: 30EE0055-HO-01-A Test report No.

Page : 19 of 60 **Issued date** : January 20, 2010 FCC ID : XCET12NA28K

#### **APPENDIX 2: Data of EMI test**

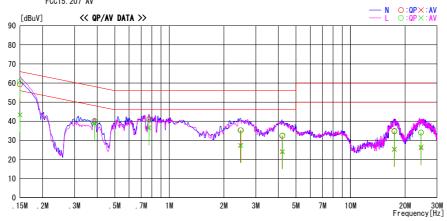
#### **Conducted Emission** (Power Supply: SONY) 11b, Tx 2412MHz, ANT 0

#### DATA OF CONDUCTED EMISSION TEST

: 30EE0055-H0-01 Report No. Temp./Humi. Engineer : 23deg.C / 35% : Takeshi Choda

Mode / Remarks : WLAN, Tx, 11b, 2412MHz, 11Mbps, Ant:0

LIMIT : FCC15.207 QP FCC15.207 AV



_	Reading	Level	Corr.	Resu	ılts	Lir	nit	Mar	gin	
Frequency	QP	AV	Factor	QP	AV	QP	AV	QP	AV	Phase
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]	
0.15000	59.1	43. 0	0.3	59. 4	43. 3	66. 0	56.0	6.6	12. 7	N
0. 38641	39.8	38. 5	0.3	40. 1	38.8	58. 1	48. 1	18.0	9. 3	N
0.77273	40.7	36. 2	0.4	41. 1	36. 6	56.0	46.0	14. 9	9. 4	N
2. 47046	34.7	26. 8	0.6	35. 3	27. 4	56.0	46.0	20. 7	18. 6	N
4. 19903	31.6	23. 2	0.8	32. 4	24. 0	56.0	46.0	23. 6	22. 0	N
17. 46370	32.8	23. 3			25. 2	60.0	50.0	25. 3	24. 8	N
24. 50342	31.8				26. 1	60.0	50.0	25. 9	23. 9	N
0.15000	60.5	43. 0	0.3	60. 8	43. 3	66. 0	56.0	5. 2	12. 7	L
0.38616	39.6	38. 4	0.3	39. 9	38. 7	58. 1	48. 1	18. 2	9. 4	L
0.77253	40.4	36. 1	0.4	40.8	36. 5	56.0	46.0	15. 2	9. 5	L
2. 48864	34.7	26. 6	0.6	35. 3	27. 2	56.0	46.0	20. 7	18. 8	L
4. 21539	31.8	23. 4	0.8	32. 6	24. 2	56.0	46.0	23. 4	21.8	L
17. 46370	33.1	23. 6	1.9	35. 0	25. 5	60.0	50.0	25.0	24. 5	L
24. 48342	31.8	24. 3	2. 3	34. 1	26. 6	60.0	50.0	25. 9	23. 4	L
					l					
					ı					

#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>The test result is rounded off to one or two decimal places, so some differences might be observed.

: 30EE0055-HO-01-A Test report No.

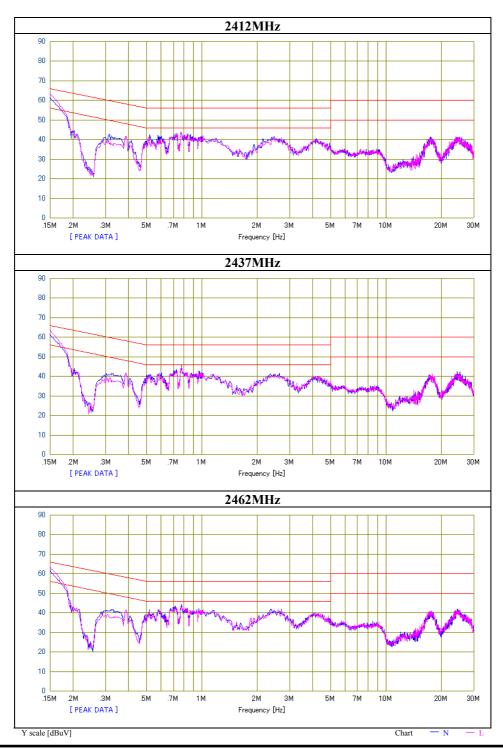
Page : 20 of 60 : January 20, 2010 **Issued date** FCC ID : XCET12NA28K

**Conducted Emission** (Power Supply: SONY)

11b, ANT 0

Head Office EMC Lab. No.2 Semi Anechoic Chamber Test place

Report No. 30EE0055-HO-01 Date 12/10/2009 Temperature/ Humidity 23 deg.C./ 35% Engineer Takeshi Choda Mode 11b Tx



#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

Page : 21 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Conducted Emission (Power Supply: SONY) 11b, Tx 2437MHz, ANT 1

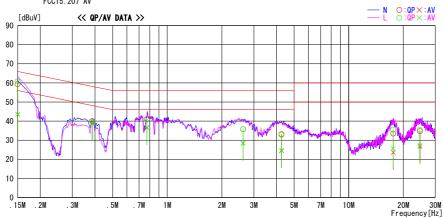
#### DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber Date: 2009/12/10

Report No. : 30EE0055-H0-01
Temp./Humi. : 23deg.C / 35%
Engineer : Takeshi Choda

 $\label{eq:mode_mode_mode} \mbox{Mode / Remarks : WLAN, Tx, 11b, 2437MHz, 11Mbps, Ant:1}$ 

LIMIT : FCC15. 207 QP FCC15. 207 AV



Frequency		Level	Corr.	Resu		Lin		Mar	gin	
rrequency	QP	AV	Factor	QP	AV	QP	AV	QP	AV	Phase
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]	
0.15000	59.1	43. 2	0. 3	59. 4	43. 5	66. 0	56. 0	6. 6	12. 5	N
0.38654	39.7	38. 5	0. 3	40.0	38. 8	58. 1	48. 1	18. 1	9.3	N
0.77314	40.6			41.0	36. 6	56.0	46. 0	15. 0	9.4	N
2.61574	35. 1			35. 7	28. 4	56.0		20. 3	17. 6	N
4. 26412	32.4	23. 7	0.8	33. 2	24. 5	56. 0	46. 0	22. 8	21.5	N
17.58424	31.6	21. 7	1. 9	33. 5	23. 6	60.0		26. 5	26. 4	N
24.69614	32.4	24. 4	2. 3	34. 7	26. 7	60.0	50.0	25. 3	23. 3	N
0.15000	60.5	43. 2	0. 3	60.8	43. 5	66. 0	56. 0	5. 2	12. 5	L
0.38655	39.5	38. 4	0. 3	39.8	38. 7	58. 1	48. 1	18. 3	9. 4	L
0.77301	40.5	36. 1	0.4	40. 9	36. 5	56.0	46. 0	15. 1	9. 5	L
2.61536	35. 1	27. 8	0. 6	35. 7	28. 4	56.0	46. 0	20. 3	17. 6	L
4. 25174	32.0	23. 8	0.8	32.8	24. 6	56.0	46. 0	23. 2	21. 4	L
17.54406	33.6	23. 8	1. 9	35. 5	25. 7	60.0	50.0	24. 5	24. 3	L
24.61578	33. 2	25. 1	2. 3	35. 5	27. 4	60.0	50.0	24. 5	22. 6	L

### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>The test result is rounded off to one or two decimal places, so some differences might be observed.

: 30EE0055-HO-01-A Test report No.

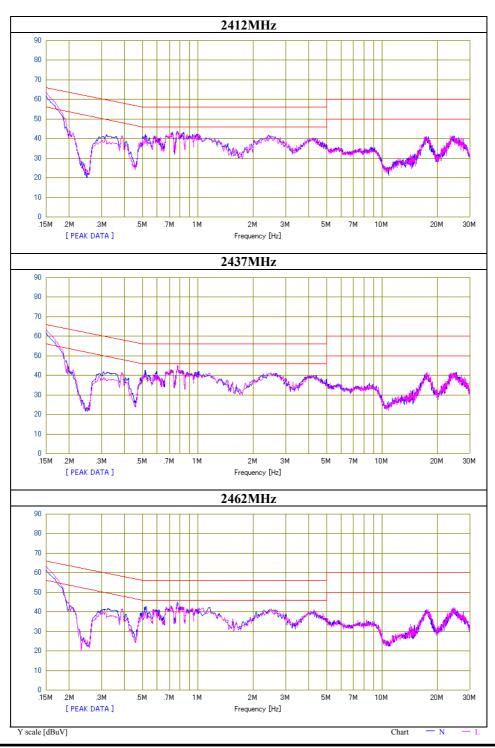
Page : 22 of 60 : January 20, 2010 **Issued date** FCC ID : XCET12NA28K

**Conducted Emission** (Power Supply: SONY)

11b, ANT 1

Head Office EMC Lab. No.2 Semi Anechoic Chamber Test place

Report No. 30EE0055-HO-01 Date 12/10/2009 Temperature/ Humidity 23 deg.C./ 35% Engineer Takeshi Choda Mode 11b Tx



#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

Page : 23 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Conducted Emission (Power Supply: SONY) 11g, Tx 2462MHz, ANT 0

#### DATA OF CONDUCTED EMISSION TEST

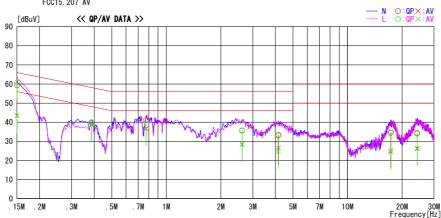
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber Date : 2009/12/10

Report No. : 30EE0055-H0-01

Temp./Humi. : 23deg.C / 35% Engineer : Takeshi Choda

 $\label{eq:mode_mode_for_mode$ 

LIMIT : FCC15. 207 QP FCC15. 207 AV



-	Reading	g Level	Corr.	Resu	ılts	Lir	nit	Mar	gin	
Frequency	QP	AV	Factor	QP	AV	QP	AV	QP	AV	Phase
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]	
0.15000	59.1	43. 2	0.3	59. 4	43. 5	66. 0	56.0	6.6	12. 5	N
0. 38658	39.7	38. 5	0.3	40.0	38.8	58. 1	48. 1	18. 1	9. 3	N
0.77317	40.7	36. 3	0.4	41. 1	36. 7	56.0	46.0	14. 9	9. 3	N
2. 61611	35.0	27. 7	0.6	35. 6	28. 3	56.0	46.0	20. 4	17. 7	N
4. 16086	32.6	25. 8	0.8	33. 4	26. 6	56.0	46.0	22. 6	19. 4	N
17. 30298	32.6		1.9	34. 5	24. 6	60.0		25. 5	25. 4	N
24. 21397			2. 3	34. 4	26. 4	60.0		25. 6	23. 6	N
0. 15000			0.3	60. 8	43. 4	66. 0	56.0	5. 2	12. 6	L
0. 38662	39.6	38. 4	0.3	39. 9	38. 7	58. 1	48. 1	18. 2	9. 4	L
0.77316	40.6	36. 1	0.4	41.0	36. 5	56.0	46.0	15.0	9. 5	L
2. 61588	35.1	27. 9	0.6	35. 7	28. 5	56.0	46.0	20. 3	17. 5	L
4. 14268	32.1	23. 7	0.8	32. 9	24. 5	56.0	46.0	23. 1	21.5	L
17. 38334	33. 2	23. 5	1.9	35. 1	25. 4	60.0	50.0	24. 9	24. 6	L
24. 21397	31.6	23. 8	2. 3	33. 9	26. 1	60.0	50.0	26. 1	23. 9	L
					1					

UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>The test result is rounded off to one or two decimal places, so some differences might be observed.

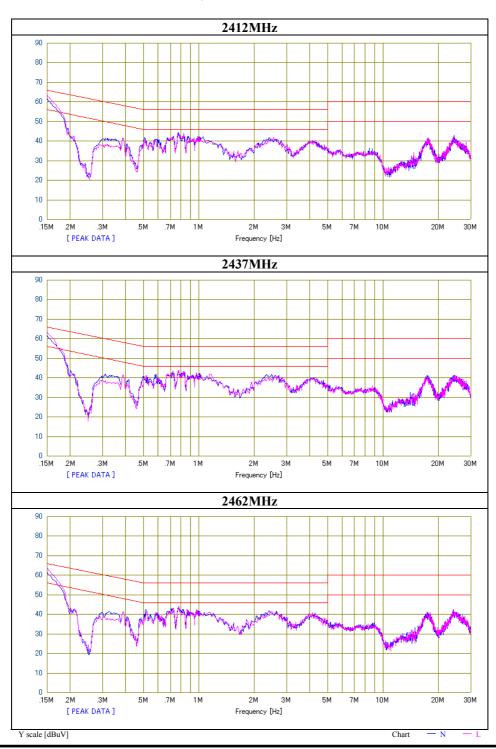
: 30EE0055-HO-01-A Test report No.

Page : 24 of 60 : January 20, 2010 **Issued date** FCC ID : XCET12NA28K

**Conducted Emission** (Power Supply: SONY)

11g, ANT 0 Head Office EMC Lab. No.2 Semi Anechoic Chamber Test place

Report No. 30EE0055-HO-01 Date 12/10/2009 Temperature/ Humidity 23 deg.C./ 35% Engineer Takeshi Choda Mode 11g Tx



#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

Page : 25 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Conducted Emission (Power Supply: SONY) 11g, Tx 2462MHz, ANT 1

#### DATA OF CONDUCTED EMISSION TEST

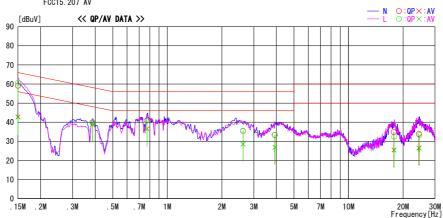
UL Japan, Inc. Head Office EMC Lab. No. 2 Semi Anechoic Chamber Date : 2009/12/10

Report No. : 30EE0055-H0-01

Temp./Humi. : 23deg.C / 35% Engineer : Takeshi Choda

 $\label{eq:mode_mode_for_mode_for_mode} \mbox{Mode / Remarks : WLAN, } \mbox{Tx, } \mbox{11g, } \mbox{2462MHz, } \mbox{24Mbps, } \mbox{Ant:1}$ 

LIMIT : FCC15. 207 QP FCC15. 207 AV



_	Reading	Level	Corr.	Resu	ılts	Lir	nit	Mar	gin	
Frequency	QP	AV	Factor	QP	AV	QP	AV	QP	AV	Phase
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]	
0.15000	58.8	42. 6	0.3	59. 1	42. 9	66. 0	56.0	6.9	13. 1	N
0.38658	39.6	38. 4	0.3	39. 9	38. 7	58. 1	48. 1	18. 2	9. 4	N
0.77318	40.6	36. 2	0.4	41.0	36. 6	56.0	46.0	15.0	9. 4	N
2.61590	34.9	27. 9	0.6	35. 5	28. 5	56.0	46.0	20. 5	17. 5	N
3.92456	32.5	26. 1	0.8	33. 3	26. 9	56.0	46.0	22.7	19. 1	N
17. 78604	32.9		1.9	34. 8	25. 5	60.0		25. 2	24. 5	N
24. 43578	31.6		2. 3	33. 9	26. 6	60.0	50.0	26. 1	23. 4	N
0.15000	60.3	42. 3	0.3	60. 6	42. 6	66. 0	56.0	5.4	13. 4	L
0.38656	39.5	38. 4	0.3	39. 8	38. 7	58. 1	48. 1	18. 3	9. 4	L
0.77320	40.4	36. 1	0.4	40. 8	36. 5	56.0	46.0	15. 2	9. 5	L
2. 61585	35.0	28. 0	0.6	35. 6	28. 6	56.0	46.0	20.4	17. 4	L
3. 92316	32.6	26. 2	0.8	33. 4	27. 0	56.0	46.0	22. 6	19.0	L
17. 84586	30.6	23. 3	1.9	32. 5	25. 2	60.0	50.0	27. 5	24. 8	L
24. 61578	31.0	24. 1	2. 3	33. 3	26. 4	60.0	50.0	26. 7	23. 6	L
					1					

#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>The test result is rounded off to one or two decimal places, so some differences might be observed.

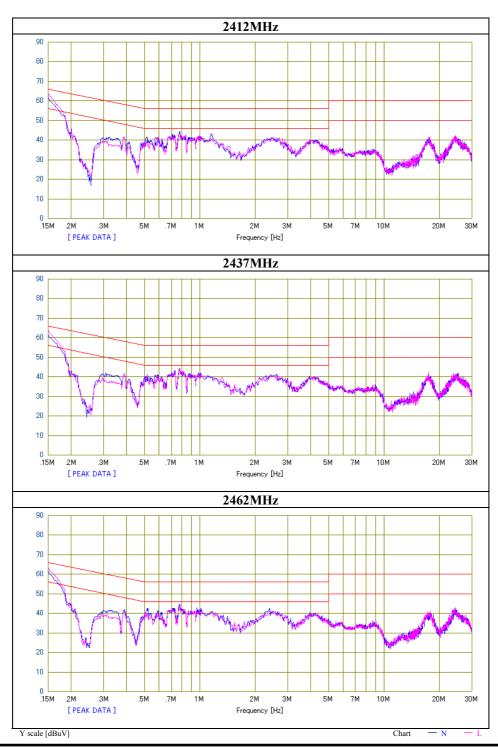
: 30EE0055-HO-01-A Test report No.

Page : 26 of 60 : January 20, 2010 **Issued date** FCC ID : XCET12NA28K

**Conducted Emission** (Power Supply: SONY)

11g, ANT 1 Head Office EMC Lab. No.2 Semi Anechoic Chamber Test place

Report No. 30EE0055-HO-01 Date 12/10/2009 Temperature/ Humidity 23 deg.C./ 35% Engineer Takeshi Choda Mode 11g Tx



#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

Page : 27 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Conducted Emission (Power Supply: SONY) 11b/g, Rx 2437MHz, ANT 0

#### DATA OF CONDUCTED EMISSION TEST

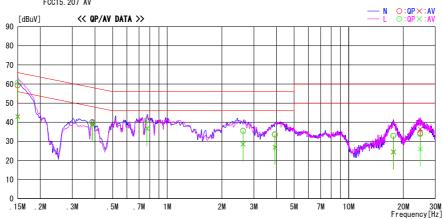
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber Date : 2009/12/10

Report No. : 30EE0055-H0-01

Temp./Humi. : 23deg.C / 35% Engineer : Takeshi Choda

 $\label{eq:mode_mode_mode_mode_mode} \mbox{Mode / Remarks : WLAN, } \mbox{Rx, } \mbox{11b/g, } \mbox{2437MHz, } \mbox{Ant:0}$ 

LIMIT : FCC15.207 QP FCC15.207 AV



_	Reading	Level	Corr.	Resu	ılts	Lir	nit	Mar	gin	
Frequency	QP	AV	Factor	QP	AV	QP	AV	QP	AV	Phase
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]	
0.15000		42. 8	0. 3	59. 3	43. 1	66. 0		6. 7	12. 9	N
0.15000	60.4	42. 6	0. 3	60. 7	42. 9	66. 0	56. 0	5. 3	13. 1	L
0.38664	39.8	38. 6	0. 3	40. 1	38. 9	58. 1	48. 1	18. 0	9. 2	N
0.38664	39.6	38. 4	0. 3	39. 9	38. 7	58. 1	48. 1	18. 2	9.4	L
0.77328	40.7	36. 3	0.4	41.1	36. 7	56.0	46. 0	14. 9	9. 3	N
0.77336	40.7	36. 2	0.4	41.1	36. 6	56.0		14. 9	9. 4	L
2. 61571	35.0	27. 9	0. 6	35. 6	28. 5	56.0	46. 0	20. 4	17. 5	N
2.61596	35.0	28. 0	0. 6	35. 6	28. 6	56.0		20. 4	17. 4	L
3.92379	32.9	26. 3	0.8	33. 7	27. 1	56.0	46. 0	22. 3	18. 9	L
3.92360	32.8	26. 1	0.8	33. 6	26. 9	56.0	46. 0	22. 4	19. 1	N
17. 62442	30.9	22. 3	1. 9	32.8	24. 2	60.0	50.0	27. 2	25. 8	L
17. 62442	31.0	22. 6	1. 9	32.9	24. 5	60.0	50.0	27. 1	25. 5	N
24. 77650	31.4	23. 8	2. 3	33. 7	26. 1	60.0	50.0	26. 3	23. 9	L
24. 77650	32.0	34. 1	2. 3	34. 3	36. 4	60.0	50.0	25. 7	13. 6	N
1										
1										

#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>The test result is rounded off to one or two decimal places, so some differences might be observed.

