Attachment 3: TEST REPORT

**FG05\_051EAL (PART 3)** 



No: #05-051E-CE4 ( 1 / 2 )

### 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: 120 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: FMI measurement software of Varsion 1.2

Assisted software: EMI measurement software of Version 1.3

		Meter	Corr.	Noise		
Freq.	Line	Reading	Factor	Level	Limit	Margin
(MHz)		(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)
0. 2000	# 1	42.8	6.8	49. 6	53. 6	4. 0
0. 2000	# 2	41.1	6.8	47. 9	53.6	5.7
0. 3000	# 1	35. 8	6. 6	42. 4	50. 2	7. 8
0. 3000	# 2	32. 8	6. 5	39. 3	50. 2	10. 9
0.3800	# 1	28. 9	6. 3	35. 2	48. 3	13. 1
0. 3800	# 2	27. 1	6, 3	33. 4	48. 3	14. 9
0. 5000	# 1	31. 6	6. 0	37. 6	46. 0	8. 4
0. 5000	# 2	28. 7	6. 1	34. 8	46. 0	11. 2
0. 6440	# 1	27. 9	6. 0	33. 9	46. 0	12. 1
0. 6860	# 1	27. 4	6. 0	33. 4	46.0	12. 6
0. 8350	# 1	26. 3	6. 1	32. 4	46. 0	13. 6
2. 7700	# 1	31. 3	6. 2	37. 5	46. 0	8. 5
2. 7700	# 2	31. 7	6. 2	37. 9	46. 0	8. 1
3.8000	# 1	27. 6	6. 2	33. 8	46. 0	12. 2
3.8000	# 2	28. 0	6. 2	34. 2	46. 0	11. 8
17. 0000	# 1	35. 2	6.8	42. 0	50. 0	8. 0
17. 0000	# 2	34. 4	6. 8	41. 2	50. 0	8.8

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

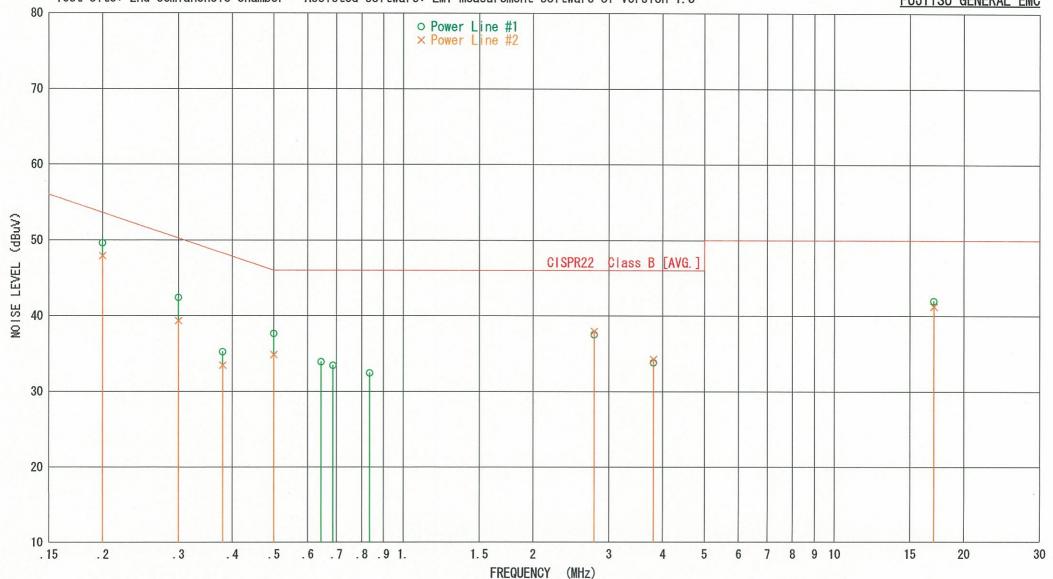
<sup>\*</sup> Corrected reading = meter reading + corr.factor(= AMN factor + 6-dB pad + cable loss)

