APPENDIX 2: Data of EMI test

Radiated Emission

DATA OF RADIATED EMISSION TEST

UL Japan, Inc. Head Office EMC Lab. No.1 Semi Anechoic Chamber
Date : 2011/06/14

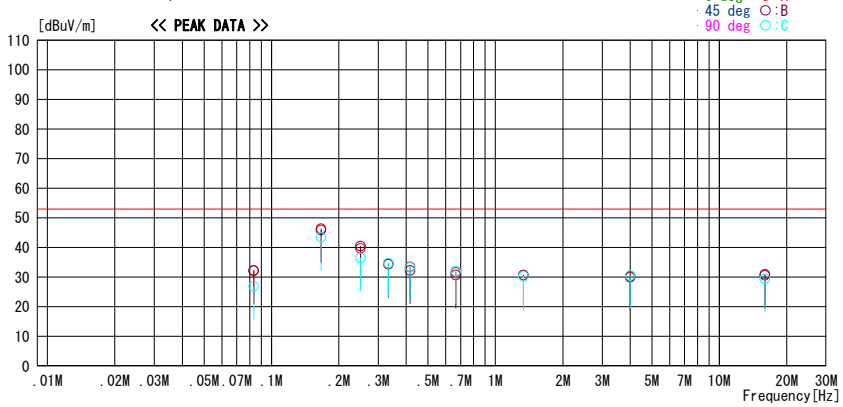
Report No. : 31IE0067-HO-01

Temp./ Humi. : 22deg. C / 44%RH
Engineer : Tsubasa Takayama

Mode / Remarks : Detecting Mode

LIMIT : FCC18.305 Any type unless otherwise specified, Freq.:Any non-ISM freq., RF Power:Below 500W, 10m
All other spurious emissions were less than 20dB for the limit.

0 deg ○:A
45 deg ○:B
90 deg ○:C



Freq.	Reading	DET	Ant.Fac	Loss	Gain	Result	Limit	Margin	Antenna		Table	Comment
[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[deg]		[deg]	
0.08333	38.5	PEAK	20.0	6.0	32.3	32.2	53.0	20.8	0	A	0	
0.08333	38.4	PEAK	20.0	6.0	32.3	32.1	53.0	20.9	45	B	0	
0.08333	33.2	PEAK	20.0	6.0	32.3	26.9	53.0	26.1	90	C	0	
0.16666	52.3	PEAK	19.8	6.0	32.2	45.9	53.0	7.1	45	B	0	
0.16666	52.8	PEAK	19.8	6.0	32.2	46.4	53.0	6.6	0	A	0	
0.16666	49.8	PEAK	19.8	6.0	32.2	43.4	53.0	9.6	90	C	0	
0.24999	46.1	PEAK	19.7	6.1	32.2	39.7	53.0	13.3	0	A	36	
0.24999	46.9	PEAK	19.7	6.1	32.2	40.5	53.0	12.5	45	B	131	
0.24999	42.9	PEAK	19.7	6.1	32.2	36.5	53.0	16.5	90	C	262	
0.33332	41.1	PEAK	19.6	6.1	32.2	34.6	53.0	18.4	0	A	12	
0.33332	40.9	PEAK	19.6	6.1	32.2	34.4	53.0	18.6	45	B	41	
0.33332	41.2	PEAK	19.6	6.1	32.2	34.7	53.0	18.3	90	C	283	
0.41665	38.8	PEAK	19.5	6.1	32.2	32.2	53.0	20.8	45	B	62	
0.41665	40.1	PEAK	19.5	6.1	32.2	33.5	53.0	19.5	0	A	282	
0.41665	39.8	PEAK	19.5	6.1	32.2	33.2	53.0	19.8	90	C	212	
0.66664	38.2	PEAK	19.4	6.2	32.2	31.6	53.0	21.4	0	A	281	
0.66664	37.3	PEAK	19.4	6.2	32.2	30.7	53.0	22.3	45	B	127	
0.66664	38.6	PEAK	19.4	6.2	32.2	32.0	53.0	21.0	90	C	152	
1.33328	37.1	PEAK	19.4	6.3	32.2	30.6	53.0	22.4	0	A	124	
1.33328	37.2	PEAK	19.4	6.3	32.2	30.7	53.0	22.3	45	B	271	
1.33328	36.8	PEAK	19.4	6.3	32.2	30.3	53.0	22.7	90	C	182	
4.00000	36.1	PEAK	19.5	6.5	32.2	29.9	53.0	23.1	0	A	121	
4.00000	36.4	PEAK	19.5	6.5	32.2	30.2	53.0	22.8	45	B	222	
4.00000	36.7	PEAK	19.5	6.5	32.2	30.5	53.0	22.5	90	C	15	
16.00000	36.2	PEAK	19.4	7.2	32.2	30.6	53.0	22.4	0	A	217	
16.00000	36.5	PEAK	19.4	7.2	32.2	30.9	53.0	22.1	45	B	228	
16.00000	35.1	PEAK	19.4	7.2	32.2	29.5	53.0	23.5	90	C	293	

CHART: WITH FACTOR , ANT TYPE: LOOP Except for the data below : adequate margin data below the limits.
CALCULATION : RESULT = READING + ANT FACTOR + LOSS(CABLE + ATTEN.) - GAIN(AMP.)