Page : 28 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Conducted Emission (Power Supply: SONY) 11b/g, Rx 2437MHz, ANT 1

#### DATA OF CONDUCTED EMISSION TEST

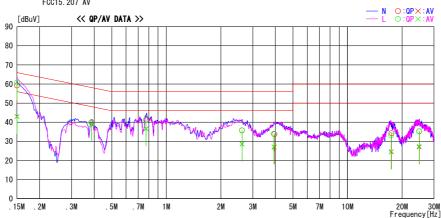
UL Japan, Inc. Head Office EMC Lab. No. 2 Semi Anechoic Chamber Date : 2009/12/10

Report No. : 30EE0055-H0-01

Temp./Humi. : 23deg.C / 35% Engineer : Takeshi Choda

 $\label{eq:mode_mode_mode_mode} \mbox{Mode / Remarks : WLAN, } \mbox{Rx, } \mbox{11b/g, } \mbox{2437MHz, } \mbox{Ant:1}$ 

LIMIT : FCC15. 207 QP FCC15. 207 AV



_	Reading	Level	Corr.	Resu	ılts	Lir	nit	Mar	gin	
Frequency	QP	AV	Factor	QP	AV	QP	AV	QP	AV	Phase
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]	
0.15000	59.0	42. 8	0.3	59. 3	43. 1	66. 0	56.0	6.7	12. 9	N
0.38668	39.7	38. 5	0.3	40.0	38.8	58. 1	48. 1	18. 1	9. 3	N
0.77336	40.9	36. 2	0.4	41.3	36. 6	56.0	46.0	14. 7	9. 4	N
2. 61607	35.1	28. 0	0.6	35. 7	28. 6	56.0	46.0	20. 3	17. 4	N
3.94274	32.9	26. 2	0.8	33. 7	27. 0	56.0	46.0	22. 3	19. 0	N
17. 46370	32.4	22. 7	1.9	34. 3	24. 6	60.0	50.0	25. 7	25. 4	N
24. 85686	33.0		2. 3	35. 3	27. 1	60.0		24. 7	22. 9	N
0.15000	60.4	42. 7		60. 7	43.0	66. 0	56.0	5.3	13. 0	L
0.38666	39.6	38. 5	0.3	39. 9	38.8	58. 1	48. 1	18. 2	9. 3	L
0. 77331	40.8	36. 2	0.4	41. 2	36.6	56.0	46.0	14. 8	9.4	L
2. 61611	35. 1	28. 1	0.6	35. 7	28. 7	56.0	46.0	20. 3	17. 3	L
3. 92420	33. 1	26. 4	0.8	33. 9	27. 2	56.0	46.0	22. 1	18. 8	L
17. 38334	31.3	22. 4	1.9	33. 2	24. 3	60.0	50.0	26. 8	25. 7	L
24. 85686	33.0	25. 1	2.3	35. 3	27. 4	60.0	50.0	24. 7	22. 6	L
					1					

UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>The test result is rounded off to one or two decimal places, so some differences might be observed.

Page : 29 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Conducted Emission (Power Supply: DELTA) 11b, Tx 2462MHz, ANT 0

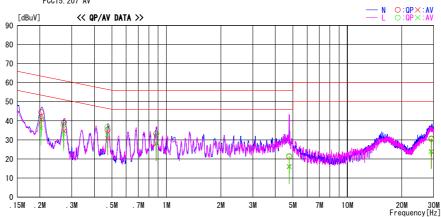
#### DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No. 4 Semi Anechoic Chamber Date : 2010/01/05

Report No. : 30EE0055-H0-01
Temp./Humi. : 22deg.C / 38%
Engineer : Takumi Shimada

 $\label{eq:mode_mode_mode_mode_mode} \mbox{Mode / Remarks : WLAN, } \mbox{Tx, } \mbox{11b, } \mbox{2462MHz, } \mbox{11Mbps, } \mbox{ANT:0}$ 

LIMIT : FCC15. 207 QP FCC15. 207 AV



-	Reading	Level	Corr.	Resi	ılts	Lin	nit	Mar	gin		
Frequency	QP	AV	Factor	QP	AV	QP	AV	QP	AV	Phase	Comment
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0. 20337	44. 2	40. 5	0.3	44. 5	40.8	63. 5	53. 5	19. 0	12.7	N	
0. 27147	38.8	34. 4	0.3	39. 1	34. 7	61. 1	51. 1	22. 0	16.4	N	
0. 47345	35.0	30. 7	0.3	35. 3	31.0	56. 5	46.5	21.2	15. 5	N	
0.87738	32. 9	27. 8	0.3	33. 2		56. 0	46.0		17. 9	N	
4. 77124	20.6	15. 4	0.7	21.3	16. 1	56.0	46.0	34. 7	29. 9	N	
29. 12103	28. 7	22. 0	2.0	30.7	24. 0	60.0	50.0	29. 3	26.0	N	
0. 20290	40.6	35. 9	0.3	40. 9	36. 2	63. 5	53. 5	22. 6	17. 3	L	
0. 27055	37. 6	32. 9	0.3	37.9	33. 2	61. 1	51. 1	23. 2	17. 9	L	
0.47195	36.6	32. 3	0.3	36. 9	32. 6	56. 5	46. 5	19. 6	13.9	L	
0.87945	33.0	27. 6	0.3	33. 3	27. 9	56.0	46.0	22. 7	18. 1	L	
4. 77396	20.9	15. 2	0.7	21.6	15. 9	56.0	46.0	34. 4	30.1	L	
28. 99725	28. 4	21.8	2.0	30.4	23. 8	60.0	50.0	29.6	26. 2	L	

UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>The test result is rounded off to one or two decimal places, so some differences might be observed.

: 30EE0055-HO-01-A Test report No.

Page : 30 of 60 : January 20, 2010 **Issued date** FCC ID : XCET12NA28K

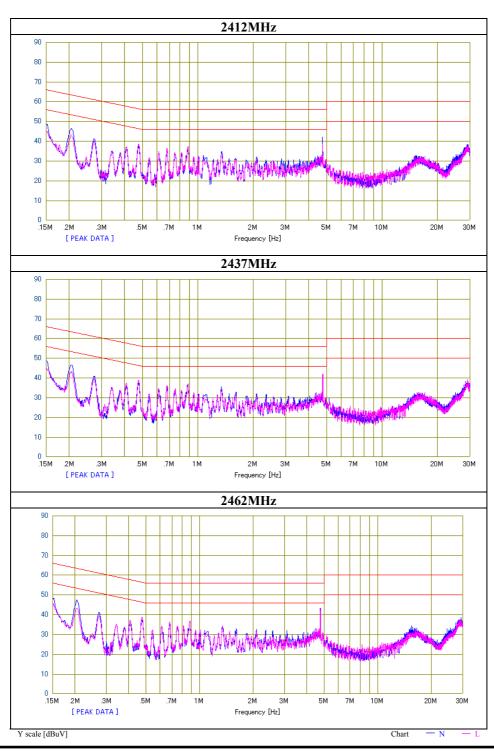
#### **Conducted Emission** (Power Supply: DELTA)

11b, ANT 0

Head Office EMC Lab. No.4 Semi Anechoic Chamber Test place

Report No. 30EE0055-HO-01 Date 01/05/2010 Temperature/ Humidity 22 deg.C./ 38% Engineer Takumi Shimada

Mode 11b Tx



#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

Page : 31 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Conducted Emission (Power Supply: DELTA) 11b, Tx 2437MHz, ANT 1

#### DATA OF CONDUCTED EMISSION TEST

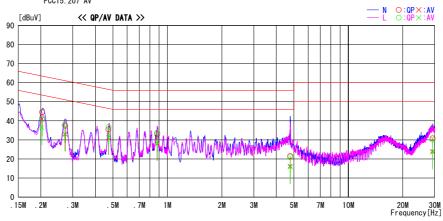
UL Japan, Inc. Head Office EMC Lab. No. 4 Semi Anechoic Chamber Date : 2010/01/05

Report No. : 30EE0055-H0-01

Temp./Humi. : 22deg.C/38% Engineer : Takumi Shimada

Mode / Remarks : WLAN, Tx, 11b, 2437MHz, 11Mbps, ANT:1

LIMIT : FCC15. 207 QP FCC15. 207 AV



-	Reading	Level	Corr.	Resi	ılts	Lin	nit	Mar	gin		
Frequency	QP	AV	Factor	QP	AV	QP	AV	QP	AV	Phase	Comment
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0. 20283	44. 3	40. 7	0.3	44. 6	41.0	63. 5	53. 5	18. 9	12.5	N	
0. 27277	37. 2	32. 7	0.3	37. 5	33.0	61.0	51.0	23. 5	18.0	N	
0. 47252	35. 2	30. 9	0.3	35. 5	31. 2	56. 5	46.5	21.0	15.3	N	
0.87837	32. 7	27. 8	0.3	33.0		56. 0	46.0		17. 9	N	
4. 76970	20.9	15. 5	0.7	21.6	16. 2	56.0	46.0	34. 4	29.8	N	
29. 19709	28.8	22. 1	2.0	30.8	24. 1	60.0	50.0	29. 2	25. 9	N	
0. 20268	40.6	36.0	0.3	40. 9	36. 3	63. 5	53. 5	22. 6	17. 2	L	
0. 27067	37. 6	32. 9	0.3	37.9	33. 2	61. 1	51. 1	23. 2	17. 9	L	
0. 47347	36.5	32. 1	0.3	36.8	32. 4	56. 5	46. 5	19. 7	14.1	L	
0.87759	33.6	28. 7	0.3	33. 9	29.0	56.0	46.0	22. 1	17.0	L	
4. 77194	20. 2	15. 1	0.7	20. 9	15.8	56.0	46.0	35. 1	30. 2	L	
29. 19832	28. 1	21. 6	2. 0	30. 1	23. 6	60.0	50.0	29. 9	26. 4	L	

#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>The test result is rounded off to one or two decimal places, so some differences might be observed.

Page : 32 of 60 Issued date : January 20, 2010 FCC ID : XCET12NA28K

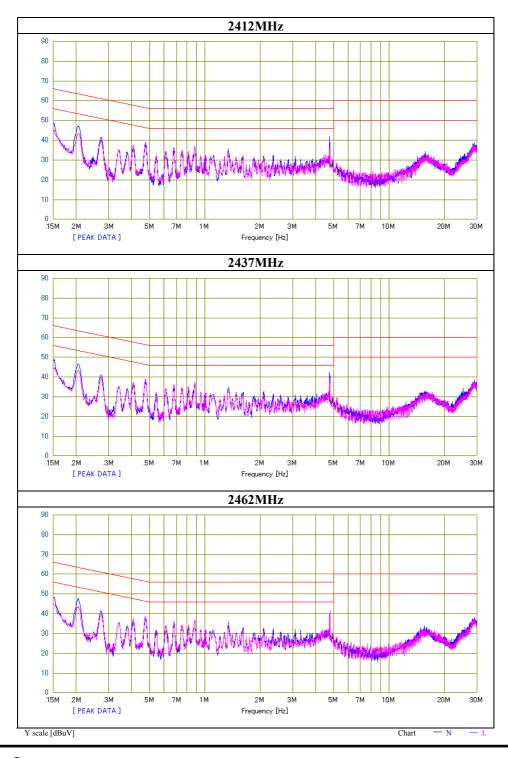
# **Conducted Emission** (Power Supply: DELTA)

11b, ANT 1

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber

Report No. 30EE0055-HO-01
Date 01/05/2010
Temperature/ Humidity 22 deg.C./ 38%
Engineer Takumi Shimada

Mode 11b Tx



#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

Page : 33 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Conducted Emission (Power Supply: DELTA) 11g, Tx 2412MHz, ANT 0

# DATA OF CONDUCTED EMISSION TEST UL Japan, Inc. Head Office EMC Lat

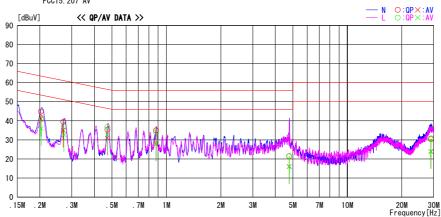
UL Japan, Inc. Head Office EMC Lab. No. 4 Semi Anechoic Chamber Date : 2010/01/05

Report No. : 30EE0055-H0-01

Temp./Humi. : 22deg.C/38% Engineer : Takumi Shimada

 $\label{eq:mode_mode_for_mode_for_mode} \mbox{Mode / Remarks} \ \mbox{: WLAN, } \mbox{Tx, } \mbox{11g, } \mbox{2412MHz, } \mbox{24Mbps, } \mbox{ANT:0}$ 

LIMIT : FCC15. 207 QP FCC15. 207 AV



F	Reading	Level	Corr.	Resu	ılts	Lin	nit	Mar	gin		
Frequency	QP	AV	Factor	QP	AV	QP	AV	QP	AV	Phase	Comment
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0. 20261	44. 5	40. 8	0.3	44. 8	41.1	63. 5	53. 5	18. 7	12.4	N	
0. 26931	39. 2	34. 8	0.3	39. 5	35. 1	61. 1	51. 1	21.6	16.0	N	
0. 47235	35. 1	30.8	0.3	35. 4		56. 5	46.5	21.1	15.4	N	
0.87725	34. 7	27. 6		35.0		56. 0	46.0		18. 1	N	
4. 77239	20. 7	15. 3	0.7	21.4	16.0	56. 0	46.0	34. 6	30.0	N	
28. 95485	28. 4	21. 9	2.0	30. 4	23. 9	60.0	50.0	29.6	26. 1	N	
0. 20339	40. 5	35. 7		40.8		63. 5	53. 5	22.7	17. 5	L	
0. 27152	37. 0	32. 4	0.3	37. 3		61. 1	51. 1	23.8	18.4	L	
0. 47241	36. 6	32. 3	0.3	36. 9	32. 6	56. 5	46. 5	19.6	13.9	L	
0.87816	33.8	28. 4	0.3	34. 1	28. 7	56. 0	46.0	21.9	17. 3	L	
4. 77136	20. 9	15. 3	0.7	21.6	16.0	56.0	46.0	34. 4	30.0	L	
28. 93265	28. 8	22. 1	2.0	30.8	24. 1	60.0	50.0	29. 2	25. 9	L	

#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>The test result is rounded off to one or two decimal places, so some differences might be observed.

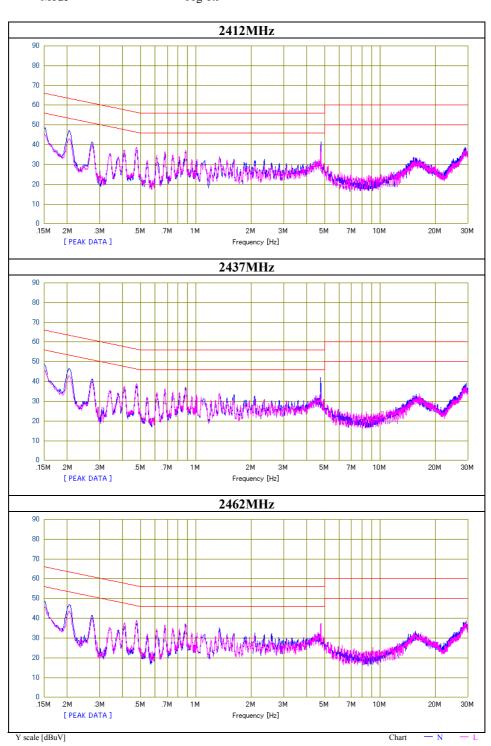
Page : 34 of 60 Issued date : January 20, 2010 FCC ID : XCET12NA28K

# **Conducted Emission** (Power Supply: DELTA)

11g, ANT 0

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber

Report No. 30EE0055-HO-01
Date 01/05/2010
Temperature/ Humidity 22 deg.C./ 38%
Engineer Takumi Shimada
Mode 11g Tx



#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

Page : 35 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Conducted Emission (Power Supply: DELTA) 11g, Tx 2462MHz, ANT 1

# DATA OF CONDUCTED EMISSION TEST UL Japan, Inc. Head Office EMC Lat

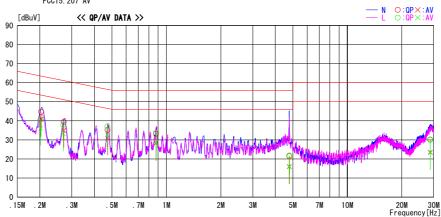
UL Japan, Inc. Head Office EMC Lab. No. 4 Semi Anechoic Chamber Date : 2010/01/05

Report No. : 30EE0055-H0-01

Temp./Humi. : 22deg.C / 38% Engineer : Takumi Shimada

 $\label{eq:mode_mode_mode_mode_mode} \mbox{Mode} \ / \ \mbox{Remarks} \ \mbox{: WLAN, } \ \mbox{Tx, } \ \mbox{11g, } \ \mbox{2462MHz, } \ \mbox{24Mbps, } \ \mbox{ANT:1}$ 

LIMIT : FCC15. 207 QP FCC15. 207 AV



F	Reading	Level	Corr.	Resu	ılts	Lin	nit	Mar	gin		
Frequency	QP	AV	Factor	QP	AV	QP	AV	QP	AV	Phase	Comment
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0. 20291	44. 4	40. 7	0.3	44. 7	41.0	63. 5	53. 5	18. 8	12.5	N	
0. 27084	39. 2	34. 8	0.3	39. 5	35. 1	61. 1	51. 1	21.6	16.0	N	
0. 47305	35.0	30.8	0.3	35. 3	31. 1	56. 5	46.5	21.2	15.4	N	
0.87711	32. 9	27. 9	0.3	33. 2		56. 0	46.0		17.8	N	
4. 77739	20.8	15. 4	0.7	21.5	16. 1	56. 0	46.0	34. 5	29. 9	N	
28. 70860	28. 3	21. 7	1.9	30. 2	23. 6	60.0	50.0	29.8	26.4	N	
0. 20171	40. 4	35. 8	0.3	40. 7	36. 1	63. 5	53. 5	22. 8	17.4	L	
0. 26949	37. 6	32. 9	0.3	37. 9	33. 2	61. 1	51. 1	23. 2	17. 9	L	
0. 47226	36.7	32. 3	0.3	37.0	32. 6	56. 5	46. 5	19.5	13.9	L	
0.87799	33.6	28. 4	0.3	33. 9	28. 7	56. 0	46.0	22. 1	17. 3	L	
4. 77438	21.1	15. 2	0.7	21.8	15. 9	56.0	46.0	34. 2	30.1	L	
28. 71664	28. 1	21. 4	1.9	30.0	23. 3	60.0	50.0	30.0	26. 7	L	

#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>The test result is rounded off to one or two decimal places, so some differences might be observed.

