FCC TEST REPORT

REPORT NO.:	RF980610H05
MODEL NO.:	Y-R0004
RECEIVED:	June 10, 2009
TESTED:	June 16 to 18, 2009
ISSUED:	June 24, 2009

APPLICANT:	LOGITECH FAR EAST LTD.
ADDRESS:	#2 Creation Rd. 4, Science-Based Ind. Park Hsinchu Taiwan, R.O.C.

ISSUED BY:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
TEST LOCATION:	No. 81-1, Lu Liao Keng, 9th Ling,Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan

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1 CERTIFICATION

PRODUCT :	2.4 GHz Wireless Number Pad
BRAND NAME :	Logitech
MODEL NO. :	Y-R0004
TESTED :	June 16 to 18, 2009
TEST SAMPLE :	ENGINEERING SAMPLE
APPLICANT :	LOGITECH FAR EAST LTD.
STANDARDS :	47 CFR Part 15, Subpart C (Section 15.249), ANSI C63.4-2003

The above equipment (Model: Y-R0004) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Carol Liao , **DATE:** *June 24, 2009*
(Carol Liao, Specialist)

TECHNICAL ACCEPTANCE : , **DATE:** *June 24, 2009*
Responsible for RF
(Hank Chung, Deputy Manager)

APPROVED BY : , **DATE:** *June 24, 2009*
(May Chen, Deputy Manager)

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: 47 CFR Part 15, Subpart C			
Standard Paragraph	**Test Type**	**Result**	**Remark**
15.207	Conducted Emission Test	NA	Power supply is DC 3V from batteries
15.249	Radiated Emission Test	PASS	Minimum passing margin is -8.71dB at 2399.80MHz
15.249	Conducted - Out Band Measurement	PASS	Meet the requirement of limit

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Measurement	Value
Radiated emissions (30MHz-1GHz)	3.94 dB
Radiated emissions (1GHz -18GHz)	2.49 dB
Radiated emissions (18GHz -40GHz)	2.70 dB

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	2.4 GHz Wireless Number Pad
MODEL NO.	Y-R0004
FCC ID	JNZYR0004
POWER SUPPLY	DC 3V from batteries
MODULATION TYPE	GFSK
CARRIER FREQUENCY OF EACH CHANNEL	2405MHz ~ 2474MHz
NUMBER OF CHANNEL	24
ANTENNA TYPE	PCB printed antenna with -0.40dBi antenna gain
DATA CABLE	NA
I/O PORTS	NA
ASSOCIATED DEVICES	2.4GHz Transceiver (Brand: Logitech, Model: C-U0003)

NOTE:

1. The above EUT information was declared by the manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

Twenty-four channels are provided in this EUT.

Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
1	2405	7	2423	13	2441	19	2459
2	2408	8	2426	14	2444	20	2462
3	2411	9	2429	15	2447	21	2465
4	2414	10	2432	16	2450	22	2468
5	2417	11	2435	17	2453	23	2471
6	2420	12	2438	18	2456	24	2474

NOTE:

1. Below 1 GHz, the channel 1, 14, and 24 were pre-tested in chamber. The channel 1, worst case one, was chosen for final test.
2. Above 1 GHz, the channel 1, 14, and 24 were tested individually.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a 2.4 GHz Wireless Number Pad. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

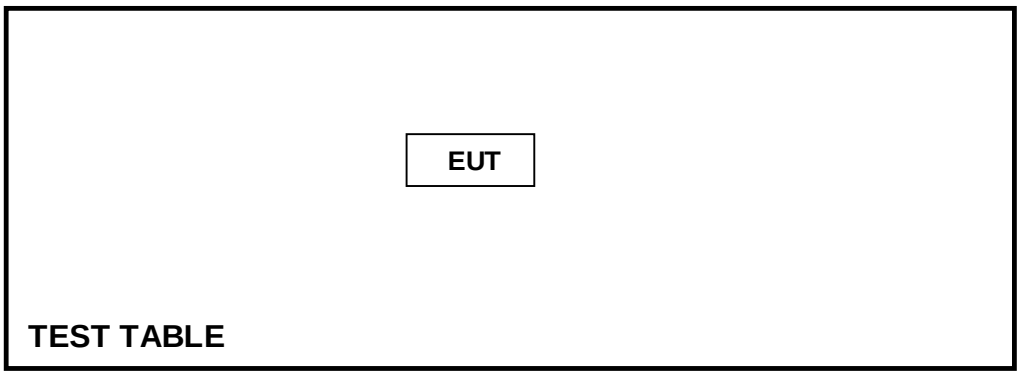
47 CFR Part 15, Subpart C (Section 15.249)
ANSI C63.4: 2003

All tests have been performed and recorded as per the above standards.

