APPENDIX 2: Data of EMI test

Conducted Emission
Tx, Ch: Low

DATA OF CONDUCTED EMISSION TEST

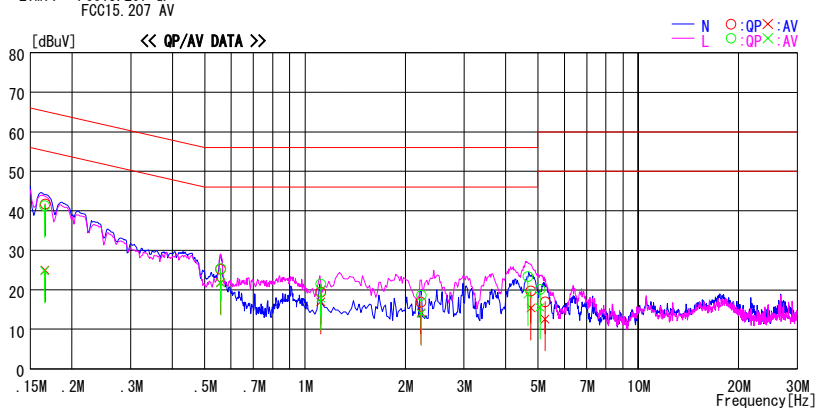
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/05/18

Company : YAMAHA CORPORATION
Kind of EUT : Portable Player Dock
Model No. : PDX-60
Serial No. : T023309ZP

Report No. : 29IE0192-HO-01
Power : AC120V / 60Hz
Temp./Humi. : 22deg.C. / 58%
Engineer : Kazufumi Nakai

Mode / Remarks : Tx 2405.376MHz

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]		
0.16582	41.4	24.7	0.3	41.7	25.0	65.2	55.2	23.5	30.2	N	
0.55767	24.9	21.6	0.3	25.2	21.9	56.0	46.0	30.8	24.1	N	
1.11579	19.0	16.5	0.4	19.4	16.9	56.0	46.0	36.6	29.1	N	
2.23041	16.4	13.7	0.5	16.9	14.2	56.0	46.0	39.1	31.8	N	
4.76448	18.9	14.6	0.8	19.7	15.4	56.0	46.0	36.3	30.6	N	
5.25553	16.1	11.7	0.9	17.0	12.6	60.0	50.0	43.0	37.4	N	
0.16541	41.0	24.5	0.3	41.3	24.8	65.2	55.2	23.9	30.4	L	
0.55844	25.1	21.4	0.3	25.4	21.7	56.0	46.0	30.6	24.3	L	
1.11532	21.1	17.5	0.4	21.5	17.9	56.0	46.0	34.5	28.1	L	
2.23165	18.1	13.5	0.5	18.6	14.0	56.0	46.0	37.4	32.0	L	
4.66825	22.6	18.2	0.8	23.4	19.0	56.0	46.0	32.6	27.0	L	
5.07335	19.2	14.7	0.9	20.1	15.6	60.0	50.0	39.9	34.4	L	

CHART:WITH FACTOR,Peak hold data. CALCURATION:RESULT[dBuV]=READING[dBuV]+C.F[dB](LISN FAC+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.

UL Japan, Inc.
Head Office EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8116
Facsimile : +81 596 24 8124

Conducted Emission
Tx, Ch: Mid

DATA OF CONDUCTED EMISSION TEST

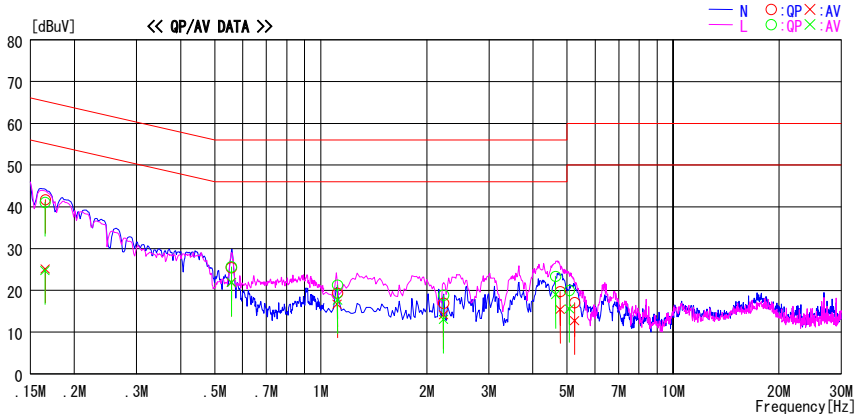
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/05/18

Company : YAMAHA CORPORATION
Kind of EUT : Portable Player Dock
Model No. : PDX-60
Serial No. : T023309ZP

Report No. : 29IE0192-HO-01
Power : AC120V / 60Hz
Temp./Humi. : 22deg.C. / 58%
Engineer : Kazufumi Nakai

Mode / Remarks : Tx 2436.096MHz

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]		
0.16524	41.4	24.8	0.3	41.7	25.1	65.2	55.2	23.5	30.1	N	
0.55714	25.1	21.6	0.3	25.4	21.9	56.0	46.0	30.6	24.1	N	
1.11449	18.9	16.3	0.4	19.3	16.7	56.0	46.0	36.7	29.3	N	
2.23051	16.4	13.6	0.5	16.9	14.1	56.0	46.0	39.1	31.9	N	
4.78114	18.9	14.6	0.8	19.7	15.4	56.0	46.0	36.3	30.6	N	
5.25421	16.2	11.8	0.9	17.1	12.7	60.0	50.0	42.9	37.3	N	
0.16474	40.8	24.4	0.3	41.1	24.7	65.2	55.2	24.1	30.5	L	
0.55792	25.3	21.6	0.3	25.6	21.9	56.0	46.0	30.4	24.1	L	
1.11488	20.9	17.3	0.4	21.3	17.7	56.0	46.0	34.7	28.3	L	
2.23104	18.3	12.5	0.5	18.8	13.0	56.0	46.0	37.2	33.0	L	
4.63815	22.6	18.2	0.8	23.4	19.0	56.0	46.0	32.6	27.0	L	
5.08112	19.1	14.7	0.9	20.0	15.6	60.0	50.0	40.0	34.4	L	

CHART:WITH FACTOR,Peak hold data. CALCURATION:RESULT[dBuV]=READING[dBuV]+C.F[dB](LISN FAC+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
Tx, Ch: High

DATA OF CONDUCTED EMISSION TEST

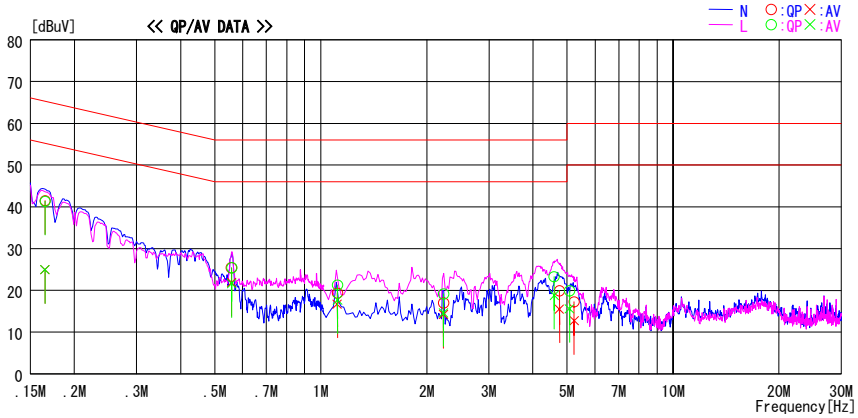
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/05/18

Company : YAMAHA CORPORATION
Kind of EUT : Portable Player Dock
Model No. : PDX-60
Serial No. : T023309ZP

Report No. : 29IE0192-HO-01
Power : AC120V / 60Hz
Temp./Humi. : 22deg.C. / 58%
Engineer : Kazufumi Nakai

Mode / Remarks : Tx 2473.984MHz

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]		
0.16474	41.2	24.6	0.3	41.5	24.9	65.2	55.2	23.7	30.3	N	
0.55751	25.1	21.6	0.3	25.4	21.9	56.0	46.0	30.6	24.1	N	
1.11461	18.9	16.3	0.4	19.3	16.7	56.0	46.0	36.7	29.3	N	
2.22957	16.5	13.7	0.5	17.0	14.2	56.0	46.0	39.0	31.8	N	
4.75612	19.1	14.7	0.8	19.9	15.5	56.0	46.0	36.1	30.5	N	
5.23674	16.3	11.8	0.9	17.2	12.7	60.0	50.0	42.8	37.3	N	
0.16474	41.0	24.6	0.3	41.3	24.9	65.2	55.2	23.9	30.3	L	
0.55851	25.1	21.3	0.3	25.4	21.6	56.0	46.0	30.6	24.4	L	
1.11513	20.9	17.3	0.4	21.3	17.7	56.0	46.0	34.7	28.3	L	
2.23045	18.7	14.1	0.5	19.2	14.6	56.0	46.0	36.8	31.4	L	
4.59941	22.5	18.0	0.8	23.3	18.8	56.0	46.0	32.7	27.2	L	
5.08636	19.0	14.7	0.9	19.9	15.6	60.0	50.0	40.1	34.4	L	