<sup>\*</sup> The limit of CISPR 22 is applied for FCC Part-15. \* Measurement uncertainty:  $\pm$  2.5 dB (K = 2, 95 %)

No: #05-051E-CE4 ( 2 / 2 )

EUT Name: Personal computer TYPE: T4020 S/N: Pre-production sample
Limit: C1SPR22 Class B Test voltage: 120 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



No: #05-051E-CE5 ( 1 / 2 )

### 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: 120 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

		Meter	Corr.	Noise		
Freq.	Line	Reading	Factor	Level	Limit	Margin
(MHz)		(dBuV)	(dB)	(dBuV)	(dBuV)	$(d\bar{B})$
0. 2000	# 1	42. 9	6.8	49. 7	63. 6	13. 9
0. 2000	# 2	47. 4	6.8	54. 2	63.6	9.4
0. 2687	# 1	39. 9	6. 6	46. 5	61. 2	14. 7
0. 2687	# 2	43.8	6. 6	50. 4	61. 2	10.8
0. 3345	# 1	39. 1	6. 4	45. 5	59.3	13.8
0. 3345	# 2	42. 1	6. 4	48. 5	59. 3	10.8
0. 4000	# 2	39. 1	6. 3	45. 4	57. <del>9</del>	12. 5
0. 4680	# 2	37. 8	6. 1	43. 9	56.6	12. 7
0. 5344	# 1	36. 4	6. 0	42. 4	56. 0	13. 6
0. 5344	# 2	38. 2	6. 0	44. 2	56. 0	11. 8
0. 6010	# 2	37 <i>.</i> 1	6. 0	43. 1	56. 0	12. 9
0. 6700	# 1	37. 4	6. 0	43. 4	56.0	12. 6
0. 6700	# 2	37. 3	6. 0	43. 3	56. 0	12. 7
0. 7350	# 1	36. 4	6. 0	42. 4	56. 0	13.6
0. 7350	# 2	36.8	6. 0	42. 8	56.0	13. 2
0.8000	# 1	36. 5	6. 1	42. 6	56. 0	13. 4
0.8000	# 2	36. 7	6. 1	42. 8	56. 0	13. 2
8. 3600	# 1	33. 9	6. 4	40. 3	60. 0	19.7

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

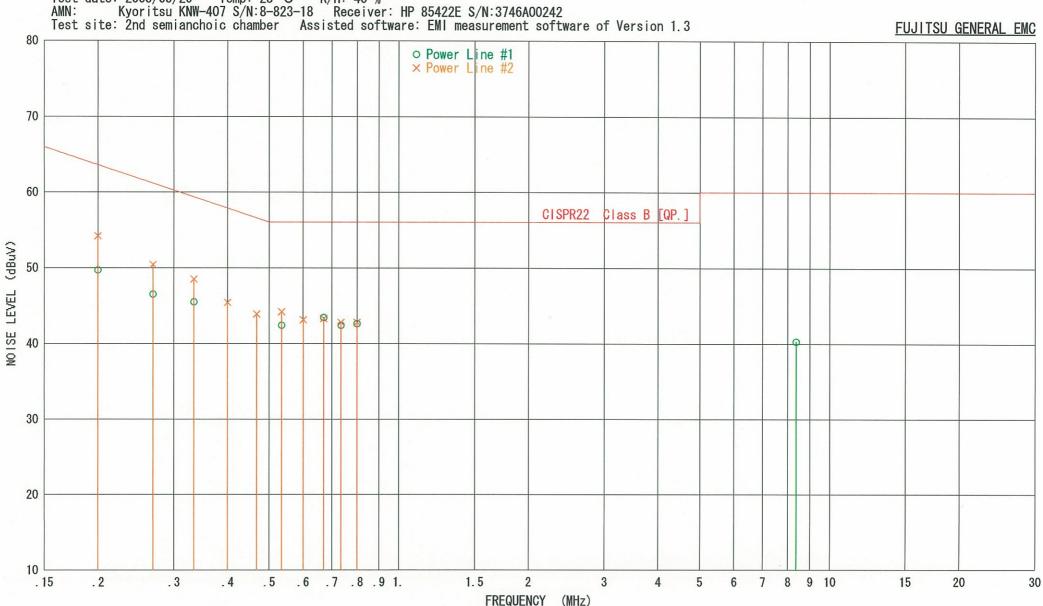
Tested by

<sup>\*</sup> Corrected reading = meter reading + corr.factor(= AMN factor + 6-dB pad + cable loss)

