

APPENDIX 2: Data of EMI test

Conducted Emission
UTD1900D-US-B (LAN)
DATA OF CONDUCTED EMISSION TEST

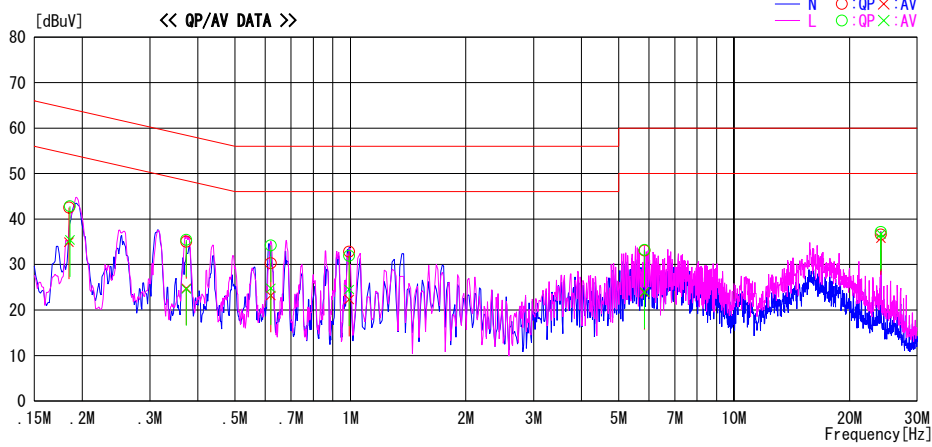
UL Apex Co., Ltd. Head Office EMC Lab. No.3 Anechoic Chamber
 Date : 2006/08/18 19:03:05

Applicant : KYOCERA Corporation
 Kind of EUT : iBURST USER TERMINAL
 Model No. : UTD1900D-US-B
 Serial No. : 01

Report No. : 26KE0199-HO
 Power : AC 120V / 60Hz
 Temp./Humi. : 27deg. C / 60%
 Operator : Kenichi Adachi

Mode / Remarks : Receiving, LAN connect

LIMIT : FCC15B ClassB (QP) (0.15-30MHz) / ICES-003
 FCC15B ClassB (AV) (0.15-30MHz) / ICES-003



Frequency [MHz]	Reading Level		Corr. Factor [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.18467	42.4	34.8	0.1	42.5	34.9	64.3	54.3	21.8	19.4	N	
0.18567	42.7	35.3	0.1	42.8	35.4	64.2	54.2	21.4	18.8	L	
0.37335	35.2	24.4	0.2	35.4	24.6	58.4	48.4	23.0	23.8	L	
0.37338	34.8	24.6	0.2	35.0	24.8	58.4	48.4	23.4	23.6	N	
0.62023	30.0	22.9	0.3	30.3	23.2	56.0	46.0	25.7	22.8	N	
0.62023	33.9	24.5	0.3	34.2	24.8	56.0	46.0	21.8	21.2	L	
0.99213	32.5	22.0	0.3	32.8	22.3	56.0	46.0	23.2	23.7	N	
0.99246	31.6	24.2	0.3	31.9	24.5	56.0	46.0	24.1	21.5	L	
5.84156	32.3	23.0	0.8	33.1	23.8	60.0	50.0	26.9	26.2	N	
5.84243	32.4	23.2	0.8	33.2	24.0	60.0	50.0	26.8	26.0	L	
24.13329	34.8	34.0	1.8	36.6	35.8	60.0	50.0	23.4	14.2	N	
24.13450	35.4	34.9	1.8	37.2	36.7	60.0	50.0	22.8	13.3	L	*

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

Test report No. : 26KE0199-HO-D-1
 Page : 19 of 26
 Issued date : August 30, 2006
 Revised date : September 7, 2006
 FCC ID : JOYIUD19AB/JOYIUU19AB/JOYIUC19AB

