

**Attachment 3: TEST REPORT**

**FG05\_051EAL (PART 2)**



**RADIATED EMISSION MEASUREMENT (30MHz~1000MHz)** — Quasi-Peak Mode —

EUT Name: Personal computer Type: T4020  
 S/N: Pre-production sample  
 Limit: CISPR22 Class B; Measurement distance is 10 m  
 Test date: 2005/05/20 Temp: 23 °C R/H: 40 %  
 Antenna: SME Bi-log VULB9160 S/N:3118 Receiver: HP 85422E S/N:3746A00242  
 Test site: 2nd semianchoic chamber  
 Assisted software: EMI measurement software of Version 1.3

Freq. (MHz)	Pol.	Meter Reading (dBuV)	Corr. Factor (dB)	Noise Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
36.04	Vert	8.7	12.9	21.6	30.0	8.4
54.09	Horiz	6.5	14.0	20.5	30.0	9.5
61.44	Vert	12.6	13.5	26.1	30.0	3.9
86.02	Horiz	13.0	9.6	22.6	30.0	7.4
86.02	Vert	16.6	9.6	26.2	30.0	3.8
162.31	Horiz	4.8	16.0	20.8	30.0	9.2
184.33	Horiz	9.5	14.4	23.9	30.0	6.1
216.00	Vert	11.0	13.4	24.4	30.0	5.6
324.03	Horiz	6.1	18.4	24.5	37.0	12.5
432.00	Horiz	6.7	22.0	28.7	37.0	8.3
480.01	Horiz	4.9	23.3	28.2	37.0	8.8
480.01	Vert	8.0	23.3	31.3	37.0	5.7
540.00	Horiz	4.1	24.6	28.7	37.0	8.3
540.00	Vert	7.8	24.6	32.4	37.0	4.6
745.03	Horiz	2.4	28.9	31.3	37.0	5.7
745.03	Vert	2.1	28.9	31.0	37.0	6.0
787.53	Horiz	-4.8	29.6	24.8	37.0	12.2
852.30	Horiz	1.8	30.5	32.3	37.0	4.7
852.30	Vert	0.5	30.5	31.0	37.0	6.0

The emissions above 852.30 MHz were below - 20 dB from limits.

\* Corrected reading = meter reading + corr.factor (= antenna factor + cable loss - preamp gain)  
 \* The limit of CISPR 22 is applied for FCC Part-15.

\* Measurement uncertainty:  $\pm 3.3$  dB (K = 2, 95 %)