<sup>\*</sup> The limit of CISPR 22 is applied for FCC Part-15. \* Measurement uncertainty: ± 2.5 dB (K = 2, 95 %)

No: #05-051E-CE5 ( 2 / 2 )

EUT Name: Personal computer TYPE: T4020 S/N: Pre-production sample Limit: CISPR22 Class B Test voltage: 120 VAC, Single phase Test date: 2005/05/20 Temp: 23 °C R/H: 40 %



No: #05-051E-CE06 ( 1 / 2 )

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

EUT Name: Personal computer Type: T4020

S/N: Pre-production sample
Limit: CISPR22 Class B Test voltage: 120 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

		Meter	Corr.	Noise		
Freq.	Line	Reading	Factor	Level	Limit	Margin
(MHz)		(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)
0. 2000	# 1	32. 0	6.8	38. 8	53. 6	14. 8
0. 2000	# 2	31. 2	6. 8	38. 0	53. 6	15. 6
0. 2687	# 1	35. 4	6. 6	42.0	51. 2	9. 2
0. 2687	# 2	34. 9	6. 6	41.5	51. 2	9. 7
0. 3345	# 1	35. 1	6. 4	41. 5	49. 3	7. 8
0. 3345	# 2	34. 7	6. 4	41. 1	49.3	8. 2
0. 4000	# 2	28. 3	6. 3	34. 6	47. 9	13. 3
0. 4680	# 2	26. 5	6. 1	32. 6	46. 6	14. 0
0. 5364	# 1	33. 3	6. 0	39. 3	46. 0	6. 7
0. 5364	# 2	32. 2	6. 0	38. 2	46. 0	7. 8
0. 6010	# 2	28. 8	6.0	34. 8	46. 0	11. 2
0. 6700	# 1	34. 6	6. 0	40. 6	46.0	5. 4
0. 6700	# 2	33. 2	6. 0	39. 2	46.0	6.8
0. 7350	# 1	32. 2	6. 0	38. 2	46. 0	7. 8
0. 7350	# 2	31. 8	6. 0	37. 8	46.0	8. 2
0.8000	# 1	31. 1	6. 1	37. 2	46.0	8. 8
0.8000	# 2	30. 3	6. 1	36. 4	46.0	9. 6
8. 3600	# 1	21. 7	6. 4	28. 1	50. 0	21. 9

