APPENDIX 2: Data of EMI test

Conducted Emission
(Power Supply: SONY)

DATA OF CONDUCTED EMISSION TEST

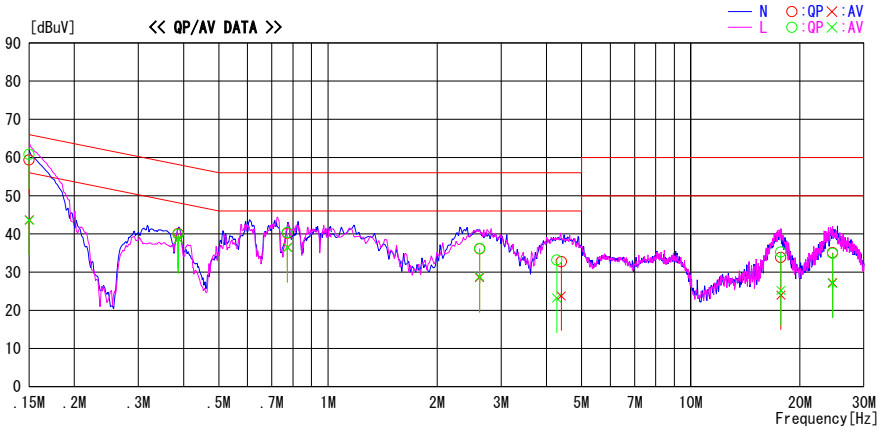
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/12/10

Report No. : 30EE0055-HO-01

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

Mode / Remarks : BT, Tx, DH5, 2402MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase
	QP	AV	Factor	QP	AV	QP	AV	QP	AV	
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]	
0.15000	59.1	43.4	0.3	59.4	43.7	66.0	56.0	6.6	12.3	N
0.15000	60.5	43.3	0.3	60.8	43.6	66.0	56.0	5.2	12.4	L
0.38664	39.6	38.4	0.3	39.9	38.7	58.1	48.1	18.2	9.4	L
0.38658	39.8	38.5	0.3	40.1	38.8	58.1	48.1	18.0	9.3	N
0.77316	39.8	36.1	0.4	40.2	36.5	56.0	46.0	15.8	9.5	N
0.77318	40.0	36.0	0.4	40.4	36.4	56.0	46.0	15.6	9.6	L
2.61596	35.5	28.0	0.6	36.1	28.6	56.0	46.0	19.9	17.4	N
2.61587	35.6	28.2	0.6	36.2	28.8	56.0	46.0	19.8	17.2	L
4.27320	32.4	22.4	0.8	33.2	23.2	56.0	46.0	22.8	22.8	L
4.39715	31.9	23.0	0.8	32.7	23.8	56.0	46.0	23.3	22.2	N
17.70478	31.9	22.1	1.9	33.8	24.0	60.0	50.0	26.2	26.0	N
17.70478	33.4	23.3	1.9	35.3	25.2	60.0	50.0	24.7	24.8	L
24.57560	32.8	24.9	2.3	35.1	27.2	60.0	50.0	24.9	22.8	N
24.57560	32.6	24.8	2.3	34.9	27.1	60.0	50.0	25.1	22.9	L

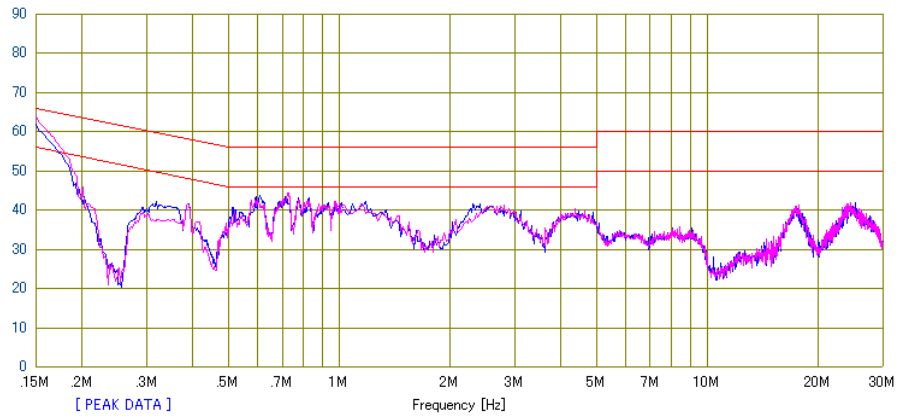
CHART:WITH FACTOR,Peak hold data. CALCULATION:RESULT[dBuV]=READING[dBuV]+C.F[dB](LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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

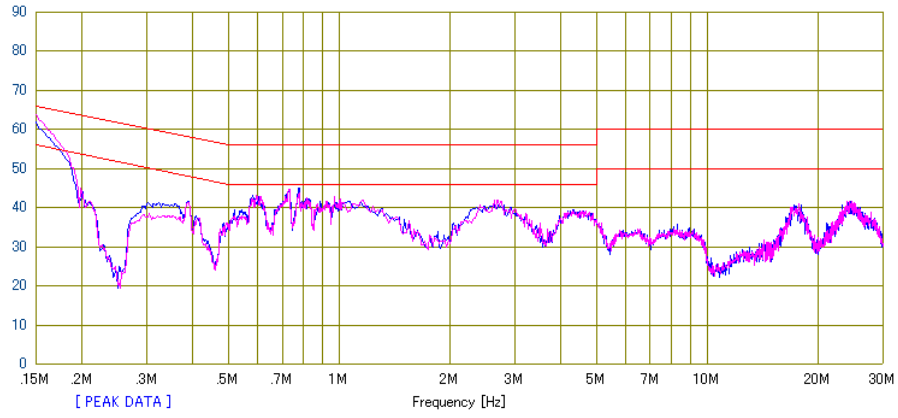
Conducted Emission
(Power Supply: SONY)

Test place	Head Office EMC Lab. No.2 Semi Anechoic Chamber
Report No.	30EE0055-HO-01
Date	12/10/2009
Temperature/ Humidity	23 deg.C./ 35%
Engineer	Takeshi Choda
Mode	Tx DH5

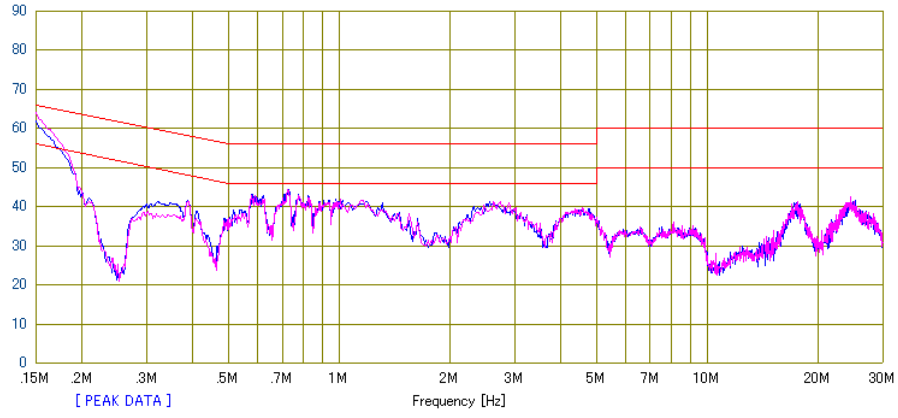
2402MHz



2441MHz



2480MHz



Y scale [dBuV] Chart — N — L

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Conducted Emission
(Power Supply: SONY)

DATA OF CONDUCTED EMISSION TEST

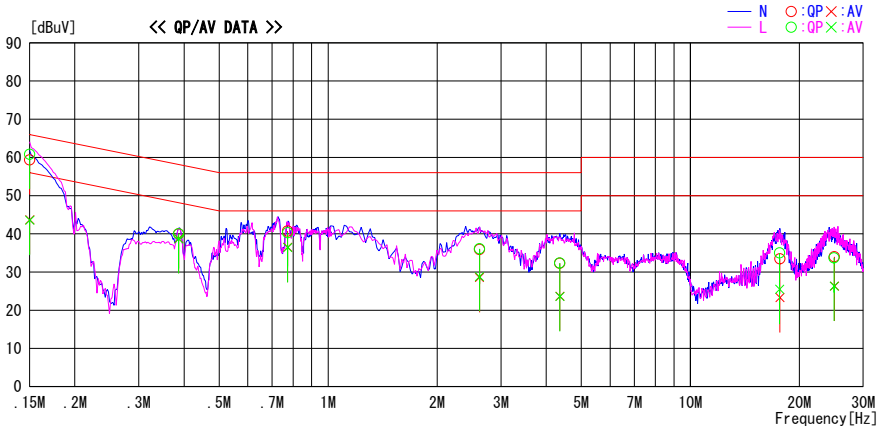
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/12/10