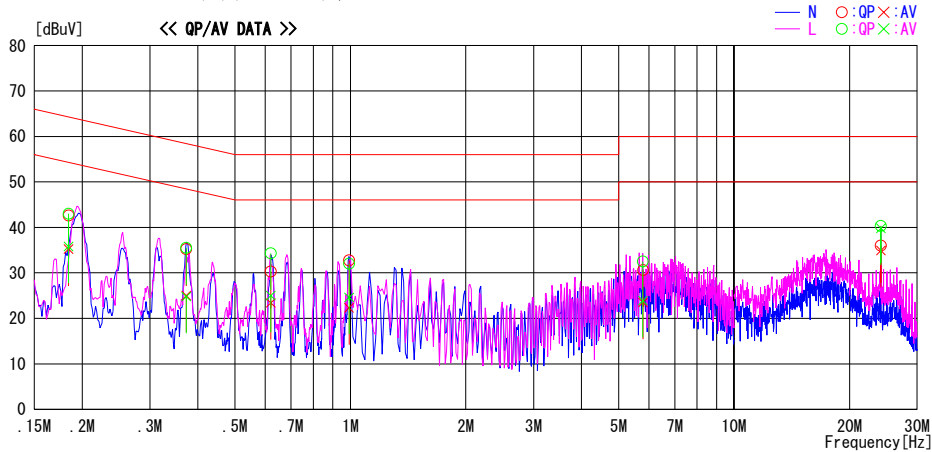
Conducted Emission
UTD1900D-US-B (USB)
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.3 Anechoic Chamber
 Date : 2006/08/18 18:38:11

Applicant : KYOCERA Corporation
 Kind of EUT : iBURST USER TERMINAL
 Model No. : UTD1900D-US-B
 Serial No. : 01
 Report No. : 26KE0199-HO
 Power : AC 120V / 60Hz
 Temp./Humi. : 27deg. C / 60%
 Operator : Kenichi Adachi

Mode / Remarks : Receiving, USB connect

LIMIT : FCC15B ClassB (QP) (0.15-30MHz) / ICES-003
 FCC15B ClassB (AV) (0.15-30MHz) / ICES-003



Frequency [MHz]	Reading Level		Corr. [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		Factor	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]		
0.18440	42.5	35.1	0.1	42.6	35.2	64.3	54.3	21.7	19.1	N	
0.37330	35.0	24.8	0.2	35.2	25.0	58.4	48.4	23.2	23.4	N	
0.62028	30.0	23.1	0.3	30.3	23.4	56.0	46.0	25.7	22.6	N	
0.99195	32.4	22.0	0.3	32.7	22.3	56.0	46.0	23.3	23.7	N	
5.78750	29.8	22.7	0.8	30.6	23.5	60.0	50.0	29.4	26.5	N	
24.13427	34.2	33.1	1.8	36.0	34.9	60.0	50.0	24.0	15.1	N	
0.18441	42.9	35.7	0.1	43.0	35.8	64.3	54.3	21.3	18.5	L	
0.37330	35.3	24.6	0.2	35.5	24.8	58.4	48.4	22.9	23.6	L	
0.62020	34.0	24.7	0.3	34.3	25.0	56.0	46.0	21.7	21.0	L	
0.99255	31.7	24.3	0.3	32.0	24.6	56.0	46.0	24.0	21.4	L	
5.78383	31.7	23.1	0.8	32.5	23.9	60.0	50.0	27.5	26.1	L	
24.13505	38.6	38.0	1.8	40.4	39.8	60.0	50.0	19.7	10.2	L	*

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

UL Apex Co., Ltd.
Head Office EMC Lab.
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MF060b(14.06.06)

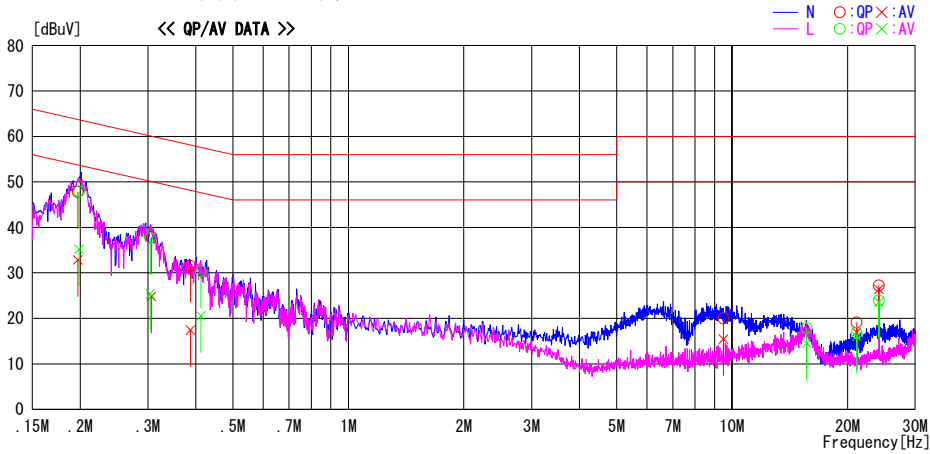
Conducted Emission
UTU1900D-US-A
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Anechoic Chamber
 Date : 2006/08/01 02:14:52