CHART:WITH FACTOR,Peak hold data. CALCURATION:RESULT[dBuV]=READING[dBuV]+C.F[dB](LISN FAC+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
Rx, Ch: Mid

DATA OF CONDUCTED EMISSION TEST

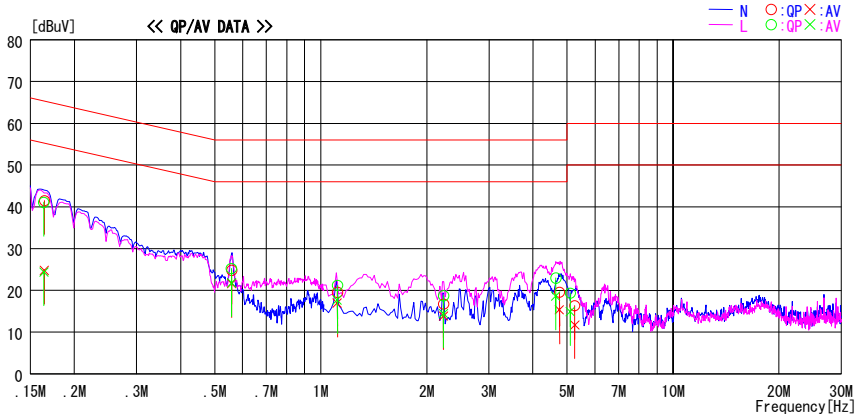
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/05/18

Company : YAMAHA CORPORATION
Kind of EUT : Portable Player Dock
Model No. : PDX-60
Serial No. : T023309ZP

Report No. : 29IE0192-HO-01
Power : AC120V / 60Hz
Temp./Humi. : 22deg.C. / 58%
Engineer : Kazufumi Nakai

Mode / Remarks : Rx 2436.096MHz

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]		
0.16407	41.2	24.5	0.3	41.5	24.8	65.3	55.3	23.8	30.5	N	
0.55834	24.5	21.3	0.3	24.8	21.6	56.0	46.0	31.2	24.4	N	
1.11441	19.1	16.5	0.4	19.5	16.9	56.0	46.0	36.5	29.1	N	
2.22882	16.2	13.4	0.5	16.7	13.9	56.0	46.0	39.3	32.1	N	
4.75996	18.8	14.5	0.8	19.6	15.3	56.0	46.0	36.4	30.7	N	
5.25994	15.4	10.8	0.9	16.3	11.7	60.0	50.0	43.7	38.3	N	
0.16357	40.8	24.1	0.3	41.1	24.4	65.3	55.3	24.2	30.9	L	
0.55784	24.9	21.5	0.3	25.2	21.8	56.0	46.0	30.8	24.2	L	
1.11424	20.8	17.3	0.4	21.2	17.7	56.0	46.0	34.8	28.3	L	
2.23041	18.2	13.9	0.5	18.7	14.4	56.0	46.0	37.3	31.6	L	
4.64532	22.2	17.8	0.8	23.0	18.6	56.0	46.0	33.0	27.4	L	
5.10948	18.4	14.0	0.9	19.3	14.9	60.0	50.0	40.7	35.1	L	

CHART:WITH FACTOR,Peak hold data. CALCURATION:RESULT[dBuV]=READING[dBuV]+C.F[dB](LISN FAC+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.

6dB Bandwidth

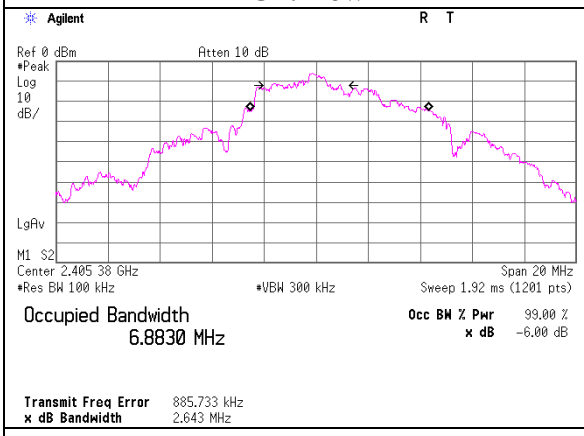
UL Japan, Inc.
Head Office EMC Lab. No.3 Shielded Room

Company	: YAMAHA CORPORATION	Test Report No.	: 29IE0192-HO-01
Equipment	: Portable Player Dock	Regulation	: FCC15.247(a)(2)/RSS-210A8.2(a)
Model No.	: PDX-60	Test distance	: -
Serial No.	: T023029ZP	Date	: 05/16/2009
Power	: AC120V/60Hz	Temperature	: 22deg.C.
Mode	: Tx (Ch L, M, H)	Humidity	: 52%
		Engineer	: Hironobu Ohnishi

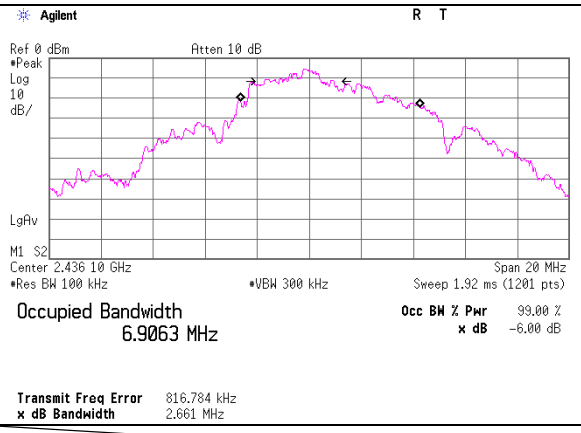
Ch	Freq. [MHz]	6dB Bandwidth [MHz]	Limit [kHz]
Low	2405.4	2.643	>500
Mid	2436.1	2.661	>500
High	2474.0	2.156	>500

6dB Bandwidth

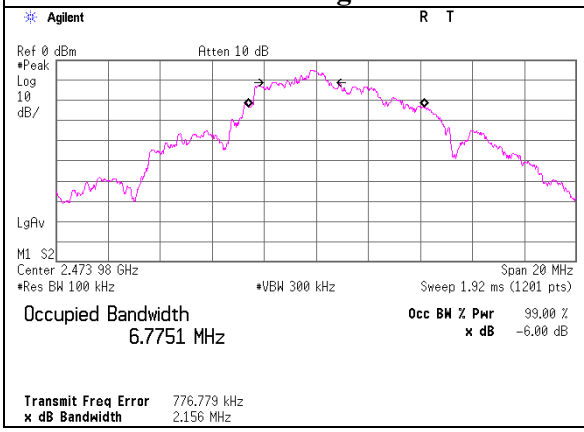
Ch: Low



Ch: Mid



Ch: High



UL Japan, Inc.
Head Office EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8116
Facsimile : +81 596 24 8124

Maximum Peak Output Power

UL Japan, Inc.
Head Office EMC Lab. No.3 Shielded Room

Company	: YAMAHA CORPORATION	Test Report No.	: 29IE0192-HO
Equipment	: Portable Player Dock	Regulation	: FCC15.247(b)(3)/RSS-210A8.4(4)
Model No.	: PDX-60	Test distance	: -
Serial No.	: T023029ZP	Date	: 05/16/2009
Power	: AC120V/60Hz	Temperature	: 22deg.C.
Mode	: Tx (Ch L, M, H)	Humidity	: 52%
		Engineer	: Hironobu Ohnishi

Ch	Freq.	P/M Reading	Cable Loss	Atten.	Result		Limit		Margin
	[MHz]	[dBm]	[dB]	[dB]	[dBm]	[mW]	[dBm]	[mW]	[dB]
Low	2405.4	-5.06	1.53	10.02	6.49	4.46	30.00	1000	23.51
Mid	2436.1	-4.50	1.54	10.02	7.06	5.08	30.00	1000	22.94
High	2474.0	-4.21	1.55	10.02	7.35	5.44	30.00	1000	22.65

Sample Calculation:
Result = Reading + Cable Loss (supplied by customer + ULJ cable) + Attenuator Loss