Report No. : 30EE0055-HO-01

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

Mode / Remarks : BT, Tx, 3DH5, 2480MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase
	QP	AV	Factor	QP	AV	QP	AV	QP	AV	
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]	
0.15000	59.1	43.4	0.3	59.4	43.7	66.0	56.0	6.6	12.3	N
0.38658	39.7	38.5	0.3	40.0	38.8	58.1	48.1	18.1	9.3	N
0.77318	40.3	36.1	0.4	40.7	36.5	56.0	46.0	15.3	9.5	N
2.61587	35.3	28.0	0.6	35.9	28.6	56.0	46.0	20.1	17.4	N
4.36080	31.5	22.9	0.8	32.3	23.7	56.0	46.0	23.7	22.3	N
17.66460	31.6	21.4	1.9	33.5	23.3	60.0	50.0	26.5	26.7	N
24.97740	31.7	24.0	2.3	34.0	26.3	60.0	50.0	26.0	23.7	N
0.15000	60.5	43.3	0.3	60.8	43.6	66.0	56.0	5.2	12.4	L
0.38661	39.7	38.4	0.3	40.0	38.7	58.1	48.1	18.1	9.4	L
0.77316	39.9	36.0	0.4	40.3	36.4	56.0	46.0	15.7	9.6	L
2.61582	35.5	28.2	0.6	36.1	28.8	56.0	46.0	19.9	17.2	L
4.36080	31.6	22.8	0.8	32.4	23.6	56.0	46.0	23.6	22.4	L
17.62442	33.1	23.6	1.9	35.0	25.5	60.0	50.0	25.0	24.5	L
24.93722	31.4	24.0	2.3	33.7	26.3	60.0	50.0	26.3	23.7	L

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

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

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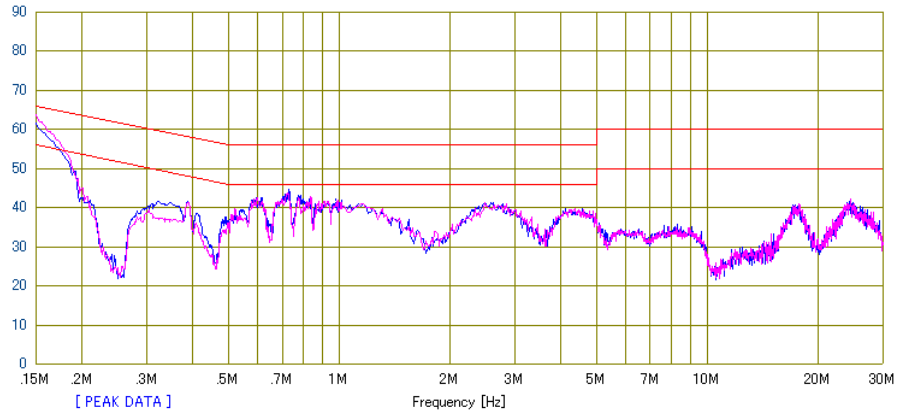
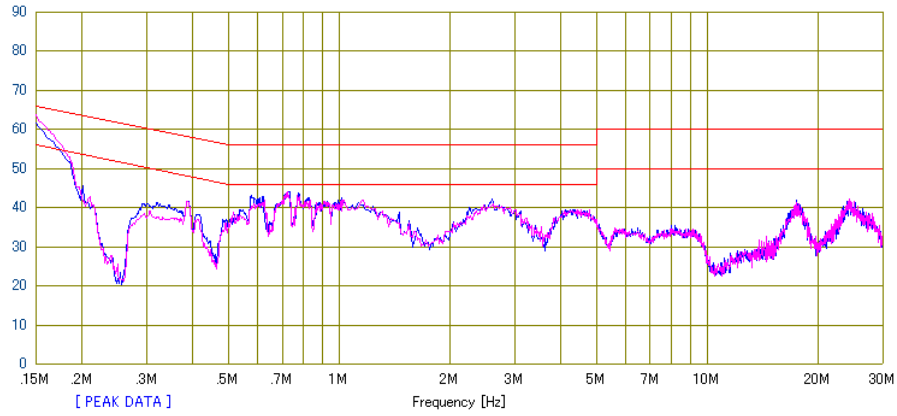
Conducted Emission
(Power Supply: SONY)

Test place	Head Office EMC Lab. No.2 Semi Anechoic Chamber
Report No.	30EE0055-HO-01
Date	12/10/2009
Temperature/ Humidity	23 deg.C./ 35%
Engineer	Takeshi Choda
Mode	Tx 3DH5

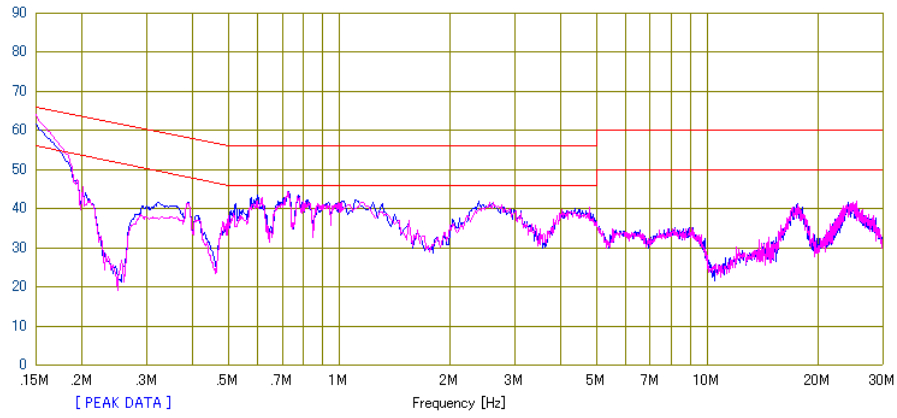
2402MHz



2441MHz



2480MHz



Y scale [dBuV] Chart — N — L

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Conducted Emission
(Power Supply: SONY)

DATA OF CONDUCTED EMISSION TEST

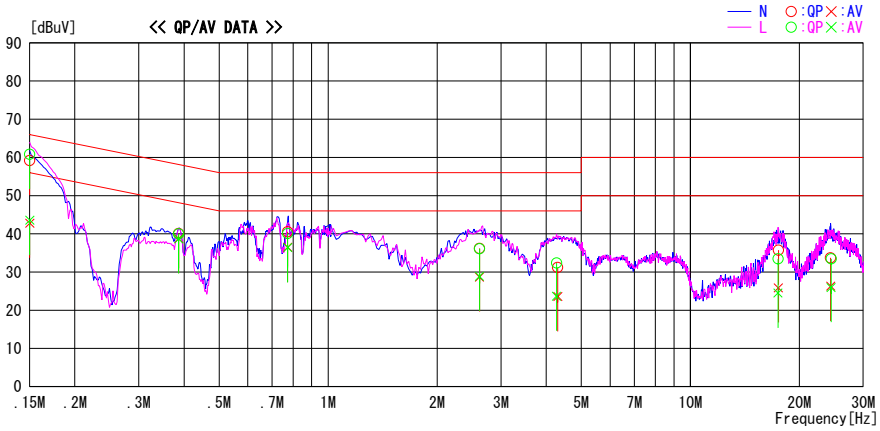
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/12/10

Report No. : 30EE0055-HO-01

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

Mode / Remarks : BT, Rx, 3DH5, 2441MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase
	QP	AV	Factor	QP	AV	QP	AV	QP	AV	
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]	
0.15000	58.9	42.5	0.3	59.2	42.8	66.0	56.0	6.8	13.2	N
0.38656	39.8	38.5	0.3	40.1	38.8	58.1	48.1	18.0	9.3	N
0.77312	40.2	36.1	0.4	40.6	36.5	56.0	46.0	15.4	9.5	N
2.61579	35.6	28.1	0.6	36.2	28.7	56.0	46.0	19.8	17.3	N
4.30627	30.4	22.8	0.8	31.2	23.6	56.0	46.0	24.8	22.4	N
17.50388	33.8	24.0	1.9	35.7	25.9	60.0	50.0	24.3	24.1	N
24.37469	31.4	24.0	2.3	33.7	26.3	60.0	50.0	26.3	23.7	N
0.15000	60.5	43.3	0.3	60.8	43.6	66.0	56.0	5.2	12.4	L
0.38656	39.7	38.4	0.3	40.0	38.7	58.1	48.1	18.1	9.4	L
0.77314	39.7	36.0	0.4	40.1	36.4	56.0	46.0	15.9	9.6	L
2.61587	35.5	28.3	0.6	36.1	28.9	56.0	46.0	19.9	17.1	L
4.26992	31.6	22.9	0.8	32.4	23.7	56.0	46.0	23.6	22.3	L
17.46370	31.6	22.6	1.9	33.5	24.5	60.0	50.0	26.5	25.5	L
24.45506	31.2	23.7	2.3	33.5	26.0	60.0	50.0	26.5	24.0	L

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

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

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Conducted Emission
(Power Supply: DELTA)

DATA OF CONDUCTED EMISSION TEST

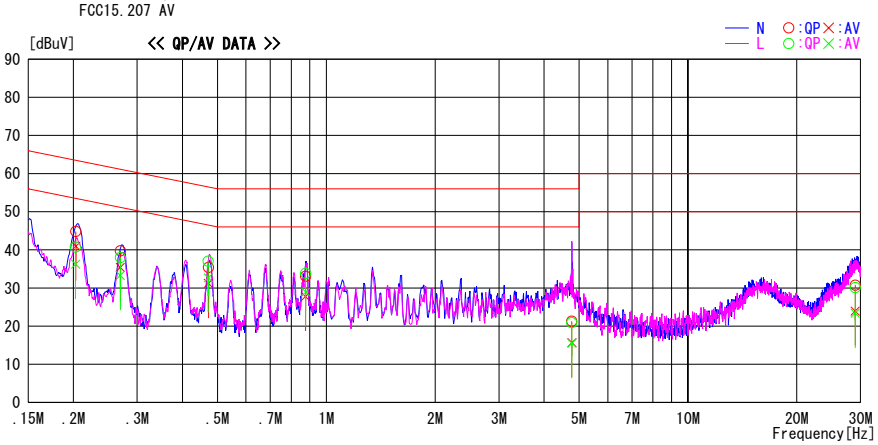
UL Japan, Inc. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2010/01/05