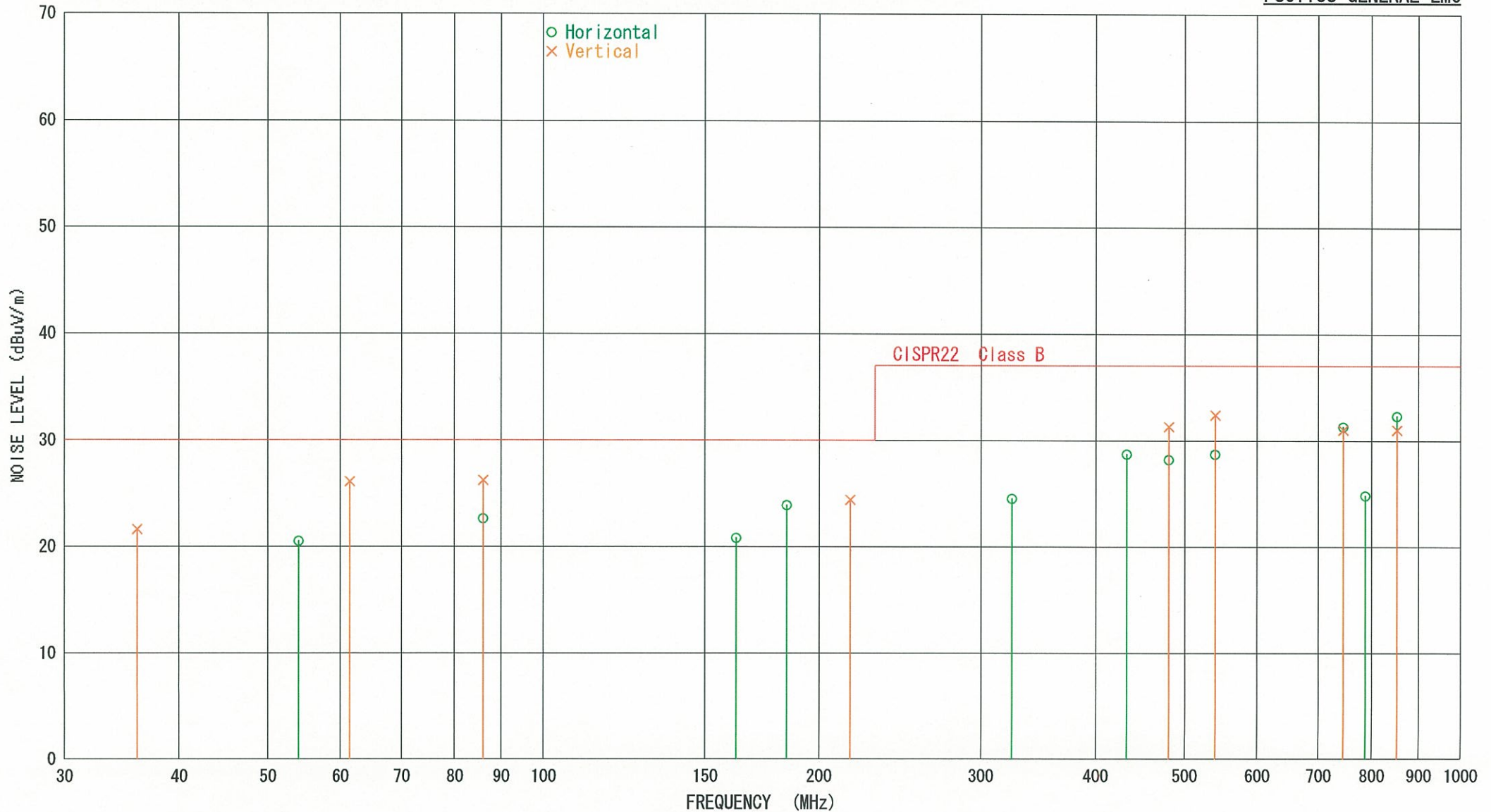
  
 Tested by

# RADIATED EMISSION MEASUREMENT -- Quasi-Peak Mode --

No: #05-051E-RE ( 2 / 2 )

EUT Name: Personal computer TYPE: T4020 S/N: Pre-production sample  
Limit: CISPR22 Class B ; Measurement distance is 10 m  
Test date: 2005/05/20 Temp: 23 °C R/H: 40 %  
Antenna: SME Bi-log VULB9160 S/N:3118 Receiver: HP 85422E S/N:3746A00242  
Test site: 2nd semianchoic chamber Assisted software: EMI measurement software of Version 1.3

FUJITSU GENERAL EMC



RADIATED EMISSION MEASUREMENT (1GHz~12GHz)

EUT Name: Personal Computer      Type: T4020      S/N: Pre-production sample  
 Limit : FCC Part-15 Class B ; Measurement distance is 3 m  
 Test date: 2005/5/16      Temp: 23 °C      R/H: 35 %  
 Antenna : Schwarzbeck BBHA9120D S/N:136  
 Receiver : Spectrum analyzer : Advantest R3371A S/N:75060396  
 Test site: 2nd semi-anechoic chamber