Applicant : KYOCERA Corporation
 Kind of EUT : iBURST USER TERMINAL
 Model No. : UTU1900D-US-A
 Serial No. : 01
 Report No. : 26KE0199-HO
 Power : AC 120V / 60Hz
 Temp./Humi. : 26deg. C / 52%
 Operator : Kenichi Adachi

Mode / Remarks : Receiving, EUT-worst-axis

LIMIT : FCC15B ClassB (QP) (0.15-30MHz) / ICES-003
 FCC15B ClassB (AV) (0.15-30MHz) / ICES-003



Frequency [MHz]	Reading Level		Corr. [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]		
0.19870	47.7	35.0	0.2	47.9	35.2	63.7	53.7	15.8	18.5	L	*
0.30433	37.3	25.0	0.4	37.7	25.4	60.1	50.1	22.4	24.7	L	
0.41270	29.9	20.1	0.4	30.3	20.5	57.6	47.6	27.3	27.1	L	
15.62940	16.2	12.8	1.7	17.9	14.5	60.0	50.0	42.1	35.5	L	
21.11770	14.9	14.1	1.9	16.8	16.0	60.0	50.0	43.2	34.0	L	
24.13497	21.9	21.5	2.0	23.9	23.5	60.0	50.0	36.1	26.5	L	
0.19720	47.5	32.6	0.2	47.7	32.8	63.7	53.7	16.0	20.9	N	
0.30645	37.5	24.4	0.4	37.9	24.8	60.1	50.1	22.3	25.3	N	
0.38725	31.1	17.0	0.4	31.5	17.4	58.1	48.1	26.6	30.7	N	
21.12015	17.2	15.0	1.9	19.1	16.9	60.0	50.0	40.9	33.1	N	
9.48810	18.9	14.3	1.1	20.0	15.4	60.0	50.0	40.0	34.6	N	
24.13502	25.3	24.4	2.0	27.3	26.4	60.0	50.0	32.7	23.6	N	

CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION: RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

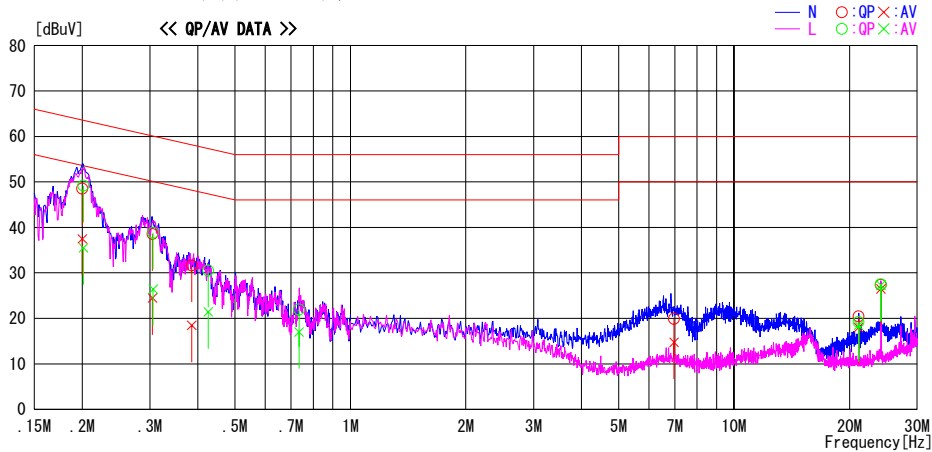
Conducted Emission
UTC1900D-US-B
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Anechoic Chamber
 Date : 2006/08/01 01:32:00

Applicant : KYOCERA Corporation
 Kind of EUT : iBURST USER TERMINAL
 Model No. : UTC1900D-US-B
 Serial No. : 01
 Report No. : 26KE0199-HO
 Power : AC 120V / 60Hz
 Temp./Humi. : 26deg. C / 52%
 Operator : Kenichi Adachi

