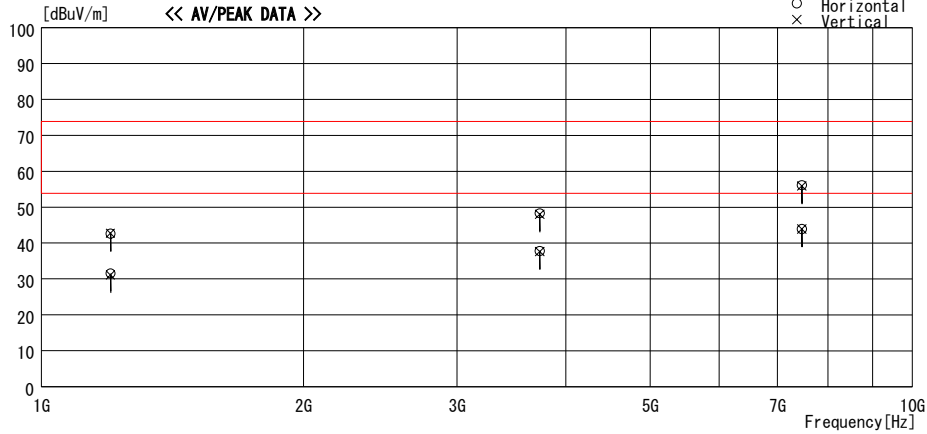
UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber  
Date : 2007/01/24

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-H0  
Power : DC 24V  
Temp./Humi. : 23deg. C. / 30%  
Operator : Kenichi Adachi

Mode / Remarks : 11a Rx 5600MHz, ANT:A, Worst-axis: EUT:X, Hor:Ant:X, Ver:Ant:Y, with L angle Ant.

LIMIT : FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:PK  
FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:AV

— Horizontal  
— Vertical  
○ Horizontal  
× Vertical



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level	Angle	Height	Polar.	Limit	Margin
			Factor	Gain						
			[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
1199.889	50.9	PK	23.4	-31.7	42.6	95	134	Hori.	73.9	31.3
1199.889	39.9	AV	23.4	-31.7	31.6	95	134	Hori.	53.9	22.3
1199.890	51.0	PK	23.4	-31.7	42.7	198	100	Vert.	73.9	31.2
1199.890	39.4	AV	23.4	-31.7	31.1	198	100	Vert.	53.9	22.8
3733.290	44.4	PK	32.3	-28.4	48.3	355	100	Hori.	73.9	25.6
3733.290	33.9	AV	32.3	-28.4	37.8	355	100	Hori.	53.9	16.1
3733.298	44.1	PK	32.3	-28.4	48.0	155	125	Vert.	73.9	25.9
3733.298	33.7	AV	32.3	-28.4	37.6	155	125	Vert.	53.9	16.3
7466.437	44.0	PK	38.3	-26.2	56.1	23	104	Hori.	73.9	17.8
7466.437	31.8	AV	38.3	-26.2	43.9	23	104	Hori.	53.9	10.0
7466.476	43.8	PK	38.3	-26.2	55.9	356	136	Vert.	73.9	18.0
7466.476	31.8	AV	38.3	-26.2	43.9	356	136	Vert.	53.9	10.0

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz-  
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (above 1GHz, Receiving)**  
**Dual Band Diversity Antenna, 11a, Rx 5600MHz, Ant:A**  
**DATA OF RADIATED EMISSION TEST**

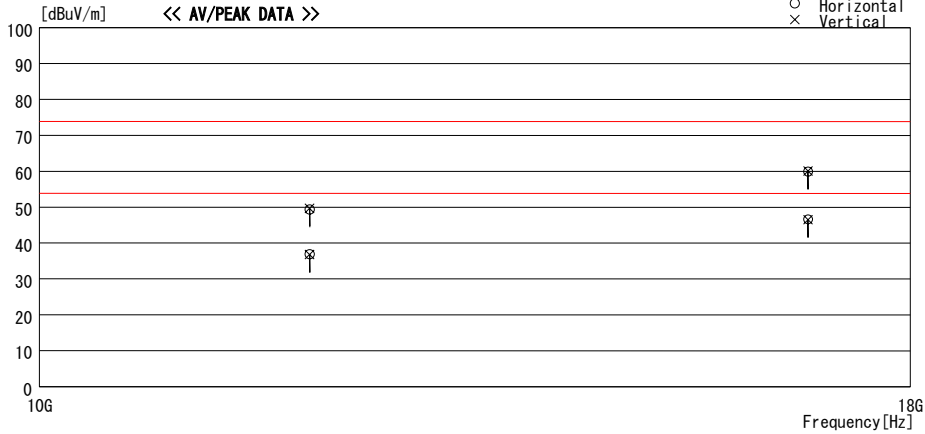
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Date : 2007/01/25

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-H0  
Power : DC 24V  
Temp./Humi. : 23deg.C. / 30%  
Operator : Kenichi Adachi

Mode / Remarks : 11a Rx 5600MHz, ANT:A, Worst-axis: EUT:X, Hor:Ant:X, Ver:Ant:Y, with L angle Ant.

LIMIT : FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:PK  
FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:AV

— Horizontal  
— Vertical  
○ Horizontal  
× Vertical



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Polar.	Limit	Margin
			Factor [dB/m]	Gain [dB]			[dBuV/m]	[dB]
11999.890	43.0	PK	40.3	-33.9	49.4	Hori.	73.9	24.5
11999.890	30.5	AV	40.3	-33.9	36.9	Hori.	53.9	17.0
11999.890	43.3	PK	40.3	-33.9	49.7	Vert.	73.9	24.2
11999.890	30.4	AV	40.3	-33.9	36.8	Vert.	53.9	17.1
16800.000	45.0	PK	46.4	-31.5	59.9	Hori.	73.9	14.0
16800.000	31.7	AV	46.4	-31.5	46.6	Hori.	53.9	7.3
16800.000	45.1	PK	46.4	-31.5	60.0	Vert.	73.9	13.9
16800.000	31.6	AV	46.4	-31.5	46.5	Vert.	53.9	7.4

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz-  
CALCULATION:RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (above 1GHz, Receiving)**

**Dual Band Diversity Antenna, 11a, Rx 5765MHz, Ant:A**

**DATA OF RADIATED EMISSION TEST**

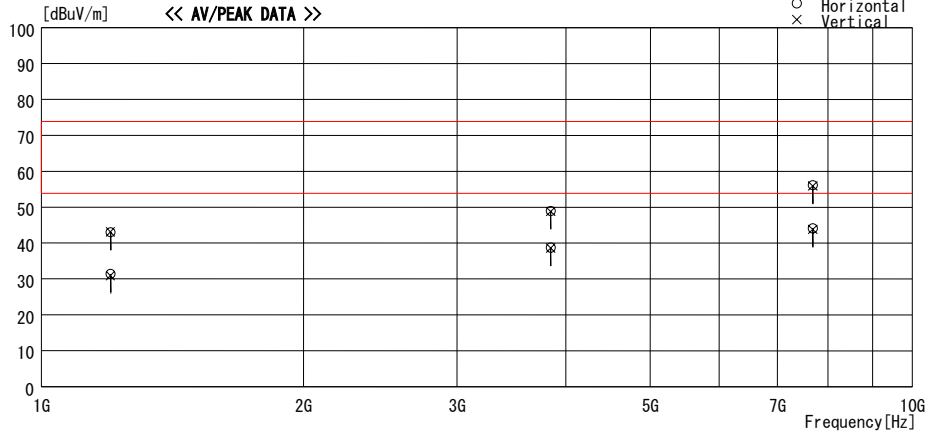
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Date : 2007/01/24

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-H0  
Power : DC 24V  
Temp./Humi. : 23deg.C. / 30%  
Operator : Kenichi Adachi

Mode / Remarks : 11a Rx 5765MHz, ANT:A, Worst-axis: EUT:X, Hor:Ant:X, Ver:Ant:Y, with L angle Ant.

LIMIT : FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:PK  
FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:AV

— Horizontal  
— Vertical  
○ Horizontal  
× Vertical



Frequency [MHz]	Reading [dBUV]	DET	Antenna		Level [dBUV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBUV/m]	Margin [dB]
			Factor [dB/m]	Loss& Gain [dB]						
1199.870	51.3	PK	23.4	-31.7	43.0	93	131	Hori.	73.9	30.9
1199.870	39.7	AV	23.4	-31.7	31.4	93	131	Hori.	53.9	22.5
1199.879	51.4	PK	23.4	-31.7	43.1	196	100	Vert.	73.9	30.8
1199.879	39.2	AV	23.4	-31.7	30.9	196	100	Vert.	53.9	23.0
3843.600	44.4	PK	32.8	-28.2	49.0	353	100	Hori.	73.9	24.9
3843.600	34.1	AV	32.8	-28.2	38.7	353	100	Hori.	53.9	15.2
3843.680	44.2	PK	32.8	-28.2	48.8	164	127	Vert.	73.9	25.1
3843.680	34.0	AV	32.8	-28.2	38.6	164	127	Vert.	53.9	15.3
7686.600	44.2	PK	37.8	-25.9	56.1	26	105	Hori.	73.9	17.8
7686.600	32.2	AV	37.8	-25.9	44.1	26	105	Hori.	53.9	9.8
7686.602	44.0	PK	37.8	-25.9	55.9	355	134	Vert.	73.9	18.0
7686.602	31.9	AV	37.8	-25.9	43.8	355	134	Vert.	53.9	10.1

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz-  
CALCULATION:RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

**Radiated Spurious Emission (above 1GHz, Receiving)**

**Dual Band Diversity Antenna, 11a, Rx 5765MHz, Ant:A**

**DATA OF RADIATED EMISSION TEST**

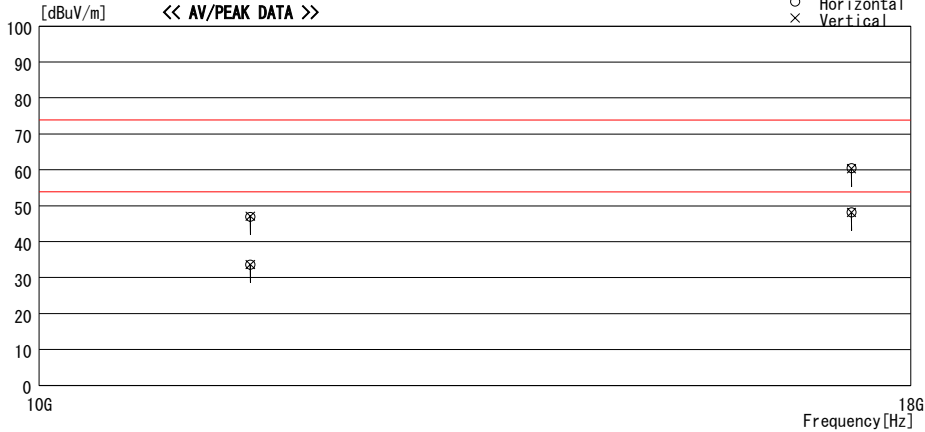
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber  
Date : 2007/01/25

Company : OMRON Corporation  
Kind of EUT : FA Wireless LAN Unit  
Model No. : WE70-AP  
Serial No. : 279651000201  
Report No. : 27DE0139-H0  
Power : DC 24V  
Temp./Humi. : 23deg.C. / 30%  
Operator : Kenichi Adachi

Mode / Remarks : 11a Rx 5765MHz, ANT:A, Worst-axis: EUT:X, Hor:Ant:X, Ver:Ant:Y, with L angle Ant.