Freq. (GHz)	Pol.	Meter Reading (dBuV)	Corr. Factor (dB)	Noise Level (dBuV/m)	Limit Peak AV (dBuV/m)	Margin (dB)
1.0800	Vert	44.0	-6.8	37.2	74.0 54.0	16.8
1.1900	Vert	47.0	-6.2	40.8	74.0 54.0	13.2
1.2900	Vert	45.5	-5.8	39.7	74.0 54.0	14.3
1.4000	Vert	45.0	-5.2	39.8	74.0 54.0	14.2
1.5100	Vert	45.5	-4.7	40.8	74.0 54.0	13.2
1.6200	Vert	51.8	-3.5	48.3	74.0 54.0	5.7
1.7300	Vert	48.1	-2.3	45.8	74.0 54.0	8.2
1.8300	Vert	50.4	-1.2	49.1	74.0 54.0	4.9
1.9400	Vert	49.0	-0.1	48.9	74.0 54.0	5.1
2.0490	Vert	41.7	0.3	42.0	74.0 54.0	12.0
2.1570	Vert	43.0	-0.3	42.7	74.0 54.0	11.3
2.4800	Vert	47.0	-2.2	44.8	74.0 54.0	9.2
2.5890	Horz	50.1	-2.2	48.0	74.0 54.0	6.0
2.5890	Vert	52.1	-2.2	50.0	74.0 54.0	4.0
2.6940	Vert	52.7	-2.0	50.7	74.0 54.0	3.3
2.8030	Vert	44.5	-1.8	42.7	74.0 54.0	11.3
3.1300	Vert	39.3	-1.7	37.6	74.0 54.0	16.4
3.6700	Vert	38.1	-1.4	36.7	74.0 54.0	17.3
3.7800	Vert	40.6	-1.0	39.6	74.0 54.0	14.4

The emissions above 3.7800 GHz were below - 10 dB from limits.

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 \* Corrected reading: = meter reading + corr. factor (= antenna factor + cable loss - preamp gain)



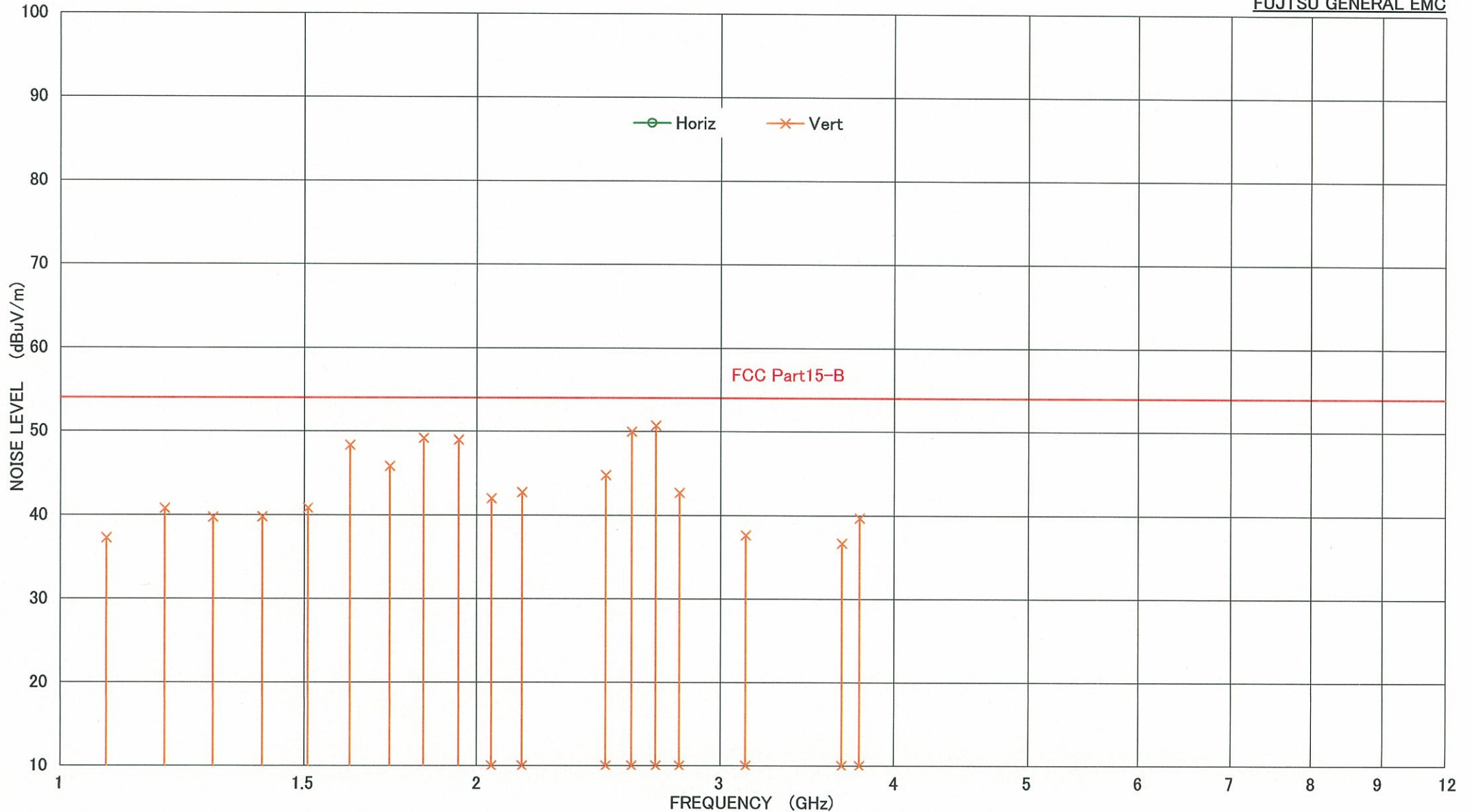
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**RADIATED EMISSION MEASUREMENT (1GHz - 12GHz)**