Mode / Remarks : Receiving, EUT normal-axis

LIMIT : FCC15B ClassB (QP) (0.15-30MHz) / ICES-003
 FCC15B ClassB (AV) (0.15-30MHz) / ICES-003



Frequency [MHz]	Reading Level		Corr. [dB]	Results		Limit		Margin		Phase	Comment
	QP [dBuV]	AV [dBuV]		Factor	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]		
0.20013	48.3	37.3	0.2	48.5	37.5	63.6	53.6	15.1	16.1	N	
0.20148	49.0	35.3	0.2	49.2	35.5	63.5	53.5	14.4	18.0	L	*
0.30495	38.1	24.1	0.4	38.5	24.5	60.1	50.1	21.6	25.6	N	
0.30617	38.4	26.0	0.4	38.8	26.4	60.1	50.1	21.3	23.7	L	
0.38585	31.2	18.0	0.4	31.6	18.4	58.2	48.2	26.6	29.8	N	
0.42617	30.1	21.0	0.4	30.5	21.4	57.3	47.3	26.8	25.9	L	
0.73475	21.5	16.6	0.4	21.9	17.0	56.0	46.0	34.1	29.0	L	
6.96940	18.9	13.8	1.0	19.9	14.8	60.0	50.0	40.1	35.3	N	
21.11910	17.3	16.6	1.9	19.2	18.5	60.0	50.0	40.8	31.5	L	
21.11950	18.5	16.1	1.9	20.4	18.0	60.0	50.0	39.6	32.0	N	
24.13500	25.5	25.3	2.0	27.5	27.3	60.0	50.0	32.5	22.7	L	
24.13580	25.4	24.5	2.0	27.4	26.5	60.0	50.0	32.6	23.5	N	

CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCURATION: RESULT=READING+C.F (LISN LOSS+CABLE LOSS)
 Except for the above table : adequate margin data below the limits.

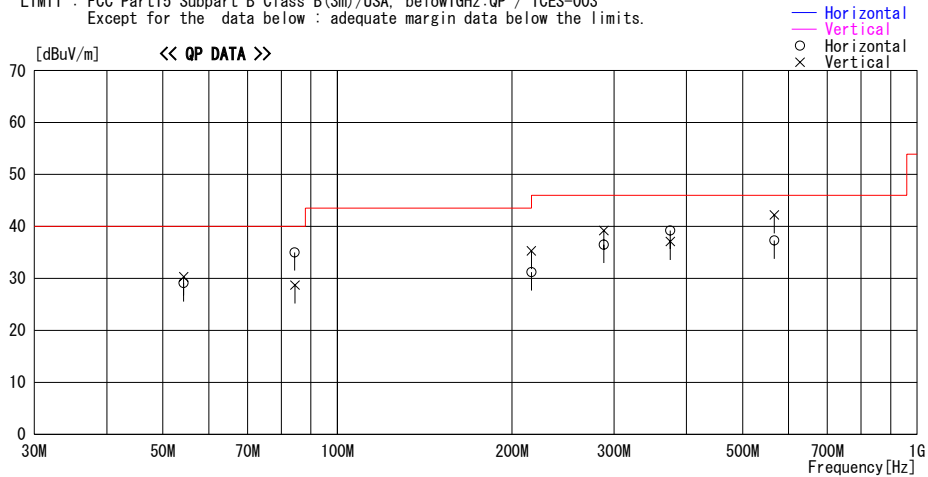
Radiated Emission
UTD1900D-US-B (LAN)
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
 Date : 2006/07/31 15:16:33

Company : KYOCERA Corporation
 Kind of EUT : iBURST USER TERMINAL
 Model No. : UTD1900D-US-B
 Serial No. : 01
 Report No. : 26KE0199-HO
 Power : AC 120V / 60Hz
 Temp./Humi. : 26deg. C / 52%
 Operator : Kenichi Adachi