3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit.

3.5 CONFIGURATION OF SYSTEM UNDER TEST



4 TEST PROCEDURES AND RESULTS

4.1 RADIATED EMISSION MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT

According to 15.249 the field strength of emissions from intentional radiators operated under these frequencies bands shall not exceed the following:

Fundamental Frequency (MHz)	Field Strength of Fundamental (dBuV/m)	
	Peak	Average
2400 ~ 2483.5	114	94
	Field Strength of Harmonics (dBuV/m)	
	74	54

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
ROHDE & SCHWARZ Spectrum Analyzer	FSP40	100036	Dec. 9, 2008	Dec. 8, 2009
HP Pre_Amplifier	8449B	3008A01923	Nov. 10, 2008	Nov. 9, 2009
ROHDE & SCHWARZ Test Receiver	ESCS30	847124/029	Sep. 9, 2008	Sep. 8, 2009
SCHWARZBECK TRILOG Broadband Antenna	VULB 9168	138	April 29, 2009	April 28, 2010
Schwarzbeck Horn_Antenna	BBHA9120	D124	Dec. 09, 2008	Dec. 08, 2009
Schwarzbeck Horn_Antenna	BBHA 9170	BBHA9170153	Jan. 22, 2009	Jan. 21, 2010
R&S Loop Antenna	HFH2-Z2	100070	Jan. 14, 2008	Jan. 13, 2010
RF Switches	EMH-011	08009	Oct. 07, 2008	Oct. 06, 2009
RF CABLE (Chaintek)	Sucoflex 106	28077	Aug. 15, 2008	Aug. 14, 2009
RF Cable	8DFB	STCCAB-30M-1GHz	Oct. 07, 2008	Oct. 06, 2009
Software	ADT_Radiated_V7.6.15.9.2	NA	NA	NA
CT Antenna Tower & Turn Table	NA	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The horn antenna, HP preamplifier (model: 8449B) and Spectrum Analyzer (model: FSP40) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in Open Site No. C.
4. The FCC Site Registration No. is 656396.
5. The VCCI Site Registration No. is R-1626.
6. The CANADA Site Registration No. is IC 7450G-3.

4.1.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

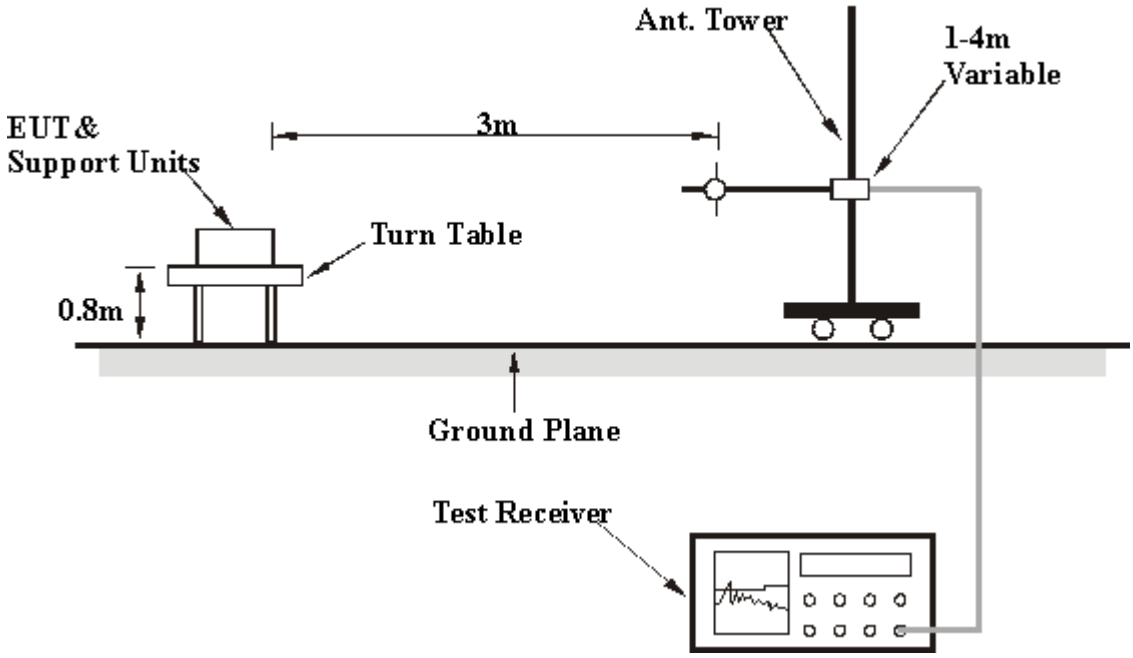
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth is 1MHz and video bandwidth of test receiver/spectrum analyzer is 3MHz for Peak detection at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz for Average detection (AV) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.1.6 EUT OPERATING CONDITIONS