No: #05-051E-GH (2/2)

EUT Name : Personal computer    TYPE : T4020    S/N : Pre-production sample  
LIMIT : FCC Part-15 class B    ; Measurement distance is 3m  
Test date : 2005/05/16    Temp : 23 °C    R/H : 35 %  
Antenna : Schwarzbeck BBHA9120D S/N:136    Receiver : Advantest R3371A S/N:75060396  
Test site : 2nd semianechoic chamber

FUJTSU GENERAL EMC



**POWER LINE CONDUCTED EMISSION MEASUREMENT** — Quasi-Peak Mode —

EUT Name: Personal computer Type: T4020  
 S/N: Pre-production sample  
 Limit: CISPR22 Class B Test voltage: 100 VAC, Single phase  
 Test date: 2005/05/20 Temp: 23 °C R/H: 40 %  
 AMN: Kyoritsu KNW-407 S/N:8-823-18 Receiver: HP 85422E S/N:3746A00242  
 Test site: 2nd semianchoic chamber  
 Assisted software: EMI measurement software of Version 1.3

Freq. (MHz)	Line	Meter Reading (dBuV)	Corr. Factor (dB)	Noise Level (dBuV)	Limit (dBuV)	Margin (dB)
0.2000	# 1	43.4	6.8	50.2	53.6	3.4
0.2000	# 2	41.7	6.8	48.5	53.6	5.1
0.2500	# 1	33.4	6.6	40.0	51.8	11.8
0.2500	# 2	32.4	6.6	39.0	51.8	12.8
0.4100	# 1	32.8	6.2	39.0	47.7	8.7
0.4100	# 2	28.7	6.2	34.9	47.7	12.8
0.4760	# 1	31.3	6.1	37.4	46.4	9.0
0.4760	# 2	27.1	6.1	33.2	46.4	13.2
0.5500	# 2	22.3	6.0	28.3	46.0	17.7
0.6500	# 1	26.3	6.0	32.3	46.0	13.7
0.6500	# 2	22.7	6.0	28.7	46.0	17.3
0.8250	# 1	27.3	6.1	33.4	46.0	12.6
1.0090	# 1	23.3	6.1	29.4	46.0	16.6
2.8000	# 1	31.6	6.2	37.8	46.0	8.2
2.8000	# 2	31.0	6.2	37.2	46.0	8.8
17.0000	# 1	35.0	6.8	41.8	50.0	8.2
17.0000	# 2	34.8	6.8	41.6	50.0	8.4

The emissions above 17.0000 MHz were below - 20 dB from limits.