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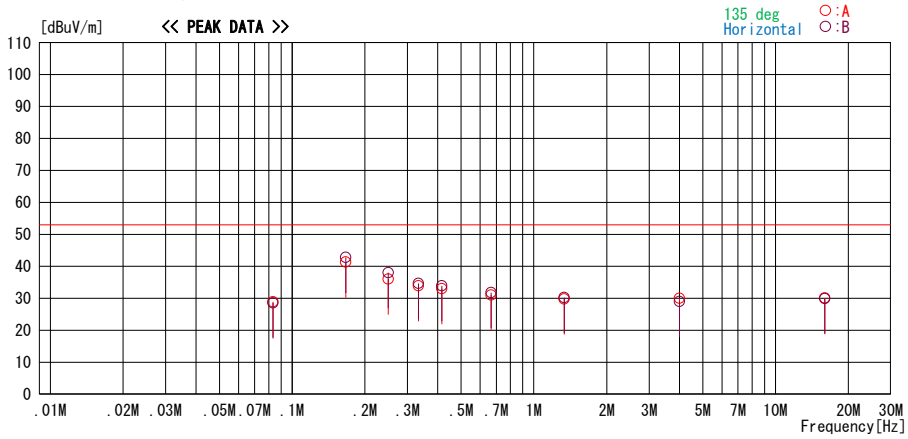

Freq.	Reading	DET	Ant.Fac	Loss	Gain	Result	Limit	Margin	Antenna		Table	Comment
[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[deg]		[deg]	
0.08333	35.2	PEAK	20.0	6.0	32.3	28.9	53.0	24.1	135	A	0	
0.08333	34.9	PEAK	20.0	6.0	32.3	28.6	53.0	24.4	0	B	0	Horizontal Posi
0.16666	47.8	PEAK	19.8	6.0	32.2	41.4	53.0	11.6	135	A	0	
0.16666	49.2	PEAK	19.8	6.0	32.2	42.8	53.0	10.2	0	B	0	Horizontal Posi
0.24999	42.4	PEAK	19.7	6.1	32.2	36.0	53.0	17.0	135	A	172	
0.24999	44.4	PEAK	19.7	6.1	32.2	38.0	53.0	15.0	0	B	281	Horizontal Posi
0.33332	40.4	PEAK	19.6	6.1	32.2	33.9	53.0	19.1	135	A	281	
0.33332	41.2	PEAK	19.6	6.1	32.2	34.7	53.0	18.3	0	B	29	Horizontal Posi
0.41665	39.7	PEAK	19.5	6.1	32.2	33.1	53.0	19.9	135	A	211	
0.41665	40.5	PEAK	19.5	6.1	32.2	33.9	53.0	19.1	0	B	283	Horizontal Posi
0.66664	37.7	PEAK	19.4	6.2	32.2	31.1	53.0	21.9	135	A	14	
0.66664	38.4	PEAK	19.4	6.2	32.2	31.8	53.0	21.2	0	B	219	Horizontal Posi
1.33328	36.3	PEAK	19.4	6.3	32.2	29.8	53.0	23.2	135	A	291	
1.33328	36.7	PEAK	19.4	6.3	32.2	30.2	53.0	22.8	0	B	287	Horizontal Posi
4.00000	36.2	PEAK	19.5	6.5	32.2	30.0	53.0	23.0	135	A	212	
4.00000	35.2	PEAK	19.5	6.5	32.2	29.0	53.0	24.0	0	B	41	Horizontal Posi
16.00000	35.7	PEAK	19.4	7.2	32.2	30.1	53.0	22.9	135	A	332	
16.00000	35.5	PEAK	19.4	7.2	32.2	29.9	53.0	23.1	0	B	261	Horizontal Posi

CHART: WITH FACTOR , ANT TYPE: LOOP Except for the data below : adequate margin data below the limits.
CALCULATION : RESULT = READING + ANT FACTOR + LOSS(CABLE + ATTEN.) - GAIN(AMP.)

APPENDIX 3: Test instruments

EMI Test Equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
MAEC-01	Semi Anechoic Chamber(NSA)	TDK	Semi Anechoic Chamber 10m	DA-06881	RE	2010/07/02 * 12
MOS-01	Digital Humidity Indicator	N.T	NT-1800	MOS01	RE	2011/02/23 * 12
MJM-01	Measure	KDS	ES19-55	-	RE	-
COTS-MEMI	EMI measurement program	TSJ	TEPTO-DV	-	RE	-
MTR-01	Test Receiver	Rohde & Schwarz	ESI40	100084	RE	2010/12/07 * 12
MLPA-01	Loop Antenna	Rohde & Schwarz	HFH2-Z2	100017	RE	2010/10/15 * 12
MCC-30	Coaxial cable	UL Japan	-	-	RE	2010/07/20 * 12
MPA-14	Pre Amplifier	SONOMA INSTRUMENT	310	260833	RE	2011/03/04 * 12
MAT-08	Attenuator(6dB)	Weinschel Corp	2	BK7971	RE	2010/11/05 * 12
MCC-03	Coaxial Cable	Fujikura/Suhner/TSJ	5D-2W(20m) /3D-2W(7.5m) /RG400u(1.5m) /RFM-E421(Switcher)	-/01068(Switcher)	RE	2011/01/16 * 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:
RE: Radiated emission