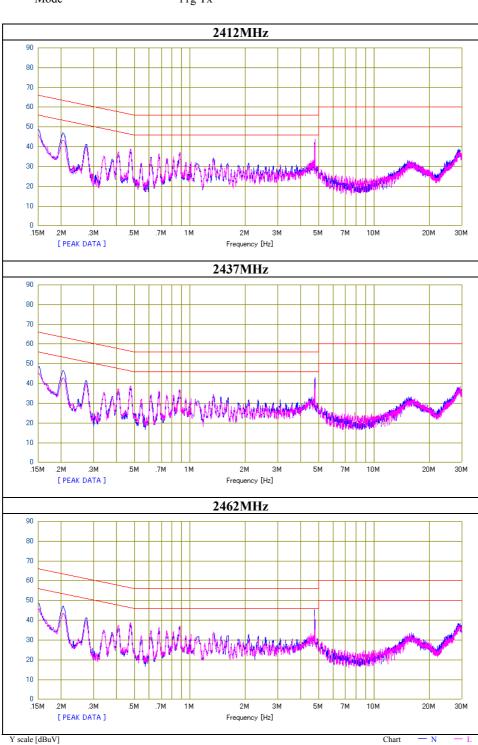
Page : 36 of 60 Issued date : January 20, 2010 FCC ID : XCET12NA28K

# **Conducted Emission** (Power Supply: DELTA)

11g, ANT 1

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber

Report No. 30EE0055-HO-01
Date 01/05/2010
Temperature/ Humidity 22 deg.C./ 38%
Engineer Takumi Shimada
Mode 11g Tx



#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

Page : 37 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Conducted Emission (Power Supply: DELTA) 11b/g, Rx 2437MHz, ANT 0

# DATA OF CONDUCTED EMISSION TEST UL Japan, Inc. Head Office EMC Lat

UL Japan, Inc. Head Office EMC Lab. No. 4 Semi Anechoic Chamber Date : 2010/01/05

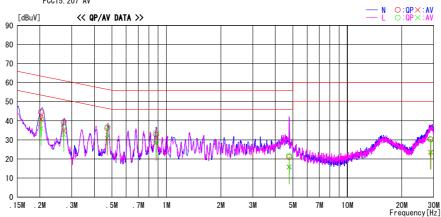
 Report No.
 : 30EE0055-H0-01

 Temp. /Humi.
 : 22deg. C / 38%

 Engineer
 : Takumi Shimada

 $\label{eq:mode_mode_mode_mode_mode} \mbox{Mode} \ / \ \mbox{Remarks} \ \ : \mbox{WLAN,} \ \ \mbox{Rx,} \ \ 11\mbox{b}/\mbox{g,} \ \ 2437\mbox{MHz,} \ \ \mbox{ANT:} \mbox{0}$ 

LIMIT : FCC15. 207 QP FCC15. 207 AV



F	Reading	Level	Corr.	Resu	ılts	Lin	nit	Mar	gin		
Frequency	QP	AV	Factor	QP	AV	QP	AV	QP	AV	Phase	Comment
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0. 20290	44. 3	40. 7	0.3	44. 6	41.0	63. 5	53. 5	18. 9	12.5	N	
0. 27109	39.0	34. 6	0.3	39. 3	34. 9	61. 1	51. 1	21.8	16. 2	N	
0.47109	35. 9	30. 7	0.3	36. 2	31.0	56. 5	46.5			N	
0.87746	32. 5	28. 0		32. 8	28. 3	56. 0	46.0			N	
4. 77060	20.3	15. 1	0.7	21.0	15.8	56.0	46.0	35.0	30. 2	N	
28. 78832	28. 5	21. 7	1.9	30. 4	23. 6	60.0	50.0	29.6	26.4	N	
0. 20314	40. 3	35. 7	0.3	40. 6	36.0	63. 5	53. 5	22. 9	17. 5	L	
0. 27127	37. 1	32. 4	0.3	37. 4	32. 7	61. 1	51. 1	23.7	18.4	L	
0. 47313	36.5	32. 2	0.3	36.8	32. 5	56. 5	46. 5	19.7	14.0	L	
0.87739	33. 6	28. 6	0.3	33. 9	28. 9	56.0	46.0	22. 1	17. 1	L	
4. 77681	21.0	15. 3	0.7	21.7	16.0	56.0	46.0	34. 3	30.0	L	
29. 02100	28. 2	21.5	2. 0	30. 2	23. 5	60.0	50.0	29.8	26.5	L	

#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>The test result is rounded off to one or two decimal places, so some differences might be observed.

Page : 38 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Conducted Emission (Power Supply: DELTA) 11b/g, Rx 2437MHz, ANT 1

#### DATA OF CONDUCTED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No. 4 Semi Anechoic Chamber Date : 2010/01/05

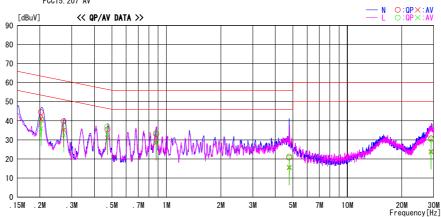
 Report No.
 : 30EE0055-H0-01

 Temp. /Humi.
 : 22deg. C / 38%

 Engineer
 : Takumi Shimada

 $\label{eq:mode_mode_mode_mode_mode} \mbox{Mode} \ / \ \mbox{Remarks} \ \ : \mbox{WLAN,} \ \ \mbox{Rx,} \ \ 11\mbox{b}/\mbox{g,} \ \ 2437\mbox{MHz,} \ \ \mbox{ANT:} 1$ 

LIMIT : FCC15. 207 QP FCC15. 207 AV



-	Reading	Level	Corr.	Resu	ılts	Lin	nit	Mar	gin		
Frequency	QP	AV	Factor	QP	AV	QP	AV	QP	AV	Phase	Comment
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0. 20257	44. 3	40.8	0.3	44. 6	41.1	63. 5	53. 5	18. 9	12.4	N	
0. 27048	39.4	34. 9	0.3	39. 7	35. 2	61. 1	51. 1	21.4	15.9	N	
0. 47251	35. 2	30. 9	0.3	35. 5	31. 2	56. 5	46.5	21.0	15.3	N	
0.87733	32. 7	28. 1	0.3	33.0		56. 0	46.0		17. 6	N	
4. 77380	20.0	14. 7	0.7	20. 7	15. 4	56.0	46.0	35. 3	30.6	N	
29.00348	28.8	22. 0	2.0	30.8	24. 0	60.0	50.0	29. 2	26.0	N	
0. 20328	40. 2	35. 6	0.3	40.5	35. 9	63. 5	53. 5	23.0	17. 6	L	
0. 27134	37.0	32. 3	0.3	37. 3	32. 6	61. 1	51. 1	23. 8	18.5	L	
0.47186	36.7	32. 4	0.3	37.0	32.7	56. 5	46. 5	19. 5	13.8	L	
0.87744	33. 4	28. 7	0.3	33. 7	29.0	56.0	46.0	22. 3	17.0	L	
4. 77562	20.6	15. 1	0.7	21.3	15.8	56.0	46.0	34. 7	30. 2	L	
29.01590	28. 2	21.5	2.0	30. 2	23. 5	60.0	50.0	29.8	26.5	L	

UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>The test result is rounded off to one or two decimal places, so some differences might be observed.

Page : 39 of 60 Issued date : January 20, 2010 FCC ID : XCET12NA28K

# Maximum Peak Output Power 11h Tx

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-HO
Date 12/07/2009
Temperature/ Humidity 23 deg.C./ 33%
Engineer Takumi Shimada

Mode 11b Tx

#### Antenna 0

	i miterina o								
I	Freq.	Reading	Cable	Atten.	Re	sult	Li	Margin	
ı			Loss						
ı	[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
ľ	2412	2.03	0.80	10.08	12.91	19.54	30.00	1000	17.09
I	2437	2.19	0.80	10.08	13.07	20.28	30.00	1000	16.93
I	2462	2.43	0.80	10.08	13.31	21.43	30.00	1000	16.69

#### Antenna 1

Freq.	Reading	Cable	Atten.	Re	sult	Liı	Margin	
		Loss						
[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
2412	2.61	0.80	10.08	13.49	22.34	30.00	1000	16.51
2437	2.74	0.80	10.08	13.62	23.01	30.00	1000	16.38
2462	3.04	0.80	10.08	13.92	24.66	30.00	1000	16.08

#### Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator

Antenna 0, 2437MHz

Rate	Reading	Remark
[Mbps]	[dBm]	
1	2.17	
2	2.14	
5.5	1.60	
11	2.19	*

Antenna 1, 2437MHz

1 111101111111 1	, = .5 / 1.111	
Rate	Reading	Remark
[Mbps]	[dBm]	
1	2.71	
2	2.71	
5.5	2.17	
11	2.74	*

All comparizon were carried out on same frequency and measurement factors.

\*Compared to the original test report: 29GE0205-HO-01-A-R1, difference in Maximum Peak Output Power is within +/- 0.5dB.

#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*:</sup> Worst Rate

Page : 40 of 60 Issued date : January 20, 2010 FCC ID : XCET12NA28K

# Maximum Peak Output Power 11g Tx

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-HO
Date 12/07/2009
Temperature/ Humidity 23 deg.C./ 33%
Engineer Takumi Shimada

Mode 11g Tx

#### Antenna 0

Ī	Freq.	Reading	Cable	Atten.	Re	sult	Li	Margin	
			Loss						
ı	[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
I	2412	10.37	0.80	10.08	21.25	133.35	30.00	1000	8.75
I	2437	10.11	0.80	10.08	20.99	125.60	30.00	1000	9.01
I	2462	10.45	0.80	10.08	21.33	135.83	30.00	1000	8.67

#### Antenna 1

Freq.	Reading	Cable	Atten.	Re	sult	Lii	Margin	
		Loss						
[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
2412	10.45	0.80	10.08	21.33	135.83	30.00	1000	8.67
2437	10.40	0.80	10.08	21.28	134.28	30.00	1000	8.72
2462	10.63	0.80	10.08	21.51	141.58	30.00	1000	8.49

#### Sample Calculation:

Result = Reading + Cable Loss (including the cable(s) customer supplied) + Attenuator

Antenna 0, 2437MHz

Rate	Reading	Remark
[Mbps]	[dBm]	
6	10.08	
9	9.87	
12	9.91	
18	9.15	
24	10.11	*
36	9.99	
48	9.90	
54	9.85	

Antenna 1, 2437MHz

Rate	Reading	Remark
[Mbps]	[dBm]	
6	10.27	
9	10.11	
12	10.15	
18	9.51	
24	10.40	*
36	10.26	
48	9.96	
54	10.15	

All comparizon were carried out on same frequency and measurement factors.

#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*:</sup> Worst Rate

<sup>\*</sup> Compared to the original test report: 29GE0205-HO-01-A-R1, difference in Maximum Peak Output Power is within  $\pm -0.5$  dB.

Page : 41 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Radiated Spurious Emission (Power Supply: SONY) 11b, Tx 2412MHz, ANT0

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-H0-01

 Date
 12/08/2009
 12/09/2009
 12/11/2009

 Temperature/ Humidity
 23 deg.C./ 33%
 22 deg.C./ 36%
 22 deg.C./ 49%

 Engineer
 Takumi Shimada
 Takumi Shimada
 Takumi Shimada

 (1-10GHz)
 (10-26.5GHz)
 (30-1000MHz)

Mode 11b Tx 2412MHz 11Mbps ANT0

Polarity	Frequency	Detector			Loss	Gain	Result	Limit	Margin	Remark
	[MHz]		[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]	,	[dB]	
Hori	47.252	~	40.0	11.2	7.4	32.2	26.4	40.0	13.6	
Hori	62.497	QP	49.7	7.2	7.6	32.2	32.3	40.0	7.7	
Hori		QP	44.1	16.9	9.3	32.0	38.3	43.5	5.2	
Hori	749.966	QP	34.5	20.9	12.6	31.7	36.3	46.0	9.7	
Hori	874.970		32.1	21.9	13.2	31.1	36.1	46.0	9.9	
Hori	1941.570		63.5	26.8	2.5	32.7	60.1	73.9	13.8	
Hori		PK	52.9	27.2	2.7	32.3	50.5	73.9	23.4	
Hori		PK	55.7	27.2	2.7	32.3	53.3	73.9	20.7	
Hori		PK	40.0	31.7	4.7	31.4	45.0	73.9	28.9	
Hori		PK	41.7	35.9	5.6	31.9	51.3	73.9	22.6	
Hori	9648.000	PK	43.2	38.5	6.6	32.7	55.6	73.9	18.3	
Hori	24120.000	PK	47.3	38.1	-1.5	30.4	53.5	73.9	20.4	
Hori	1941.570	AV	32.7	26.8	2.5	32.7	29.3	53.9	24.6	
Hori		AV	39.0	27.2	2.7	32.3	36.6	53.9	17.3	
Hori	2400.000	AV	43.6	27.2	2.7	32.3	41.2	53.9	12.7	
Hori		AV	28.4	31.7	4.7	31.4	33.4	53.9	20.5	
Hori		AV	30.1	35.9	5.6	31.9	39.7	53.9	14.2	
Hori	9648.000	AV	30.6	38.5	6.6	32.7	43.0	53.9	11.0	
Hori	24120.000		35.6	38.1	-1.5	30.4	41.8	53.9	12.1	
Vert		QP	49.6	11.6	7.4	32.2	36.4	40.0	3.6	
Vert	65.213	-	47.3	6.8	7.7	32.2	29.6	40.0	10.4	
Vert		QP	37.1	16.9	9.3	32.0	31.3	43.5	12.2	
Vert		QP	33.9	19.5	11.7	32.0	33.1	46.0	12.9	
Vert		QP	39.2	20.9	12.6	31.7	41.0	46.0	5.0	
Vert	874.967	-	32.7	21.9	13.2	31.1	36.7	46.0	9.3	
Vert		PK	66.9	26.8	2.5	32.7	63.5	73.9	10.4	
Vert		PK	53.0	27.2	2.7	32.3	50.6	73.9	23.3	
Vert		PK	55.1	27.2	2.7	32.3	52.7	73.9	21.2	
Vert	4824.000	PK	41.6	31.7	4.7	31.4	46.6	73.9	27.3	
Vert		PK	42.9	35.9	5.6	31.9	52.5	73.9	21.4	
Vert	9648.000	PK	43.5	38.5	6.6	32.7	55.9	73.9	18.0	
Vert	24120.000		47.6	38.1	-1.5	30.4	53.8	73.9	20.1	
Vert		AV	34.8	26.8	2.5	32.7	31.4	53.9	22.5	
Vert	2390.000		36.3	27.2	2.7	32.3	33.9	53.9	20.0	
Vert		AV	43.0	27.2	2.7	32.3	40.6	53.9	13.3	
Vert		AV	28.4	31.7	4.7	31.4	33.4	53.9	20.5	
Vert		AV	30.2	35.9	5.6	31.9	39.8	53.9	14.1	
Vert	9648.000	AV	30.6	38.5	6.6	32.7	43.0	53.9	10.9	
Vert	24120.000	AV	35.7	38.1	-1.5	30.4	41.9	53.9	12.1	

 $Result = Reading + Ant\ Factor + Loss\ (Cable + Attenuator + Filter-Distance\ factor (above\ 10GHz)) - Gain (Amplifier)$ 

### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Page : 42 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Radiated Spurious Emission (Power Supply: SONY) 11b, Tx 2437MHz, ANT0

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-H0-01

 Date
 12/08/2009
 12/09/2009
 12/11/2009

 Temperature/ Humidity
 23 deg.C./ 33%
 22 deg.C./ 36%
 22 deg.C./ 49%

 Engineer
 Takumi Shimada
 Takumi Shimada
 Takumi Shimada

 (1-10GHz)
 (10-26.5GHz)
 (30-1000MHz)

Mode 11b Tx 2437MHz 11Mbps ANT0

Polarity	Frequency	Detector	Reading	Ant.Fac.	Loss	Gain	Result	Limit	Margin	Remark
	[MHz]		[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
Hori	47.234	QP	39.7	11.2	7.4	32.2	26.1	40.0	13.9	
Hori	62.494	QP	49.3	7.2	7.6	32.2	31.9	40.0	8.1	
Hori	215.999	QP	43.8	16.9	9.3	32.0	38.0	43.5	5.5	
Hori	576.004	QP	38.4	19.5	11.7	32.0	37.6	46.0	8.4	
Hori		QP	35.8	20.9	12.6	31.7	37.6	46.0	8.4	
Hori		QP	32.0	21.9	13.2	31.1	36.0	46.0	10.0	
Hori		PK	64.9	26.8	2.5	32.7	61.5	73.9	12.4	
Hori		PK	42.7	31.8	4.6	31.4	47.7	73.9	26.2	
Hori		PK	43.9	36.1	5.6	31.9	53.7	73.9	20.2	
Hori		PK	44.2	38.6	6.6	32.7	56.7	73.9	17.2	
Hori		PK	46.7	38.5	-1.5	30.3	53.4	73.9	20.5	
Hori	1941.767	AV	35.3	26.8	2.5	32.7	31.9	53.9	22.0	
Hori	4874.000		30.2	31.8	4.6	31.4	35.2	53.9	18.7	
Hori		AV	31.7	36.1	5.6	31.9	41.5	53.9	12.4	
Hori		AV	31.8	38.6	6.6	32.7	44.3	53.9	9.6	
Hori		AV	35.1	38.5	-1.5	30.3	41.8	53.9	12.1	
Vert	46.150	-	49.8	11.6	7.4	32.2	36.6	40.0	3.4	
Vert	65.117	QP	46.7	6.8	7.7	32.2	29.0	40.0	11.0	
Vert		QP	36.4	16.9	9.3	32.0	30.6	43.5	12.9	
Vert	576.011	QP	34.0	19.5	11.7	32.0	33.2	46.0	12.8	
Vert		QP	38.5	20.9	12.6	31.7	40.3	46.0	5.7	
Vert	874.966	-	31.6	21.9	13.2	31.1	35.6	46.0	10.4	
Vert	1941.367		67.4	26.8	2.5	32.7	64.0	73.9	9.9	
Vert	4874.000		42.6	31.8	4.6	31.4	47.6	73.9	26.3	
Vert		PK	44.2	36.1	5.6	31.9	54.0	73.9	19.9	
Vert Vert	9748.000 24370.000		44.7 46.8	38.6 38.5	6.6 -1.5	32.7 30.3	57.2 53.5	73.9 73.9	16.7 20.4	
Vert		AV	31.1	26.8	2.5	32.7	27.7	53.9	26.2	
Vert		AV	30.1	31.8	4.6	31.4	35.1	53.9	18.8	
Vert		AV	31.7	36.1	5.6	31.9	41.5	53.9	12.4	
Vert	9748.000	AV	31.8	38.6	6.6	32.7	44.3	53.9	9.6	
Vert		AV	35.1	38.5	-1.5	30.3	41.8	53.9	12.1	
· cr	21370.000	,	30.1	30.0	1.0	30.3	11.0	55.5	12.1	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amprifier)

#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Page : 43 of 60 Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Radiated Spurious Emission (Power Supply: SONY) 11b, Tx 2462MHz, ANT0

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-H0-01

 Date
 12/08/2009
 12/09/2009
 12/11/2009

 Temperature/ Humidity
 23 deg.C./ 33%
 22 deg.C./ 36%
 22 deg.C./ 49%

 Engineer
 Takumi Shimada
 Takumi Shimada
 Takumi Shimada

 (1-10GHz)
 (10-26.5GHz)
 (30-1000MHz)

Mode 11b Tx 2462MHz 11Mbps ANT0

Polarity	Frequency	Detector	Reading	Ant.Fac.	Loss	Gain	Result	Limit	Margin	Remark
	[MHz]		[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]	·	[dB]	
Hori	47.119	QP	39.5	11.3	7.4	32.2	26.0	40.0	14.0	
Hori	62.521	QP	49.6	7.2	7.6	32.2	32.2	40.0	7.8	
Hori	215.999	QP	43.2	16.9	9.3	32.0	37.4	43.5	6.1	
Hori	576.006	QP	38.9	19.5	11.7	32.0	38.1	46.0	7.9	
Hori	749.963	QP	35.4	20.9	12.6	31.7	37.2	46.0	8.8	
Hori	874.963	QP	32.8	21.9	13.2	31.1	36.8	46.0	9.2	
Hori	1941.667	PK	65.4	26.8	2.5	32.7	62.0	73.9	11.9	
Hori	2483.500	PK	49.9	27.3	2.8	32.2	47.8	73.9	26.1	
Hori	4924.000	PK	41.2	31.8	4.6	31.4	46.2	73.9	27.7	
Hori	7386.000	PK	42.7	36.2	5.6	32.0	52.5	73.9	21.4	
Hori		PK	42.7	38.8	6.7	32.7	55.5	73.9	18.4	
Hori	24620.000	PK	46.3	38.8	-1.4	30.1	53.6	73.9	20.3	
Hori	1941.667	AV	34.4	26.8	2.5	32.7	31.0	53.9	22.9	
Hori	2483.500	AV	37.5	27.3	2.8	32.2	35.4	53.9	18.5	
Hori	4924.000	AV	28.7	31.8	4.6	31.4	33.7	53.9	20.2	
Hori	7386.000	AV	30.1	36.2	5.6	32.0	39.9	53.9	14.0	
Hori	9848.000	AV	30.3	38.8	6.7	32.7	43.1	53.9	10.8	
Hori	24620.000	AV	33.8	38.8	-1.4	30.1	41.1	53.9	12.8	
Vert	46.138	QP	49.4	11.6	7.4	32.2	36.2	40.0	3.8	
Vert	65.127	QP	46.8	6.8	7.7	32.2	29.1	40.0	10.9	
Vert	215.999	QP	36.1	16.9	9.3	32.0	30.3	43.5	13.2	
Vert	576.021	QP	34.3	19.5	11.7	32.0	33.5	46.0	12.5	
Vert	749.967	QP	38.1	20.9	12.6	31.7	39.9	46.0	6.1	
Vert	874.967	QP	31.3	21.9	13.2	31.1	35.3	46.0	10.7	
Vert	1942.417	PK	66.2	26.8	2.5	32.7	62.8	73.9	11.1	
Vert	2483.500	PK	48.5	27.3	2.8	32.2	46.4	73.9	27.5	
Vert	4924.000	PK	41.2	31.8	4.6	31.4	46.2	73.9	27.7	
Vert	7386.000	PK	42.6	36.2	5.6	32.0	52.4	73.9	21.5	
Vert	9848.000	PK	43.0	38.8	6.7	32.7	55.8	73.9	18.1	
Vert	24620.000	PK	46.2	38.8	-1.4	30.1	53.5	73.9	20.4	
Vert	1942.417	AV	35.9	26.8	2.5	32.7	32.5	53.9	21.4	
Vert	2483.500	AV	36.1	27.3	2.8	32.2	34.0	53.9	19.9	
Vert	4924.000	AV	28.7	31.8	4.6	31.4	33.7	53.9	20.2	
Vert	7386.000	AV	30.1	36.2	5.6	32.0	39.9	53.9	14.0	
Vert	9848.000	AV	30.3	38.8	6.7	32.7	43.1	53.9	10.8	
		AV								
Vert	24620.000	AV	33.7	38.8	-1.4	30.1	41.0	53.9	12.9	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Page : 44 of 60 Issued date : January 20.