Radiated Spurious Emission (below 1GHz)
Tx, Ch: Low

DATA OF RADIATED EMISSION TEST

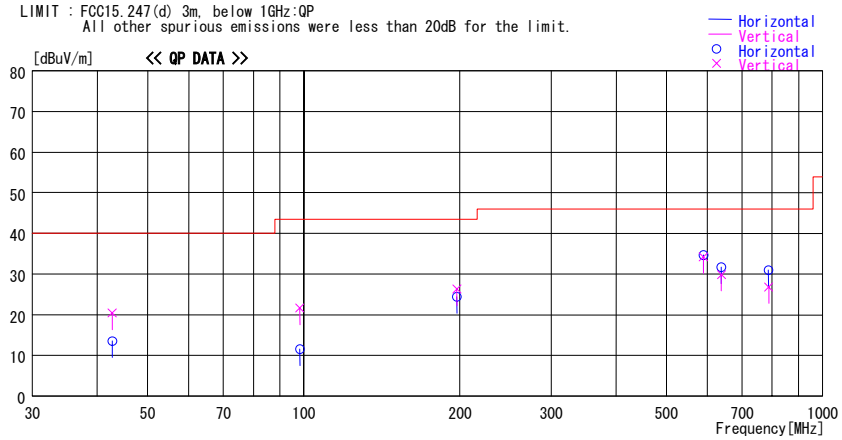
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/05/18

Company : YAMAHA CORPORATION
Kind of EUT : Portable Player Dock
Model No. : PDX-60
Serial No. : T023309ZP

Report No. : 29IE0192-HO-01
Power : AC120V / 60Hz
Temp./Humi. : 22deg.C. / 58%
Engineer : Kazufumi Nakai

Mode / Remarks : Tx 2405.376MHz / Normal-axis

LIMIT : FCC15.247(d) 3m, below 1GHz:QP
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna Factor [dB/m]	Loss& Gain [dB]	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
42.760	22.5	QP	12.8	-21.8	13.5	0	300	Hori.	40.0	26.5	
42.762	29.5	QP	12.7	-21.8	20.4	10	100	Vert.	40.0	19.6	
98.330	22.7	QP	10.0	-21.1	11.6	0	300	Hori.	43.5	31.9	
98.333	32.7	QP	10.0	-21.1	21.6	8	100	Vert.	43.5	21.9	
197.364	27.8	QP	16.5	-19.9	24.4	256	100	Hori.	43.5	19.1	
197.365	29.7	QP	16.5	-19.9	26.3	55	100	Vert.	43.5	17.2	
589.798	34.5	QP	19.1	-18.9	34.7	86	134	Hori.	46.0	11.3	
589.803	34.0	QP	19.1	-18.9	34.2	329	100	Vert.	46.0	11.8	
638.949	29.0	QP	19.4	-18.5	29.9	64	100	Vert.	46.0	16.1	
638.954	30.8	QP	19.4	-18.5	31.7	32	127	Hori.	46.0	14.3	
786.398	27.1	QP	21.5	-17.6	31.0	150	100	Hori.	46.0	15.0	
787.670	22.9	QP	21.5	-17.6	26.8	72	100	Vert.	46.0	19.2	

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-300MHz:BICONICAL, 300MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - GAIN(AMP)

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

Radiated Spurious Emission (below 1GHz)
Tx, Ch: Mid

DATA OF RADIATED EMISSION TEST

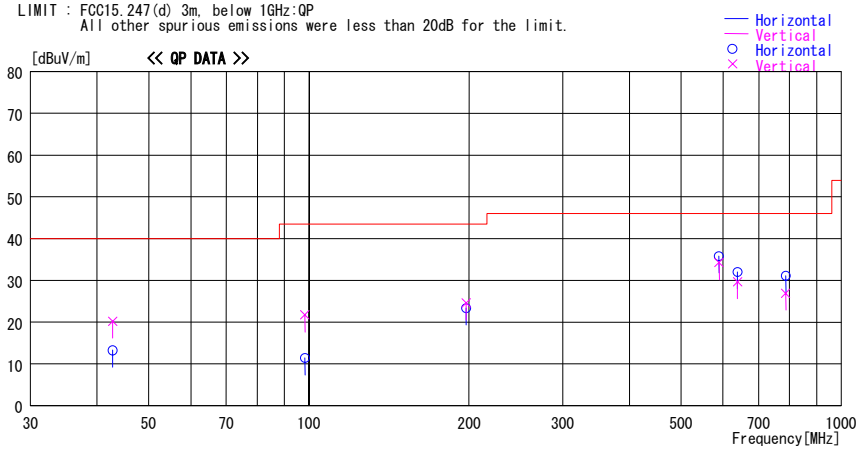
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/05/18

Company : YAMAHA CORPORATION
Kind of EUT : Portable Player Dock
Model No. : PDX-60
Serial No. : T023309ZP

Report No. : 29IE0192-HO-01
Power : AC120V / 60Hz
Temp./Humi. : 22deg.C. / 58%
Engineer : Kazufumi Nakai

Mode / Remarks : Tx 2436.096MHz / Normal-axis

LIMIT : FCC15.247(d) 3m, below 1GHz:QP
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna Factor [dB/m]	Loss& Gain [dB]	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
42.775	22.4	QP	12.7	-21.8	13.3	0	300	Hori.	40.0	26.7	
42.775	29.3	QP	12.7	-21.8	20.2	346	100	Vert.	40.0	19.8	
98.267	32.8	QP	10.0	-21.1	21.7	5	100	Vert.	43.5	21.8	
98.321	22.5	QP	10.0	-21.1	11.4	0	300	Hori.	43.5	32.1	
197.353	26.8	QP	16.5	-19.9	23.4	270	100	Hori.	43.5	20.1	
197.361	28.0	QP	16.5	-19.9	24.6	98	100	Vert.	43.5	18.9	
589.333	35.6	QP	19.1	-18.9	35.8	57	138	Hori.	46.0	10.2	
589.799	34.0	QP	19.1	-18.9	34.2	333	100	Vert.	46.0	11.8	
638.949	31.1	QP	19.4	-18.5	32.0	51	120	Hori.	46.0	14.0	
638.955	28.7	QP	19.4	-18.5	29.6	70	100	Vert.	46.0	16.4	
786.396	27.2	QP	21.5	-17.6	31.1	147	100	Hori.	46.0	14.9	
786.396	23.0	QP	21.5	-17.6	26.9	75	100	Vert.	46.0	19.1	

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-300MHz:BICONICAL, 300MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - GAIN(AMP)

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

UL Japan, Inc.
Head Office EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8116
Facsimile : +81 596 24 8124

Radiated Spurious Emission (below 1GHz)
Tx, Ch: High

DATA OF RADIATED EMISSION TEST

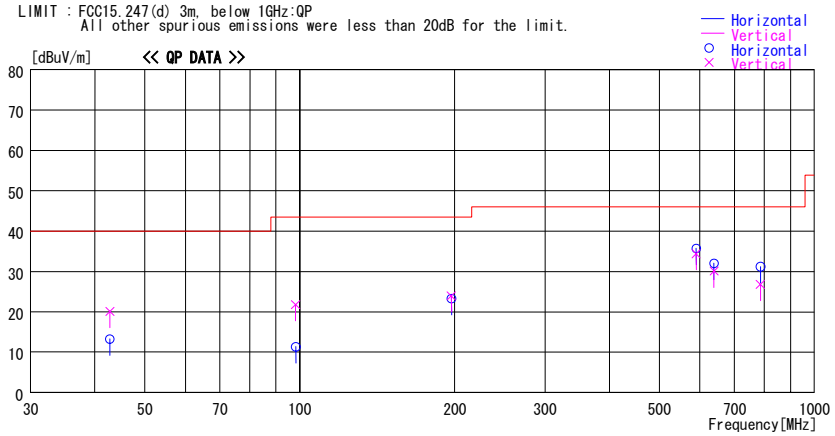
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/05/18

Company : YAMAHA CORPORATION
Kind of EUT : Portable Player Dock
Model No. : PDX-60
Serial No. : T023309ZP

Report No. : 29IE0192-HO-01
Power : AC120V / 60Hz
Temp./Humi. : 22deg.C. / 58%
Engineer : Kazufumi Nakai

Mode / Remarks : Tx 2473.984MHz / Normal-axis

LIMIT : FCC15.247(d) 3m, below 1GHz:QP
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna Factor [dB/m]	Loss& Gain [dB]	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
42.781	22.4	QP	12.7	-21.8	13.3	0	300	Hori.	40.0	26.7	
42.783	29.2	QP	12.7	-21.8	20.1	7	100	Vert.	40.0	19.9	
98.258	32.9	QP	10.0	-21.1	21.8	93	100	Vert.	43.5	21.7	
98.332	22.4	QP	10.0	-21.1	11.3	0	300	Hori.	43.5	32.2	
197.351	27.4	QP	16.5	-19.9	24.0	56	100	Vert.	43.5	19.5	
197.358	26.7	QP	16.5	-19.9	23.3	225	100	Hori.	43.5	20.2	
589.797	35.5	QP	19.1	-18.9	35.7	62	131	Hori.	46.0	10.3	
589.799	34.2	QP	19.1	-18.9	34.4	333	100	Vert.	46.0	11.6	
638.949	29.2	QP	19.4	-18.5	30.1	70	100	Vert.	46.0	15.9	
638.960	31.1	QP	19.4	-18.5	32.0	44	122	Hori.	46.0	14.0	
786.396	27.3	QP	21.5	-17.6	31.2	159	100	Hori.	46.0	14.8	
786.401	22.9	QP	21.5	-17.6	26.8	1	100	Vert.	46.0	19.2	