Report No. : 30EE0055-HO-01

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

Mode / Remarks : BT, Tx, DH5, 2441MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV	Factor	QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.20292	44.5	40.7	0.3	44.8	41.0	63.5	53.5	18.7	12.5	N	
0.26957	39.4	35.1	0.3	39.7	35.4	61.1	51.1	21.4	15.7	N	
0.47196	35.1	30.9	0.3	35.4	31.2	56.5	46.5	21.1	15.3	N	
0.87598	32.8	27.5	0.3	33.1	27.8	56.0	46.0	22.9	18.2	N	
4.77460	20.6	15.0	0.7	21.3	15.7	56.0	46.0	34.7	30.3	N	
29.01084	28.7	22.0	2.0	30.7	24.0	60.0	50.0	29.3	26.0	N	
0.20256	40.4	35.9	0.3	40.7	36.2	63.5	53.5	22.8	17.3	L	
0.26952	37.7	33.0	0.3	38.0	33.3	61.1	51.1	23.1	17.8	L	
0.47163	36.7	32.4	0.3	37.0	32.7	56.5	46.5	19.5	13.8	L	
0.87717	33.5	28.7	0.3	33.8	29.0	56.0	46.0	22.2	17.0	L	
4.77329	20.2	14.8	0.7	20.9	15.5	56.0	46.0	35.1	30.5	L	
29.01230	28.1	21.4	2.0	30.1	23.4	60.0	50.0	29.9	26.6	L	

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

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

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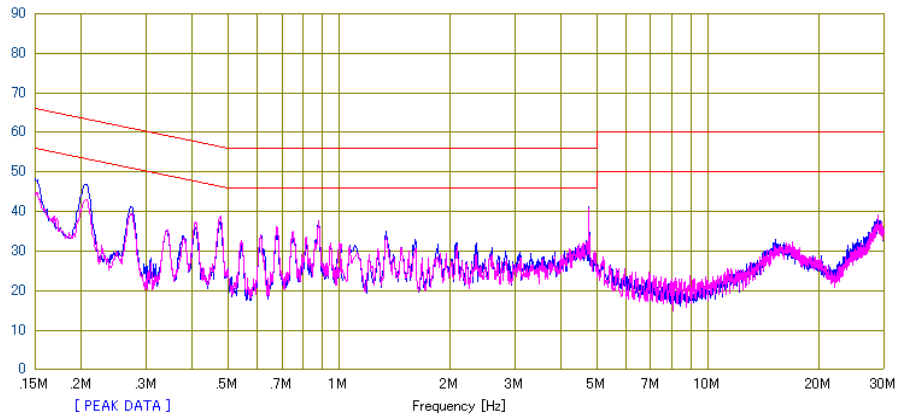
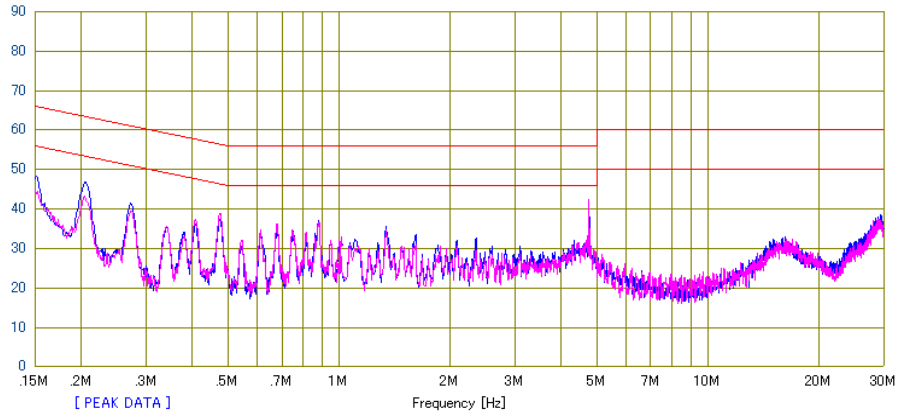
Conducted Emission
(Power Supply: DELTA)

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	Tx DH5

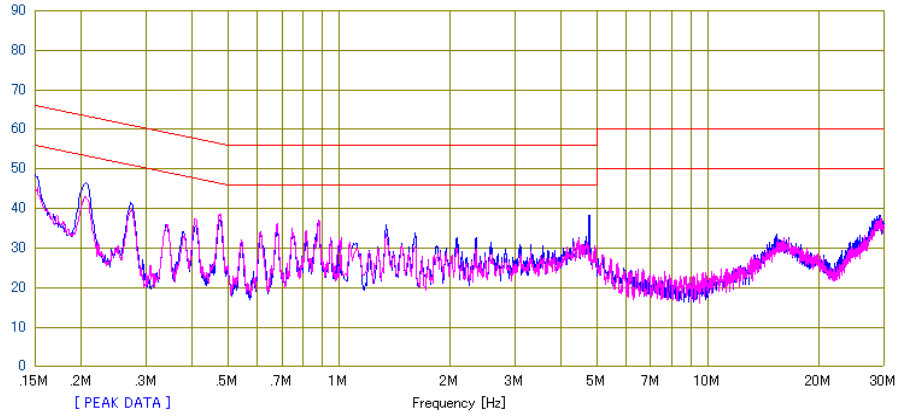
2402MHz



2441MHz



2480MHz



Y scale [dBuV] Chart — N — L

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Conducted Emission
(Power Supply: DELTA)

DATA OF CONDUCTED EMISSION TEST

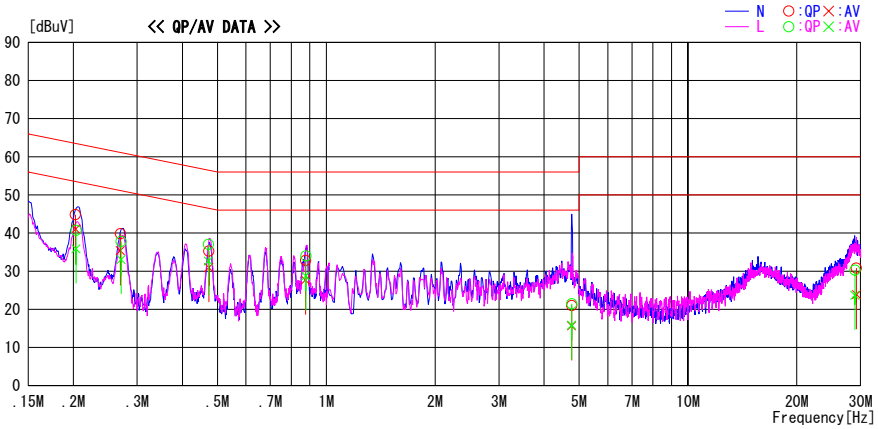
UL Japan, Inc. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2010/01/05

Report No. : 30EE0055-HO-01

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

Mode / Remarks : BT, Tx, 3DH5, 2402MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV	Factor	QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.20246	44.5	40.8	0.3	44.8	41.1	63.5	53.5	18.7	12.4	N	
0.26964	39.5	35.1	0.3	39.8	35.4	61.1	51.1	21.3	15.7	N	
0.47323	35.0	30.7	0.3	35.3	31.0	56.5	46.5	21.2	15.5	N	
0.87580	32.5	27.4	0.3	32.8	27.7	56.0	46.0	23.2	18.3	N	
4.77122	20.3	15.0	0.7	21.0	15.7	56.0	46.0	35.0	30.3	N	
29.22561	28.8	21.9	2.0	30.8	23.9	60.0	50.0	29.2	26.1	N	
0.20329	40.4	35.6	0.3	40.7	35.9	63.5	53.5	22.8	17.6	L	
0.27062	37.5	32.8	0.3	37.8	33.1	61.1	51.1	23.3	18.0	L	
0.47223	36.7	32.4	0.3	37.0	32.7	56.5	46.5	19.5	13.8	L	
0.87731	33.7	28.5	0.3	34.0	28.8	56.0	46.0	22.0	17.2	L	
4.77050	20.8	15.2	0.7	21.5	15.9	56.0	46.0	34.5	30.1	L	
28.93663	28.3	21.7	2.0	30.3	23.7	60.0	50.0	29.7	26.3	L	

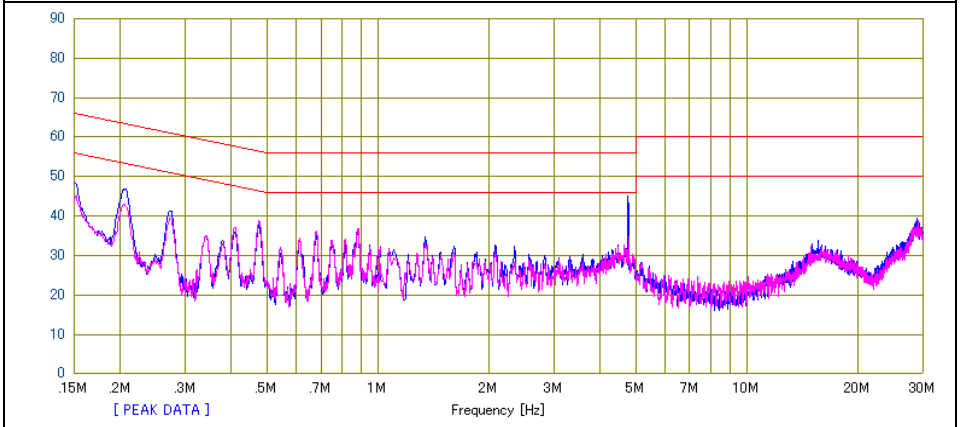
CHART:WITH FACTOR,Peak hold data. CALCULATION:RESULT[dBuV]=READING[dBuV]+C.F[dB](LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

