

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: ± 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

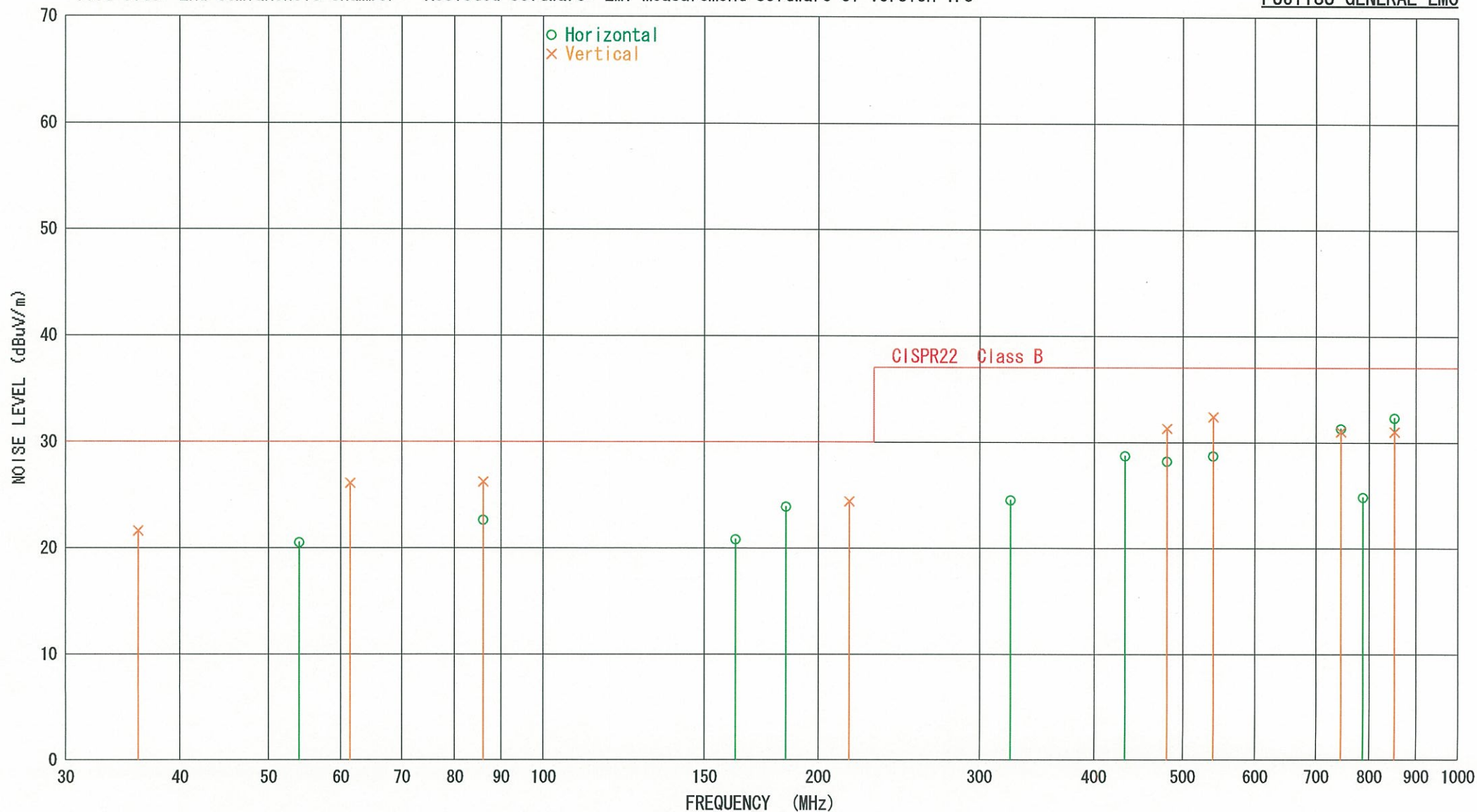
Limit: CISPR22 Class B ; Measurement distance is 10 m

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.