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-300MHz:BICONICAL, 300MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - GAIN(AMP)

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

UL Japan, Inc.
Head Office EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8116
Facsimile : +81 596 24 8124

Radiated Spurious Emission (below 1GHz)
Rx, Ch: Mid

DATA OF RADIATED EMISSION TEST

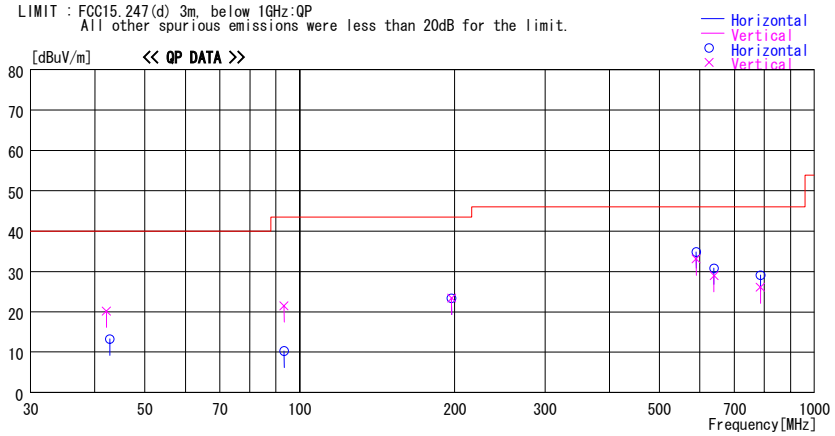
UL Japan, Inc. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2009/05/18

Company : YAMAHA CORPORATION
Kind of EUT : Portable Player Dock
Model No. : PDX-60
Serial No. : T023309ZP

Report No. : 29IE0192-HO-01
Power : AC120V / 60Hz
Temp./Humi. : 22deg.C. / 58%
Engineer : Kazufumi Nakai

Mode / Remarks : Rx 2436.096MHz / Normal-axis

LIMIT : FCC15.247(d) 3m, below 1GHz:QP
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna Factor [dB/m]	Loss& Gain [dB]	Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
42.136	29.0	QP	13.0	-21.8	20.2	11	100	Vert.	40.0	19.8	
42.760	22.3	QP	12.8	-21.8	13.3	0	300	Hori.	40.0	26.7	
93.275	33.5	QP	9.1	-21.1	21.5	121	100	Vert.	43.5	22.0	
93.354	22.3	QP	9.1	-21.1	10.3	0	300	Hori.	43.5	33.2	
197.353	26.8	QP	16.5	-19.9	23.4	246	100	Hori.	43.5	20.1	
197.357	26.8	QP	16.5	-19.9	23.4	27	100	Vert.	43.5	20.1	
589.799	32.9	QP	19.1	-18.9	33.1	322	100	Vert.	46.0	12.9	
589.803	34.6	QP	19.1	-18.9	34.8	61	149	Hori.	46.0	11.2	
638.947	28.1	QP	19.4	-18.5	29.0	66	100	Vert.	46.0	17.0	
638.951	29.9	QP	19.4	-18.5	30.8	52	118	Hori.	46.0	15.2	
786.396	25.2	QP	21.5	-17.6	29.1	199	100	Hori.	46.0	16.9	
786.397	22.2	QP	21.5	-17.6	26.1	129	100	Vert.	46.0	19.9	

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-300MHz:BICONICAL, 300MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - GAIN(AMP)

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

Radiated Spurious Emission (above 1GHz)

Tx, Ch: Low

UL Japan, Inc.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: YAMAHA CORPORATION	REPORT NO	: 29IE0192-HO-01
Equipment	: Portable Player Dock	REGULATION	: FCC15.247(d)/RSS-210A8.5
Model	: PDX-60	TEST DISTANCE	: 3/1m
Sample No.	: T023309ZP	DATE	: 05/17/2009
Power	: AC 120 V / 60 Hz	TEMPERATURE	: 24deg.C
Mode	: Tx, 2405.376MHz	HUMIDITY	: 46%
Remarks	: Normal-axis	ENGINEER	: Norihisa Hashimoto

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	PK	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	44.6	43.7	27.1	32.4	2.6	0.0	41.9	41.0	73.9	32.0	32.9
2	4810.8	44.2	47.9	31.2	31.4	3.7	1.4	49.1	52.8	73.9	24.8	21.1
3	7216.1	41.8	42.0	35.6	31.2	4.1	0.0	50.3	50.5	73.9	23.6	23.4
4	9621.5	41.8	41.9	38.4	32.0	4.7	0.0	52.9	53.0	73.9	21.0	20.9
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12026.9	NS	NS	-	-	-	-	-	-	73.9	-	-
6	14432.3	NS	NS	-	-	-	-	-	-	73.9	-	-
7	16837.6	NS	NS	-	-	-	-	-	-	73.9	-	-
8	19243.0	NS	NS	-	-	-	-	-	-	73.9	-	-
9	21648.4	NS	NS	-	-	-	-	-	-	73.9	-	-
10	24053.8	45.9	46.4	40.3	29.0	7.9	0.0	55.6	56.1	73.9	18.3	17.8

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	AV	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	31.3	30.4	27.1	32.4	2.6	0.0	28.6	27.7	53.9	25.3	26.2
2	4810.8	36.9	40.8	31.2	31.4	3.7	1.4	41.8	45.7	53.9	12.1	8.2
3	7216.1	30.0	29.9	35.6	31.2	4.1	0.0	38.5	38.4	53.9	15.4	15.5
4	9621.5	30.7	30.5	38.4	32.0	4.7	0.0	41.8	41.6	53.9	12.1	12.3
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12026.9	NS	NS	-	-	-	-	-	-	53.9	-	-
6	14432.3	NS	NS	-	-	-	-	-	-	53.9	-	-
7	16837.6	NS	NS	-	-	-	-	-	-	53.9	-	-
8	19243.0	NS	NS	-	-	-	-	-	-	53.9	-	-
9	21648.4	NS	NS	-	-	-	-	-	-	53.9	-	-
10	24053.8	34.3	34.3	40.3	29.0	7.9	0.0	44.0	44.0	53.9	9.9	9.9

20dBc(Fundamental 2405.376MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	20dBc	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2405.4	101.6	97.4	27.2	32.4	2.6	0.0	99.0	94.8	-	-	-
2	2400.0	68.1	63.1	27.2	32.4	2.6	0.0	65.5	60.5	Funda-20dB	13.5	14.3

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB
*Except for the above table : All other spurious emissions were less than 20dB for the limit.
*In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*The test result is round off to one or two decimal places, so some differences might be observed.
*Hi-Pass Fiter was not used for factor 0.0dB of the above table.
*NS: Non Signal

Radiated Spurious Emission
Tx, Ch: Mid

UL Japan, Inc.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: YAMAHA CORPORATION	REPORT NO	: 29IE0192-HO-01
Equipment	: Portable Player Dock	REGULATION	: FCC15.247(d)/RSS-210A8.5
Model	: PDX-60	TEST DISTANCE	: 3/1m
Sample No.	: T023309ZP	DATE	: 05/17/2009
Power	: AC 120 V / 60 Hz	TEMPERATURE	: 24deg.C
Mode	: Tx, 2436.096MHz	HUMIDITY	: 46%
Remarks	: Normal-axis	ENGINEER	: Norihisa Hashimoto

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	PK	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4872.2	46.3	50.7	31.3	31.3	3.7	1.4	51.4	55.8	73.9	22.5	18.1
2	7308.3	42.1	42.4	35.8	31.2	4.0	0.0	50.7	51.0	73.9	23.2	22.9
3	9744.4	41.3	42.6	38.5	32.0	4.7	0.0	52.5	53.8	73.9	21.4	20.1
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12180.5	NS	NS	-	-	-	-	-	-	73.9	-	-
5	14616.6	NS	NS	-	-	-	-	-	-	73.9	-	-
6	17052.7	NS	NS	-	-	-	-	-	-	73.9	-	-
7	19488.8	NS	NS	-	-	-	-	-	-	73.9	-	-
8	21924.9	NS	NS	-	-	-	-	-	-	73.9	-	-
9	24361.0	47.2	47.4	40.4	29.0	8.0	0.0	57.1	57.3	73.9	16.8	16.6

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	AV	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4872.2	38.2	45.8	31.3	31.3	3.7	1.4	43.3	50.9	53.9	10.6	3.0
2	7308.3	30.1	30.0	35.8	31.2	4.0	0.0	38.7	38.6	53.9	15.2	15.3
3	9744.4	29.9	29.9	38.5	32.0	4.7	0.0	41.1	41.1	53.9	12.8	12.8
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12180.5	NS	NS	-	-	-	-	-	-	53.9	-	-
5	14616.6	NS	NS	-	-	-	-	-	-	53.9	-	-
6	17052.7	NS	NS	-	-	-	-	-	-	53.9	-	-
7	19488.8	NS	NS	-	-	-	-	-	-	53.9	-	-
8	21924.9	NS	NS	-	-	-	-	-	-	53.9	-	-
9	24361.0	34.7	34.7	40.4	29.0	8.0	0.0	44.6	44.6	53.9	9.3	9.3