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

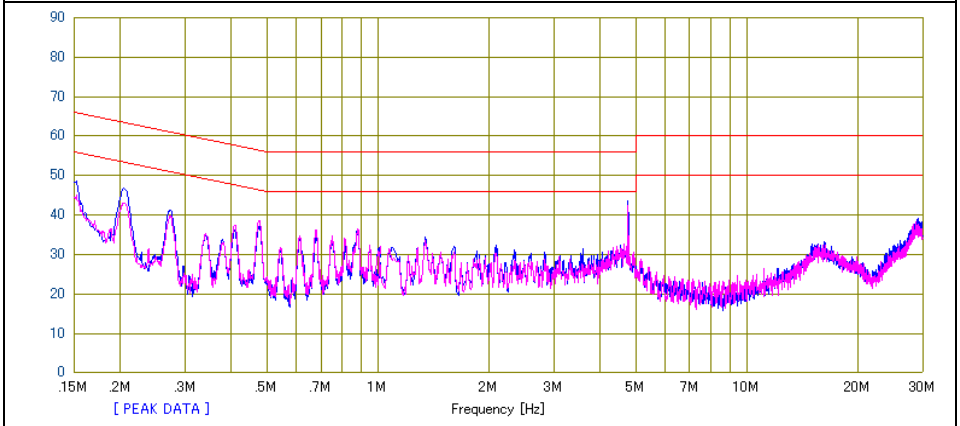
Conducted Emission
(Power Supply: DELTA)

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	Tx 3DH5

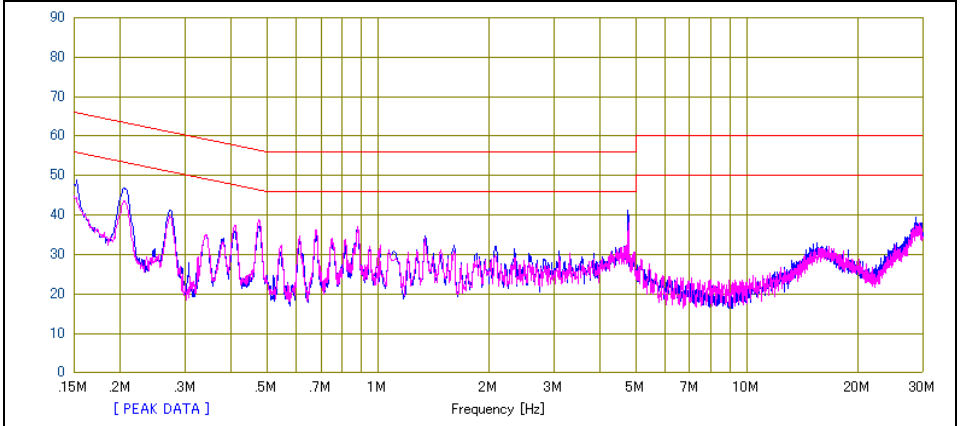
2402MHz



2441MHz



2480MHz



Y scale [dBuV] Chart — N — L

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Conducted Emission
(Power Supply: DELTA)

DATA OF CONDUCTED EMISSION TEST

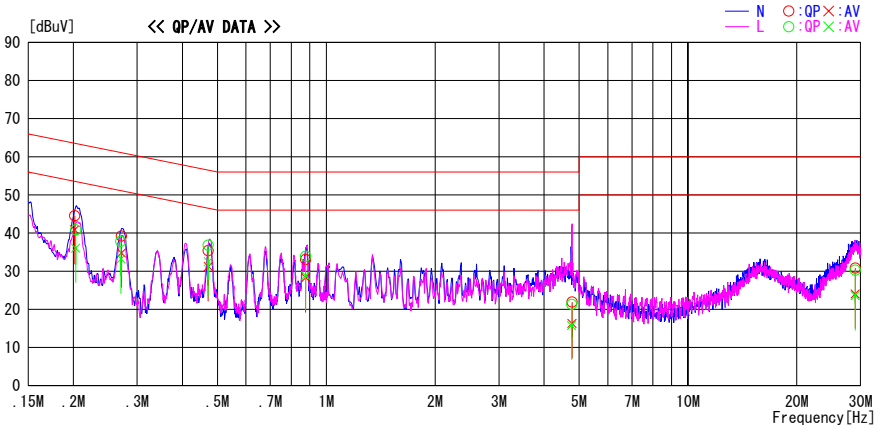
UL Japan, Inc. Head Office EMC Lab. No.4 Semi Anechoic Chamber
Date : 2010/01/05

Report No. : 30EE0055-HO-01

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

Mode / Remarks : BT, Rx, 2441MHz

LIMIT : FCC15.207 QP
FCC15.207 AV



Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase	Comment
	QP	AV	Factor	QP	AV	QP	AV	QP	AV		
[MHz]	[dBuV]	[dBuV]	[dB]	[dBuV]	[dBuV]	[dBuV]	[dBuV]	[dB]	[dB]		
0.20153	44.3	40.6	0.3	44.6	40.9	63.5	53.5	18.9	12.6	N	
0.27126	38.9	34.5	0.3	39.2	34.8	61.1	51.1	21.9	16.3	N	
0.47173	35.1	30.9	0.3	35.4	31.2	56.5	46.5	21.1	15.3	N	
0.87728	32.8	28.0	0.3	33.1	28.3	56.0	46.0	22.9	17.7	N	
4.77971	21.2	15.6	0.7	21.9	16.3	56.0	46.0	34.1	29.7	N	
28.98658	28.8	22.1	2.0	30.8	24.1	60.0	50.0	29.2	25.9	N	
0.20271	40.5	35.8	0.3	40.8	36.1	63.5	53.5	22.7	17.4	L	
0.27050	37.5	32.9	0.3	37.8	33.2	61.1	51.1	23.3	17.9	L	
0.47138	36.5	32.2	0.3	36.8	32.5	56.5	46.5	19.7	14.0	L	
0.87690	33.6	28.6	0.3	33.9	28.9	56.0	46.0	22.1	17.1	L	
4.76991	20.6	15.1	0.7	21.3	15.8	56.0	46.0	34.7	30.2	L	
29.00910	28.3	21.6	2.0	30.3	23.6	60.0	50.0	29.7	26.4	L	

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

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

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Maximum Peak Output Power

Test place	Head Office EMC Lab. No.3 Semi Anechoic Chamber
Report No.	29AE0000-HO
Date	12/07/2009
Temperature/ Humidity	23 deg.C./ 33%
Engineer	Takumi Shimada
Mode	Tx (Hopping off) DH5/2DH5/3DH5/Inquiry

DH5/Inquiry

Mode	Freq.	Reading	Cable Loss	Atten.	Result		Limit		Margin
	[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
DH5	2402.0	-9.88	0.80	10.08	1.00	1.26	20.97	125	19.97
DH5	2441.0	-9.92	0.80	10.08	0.96	1.25	20.97	125	20.01
DH5	2480.0	-10.19	0.80	10.08	0.69	1.17	20.97	125	20.28
Inquiry	2441.0	-9.91	0.80	10.08	0.97	1.25	20.97	125	20.00

2DH5

Mode	Freq.	Reading	Cable Loss	Atten.	Result		Limit		Margin
	[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
2DH5	2402.0	-9.31	0.80	10.08	1.57	1.44	20.97	125	19.40
2DH5	2441.0	-9.43	0.80	10.08	1.45	1.40	20.97	125	19.52
2DH5	2480.0	-9.66	0.80	10.08	1.22	1.32	20.97	125	19.75

3DH5

Mode	Freq.	Reading	Cable Loss	Atten.	Result		Limit		Margin
	[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
3DH5	2402.0	-9.15	0.80	10.08	1.73	1.49	20.97	125	19.24
3DH5	2441.0	-9.24	0.80	10.08	1.64	1.46	20.97	125	19.33
3DH5	2480.0	-9.45	0.80	10.08	1.43	1.39	20.97	125	19.54

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

Test was not performed at AFH mode, because the decrease of number of channel (min: 20ch) at AFH mode does not influence on the output power and bandwidth of the EUT.
However, the limit level 125mWof AFH mode was used for the test.