Mode / Remarks : Receiving, LAN connect, EUT-worst-axis

LIMIT : FCC Part15 Subpart B Class B(3m)/USA, below1GHz:QP / ICES-003
 Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss& Gain [dB]							
54.296	41.9	QP	9.2	-22.0	29.1	82	400	Hori.	40.0	10.9	
54.296	43.1	QP	9.2	-22.0	30.3	150	100	Vert.	40.0	9.7	
84.448	49.4	QP	7.0	-21.4	35.0	86	221	Hori.	40.0	5.0	
84.451	43.1	QP	7.0	-21.4	28.7	132	159	Vert.	40.0	11.3	
215.996	34.6	QP	16.8	-20.2	31.2	55	157	Hori.	43.5	12.3	
215.996	38.7	QP	16.8	-20.2	35.3	165	100	Vert.	43.5	8.2	
287.997	36.4	QP	19.4	-19.3	36.5	172	170	Hori.	46.0	9.5	
287.997	39.1	QP	19.4	-19.3	39.2	172	100	Vert.	46.0	6.8	
374.996	41.7	QP	17.0	-19.5	39.2	164	100	Hori.	46.0	6.8	
374.996	39.6	QP	17.0	-19.5	37.1	148	127	Vert.	46.0	8.9	
566.960	38.0	QP	18.8	-19.5	37.3	155	162	Hori.	46.0	8.7	
566.960	42.9	QP	18.8	-19.5	42.2	180	100	Vert.	46.0	3.8	*

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)

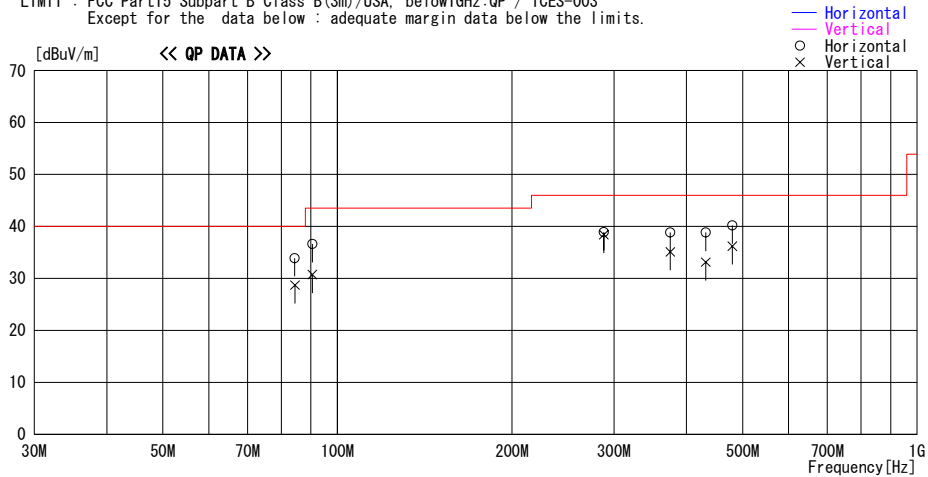
Radiated Emission
UTD1900D-US-B (USB)
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Date : 2006/07/31 14:14:20

Company : KYOCERA Corporation
 Kind of EUT : iBURST USER TERMINAL
 Model No. : UTD1900D-US-B
 Serial No. : 01
 Report No. : 26KE0199-HO
 Power : AC 120V / 60Hz
 Temp./Humi. : 26deg. C / 52%
 Operator : Kenichi Adachi

Mode / Remarks : Receiving, USB connect, EUT-worst-axis

LIMIT : FCC Part15 Subpart B Class B(3m)/USA, below1GHz:QP / ICES-003
 Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss& Gain [dB]							
84.449	48.3	QP	7.0	-21.4	33.9	77	219	Hori.	40.0	6.1	
84.450	43.1	QP	7.0	-21.4	28.7	133	168	Vert.	40.0	11.3	
90.490	50.1	QP	8.0	-21.5	36.6	77	219	Hori.	43.5	6.9	
90.490	44.2	QP	8.0	-21.5	30.7	142	147	Vert.	43.5	12.8	
287.998	38.8	QP	19.4	-19.3	38.9	167	170	Hori.	46.0	7.1	
287.999	38.3	QP	19.4	-19.3	38.4	168	100	Vert.	46.0	7.6	
374.994	41.3	QP	17.0	-19.5	38.8	216	100	Hori.	46.0	7.2	
374.997	37.6	QP	17.0	-19.5	35.1	179	138	Vert.	46.0	10.9	
432.006	40.8	QP	17.8	-19.8	38.8	150	100	Hori.	46.0	7.2	
432.007	35.1	QP	17.8	-19.8	33.1	160	123	Vert.	46.0	12.9	
480.001	42.1	QP	17.8	-19.7	40.2	154	100	Hori.	46.0	5.8	*
480.002	38.1	QP	17.8	-19.7	36.2	178	113	Vert.	46.0	9.8	