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB
*Except for the above table : All other spurious emissions were less than 20dB for the limit.
*In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*The test result is round off to one or two decimal places, so some differences might be observed.
*Hi-Pass Fiter was not used for factor 0.0dB of the above table.
*NS: Non Signal

Radiated Spurious Emission
Tx, Ch: High

UL Japan, Inc.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: YAMAHA CORPORATION	REPORT NO	: 29IE0192-HO-01
Equipment	: Portable Player Dock	REGULATION	: FCC15.247(d)/RSS-210A8.5
Model	: PDX-60	TEST DISTANCE	: 3/1m
Sample No.	: T023309ZP	DATE	: 05/17/2009
Power	: AC 120 V / 60 Hz	TEMPERATURE	: 24deg.C
Mode	: Tx, 2473.984	HUMIDITY	: 46%
Remarks	: Normal-axis	ENGINEER	: Norihisa Hashimoto

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	PK	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	55.1	49.4	27.3	32.4	2.7	0.0	52.7	47.0	73.9	21.2	26.9
2	4948.0	49.1	49.5	31.4	31.3	3.7	1.4	54.3	54.7	73.9	19.6	19.2
3	7422.0	42.7	42.9	36.0	31.2	4.1	0.0	51.6	51.8	73.9	22.3	22.1
4	9895.9	42.5	42.6	38.7	32.0	4.7	0.0	53.9	54.0	73.9	20.0	19.9
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12369.9	NS	NS	-	-	-	-	-	-	73.9	-	-
6	14843.9	NS	NS	-	-	-	-	-	-	73.9	-	-
7	17317.9	NS	NS	-	-	-	-	-	-	73.9	-	-
8	19791.9	NS	NS	-	-	-	-	-	-	73.9	-	-
9	22265.9	NS	NS	-	-	-	-	-	-	73.9	-	-
10	24739.8	47.1	46.1	40.4	28.9	8.2	0.0	57.3	56.3	73.9	16.6	17.6

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	AV	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	46.0	39.4	27.3	32.4	2.7	0.0	43.6	37.0	53.9	10.3	16.9
2	4948.0	42.6	44.5	31.4	31.3	3.7	1.4	47.8	49.7	53.9	6.1	4.2
3	7422.0	29.4	29.3	36.0	31.2	4.1	0.0	38.3	38.2	53.9	15.6	15.7
4	9895.9	29.7	29.5	38.7	32.0	4.7	0.0	41.1	40.9	53.9	12.8	13.0
Test distance 1meter RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12369.9	NS	NS	-	-	-	-	-	-	53.9	-	-
6	14843.9	NS	NS	-	-	-	-	-	-	53.9	-	-
7	17317.9	NS	NS	-	-	-	-	-	-	53.9	-	-
8	19791.9	NS	NS	-	-	-	-	-	-	53.9	-	-
9	22265.9	NS	NS	-	-	-	-	-	-	53.9	-	-
10	24739.8	34.4	34.4	40.4	28.9	8.2	0.0	44.6	44.6	53.9	9.3	9.3

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB
*Except for the above table : All other spurious emissions were less than 20dB for the limit.
*In the frequency over the fifth harmonic, the noise from the EUT was not seen.The data above is its base noise.
*The test result is round off to one or two decimal places, so some differences might be observed.
*Hi-Pass Fiter was not used for factor 0.0dB of the above table.
*NS: Non Signal

Radiated Spurious Emission
Rx, Ch: Mid

UL Japan, Inc.
Head Office EMC Lab. No.2 Semi Anechoic Chamber

Company	: YAMAHA CORPORATION	REPORT NO	: 29IE0192-HO-01
Equipment	: Portable Player Dock	REGULATION	: FCC15.247(d)/RSS-210A8.5
Model	: PDX-60	TEST DISTANCE	: 3m
Sample No.	: T023309ZP	DATE	: 05/17/2009
Power	: AC 120 V / 60 Hz	TEMPERATURE	: 24deg.C
Mode	: Rx, 2436.096	HUMIDITY	: 46%
Remarks	: Normal-axis	ENGINEER	: Norihisa Hashimoto

PK DETECT (RBW: 1MHz, VBW: 1MHz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	PK	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2436.1	42.2	42.8	27.2	32.4	2.6	0.0	39.6	40.2	73.9	34.3	33.7
2	4872.2	39.6	39.9	31.3	31.3	3.7	0.0	43.3	43.6	73.9	30.6	30.3
3	7308.3	39.0	39.4	35.8	31.2	4.0	0.0	47.6	48.0	73.9	26.3	25.9
4	9744.4	40.9	40.7	38.5	32.0	4.7	0.0	52.1	51.9	73.9	21.8	22.0

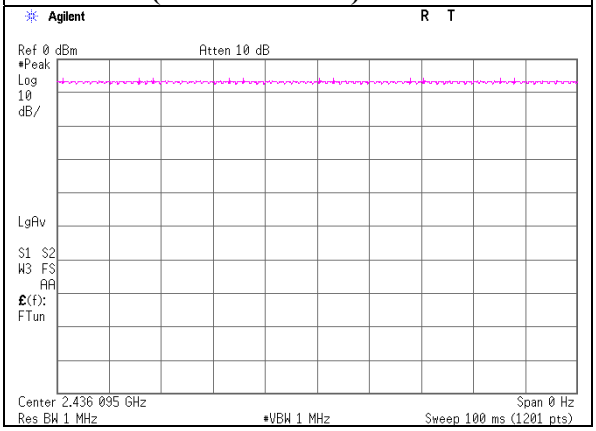
AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ	S/A READING		ANT	AMP	CABLE	Hi-Pass	RESULT		Limit	MARGIN	
		HOR	VER	Factor	GAIN	LOSS	Filter	HOR	VER	AV	HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2436.1	28.1	28.1	27.2	32.4	2.6	0.0	25.5	25.5	53.9	28.4	28.4
2	4872.2	26.8	26.5	31.3	31.3	3.7	0.0	30.5	30.2	53.9	23.4	23.7
3	7308.3	27.1	26.0	35.8	31.2	4.0	0.0	35.7	34.6	53.9	18.2	19.3
4	9744.4	27.3	27.1	38.5	32.0	4.7	0.0	38.5	38.3	53.9	15.4	15.6

*Except for the above table : All other spurious emissions were less than 20dB for the limit.
*The test result is round off to one or two decimal places, so some differences might be observed.
*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