LIMIT : FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:PK  
FCC15.109(a) 3m, below 1GHz:QP, above 1GHz:AV

— Horizontal  
— Vertical  
○ Horizontal  
× Vertical



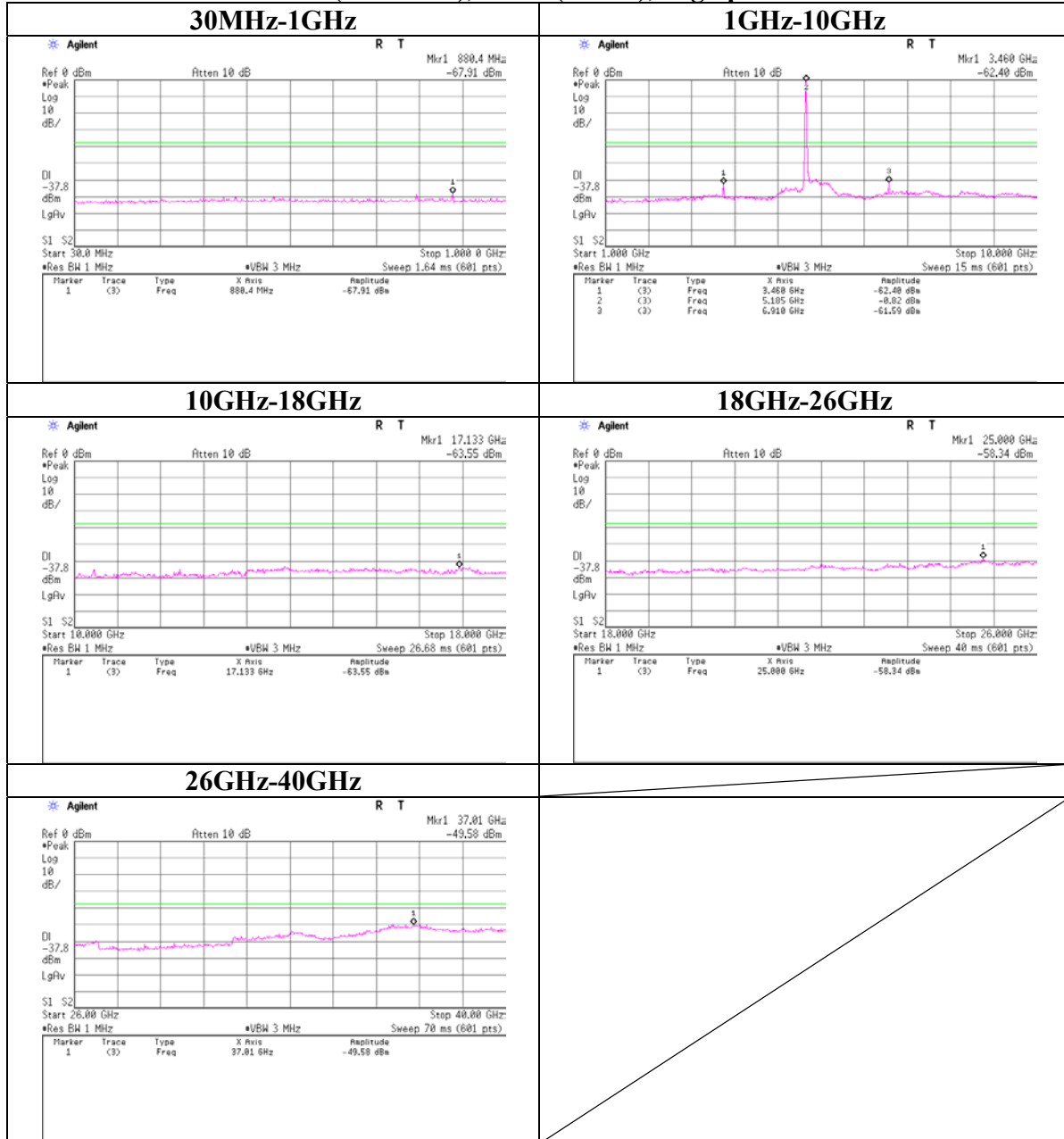
Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Loss& Gain [dB]				
11531.040	42.6	PK	38.5	-34.2	46.9	Hori.	73.9	27.0
11531.040	29.3	PK	38.5	-34.2	33.6	Hori.	73.9	40.3
11531.040	42.8	PK	38.5	-34.2	47.1	Vert.	73.9	26.8
11531.040	29.4	AV	38.5	-34.2	33.7	Vert.	53.9	20.3
17295.000	45.4	PK	46.2	-31.2	60.4	Hori.	73.9	13.5
17295.000	33.2	AV	46.2	-31.2	48.2	Hori.	53.9	5.7
17295.010	45.3	PK	46.2	-31.2	60.3	Vert.	73.9	13.6
17295.010	33.1	AV	46.2	-31.2	48.1	Vert.	53.9	5.8

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz-  
CALCULATION:RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

\*The limit is rounded down to one decimal place. \*The test result is round off to one or two decimal places, so some differences might be observed.

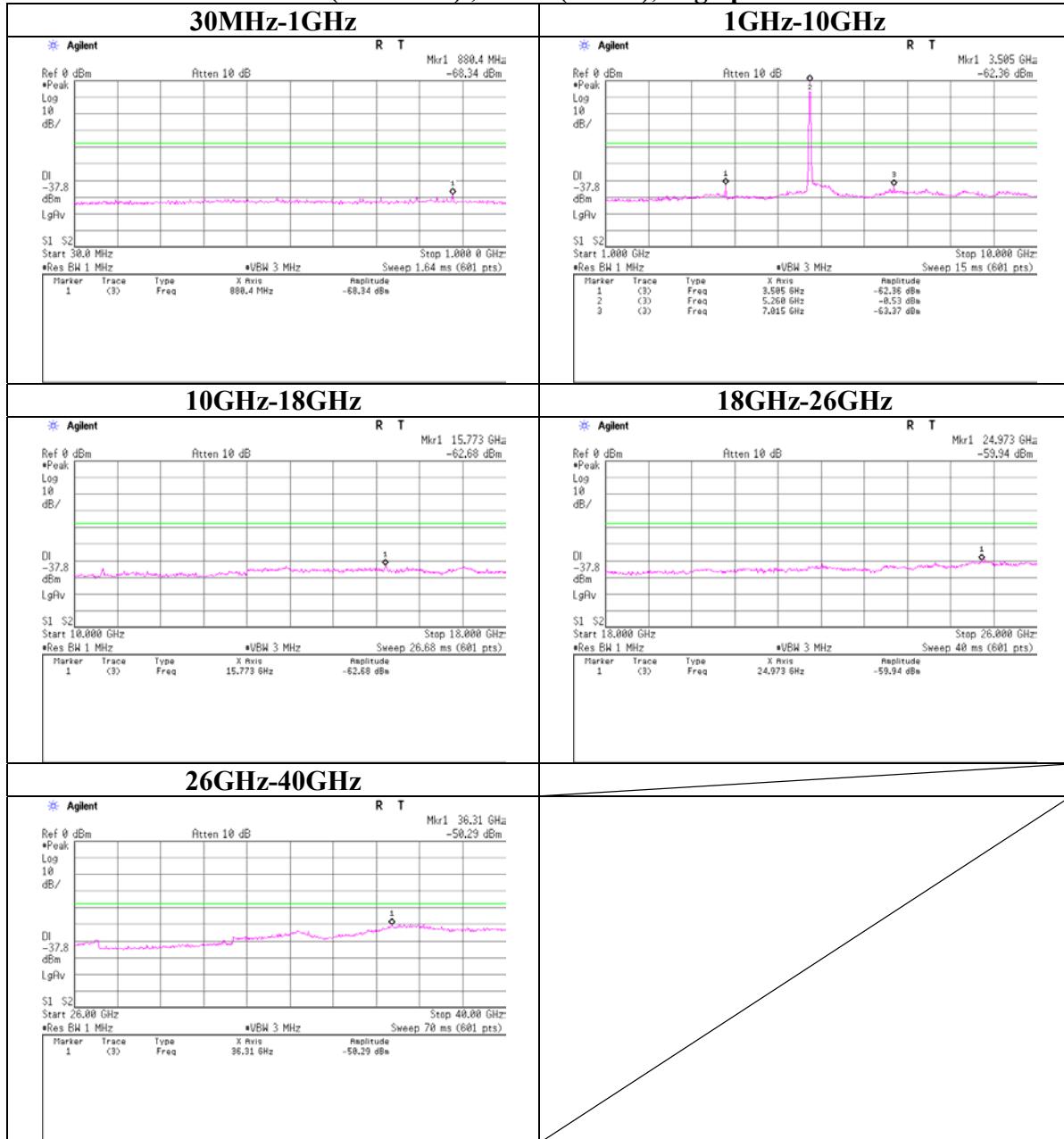
**Conducted Spurious Emission(DSSS and other forms of modulation)**