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- \* Corrected reading = meter reading + corr.factor (= AMN factor + 6-dB pad + cable loss)
  - \* The limit of CISPR 22 is applied for FCC Part-15.
  - \* Measurement uncertainty:  $\pm 2.5$  dB (K = 2, 95 %)



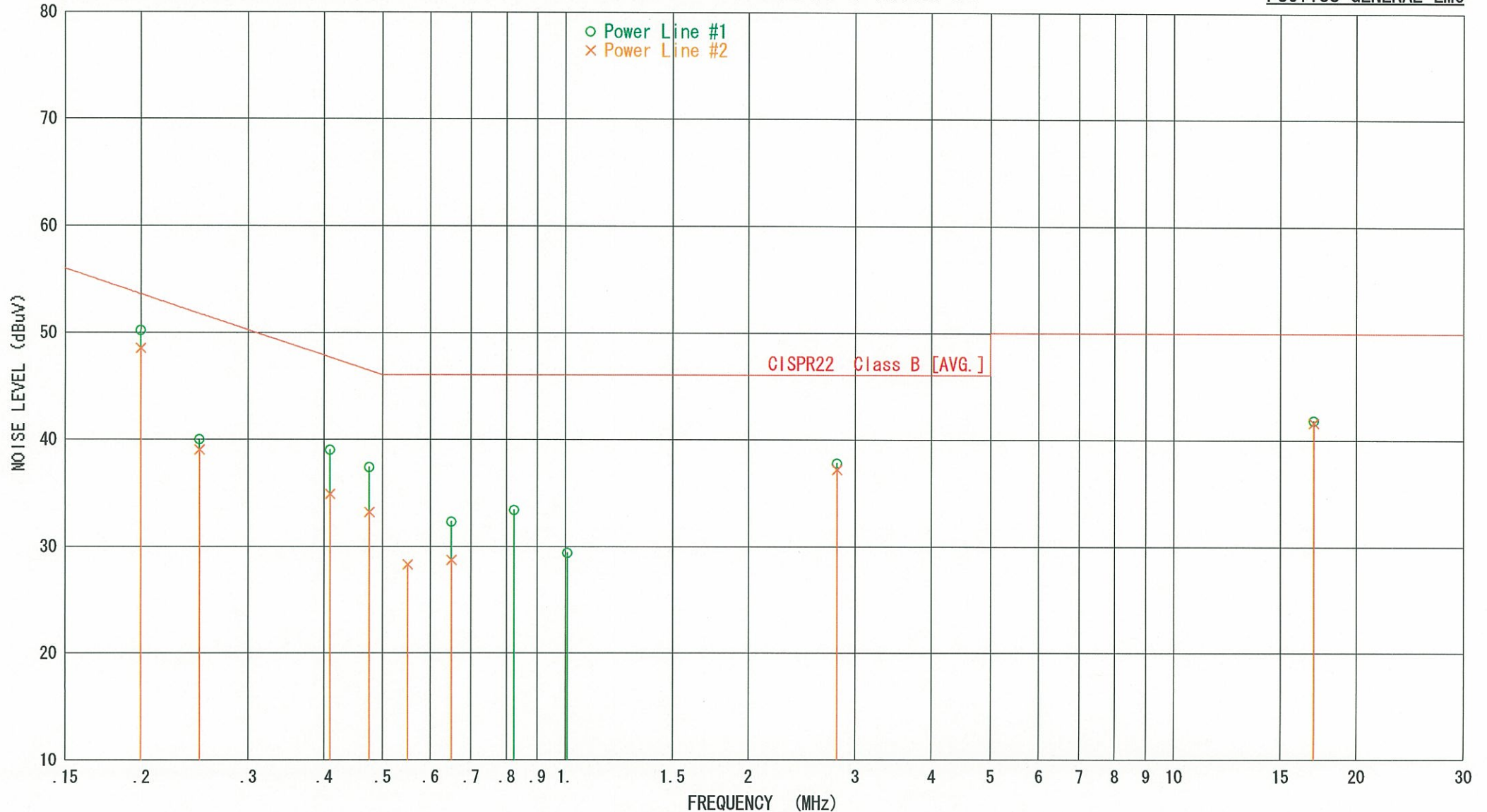
Tested by

# POWER LINE CONDUCTED EMISSION MEASUREMENT -- Quasi-Peak Mode --

No: #05-051E-CE1 ( 2 / 2 )

EUT Name: Personal computer TYPE: T4020 S/N: Pre-production sample  
Limit: CISPR22 Class B Test voltage: 100 VAC, Single phase  
Test date: 2005/05/20 Temp: 23 °C R/H: 40 %  
AMN: Kyoritsu KNW-407 S/N:8-823-18 Receiver: HP 85422E S/N:3746A00242  
Test site: 2nd semianchoic chamber Assisted software: EMI measurement software of Version 1.3

FUJITSU GENERAL EMC



**POWER LINE CONDUCTED EMISSION MEASUREMENT** — Quasi-Peak Mode —

EUT Name: Personal computer Type: T4020  
 S/N: Pre-production sample  
 Limit: CISPR22 Class B Test voltage: 100 VAC, Single phase  
 Test date: 2005/05/20 Temp: 23 °C R/H: 40 %  