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Radiated Spurious Emission (Power Supply: SONY) 11b, Tx 2412MHz, ANT1

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-H0-01

 Date
 12/08/2009
 12/09/2009
 12/11/2009

 Temperature/ Humidity
 23 deg.C./ 33%
 22 deg.C./ 36%
 22 deg.C./ 49%

 Engineer
 Takumi Shimada
 Takumi Shimada
 Takeshi Choda

 (1-10GHz)
 (10-26.5GHz)
 (30-1000MHz)

Mode 11b Tx 2412MHz 11Mbps ANT1

Polarity	Frequency	Detector	-	Ant.Fac.	Loss	Gain	Result	Limit	Margin	Remark
	[MHz]		[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]		[dB]	
Hori	46.987	QP	38.3	11.3	7.4	32.2	24.8	40.0	15.2	
Hori	62.497	QP	48.3	7.2	7.6	32.2	30.9	40.0	9.1	
Hori	215.999	QP	45.1	16.9	9.3	32.0	39.3	43.5	4.2	
Hori	749.959	QP	36.2	20.9	12.6	31.7	38.0	46.0	8.0	
Hori	874.952	QP	31.3	21.9	13.2	31.1	35.3	46.0	10.7	
Hori	1943.933	PK	65.4	26.8	2.5	32.7	62.0	73.9	11.9	
Hori	2390.000	PK	54.8	27.2	2.7	32.3	52.4	73.9	21.5	
Hori	2400.000	PK	60.3	27.2	2.7	32.3	57.9	73.9	16.0	
Hori	4824.000	PK	41.4	31.7	4.7	31.4	46.4	73.9	27.5	
Hori	7236.000	PK	42.3	35.9	5.6	31.9	51.9	73.9	22.0	
Hori	9648.000	PK	42.9	38.5	6.6	32.7	55.3	73.9	18.6	
Hori	24120.000	PK	47.7	38.1	-1.5	30.4	53.9	73.9	20.0	
Hori	1943.933	AV	34.7	26.8	2.5	32.7	31.3	53.9	22.6	
Hori	2390.000	AV	42.0	27.2	2.7	32.3	39.6	53.9	14.3	
Hori	2400.000	AV	47.9	27.2	2.7	32.3	45.5	53.9	8.4	
Hori	4824.000	AV	29.0	31.7	4.7	31.4	34.0	53.9	19.9	
Hori	9648.000	AV	30.6	38.5	6.6	32.7	43.0	53.9	10.9	
Hori	24120.000	AV	35.4	38.1	-1.5	30.4	41.6	53.9	12.3	
Vert	46.762	QP	49.3	11.4	7.4	32.2	35.9	40.0	4.1	
Vert	65.833	QP	50.0	6.7	7.7	32.2	32.2	40.0	7.8	
Vert	215.999	QP	33.5	16.9	9.3	32.0	27.7	43.5	15.8	
Vert	576.004	QP	33.8	19.5	11.7	32.0	33.0	46.0	13.0	
Vert	749.960	QP .	37.3	20.9	12.6	31.7	39.1	46.0	6.9	
Vert	874.953	QP OP	31.4	21.9	13.2	31.1	35.4	46.0	10.6	
Vert		PK	67.1	26.8	2.5	32.7	63.7	73.9	10.0	
		PK								
Vert	2390.000		54.2	27.2	2.7	32.3	51.8	73.9	22.1	
Vert	2400.000	PK	56.6	27.2	2.7	32.3	54.2	73.9	19.7	
Vert	4824.000	PK	40.7	31.7	4.7	31.4	45.7	73.9	28.2	
Vert	7236.000	PK	41.8	35.9	5.6	31.9	51.4	73.9	22.5	
Vert	9648.000	PK	42.5	38.5	6.6	32.7	54.9	73.9	19.0	
Vert	24120.000	PK	47.6	38.1	-1.5	30.4	53.8	73.9	20.1	
Vert	1943.845	AV	34.6	26.8	2.5	32.7	31.2	53.9	22.7	
Vert	2390.000	AV	40.2	27.2	2.7	32.3	37.8	53.9	16.1	
Vert	2400.000	AV	44.6	27.2	2.7	32.3	42.2	53.9	11.7	
Vert	4824.000	AV	30.8	31.7	4.7	31.4	35.8	53.9	18.1	
Vert	7236.000	AV	30.6	35.9	5.6	31.9	40.2	53.9	13.7	
Vert	9648.000	AV	30.9	38.5	6.6	32.7	43.3	53.9	10.6	
Vert	24120.000	AV	35.6	38.1	-1.5	30.4	41.8	53.9	12.1	
v CI t	Z+120.000	ΑV	33.0	30.1	-1.3	30.4	41.0	33.9	14.1	
							1			
		l					l			

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

## UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

<sup>\*</sup>The 10th harmonic was not seen so the result was its base noise level. Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

Page : 45 of 60 Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Radiated Spurious Emission (Power Supply: SONY) 11b, Tx 2437MHz, ANT1

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-H0-01

 Date
 12/08/2009
 12/09/2009
 12/11/2009

 Temperature/ Humidity
 23 deg.C./ 33%
 22 deg.C./ 36%
 22 deg.C./ 49%

 Engineer
 Takumi Shimada
 Takumi Shimada
 Takeshi Choda

 (1-10GHz)
 (10-26.5GHz)
 (30-1000MHz)

Mode 11b Tx 2437MHz 11Mbps ANT1

Polarity	Frequency	Detector	Reading		Loss	Gain	Result	Limit	Margin	Remark
	[MHz]		[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
Hori	46.987	-	38.9	11.3	7.4	32.2	25.4	40.0	14.6	
Hori	215.999	QP	43.7	16.9	9.3	32.0	37.9	43.5	5.6	
Hori		QP	38.4	19.5	11.7	32.0	37.6	46.0	8.4	
Hori	749.960	`	37.2	20.9	12.6	31.7	39.0	46.0	7.0	
Hori	874.953	-	30.8	21.9	13.2	31.1	34.8	46.0	11.2	
Hori	1944.967		64.9	26.8	2.5	32.7	61.5	73.9	12.4	
Hori		PK	40.9	31.8	4.6	31.4	45.9	73.9	28.0	
Hori	7311.000		42.3	36.1	5.6	31.9	52.1	73.9	21.8	
Hori		PK	42.1	38.6	6.6	32.7	54.6	73.9	19.3	
Hori	24370.000		46.9	38.5	-1.5	30.3	53.6	73.9	20.3	
Hori		AV	28.7	31.8	4.6	31.4	33.7	53.9	20.2	
Hori		AV	30.8	36.1	5.6	31.9	40.6	53.9	13.3	
Hori		AV	30.6	38.6	6.6	32.7	43.1	53.9	10.8	
Hori	24370.000	AV	35.3	38.5	-1.5	30.3	42.0	53.9	11.9	
Vert		QP	49.2	11.4	7.4	32.2	35.8	40.0	4.2	
Vert	65.861	QP	48.5	6.7	7.7	32.2	30.7	40.0	9.3	
Vert	215.999	QP	33.6	16.9	9.3	32.0	27.8	43.5	15.7	
Vert	576.004	QP	33.9	19.5	11.7	32.0	33.1	46.0	12.9	
Vert	749.959	QP	36.9	20.9	12.6	31.7	38.7	46.0	7.3	
Vert	874.953	QP	31.6	21.9	13.2	31.1	35.6	46.0	10.4	
Vert	1944.967	PK	66.9	26.8	2.5	32.7	63.5	73.9	10.4	
Vert	4874.000	PK	41.3	31.8	4.6	31.4	46.3	73.9	27.6	
Vert	7311.000	PK	41.8	36.1	5.6	31.9	51.6	73.9	22.3	
Vert	9748.000	PK	42.1	38.6	6.6	32.7	54.6	73.9	19.3	
Vert	24370.000	PK	46.7	38.5	-1.5	30.3	53.4	73.9	20.5	
Vert	1944.967	AV	36.2	26.8	2.5	32.7	32.8	53.9	21.1	
Vert	4874.000	AV	30.1	31.8	4.6	31.4	35.1	53.9	18.8	
Vert	7311.000	AV	29.8	36.1	5.6	31.9	39.6	53.9	14.3	
Vert	9748.000	AV	30.2	38.6	6.6	32.7	42.7	53.9	11.2	
Vert	24370.000	AV	35.1	38.5	-1.5	30.3	41.8	53.9	12.1	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amprifier)

\*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Page : 46 of 60 Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Radiated Spurious Emission (Power Supply: SONY) 11b, Tx 2462MHz, ANT1

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-H0-01

 Date
 12/08/2009
 12/09/2009
 12/11/2009

 Temperature/ Humidity
 23 deg.C./ 33%
 22 deg.C./ 36%
 22 deg.C./ 49%

 Engineer
 Takumi Shimada
 Takumi Shimada
 Takeshi Choda

 (1-10GHz)
 (10-26.5GHz)
 (30-1000MHz)

Mode 11b Tx 2462MHz 11Mbps ANT1

Polarity	Frequency	Datastas	Reading	Ant.Fac.	T	Gain	Result	Limit	Margin	Remark
Polarity	[MHz]	Detector	[dBuV]	[dB/m]	Loss [dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	кетагк
Hori	47.120	QP	40.4	11.3	7.4	32.2	26.9	40.0	13.1	
Hori		QP QP	48.9	7.2	7.4	32.2	31.5	40.0	8.5	
Hori	215.999	QP QP	43.8	16.9	9.3	32.0	38.0	43.5	5.5	
Hori		QP QP	38.3	19.5	11.7	32.0	37.5	46.0	8.5	
Hori	749.960	QP	36.0	20.9	12.6	31.7	37.3	46.0	8.2	
Hori	874.953	-	30.4	21.9	13.2	31.7	34.4	46.0	11.6	
Hori	1943.975	PK.	65.6	26.8	2.5	32.7	62.2	73.9	11.7	
Hori		PK	50.2	27.3	2.8	32.7	48.1	73.9	25.8	
Hori	4924.000	PK	40.4	31.8	4.6	31.4	45.4	73.9	28.5	
Hori		PK	41.5	36.2	5.6	32.0	51.3	73.9	22.6	
Hori		PK	42.1	38.8	6.7	32.7	54.9	73.9	19.0	
Hori	24620.000		46.4	38.8	-1.4	30.1	53.7	73.9	20.2	
Hori	1943.975	AV	36.8	26.8	2.5	32.7	33.4	53.9	20.5	
Hori		AV	38.6	27.3	2.8	32.7	36.5	53.9	17.4	
Hori		AV	28.7	31.8	4.6	31.4	33.7	53.9	20.2	
Hori		AV	30.0	36.2	5.6	32.0	39.8	53.9	14.1	
Hori	9848.000		30.3	38.8	6.7	32.7	43.1	53.9	10.8	
Hori	24620.000	AV	35.4	38.8	-1.4	30.1	42.7	53.9	11.2	
Vert	46.762	QP	49.1	11.4	7.4	32.2	35.7	40.0	4.3	
Vert	65.861	QP	48.3	6.7	7.7	32.2	30.5	40.0	9.5	
Vert		QP	33.9	16.9	9.3	32.0	28.1	43.5	15.4	
Vert	576.004	QP	33.5	19.5	11.7	32.0	32.7	46.0	13.3	
Vert		OP	37.1	20.9	12.6	31.7	38.9	46.0	7.1	
Vert	874.953	OP	31.5	21.9	13.2	31.1	35.5	46.0	10.5	
Vert	1943.975	PK	67.5	26.8	2.5	32.7	64.1	73.9	9.8	
Vert	2483.500	PK	49.7	27.3	2.8	32.2	47.6	73.9	26.3	
Vert	4924.000	PK	40.3	31.8	4.6	31.4	45.3	73.9	28.6	
Vert	7386.000	PK	41.8	36.2	5.6	32.0	51.6	73.9	22.3	
Vert	9848.000	PK	42.9	38.8	6.7	32.7	55.7	73.9	18.2	
Vert	24620.000	PK	46.3	38.8	-1.4	30.1	53.6	73.9	20.3	
Vert	1943.975	AV	35.1	26.8	2.5	32.7	31.7	53.9	22.2	
Vert	2483.500	AV	37.5	27.3	2.8	32.2	35.4	53.9	18.5	
Vert	4924.000	AV	28.9	31.8	4.6	31.4	33.9	53.9	20.0	
Vert	7386.000	AV	30.3	36.2	5.6	32.0	40.1	53.9	13.8	
Vert	9848.000	AV	30.2	38.8	6.7	32.7	43.0	53.9	10.9	
Vert	24620.000	AV	35.5	38.8	-1.4	30.1	42.8	53.9	11.2	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

#### UL Japan, Inc. Head Office EMC Lab.

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

<sup>\*</sup>Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

<sup>\*</sup>The 10th harmonic was not seen so the result was its base noise level. Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB

: XCET12NA28K

Page : 47 of 60 Issued date : January 20, 2010

FCC ID

Radiated Spurious Emission (Power Supply: SONY) 11g, Tx 2412MHz, ANT0

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-H0-01

 Date
 12/08/2009
 12/09/2009
 12/11/2009

 Temperature/ Humidity
 23 deg.C./ 33%
 22 deg.C./ 36%
 22 deg.C./ 49%

 Engineer
 Takumi Shimada
 Takumi Shimada
 Takumi Shimada

 (1-10GHz)
 (10-26.5GHz)
 (30-1000MHz)

Mode 11g Tx 2412MHz 24Mbps ANT0

Polarity	Frequency	Detector		Ant.Fac.	Loss	Gain	Result	Limit	Margin	Remark
	[MHz]		[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
Hori	46.963	QP	38.3	11.3	7.4	32.2	24.8	40.0	15.2	
Hori	62.499	QP	48.1	7.2	7.6	32.2	30.7	40.0	9.3	
Hori	215.999	QP	44.1	16.9	9.3	32.0	38.3	43.5	5.2	
Hori	576.011	QP	37.7	19.5	11.7	32.0	36.9	46.0	9.1	
Hori	749.951	QP	35.0	20.9	12.6	31.7	36.8	46.0	9.2	
Hori	874.938	QP	32.3	21.9	13.2	31.1	36.3	46.0	9.7	
Hori	1943.672	PK	64.1	26.8	2.5	32.7	60.7	73.9	13.2	
Hori	1943.672	PK	35.7	26.8	2.5	32.7	32.3	73.9	41.6	
Hori	2390.000	PK	56.9	27.2	2.7	32.3	54.5	73.9	19.4	
Hori	2400.000	PK	77.7	27.2	2.7	32.3	75.3	-	-	See 20dBc Data Sheet
Hori	4824.000	PK	40.4	31.7	4.7	31.4	45.4	73.9	28.5	
Hori	7236.000	PK	42.2	35.9	5.6	31.9	51.8	73.9	22.1	
Hori	9648.000	PK	42.1	38.5	6.6	32.7	54.5	73.9	19.4	
Hori	24120.000	PK	47.4	38.1	-1.5	30.4	53.6	73.9	20.3	
Hori	2390.000	AV	42.1	27.2	2.7	32.3	39.7	53.9	14.2	
Hori	2400.000	AV	58.7	27.2	2.7	32.3	56.3	-	-	See 20dBc Data Sheet
Hori	4824.000	AV	28.5	31.7	4.7	31.4	33.5	53.9	20.4	
Hori	7236.000	AV	30.2	35.9	5.6	31.9	39.8	53.9	14.1	
Hori	9648.000	AV	30.5	38.5	6.6	32.7	42.9	53.9	11.0	
Hori	24120.000		35.5	38.1	-1.5	30.4	41.7	53.9	12.2	
Vert	46.198	QP	49.9	11.6	7.4	32.2	36.7	40.0	3.3	
Vert	65.161	QP .	46.6	6.8	7.7	32.2	28.9	40.0	11.1	
Vert	215.999	QP	36.6	16.9	9.3	32.0	30.8	43.5	12.7	
Vert	576.002	QP OP	34.1	19.5	11.7	32.0	33.3	46.0	12.7	
Vert	749.952	QP QP	38.5	20.9	12.6	31.7	40.3	46.0	5.7	
Vert	874.933	QP QP	31.5	21.9	13.2	31.1	35.5	46.0	10.5	
Vert	1943.672	`	67.2	26.8	2.5	32.7	63.8	73.9	10.3	
Vert	2390.000	PK	58.7	27.2	2.7	32.7	56.3	73.9	17.6	
Vert	2400.000			27.2	2.7			/3.9	17.0	See 20dBc Data Sheet
			78.8			32.3	76.4	-	-	See 20dBc Data Sheet
Vert	4824.000	PK	40.3	31.7	4.7	31.4	45.3	73.9	28.6	
Vert	7236.000	PK	42.1	35.9	5.6	31.9	51.7	73.9	22.2	
Vert	9648.000	PK	42.9	38.5	6.6	32.7	55.3	73.9	18.6	
Vert	24120.000		47.8	38.1	-1.5	30.4	54.0	73.9	19.9	
Vert	1943.672	AV	34.5	26.8	2.5	32.7	31.1	53.9	22.8	
Vert	2390.000	AV	42.2	27.2	2.7	32.3	39.8	53.9	14.1	
Vert	2400.000		60.3	27.2	2.7	32.3	57.9	-	-	See 20dBc Data Sheet
Vert	4824.000	AV	28.4	31.7	4.7	31.4	33.4	53.9	20.5	
Vert	7236.000		30.2	35.9	5.6	31.9	39.8	53.9	14.1	
Vert	9648.000	AV	30.5	38.5	6.6	32.7	42.9	53.9	11.0	
Vert	24120.000	AV	35.6	38.1	-1.5	30.4	41.8	53.9	12.1	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Page : 48 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