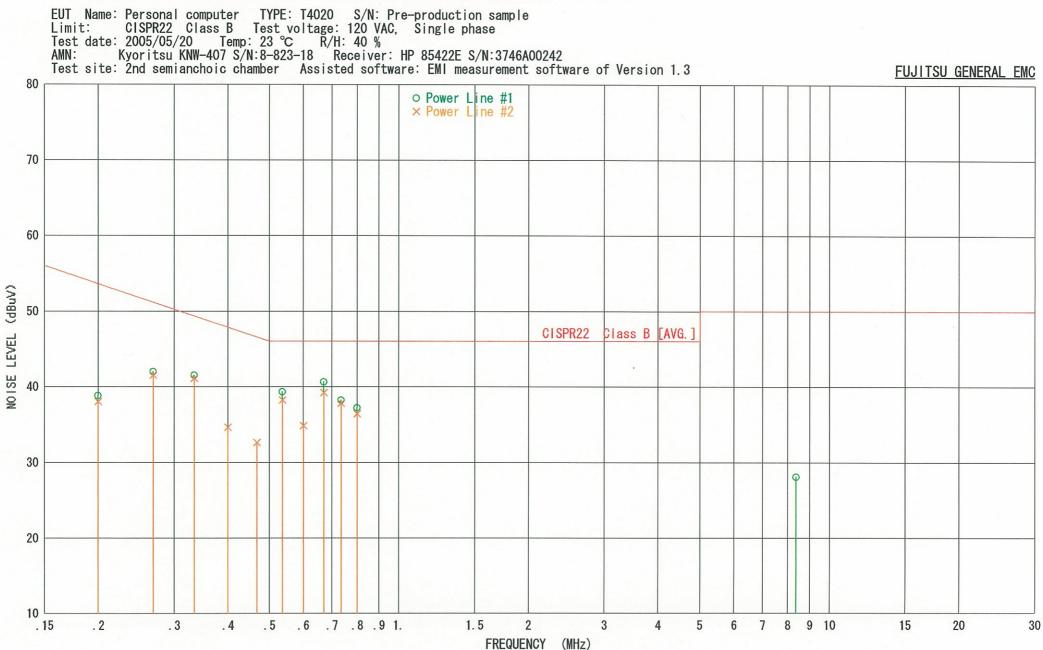
The emissions above 8.3600 MHz were below - 20 dB from limits.



<sup>\*</sup> 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 %)

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

No: #05-051E-CE06 (2/2)



No: #05-051E-CE7 ( 1 / 2 )

## 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: 230 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 seftware: EMI measurement coftware of Version 1.2

Assisted software: EMI measurement software of Version 1.3

		Meter	Corr.	Noise		
Freg.	Line	Reading	Factor	Level	Limit	Margin
(MHz)		(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)
0. 2000	# 1	43.6	6.8	50. 4	53. 6	3. 2
0. 2000	# 2	43. 1	6. 8	49. 9	53, 6	3. 7
0, 3000	# 1	40. 6	6. 5	47. 1	50. 2	3. 1
0. 3000	# 2	39. 0	6. 5	45. 5	50. 2	4. 7
0. 3800	# 1	35. 8	6. 3	42. 1	48. 3	6. 2
0.3800	# 2	30. 8	6. 3	37. 1	48. 3	11. 2
0. 5000	# 1	31. 4	6. 0	37. 4	46. 0	8. 6
0. 5000	# 2	29. 0	6. 1	35. 1	46, 0	10. 9
0. 7250	# 1	27. 5	6. 0	33, 5	46. 0	12. 5
0. 7250	# 1	28. 8	6. 0	34. 8	46. 0	11. 2
2. 7700	# 1	30. 1	6. 2	36. 3	46. 0	9. 7
2. 7700	# 2	30. 1	6. 2	36. 3	46. 0	9. 7
3. 2000	# 1	27. 7	6. 2	33, 9	46. 0	12. 1
4. 2060	# 1	25. 1	6. 2	31. 3	46. 0	14. 7
20. 2000	# 1	31. 2	7. 0	38. 2	50.0	11. 8
20. 2800	# 2	32.0	7. 0	39. 0	50. 0	11. 0