**Ch.:36(5180MHz), Ant:A(Worst), High power**

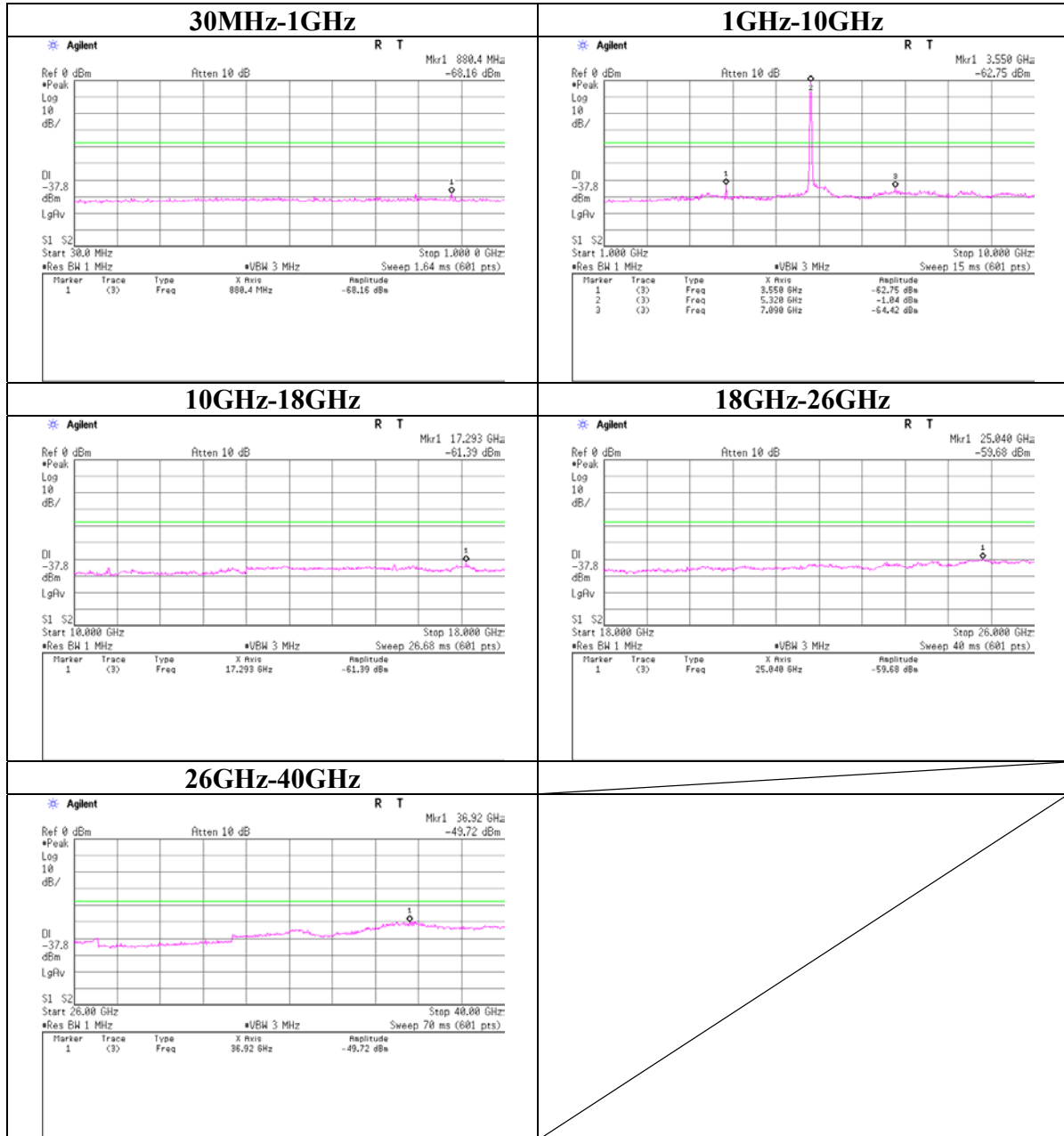


**Conducted Spurious Emission(DSSS and other forms of modulation)**

**Ch.:52(5260MHz) , Ant:A(Worst), High power**

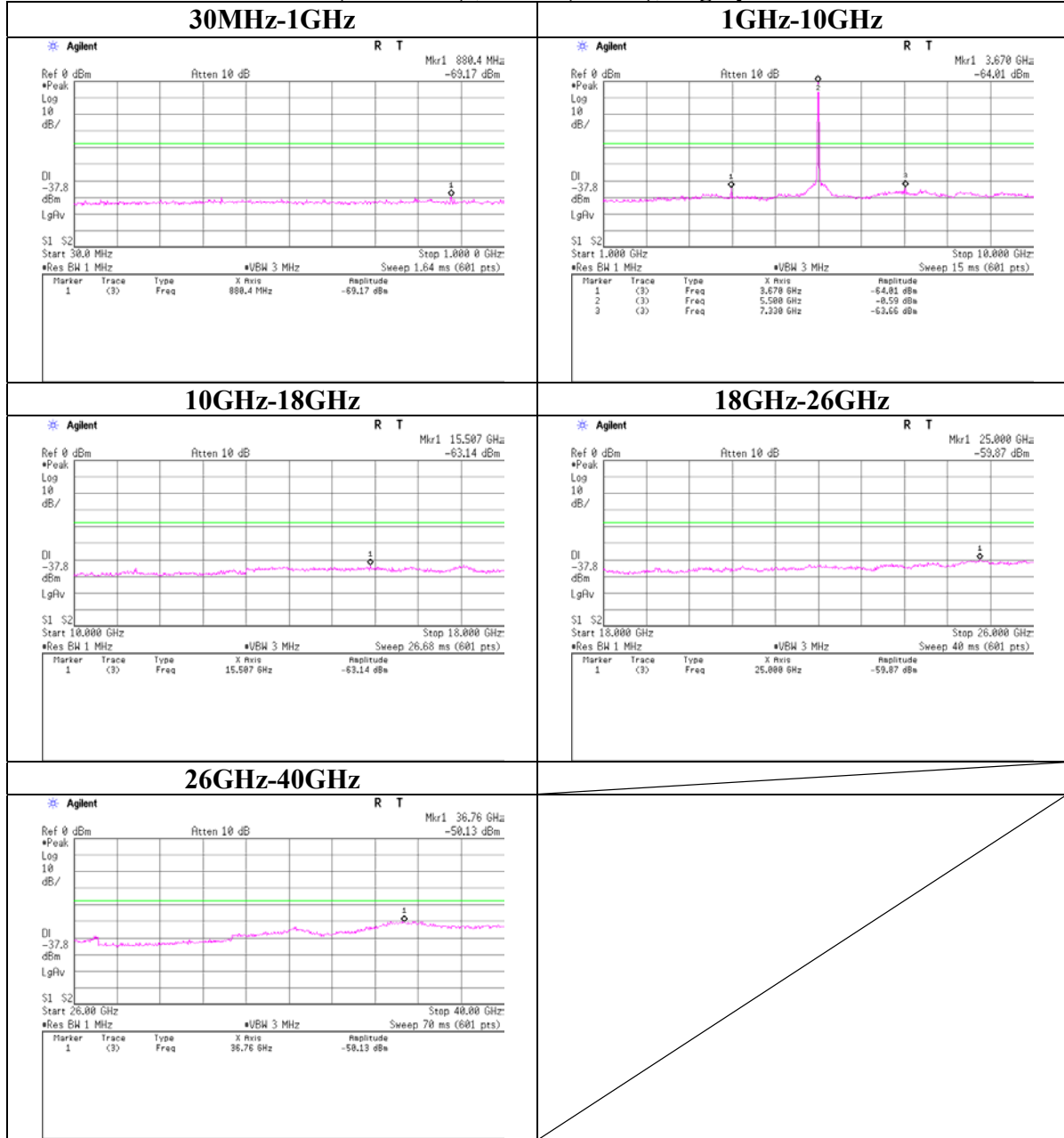


**Conducted Spurious Emission(DSSS and other forms of modulation)**  
**Ch.:64(5320MHz) , Ant:A(Worst), High power**



**Conducted Spurious Emission(DSSS and other forms of modulation)**

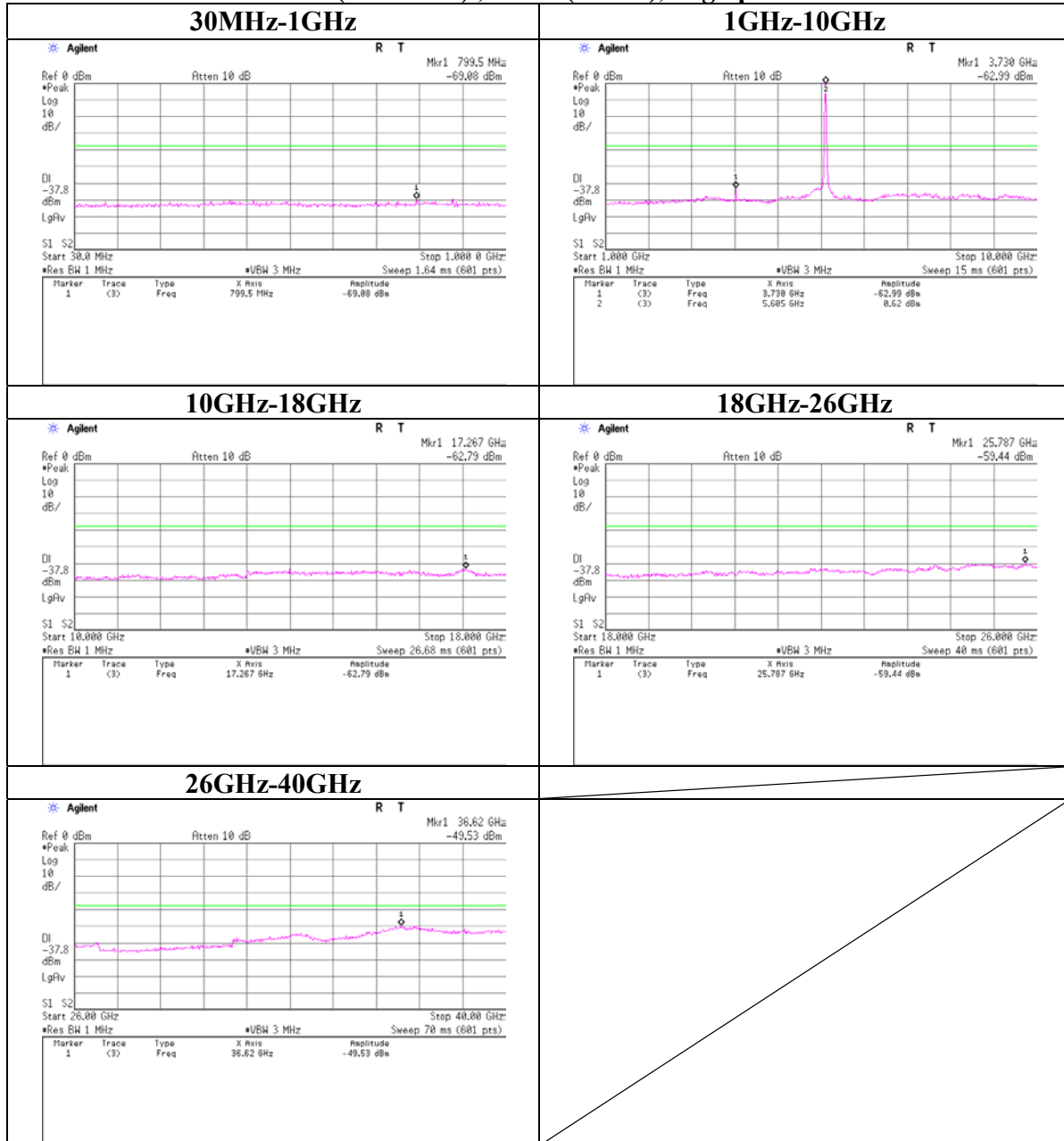
**Ch.:100(5500MHz) , Ant:A(Worst), High power**





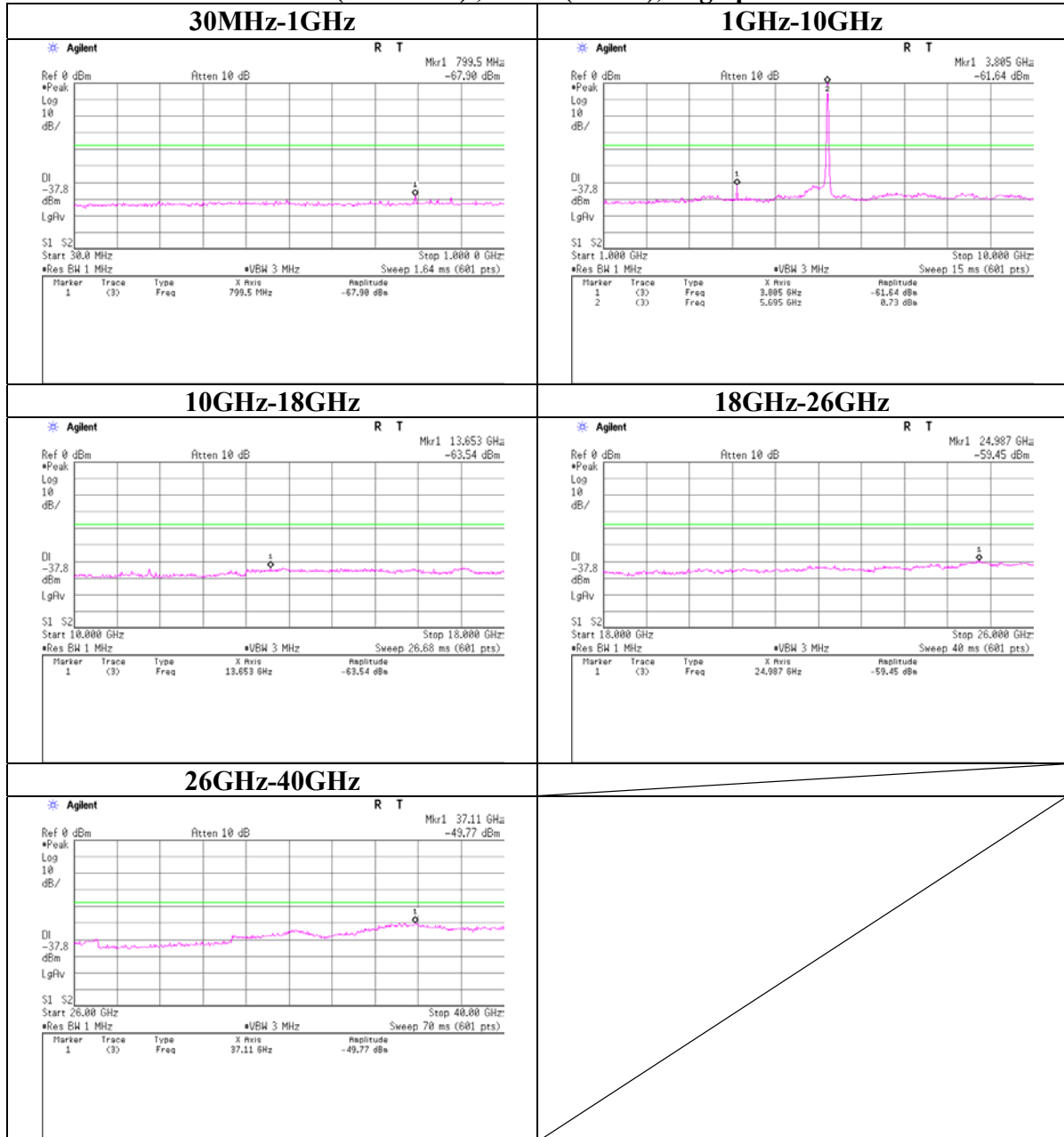
**Conducted Spurious Emission(DSSS and other forms of modulation)**