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



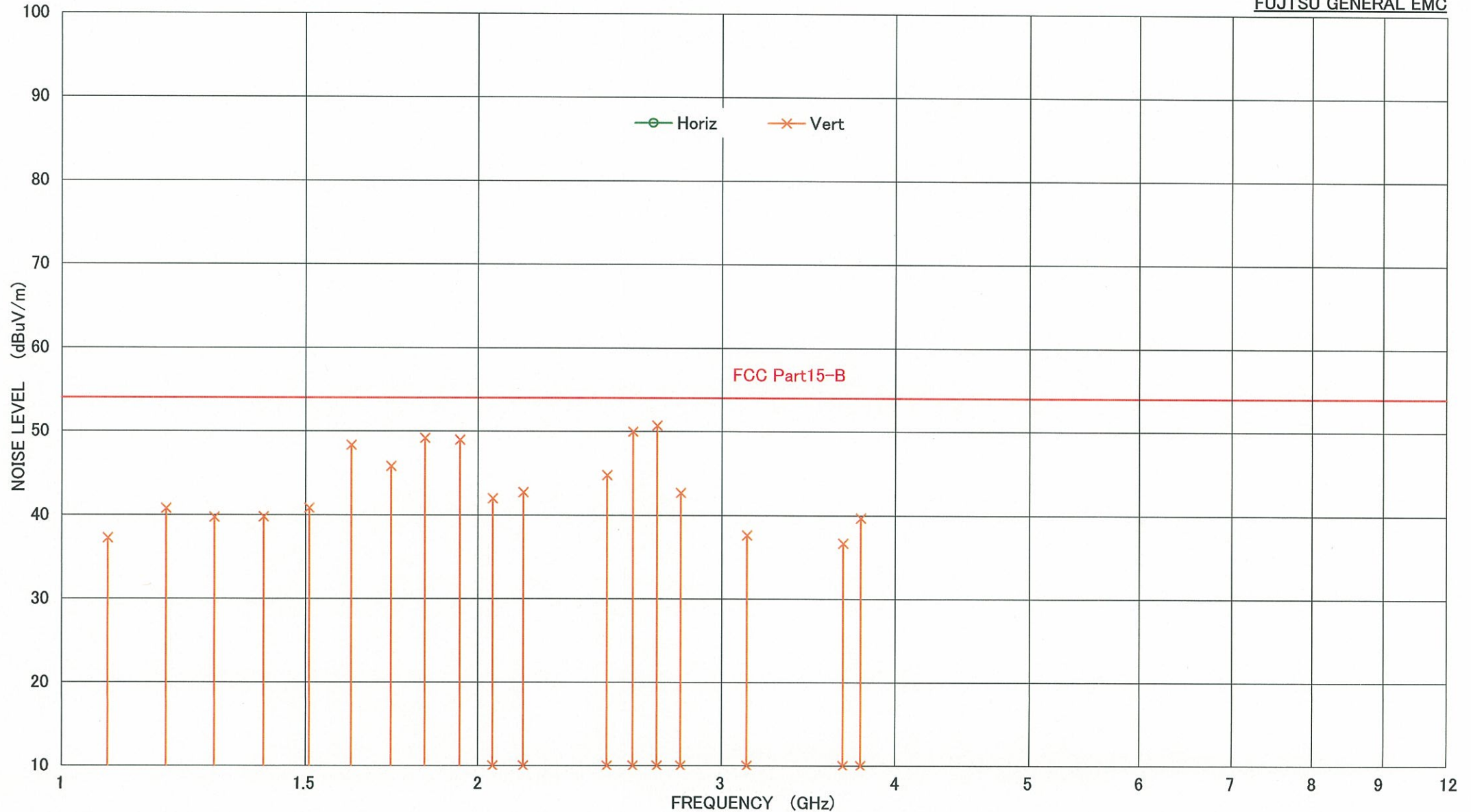
Tested by

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.