 AMN: Kyoritsu KNW-407 S/N:8-823-18 Receiver: HP 85422E S/N:3746A00242  
 Test site: 2nd semianchoic chamber  
 Assisted software: EMI measurement software of Version 1.3

Freq. (MHz)	Line	Meter Reading (dBuV)	Corr. Factor (dB)	Noise Level (dBuV)	Limit (dBuV)	Margin (dB)
0.2000	# 1	45.4	6.8	52.2	63.6	11.4
0.2000	# 2	45.8	6.8	52.6	63.6	11.0
0.2687	# 1	40.4	6.6	47.0	61.2	14.2
0.2687	# 2	40.9	6.6	47.5	61.2	13.7
0.3345	# 2	36.8	6.4	43.2	59.3	16.1
0.4000	# 1	37.0	6.3	43.3	57.9	14.6
0.4000	# 2	36.8	6.3	43.1	57.9	14.8
0.4680	# 1	34.5	6.1	40.6	56.6	16.0
0.4680	# 2	34.9	6.1	41.0	56.6	15.6
0.5360	# 1	35.6	6.0	41.6	56.0	14.4
0.5360	# 2	35.6	6.0	41.6	56.0	14.4
0.6000	# 1	35.0	6.0	41.0	56.0	15.0
0.6000	# 2	34.7	6.0	40.7	56.0	15.3
0.6700	# 1	37.2	6.0	43.2	56.0	12.8
0.6700	# 2	36.5	6.0	42.5	56.0	13.5
0.7350	# 2	32.7	6.0	38.7	56.0	17.3
0.8000	# 1	35.2	6.1	41.3	56.0	14.7
0.8000	# 2	34.9	6.1	41.0	56.0	15.0
8.3600	# 1	32.7	6.4	39.1	60.0	20.9

The emissions above 8.3600 MHz were below - 20 dB from limits.