# Radiated Spurious Emission (Power Supply: SONY)

11g, Tx 2412MHz, ANT0

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-H0-01
Date 12/08/2009
Temperature/ Humidity 23 deg.C./ 33%
Engineer Takumi Shimada (1-10GHz)

Mode 11g Tx 2412MHz 24Mbps ANT0

20dBc Data Sheet

Loubt Da	ta Succi									
Polarity	Frequency	Detector	Reading	Ant	Loss	Gain	Result	Limit	Margin	Remark
				Factor						
	[MHz]		[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
Hori	2412.000	PK	95.5	27.2	2.7	32.3	93.1		-	Carrier
Hori	2400.000	PK	63.1	27.2	2.7	32.3	60.7	73.1	12.4	
Vert	2412.000	PK	96.0	27.2	2.7	32.3	93.6	-	-	Carrier
Vert	2400.000	PK	63.8	27.2	2.7	32.3	61.4	73.6	12.2	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amprifier)

**Head Office EMC Lab.** 

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

Page : 49 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Radiated Spurious Emission (Power Supply: SONY) 11g, Tx 2437MHz, ANT0

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-H0-01

 Date
 12/08/2009
 12/09/2009
 12/11/2009

 Temperature/ Humidity
 23 deg.C./ 33%
 22 deg.C./ 36%
 22 deg.C./ 49%

 Engineer
 Takumi Shimada
 Takumi Shimada
 Takumi Shimada

 (1-10GHz)
 (10-26.5GHz)
 (30-1000MHz)

Mode 11g Tx 2437MHz 24Mbps ANT0

Polarity	Frequency	Detector	Reading	Ant.Fac.	Loss	Gain	Result	Limit	Margin	Remark
	[MHz]		[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
Hori	47.453	QP	39.5	11.2	7.4	32.2	25.9	40.0	14.1	
Hori	62.498	QP	49.2	7.2	7.6	32.2	31.8	40.0	8.2	
Hori	215.999	QP	44.3	16.9	9.3	32.0	38.5	43.5	5.0	
Hori	576.003	QP	39.0	19.5	11.7	32.0	38.2	46.0	7.8	
Hori	749.956	QP	35.5	20.9	12.6	31.7	37.3	46.0	8.7	
Hori	874.953	QP	32.1	21.9	13.2	31.1	36.1	46.0	9.9	
Hori	1943.767	PK	65.7	26.8	2.5	32.7	62.3	73.9	11.6	
Hori		PK	40.3	31.8	4.6	31.4	45.3	73.9	28.6	
Hori		PK	42.2	36.1	5.6	31.9	52.0	73.9	21.9	
Hori		PK	42.8	38.6	6.6	32.7	55.3	73.9	18.6	
Hori		PK	46.9	38.5	-1.5	30.3	53.6	73.9	20.3	
Hori		AV	36.8	26.8	2.5	32.7	33.4	53.9	20.5	
Hori		AV	28.5	31.8	4.6	31.4	33.5	53.9	20.4	
Hori	7311.000	AV	30.1	36.1	5.6	31.9	39.9	53.9	14.0	
Hori		AV	30.1	38.6	6.6	32.7	42.6	53.9	11.3	
Hori	24370.000	AV	35.3	38.5	-1.5	30.3	42.0	53.9	11.9	
Vert	46.198	QP	49.7	11.6	7.4	32.2	36.5	40.0	3.5	
Vert	65.035	QP	46.4	6.8	7.7	32.2	28.7	40.0	11.3	
Vert		QP	36.9	16.9	9.3	32.0	31.1	43.5	12.4	
Vert	575.997	QP	34.2	19.5	11.7	32.0	33.4	46.0	12.6	
Vert		QP	38.1	20.9	12.6	31.7	39.9	46.0	6.1	
Vert	874.961	QP	31.0	21.9	13.2	31.1	35.0	46.0	11.0	
Vert	1943.767	PK	67.8	26.8	2.5	32.7	64.4	73.9	9.5	
Vert		PK	40.7	31.8	4.6	31.4	45.7	73.9	28.2	
Vert		PK	41.8	36.1	5.6	31.9	51.6	73.9	22.3	
Vert	9748.000	PK	41.7	38.6	6.6	32.7	54.2	73.9	19.7	
Vert	24370.000	PK	46.7	38.5	-1.5	30.3	53.4	73.9	20.5	
Vert	1943.767	AV	37.2	26.8	2.5	32.7	33.8	53.9	20.1	
Vert	4874.000	AV	28.5	31.8	4.6	31.4	33.5	53.9	20.4	
Vert	7311.000	AV	30.1	36.1	5.6	31.9	39.9	53.9	14.0	
Vert Vert	9748.000 24370.000	AV AV	30.1 35.2	38.6 38.5	6.6 -1.5	32.7 30.3	42.6 41.9	53.9 53.9	11.3 12.0	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amprifier)

UL Japan, Inc. Head Office EMC Lab.

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

<sup>\*</sup>Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

<sup>\*</sup>The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

Page : 50 of 60 Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Radiated Spurious Emission (Power Supply: SONY) 11g, Tx 2462MHz, ANT0

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-H0-01

 Date
 12/08/2009
 12/09/2009
 12/11/2009

 Temperature/ Humidity
 23 deg.C./ 33%
 22 deg.C./ 36%
 22 deg.C./ 49%

 Engineer
 Takumi Shimada
 Takumi Shimada
 Takumi Shimada

 (1-10GHz)
 (10-26.5GHz)
 (30-1000MHz)

Mode 11g Tx 2462MHz 24Mbps ANT0

Hori 874.969 Hori 1944.538 Hori 2483.500 Hori 4924.000 Hori 7386.000 Hori 9848.000 Hori 1944.538 Hori 24620.000 Hori 1944.538 Hori 4924.000 Hori 7386.000 Hori 7386.000 Hori 9848.000 Hori 24620.000 Vert 46.368 Vert 64.859 Vert 576.003 Vert 749.965 Vert 749.965 Vert 874.965 Vert 1944.538	QP QP QP QP PK PK PK PK AV AV AV AV QP QP QP QP	[dBuV] 38.9 49.9 44.3 38.4 36.1 31.2 63.6 58.6 41.4 42.3 42.5 46.4 34.9 43.2 29.1 30.1 30.3 33.6 49.5 45.8 36.3 34.0	[dB/m] 11.0 7.2 16.9 19.5 20.9 21.9 26.8 27.3 31.8 36.2 38.8 26.8 27.3 31.8 36.2 38.8 11.5 6.9 16.9	[dB] 7.4 7.6 9.3 11.7 12.6 13.2 2.5 2.8 4.6 5.6 6.7 -1.4 2.5 2.8 4.6 7.7 7.7 9.3	[dB] 32.2 32.2 32.0 32.0 32.0 32.7 31.1 32.7 32.2 31.4 32.0 32.7 30.1 32.7 30.1 32.2 32.2 32.2 32.2 32.2 32.2 32.2	[dBuV/m] 25.1 32.5 38.5 37.6 37.9 35.2 60.2 56.5 46.4 52.11 55.3 53.7 31.5 41.1 39.9 43.1 40.9 36.2 28.2	[dBuV/m] 40.0 40.0 43.5 46.0 46.0 73.9 73.9 73.9 73.9 73.9 53.9 53.9 53.9 53.9 53.9 40.0 40.0	[dB] 14.9 7.5 5.0 8.4 8.1 10.8 13.7 17.4 27.5 21.8 18.6 20.2 22.4 12.8 19.8 14.0 10.8 13.0 3.8	
Hori 62.495 Hori 215.999 Hori 576.001 Hori 749.971 Hori 874.969 Hori 1944.538 Hori 4924.000 Hori 9848.000 Hori 1944.538 Hori 24620.000 Hori 1944.538 Hori 4924.000 Hori 9848.000 Hori 1944.538 Hori 2483.500 Hori 4924.000 Hori 9848.000 Hori 9848.000 Hori 4924.000 Vert 46.368 Vert 64.859 Vert 576.003 Vert 749.965 Vert 749.965 Vert 874.965 Vert 1944.538	QP QP QP QP PK PK PK PK PK AV AV AV AV QP QP QP	49.9 44.3 38.4 36.1 31.2 63.6 58.6 41.4 42.3 42.5 46.4 34.9 43.2 29.1 30.1 30.3 33.6 49.5 45.8 45.8 46.8	7.2 16.9 19.5 20.9 21.9 26.8 27.3 31.8 36.2 38.8 27.3 31.8 36.2 38.8 27.3 31.8 36.2 38.8	7.6 9.3 11.7 12.6 13.2 2.5 2.8 4.6 6.7 -1.4 2.5 2.8 4.6 5.6 6.7 -1.4 7.4 7.7	32.2 32.0 32.0 31.7 31.1 32.7 32.2 31.4 32.0 32.7 30.1 32.7 32.2 31.4 32.0 32.7 30.1 32.2 31.4 32.0 32.7 32.2	32.5 38.5 37.6 37.9 35.2 60.2 56.5 46.4 52.1 55.3 53.7 31.5 41.1 39.9 43.1 40.9 36.2 28.2	40.0 43.5 46.0 46.0 73.9 73.9 73.9 73.9 73.9 53.9 53.9 53.9 53.9 53.9 40.0	7.5 5.0 8.4 8.1 10.8 13.7 17.4 27.5 21.8 18.6 20.2 22.4 12.8 14.0 10.8 13.0	
Hori 215.999 Hori 576.001 Hori 749.971 Hori 874.969 Hori 1944.538 Hori 2483.500 Hori 4924.000 Hori 9848.000 Hori 1944.538 Hori 24620.000 Hori 1944.538 Hori 2483.500 Hori 4924.000 Hori 4924.000 Hori 9848.000 Hori 9848.000 Hori 9848.000 Hori 4924.000 Vert 46.368 Vert 64.859 Vert 576.003 Vert 749.965 Vert 749.965 Vert 874.965 Vert 1944.538	QP QP QP PK PK PK PK PK AV AV AV AV QP QP QP QP	44.3 38.4 36.1 31.2 63.6 58.6 41.4 42.5 46.4 34.9 43.2 29.1 30.1 30.3 33.6 49.5 45.8 36.3 34.0	16.9 19.5 20.9 21.9 26.8 27.3 31.8 36.2 38.8 27.3 31.8 36.2 38.8 38.8 26.9 11.5 6.9	9.3 11.7 12.6 13.2 2.5 2.8 4.6 6.7 -1.4 2.5 2.8 4.6 5.6 6.7 -1.4 7.4 7.7	32.0 32.0 31.7 31.1 32.7 32.2 31.4 32.0 32.7 30.1 32.7 32.2 31.4 32.0 32.7 30.1 32.2 32.2 32.2 32.2 32.2 32.2 32.2 32	38.5 37.6 37.9 35.2 60.2 56.5 46.4 52.1 55.3 53.7 31.5 41.1 39.9 43.1 40.9 36.2 28.2	43.5 46.0 46.0 46.0 73.9 73.9 73.9 73.9 73.9 53.9 53.9 53.9 53.9 40.0	5.0 8.4 8.1 10.8 13.7 17.4 27.5 21.8 18.6 20.2 22.4 12.8 14.0 10.8 13.0	
Hori 576.001 Hori 749.971 Hori 874.969 Hori 1944.538 Hori 4924.000 Hori 9848.000 Hori 1944.538 Hori 24620.000 Hori 1944.538 Hori 24620.000 Hori 1944.538 Hori 2483.500 Hori 4924.000 Hori 4924.000 Hori 9848.000 Hori 4924.000 Vert 46.368 Vert 64.859 Vert 576.003 Vert 749.965 Vert 749.965 Vert 874.965 Vert 1944.538	QP QP PK PK PK PK PK AV AV AV AV QP QP QP	38.4 36.1 31.2 63.6 58.6 41.4 42.3 42.5 46.4 34.9 43.2 29.1 30.1 30.3 33.6 49.5 45.8 36.3 34.0	19.5 20.9 21.9 26.8 27.3 31.8 36.2 38.8 26.8 27.3 31.8 36.2 38.8 36.2 11.5 6.9	11.7 12.6 13.2 2.5 2.8 4.6 5.6 6.7 -1.4 2.5 2.8 4.6 5.6 6.7 7-1.4 7.4	32.0 31.7 31.1 32.7 32.2 31.4 32.0 32.7 30.1 32.7 32.2 31.4 32.0 32.7 30.1 32.2 32.3 32.2 32.3	37.6 37.9 35.2 60.2 56.5 46.4 52.1 55.3 53.7 31.5 41.1 39.9 43.1 40.9 36.2 28.2	46.0 46.0 46.0 73.9 73.9 73.9 73.9 73.9 53.9 53.9 53.9 53.9 53.9 40.0	8.4 8.1 10.8 13.7 17.4 27.5 21.8 18.6 20.2 22.4 12.8 14.0 10.8 13.0	
Hori 749.971 Hori 874.969 Hori 1944.538 Hori 2483.500 Hori 4924.000 Hori 9848.000 Hori 24620.000 Hori 1944.538 Hori 2483.500 Hori 4924.000 Hori 4924.000 Hori 4924.000 Hori 7386.000 Hori 4924.000 Hori 4924.000 Hori 494.800 Vert 46.368 Vert 64.859 Vert 576.003 Vert 749.965 Vert 749.965 Vert 874.965 Vert 1944.538	QP QP PK PK PK PK PK PK AV AV AV AV AV QP QP QP	36.1 31.2 63.6 58.6 41.4 42.3 42.5 46.4 34.9 43.2 29.1 30.1 30.3 33.6 49.5 45.8 36.3 34.0	20.9 21.9 26.8 27.3 31.8 36.2 38.8 26.8 27.3 31.8 36.2 38.8 11.5 6.9	12.6 13.2 2.5 2.8 4.6 5.6 6.7 -1.4 2.5 2.8 4.6 6.7 -1.4 7.4	31.7 31.1 32.7 32.2 31.4 32.0 32.7 30.1 32.7 32.2 31.4 32.0 32.7 30.1 32.2 31.4 32.0 32.7 30.1 32.2 31.4 32.0 32.7 30.1 32.7 32.2 31.4 32.0 32.7 30.1 32.7 32.2 31.4 32.0 32.7 32.2 31.4 32.0 32.7 32.2 31.4 32.0 32.7 32.0	37.9 35.2 60.2 56.5 46.4 52.11 55.3 53.7 31.5 41.1 39.9 43.1 40.9 36.2 28.2	46.0 46.0 73.9 73.9 73.9 73.9 73.9 53.9 53.9 53.9 53.9 53.9 53.9 40.0	8.1 10.8 13.7 17.4 27.5 21.8 18.6 20.2 22.4 12.8 19.8 14.0 10.8 13.0	
Hori 874.969 Hori 1944.538 Hori 2483.500 Hori 4924.000 Hori 7386.000 Hori 9848.000 Hori 1944.538 Hori 24620.000 Hori 1944.538 Hori 4924.000 Hori 7386.000 Hori 7386.000 Hori 9848.000 Hori 948.000 Vert 46.368 Vert 64.859 Vert 576.003 Vert 749.965 Vert 749.965 Vert 874.965 Vert 1944.538	QP PK PK PK PK PK PK AV AV AV AV QP QP QP QP	31.2 63.6 58.6 41.4 42.3 42.5 46.4 34.9 43.2 29.1 30.1 30.3 33.6 49.5 45.8 36.3 34.0	21.9 26.8 27.3 31.8 36.2 38.8 26.8 27.3 31.8 36.2 38.8 11.5 6.9	13.2 2.5 2.8 4.6 5.6 6.7 -1.4 2.5 2.8 4.6 5.6 6.7 -1.4 7.4	31.1 32.7 32.2 31.4 32.0 32.7 30.1 32.7 32.2 31.4 32.0 32.7 30.1 32.2 32.0 32.7 32.2 32.2 32.2 32.2	35.2 60.2 56.5 46.4 52.1 55.3 31.5 41.1 39.9 43.1 40.9 36.2 28.2	46.0 73.9 73.9 73.9 73.9 73.9 73.9 53.9 53.9 53.9 53.9 53.9 40.0	10.8 13.7 17.4 27.5 21.8 18.6 20.2 22.4 12.8 19.8 14.0 10.8 13.0	
Hori 1944.538 Hori 2483.500 Hori 4924.000 Hori 7386.000 Hori 9848.000 Hori 1944.538 Hori 4924.000 Hori 1944.538 Hori 4924.000 Hori 7386.000 Hori 9848.000 Hori 9848.000 Hori 24620.000 Vert 46.368 Vert 64.859 Vert 576.003 Vert 749.965 Vert 874.965 Vert 1944.538	PK PK PK PK PK PK AV AV AV AV QP QP QP	63.6 58.6 41.4 42.3 42.5 46.4 34.9 43.2 29.1 30.1 30.3 33.6 49.5 45.8 36.3 34.0	26.8 27.3 31.8 36.2 38.8 38.8 26.8 27.3 31.8 36.2 38.8 36.2 11.5 6.9	2.5 2.8 4.6 5.6 6.7 -1.4 2.5 2.8 4.6 6.7 -1.4 7.4	32.7 32.2 31.4 32.0 32.7 30.1 32.7 32.2 31.4 32.0 32.7 30.1 32.2 32.2	60.2 56.5 46.4 52.1 55.3 53.7 31.5 41.1 39.9 43.1 40.9 36.2 28.2	73.9 73.9 73.9 73.9 73.9 73.9 53.9 53.9 53.9 53.9 53.9 40.0	13.7 17.4 27.5 21.8 18.6 20.2 22.4 12.8 19.8 14.0 10.8 13.0	
Hori 2483.500 Hori 4924.000 Hori 7386.000 Hori 9848.000 Hori 1944.538 Hori 24620.000 Hori 1944.538 Hori 4924.000 Hori 7386.000 Hori 9848.000 Hori 9848.000 Hori 24620.000 Vert 46.368 Vert 64.859 Vert 215.999 Vert 576.003 Vert 749.965 Vert 874.965 Vert 1944.538	PK PK PK PK PK AV AV AV AV QP QP QP	58.6 41.4 42.3 42.5 46.4 34.9 43.2 29.1 30.1 30.3 33.6 49.5 45.8 36.3 34.0	27.3 31.8 36.2 38.8 38.8 26.8 27.3 31.8 36.2 38.8 38.8 11.5 6.9	2.8 4.6 5.6 6.7 -1.4 2.5 2.8 4.6 5.6 6.7 -1.4 7.4	32.2 31.4 32.0 32.7 30.1 32.7 32.2 31.4 32.0 32.7 30.1 32.2 32.2	56.5 46.4 52.1 55.3 53.7 31.5 41.1 39.9 43.1 40.9 36.2 28.2	73.9 73.9 73.9 73.9 73.9 53.9 53.9 53.9 53.9 53.9 40.0	17.4 27.5 21.8 18.6 20.2 22.4 12.8 19.8 14.0 10.8 13.0	
Hori 4924.000 Hori 7386.000 Hori 9848.000 Hori 9848.000 Hori 1944.538 Hori 2483.500 Hori 4924.000 Hori 9848.000 Hori 9848.000 Hori 9848.000 Hori 24620.000 Vert 46.368 Vert 64.859 Vert 215.999 Vert 576.003 Vert 749.965 Vert 874.965 Vert 1944.538	PK PK PK AV AV AV AV QP QP QP	41.4 42.3 42.5 46.4 34.9 43.2 29.1 30.1 30.3 33.6 49.5 45.8 36.3 34.0	31.8 36.2 38.8 38.8 26.8 27.3 31.8 36.2 38.8 38.8 11.5 6.9	4.6 5.6 6.7 -1.4 2.5 2.8 4.6 5.6 6.7 -1.4 7.4	31.4 32.0 32.7 30.1 32.7 32.2 31.4 32.0 32.7 30.1 32.2 32.2	46.4 52.1 55.3 53.7 31.5 41.1 34.1 39.9 43.1 40.9	73.9 73.9 73.9 73.9 53.9 53.9 53.9 53.9 53.9 40.0	27.5 21.8 18.6 20.2 22.4 12.8 19.8 14.0 10.8 13.0	
Hori 7386.000 Hori 9848.000 Hori 24620.000 Hori 1944.538 Hori 2483.500 Hori 4924.000 Hori 9848.000 Hori 9848.000 Hori 24620.000 Vert 46.368 Vert 64.859 Vert 576.003 Vert 749.965 Vert 874.965 Vert 1944.538	PK PK PK AV AV AV AV QP QP QP	42.3 42.5 46.4 34.9 43.2 29.1 30.1 30.3 33.6 49.5 45.8 36.3 34.0	36.2 38.8 38.8 26.8 27.3 31.8 36.2 38.8 11.5 6.9 16.9	5.6 6.7 -1.4 2.5 2.8 4.6 5.6 6.7 -1.4 7.4 7.7	32.0 32.7 30.1 32.7 32.2 31.4 32.0 32.7 30.1 32.2 32.2	52.1 55.3 53.7 31.5 41.1 34.1 39.9 43.1 40.9 36.2 28.2	73.9 73.9 73.9 53.9 53.9 53.9 53.9 53.9 40.0	21.8 18.6 20.2 22.4 12.8 19.8 14.0 10.8 13.0	
Hori 9848.000 Hori 24620.000 Hori 1944.538 Hori 2483.500 Hori 4924.000 Hori 7386.000 Hori 9848.000 Hori 24620.000 Vert 46.368 Vert 64.859 Vert 576.003 Vert 749.965 Vert 874.965 Vert 1944.538	PK PK AV AV AV AV QP QP QP	42.5 46.4 34.9 43.2 29.1 30.1 30.3 33.6 49.5 45.8 36.3 34.0	38.8 38.8 26.8 27.3 31.8 36.2 38.8 38.8 11.5 6.9 16.9	6.7 -1.4 2.5 2.8 4.6 5.6 6.7 -1.4 7.4 7.7	32.7 30.1 32.7 32.2 31.4 32.0 32.7 30.1 32.2 32.2	55.3 53.7 31.5 41.1 34.1 39.9 43.1 40.9 36.2 28.2	73.9 73.9 53.9 53.9 53.9 53.9 53.9 40.0	18.6 20.2 22.4 12.8 19.8 14.0 10.8 13.0	
Hori 24620.000 Hori 1944.538 Hori 2483.500 Hori 4924.000 Hori 7386.000 Hori 9848.000 Vert 46.368 Vert 64.859 Vert 215.999 Vert 749.965 Vert 749.965 Vert 1944.538	PK AV AV AV AV AV QP QP QP QP	46.4 34.9 43.2 29.1 30.1 30.3 33.6 49.5 45.8 36.3 34.0	38.8 26.8 27.3 31.8 36.2 38.8 38.8 11.5 6.9 16.9	-1.4 2.5 2.8 4.6 5.6 6.7 -1.4 7.4 7.7	30.1 32.7 32.2 31.4 32.0 32.7 30.1 32.2 32.2	53.7 31.5 41.1 34.1 39.9 43.1 40.9 36.2 28.2	73.9 53.9 53.9 53.9 53.9 53.9 40.0	20.2 22.4 12.8 19.8 14.0 10.8 13.0	
Hori 1944.538 Hori 2483.500 Hori 4924.000 Hori 7386.000 Hori 9848.000 Hori 24620.000 Vert 46.368 Vert 64.859 Vert 576.003 Vert 749.965 Vert 874.965 Vert 1944.538	AV AV AV AV AV QP QP QP	34.9 43.2 29.1 30.1 30.3 33.6 49.5 45.8 36.3 34.0	26.8 27.3 31.8 36.2 38.8 38.8 11.5 6.9 16.9	2.5 2.8 4.6 5.6 6.7 -1.4 7.4 7.7	32.7 32.2 31.4 32.0 32.7 30.1 32.2 32.2	31.5 41.1 34.1 39.9 43.1 40.9 36.2 28.2	53.9 53.9 53.9 53.9 53.9 53.9 40.0	22.4 12.8 19.8 14.0 10.8 13.0	
Hori 2483.500 Hori 4924.000 Hori 7386.000 Hori 9848.000 Hori 24620.000 Vert 46.368 Vert 64.859 Vert 576.003 Vert 749.965 Vert 874.965 Vert 1944.538	AV AV AV AV QP QP QP	43.2 29.1 30.1 30.3 33.6 49.5 45.8 36.3 34.0	27.3 31.8 36.2 38.8 38.8 11.5 6.9 16.9	2.8 4.6 5.6 6.7 -1.4 7.4 7.7	32.2 31.4 32.0 32.7 30.1 32.2 32.2	41.1 34.1 39.9 43.1 40.9 36.2 28.2	53.9 53.9 53.9 53.9 53.9 40.0	12.8 19.8 14.0 10.8 13.0 3.8	
Hori 4924.000 Hori 7386.000 Hori 9848.000 Hori 24620.000 Vert 46.368 Vert 64.859 Vert 215.999 Vert 576.003 Vert 749.965 Vert 874.965 Vert 1944.538	AV AV AV QP QP QP QP	29.1 30.1 30.3 33.6 49.5 45.8 36.3 34.0	31.8 36.2 38.8 38.8 11.5 6.9 16.9	4.6 5.6 6.7 -1.4 7.4 7.7	31.4 32.0 32.7 30.1 32.2 32.2	34.1 39.9 43.1 40.9 36.2 28.2	53.9 53.9 53.9 53.9 40.0	19.8 14.0 10.8 13.0 3.8	
Hori 7386.000 Hori 9848.000 Hori 24620.000 Vert 46.368 Vert 64.859 Vert 215.999 Vert 576.003 Vert 749.965 Vert 874.965 Vert 1944.538	AV AV AV QP QP QP	30.1 30.3 33.6 49.5 45.8 36.3 34.0	36.2 38.8 38.8 11.5 6.9 16.9	5.6 6.7 -1.4 7.4 7.7	32.0 32.7 30.1 32.2 32.2	39.9 43.1 40.9 36.2 28.2	53.9 53.9 53.9 40.0	14.0 10.8 13.0 3.8	
Hori 9848.000 Hori 24620.000 Vert 46.368 Vert 64.859 Vert 215.999 Vert 576.003 Vert 749.965 Vert 874.965 Vert 1944.538	AV AV QP QP QP QP	30.3 33.6 49.5 45.8 36.3 34.0	38.8 38.8 11.5 6.9 16.9	6.7 -1.4 7.4 7.7	32.7 30.1 32.2 32.2	43.1 40.9 36.2 28.2	53.9 53.9 40.0	10.8 13.0 3.8	
Hori 24620.000 Vert 46.368 Vert 64.859 Vert 215.999 Vert 576.003 Vert 749.965 Vert 874.965 Vert 1944.538	AV QP QP QP QP	33.6 49.5 45.8 36.3 34.0	38.8 11.5 6.9 16.9	-1.4 7.4 7.7	30.1 32.2 32.2	40.9 36.2 28.2	53.9 40.0	13.0	
Vert 46.368 Vert 64.859 Vert 215.999 Vert 576.003 Vert 749.965 Vert 874.965 Vert 1944.538	QP QP QP QP	49.5 45.8 36.3 34.0	11.5 6.9 16.9	7.4 7.7	32.2 32.2	36.2 28.2	40.0	3.8	
Vert 64.859 Vert 215.999 Vert 576.003 Vert 749.965 Vert 874.965 Vert 1944.538	QP QP QP	45.8 36.3 34.0	6.9 16.9	7.7	32.2	28.2			
Vert 215.999 Vert 576.003 Vert 749.965 Vert 874.965 Vert 1944.538	QP QP	36.3 34.0	16.9				40.0		
Vert 576.003 Vert 749.965 Vert 874.965 Vert 1944.538	QP	34.0		9.3	32.0		70.0	11.8	
Vert 749.965 Vert 874.965 Vert 1944.538	-		10.5		22.0	30.5	43.5	13.0	
Vert 874.965 Vert 1944.538	QP		19.5	11.7	32.0	33.2	46.0	12.8	
Vert 1944.538		39.1	20.9	12.6	31.7	40.9	46.0	5.1	
	QP	32.6	21.9	13.2	31.1	36.6	46.0	9.4	
	PK	67.6	26.8	2.5	32.7	64.2	73.9	9.7	
Vert 2483.500	PK	58.1	27.3	2.8	32.2	56.0	73.9	17.9	
Vert 4924.000	PK	41.1	31.8	4.6	31.4	46.1	73.9	27.8	
Vert 7386.000	PK	42.0	36.2	5.6	32.0	51.8	73.9	22.1	
Vert 9848.000	PK	42.3	38.8	6.7	32.7	55.1	73.9	18.8	
Vert 24620.000	PK	46.3	38.8	-1.4	30.1	53.6	73.9	20.3	
	AV	35.1	26.8	2.5	32.7	31.7	53.9	22.2	
Vert 2483.500	AV	42.4	27.3	2.8	32.2	40.3	53.9	13.6	
Vert 4924.000	AV	28.8	31.8	4.6	31.4	33.8	53.9	20.1	
Vert 7386.000	AV	30.0	36.2	5.6	32.0	39.8	53.9	14.1	
Vert 9848.000	AV	30.3	38.8	6.7	32.7	43.1	53.9	10.8	
Vert 24620.000	AV	33.7	38.8	-1.4	30.1	41.0	53.9	12.9	