Set the EUT under transmission / receiver condition continuously at specific channel frequency.

4.1.7 TEST RESULTS

BELOW 1GHz WORST-CASE DATA

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	32.0deg. C, 52.0%RH 965hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	127.60	26.37 QP	43.50	-17.13	1.00 H	215	13.04	13.33
2	158.02	28.93 QP	43.50	-14.57	2.19 H	254	13.48	15.45
3	198.44	26.21 QP	43.50	-17.29	1.56 H	20	13.72	12.49
4	218.70	27.05 QP	46.00	-18.95	1.56 H	60	13.96	13.09
5	324.60	26.70 QP	46.00	-19.30	1.56 H	318	9.26	17.44
6	390.20	27.34 QP	46.00	-18.66	1.56 H	193	8.11	19.23
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	114.55	27.55 QP	43.50	-15.95	1.00 V	123	15.57	11.98
2	121.70	23.78 QP	43.50	-19.72	1.00 V	342	11.05	12.73
3	162.08	26.08 QP	43.50	-17.42	1.00 V	0	10.76	15.32
4	218.75	25.09 QP	46.00	-20.91	1.00 V	256	12.00	13.09
5	286.10	27.52 QP	46.00	-18.48	1.00 V	67	11.42	16.10
6	390.20	29.70 QP	46.00	-16.30	1.00 V	240	10.47	19.23

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.

ABOVE 1GHz DATA

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 64.0%RH 965hPa	TESTED BY	Eric Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2399.40	60.79 PK	74.00	-13.21	1.52 H	23	30.47	30.32
2	2399.40	25.57 AV	54.00	-28.43	1.52 H	23	-4.75	30.32
3	*2405.00	90.52 PK	114.00	-23.48	1.52 H	21	60.18	30.34
4	*2405.00	55.30 AV	94.00	-38.70	1.52 H	21	24.96	30.34
5	4810.00	47.40 PK	74.00	-26.60	1.22 H	303	10.65	36.75
6	4810.00	12.18 AV	54.00	-41.82	1.22 H	303	-24.57	36.75
7	7215.00	53.90 PK	74.00	-20.10	1.30 H	83	10.76	43.14
8	7215.00	18.68 AV	54.00	-35.32	1.30 H	83	-24.46	43.14
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	**2399.80**	**65.29 PK**	**74.00**	**-8.71**	**1.40 V**	**183**	**34.97**	**30.32**
2	2399.80	30.07 AV	54.00	-23.93	1.40 V	183	-0.25	30.32
3	*2405.00	94.61 PK	114.00	-19.39	1.42 V	181	64.27	30.34
4	*2405.00	59.39 AV	94.00	-34.61	1.42 V	181	29.05	30.34
5	4810.00	48.83 PK	74.00	-25.17	1.41 V	251	12.08	36.75
6	4810.00	13.61 AV	54.00	-40.39	1.41 V	251	-23.14	36.75
7	7215.00	53.02 PK	74.00	-20.98	1.34 V	359	9.88	43.14
8	7215.00	17.80 AV	54.00	-36.20	1.34 V	359	-25.34	43.14