* 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 %)


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

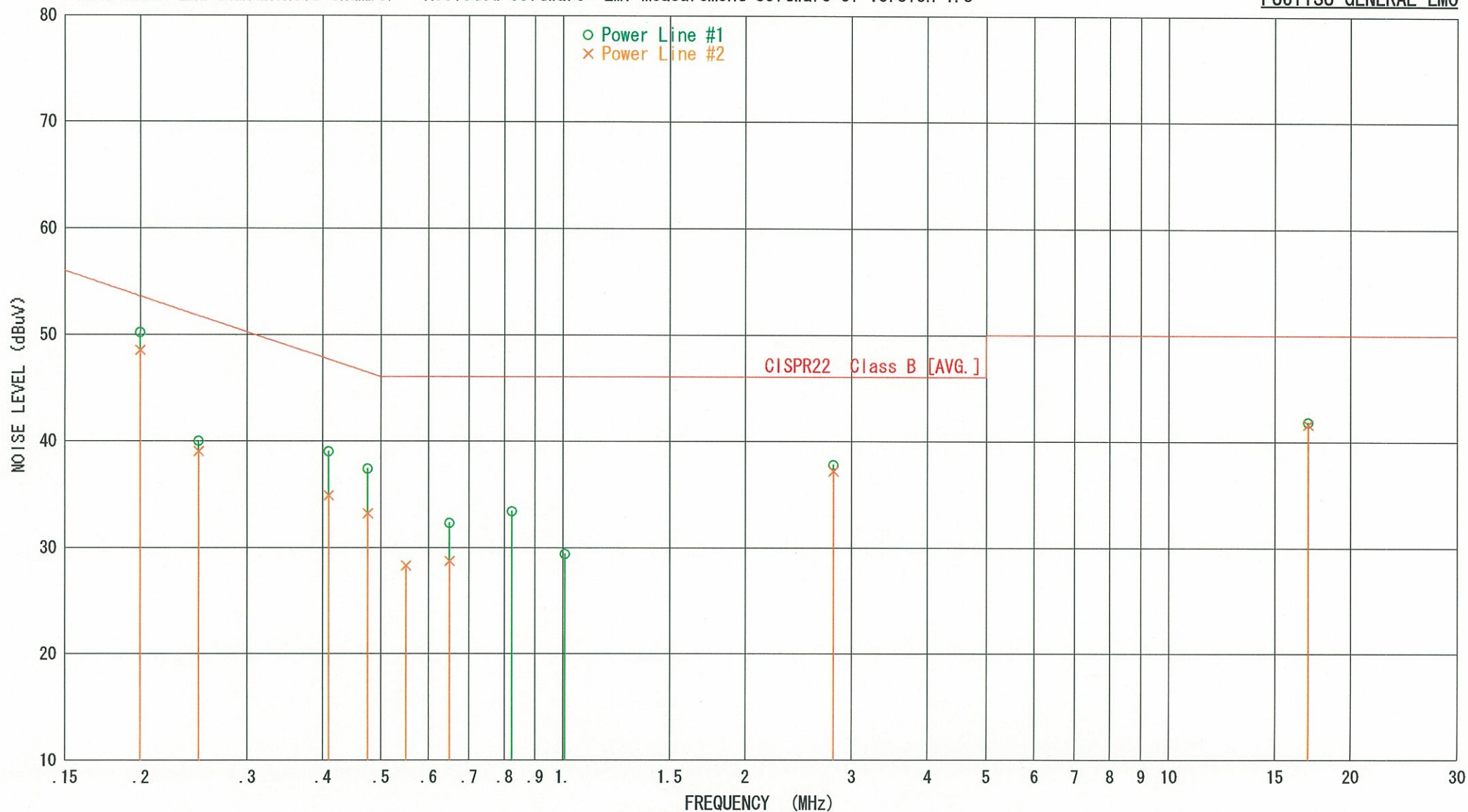
Limit: CISPR22 Class B Test voltage: 100 VAC, Single phase

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 %)