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

Radiated Spurious Emission
(Power Supply: SONY)

Test place	Head Office EMC Lab. No.2 and 3 Semi Anechoic Chamber		
Report No.	30EE0055-HO-01		
Date	12/09/2009	12/10/2009	12/13/2009
Temperature/ Humidity	22 deg.C./ 36%	22 deg.C./ 34%	22 deg.C./ 41%
Engineer	Takumi Shimada (10-26.5GHz)	Takumi Shimada (1-10GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, DH5 2402MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	50.284	QP	43.9	10.2	7.5	32.2	29.4	40.0	10.6	
Hori	75.380	QP	49.5	6.2	7.8	32.1	31.4	40.0	8.6	
Hori	215.999	QP	41.8	16.9	9.3	32.0	36.0	43.5	7.5	
Hori	576.004	QP	37.3	19.5	11.7	32.0	36.5	46.0	9.5	
Hori	749.992	QP	33.8	20.9	12.6	31.7	35.6	46.0	10.4	
Hori	874.989	QP	28.2	21.9	13.2	31.1	32.2	46.0	13.8	
Hori	1941.578	PK	68.1	26.2	2.5	32.4	64.4	73.9	9.5	
Hori	2390.000	PK	55.2	27.1	2.7	32.4	52.6	73.9	21.3	
Hori	2400.000	PK	57.6	27.1	2.7	32.4	55.0	73.9	18.9	
Hori	4804.000	PK	40.7	31.2	5.2	31.3	45.8	73.9	28.1	
Hori	7206.000	PK	41.2	35.6	5.7	31.1	51.4	73.9	22.5	
Hori	9608.000	PK	41.6	38.4	6.6	31.4	55.2	73.9	18.7	
Hori	24020.000	PK	47.6	38.0	-1.6	30.5	53.5	73.9	20.4	
Hori	1941.578	AV	34.5	26.2	2.5	32.4	30.8	53.9	23.1	VBW=10Hz
Hori	2390.000	AV	40.0	27.1	2.7	32.4	37.4	53.9	16.5	
Hori	2400.000	AV	49.5	27.1	2.7	32.4	46.9	53.9	7.0	
Hori	4804.000	AV	29.3	31.2	5.2	31.3	34.4	53.9	19.5	
Hori	7206.000	AV	29.2	35.6	5.7	31.1	39.4	53.9	14.5	
Hori	9608.000	AV	29.3	38.4	6.6	31.4	42.9	53.9	11.0	
Hori	24020.000	AV	35.4	38.0	-1.6	30.5	41.3	53.9	12.6	
Vert	46.710	QP	47.5	11.4	7.4	32.2	34.1	40.0	5.9	
Vert	72.120	QP	45.3	6.2	7.8	32.1	27.2	40.0	12.8	
Vert	215.999	QP	31.7	16.9	9.3	32.0	25.9	43.5	17.6	
Vert	576.006	QP	35.0	19.5	11.7	32.0	34.2	46.0	11.8	
Vert	749.992	QP	38.9	20.9	12.6	31.7	40.7	46.0	5.3	
Vert	874.990	QP	28.8	21.9	13.2	31.1	32.8	46.0	13.2	
Vert	1941.400	PK	67.2	26.2	2.5	32.4	63.5	73.9	10.4	
Vert	2390.000	PK	54.2	27.1	2.7	32.4	51.6	73.9	22.3	
Vert	2400.000	PK	50.8	27.1	2.7	32.4	48.2	73.9	25.7	
Vert	4804.000	PK	40.6	31.2	5.2	31.3	45.7	73.9	28.2	
Vert	7206.000	PK	40.4	35.6	5.7	31.1	50.6	73.9	23.3	
Vert	9608.000	PK	41.8	38.4	6.6	31.4	55.4	73.9	18.5	
Vert	24020.000	PK	47.8	38.0	-1.6	30.5	53.7	73.9	20.2	
Vert	1941.400	AV	32.9	26.2	2.5	32.4	29.2	53.9	24.7	VBW=10Hz
Vert	2390.000	AV	37.3	27.1	2.7	32.4	34.7	53.9	19.2	
Vert	2400.000	AV	45.1	27.1	2.7	32.4	42.5	53.9	11.4	
Vert	4804.000	AV	29.6	31.2	5.2	31.3	34.7	53.9	19.2	
Vert	7206.000	AV	29.7	35.6	5.7	31.1	39.9	53.9	14.0	
Vert	9608.000	AV	29.8	38.4	6.6	31.4	43.4	53.9	10.5	
Vert	24020.000	AV	35.5	38.0	-1.6	30.5	41.4	53.9	12.5	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).
*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

Radiated Spurious Emission
(Power Supply: SONY)

Test place	Head Office EMC Lab. No.2 and 3 Semi Anechoic Chamber		
Report No.	30EE0055-HO-01		
Date	12/09/2009	12/10/2009	12/13/2009
Temperature/ Humidity	22 deg.C./ 36%	22 deg.C./ 34%	22 deg.C./ 41%
Engineer	Takumi Shimada (10-26.5GHz)	Takumi Shimada (1-10GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, DH5 2441MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	50.576	QP	43.7	10.1	7.5	32.2	29.1	40.0	10.9	
Hori	75.490	QP	49.1	6.2	7.8	32.1	31.0	40.0	9.0	
Hori	215.999	QP	44.0	16.9	9.3	32.0	38.2	43.5	5.3	
Hori	576.004	QP	37.1	19.5	11.7	32.0	36.3	46.0	9.7	
Hori	749.992	QP	33.9	20.9	12.6	31.7	35.7	46.0	10.3	
Hori	874.992	QP	28.2	21.9	13.2	31.1	32.2	46.0	13.8	
Hori	1945.533	PK	65.7	26.2	2.5	32.4	62.0	73.9	11.9	
Hori	4882.000	PK	41.4	31.3	5.2	31.3	46.6	73.9	27.3	
Hori	7323.000	PK	40.4	35.8	5.7	31.1	50.8	73.9	23.1	
Hori	9764.000	PK	41.6	38.6	6.7	31.4	55.5	73.9	18.5	
Hori	24410.000	PK	47.1	38.5	-1.5	30.2	53.9	73.9	20.0	
Hori	1945.533	AV	33.7	26.2	2.5	32.4	30.0	53.9	23.9	VBW=10Hz
Hori	4882.000	AV	31.0	31.3	5.2	31.3	36.2	53.9	17.7	
Hori	7323.000	AV	29.8	35.8	5.7	31.1	40.2	53.9	13.7	
Hori	9764.000	AV	29.8	38.6	6.7	31.4	43.7	53.9	10.2	
Hori	24410.000	AV	34.7	38.5	-1.5	30.2	41.5	53.9	12.4	
Vert	46.406	QP	47.4	11.5	7.4	32.2	34.1	40.0	5.9	
Vert	72.112	QP	45.6	6.2	7.8	32.1	27.5	40.0	12.5	
Vert	215.999	QP	32.1	16.9	9.3	32.0	26.3	43.5	17.2	
Vert	576.000	QP	34.7	19.5	11.7	32.0	33.9	46.0	12.1	
Vert	749.991	QP	38.5	20.9	12.6	31.7	40.3	46.0	5.7	
Vert	874.989	QP	28.9	21.9	13.2	31.1	32.9	46.0	13.1	
Vert	1946.502	PK	64.1	26.2	2.5	32.4	60.4	73.9	13.6	
Vert	4882.000	PK	41.8	31.3	5.2	31.3	47.0	73.9	26.9	
Vert	7323.000	PK	41.6	35.8	5.7	31.1	52.0	73.9	21.9	
Vert	9764.000	PK	41.5	38.6	6.7	31.4	55.4	73.9	18.6	
Vert	24410.000	PK	47.4	38.5	-1.5	30.2	54.2	73.9	19.7	
Vert	1946.502	AV	34.8	26.2	2.5	32.4	31.1	53.9	22.8	VBW=10Hz
Vert	4882.000	AV	31.7	31.3	5.2	31.3	36.9	53.9	17.0	
Vert	7323.000	AV	29.5	35.8	5.7	31.1	39.9	53.9	14.0	
Vert	9764.000	AV	29.7	38.6	6.7	31.4	43.6	53.9	10.3	
Vert	24410.000	AV	34.9	38.5	-1.5	30.2	41.7	53.9	12.2	

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

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

*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

Radiated Spurious Emission
(Power Supply: SONY)