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency
6. The average value of fundamental frequency is: Average = Peak value + 20log(Duty cycle) Where the duty factor is calculated from following formula:20 log (Duty cycle) = 20 log (0.36 ms / 20.76 ms) = -35.22 dB

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 14	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 64.0%RH 965hPa	TESTED BY	Eric Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2444.00	90.44 PK	114.00	-23.56	1.39 H	30	59.96	30.48
2	*2444.00	55.22 AV	94.00	-38.78	1.39 H	30	24.74	30.48
3	4888.00	47.20 PK	74.00	-26.80	1.31 H	310	10.24	36.96
4	4888.00	11.98 AV	54.00	-42.02	1.31 H	310	-24.98	36.96
5	7332.00	53.70 PK	74.00	-20.30	1.28 H	92	10.57	43.13
6	7332.00	18.48 AV	54.00	-35.52	1.28 H	92	-24.65	43.13
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2444.00	94.11 PK	114.00	-19.89	1.38 V	177	63.63	30.48
2	*2444.00	58.89 AV	94.00	-35.11	1.38 V	177	28.41	30.48
3	4888.00	48.92 PK	74.00	-25.08	1.32 V	263	11.96	36.96
4	4888.00	13.70 AV	54.00	-40.30	1.32 V	263	-23.26	36.96
5	7332.00	54.29 PK	74.00	-19.71	1.29 V	351	11.16	43.13
6	7332.00	19.07 AV	54.00	-34.93	1.29 V	351	-24.06	43.13

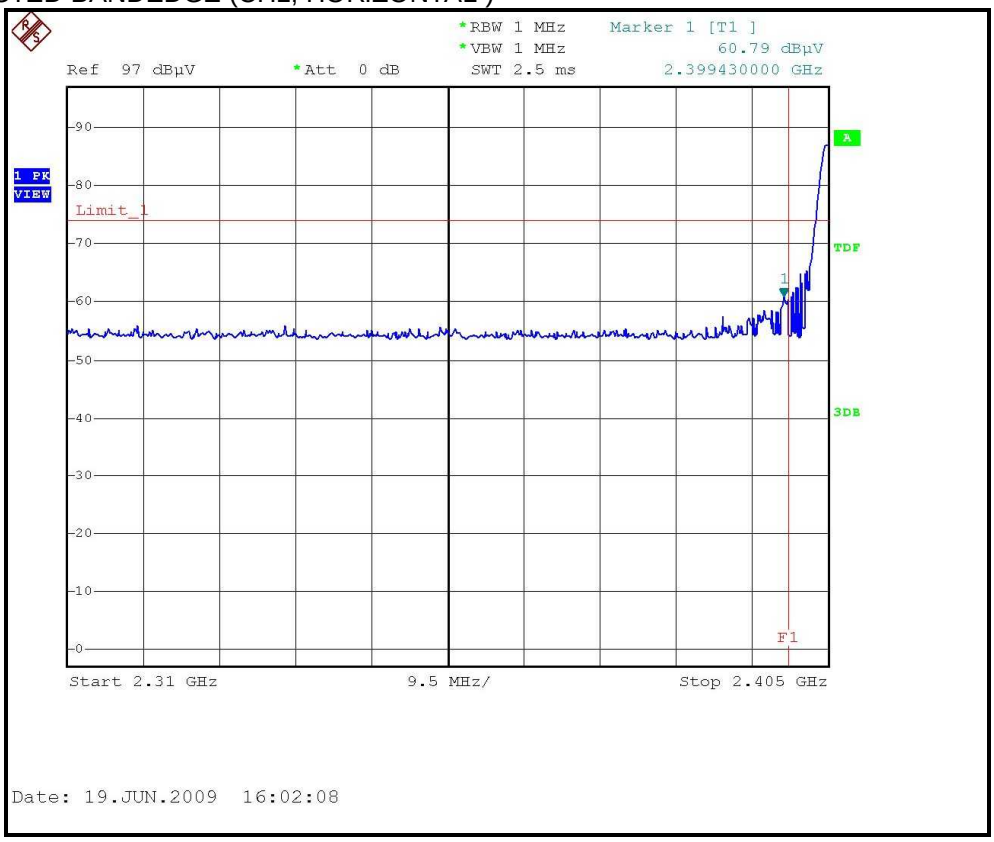
REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency
6. The average value of fundamental frequency is: Average = Peak value + 20log(Duty cycle) Where the duty factor is calculated from following formula:20 log (Duty cycle) = 20 log (0.36 ms / 20.76 ms) = -35.22 dB