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- \* Corrected reading = meter reading + corr.factor (= AMN factor + 6-dB pad + cable loss)
  - \* The limit of CISPR 22 is applied for FCC Part-15.
  - \* Measurement uncertainty: ± 2.5 dB (K = 2, 95 %)

*A. Nakawa*

Tested by

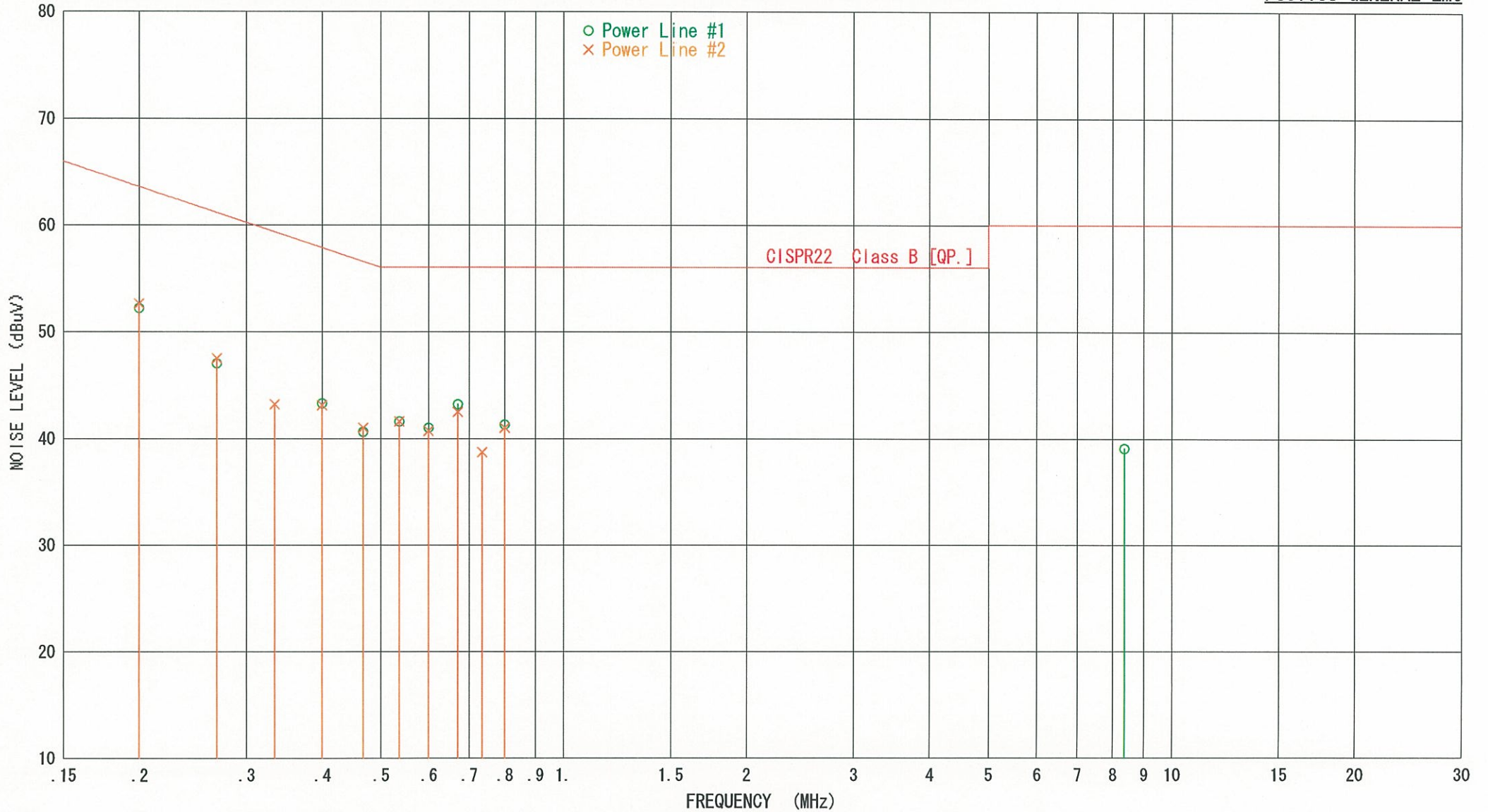


# POWER LINE CONDUCTED EMISSION MEASUREMENT — Quasi-Peak Mode —

No: #05-051E-CE2 ( 2 / 2 )