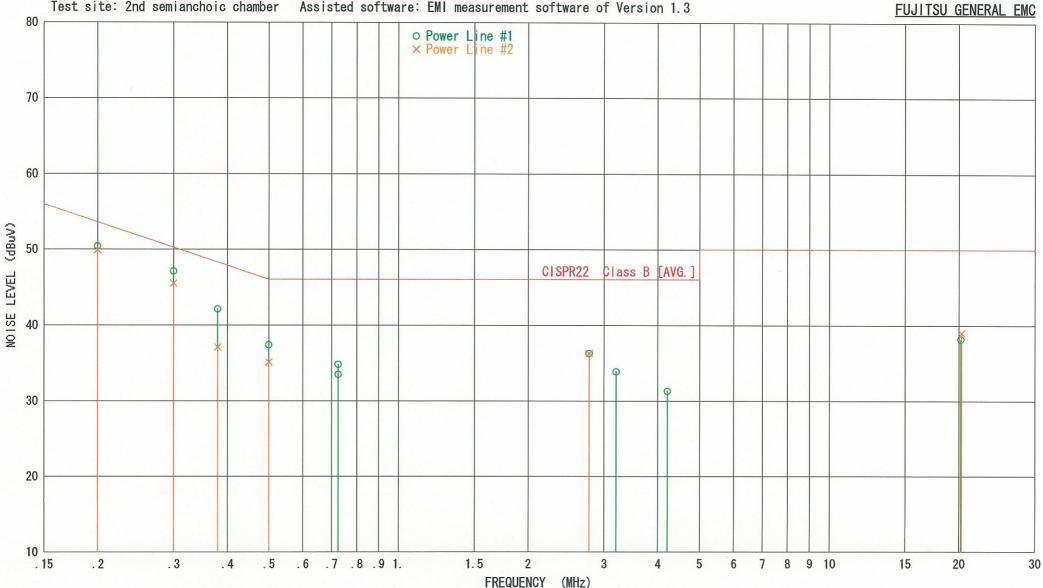
The emissions above 20.2800 MHz were below - 20 dB from limits.

<sup>\*</sup> Corrected reading = meter reading + corr.factor (= AMN factor + 6-dB pad + cable loss)

<sup>\*</sup> The limit of CISPR 22 is applied for FCC Part-15. \* Measurement uncertainty:  $\pm$  2.5 dB (K = 2, 95 %)

No: #05-051E-CE7 (2/2)

EUT Name: Personal computer TYPE: T4020 S/N: Pre-production sample
Limit: CISPR22 Class B Test voltage: 230 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



No: #05-051E-CE8 ( 1 / 2 )

### 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: 230 VAC, Single phase
Test date: 2005/05/21 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

	Meter	Corr.	Noise		
Line	Reading	Factor	Level	Limit	Margin
	(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)
# 1	48. 7	6.8	55. 5	63. 6	8. 1
# 2	50. 2	6.8	57. 0	63. 6	6. 6
# 1	42.8	6. 6	49.4	61.2	11.8
	44. 9	6. 6	51. 5	61. 2	9. 7
	38. 6	6. 4	45.0	59. 3	14. 3
	42. 6	6. 4	49.0	59. 3	10. 3
	37. 4	6. 0	43. 4	56. 0	12. 6
# 2	38. 7	6. 0	44. 7	56. 0	11. 3
# 2	37. 3	6. 0	43.3	56.0	12. 7
# 1	37. 4	6. 0	43. 4	56. 0	12.6
# 2	37. 9	6. 0	43. 9	56. 0	12. 1
# 1	37. 4	6. 0	43. 4	56. 0	12. 6
# 2	38. 4	6. 0	44. 4	56. 0	11.6
# 1	38. 0	6. 1	44. 1	56. 0	11. 9
# 2	39. 0	6. 1	<b>45</b> . 1	56.0	10. 9
# 1	36. 7	6. 1	42. 8	56.0	13. 2
# 2	37. 0	6. 1	43. 1	56.0	12. 9
# 2	31. 3	6. 4	37. 7	60. 0	22. 3
	######################################	Line Reading (dBuV)  # 1	Line Reading (dBuV) (dB) # 1	Line         Reading (dBuV)         Factor (dBuV)         Level (dBuV)           # 1         48. 7         6. 8         55. 5           # 2         50. 2         6. 8         57. 0           # 1         42. 8         6. 6         49. 4           # 2         44. 9         6. 6         51. 5           # 1         38. 6         6. 4         45. 0           # 2         42. 6         6. 4         49. 0           # 1         37. 4         6. 0         43. 4           # 2         38. 7         6. 0         44. 7           # 2         37. 3         6. 0         43. 3           # 1         37. 4         6. 0         43. 3           # 1         37. 4         6. 0         43. 4           # 2         37. 9         6. 0         43. 9           # 1         37. 4         6. 0         43. 4           # 2         38. 4         6. 0         44. 4           # 1         38. 0         6. 1         44. 1           # 2         39. 0         6. 1         45. 1           # 1         36. 7         6. 1         42. 8           # 2         37. 0         6. 1	Line         Reading (dBuV)         Factor (dBuV)         Level (dBuV)         Limit (dBuV)           # 1         48.7         6.8         55.5         63.6           # 2         50.2         6.8         57.0         63.6           # 1         42.8         6.6         49.4         61.2           # 2         44.9         6.6         51.5         61.2           # 1         38.6         6.4         45.0         59.3           # 2         42.6         6.4         49.0         59.3           # 1         37.4         6.0         43.4         56.0           # 2         38.7         6.0         44.7         56.0           # 2         37.3         6.0         43.3         56.0           # 1         37.4         6.0         43.4         56.0           # 2         37.9         6.0         43.4         56.0           # 1         37.4         6.0         43.4         56.0           # 1         37.4         6.0         43.4         56.0           # 2         38.4         6.0         44.4         56.0           # 1         38.0         6.1         44.1