 $Result = Reading + Ant\ Factor + Loss\ (Cable + Attenuator + Filter-Distance\ factor (above\ 10GHz)) - Gain (Amplifier)$ 

### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Page : 51 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Radiated Spurious Emission (Power Supply: SONY) 11g, Tx 2412MHz, ANT1

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-H0-01

 Date
 12/08/2009
 12/09/2009
 12/11/2009

 Temperature/ Humidity
 23 deg.C./ 33%
 22 deg.C./ 36%
 22 deg.C./ 49%

 Engineer
 Takumi Shimada
 Takumi Shimada
 Takeshi Choda

 (1-10GHz)
 (10-26.5GHz)
 (30-1000MHz)

Mode 11g Tx 2412MHz 24Mbps ANT1

Polarity	Frequency	Detector	-	Ant.Fac.	Loss	Gain	Result	Limit	Margin	Remark
	[MHz]		[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]	,	[dB]	
Hori	47.097	QP	40.5	11.3	7.4	32.2	27.0	40.0	13.0	
Hori	62.496	QP	48.7	7.2	7.6	32.2	31.3	40.0	8.7	
Hori	215.999	QP	43.9	16.9	9.3	32.0	38.1	43.5	5.4	
Hori	576.004	QP	37.6	19.5	11.7	32.0	36.8	46.0	9.2	
Hori	749.960	QP	36.4	20.9	12.6	31.7	38.2	46.0	7.8	
Hori	874.953	QP	31.0	21.9	13.2	31.1	35.0	46.0	11.0	
Hori	1943.672	PK	63.7	26.8	2.5	32.7	60.3	73.9	13.6	
Hori		PK	62.7	27.2	2.7	32.3	60.3	73.9	13.6	
Hori	2400.000	PK	83.0	27.2	2.7	32.3	80.6	-	-	See 20dBc Data Sheet
Hori	4824.000	PK	40.1	31.7	4.7	31.4	45.1	73.9	28.8	
Hori	7236.000	PK	41.4	35.9	5.6	31.9	51.0	73.9	22.9	
Hori	9648.000	PK	42.4	38.5	6.6	32.7	54.8	73.9	19.1	
Hori	24120.000	PK	47.8	38.1	-1.5	30.4	54.0	73.9	19.9	
Hori	1943.672	AV	35.9	26.8	2.5	32.7	32.5	53.9	21.4	
Hori	2390.000	AV	47.6	27.2	2.7	32.3	45.2	53.9	8.7	
Hori	2400.000	AV	63.6	27.2	2.7	32.3	61.2	-	-	See 20dBc Data Sheet
Hori	4824.000	AV	29.3	31.7	4.7	31.4	34.3	53.9	19.6	
Hori	7236.000	AV	30.1	35.9	5.6	31.9	39.7	53.9	14.2	
Hori	9648.000	AV	30.5	38.5	6.6	32.7	42.9	53.9	11.0	
Hori	24120.000	AV	35.7	38.1	-1.5	30.4	41.9	53.9	12.0	
Vert	46.873	QP	49.0	11.4	7.4	32.2	35.6	40.0	4.4	
Vert	65.773	QP	48.8	6.7	7.7	32.2	31.0	40.0	9.0	
Vert	215.999	QP	34.8	16.9	9.3	32.0	29.0	43.5	14.5	
Vert	576.004	QP	34.0	19.5	11.7	32.0	33.2	46.0	12.8	
Vert	749.960	QP	37.0	20.9	12.6	31.7	38.8	46.0	7.2	
Vert	874.954	QP	32.0	21.9	13.2	31.1	36.0	46.0	10.0	
Vert	1943.672	PK	66.9	26.8	2.5	32.7	63.5	73.9	10.4	
Vert	2390.000	PK	60.6	27.2	2.7	32.3	58.2	73.9	15.7	
Vert	2400.000	PK	80.3	27.2	2.7	32.3	77.9	-	-	See 20dBc Data Sheet
Vert	4824.000	PK	41.0	31.7	4.7	31.4	46.0	73.9	27.9	
Vert	7236.000	PK	42.0	35.9	5.6	31.9	51.6	73.9	22.3	
Vert	9648.000	PK	42.5	38.5	6.6	32.7	54.9	73.9	19.0	
Vert	24120.000	PK	47.7	38.1	-1.5	30.4	53.9	73.9	20.0	
Vert	1943.672	AV	34.9	26.8	2.5	32.7	31.5	53.9	22.4	
Vert	2390.000	AV	44.1	27.2	2.7	32.3	41.7	53.9	12.2	
Vert	2400.000	AV	60.5	27.2	2.7	32.3	58.1	-	-	See 20dBc Data Sheet
Vert	4824.000	AV	28.8	31.7	4.7	31.4	33.8	53.9	20.1	
Vert		AV	30.5	35.9	5.6	31.9	40.1	53.9	13.8	
Vert	9648.000	AV	30.5	38.5	6.6	32.7	42.9	53.9	11.0	
Vert	24120.000	AV	35.8	38.1	-1.5	30.4	42.0	53.9	11.9	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

\*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

## UL Japan, Inc.

**Head Office EMC Lab.** 

 $4383\text{-}326 \; Asama\text{-}cho, \, Ise\text{-}shi, \, Mie\text{-}ken \; 516\text{-}0021 \; JAPAN$ 

<sup>\*</sup>Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Page : 52 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Radiated Spurious Emission (Power Supply: SONY) 11g, Tx 2412MHz, ANT1

Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-H0-01

 Date
 12/08/2009
 12/09/2009
 12/11/2009

 Temperature/ Humidity
 23 deg.C./ 33%
 22 deg.C./ 36%
 22 deg.C./ 49%

 Engineer
 Takumi Shimada
 Takumi Shimada
 Takeshi Choda

 (1-10GHz)
 (10-26.5GHz)
 (30-1000MHz)

Mode 11g Tx 2412MHz 24Mbps ANT1

#### 20dBc Data Sheet

Test place

Polarity	Frequency	Detector	Reading	Ant	Loss	Gain	Result	Limit	Margin	Remark
				Factor						
	[MHz]		[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
Hori	2412.000	PK	100.8	27.2	2.7	32.3	98.4	-	-	Carrier
Hori	2400.000	PK	67.8	27.2	2.7	32.3	65.4	78.4	13.0	
Vert	2412.000	PK	98.2	27.2	2.7	32.3	95.8	-	-	Carrier
Vert	2400.000	PK	65.1	27.2	2.7	32.3	62.7	75.8	13.1	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amprifier)

**Head Office EMC Lab.** 

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

Page : 53 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Radiated Spurious Emission (Power Supply: SONY) 11g, Tx 2437MHz, ANT1

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-H0-01

 Date
 12/08/2009
 12/09/2009
 12/11/2009

 Temperature/ Humidity
 23 deg.C./ 33%
 22 deg.C./ 36%
 22 deg.C./ 49%

 Engineer
 Takumi Shimada
 Takumi Shimada
 Takeshi Choda

 (1-10GHz)
 (10-26.5GHz)
 (30-1000MHz)

Mode 11g Tx 2437MHz 24Mbps ANT1

Polarity	Frequency	Detector	-	Ant.Fac.	Loss	Gain	Result	Limit	Margin	Remark
	[MHz]		[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]		[dB]	
Iori	46.804	QP	39.7	11.4	7.4	32.2	26.3	40.0	13.7	
Iori		QP	49.1	7.2	7.6	32.2	31.7	40.0	8.3	
Iori		QP	44.0	16.9	9.3	32.0	38.2	43.5	5.3	
Iori		QP	38.1	19.5	11.7	32.0	37.3	46.0	8.7	
Iori		QP	35.1	20.9	12.6	31.7	36.9	46.0	9.1	
Iori	874.953	QP	31.3	21.9	13.2	31.1	35.3	46.0	10.7	
Iori		PK	65.3	26.8	2.5	32.7	61.9	73.9	12.0	
Iori	4874.000		42.4	31.8	4.6	31.4	47.4	73.9	26.5	
Iori	7311.000		41.9	36.1	5.6	31.9	51.7	73.9	22.2	
Hori		PK	42.3	38.6	6.6	32.7	54.8	73.9	19.1	
Hori	24370.000		46.7	38.5	-1.5	30.3	53.4	73.9	20.5	
Hori	1943.767		35.4	26.8	2.5	32.7	32.0	53.9	21.9	
Hori	4874.000		28.7	31.8	4.6	31.4	33.7	53.9	20.2	
Hori		AV	30.0	36.1	5.6	31.9	39.8	53.9	14.1	
Hori	9748.000	AV	30.3	38.6	6.6	32.7	42.8	53.9	11.1	
Hori	24370.000	AV	35.5	38.5	-1.5	30.3	42.2	53.9	11.7	
Vert		QP	49.2	11.5	7.4	32.2	35.9	40.0	4.1	
Vert	65.773	QP	48.6	6.7	7.7	32.2	30.8	40.0	9.2	
Vert	215.999	QP	33.4	16.9	9.3	32.0	27.6	43.5	15.9	
Vert	576.004	QP	33.7	19.5	11.7	32.0	32.9	46.0	13.1	
Vert	749.960	QP	37.4	20.9	12.6	31.7	39.2	46.0	6.8	
Vert	874.953	QP	32.3	21.9	13.2	31.1	36.3	46.0	9.7	
Vert	1943.767	PK	67.4	26.8	2.5	32.7	64.0	73.9	9.9	
Vert	4874.000	PK	40.9	31.8	4.6	31.4	45.9	73.9	28.0	
Vert	7311.000	PK	41.6	36.1	5.6	31.9	51.4	73.9	22.5	
Vert	9748.000	PK	42.1	38.6	6.6	32.7	54.6	73.9	19.3	
Vert	24370.000	PK	47.0	38.5	-1.5	30.3	53.7	73.9	20.2	
Vert	1943.767	AV	35.0	26.8	2.5	32.7	31.6	53.9	22.3	
Vert	4874.000	AV	28.7	31.8	4.6	31.4	33.7	53.9	20.2	
Vert	7311.000	AV	30.3	36.1	5.6	31.9	40.1	53.9	13.8	
Vert	9748.000	AV	30.7	38.6	6.6	32.7	43.2	53.9	10.7	
Vert	24370.000	AV	35.4	38.5	-1.5	30.3	42.1	53.9	11.8	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amprifier)

### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Page : 54 of 60 Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Radiated Spurious Emission (Power Supply: SONY) 11g, Tx 2462MHz, ANT1

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-H0-01

 Date
 12/08/2009
 12/09/2009
 12/11/2009

 Temperature/ Humidity
 23 deg.C./ 33%
 22 deg.C./ 36%
 22 deg.C./ 49%

 Engineer
 Takumi Shimada
 Takumi Shimada
 Takeshi Choda

 (1-10GHz)
 (10-26.5GHz)
 (30-1000MHz)