**Ch.:120(5600MHz) , Ant:A(Worst), High power**



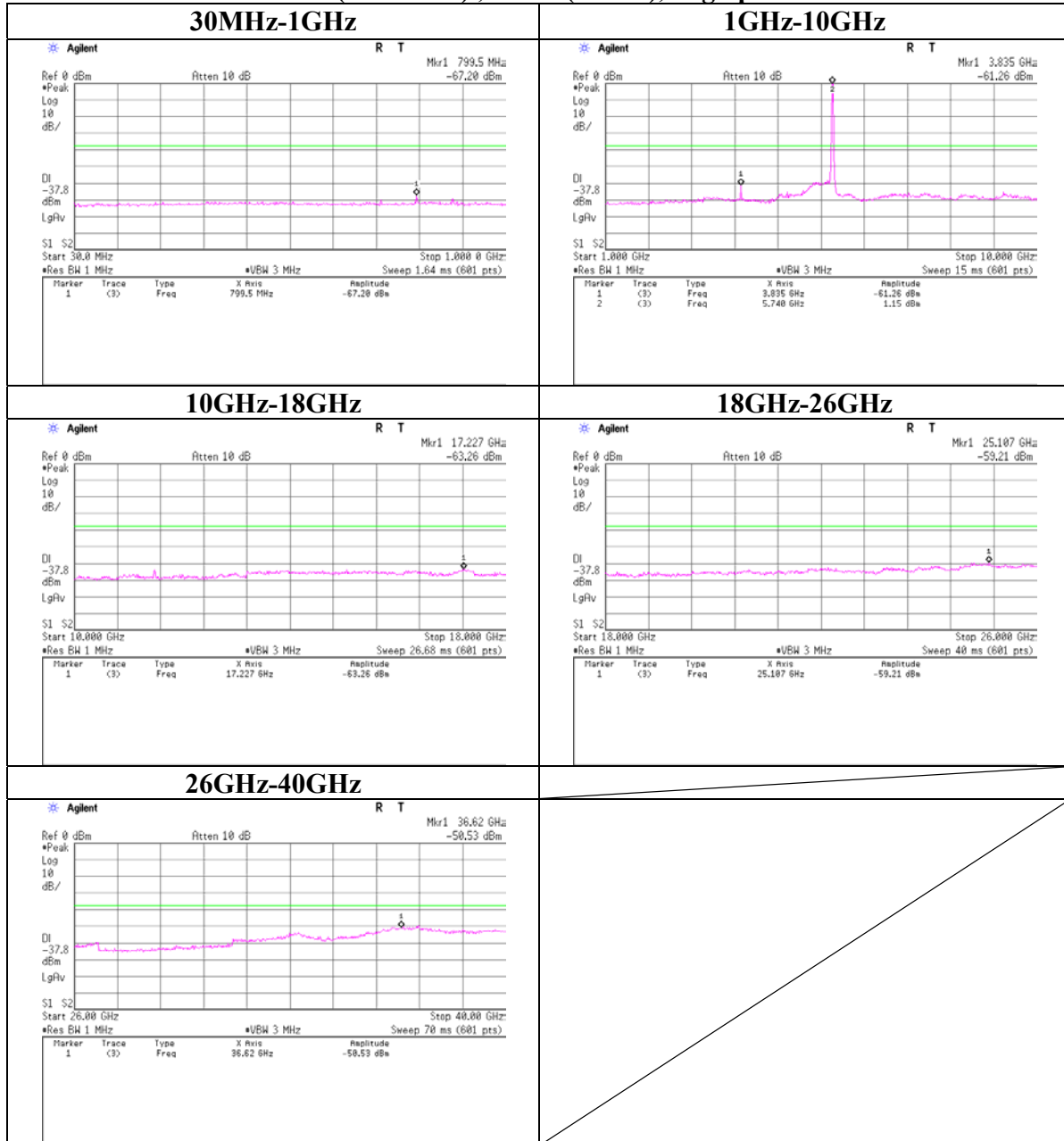
**Conducted Spurious Emission(DSSS and other forms of modulation)**

**Ch.:140(5700MHz) , Ant:A(Worst), High power**



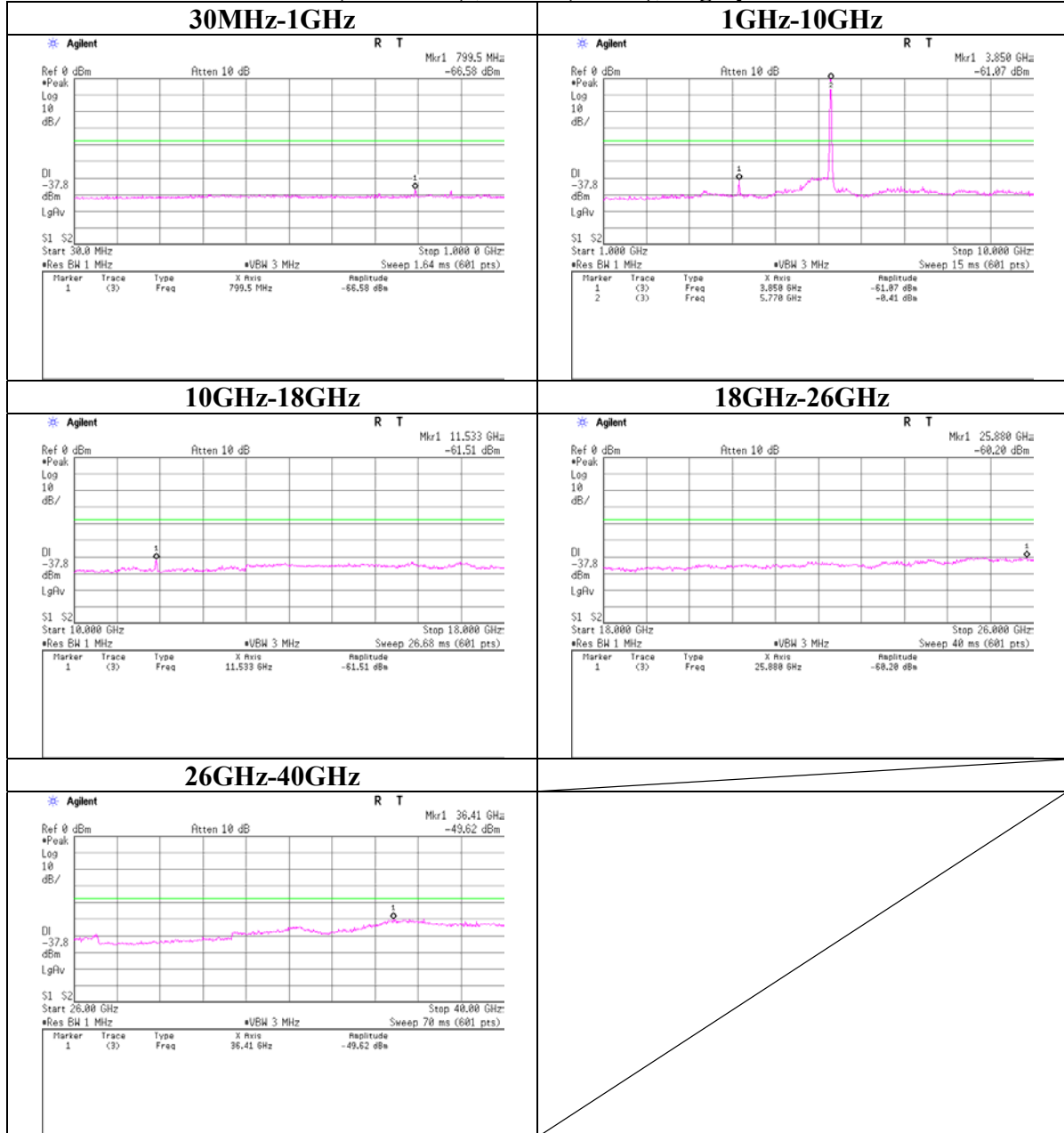
**Conducted Spurious Emission(DSSS and other forms of modulation)**

**Ch.:149(5745MHz) , Ant:A(Worst), High power**



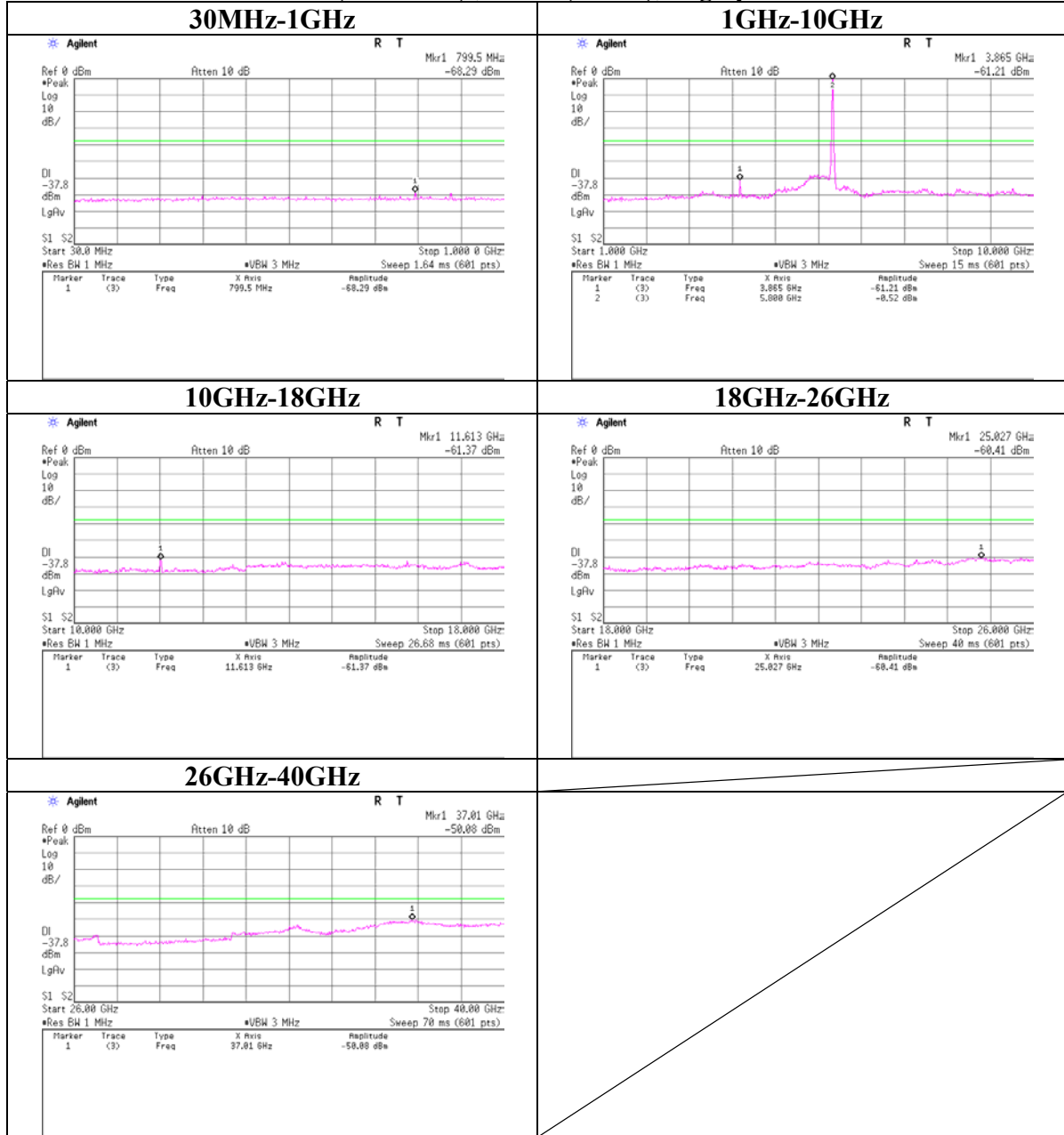
**Conducted Spurious Emission(DSSS and other forms of modulation)**

**Ch.:153(5765MHz) , Ant:A(Worst), High power**



**Conducted Spurious Emission(DSSS and other forms of modulation)**

**Ch.:161(5805MHz) , Ant:A(Worst), High power**



**Radiated emission Band Edge compliance**  
**Dual Band Diversity Antenna, Ant:A(Worst), High power**

UL-Apex Co., Ltd.  
Head Office EMC Lab. No.4 and No.2 Semi Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Section 15.407(b) / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	3m
Model	WE70-AP	Date	01/21/2007      01/24/2007
S/N	279651000201	Temperature	23 deg.C.      23 deg.C.
Power	DC 24V	Humidity	33 %      30 %
Mode	IEEE 802.11a, Tx, 54Mbps,Ant:A	Engineer	Kenichi Adachi      Kenichi Adachi
EUT Position	H: X-axis / V: X-axis		(No.4AC)      (No.2AC)
Ant. Position	H: X-axis / V: Y-axis		
Tx Antenna	0.8m Height		

(No.4 (1 to 4) and No.2 (5 to 8) Semi Anechoic Chamber) (\* No.1: Tx 5180MHz, No.2: Tx 5320MHz, No.3: Tx 5500MHz, No.4: Tx 5700MHz)  
**PK DETECT** (RBW: 1MHz, VBW:1MHz) (\* No.5 and No.6: Tx 5745MHz, No.7 and No.8: Tx 5805MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Band-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV/m]	VER [dBuV/m]					HOR [dB]	VER [dB]		HOR [dB]	VER [dB]
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass</b>												
1	5150.0	48.5	48.6	31.4	31.2	3.3	0.0	52.0	52.1	73.9	21.9	21.8
2	5350.0	54.0	52.9	31.5	31.0	3.3	0.0	57.8	56.7	73.9	16.1	17.2
3	5470.0	56.1	52.0	31.6	30.8	3.4	0.0	60.3	56.2	-	-	-
4	5725.0	58.1	57.4	32.0	30.5	3.4	0.0	63.0	62.3	-	-	-
5	5715.0	58.9	58.8	36.5	31.5	4.5	0.0	68.4	68.3	-	-	-
6	5725.0	71.0	70.9	36.5	31.5	4.5	0.0	80.5	80.4	-	-	-
7	5825.0	69.5	67.0	36.6	31.4	4.5	0.0	79.2	76.7	-	-	-
8	5835.0	58.1	57.4	36.6	31.4	4.5	0.0	67.8	67.1	-	-	-

**AV DETECT** (RBW: 1MHz, VBW:10Hz) (\* No.1: Tx 5180MHz, No.2: Tx 5320MHz, No.3: Tx 5500MHz, No.4: Tx 5700MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Band-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV/m]	VER [dBuV/m]					HOR [dB]	VER [dB]		HOR [dB]	VER [dB]
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass</b>												
1	5150.0	32.0	33.0	31.4	31.2	3.3	0.0	35.5	36.5	53.9	18.4	17.4
2	5350.0	34.0	34.3	31.5	31.0	3.3	0.0	37.8	38.1	53.9	16.1	15.8

The noise was measured at each position of all three axes X, Y and Z to compare the level, and the maximum noise.