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 24	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28.0deg. C, 64.0%RH 965hPa	TESTED BY	Eric Lee

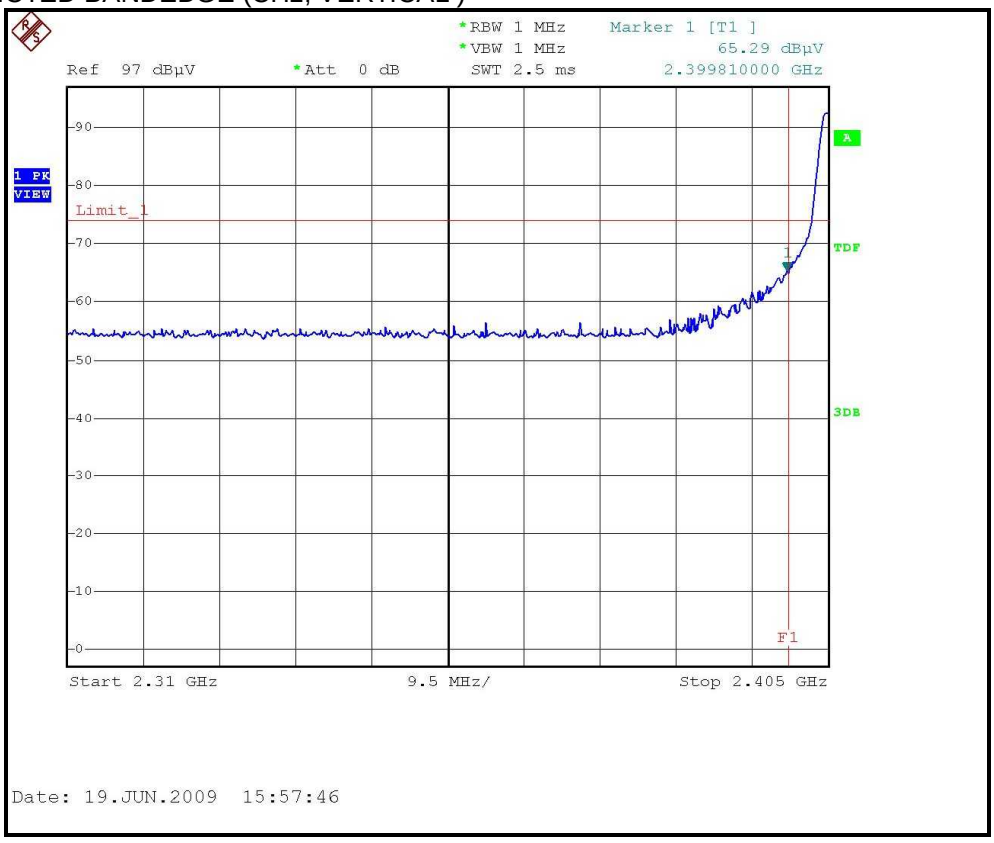
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2474.00	89.34 PK	114.00	-24.66	1.35 H	20	58.75	30.59
2	*2474.00	54.12 AV	94.00	-39.88	1.35 H	20	23.53	30.59
3	2484.30	58.87 PK	74.00	-15.13	1.37 H	18	28.24	30.63
4	2484.30	23.65 AV	54.00	-30.35	1.37 H	18	-6.98	30.63
5	4948.00	48.11 PK	74.00	-25.89	1.28 H	282	10.99	37.12
6	4948.00	12.89 AV	54.00	-41.11	1.28 H	282	-24.23	37.12
7	7422.00	53.28 PK	74.00	-20.72	1.33 H	89	10.15	43.13
8	7422.00	18.06 AV	54.00	-35.94	1.33 H	89	-25.07	43.13
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2474.00	93.25 PK	114.00	-20.75	1.35 V	181	62.66	30.59
2	*2474.00	58.03 AV	94.00	-35.97	1.35 V	181	27.44	30.59
3	2483.80	63.60 PK	74.00	-10.40	1.36 V	184	32.97	30.63
4	2483.80	28.38 AV	54.00	-25.62	1.36 V	184	-2.25	30.63
5	4948.00	48.63 PK	74.00	-25.37	1.29 V	271	11.51	37.12
6	4948.00	13.41 AV	54.00	-40.59	1.29 V	271	-23.71	37.12
7	7422.00	53.78 PK	74.00	-20.22	1.30 V	302	10.65	43.13
8	7422.00	18.56 AV	54.00	-35.44	1.30 V	302	-24.57	43.13