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)

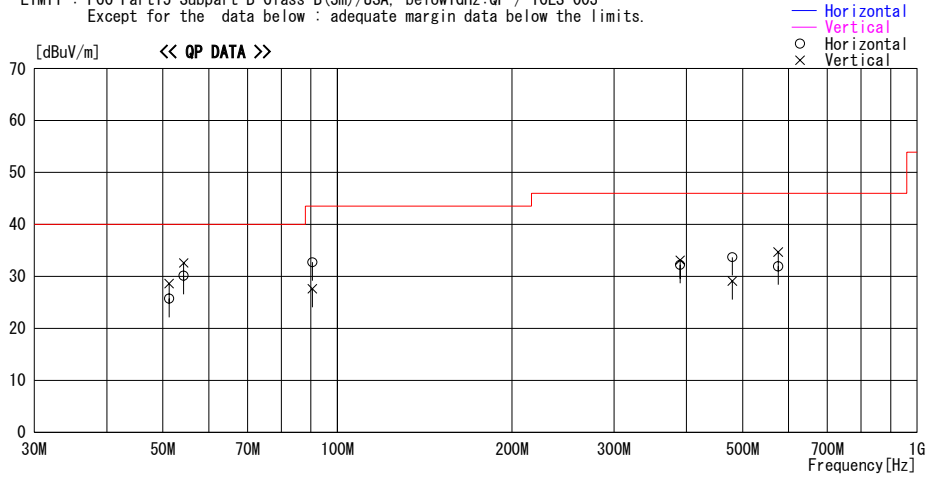
Radiated Emission
UTU1900D-US-A
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
 Date : 2006/07/31 16:54:57

Company : KYOCERA Corporation
 Kind of EUT : iBURST USER TERMINAL
 Model No. : UTU1900D-US-A
 Serial No. : 01
 Report No. : 26KE0199-HO
 Power : AC 120V / 60Hz
 Temp./Humi. : 26deg. C / 52%
 Operator : Kenichi Adachi

Mode / Remarks : Receiving, EUT-worst-axis

LIMIT : FCC Part15 Subpart B Class B(3m)/USA, below1GHz:QP / ICES-003
 Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss& Gain [dB]							
51.263	37.9	QP	9.8	-22.0	25.7	285	378	Hori.	40.0	14.3	
51.263	40.8	QP	9.8	-22.0	28.6	334	100	Vert.	40.0	11.4	
54.290	42.9	QP	9.2	-22.0	30.1	282	378	Hori.	40.0	9.9	
54.290	45.4	QP	9.2	-22.0	32.6	292	100	Vert.	40.0	7.4	*
90.484	46.2	QP	8.0	-21.5	32.7	78	303	Hori.	43.5	10.8	
90.484	41.1	QP	8.0	-21.5	27.6	137	154	Vert.	43.5	15.9	
390.030	34.3	QP	17.5	-19.6	32.2	270	100	Hori.	46.0	13.8	
390.030	35.2	QP	17.5	-19.6	33.1	37	141	Vert.	46.0	12.9	
480.076	35.6	QP	17.8	-19.7	33.7	309	100	Hori.	46.0	12.3	
480.076	31.0	QP	17.8	-19.7	29.1	63	100	Vert.	46.0	16.9	
576.003	32.3	QP	18.9	-19.3	31.9	100	178	Hori.	46.0	14.1	
576.003	35.1	QP	18.9	-19.3	34.7	44	112	Vert.	46.0	11.3	

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)

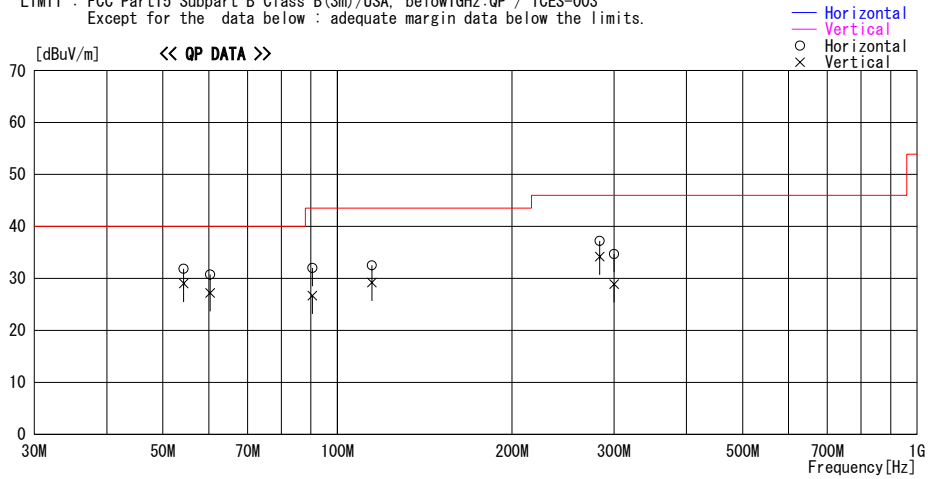
Radiated Emission
UTC1900D-US-B
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
 Date : 2006/07/31 17:47:43