With the result above, the effective radiated power was calculated on the basis of the reference value  
- for the calibration data on the substitution measurement.

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

(No.2 Semi Anechoic Chamber) (No.1: Tx 5500MHz, No.2: Tx 5700MHz, No.3 and No.4: Tx 5745MHz, No.5 and No.6: Tx 5805MHz)

No.	Frequency [MHz]	Electric Field Strength (After Factor Calculation) [dBuV/m]		SG Reading [dBm]		Tx Cable Loss [dB]	Tx Ant. Gain [dBi]	Tx Ant. ATT. Loss [dB]	RESULT (EIRP) [dBm]		LIMIT [dBm]	MARGIN [dB]		Mode	A/C	Remarks
		HOR	VER	HOR	VER				HOR	VER		HOR	VER			
		3	5470.00	60.3	56.2				-47.1	-51.4		4.8	12.8			
4	5725.00	63.0	62.3	-44.1	-45.0	5.0	13.0	0.0	-36.1	-37.0	-27.0	9.1	10.0	Operating	No4	
5	5715.00	68.4	68.3	-39.7	-40.3	4.7	13.3	0.0	-31.1	-31.6	-27.0	4.1	4.6	Operating	No2	
6	5725.00	80.5	80.4	-27.6	-28.2	4.7	13.4	0.0	-19.0	-19.6	-17.0	2.0	2.6	Operating	No2	
7	5825.00	79.2	76.7	-28.9	-32.0	4.8	13.4	0.0	-20.3	-23.4	-17.0	3.3	6.4	Operating	No2	
8	5835.00	62.6	61.6	-45.6	-47.1	4.8	13.5	0.0	-36.9	-38.5	-27.0	9.9	11.5	Operating	No2	

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain - Tx Ant. ATT. Loss

Rx-ANTENNA : Biconical Antenna(30-300MHz), Logperiodic Antenna(300-1000MHz), Horn Antenna(1-12.75GHz)

Tx-ANTENNA : Shorted Dipole Antenna(30-120MHz), Dipole Antenna(120-1000MHz), Horn Antenna(1-12.75GHz)

All other emissions were at least 20dB below the specification limit.

The noise was measured at each position of all three axes X, Y and Z to compare the level, and the maximum noise.

With the result above, the effective radiated power was calculated on the basis of the reference value

- for the calibration data on the substitution measurement.

\*The limit is rounded down to one decimal place.

**UL Apex Co., Ltd.**

**Head Office EMC Lab.**

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MF060b(14.06.06)

**Radiated emission Band Edge compliance**  
**Magnetic Pedestal Antenna, Ant:A(Worst), High power**

UL-Apex Co., Ltd.  
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Section 15.407(b) / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	3m
Model	WE70-AP	Date	02/26/2007
S/N	279651000201	Temperature	23 deg.C.
Power	DC 24V	Humidity	30 %
Mode	IEEE 802.11a, Tx, 54Mbps, Ant:A	Engineer	Takahiro Hatakeda
EUT Position	H: X-axis / V: X-axis		
Ant. Position	H: X-axis / V: Y-axis		
Tx Antenna	0.8m Height		

(No.3 Semi Anechoic Chamber) (\* No.1: Tx 5180MHz, No.2: Tx 5320MHz, No.3: Tx 5500MHz, No.4: Tx 5700MHz)  
**PK DETECT** (RBW: 1MHz, VBW: 1MHz) (\* No.5 and No.6: Tx 5745MHz, No.7 and No.8: Tx 5805MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Band-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV/m]	VER [dBuV/m]					HOR [dB]	VER [dB]		HOR [dB]	VER [dB]
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass</b>												
1	5150.0	48.4	50.7	33.8	31.6	3.6	0.0	54.2	56.5	73.9	19.7	17.4
2	5350.0	56.5	57.6	33.9	31.7	3.7	0.0	62.4	63.5	73.9	11.5	10.4
3	5470.0	54.1	55.2	33.9	31.8	3.7	0.0	59.9	61.0	-	-	-
4	5725.0	61.9	63.4	33.9	31.9	3.8	0.0	67.7	69.2	-	-	-
5	5715.0	60.0	62.6	33.9	31.9	3.8	0.0	65.8	68.4	-	-	-
6	5725.0	72.7	73.3	33.9	31.9	3.8	0.0	78.5	79.1	-	-	-
7	5825.0	71.2	72.7	33.9	31.9	3.9	0.0	77.1	78.6	-	-	-
8	5835.0	58.7	58.7	33.9	31.9	3.9	0.0	64.6	64.6	-	-	-

**AV DETECT** (RBW: 1MHz, VBW: 10Hz) (\* No.1: Tx 5180MHz, No.2: Tx 5320MHz, No.3: Tx 5500MHz, No.4: Tx 5700MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Band-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV/m]	VER [dBuV/m]					HOR [dB]	VER [dB]		HOR [dB]	VER [dB]
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass</b>												
1	5150.0	33.3	35.0	33.8	31.6	3.6	0.0	39.1	40.8	53.9	14.8	13.1
2	5350.0	38.4	38.5	33.9	31.7	3.7	0.0	44.3	44.4	53.9	9.6	9.5

The noise was measured at each position of all three axes X, Y and Z to compare the level, and the maximum noise.  
With the result above, the effective radiated power was calculated on the basis of the reference value  
- for the calibration data on the substitution measurement.  
\*The limit is rounded down to one decimal place.  
\*The test result is round off to one or two decimal places, so some differences might be observed.

(No.3 Semi Anechoic Chamber) (No.1: Tx 5500MHz, No.2: Tx 5700MHz, No.3 and No.4: Tx 5745MHz, No.5 and No.6: Tx 5805MHz)

No.	Frequency [MHz]	Electric Field Strength (After Factor Calculation)		SG Reading		Tx	Tx	Tx Ant.	RESULT (EIRP)		LIMIT	MARGIN		Mode	A/C	Remarks
		[dBuV/m]		[dBm]		Cable Loss	Ant. Gain	ATT. Loss	[dBm]		[dBm]	[dB]				
		HOR	VER	HOR	VER	[dB]	[dBi]	[dB]	HOR	VER	(EIRP)	HOR	VER			
3	5470.00	59.9	61.0	-48.5	-47.6	4.8	12.8	0.0	-40.5	-39.6	-27.0	13.5	12.6	Operating	No3	
4	5725.00	67.7	69.2	-40.5	-39.1	5.0	13.0	0.0	-32.5	-31.1	-27.0	5.5	4.1	Operating	No3	
5	5715.00	65.8	68.4	-42.4	-39.9	4.9	13.0	0.0	-34.4	-31.9	-27.0	7.4	4.9	Operating	No3	
6	5725.00	78.5	79.1	-29.7	-29.2	5.0	13.0	0.0	-21.7	-21.2	-17.0	4.7	4.2	Operating	No3	
7	5825.00	77.1	78.6	-31.0	-29.5	5.0	13.0	0.0	-23.0	-21.5	-17.0	6.0	4.5	Operating	No3	
8	5835.00	64.6	64.6	-43.5	-43.5	5.0	13.0	0.0	-35.5	-35.5	-27.0	8.5	8.5	Operating	No3	

CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain - Tx Ant. ATT. Loss  
Rx-ANTENNA : Biconical Antenna(30-300MHz), Logperiodic Antenna(300-1000MHz), Horn Antenna(1-12.75GHz)  
Tx-ANTENNA : Shorted Dipole Antenna(30-120MHz), Dipole Antenna(120-1000MHz), Horn Antenna(1-12.75GHz)  
All other emissions were at least 20dB below the specification limit.  
The noise was measured at each position of all three axes X, Y and Z to compare the level, and the maximum noise.  
With the result above, the effective radiated power was calculated on the basis of the reference value  
- for the calibration data on the substitution measurement.  
\*The limit is rounded down to one decimal place.

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**Radiated emission Band Edge compliance**  
**Magnetic Pedestal Antenna + extension cable of 5.0m, Ant: A(Worst), High power**  
UL-Apex Co., Ltd.  
Head Office EMC Lab. No.3 Semi Anechoic Chamber

Company	OMRON Corporation	Regulation	FCC Section 15.407(b) / RSS-210 A9.3
Equipment	FA Wireless LAN Unit	Test Distance	3m
Model	WE70-AP	Date	02/26/2007
S/N	279651000201	Temperature	23 deg.C.
Power	DC 24V	Humidity	30 %
Mode	IEEE 802.11a, Tx, 54Mbps, Ant:A	Engineer	Takahiro Hatakeda
EUT Position	H: X-axis / V: X-axis		
Ant. Position	H: X-axis / V: Y-axis		
Tx Antenna	0.8m Height		

(No.3 Semi Anechoic Chamber) (\* No.1: Tx 5180MHz, No.2: Tx 5320MHz, No.3: Tx 5500MHz, No.4: Tx 5700MHz)  
**PK DETECT** (RBW: 1MHz, VBW: 1MHz) (\* No.5 and No.6: Tx 5745MHz, No.7 and No.8: Tx 5805MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Band-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV/m]	VER [dBuV/m]					HOR [dB]	VER [dB]		HOR [dB]	VER [dB]
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass</b>												
1	5150.0	49.5	49.9	33.8	31.6	3.6	0.0	55.3	55.7	73.9	18.6	18.2
2	5350.0	49.4	53.4	33.9	31.7	3.7	0.0	55.3	59.3	73.9	18.6	14.6
3	5470.0	50.4	52.3	33.9	31.8	3.7	0.0	56.2	58.1	-	-	-
4	5725.0	56.0	56.8	33.9	31.9	3.8	0.0	61.8	62.6	-	-	-
5	5715.0	56.9	59.0	33.9	31.9	3.8	0.0	62.7	64.8	-	-	-
6	5725.0	70.9	73.1	33.9	31.9	3.8	0.0	76.7	78.9	-	-	-
7	5825.0	66.5	68.6	33.9	31.9	3.9	0.0	72.4	74.5	-	-	-
8	5835.0	53.9	55.1	33.9	31.9	3.9	0.0	59.8	61.0	-	-	-

**AV DETECT** (RBW: 1MHz, VBW: 10Hz) (\* No.1: Tx 5180MHz, No.2: Tx 5320MHz, No.3: Tx 5500MHz, No.4: Tx 5700MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Band-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV/m]	VER [dBuV/m]					HOR [dB]	VER [dB]		HOR [dB]	VER [dB]
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass</b>												
1	5150.0	35.1	35.3	33.8	31.6	3.6	0.0	40.9	41.1	53.9	13.0	12.8
2	5350.0	35.2	36.7	33.9	31.7	3.7	0.0	41.1	42.6	53.9	12.8	11.3

The noise was measured at each position of all three axes X, Y and Z to compare the level, and the maximum noise.  
With the result above, the effective radiated power was calculated on the basis of the reference value  
- for the calibration data on the substitution measurement.  
\*The limit is rounded down to one decimal place.  
\*The test result is round off to one or two decimal places, so some differences might be observed.