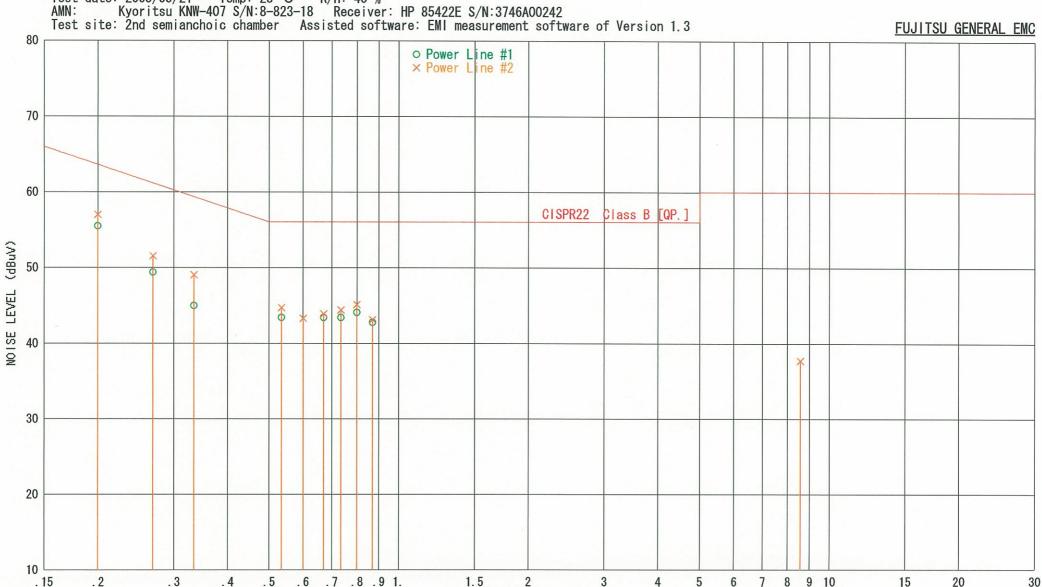
The emissions above 8.5578 MHz were below - 20 dB from limits. 

<sup>\*</sup> Corrected reading = meter reading + corr.factor (= AMN factor + 6-dB pad + cable loss)

<sup>\*</sup> The limit of CISPR 22 is applied for FCC Part-15. \* Measurement uncertainty:  $\pm$  2.5 dB (K = 2, 95 %)

No: #05-051E-CE8 ( 2 / 2 )

EUT Name: Personal computer TYPE: T4020 S/N: Pre-production sample Limit: CISPR22 Class B Test voltage: 230 VAC, Single phase Test date: 2005/05/21 Temp: 23 °C R/H: 40 %



FREQUENCY (MHz)

No: #05-051E-CE9 ( 1 / 2 )

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

EUT Name: Personal computer Type: T4020

S/N: Pre-production sample
Limit: CISPR22 Class B Test voltage: 230 VAC, Single phase
Test date: 2005/05/21 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