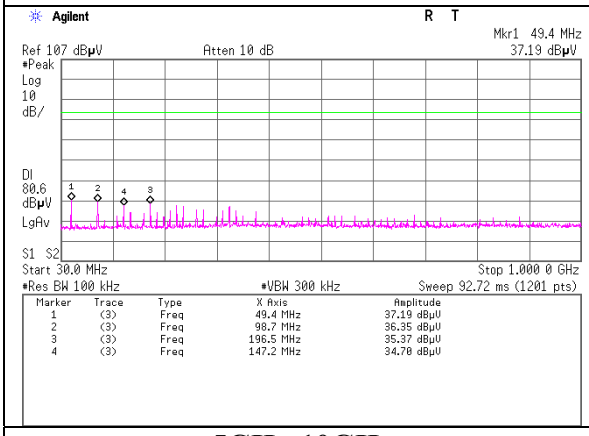
VBW(AV) Calculation

VBW: 1/x = 10Hz
x: (Tx on + Tx off) = 100ms

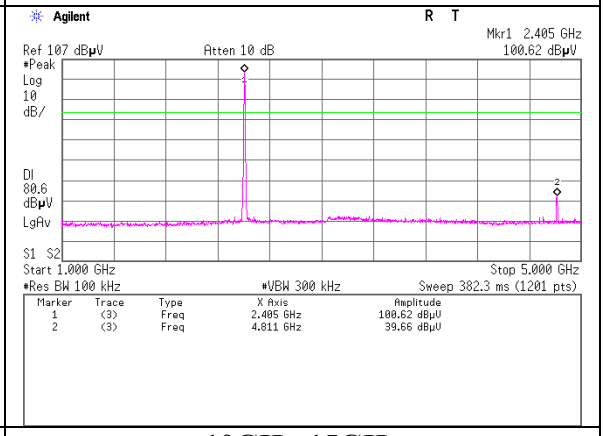


Conducted Spurious Emission
Tx, Ch: Low

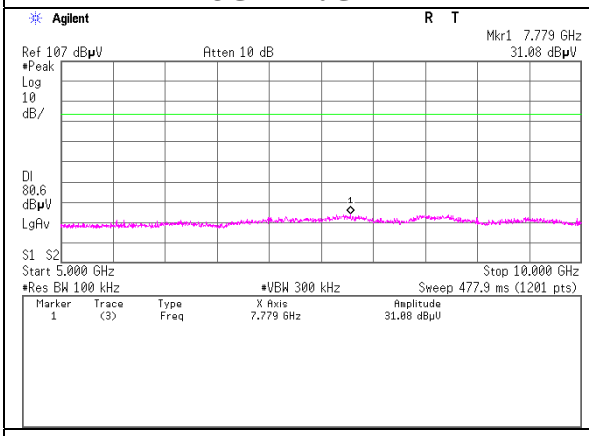
30MHz-1GHz



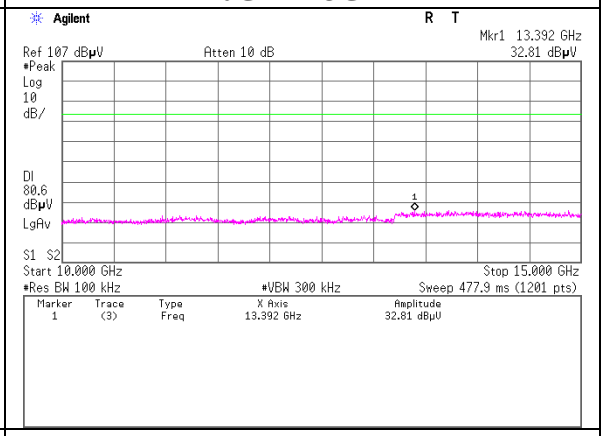
1GHz-5GHz



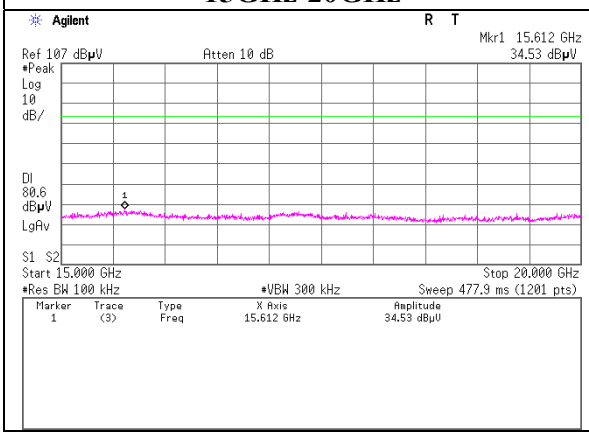
5GHz-10GHz



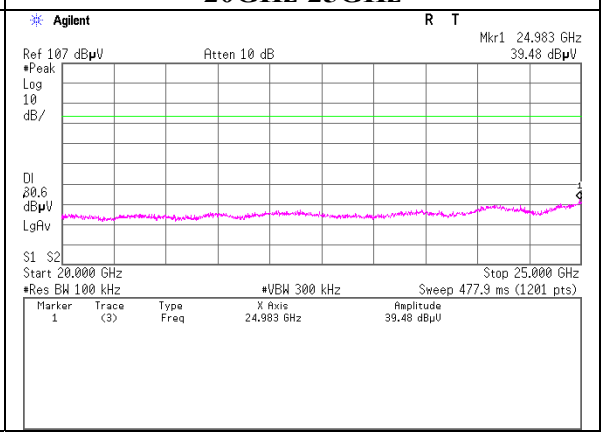
10GHz-15GHz



15GHz-20GHz

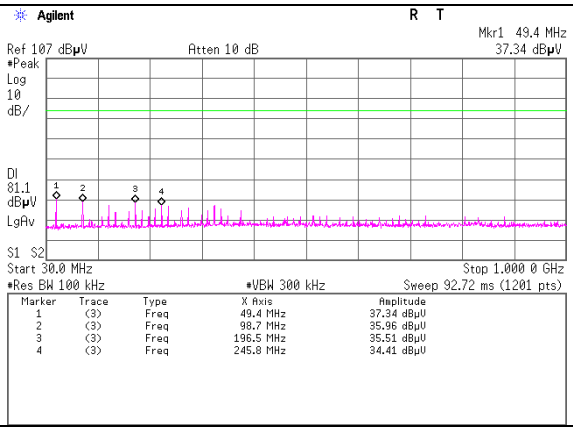


20GHz-25GHz

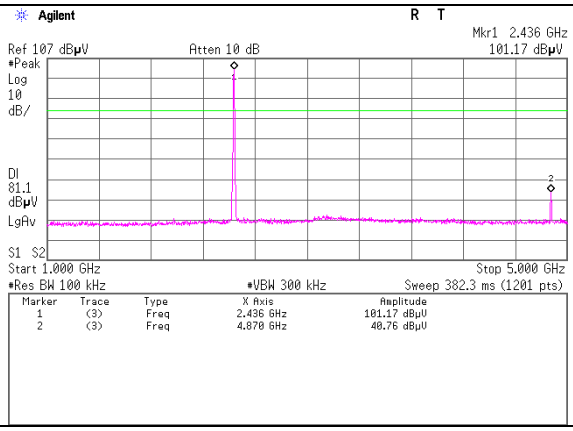


Conducted Spurious Emission
Tx, Ch: Mid

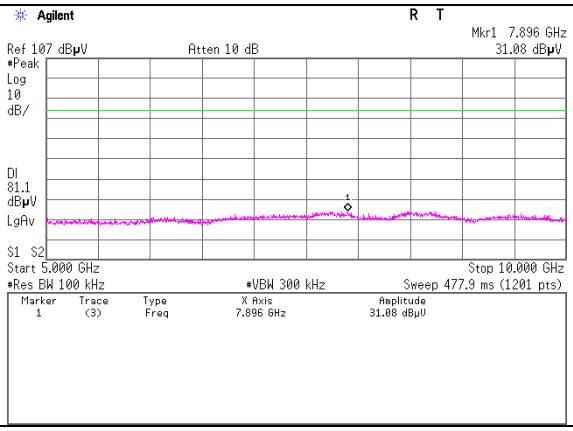
30MHz-1GHz



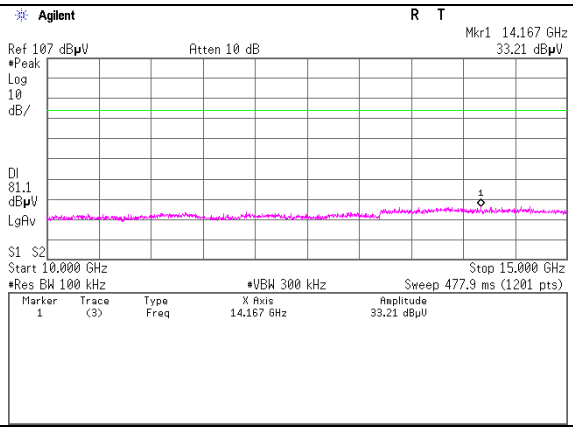
1GHz-5GHz



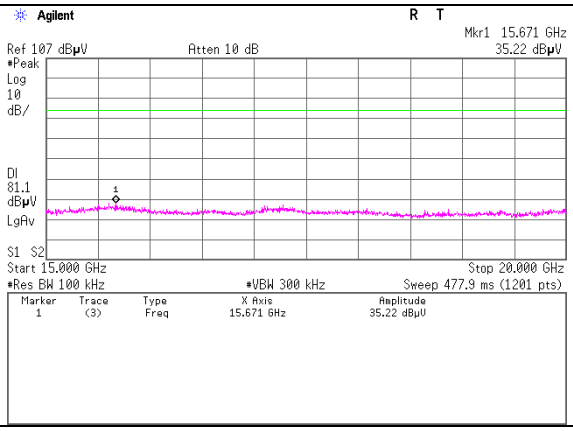
5GHz-10GHz



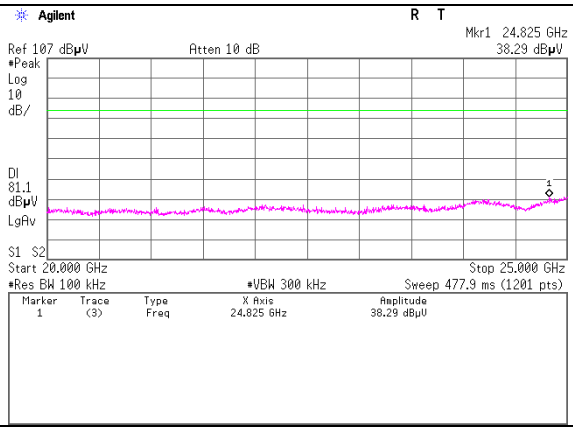
10GHz-15GHz



15GHz-20GHz



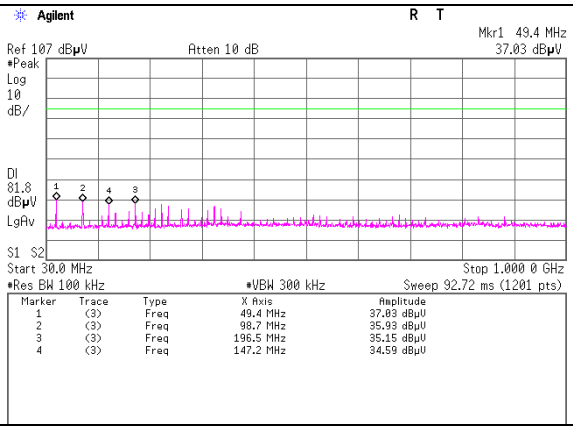
20GHz-25GHz



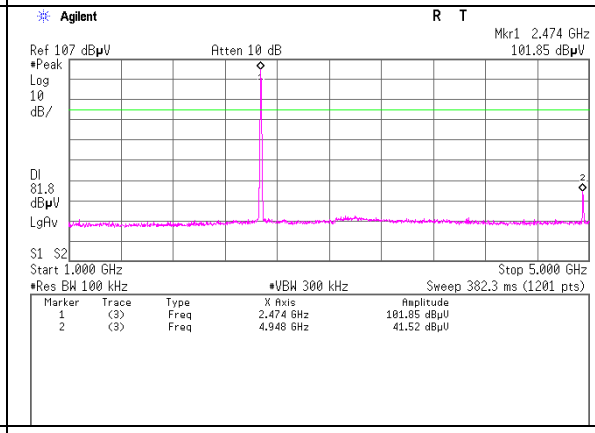
UL Japan, Inc.