(No.3 Semi Anechoic Chamber) (No.1: Tx 5500MHz, No.2: Tx 5700MHz, No.3 and No.4: Tx 5745MHz, No.5 and No.6: Tx 5805MHz)

No.	Frequency [MHz]	Electric Field Strength (After Factor Calculation)		SG Reading		Tx	Tx	Tx Ant.	RESULT (EIRP)		LIMIT	MARGIN		Mode	A/C	Remarks
		[dBuV/m]		[dBm]		Cable Loss [dB]	Ant. Gain [dBi]	ATT. Loss [dB]	[dBm]		[dBm]	[dB]				
		HOR	VER	HOR	VER				HOR	VER	(EIRP)	HOR	VER			
3	5470.00	56.2	58.1	-52.2	-50.5	4.8	12.8	0.0	-44.2	-42.5	-27.0	17.2	15.5	Operating	No3	
4	5725.00	61.8	62.6	-46.4	-45.7	5.0	13.0	0.0	-38.4	-37.7	-27.0	11.4	10.7	Operating	No3	
5	5715.00	62.7	64.8	-45.5	-43.5	4.9	13.0	0.0	-37.5	-35.5	-27.0	10.5	8.5	Operating	No3	
6	5725.00	76.7	78.9	-31.5	-29.4	5.0	13.0	0.0	-23.5	-21.4	-17.0	6.5	4.4	Operating	No3	
7	5825.00	72.4	74.5	-35.7	-33.6	5.0	13.0	0.0	-27.7	-25.6	-17.0	10.7	8.6	Operating	No3	
8	5835.00	59.8	61.0	-48.3	-47.1	5.0	13.0	0.0	-40.3	-39.1	-27.0	13.3	12.1	Operating	No3	

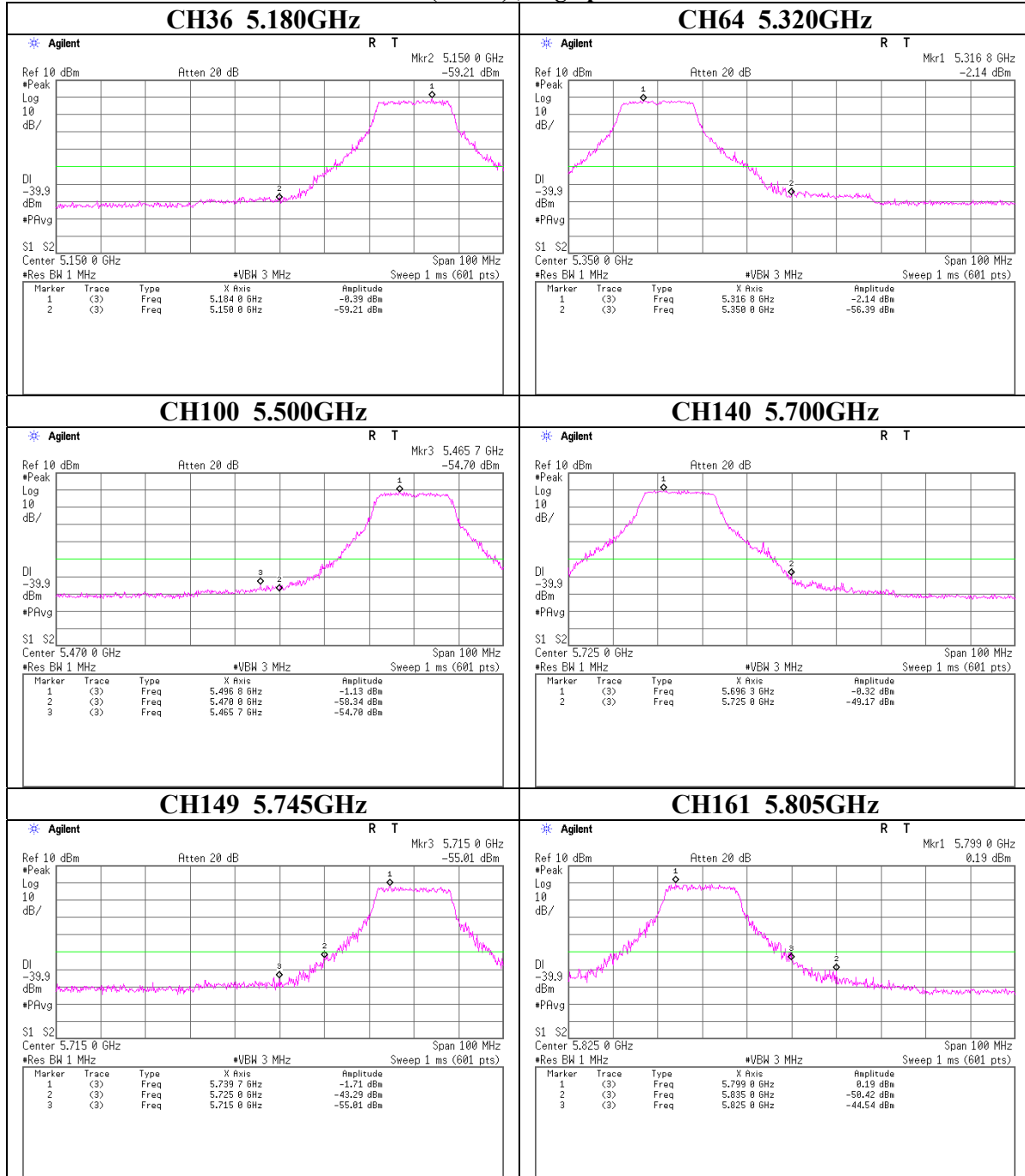
CALCULATION RESULT = SG Reading - Tx Loss + Tx Ant. Gain - Tx Ant. ATT. Loss  
Rx-ANTENNA : Biconical Antenna(30-300MHz), Logperiodic Antenna(300-1000MHz), Horn Antenna(1-12.75GHz)  
Tx-ANTENNA : Shorted Dipole Antenna(30-120MHz), Dipole Antenna(120-1000MHz), Horn Antenna(1-12.75GHz)  
All other emissions were at least 20dB below the specification limit.  
The noise was measured at each position of all three axes X, Y and Z to compare the level, and the maximum noise.  
With the result above, the effective radiated power was calculated on the basis of the reference value  
- for the calibration data on the substitution measurement.  
\*The limit is rounded down to one decimal place.

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**Conducted emission Band Edge compliance**

**Ant:A(Worst) , High power**



Display Line = - 27dBm - Cable Loss - ATT.Loss - ANT.Gain

### Peak Power Spectral Density

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Company	OMRON Corporation	Regulation	FCC Section 15.407(a)(1)(2)(3) / RSS-210 A9.2
Equipment	FA Wireless LAN Unit	Test Distance	-
Model	WE70-AP	Date	02/05/2007
S/N	279651000202	Temperature	25deg.C
Power	DC 24V	Humidity	30%
Mode	IEEE802.11a ,Tx, 54Mbps, Ant:A	Engineer	Kenichi Adachi
	High power		

Ch	Freq. [MHz]	Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
36	5180.0	-9.36	10.09	0.65	1.38	4.00	2.62
52	5260.0	-9.96	10.10	0.65	0.79	4.00	3.21
64	5320.0	-10.10	10.11	0.65	0.66	11.00	10.34
100	5500.0	-9.16	10.13	0.65	1.62	17.00	15.38
120	5600.0	-7.56	10.14	0.67	3.25	17.00	13.75
140	5700.0	-8.71	10.15	0.67	2.11	17.00	14.89
149	5745.0	-8.75	10.15	0.67	2.07	17.00	14.93
153	5765.0	-8.45	10.15	0.68	2.38	17.00	14.62
161	5805.0	-8.30	10.16	0.68	2.54	17.00	14.46

Sample Calculation:

Result = Reading + Cable Loss + Attenuator

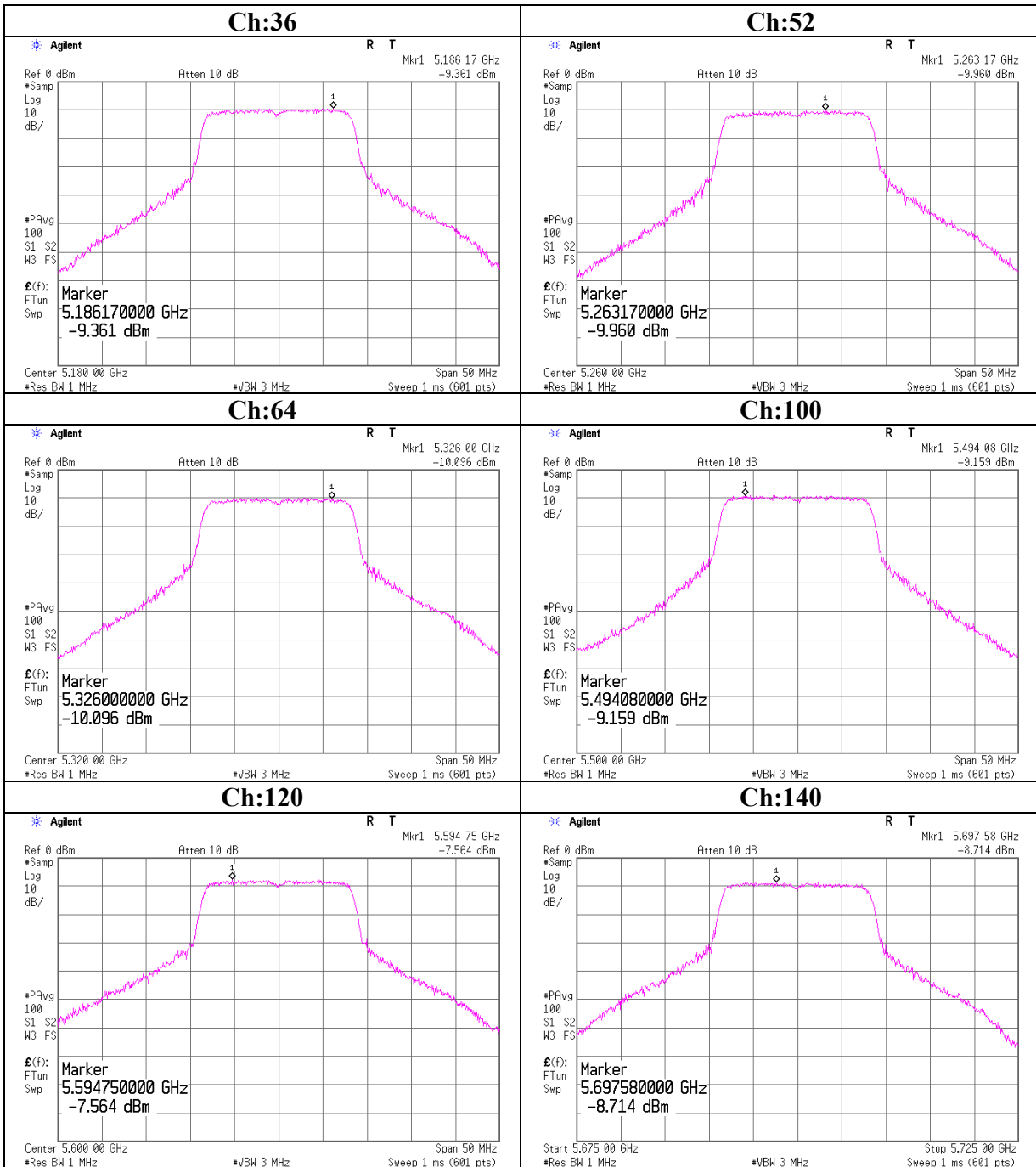
\* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

\*The limit is rounded down to one decimal place.

\*The test result is round off to one or two decimal places, so some differences might be observed.