Company : KYOCERA Corporation
 Kind of EUT : iBURST USER TERMINAL
 Model No. : UTC1900D-US-B
 Serial No. : 01
 Report No. : 26KE0199-HO
 Power : AC 120V / 60Hz
 Temp./Humi. : 26deg. C / 52%
 Operator : Kenichi Adachi

Mode / Remarks : Receiving, EUT Noraml-axis

LIMIT : FCC Part15 Subpart B Class B(3m)/USA, below1GHz:QP / ICES-003
 Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss& Gain [dB]							
54.290	44.6	QP	9.2	-22.0	31.8	89	380	Hori.	40.0	8.2	*
54.290	41.8	QP	9.2	-22.0	29.0	289	100	Vert.	40.0	11.0	
60.313	40.9	QP	8.1	-21.8	27.2	287	100	Vert.	40.0	12.8	
60.313	44.4	QP	8.1	-21.8	30.7	264	377	Hori.	40.0	9.3	
90.491	40.2	QP	8.0	-21.5	26.7	153	140	Vert.	43.5	16.8	
90.491	45.5	QP	8.0	-21.5	32.0	58	298	Hori.	43.5	11.5	
114.618	41.9	QP	11.8	-21.2	32.5	241	297	Hori.	43.5	11.0	
114.618	38.6	QP	11.8	-21.2	29.2	322	100	Vert.	43.5	14.3	
283.499	37.4	QP	19.2	-19.4	37.2	298	137	Hori.	46.0	8.8	
283.499	34.4	QP	19.2	-19.4	34.2	360	100	Vert.	46.0	11.8	
300.001	39.6	QP	14.1	-19.0	34.7	289	100	Hori.	46.0	11.3	
300.001	33.8	QP	14.1	-19.0	28.9	194	100	Vert.	46.0	17.1	

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)

APPENDIX 3: Test instruments

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE / CE	2006/04/10 * 12
MTR-03	Test Receiver	Rohde & Schwarz	ESCI	RE / CE	2006/03/04 * 12
MSA-05	Spectrum Analyzer	Advantest	R3273	RE / CE	2006/05/20 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	RE	2006/02/23 * 12
MPA-09	Pre Amplifier	Agilent	8447D	RE	2005/09/07 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	RE	2005/12/16 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	RE	2005/10/10 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2005/10/14 * 12
MOS-02	Digital Humidity Indicator	N.T	NT-1800	RE / CE	2004/11/25 * 24
MSTW-14	EMI measurement program	TSJ	TEPTO-DV	RE / CE	-
MCC-13	Coaxial Cable	Fujikura/Agilent	-	CE	2006/02/23 * 12
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	CE (EUT)	2006/02/06 * 12
MJG-52	Conversion adapter	SE	RW-P003	CE	-
MAEC-03	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	CE	2006/03/03 * 12
TR-07	Test Receiver	Rohde & Schwarz	ESCS30	CE	2005/09/14 * 12
MSA-04	Spectrum Analyzer	Agilent	E4448A	CE	2006/06/02 * 12
MCC-51	Coaxial cable	UL Apex	-	CE	2006/03/11 * 12
MLS-07	LISN(AMN)	Schwarzbeck	NSLK8127	CE (EUT)	2006/02/06 * 12
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	CE (AE)	2006/02/06 * 12
MTA-06	Terminator	MCL	BTRM-50	CE	2006/02/06 * 12
MOS-12	Thermo-Hygrometer	Custom	CTH-180	CE	2006/01/19 * 24

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

Test Item :

CE: Conducted emission
RE: Radiated emission