Test place	Head Office EMC Lab. No.2 and 3 Semi Anechoic Chamber		
Report No.	30EE0055-HO-01		
Date	12/09/2009	12/10/2009	12/13/2009
Temperature/ Humidity	22 deg.C./ 36%	22 deg.C./ 34%	22 deg.C./ 41%
Engineer	Takumi Shimada (10-26.5GHz)	Takumi Shimada (1-10GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, DH5 2480MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	50.648	QP	44.0	10.1	7.5	32.2	29.4	40.0	10.6	
Hori	75.470	QP	48.9	6.2	7.8	32.1	30.8	40.0	9.2	
Hori	215.999	QP	43.8	16.9	9.3	32.0	38.0	43.5	5.5	
Hori	576.005	QP	36.5	19.5	11.7	32.0	35.7	46.0	10.3	
Hori	749.988	QP	34.4	20.9	12.6	31.7	36.2	46.0	9.8	
Hori	874.990	QP	27.9	21.9	13.2	31.1	31.9	46.0	14.1	
Hori	1941.267	PK	63.7	26.2	2.5	32.4	60.0	73.9	13.9	
Hori	2483.500	PK	44.0	27.3	2.8	32.4	41.7	73.9	32.2	
Hori	4960.000	PK	41.4	31.5	5.3	31.3	46.9	73.9	27.0	
Hori	7440.000	PK	40.8	36.0	5.8	31.1	51.5	73.9	22.4	
Hori	9920.000	PK	42.2	38.7	6.7	31.4	56.2	73.9	17.7	
Hori	24800.000	PK	48.2	39.1	-1.4	30.0	55.9	73.9	18.0	
Hori	1941.267	AV	32.9	26.2	2.5	32.4	29.2	53.9	24.7	VBW=10Hz
Hori	2483.500	AV	31.1	27.3	2.8	32.4	28.8	53.9	25.1	
Hori	4960.000	AV	30.2	31.5	5.3	31.3	35.7	53.9	18.2	
Hori	7440.000	AV	29.9	36.0	5.8	31.1	40.6	53.9	13.3	
Hori	9920.000	AV	30.3	38.7	6.7	31.4	44.3	53.9	9.6	
Hori	24800.000	AV	36.3	39.1	-1.4	30.0	44.0	53.9	9.9	
Vert	46.450	QP	47.2	11.5	7.4	32.2	33.9	40.0	6.1	
Vert	72.296	QP	45.8	6.2	7.8	32.1	27.7	40.0	12.3	
Vert	215.999	QP	30.3	16.9	9.3	32.0	24.5	43.5	19.0	
Vert	576.004	QP	34.8	19.5	11.7	32.0	34.0	46.0	12.0	
Vert	749.993	QP	38.7	20.9	12.6	31.7	40.5	46.0	5.5	
Vert	874.988	QP	28.6	21.9	13.2	31.1	32.6	46.0	13.4	
Vert	1941.983	PK	67.7	26.2	2.5	32.4	64.0	73.9	9.9	
Vert	2483.500	PK	46.7	27.3	2.8	32.4	44.4	73.9	29.5	
Vert	4960.000	PK	41.4	31.5	5.3	31.3	46.9	73.9	27.1	
Vert	7440.000	PK	41.7	36.0	5.8	31.1	52.4	73.9	21.5	
Vert	9920.000	PK	42.1	38.7	6.7	31.4	56.1	73.9	17.8	
Vert	24800.000	PK	48.5	39.1	-1.4	30.0	56.2	73.9	17.7	
Vert	1941.983	AV	35.1	26.2	2.5	32.4	31.4	53.9	22.5	VBW=10Hz
Vert	2483.500	AV	33.7	27.3	2.8	32.4	31.4	53.9	22.5	
Vert	4960.000	AV	29.9	31.5	5.3	31.3	35.4	53.9	18.5	
Vert	7440.000	AV	29.7	36.0	5.8	31.1	40.4	53.9	13.5	
Vert	9920.000	AV	30.3	38.7	6.7	31.4	44.3	53.9	9.6	
Vert	24800.000	AV	36.7	39.1	-1.4	30.0	44.4	53.9	9.5	

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

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

*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

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Radiated Spurious Emission
(Power Supply: SONY)

Test place	Head Office EMC Lab. No.2 and 3 Semi Anechoic Chamber		
Report No.	30EE0055-HO-01		
Date	12/09/2009	12/10/2009	12/13/2009
Temperature/ Humidity	22 deg.C./ 36%	22 deg.C./ 34%	22 deg.C./ 41%
Engineer	Takumi Shimada (10-26.5GHz)	Takumi Shimada (1-10GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, 3DH5 2402MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	50.896	QP	43.6	10.0	7.5	32.2	28.9	40.0	11.1	
Hori	75.390	QP	49.4	6.2	7.8	32.1	31.3	40.0	8.7	
Hori	215.999	QP	43.8	16.9	9.3	32.0	38.0	43.5	5.5	
Hori	576.003	QP	37.1	19.5	11.7	32.0	36.3	46.0	9.7	
Hori	749.991	QP	34.8	20.9	12.6	31.7	36.6	46.0	9.4	
Hori	874.990	QP	28.1	21.9	13.2	31.1	32.1	46.0	13.9	
Hori	1941.367	PK	64.2	26.2	2.5	32.4	60.5	73.9	13.4	
Hori	2390.000	PK	54.6	27.1	2.7	32.4	52.0	73.9	21.9	
Hori	2400.000	PK	57.4	27.1	2.7	32.4	54.8	73.9	19.1	
Hori	4804.000	PK	40.4	31.2	5.2	31.3	45.5	73.9	28.4	
Hori	7206.000	PK	41.6	35.6	5.7	31.1	51.8	73.9	22.1	
Hori	9608.000	PK	41.2	38.4	6.6	31.4	54.8	73.9	19.1	
Hori	24020.000	PK	47.6	38.0	-1.6	30.5	53.5	73.9	20.4	
Hori	1941.367	AV	32.4	26.2	2.5	32.4	28.7	53.9	25.2	VBW=10Hz
Hori	2390.000	AV	38.2	27.1	2.7	32.4	35.6	53.9	18.3	
Hori	2400.000	AV	42.4	27.1	2.7	32.4	39.8	53.9	14.1	
Hori	4804.000	AV	29.7	31.2	5.2	31.3	34.8	53.9	19.1	
Hori	7206.000	AV	29.6	35.6	5.7	31.1	39.8	53.9	14.1	
Hori	9608.000	AV	29.9	38.4	6.6	31.4	43.5	53.9	10.5	
Hori	24020.000	AV	35.5	38.0	-1.6	30.5	41.4	53.9	12.5	
Vert	46.606	QP	47.6	11.5	7.4	32.2	34.3	40.0	5.7	
Vert	72.108	QP	45.8	6.2	7.8	32.1	27.7	40.0	12.3	
Vert	215.999	QP	30.9	16.9	9.3	32.0	25.1	43.5	18.4	
Vert	576.005	QP	34.9	19.5	11.7	32.0	34.1	46.0	11.9	
Vert	749.991	QP	38.7	20.9	12.6	31.7	40.5	46.0	5.5	
Vert	874.987	QP	28.6	21.9	13.2	31.1	32.6	46.0	13.4	
Vert	1941.483	PK	63.8	26.2	2.5	32.4	60.1	73.9	13.9	
Vert	2390.000	PK	54.5	27.1	2.7	32.4	51.9	73.9	22.0	
Vert	2400.000	PK	61.5	27.1	2.7	32.4	58.9	73.9	15.0	
Vert	4804.000	PK	41.5	31.2	5.2	31.3	46.6	73.9	27.3	
Vert	7206.000	PK	40.7	35.6	5.7	31.1	50.9	73.9	23.0	
Vert	9608.000	PK	41.6	38.4	6.6	31.4	55.2	73.9	18.7	
Vert	24020.000	PK	47.5	38.0	-1.6	30.5	53.4	73.9	20.5	
Vert	1941.483	AV	33.6	26.2	2.5	32.4	29.9	53.9	24.1	VBW=10Hz
Vert	2390.000	AV	37.7	27.1	2.7	32.4	35.1	53.9	18.8	
Vert	2400.000	AV	46.3	27.1	2.7	32.4	43.7	53.9	10.2	
Vert	4804.000	AV	29.1	31.2	5.2	31.3	34.2	53.9	19.7	
Vert	7206.000	AV	29.7	35.6	5.7	31.1	39.9	53.9	14.0	
Vert	9608.000	AV	29.7	38.4	6.6	31.4	43.3	53.9	10.6	
Vert	24020.000	AV	35.7	38.0	-1.6	30.5	41.6	53.9	12.3	

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

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

*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

Radiated Spurious Emission
(Power Supply: SONY)

Test place	Head Office EMC Lab. No.2 and 3 Semi Anechoic Chamber		
Report No.	30EE0055-HO-01		
Date	12/09/2009	12/10/2009	12/13/2009
Temperature/ Humidity	22 deg.C./ 36%	22 deg.C./ 34%	22 deg.C./ 41%
Engineer	Takumi Shimada (10-26.5GHz)	Takumi Shimada (1-10GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, 3DH5 2441MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	50.708	QP	43.8	10.1	7.5	32.2	29.2	40.0	10.8	
Hori	75.468	QP	49.0	6.2	7.8	32.1	30.9	40.0	9.1	
Hori	215.999	QP	44.0	16.9	9.3	32.0	38.2	43.5	5.3	
Hori	576.003	QP	37.1	19.5	11.7	32.0	36.3	46.0	9.7	
Hori	749.994	QP	34.5	20.9	12.6	31.7	36.3	46.0	9.7	
Hori	874.995	QP	28.1	21.9	13.2	31.1	32.1	46.0	13.9	
Hori	1946.700	PK	65.6	26.2	2.5	32.4	61.9	73.9	12.0	
Hori	4882.000	PK	41.3	31.3	5.2	31.3	46.5	73.9	27.4	
Hori	7323.000	PK	41.5	35.8	5.7	31.1	51.9	73.9	22.0	
Hori	9764.000	PK	41.6	38.6	6.7	31.4	55.5	73.9	18.4	
Hori	24410.000	PK	47.3	38.5	-1.5	30.2	54.1	73.9	19.8	
Hori	1946.700	AV	33.6	26.2	2.5	32.4	29.9	53.9	24.0	VBW=10Hz
Hori	4882.000	AV	29.6	31.3	5.2	31.3	34.8	53.9	19.1	
Hori	7323.000	AV	29.6	35.8	5.7	31.1	40.0	53.9	13.9	
Hori	9764.000	AV	29.8	38.6	6.7	31.4	43.7	53.9	10.2	
Hori	24410.000	AV	34.9	38.5	-1.5	30.2	41.7	53.9	12.2	
Vert	46.450	QP	47.7	11.5	7.4	32.2	34.4	40.0	5.6	
Vert	72.208	QP	45.5	6.2	7.8	32.1	27.4	40.0	12.6	
Vert	215.999	QP	31.8	16.9	9.3	32.0	26.0	43.5	17.5	
Vert	576.005	QP	34.6	19.5	11.7	32.0	33.8	46.0	12.2	
Vert	749.991	QP	38.5	20.9	12.6	31.7	40.3	46.0	5.7	
Vert	874.986	QP	29.3	21.9	13.2	31.1	33.3	46.0	12.7	
Vert	1945.067	PK	63.5	26.2	2.5	32.4	59.8	73.9	14.1	
Vert	4882.000	PK	41.3	31.3	5.2	31.3	46.5	73.9	27.4	
Vert	7323.000	PK	41.4	35.8	5.7	31.1	51.8	73.9	22.1	
Vert	9764.000	PK	41.9	38.6	6.7	31.4	55.8	73.9	18.1	
Vert	24410.000	PK	47.1	38.5	-1.5	30.2	53.9	73.9	20.0	
Vert	1945.067	AV	32.4	26.2	2.5	32.4	28.7	53.9	25.2	VBW=10Hz
Vert	4882.000	AV	30.0	31.3	5.2	31.3	35.2	53.9	18.7	
Vert	7323.000	AV	29.5	35.8	5.7	31.1	39.9	53.9	14.0	
Vert	9764.000	AV	29.8	38.6	6.7	31.4	43.7	53.9	10.2	
Vert	24410.000	AV	35.1	38.5	-1.5	30.2	41.9	53.9	12.0	