Head Office EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8116
Facsimile : +81 596 24 8124

Conducted Spurious Emission
Tx, Ch: High

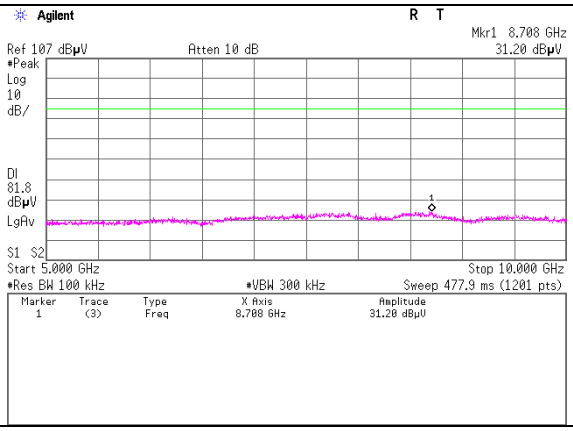
30MHz-1GHz



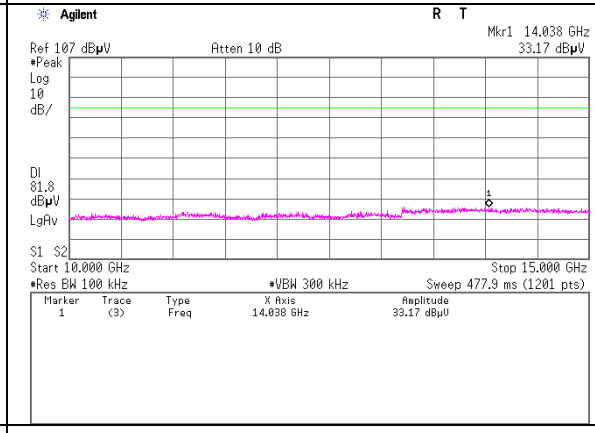
1GHz-5GHz



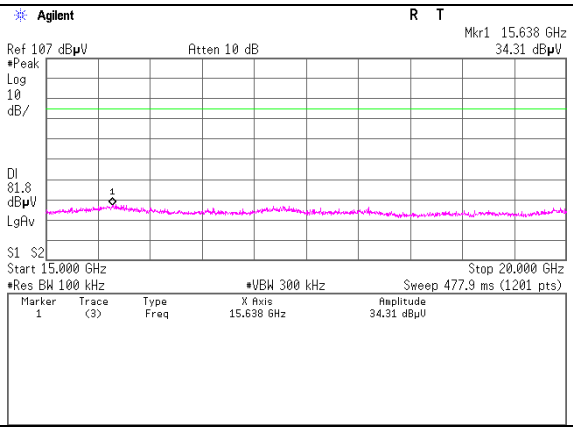
5GHz-10GHz



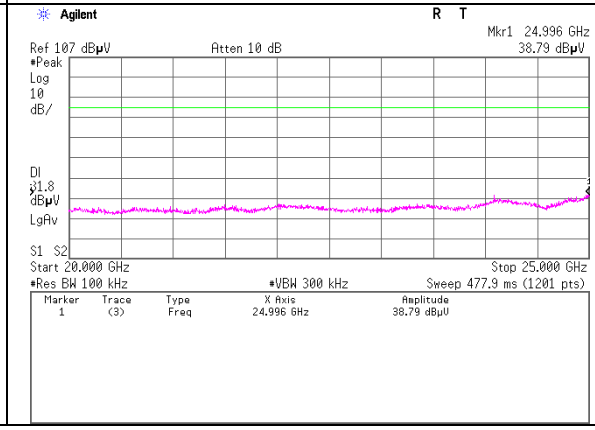
10GHz-15GHz



15GHz-20GHz



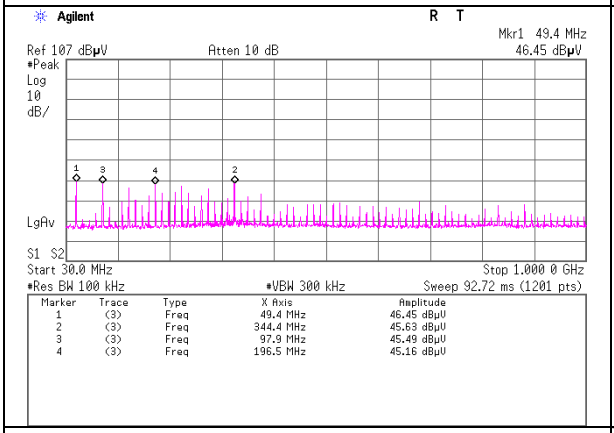
20GHz-25GHz



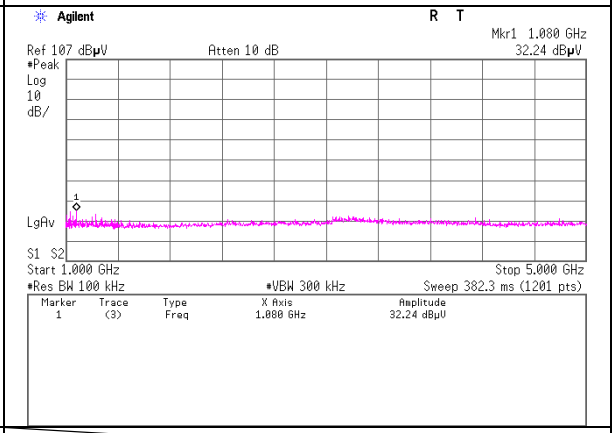
UL Japan, Inc.
Head Office EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8116
Facsimile : +81 596 24 8124

Conducted Spurious Emission
Rx, Ch: Mid

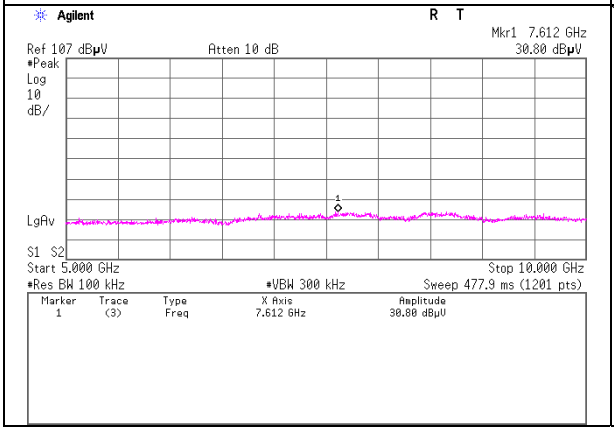
30MHz-1GHz



1GHz-5GHz



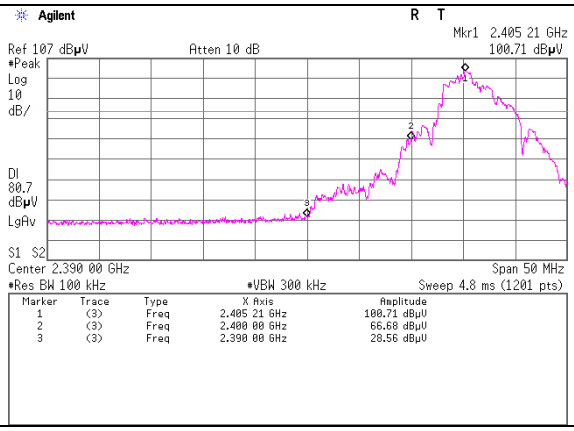
5GHz-10GHz



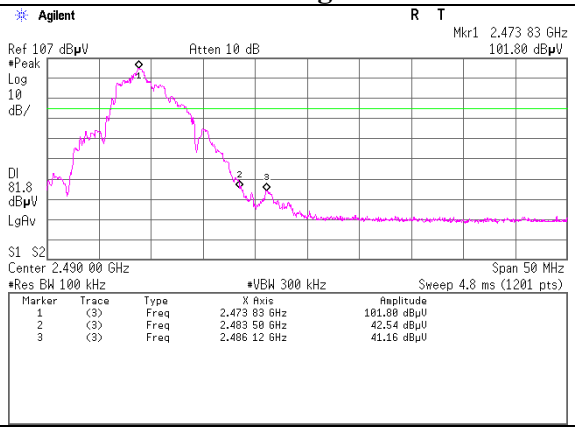
UL Japan, Inc.
Head Office EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8116
Facsimile : +81 596 24 8124