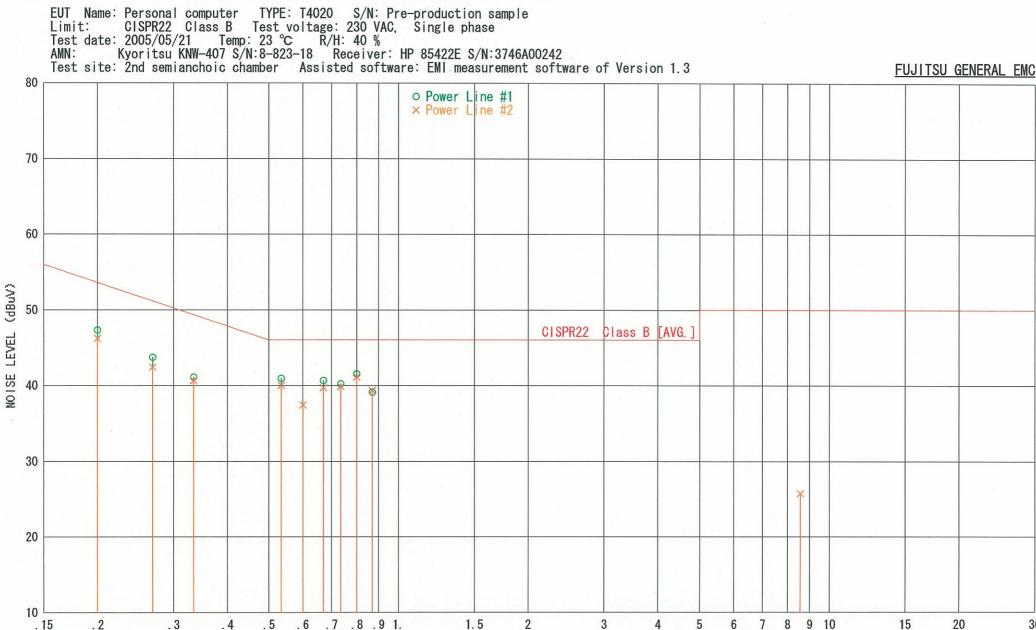
		Meter	Corr.	Noise		
Freq.	Line	Reading	Factor	Level	Limit	Margin
(MHz)		(dBuV)	(dB)	(dBuV)	(dBuV)	(dB)
0. 2000	# 1	40. 5	6.8	47. 3	53. 6	6. 3
0. 2000	# 2	39. 4	6.8	46. 2	53. 6	7.4
0. 2687	# 1	37. 1	6. 6	43. 7	51. 2	7. 5
0. 2687	# 2	35. 8	6. 6	42. 4	51. 2	8. 8
0. 3344	# 1	34. 7	6. 4	41. 1	49.3	8. 2
0. 3344	# 2	34. 2	6. 4	40. 6	49. 3	8. 7
0. 5344	# 1	34. 9	6. 0	40. 9	46.0	5. 1
0. 5344	# 2	34. 0	6. 0	40. 0	46.0	6. 0
0. 6010	# 2	31.4	6. 0	37. 4	46.0	8. 6
0. 6700	# 1	34. 6	6. 0	40. 6	46.0	5. 4
0. 6700	# 2	33. 7	6. 0	39. 7	46. 0	6.3
0. 7350	# 1	34. 2	6. 0	40. 2	46. 0	5. 8
0. 7350	# 2	33. 8	6. 0	39. 8	46. 0	6. 2
0. 8000	# 1	35. 4	6. 1	41. 5	46. 0	4. 5
0, 8000	# 2	35.0	6. 1	41. 1	46. 0	4. 9
0. 8700	# 1	33. 0	6. 1	39. 1	46. 0	6. 9
0. 8700	# 2	33. 2	6. 1	39. 3	46. 0	6. 7
8. 5578	# 2	19. 3	6. 4	25. 7	50. 0	24. 3

The emissions above 8.5578 MHz were below - 20 dB from limits.

<sup>\*</sup> 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 %)

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

No: #05-051E-CE9 (2/2)



FREQUENCY (MHz)