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

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

*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

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Radiated Spurious Emission
(Power Supply: SONY)

Test place	Head Office EMC Lab. No.2 and 3 Semi Anechoic Chamber		
Report No.	30EE0055-HO-01		
Date	12/09/2009	12/10/2009	12/13/2009
Temperature/ Humidity	22 deg.C./ 36%	22 deg.C./ 34%	22 deg.C./ 41%
Engineer	Takumi Shimada (10-26.5GHz)	Takumi Shimada (1-10GHz)	Takumi Shimada (30-1000MHz)
Mode	Tx, 3DH5 2480MHz		

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	50.922	QP	43.6	10.0	7.5	32.2	28.9	40.0	11.1	
Hori	75.468	QP	49.1	6.2	7.8	32.1	31.0	40.0	9.0	
Hori	215.999	QP	44.0	16.9	9.3	32.0	38.2	43.5	5.3	
Hori	576.004	QP	37.1	19.5	11.7	32.0	36.3	46.0	9.7	
Hori	749.987	QP	34.4	20.9	12.6	31.7	36.2	46.0	9.8	
Hori	874.986	QP	28.0	21.9	13.2	31.1	32.0	46.0	14.0	
Hori	1941.700	PK	67.6	26.2	2.5	32.4	63.9	73.9	10.0	
Hori	2483.500	PK	54.3	27.3	2.8	32.4	52.0	73.9	21.9	
Hori	4960.000	PK	41.5	31.5	5.3	31.3	47.0	73.9	26.9	
Hori	7440.000	PK	42.0	36.0	5.8	31.1	52.7	73.9	21.2	
Hori	9920.000	PK	42.2	38.7	6.7	31.4	56.2	73.9	17.7	
Hori	24800.000	PK	48.4	39.1	-1.4	30.0	56.1	73.9	17.8	
Hori	1941.700	AV	35.6	26.2	2.5	32.4	31.9	53.9	22.0	VBW=10Hz
Hori	2483.500	AV	35.9	27.3	2.8	32.4	33.6	53.9	20.3	
Hori	4960.000	AV	29.7	31.5	5.3	31.3	35.2	53.9	18.7	
Hori	7440.000	AV	29.9	36.0	5.8	31.1	40.6	53.9	13.3	
Hori	9920.000	AV	30.4	38.7	6.7	31.4	44.4	53.9	9.5	
Hori	24800.000	AV	36.4	39.1	-1.4	30.0	44.1	53.9	9.8	
Vert	46.771	QP	47.4	11.4	7.4	32.2	34.0	40.0	6.0	
Vert	72.120	QP	45.7	6.2	7.8	32.1	27.6	40.0	12.4	
Vert	215.999	QP	30.8	16.9	9.3	32.0	25.0	43.5	18.5	
Vert	576.002	QP	34.7	19.5	11.7	32.0	33.9	46.0	12.1	
Vert	749.991	QP	38.1	20.9	12.6	31.7	39.9	46.0	6.1	
Vert	874.985	QP	28.8	21.9	13.2	31.1	32.8	46.0	13.2	
Vert	1943.683	PK	67.0	26.2	2.5	32.4	63.3	73.9	10.6	
Vert	2483.500	PK	56.4	27.3	2.8	32.4	54.1	73.9	19.8	
Vert	4960.000	PK	41.9	31.5	5.3	31.3	47.4	73.9	26.6	
Vert	7440.000	PK	42.1	36.0	5.8	31.1	52.8	73.9	21.2	
Vert	9920.000	PK	42.5	38.7	6.7	31.4	56.5	73.9	17.5	
Vert	24800.000	PK	48.3	39.1	-1.4	30.0	56.0	73.9	17.9	
Vert	1943.683	AV	34.8	26.2	2.5	32.4	31.1	53.9	22.9	VBW=10Hz
Vert	2483.500	AV	36.3	27.3	2.8	32.4	34.0	53.9	19.9	
Vert	4960.000	AV	29.2	31.5	5.3	31.3	34.7	53.9	19.2	
Vert	7440.000	AV	29.9	36.0	5.8	31.1	40.6	53.9	13.3	
Vert	9920.000	AV	30.4	38.7	6.7	31.4	44.4	53.9	9.5	
Vert	24800.000	AV	36.6	39.1	-1.4	30.0	44.3	53.9	9.6	

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

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

*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

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Radiated Spurious Emission
(Power Supply: SONY)

Test place	Head Office EMC Lab. No.2 Semi Anechoic Chamber	
Report No.	30EE0055-HO-01	
Date	12/10/2009	12/13/2009
Temperature/ Humidity	22 deg.C./ 34%	22 deg.C./ 41%
Engineer	Takumi Shimada	Takumi Shimada
	(1-10GHz)	(30-1000MHz)
Mode	Rx 2441MHz	

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	50.858	QP	43.5	10.0	7.5	32.2	28.8	40.0	11.2	
Hori	75.382	QP	49.2	6.2	7.8	32.1	31.1	40.0	8.9	
Hori	215.999	QP	44.3	16.9	9.3	32.0	38.5	43.5	5.0	
Hori	576.003	QP	36.2	19.5	11.7	32.0	35.4	46.0	10.6	
Hori	749.996	QP	34.3	20.9	12.6	31.7	36.1	46.0	9.9	
Hori	874.991	QP	28.4	21.9	13.2	31.1	32.4	46.0	13.6	
Hori	1943.183	PK	65.6	26.2	2.5	32.4	61.9	73.9	12.0	
Hori	2441.000	PK	46.1	27.2	2.8	32.4	43.7	73.9	30.3	
Hori	1943.183	AV	33.6	26.2	2.5	32.4	29.9	53.9	24.0	VBW=10Hz
Hori	2441.000	AV	31.0	27.2	2.8	32.4	28.6	53.9	25.3	VBW=10Hz
Vert	46.562	QP	47.7	11.5	7.4	32.2	34.4	40.0	5.6	
Vert	71.968	QP	45.7	6.2	7.8	32.1	27.6	40.0	12.4	
Vert	215.999	QP	31.6	16.9	9.3	32.0	25.8	43.5	17.7	
Vert	576.001	QP	34.3	19.5	11.7	32.0	33.5	46.0	12.5	
Vert	749.992	QP	38.3	20.9	12.6	31.7	40.1	46.0	5.9	
Vert	874.993	QP	29.5	21.9	13.2	31.1	33.5	46.0	12.5	
Vert	1941.767	PK	64.5	26.2	2.5	32.4	60.8	73.9	13.1	
Vert	2441.000	PK	43.5	27.2	2.8	32.4	41.1	73.9	32.8	
Vert	1941.767	AV	33.4	26.2	2.5	32.4	29.7	53.9	24.2	VBW=10Hz
Vert	2441.000	AV	30.1	27.2	2.8	32.4	27.7	53.9	26.2	VBW=10Hz

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).
*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

Radiated Spurious Emission
Reference Data
(Power Supply: DELTA)

Test place Head Office EMC Lab. No.4 Semi Anechoic Chamber
Report No. 30EE0055-HO-01
Date 12/26/2009
Temperature/ Humidity 23 deg.C./ 38%
Engineer Takumi Shimada