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

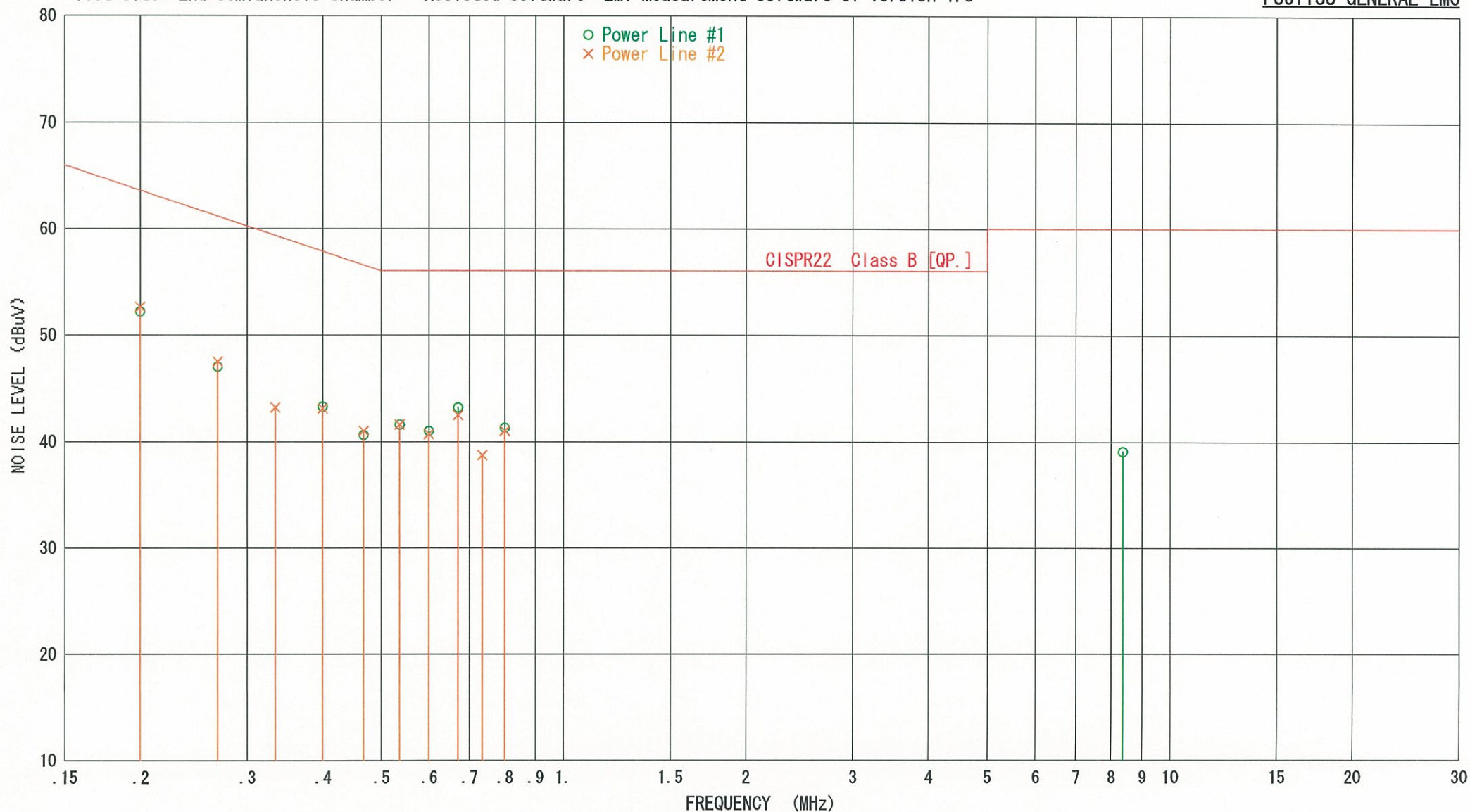
Limit: CISPR22 Class B Test voltage: 100 VAC, Single phase

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: ± 2.5 dB (K = 2, 95 %)

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

FUJITSU GENERAL EMC