Mode 11g Tx 2462MHz 24Mbps ANT1

	_	-	- 4			~ .				
Polarity	Frequency	Detector	Reading		Loss	Gain	Result	Limit	Margin	Remark
	[MHz] 47.234	OD	[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
Hori Hori		QP QP	40.8 49.0	11.2 7.2	7.4 7.6	32.2 32.2	27.2 31.6	40.0 40.0	12.8 8.4	
Hori	215.999	QP QP	44.1	16.9	9.3	32.2	38.3	43.5	5.2	
Hori Hori		QP QP	38.0	19.5	11.7	32.0	37.2	45.5	8.8	
Hori	749.960	QP QP	36.0	20.9	12.6	31.7	37.2	46.0	8.2	
Hori	874.953	-	31.5	21.9	13.2	31.7	35.5	46.0	10.5	
Hori	1944.538	PK.	64.1	26.8	2.5	32.7	60.7	73.9	13.2	
Hori		PK	59.5	27.3	2.8	32.7	57.4	73.9	16.5	
Hori	4924.000	PK.	41.0	31.8	4.6	31.4	46.0	73.9	27.9	
Hori		PK	42.0	36.2	5.6	32.0	51.8	73.9	22.1	
Hori		PK	42.4	38.8	6.7	32.7	55.2	73.9	18.7	
Hori	24620.000		46.3	38.8	-1.4	30.1	53.6	73.9	20.3	
Hori	1944.538	AV	35.6	26.8	2.5	32.7	32.2	53.9	21.7	
Hori		AV	43.3	27.3	2.8	32.7	41.2	53.9	12.7	
Hori		AV	28.8	31.8	4.6	31.4	33.8	53.9	20.1	
Hori	7386.000		30.1	36.2	5.6	32.0	39.9	53.9	14.0	
Hori	9848.000		30.7	38.8	6.7	32.7	43.5	53.9	10.4	
Hori	24620.000	AV	33.5	38.8	-1.4	30.1	40.8	53.9	13.1	
Vert		QP	49.2	11.4	7.4	32.2	35.8	40.0	4.2	
Vert	65.793	QP	48.2	6.7	7.7	32.2	30.4	40.0	9.6	
Vert		QP	34.9	16.9	9.3	32.0	29.1	43.5	14.4	
Vert	576.004	QP	34.2	19.5	11.7	32.0	33.4	46.0	12.6	
Vert	749.960	QP	37.3	20.9	12.6	31.7	39.1	46.0	6.9	
Vert	874.953	QP	31.8	21.9	13.2	31.1	35.8	46.0	10.2	
Vert	1944.538	PK	68.2	26.8	2.5	32.7	64.8	73.9	9.1	
Vert	2483.500	PK	59.7	27.3	2.8	32.2	57.6	73.9	16.3	
Vert	4924.000	PK	40.9	31.8	4.6	31.4	45.9	73.9	28.0	
Vert	7386.000	PK	42.3	36.2	5.6	32.0	52.1	73.9	21.8	
Vert	9848.000	PK	41.8	38.8	6.7	32.7	54.6	73.9	19.3	
Vert	24620.000	PK	46.5	38.8	-1.4	30.1	53.8	73.9	20.1	
Vert	1944.538	AV	35.4	26.8	2.5	32.7	32.0	53.9	21.9	
Vert	2483.500	AV	43.9	27.3	2.8	32.2	41.8	53.9	12.1	
Vert	4924.000	AV	28.5	31.8	4.6	31.4	33.5	53.9	20.4	
Vert	7386.000	AV	30.2	36.2	5.6	32.0	40.0	53.9	13.9	
Vert	9848.000	AV	30.4	38.8	6.7	32.7	43.2	53.9	10.7	
Vert	24620.000	AV	33.6	38.8	-1.4	30.1	40.9	53.9	13.0	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

## UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Page : 55 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Radiated Spurious Emission (Power Supply: SONY) 11b/g, Rx 2437MHz, ANT0

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-HO-01

 Date
 12/08/2009
 12/11/2009

 Temperature/ Humidity
 23 deg.C./ 33%
 22 deg.C./ 49%

 Engineer
 Takumi Shimada
 Takumi Shimada

 (1-10GHz)
 (30-1000MHz)

Mode 11b/g Rx 2437MHz ANTO

Mitz	Polarity	Frequency	Detector	Reading	Ant.Fac.	Loss	Gain	Result	Limit	Margin	Remark
Hori 62.493 QP 48.8 7.2 7.6 32.2 31.4 40.0 8.6 Hori 215.999 QP 44.5 16.9 9.3 32.0 38.7 43.5 4.8 Hori 576.000 QP 38.6 19.5 11.7 32.0 37.8 46.0 8.2 Hori 749.958 QP 36.8 20.9 12.6 31.7 38.6 46.0 11.0 Hori 1941.508 PK 64.6 26.8 2.5 32.7 61.2 73.9 12.7 Hori 2437.000 PK 42.7 27.2 2.8 32.3 40.4 73.9 33.5 Hori 1941.508 AV 33.4 26.8 2.5 32.7 30.0 53.9 23.9 Hori 2437.000 AV 30.5 27.2 2.8 32.3 28.2 53.9 25.7 Vert 46.208 QP 49.4 11.6 7.4 32.2 36.2 40.0 3.8 Vert 46.208 QP 45.4 6.8 7.7 32.2 27.7 40.0 12.3 Vert 576.006 QP 34.2 19.5 11.7 32.0 33.4 46.0 12.6 Vert 576.006 QP 34.2 19.5 11.7 32.0 33.4 46.0 12.6 Vert 874.957 QP 38.0 20.9 12.6 31.7 39.8 46.0 6.2 Vert 874.965 QP 33.0 21.9 13.2 31.1 37.0 46.0 9.0 Vert 1941.467 PK 65.8 26.8 2.5 32.7 62.4 73.9 11.5 Vert 1941.467 PK 65.8 26.8 2.5 32.7 32.7 30.4 53.9 23.5 Vert 1941.467 PK 42.6 27.2 2.8 32.3 40.3 73.9 33.6 Vert 1941.467 PK 42.6 27.2 2.8 32.3 40.3 73.9 33.6 Vert 1941.467 PK 42.6 27.2 2.8 32.3 40.3 73.9 33.6 Vert 1941.467 PK 42.6 27.2 2.8 32.3 40.3 73.9 33.6 Vert 1941.467 PK 42.6 27.2 2.8 32.3 40.3 73.9 33.6 Vert 1941.467 PK 42.6 27.2 2.8 32.3 40.3 73.9 33.6 Vert 1941.467 PK 42.6 27.2 2.8 32.3 40.3 73.9 33.6 Vert 1941.467 PK 42.6 27.2 2.8 32.3 40.3 73.9 33.6 Vert 1941.467 AV 33.8 26.8 2.5 32.7 32.7 30.4 53.9 23.5		[MHz]		[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]		[dB]	
Hori 215.999 QP 44.5 16.9 9.3 32.0 38.7 43.5 4.8 doi: 576.000 QP 38.6 19.5 11.7 32.0 37.8 46.0 8.2 doi: 749.958 QP 36.8 20.9 12.6 31.7 38.6 46.0 11.0 doi: 874.961 QP 31.0 21.9 13.2 31.1 35.0 46.0 11.0 doi: 1941.508 PK 64.6 26.8 2.5 32.7 61.2 73.9 12.7 doi: 1941.508 AV 33.4 26.8 2.5 32.7 61.2 73.9 33.5 doi: 1941.508 AV 33.4 26.8 2.5 32.7 30.0 53.9 23.9 doi: 2437.000 AV 30.5 27.2 2.8 32.3 40.4 73.9 33.5 doi: 2437.000 AV 30.5 27.2 2.8 32.3 28.2 53.9 25.7 doi: 2437.000 AV 30.5 27.2 2.8 32.3 36.2 40.0 3.8 doi: 2437.000 AV 30.5 27.2 2.8 32.3 36.2 40.0 3.8 doi: 2437.000 AV 30.5 27.2 2.8 32.3 36.2 40.0 12.3 doi: 2437.000 AV 30.5 27.2 2.8 32.3 36.2 40.0 12.3 doi: 2437.000 AV 30.5 27.2 2.8 32.3 36.2 40.0 12.3 doi: 2437.000 AV 30.5 27.2 2.8 32.3 36.2 40.0 12.3 doi: 2437.000 AV 30.5 27.2 28.8 32.3 40.4 doi: 12.3 doi: 2437.000 AV 30.5 27.2 28.8 32.3 36.2 40.0 12.3 doi: 2437.000 AV 30.5 27.2 28.8 32.3 36.0 40.0 12.3 doi: 2437.000 AV 30.5 27.2 28.8 32.3 30.0 31.0 43.5 12.5 doi: 2437.000 AV 30.5 21.9 13.2 31.1 37.0 46.0 9.0 doi: 2437.000 AV 30.5 21.9 13.2 31.1 37.0 46.0 9.0 doi: 2437.000 AV 30.5 21.9 13.2 31.1 37.0 46.0 9.0 doi: 2437.000 AV 30.5 27.2 2.8 32.3 40.3 73.9 33.6 doi: 2437.000 AV 30.5 27.2 2.8 32.3 40.3 73.9 33.6 doi: 2437.000 AV 30.5 27.2 2.8 32.3 40.3 73.9 33.6 doi: 2437.000 AV 30.5 27.2 2.8 32.3 40.3 73.9 33.6 doi: 2437.000 AV 30.5 27.2 2.8 32.3 40.3 73.9 33.6 doi: 2437.000 AV 30.5 27.2 2.8 32.3 40.3 73.9 33.6 doi: 2437.000 AV 30.5 27.2 2.8 32.3 40.3 73.9 33.6 doi: 2437.000 AV 30.5 27.2 2.8 32.3 40.3 73.9 33.6 doi: 2437.000 AV 30.5 27.2 2.8 32.3 40.3 73.9 33.6 doi: 2437.000 AV 30.5 27.2 2.8 32.3 40.3 73.9 33.6 doi: 2437.000 AV 30.5 27.2 2.8 32.3 40.3 73.9 33.6 doi: 2437.000 AV 30.5 27.2 2.8 32.3 32.7 30.4 53.9 23.5 doi: 2437.000 AV 30.5 27.2 2.8 32.7 32.7 30.4 53.9 23.5 doi: 2437.000 AV 30.5 27.2 2.8 32.7 32.7 30.4 53.9 23.5 doi: 2437.000 AV 30.5 27.2 2.8 32.7 32.7 30.4 53.9 23.5 doi: 2437.000 AV 30.5 27.2 2.8 32.7 32.7 30.4 53.9 23.5 doi: 2437.000 AV 30.5 27.2 2.8 32.7 32.7 30.4 53.9 23.5 doi: 2437.000 AV 30.5 2			-								
Hori 576.000 QP 38.6 19.5 11.7 32.0 37.8 46.0 8.2 Hori 749.958 QP 36.8 20.9 12.6 31.7 38.6 46.0 7.4 Hori 874.961 QP 31.0 21.9 13.2 31.1 35.0 46.0 11.0 Hori 1941.508 PK 64.6 26.8 2.5 32.7 61.2 73.9 12.7 Hori 2437.000 PK 42.7 27.2 2.8 32.3 40.4 73.9 33.5 Hori 1941.508 AV 33.4 26.8 2.5 32.7 30.0 53.9 23.9 Hori 2437.000 AV 30.5 27.2 2.8 32.3 28.2 53.9 25.7 Hori 46.208 QP 49.4 11.6 7.4 32.2 36.2 40.0 3.8 Hori 65.205 QP 45.4 6.8 7.7 32.2 27.7 40.0 12.3 Hori 576.006 QP 34.2 19.5 11.7 32.0 33.4 46.0 12.6 Hori 749.957 QP 38.0 20.9 12.6 31.7 39.8 46.0 6.2 Hori 749.957 QP 38.0 20.9 12.6 31.7 39.8 46.0 9.0 Hori 749.957 QP 38.0 20.9 12.6 31.7 39.8 46.0 9.0 Hori 1941.467 PK 65.8 26.8 25.5 32.7 62.4 73.9 11.5 Hori 1941.467 PK 65.8 26.8 25.5 32.7 62.4 73.9 11.5 Hori 1941.467 PK 65.8 26.8 25.5 32.7 62.4 73.9 33.6 Hori 1941.467 PK 42.6 27.2 2.8 32.3 40.3 73.9 33.6 Hori 1941.467 PK 42.6 27.2 2.8 32.7 32.7 30.4 53.9 23.5 Hori 1941.467 PK 42.6 27.2 2.8 32.7 32.7 30.4 53.9 23.5 Hori 1941.467 PK 42.6 27.2 2.8 32.7 32.7 30.4 53.9 23.5 Hori 1941.467 PK 42.6 27.2 2.8 32.7 32.7 30.4 53.9			-								
Hori 749,958 QP 36.8 20.9 12.6 31.7 38.6 46.0 7.4 Hori 874,961 QP 31.0 21.9 13.2 31.1 35.0 46.0 11.0 Hori 1941,508 PK 64.6 26.8 2.5 32.7 61.2 73.9 12.7 Hori 1941,508 PK 42.7 27.2 2.8 32.3 40.4 73.9 33.5 Hori 1941,508 AV 33.4 26.8 2.5 32.7 30.0 53.9 23.9 Hori 1941,508 AV 30.5 27.2 2.8 32.3 28.2 53.9 25.7 Hori 46.208 QP 49.4 11.6 7.4 32.2 36.2 40.0 3.8 Hori 2437,000 AV 30.5 27.2 2.8 32.3 28.2 53.9 25.7 Hori 65.205 QP 45.4 6.8 7.7 32.2 27.7 40.0 12.3 Hori 215,999 QP 36.8 16.9 9.3 32.0 31.0 43.5 12.5 Hori 576,006 QP 34.2 19.5 11.7 32.0 33.4 46.0 12.6 Hori 749,957 QP 38.0 20.9 12.6 31.7 39.8 46.0 6.2 Hori 749,957 QP 33.0 21.9 13.2 31.1 37.0 46.0 9.0 Hori 874,965 QP 33.0 21.9 13.2 31.1 37.0 46.0 9.0 Hori 1941,467 PK 65.8 26.8 2.5 32.7 62.4 73.9 11.5 Hori 2437,000 PK 42.6 27.2 2.8 32.3 40.3 73.9 33.6 Hori 1941,467 AV 33.8 26.8 2.5 32.7 30.4 53.9 23.5			`								
Hori   874.961   QP   31.0   21.9   13.2   31.1   35.0   46.0   11.0     Hori   1941.508   PK   64.6   26.8   2.5   32.7   61.2   73.9   12.7     Hori   2437.000   PK   42.7   27.2   2.8   32.3   40.4   73.9   33.5     Hori   1941.508   AV   33.4   26.8   2.5   32.7   30.0   53.9   23.9     Hori   2437.000   AV   30.5   27.2   2.8   32.3   28.2   53.9   25.7     Vert   46.208   QP   49.4   11.6   7.4   32.2   36.2   40.0   3.8     Vert   65.205   QP   45.4   6.8   7.7   32.2   27.7   40.0   12.3     Vert   215.999   QP   36.8   16.9   9.3   32.0   31.0   43.5   12.5     Vert   576.006   QP   34.2   19.5   11.7   32.0   33.4   46.0   12.6     Vert   749.957   QP   38.0   20.9   12.6   31.7   39.8   46.0   6.2     Vert   874.965   QP   33.0   21.9   13.2   31.1   37.0   46.0   9.0     Vert   1941.467   PK   65.8   26.8   2.5   32.7   61.2   73.9   11.5     Vert   2437.000   PK   42.6   27.2   2.8   32.3   40.3   73.9   33.6     Vert   1941.467   AV   33.8   26.8   2.5   32.7   30.4   53.9   23.5			-								
Hori 1941.508 PK 64.6 26.8 2.5 32.7 61.2 73.9 12.7 Hori 2437.000 PK 42.7 27.2 2.8 32.3 40.4 73.9 33.5 Hori 1941.508 AV 33.4 26.8 2.5 32.7 30.0 53.9 23.9 Hori 2437.000 AV 30.5 27.2 2.8 32.3 28.2 53.9 25.7 Wert 46.208 QP 49.4 11.6 7.4 32.2 36.2 40.0 3.8 Wert 65.205 QP 45.4 6.8 7.7 32.2 27.7 40.0 12.3 Wert 215.999 QP 36.8 16.9 9.3 32.0 31.0 43.5 12.5 Wert 576.006 QP 34.2 19.5 11.7 32.0 33.4 46.0 12.6 Wert 749.957 QP 38.0 20.9 12.6 31.7 39.8 46.0 6.2 Wert 874.965 QP 33.0 21.9 13.2 31.1 37.0 46.0 9.0 Wert 1941.467 PK 65.8 26.8 2.5 32.7 62.4 73.9 11.5 Wert 1941.467 PK 42.6 27.2 2.8 32.3 40.3 73.9 33.6 Wert 1941.467 AV 33.8 26.8 2.5 32.7 30.4 53.9 23.5											
Hori   2437.000   PK   42.7   27.2   2.8   32.3   40.4   73.9   33.5     Hori   1941.508   AV   33.4   26.8   2.5   32.7   30.0   53.9   23.9     Hori   2437.000   AV   30.5   27.2   2.8   32.3   28.2   53.9   25.7     Vert   46.208   QP   49.4   11.6   7.4   32.2   36.2   40.0   3.8     Vert   65.205   QP   45.4   6.8   7.7   32.2   27.7   40.0   12.3     Vert   215.999   QP   36.8   16.9   9.3   32.0   31.0   43.5   12.5     Vert   576.006   QP   34.2   19.5   11.7   32.0   33.4   46.0   12.6     Vert   749.957   QP   38.0   20.9   12.6   31.7   39.8   46.0   6.2     Vert   874.965   QP   33.0   21.9   13.2   31.1   37.0   46.0   9.0     Vert   1941.467   PK   65.8   26.8   2.5   32.7   62.4   73.9   11.5     Vert   2437.000   PK   42.6   27.2   2.8   32.3   40.3   73.9   33.6     Vert   1941.467   AV   33.8   26.8   2.5   32.7   30.4   53.9   23.5			`								
Hori											
Hori         2437.000         AV         30.5         27.2         2.8         32.3         28.2         53.9         25.7           Vert         46.208         QP         49.4         11.6         7.4         32.2         36.2         40.0         3.8           Vert         65.205         QP         45.4         6.8         7.7         32.2         27.7         40.0         12.3           Vert         215.999         QP         36.8         16.9         9.3         32.0         31.0         43.5         12.5           Vert         576.006         QP         34.2         19.5         11.7         32.0         33.4         46.0         12.6           Vert         749.957         QP         38.0         20.9         12.6         31.7         39.8         46.0         6.2           Vert         874.965         QP         33.0         21.9         13.2         31.1         37.0         46.0         9.0           Vert         1941.467         PK         65.8         26.8         2.5         32.7         62.4         73.9         11.5           Vert         2437.000         PK         42.6         27.2											
Vert         46.208         QP         49.4         11.6         7.4         32.2         36.2         40.0         3.8           Vert         65.205         QP         45.4         6.8         7.7         32.2         27.7         40.0         12.3           Vert         215.999         QP         36.8         16.9         9.3         32.0         31.0         43.5         12.5           Vert         576.006         QP         34.2         19.5         11.7         32.0         33.4         46.0         12.6           Vert         749.957         QP         38.0         20.9         12.6         31.7         39.8         46.0         6.2           Vert         874.965         QP         33.0         21.9         13.2         31.1         37.0         46.0         9.0           Vert         1941.467         PK         65.8         26.8         2.5         32.7         62.4         73.9         11.5           Vert         2437.000         PK         42.6         27.2         2.8         32.3         40.3         73.9         33.6           Vert         1941.467         AV         33.8         26.8			I								
Vert         65.205         QP         45.4         6.8         7.7         32.2         27.7         40.0         12.3           Vert         215.999         QP         36.8         16.9         9.3         32.0         31.0         43.5         12.5           Vert         576.006         QP         34.2         19.5         11.7         32.0         33.4         46.0         12.6           Vert         749.957         QP         38.0         20.9         12.6         31.7         39.8         46.0         6.2           Vert         874.965         QP         33.0         21.9         13.2         31.1         37.0         46.0         9.0           Vert         1941.467         PK         65.8         26.8         2.5         32.7         62.4         73.9         11.5           Vert         2437.000         PK         42.6         27.2         2.8         32.3         40.3         73.9         33.6           Vert         1941.467         AV         33.8         26.8         2.5         32.7         30.4         53.9         23.5											
Vert         215.999         QP         36.8         16.9         9.3         32.0         31.0         43.5         12.5           Vert         576.006         QP         34.2         19.5         11.7         32.0         33.4         46.0         12.6           Vert         749.957         QP         38.0         20.9         12.6         31.7         39.8         46.0         6.2           Vert         874.965         QP         33.0         21.9         13.2         31.1         37.0         46.0         9.0           Vert         1941.467         PK         65.8         26.8         2.5         32.7         62.4         73.9         11.5           Vert         1941.467         AV         33.8         26.8         2.5         32.7         30.4         53.9         23.5											
Zert         576.006 QP         34.2 QP         11.7 32.0 33.4 46.0 12.6           Zert         749.957 QP         38.0 20.9 12.6 31.7 39.8 46.0 6.2           Zert         874.965 QP         33.0 21.9 13.2 31.1 37.0 46.0 9.0           Zert         1941.467 PK         65.8 26.8 2.5 32.7 62.4 73.9 11.5           Zert         2437.000 PK         42.6 27.2 2.8 32.3 40.3 73.9 33.6           Zert         1941.467 AV         33.8 26.8 2.5 32.7 30.4 53.9 23.5			-								
Vert         749,957 QP         38.0         20.9         12.6         31.7         39.8         46.0         6.2           Vert         874,965 QP         33.0         21.9         13.2         31.1         37.0         46.0         9.0           Vert         1941,467 PK         65.8         26.8         2.5         32.7         62.4         73.9         11.5           Vert         2437,000 PK         42.6         27.2         2.8         32.3         40.3         73.9         33.6           Vert         1941,467 AV         33.8         26.8         2.5         32.7         30.4         53.9         23.5			-								
Vert         874,965 QP         33.0         21.9         13.2         31.1         37.0         46.0         9.0           Vert         1941,467 PK         65.8         26.8         2.5         32.7         62.4         73.9         11.5           Vert         2437,000 PK         42.6         27.2         2.8         32.3         40.3         73.9         33.6           Vert         1941,467 AV         33.8         26.8         2.5         32.7         30.4         53.9         23.5											
Vert         1941.467         PK         65.8         26.8         2.5         32.7         62.4         73.9         11.5           Vert         2437.000         PK         42.6         27.2         2.8         32.3         40.3         73.9         33.6           Vert         1941.467         AV         33.8         26.8         2.5         32.7         30.4         53.9         23.5			-								
Vert         2437.000 PK         42.6         27.2         2.8         32.3         40.3         73.9         33.6           Vert         1941.467 AV         33.8         26.8         2.5         32.7         30.4         53.9         23.5			`								
/ert 1941.467 AV 33.8 26.8 2.5 32.7 30.4 53.9 23.5											
Vert 2437.000 AV 29.9 27.2 2.8 32.3 27.6 53.9 26.3			I								
	/ert	2437.000	AV	29.9	27.2	2.8	32.3	27.6	53.9	26.3	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