Mode Tx, DH5 2441MHz

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	47.995	QP	35.1	12.0	7.5	32.0	22.6	40.0	17.4	
Hori	75.448	QP	46.8	7.0	7.9	32.0	29.7	40.0	10.3	
Hori	215.999	QP	42.4	17.6	9.3	31.9	37.4	43.5	6.1	
Hori	576.002	QP	35.3	20.1	11.6	32.1	34.9	46.0	11.1	
Hori	749.978	QP	34.2	23.0	12.5	31.9	37.8	46.0	8.2	
Hori	874.978	QP	33.5	23.8	13.1	31.3	39.1	46.0	6.9	
Hori	1941.829	PK	62.7	25.9	2.7	33.0	58.3	73.9	15.6	
Hori	4882.000	PK	42.7	31.1	5.4	31.9	47.3	73.9	26.6	
Hori	7323.000	PK	42.1	36.1	5.8	32.6	51.4	73.9	22.5	
Hori	9764.000	PK	42.0	38.1	7.0	33.4	53.7	73.9	20.2	
Hori	24410.000	PK	47.5	38.3	-1.1	32.3	52.4	73.9	21.5	
Hori	1941.829	AV	33.6	25.9	2.7	33.0	29.2	53.9	24.7	VBW=10Hz
Hori	4882.000	AV	33.1	31.1	5.4	31.9	37.7	53.9	16.2	
Hori	7323.000	AV	30.0	36.1	5.8	32.6	39.3	53.9	14.6	
Hori	9764.000	AV	30.0	38.1	7.0	33.4	41.7	53.9	12.2	
Hori	24410.000	AV	34.9	38.3	-1.1	32.3	39.8	53.9	14.1	
Vert	46.436	QP	44.2	12.6	7.5	32.1	32.2	40.0	7.8	
Vert	75.568	QP	41.7	7.0	7.9	32.0	24.6	40.0	15.4	
Vert	215.999	QP	35.1	17.6	9.3	31.9	30.1	43.5	13.4	
Vert	576.007	QP	33.7	20.1	11.6	32.1	33.3	46.0	12.7	
Vert	749.968	QP	33.5	23.0	12.5	31.9	37.1	46.0	8.9	
Vert	874.961	QP	32.0	23.8	13.1	31.3	37.6	46.0	8.4	
Vert	1942.183	PK	68.8	25.9	2.7	33.0	64.4	73.9	9.5	
Vert	4882.000	PK	43.0	31.1	5.4	31.9	47.6	73.9	26.3	
Vert	9764.000	PK	42.3	38.1	7.0	33.4	54.0	73.9	19.9	
Vert	24410.000	PK	47.7	38.3	-1.1	32.3	52.6	73.9	21.3	
Vert	1942.183	AV	36.4	25.9	2.7	33.0	32.0	53.9	21.9	VBW=10Hz
Vert	4882.000	AV	33.0	31.1	5.4	31.9	37.6	53.9	16.3	
Vert	7323.000	AV	30.0	36.1	5.8	32.6	39.3	53.9	14.6	
Vert	9764.000	AV	30.0	38.1	7.0	33.4	41.7	53.9	12.2	
Vert	24410.000	AV	34.7	38.3	-1.1	32.3	39.6	53.9	14.3	

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).
*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

Radiated Spurious Emission
Reference Data
(Power Supply: DELTA)

Test place Head Office EMC Lab. No.3 Semi Anechoic Chamber
Report No. 30EE0055-HO-01
Date 01/15/2010
Temperature/ Humidity 23 deg.C./ 38%
Engineer Takumi Shimada

Mode Rx, 2441MHz

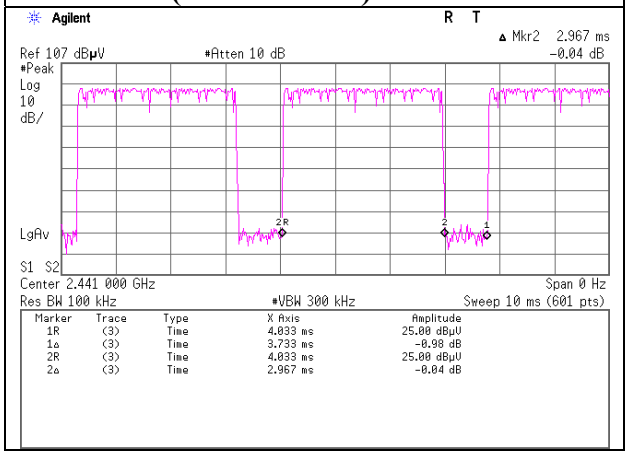
Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Remark
Hori	48.005	QP	39.0	11.0	7.4	32.2	25.2	40.0	14.8	
Hori	79.195	QP	47.8	6.1	7.9	32.1	29.7	40.0	10.3	
Hori	215.999	QP	44.2	16.9	9.3	32.0	38.4	43.5	5.1	
Hori	576.004	QP	40.2	19.5	11.7	32.0	39.4	46.0	6.6	
Hori	750.000	QP	33.9	20.9	12.6	31.7	35.7	46.0	10.3	
Hori	874.995	QP	30.3	21.9	13.2	31.1	34.3	46.0	11.7	
Hori	1941.807	PK	61.3	26.8	2.5	32.7	57.9	73.9	16.0	
Hori	2441.000	PK	42.3	27.2	2.8	32.3	40.0	73.9	33.9	
Hori	3186.506	PK	52.2	28.4	3.1	31.9	51.8	73.9	22.1	
Hori	1941.807	AV	32.2	26.8	2.5	32.7	28.8	53.9	25.2	VBW=10Hz
Hori	2441.000	AV	31.0	27.2	2.8	32.3	28.7	53.9	25.2	VBW=10Hz
Hori	3186.506	AV	35.2	28.4	3.1	31.9	34.8	53.9	19.1	VBW=10Hz
Vert	44.776	QP	43.9	12.1	7.4	32.2	31.2	40.0	8.8	
Vert	78.372	QP	41.9	6.1	7.9	32.1	23.8	40.0	16.2	
Vert	215.999	QP	33.8	16.9	9.3	32.0	28.0	43.5	15.5	
Vert	576.001	QP	36.4	19.5	11.7	32.0	35.6	46.0	10.4	
Vert	749.992	QP	34.2	20.9	12.6	31.7	36.0	46.0	10.0	
Vert	874.993	QP	29.6	21.9	13.2	31.1	33.6	46.0	12.4	
Vert	1941.870	PK	66.7	26.8	2.5	32.7	63.3	73.9	10.6	
Vert	2441.000	PK	44.8	27.2	2.8	32.3	42.5	73.9	31.4	
Vert	3187.367	PK	53.8	28.4	3.1	31.9	53.4	73.9	20.5	
Vert	1941.870	AV	35.5	26.8	2.5	32.7	32.1	53.9	21.8	VBW=10Hz
Vert	2441.000	AV	31.4	27.2	2.8	32.3	29.1	53.9	24.8	VBW=10Hz
Vert	3187.367	AV	36.4	28.4	3.1	31.9	36.0	53.9	17.9	VBW=10Hz

Result = Reading + Ant Factor + Loss (Cable+Attenuator+Filter-Distance factor(above 10GHz)) - Gain(Amplifier)
*Other frequency noises omitted in this report were not seen or had enough margin (more than 20dB).
*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

VBW (AV) Calculation

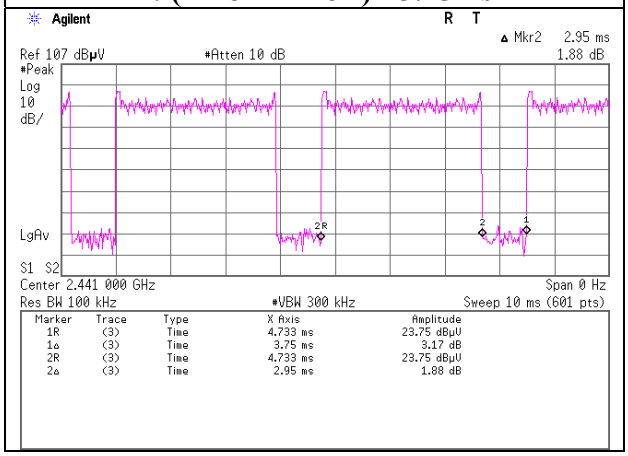
DH5

VBW: 1/x = 268Hz<270Hz
x: (Tx on+Tx off) =3.73ms



3DH5

VBW: 1/x = 267Hz<270Hz
x: (Tx on+Tx off) =3.75ms



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APPENDIX 3: Test instruments

EMI test equipment

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	-
COTS-MEMI	EMI measurement program	TSJ	TEPTO-DV	-	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-05	Biconical Antenna	Schwarzbeck	BBA9106	1302	RE	2009/01/10 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	201	RE	2009/10/05 * 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-26.5GHz 6m	Suhner	SUCOFLEX104	246769(1m) / 292411(5m)	RE	2009/11/17 * 12
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)/sucoform141-PE(1m)/RFM-E121(Switcher)	-/04178	CE	2009/07/01 * 12
MAEC-03	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-10005	RE	2009/02/02 * 12
MOS-13	Thermo-Hygrometer	Custom	CTH-180	-	RE	2009/02/06 * 12
MJM-06	Measure	PROMART	SEN1955	-	RE	-
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

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
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	RE/CE	2009/08/17 * 12
MOS-22	Thermo-Hygrometer	Custom	CTH-201	0003	RE/CE	2009/02/05 * 12
MJM-05	Measure	PROMART	SEN1955	-	RE/CE	-
MSA-03	Spectrum Analyzer	Agilent	E4448A	MY44020357	RE/CE	2009/11/20 * 12
MHA-06	Horn Antenna 1-18GHz	Schwarzbeck	BBHA9120D	254	RE	2009/01/31 * 12
MCC-47	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	295123(5m) / 287573(1m)	RE	2009/11/19 * 12
MPA-10	Pre Amplifier	Agilent	8449B	3008A02142	RE	2009/09/14 * 12
MCC-77	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	278942/4	RE	2008/12/17 * 12
MHF-18	High Pass Filter 3.5-18.0GHz	TOKIMEC	TF323DCA	7002	RE	2008/12/16 * 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

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