EUT Name: Personal computer TYPE: T4020 S/N: Pre-production sample  
Limit: CISPR22 Class B Test voltage: 100 VAC, Single phase  
Test date: 2005/05/20 Temp: 23 °C R/H: 40 %  
AMN: Kyoritsu KNW-407 S/N:8-823-18 Receiver: HP 85422E S/N:3746A00242  
Test site: 2nd semianchoic chamber Assisted software: EMI measurement software of Version 1.3

FUJITSU GENERAL EMC



**POWER LINE CONDUCTED EMISSION MEASUREMENT** — AV Mode —

EUT Name: Personal computer Type: T4020  
 S/N: Pre-production sample  
 Limit: CISPR22 Class B Test voltage: 100 VAC, Single phase  
 Test date: 2005/05/20 Temp: 23 °C R/H: 40 %  
 AMN: Kyoritsu KNW-407 S/N:8-823-18 Receiver: HP 85422E S/N:3746A00242  
 Test site: 2nd semianchoic chamber  
 Assisted software: EMI measurement software of Version 1.3

Freq. (MHz)	Line	Meter Reading (dBuV)	Corr. Factor (dB)	Noise Level (dBuV)	Limit (dBuV)	Margin (dB)
0.2000	# 1	35.8	6.8	42.6	53.6	11.0
0.2000	# 2	35.9	6.8	42.7	53.6	10.9
0.2687	# 1	34.1	6.6	40.7	51.2	10.5
0.2687	# 2	34.4	6.6	41.0	51.2	10.2
0.3345	# 2	30.9	6.4	37.3	49.3	12.0
0.4000	# 1	33.9	6.3	40.2	47.9	7.7
0.4000	# 2	33.6	6.3	39.9	47.9	8.0
0.4680	# 1	29.1	6.1	35.2	46.6	11.4
0.4680	# 2	29.6	6.1	35.7	46.6	10.9
0.5360	# 1	33.0	6.0	39.0	46.0	7.0
0.5360	# 2	32.3	6.0	38.3	46.0	7.7
0.6000	# 1	28.7	6.0	34.7	46.0	11.3
0.6000	# 2	29.1	6.0	35.1	46.0	10.9
0.6700	# 1	32.4	6.0	38.4	46.0	7.6
0.6700	# 2	30.8	6.0	36.8	46.0	9.2
0.7325	# 2	26.8	6.0	32.8	46.0	13.2
0.8025	# 1	30.1	6.1	36.2	46.0	9.8
0.8025	# 2	29.6	6.1	35.7	46.0	10.3
8.3637	# 1	21.3	6.4	27.7	50.0	22.3

The emissions above 8.3637 MHz were below - 20 dB from limits.

- \* Corrected reading = meter reading + corr.factor (= AMN factor + 6-dB pad + cable loss)  
 \* The limit of CISPR 22 is applied for FCC Part-15.  
 \* Measurement uncertainty:  $\pm 2.5$  dB (K = 2, 95 %)

*H. Aikawa*

Tested by

# POWER LINE CONDUCTED EMISSION MEASUREMENT -- AV Mode --

No: #05-051E-CE3 ( 2 / 2 )

EUT Name: Personal computer TYPE: T4020 S/N: Pre-production sample  
Limit: CISPR22 Class B Test voltage: 100 VAC, Single phase  
Test date: 2005/05/20 Temp: 23 °C R/H: 40 %  
AMN: Kyoritsu KNW-407 S/N:8-823-18 Receiver: HP 85422E S/N:3746A00242  
Test site: 2nd semianchoic chamber Assisted software: EMI measurement software of Version 1.3

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