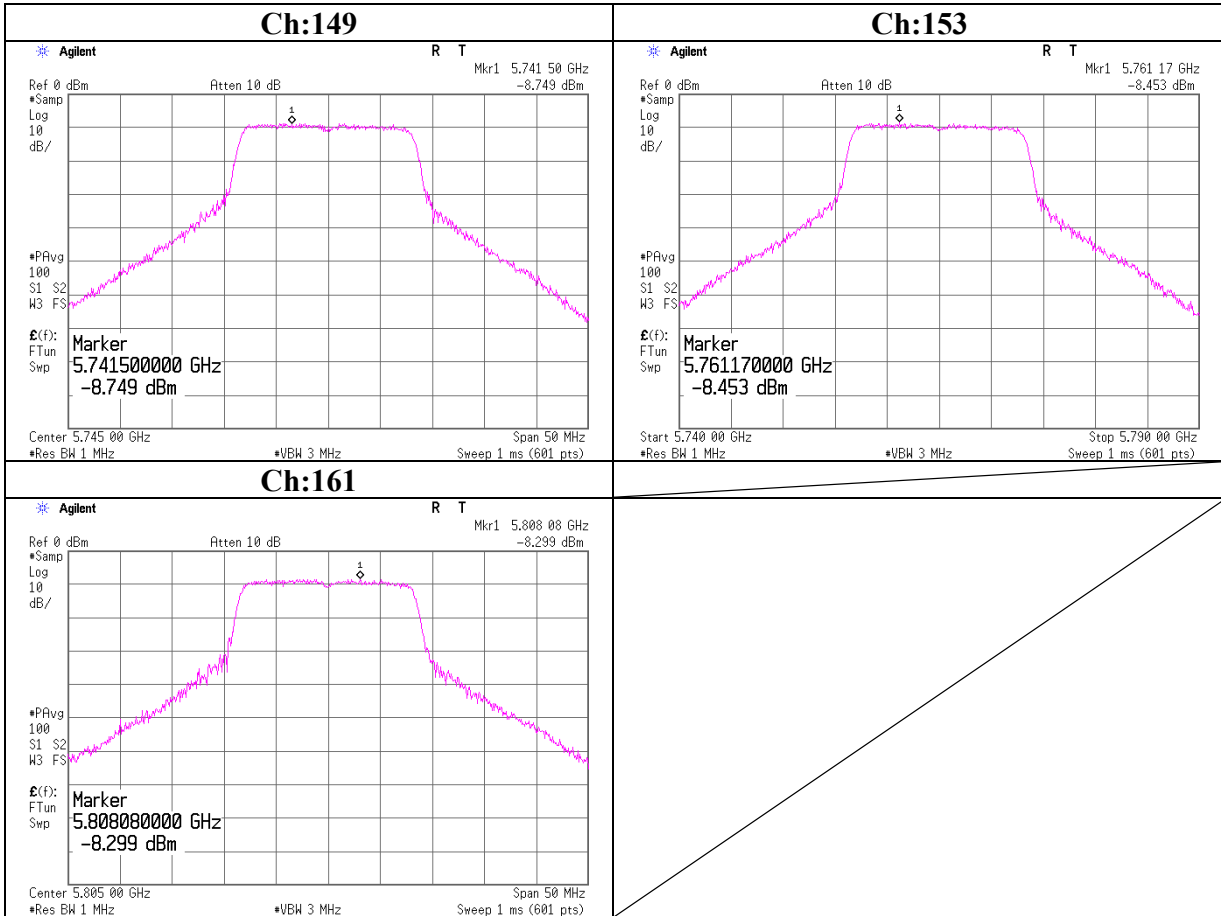
### Peak Power Spectral Density

Ant:A



**Peak Power Spectral Density**

Ant:A



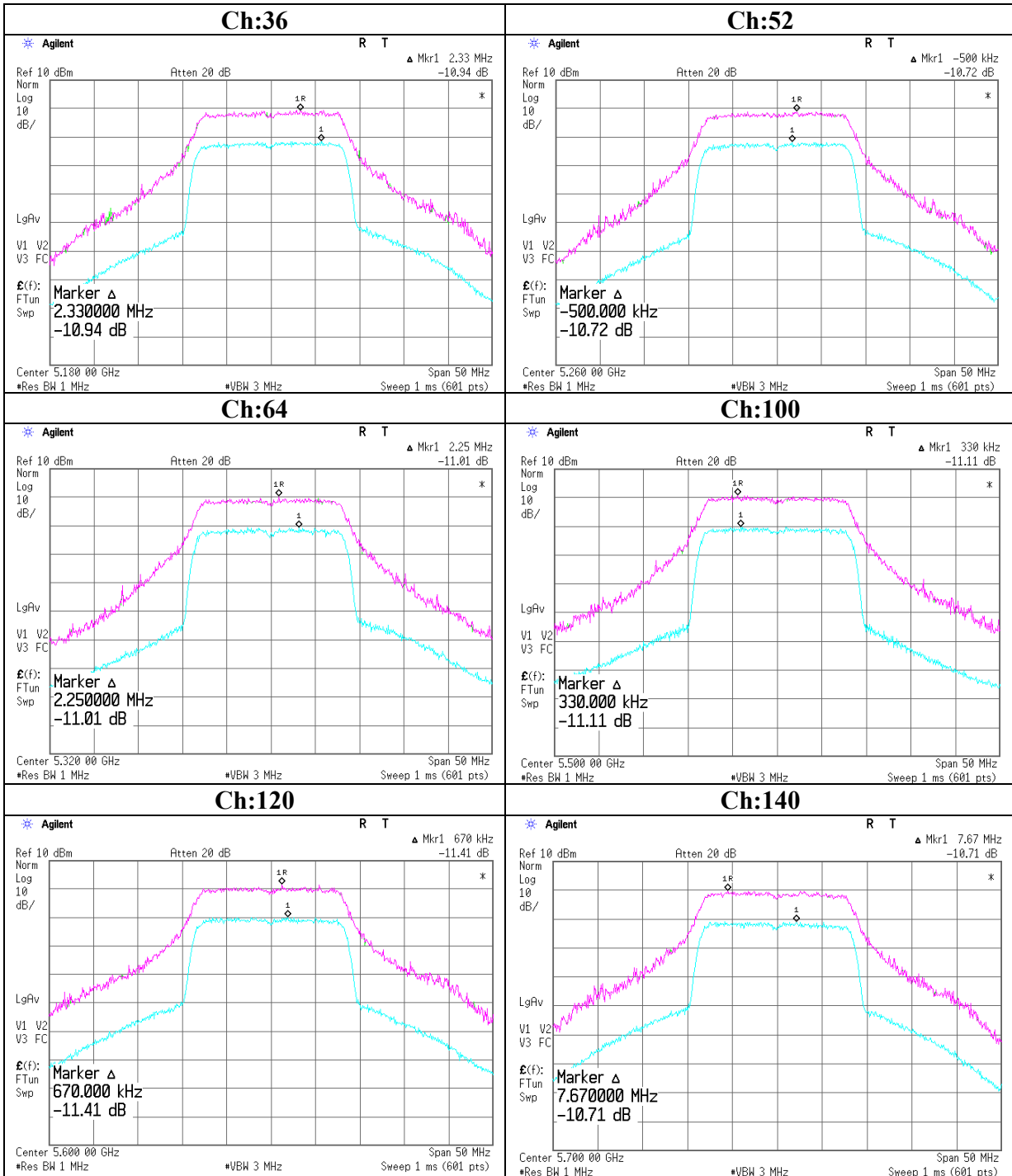
### Peak Excursion Ratio

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Head Office EMC Lab. No.7 Shielded room

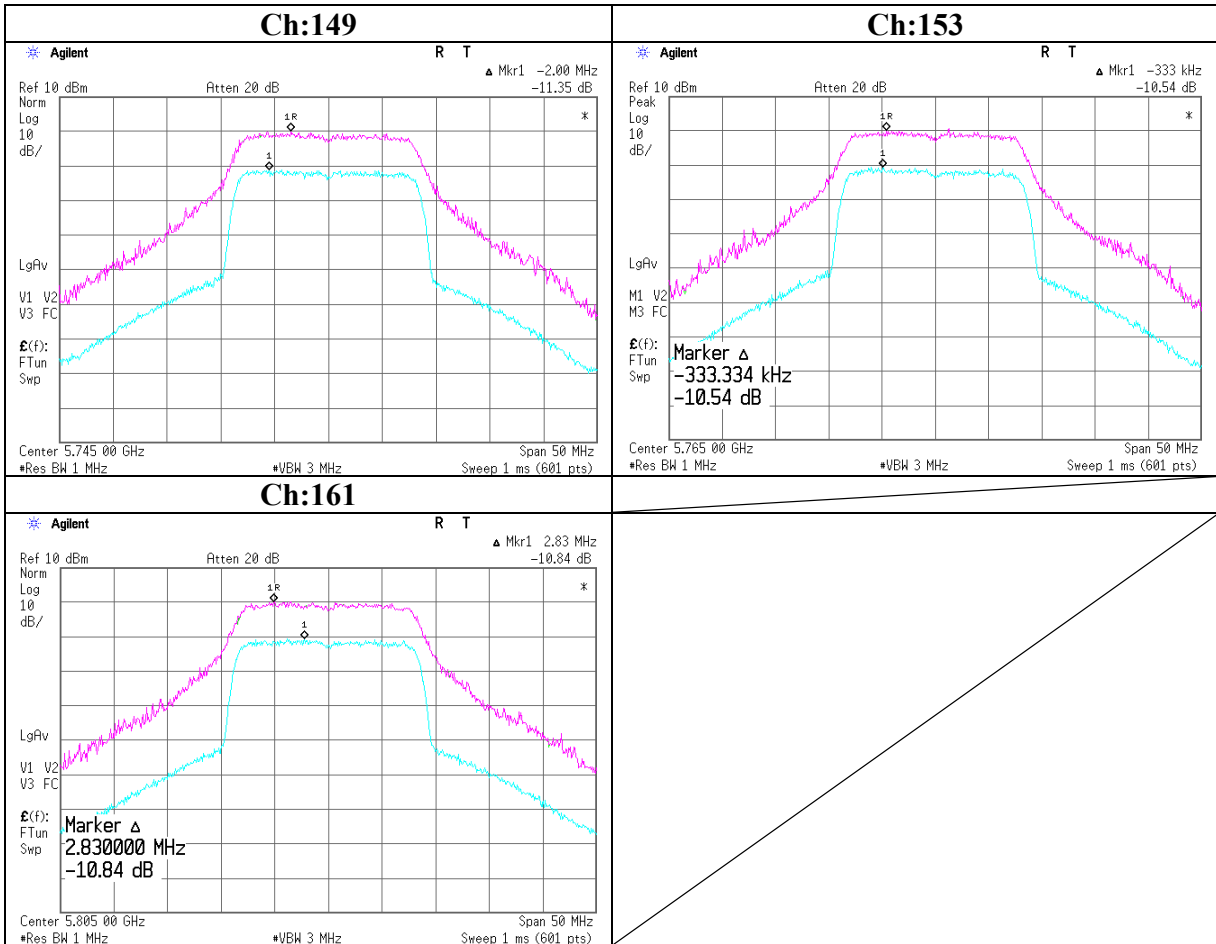
Company	OMRON Corporation	Regulation	FCC Section 15.407(a)(6)
Equipment	FA Wireless LAN Unit	Test Distance	-
Model	WE70-AP	Date	02/06/2007
S/N	279651000202	Temperature	25 deg.C
Power	DC 24V	Humidity	31%
Mode	IEEE802.11a ,Tx, 54Mbps, Ant:A	Engineer	Kenichi Adachi
	High power		

Ch	Freq. [MHz]	Peak Power Excursion [dB]	Limit [dB]
36	5180.0	10.940	13.0
52	5260.0	10.720	13.0
64	5320.0	11.010	13.0
100	5500.0	11.110	13.0
120	5600.0	11.410	13.0
140	5700.0	10.710	13.0
149	5745.0	11.350	13.0
153	5765.0	10.540	13.0
161	5805.0	10.840	13.0