Conducted emission Band Edge compliance

Ch: Low



Ch: High



Power Density

UL Japan, Inc.
Head Office EMC Lab. No.3 Shielded Room

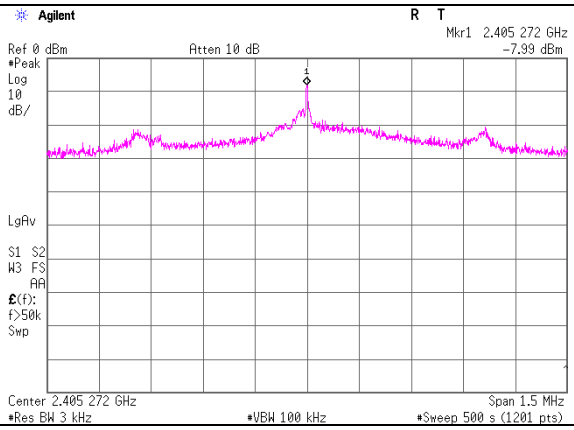
Company	: YAMAHA CORPORATION	Test Report No.	: 29IE0192-HO-01
Equipment	: Portable Player Dock	Regulation	: FCC15.247(e)/RSS-210A8.2(b)
Model No.	: PDX-60	Test distance	: -
Serial No.	: T023029ZP	Date	: 05/16/2009
Power	: AC120V/60Hz	Temperature	: 22deg.C.
Mode	: Tx (Ch L, M, H)	Humidity	: 52%
		Engineer	: Hironobu Ohnishi

Ch	Freq. [MHz]	Reading [dBm]	Cable [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2405.3	-7.99	1.53	10.02	3.56	8.00	4.44
Mid	2436.0	-7.45	1.54	10.02	4.11	8.00	3.89
High	2473.9	-6.80	1.55	10.02	4.76	8.00	3.24

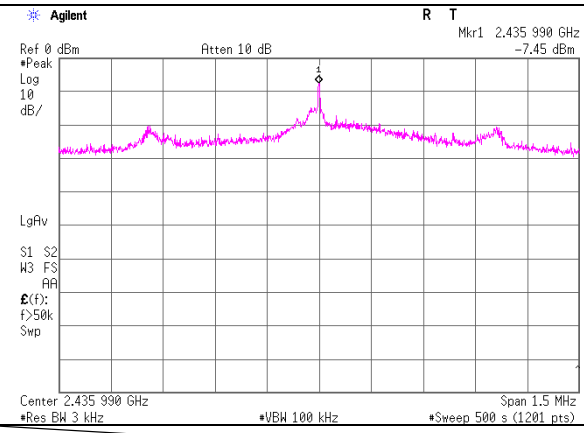
Sample Calculation:
Result = Reading + Cable Loss (spplied by customer + ULJ cable) + Attenuator Loss

Power Density

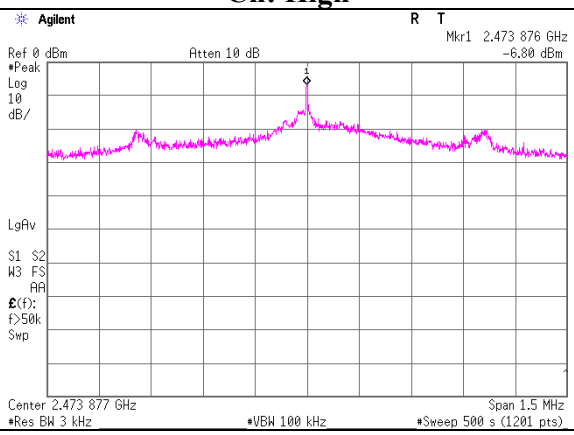
Ch: Low



Ch: Mid



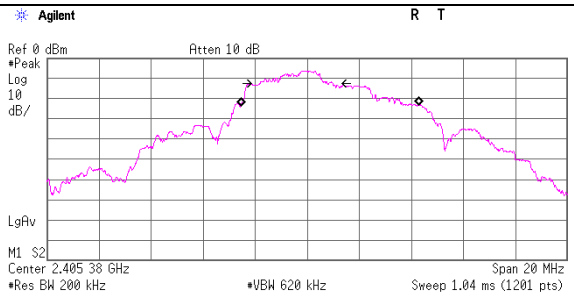
Ch: High



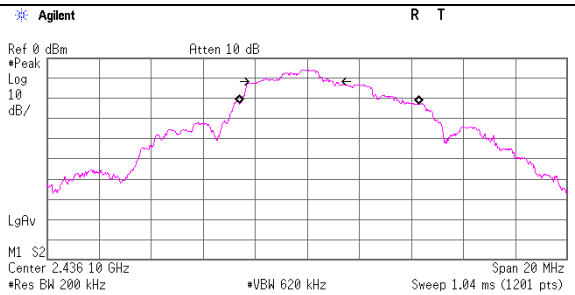
UL Japan, Inc.
Head Office EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8116
Facsimile : +81 596 24 8124

99%Occupied Bandwidth

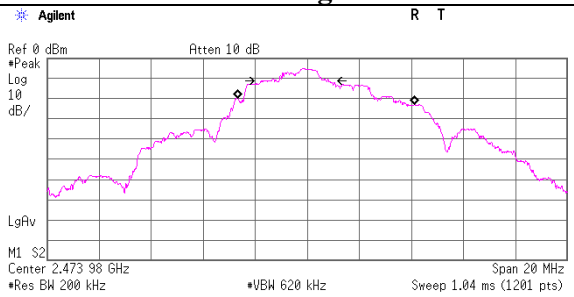
Ch: Low



Ch: Mid



Ch: High



UL Japan, Inc.
Head Office EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8116
Facsimile : +81 596 24 8124

APPENDIX 3: Test instruments

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MOS-13	Thermo-Hygrometer	Custom	CTH-180	-	AT	2009/02/06 * 12
MCC-114	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	290212/4	AT	2008/08/01 * 12
MAT-22	Attenuator(10dB) DC-18GHz	Orient Microwave	BX10-0476-00	-	AT	2009/03/24 * 12
MSA-04	Spectrum Analyzer	Agilent	E4448A	US44300523	AT	2008/08/18 * 12
MPM-13	Power Meter	Anritsu	ML2495A	0824014	AT	2008/08/13 * 12
MPSE-18	Power sensor	Anritsu	MA2411B	0738174	AT	2008/08/13 * 12
MAEC-02	Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 3m	DA-06902	RE/CE	2008/05/17 * 12
MOS-22	Thermo-Hygrometer	Custom	CTH-201	0003	RE/CE	2009/02/05 * 12
MJM-05	Measure	PROMART	SEN1955	-	RE/CE	-
CUST-MSTW-14	EMI measurement program	TSJ	TEPTO-DV	-	RE/CE	-
MRENT-62	Spectrum Analyzer	Agilent	E4448A	MY46180856	RE/CE	2008/11/25 * 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	2008/11/27 * 12
MPA-10	Pre Amplifier	Agilent	8449B	3008A02142	RE	2008/09/17 * 12
MHA-02	Horn Antenna 18-26.5GHz	EMCO	3160-09	1265	RE	2009/01/31 * 12
MHF-18	High Pass Filter 3.5-18.0GHz	TOKIMEC	TF323DCA	7002	RE	2008/12/16 * 12
MCC-77	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	278942/4	RE	2008/12/17 * 12
MTR-03	Test Receiver	Rohde & Schwarz	ESCI	100300	RE	2009/04/14 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	VHA91032008	RE	2008/10/18 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	201	RE	2008/10/18 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	-	RE	2009/02/16 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	BK7970	RE	2008/11/14 * 12
MPA-09	Pre Amplifier	Agilent	8447D	2944A10845	RE	2008/09/04 * 12
MLS-07	LISN(AMN)	Schwarzbeck	NSLK8127	8127364	CE	2009/02/18 * 12
MCC-13	Coaxial Cable	Fujikura/Agilent	-	-	CE	2009/02/16 * 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

UL Japan, Inc.
Head Office EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8116
Facsimile : +81 596 24 8124