\*The 10th harmonic was not seen so the result was its base noise level.

Distance factor: 10GHz-26.5GHz 20log(3.0m/1.0m)= 9.5dB 26.5GHz-40GHz 20log(3.0m/0.5m)=15.6dB

### UL Japan, Inc.

#### **Head Office EMC Lab.**

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

<sup>\*</sup>Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Page : 56 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

#### Radiated Spurious Emission (Power Supply: SONY) 11b/g, Rx 2437MHz, ANT1

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-HO-01

 Date
 12/08/2009
 12/11/2009

 Temperature/ Humidity
 23 deg.C./ 33%
 22 deg.C./ 49%

 Engineer
 Takumi Shimada
 Takeshi Choda

 (1-10GHz)
 (30-1000MHz)

Mode 11b/g Rx 2437MHz ANT1

Hori Hori Hori Hori Hori Hori Hori Hori	[MHz]		[dBuV]	[dB/m]	f. 1753	f 1703		Lean 227 3		
Hori Hori Hori Hori Hori Hori Hori Hori			[	[ub/III]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	
Hori Hori Hori Hori Hori Hori Hori Hori	47.453	QP	40.6	11.2	7.4	32.2	27.0	40.0	13.0	
Hori Hori Hori Hori Hori Hori Hori Hori	62.497	QP	49.1	7.2	7.6	32.2	31.7	40.0	8.3	
Hori Hori Hori Hori Hori Hori Vert Vert Vert Vert Vert Vert Vert Vert	215.999	QP	44.0	16.9	9.3	32.0	38.2	43.5	5.3	
Hori Hori Hori Hori Hori Hori Vert Vert Vert Vert Vert Vert Vert Vert	576.005	QP	37.9	19.5	11.7	32.0	37.1	46.0	8.9	
Hori Hori Hori Hori Vert Vert Vert Vert Vert Vert Vert Vert	749.960	QP	37.4	20.9	12.6	31.7	39.2	46.0	6.8	
Hori Hori Vert Vert Vert Vert Vert Vert Vert Vert	874.953	QP	31.2	21.9	13.2	31.1	35.2	46.0	10.8	
Hori Hori Vert Vert Vert Vert Vert Vert Vert Vert	1941.508	PK	65.9	26.8	2.5	32.7	62.5	73.9	11.5	
Hori Vert Vert Vert Vert Vert Vert Vert Vert	2437.000	PK	42.7	27.2	2.8	32.3	40.4	73.9	33.5	
Vert Vert Vert Vert Vert Vert Vert Vert	1941.508	AV	33.5	26.8	2.5	32.7	30.1	53.9	23.8	
/ert /ert /ert /ert /ert /ert /ert /ert	2437.000	AV	30.7	27.2	2.8	32.3	28.4	53.9	25.5	
Vert Vert Vert Vert Vert Vert Vert Vert	46.893	QP	49.4	11.4	7.4	32.2	36.0	40.0	4.0	
/ert /ert /ert /ert /ert /ert /ert	65.635	QP	47.5	6.8	7.7	32.2	29.8	40.0	10.2	
/ert /ert /ert /ert /ert	215.999	QP	34.4	16.9	9.3	32.0	28.6	43.5	14.9	
Vert Vert Vert Vert	576.004	QP	33.7	19.5	11.7	32.0	32.9	46.0	13.1	
Vert Vert Vert	749.960	QP	37.8	20.9	12.6	31.7	39.6	46.0	6.4	
Vert Vert	874.953	QP	32.0	21.9	13.2	31.1	36.0	46.0	10.0	
Vert Vert	1941.467	PK	66.1	26.8	2.5	32.7	62.7	73.9	11.2	
	2437.000	PK	43.3	27.2	2.8	32.3	41.0	73.9	32.9	
Vert	1941.467	AV	34.4	26.8	2.5	32.7	31.0	53.9	22.9	
	2437.000	AV	30.2	27.2	2.8	32.3	27.9	53.9	26.0	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)

#### UL Japan, Inc.

#### **Head Office EMC Lab.**

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

<sup>\*</sup>Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Page : 57 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

# Radiated Spurious Emission Reference Data

(Power Supply: DELTA) 11b, Tx 2437MHz, ANT0

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber

Report No. 30EE0055-H0-01
Date 12/26/2009
Temperature/ Humidity 23 deg.C./ 38%
Engineer Takumi Shimada

Mode 11b Tx 2437MHz 11Mbps ANT0

Polarity	Frequency	Detector	Reading	Ant.Fac.	Loss	Gain	Result	Limit [dBuV/m]	Margin	Remark
	[MHz]	on	[dBuV]	[dB/m]	[dB]	[dB]	[dBuV/m]	,	[dB]	
Iori		QP	35.3	12.0	7.5	32.0	22.8	40.0	17.2	
Hori	75.428	QP	46.3	7.0	7.9	32.0	29.2	40.0	10.8	
Iori		QP	42.0	17.6	9.3	31.9	37.0	43.5	6.5	
Iori		QP	35.8	20.1	11.6	32.1	35.4	46.0	10.6	
Hori		QP	34.9	23.0	12.5	31.9	38.5	46.0	7.5	
Iori		QP	32.4	23.8	13.1	31.3	38.0	46.0	8.0	
Hori		PK	64.4	25.9	2.7	33.0	60.0	73.9	13.9	
Iori		PK	42.4	36.1	5.8	32.6	51.7	73.9	22.3	
Iori	9748.000		42.1	38.1	7.0	33.4	53.8	73.9	20.1	
Hori	24370.000		46.6	38.3	-1.1	32.3	51.5	73.9	22.4	
Iori		AV	34.1	25.9	2.7	33.0	29.7	53.9	24.2	
Hori	4874.000		29.6	31.0	5.4	31.9	34.1	53.9	19.8	
Hori	7311.000		30.1	36.1	5.8	32.6	39.4	53.9	14.5	
Hori		AV	30.1	38.1	7.0	33.4	41.8	53.9	12.1	
Hori	24370.000		35.3	38.3	-1.1	32.3	40.2	53.9	13.7	
Vert	46.723	QP	45.0	12.5	7.5	32.1	32.9	40.0	7.1	
Vert	75.542	-	41.2	7.0	7.9	32.0	24.1	40.0	15.9	
Vert	215.999	QP	34.6	17.6	9.3	31.9	29.6	43.5	13.9	
Vert		QP	33.3	20.1	11.6	32.1	32.9	46.0	13.1	
√ert	749.965	QP	33.7	23.0	12.5	31.9	37.3	46.0	8.7	
Vert		QP	32.2	23.8	13.1	31.3	37.8	46.0	8.2	
Vert		PK	66.9	25.9	2.7	33.0	62.5	73.9	11.4	
Vert	4874.000	PK	42.2	31.0	5.4	31.9	46.7	73.9	27.2	
Vert	9748.000	PK	42.6	38.1	7.0	33.4	54.3	73.9	19.6	
Vert	24370.000	PK	46.5	38.3	-1.1	32.3	51.4	73.9	22.5	
Vert	1947.283	AV	36.2	25.9	2.7	33.0	31.8	53.9	22.1	
Vert	4874.000	AV	29.1	31.0	5.4	31.9	33.6	53.9	20.3	
Vert	7311.000	AV	30.1	36.1	5.8	32.6	39.4	53.9	14.5	
Vert	9748.000	AV	30.1	38.1	7.0	33.4	41.8	53.9	12.1	
Vert	24370.000	AV	35.5	38.3	-1.1	32.3	40.4	53.9	13.5	

 $Result = Reading + Ant\ Factor + Loss\ (Cable + Attenuator + Filter-Distance\ factor (above\ 10GHz)) - Gain (Amprifier)$ 

### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Page : 58 of 60 Issued date : January 20, 2010 FCC ID : XCET12NA28K

## Radiated Spurious Emission

#### Reference Data (Power Supply: DELTA) 11b/g, Rx 2437MHz, ANT0

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber

Report No. 30EE0055-H0-01
Date 01/15/2010
Temperature/ Humidity 23 deg.C./ 38%
Engineer Takumi Shimada

Mode 11b/g Rx 2437MHz ANT0

Polarity	Frequency	Detector	Reading [dBuV]	Ant.Fac.	Loss	Gain	Result	Limit	Margin	Remark
Hori	[MHz]	QP	,	[dB/m]	[dB]	[dB]	[dBuV/m]		[dB]	
		`	39.4	11.0	7.4	32.2	25.6	40.0	14.4	
Iori	79.213	QP	47.7	6.1	7.9	32.1	29.6	40.0	10.4	
Iori		QP	43.9	16.9	9.3	32.0	38.1	43.5	5.4	
Iori	576.006	QP	39.3	19.5	11.7	32.0	38.5	46.0	7.5	
Iori		QP	34.5	20.9	12.6	31.7	36.3	46.0	9.7	
Iori	874.990	QP	29.6	21.9	13.2	31.1	33.6	46.0	12.4	
Iori	1941.583		65.1	26.8	2.5	32.7	61.7	73.9	12.2	
Iori	2437.000		43.0	27.2	2.8	32.3	40.7	73.9	33.3	
Iori	3188.456		51.8	28.4	3.1	31.9	51.4	73.9	22.5	
Iori		AV	33.3	26.8	2.5	32.7	29.9	53.9	24.0	
Iori	2437.000		31.9	27.2	2.8	32.3	29.6	53.9	24.3	
Iori		AV	34.9	28.4	3.1	31.9	34.5	53.9	19.4	
/ert		QP	43.9	12.1	7.4	32.2	31.2	40.0	8.8	
ert ert		QP	42.0	6.1	7.9	32.1	23.9	40.0	16.1	
/ert	215.999	QP	34.2	16.9	9.3	32.0	28.4	43.5	15.1	
/ert		QP	35.9	19.5	11.7	32.0	35.1	46.0	10.9	
/ert		QP	34.8	20.9	12.6	31.7	36.6	46.0	9.4	
/ert	874.990	_	28.1	21.9	13.2	31.1	32.1	46.0	13.9	
/ert	1945.187	PK	66.1	26.8	2.5	32.7	62.7	73.9	11.2	
/ert	2437.000		43.7	27.2	2.8	32.3	41.4	73.9	32.5	
<sup>7</sup> ert		PK	54.1	28.4	3.1	31.9	53.7	73.9	20.2	
ert ert	1945.187	AV	34.6	26.8	2.5	32.7	31.2	53.9	22.8	
/ert	2437.000	AV	31.3	27.2	2.8	32.3	29.0	53.9	24.9	
Vert	3186.412	AV	36.6	28.4	3.1	31.9	36.2	53.9	17.7	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amprifier)

#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

<sup>\*</sup>Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).

Page : 59 of 60

: January 20, 2010 : XCET12NA28K **Issued date** FCC ID

### **APPENDIX 3: Test instruments**

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item RE	Calibration Date * Interval(month) 2009/02/02 * 12	
MAEC-03	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005			
MOS-13	Thermo-Hygrometer	Custom	CTH-180	-	RE	2009/02/06 * 12	
MJM-06	Measure	PROMART	SEN1955	-	RE	-	
COTS-MEMI	EMI measurement program	TSJ	TEPTO-DV	-	RE/CE	-	
MSA-04	Spectrum Analyzer	Agilent	E4448A	US44300523	RE/AT	2009/08/25 * 12	
MHA-20	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	258	RE	2009/04/30 * 12	
MCC-56	Microwave Cable 1G- 26.5GHz	Suhner	SUCOFLEX104	174410(1m) / 284655(5m)	RE	2009/01/07 * 12	
MPA-11	MicroWave System Amplifier	Agilent	83017A	MY39500779	RE	2009/03/19 * 12	
MPM-08	Power Meter	Anritsu	ML2495A	6K00003338	AT	2009/09/09 * 12	
MPSE-11	Power sensor	Anritsu	MA2411B	011737	AT	2009/09/09 * 12	
MAT-20	Attenuator(10dB)(above 1GHz)	HIROSE ELECTRIC CO.,LTD.	AT-110	-	AT	2009/01/16 * 12	
MHF-19	High Pass Filter 3.5- 18.0GHz	TOKIMEC	TF323DCA	602	RE	2008/12/16 * 12	
MCC-78	Microwave Cable 1G- 26.5GHz	Suhner	SUCOFLEX104	278993/4	RE	2008/12/17 * 12	
MHA-16	Horn Antenna 15-40GHz	Schwarzbeck	BBHA9170	BBHA9170306	RE	2009/04/30 * 12	
MAEC-02	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-06902	CE	2009/08/17 * 12	
MOS-22	Thermo-Hygrometer	Custom	CTH-201	0003	CE	2009/02/05 * 12	
MJM-05	Measure	PROMART	SEN1955	-	CE	-	
MSA-03	Spectrum Analyzer	Agilent	E4448A	MY44020357	CE	2009/11/20 * 12	
MTR-03	Test Receiver	Rohde & Schwarz	ESCI	100300	CE	2009/04/14 * 12	
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	8127363	CE(EUT)	2009/02/18 * 12	
MLS-07	LISN(AMN)	Schwarzbeck	NSLK8127	8127364	CE(AE)	2009/02/18 * 12	
MTA-07	Terminator	MCL	BTRM-50	1 9944	CE	2009/02/17 * 12	
MCC-13	Coaxial Cable	Fujikura	3D-2W(12m)/5D- 2W(5m)/5D- 2W(0.8m)/5D- 2W(1m)	-	CE	2009/02/16 * 12	
MTR-08	Test Receiver	Rohde & Schwarz	ESCI	100767	RE	2009/06/30 * 12	
MBA-03	Biconical Antenna	Schwarzbeck	BBA9106	1915	RE	2009/01/19 * 12	
MLA-03	Logperiodic Antenna	Schwarzbeck	USLP9143	174	RE	2009/01/10 * 12	
MCC-51	Coaxial cable	UL Japan	-	-	RE	2009/07/02 * 12	
MAT-09	Attenuator(6dB)	Weinschel Corp	2	BK7973	RE	2009/11/12 * 12	
MPA-13	Pre Amplifier	SONOMA INSTRUMENT	310	260834	RE	2009/03/18 * 12	
MSA-09	Spectrum Analyzer	Advantest	R3273	95090115	RE	2009/12/11 * 12	

#### UL Japan, Inc.

**Head Office EMC Lab.** 

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

Page : 60 of 60

Issued date : January 20, 2010 FCC ID : XCET12NA28K

EMI test equipment (2/2)

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)	
MAEC-04	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	RE/CE	2009/02/03 * 12	
MOS-15	Thermo-Hygrometer	Custom	CTH-180	-	RE/CE	2009/02/06 * 12	
MJM-07	Measure	PROMART	SEN1955	-	RE/CE	-	
MSA-05	Spectrum Analyzer	Advantest	R3273	160400285	RE/CE	2009/12/15 * 12	
MTR-07	Test Receiver	Rohde & Schwarz	ESCI	100635	RE/CE	2009/10/23 * 12	
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	VHA91032008	RE	2009/10/05 * 12	
MLA-08	Logperiodic Antenna	Schwarzbeck	UKLP9140-A	N/A	RE	2009/01/10 * 12	
MCC-50	Coaxial cable	UL Japan	-	-	RE	2009/03/18 * 12	
MAT-31	Attenuator(6dB)	TME	UFA-01	-	RE	2009/11/11 * 12	
MPA-14	Pre Amplifier	SONOMA INSTRUMENT	310 260833		RE	2009/03/18 * 12	
MHA-21	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	9120D-557	RE	2009/08/10 * 12	
MCC-57	Microwave Cable 1G-	Suhner	SUCOFLEX104	246769(1m)/	RE	2009/11/17 * 12	
	26.5GHz 6m			292411(5m)			
MPA-12	MicroWave System Amplifier	Agilent	83017A	MY39500780	RE	2009/03/19 * 12	
MHA-17	Horn Antenna 15-40GHz	Schwarzbeck	BBHA9170	BBHA9170307	RE	2009/06/18 * 12	
MCC-79	Microwave Cable 1G- 26.5GHz	Suhner	SUCOFLEX104	278923/4	RE	2009/12/19 * 12	
MHF-20	High Pass Filter 3.5- 18.0GHz	TOKIMEC	TF323DCC	607	RE	2009/12/19 * 12	
MLS-02	LISN(AMN)	Schwarzbeck	NSLK8127	8127383	CE(EUT)	2009/06/22 * 12	
MLS-03	LISN(AMN)	Schwarzbeck	NSLK8127	8127384	CE(AE)	2009/07/16 * 12	
MTA-06	Terminator	MCL	BTRM-50	1 9951	CE	2009/02/17 * 12	
MCC-113	Coaxial cable	Fujikura/Suhner/TSJ	5D- 2W(10m)/SFM141( 5m)/421- 010(1m)/sucoform1 41-PE(1m)/RFM- E121(Switcher)	-/04178	CE	2009/07/01 * 12	

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

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

As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

**Test Item: CE: Conducted Emission** 

**RE: Radiated Emission** 

**AT: Antenna Terminal Conducted test** 

**Head Office EMC Lab.** 

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