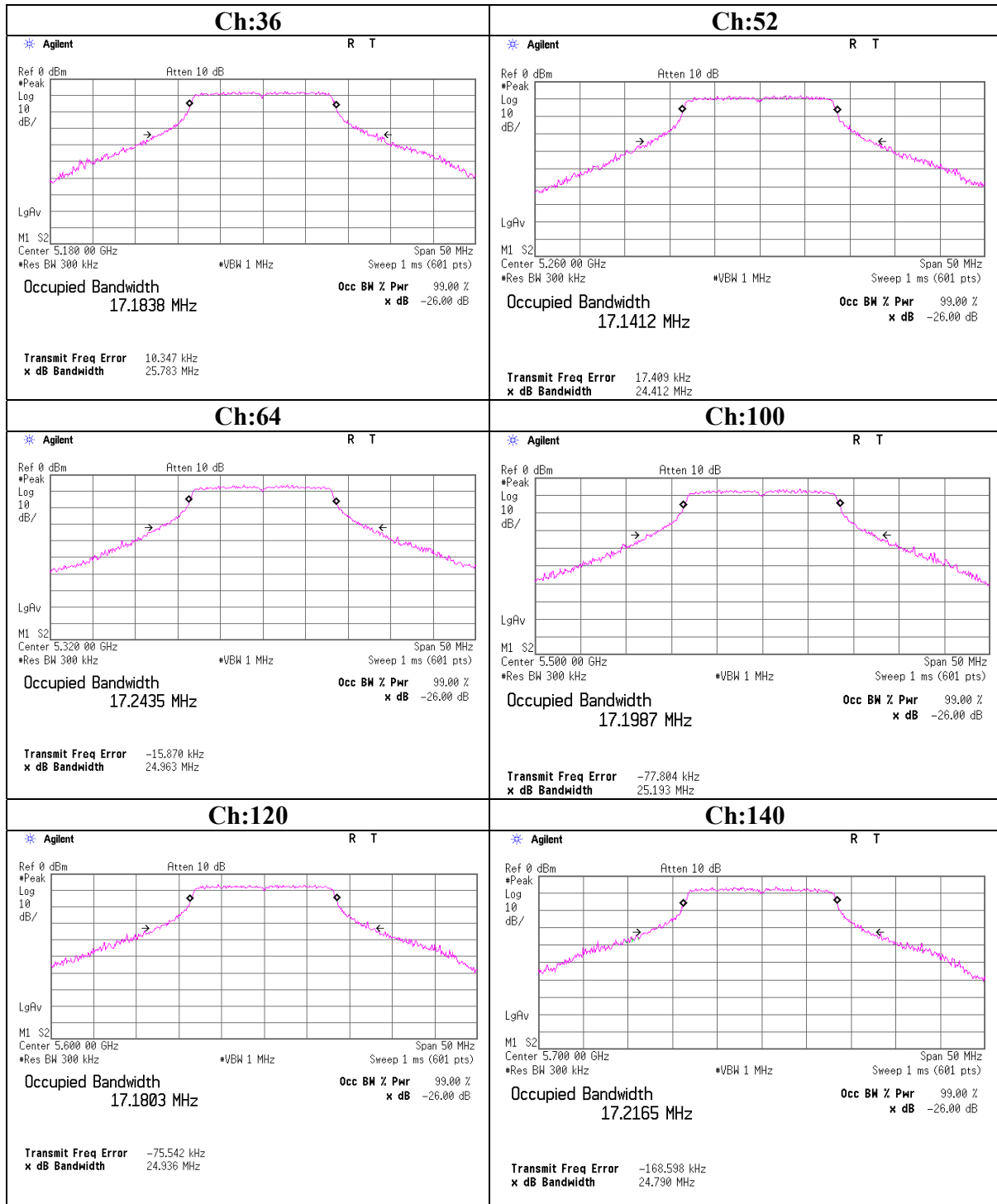
### Peak Excursion Ratio



**Peak Excursion Ratio**

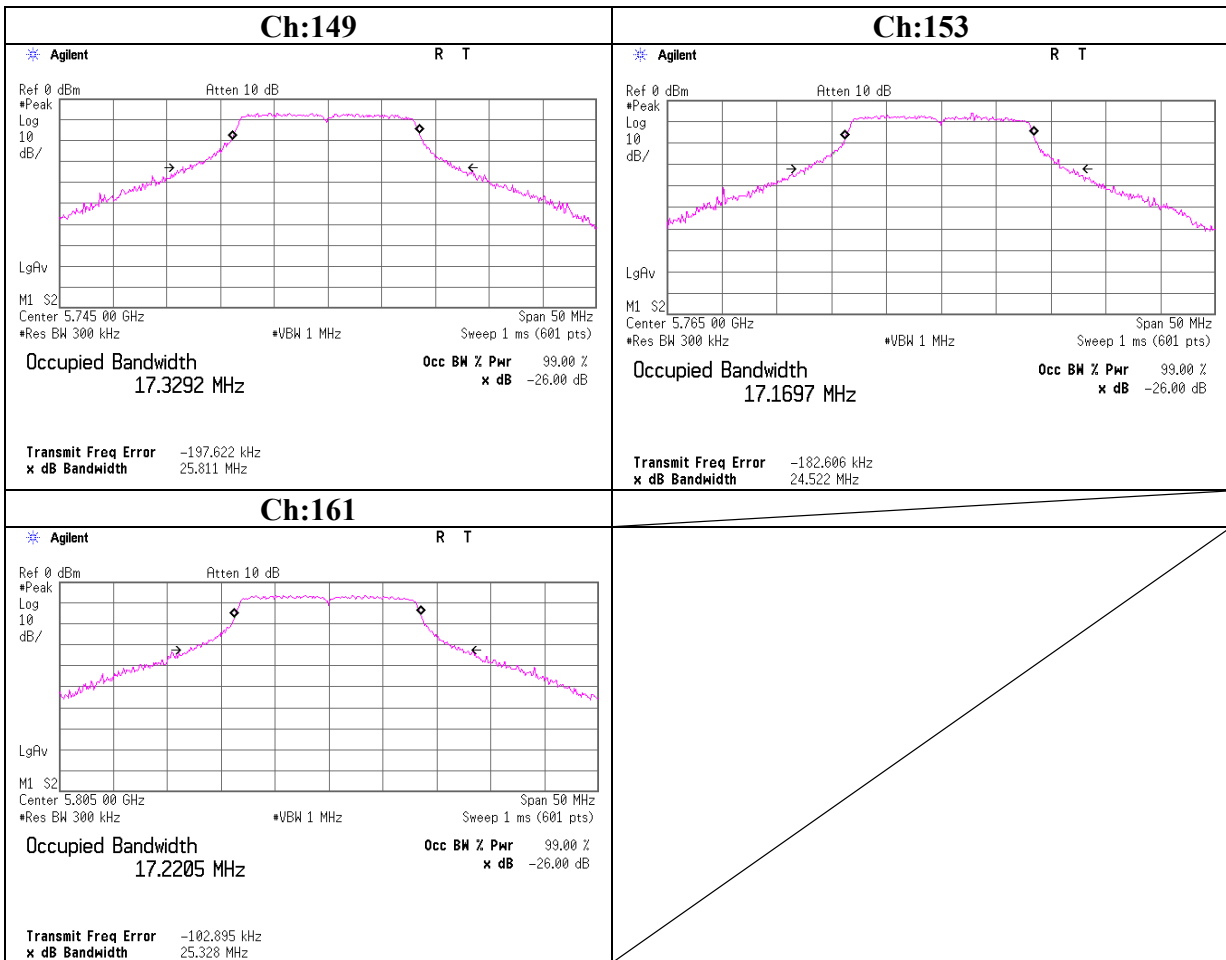


**99% Occupied Bandwidth**





**99% Occupied Bandwidth**



## APPENDIX 3:Test instruments

### EMI test equipment (1/2)

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-04	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE	2006/03/06 * 12
MHA-21	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	RE	2006/08/17 * 12
MCC-57	Microwave Cable 1G- 26.5GHz	Suhner	SUCOFLEX104	RE	2006/04/15 * 12
MPA-12	MicroWave System Amplifier	Agilent	83017A	RE	2006/03/27 * 12
MSA-05	Spectrum Analyzer	Advantest	R3273	RE / CE	2006/05/20 * 12
MOS-15	Thermo-Hygrometer	Custom	CTH-180	RE	2006/01/19 * 24
MJM-07	Measure	PROMART	SEN1955	RE	-
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE / CE	2006/04/10 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	RE	2006/10/07 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2006/10/07 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	RE	2006/12/27 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	RE	2006/02/23 * 12
MPA-09	Pre Amplifier	Agilent	8447D	RE	2006/09/07 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	RE / AT / CE	2006/09/13 * 12
MTR-03	Test Receiver	Rohde & Schwarz	ESCI	RE / CE	2006/03/04 * 12
MOS-02	Digital Humidity Indicator	N.T	NT-1800	RE / CE	2006/11/27 * 12
MJM-05	Measure	PROMART	SEN1955	RE / CE	-
MSTW-14	EMI measurement program	TSJ	TEPTO-DV	RE / CE	-
MCC-25	Microwave Cable 1G- 26.5GHz	Suhner	SUCOFLEX104	RE	2006/08/29 * 12
MPA-10	Pre Amplifier	Agilent	8449B	RE	2006/09/11 * 12
MCC-47	Microwave Cable 1G- 26.5GHz	Suhner	SUCOFLEX104	RE	2006/08/29 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2007/01/30 * 12
MHA-02	Horn Antenna	EMCO	3160-09	RE	2007/01/30 * 12
MCC-27	Microwave Cable 1G- 40GHz	Suhner	SUCOFLEX101	RE	2006/08/30 * 12
MPA-03	Microwave System Power Amplifier	Agilent	83050A	RE	2006/05/16 * 12
MCC-28	Microwave Cable 1G- 40GHz	Suhner	SUCOFLEX101	RE	2006/08/30 * 12
MHA-04	Horn Antenna	EMCO	3160-10	RE	2007/01/30 * 12
MHF-09	High Pass Filter 7-30GHz	TOKIMEC	TF37NCCA	RE	2006/06/21 * 12
MAEC-01	Anechoic Chamber	TDK	Semi Anechoic Chamber 10m	RE	2006/11/01 * 12
MTR-01	Test Receiver	Rohde & Schwarz	ESI40	RE	2006/10/14 * 12
MCC-01	Coaxial Cable 0.1- 3000MHz	Suhner/storm/Agilent/ TSJ	-	RE	2006/02/20 * 12
MPA-04	Pre Amplifier	Agilent	8447D	RE	2007/01/24 * 12
MAT-06	Attenuator(6dB)	Weinschel Corp	2	RE	2006/12/27 * 12
MBA-01	Biconical Antenna	Schwarzbeck	BBA9106	RE	2006/10/07 * 12
MLA-01	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2006/10/07 * 12

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**EMI test equipment (2/2)**

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MOS-01	Digital Humidity Indicator	N.T	NT-1800	RE	2006/11/27 * 12
MJM-01	Measure	KDS	ES19-55	RE	-
MAT-24	Attenuator(10dB)(above1 GHz)	Agilent	8493C	AT	2006/06/02 * 12
MLA-04C	Microwave Cable	Suhner	SUCOFLEX104	AT	2006/04/15 * 12
MDPS-12	DC Power Supply	Kikusui	PAK35-10A	AT	Pre Check
MOS-14	Thermo-Hygrometer	Custom	CTH-180	AT	2006/01/19 * 24
MBA-05	Biconical Antenna	Schwarzbeck	BBA9106	RE	2007/01/19 * 12
MLA-08	Logperiodic Antenna	Schwarzbeck	UKLP9140-A	RE	2007/01/19 * 12
MAT-31	Attenuator(6dB)	TME	UFA-01	RE	2006/03/11 * 12
MCC-50	Coaxial cable	UL Apex	-	RE	2006/03/09 * 12
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	RE	2007/02/03 * 12
MHF-05	High Pass Filter 3.5-18GHz	Tokimec	TF323DCA	RE	2007/01/16 * 12
MPA-17	Pre Amplifier	UNITEK ELECTROBICS INC.	40GHzAMP	RE	2006/12/15 * 12
MCC-13	Coaxial Cable	Fujikura/Agilent	-	CE	2006/02/23 * 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-16	Terminator	TME	CT-03NP	CE	2006/12/13 * 12
MSA-04	Spectrum Analyzer	Agilent	E4448A	AT / RE	2006/06/02 * 12
MOS-04	Digital Humidity Indicator	N.T	NT-1800	AT	2006/11/27 * 12
MAEC-03	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE	2006/03/03 * 12
MOS-12	Thermo-Hygrometer	Custom	CTH-180	RE	2006/01/19 * 24
MHA-20	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	RE	2006/04/06 * 12
MCC-56	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	RE	2006/04/15 * 12
MPA-11	MicroWave System Amplifier	Agilent	83017A	RE	2006/03/27 * 12
MCC-16	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	RE	2007/02/22 * 12
MCC-53	Microwave Cable 1G-40GHz	Suhner	SUCOFLEX101	RE	2006/04/01 * 12
MPA-17	Pre Amplifier	UNITEK ELECTROBICS INC.	40GHzAMP	RE	2006/12/15 * 12
MPA-14	Pre Amplifier	SONOA INSTRUMENT	310	RE	2006/03/25 * 12
TR-07	Test Receiver	Rohde & Schwarz	ESCS30	RE / CE	2006/09/12 * 12
MTA-06	Terminator	MCL	BTRM-50	CE	2007/02/01 * 12

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

**CE: Conducted Emissions,**

**RE: Radiated Emissions,**

**AT: Antenna Terminal Conducted test**

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