REMARKS: 1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * " : Fundamental frequency
6. The average value of fundamental frequency is: Average = Peak value + 20log(Duty cycle) Where the duty factor is calculated from following formula:20 log (Duty cycle) = 20 log (0.36 ms / 20.76 ms) = -35.22 dB

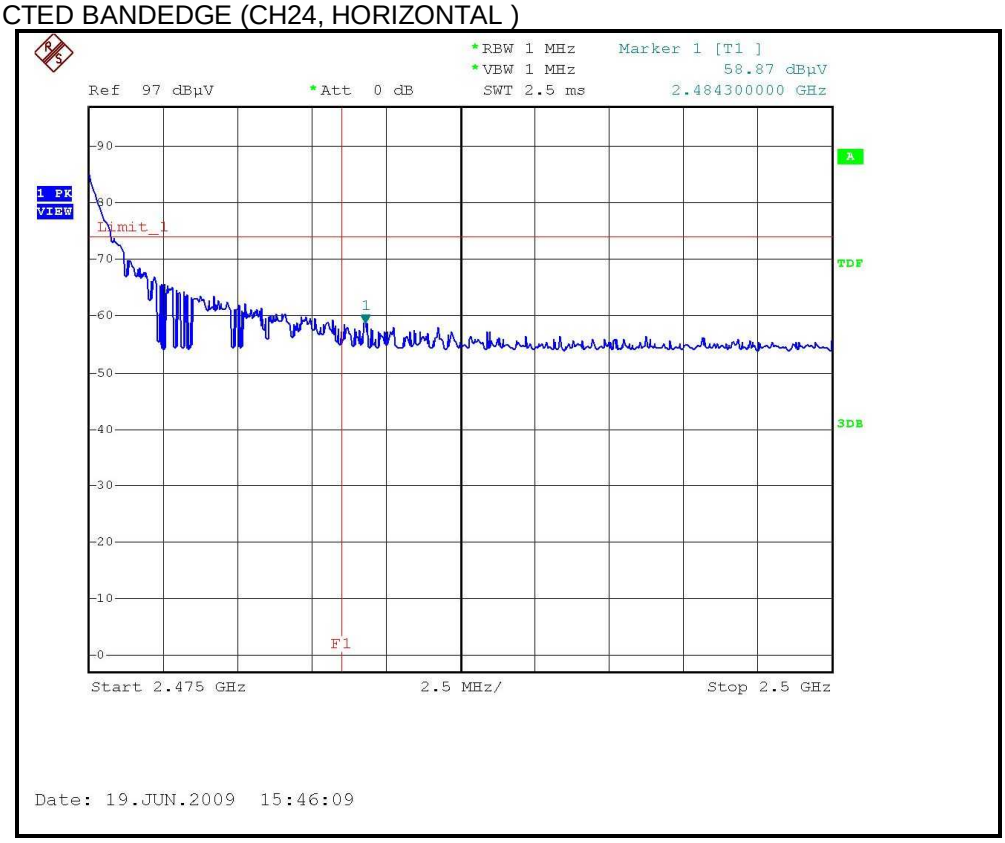
RESTRICTED BANDEDGE (CH1, HORIZONTAL)



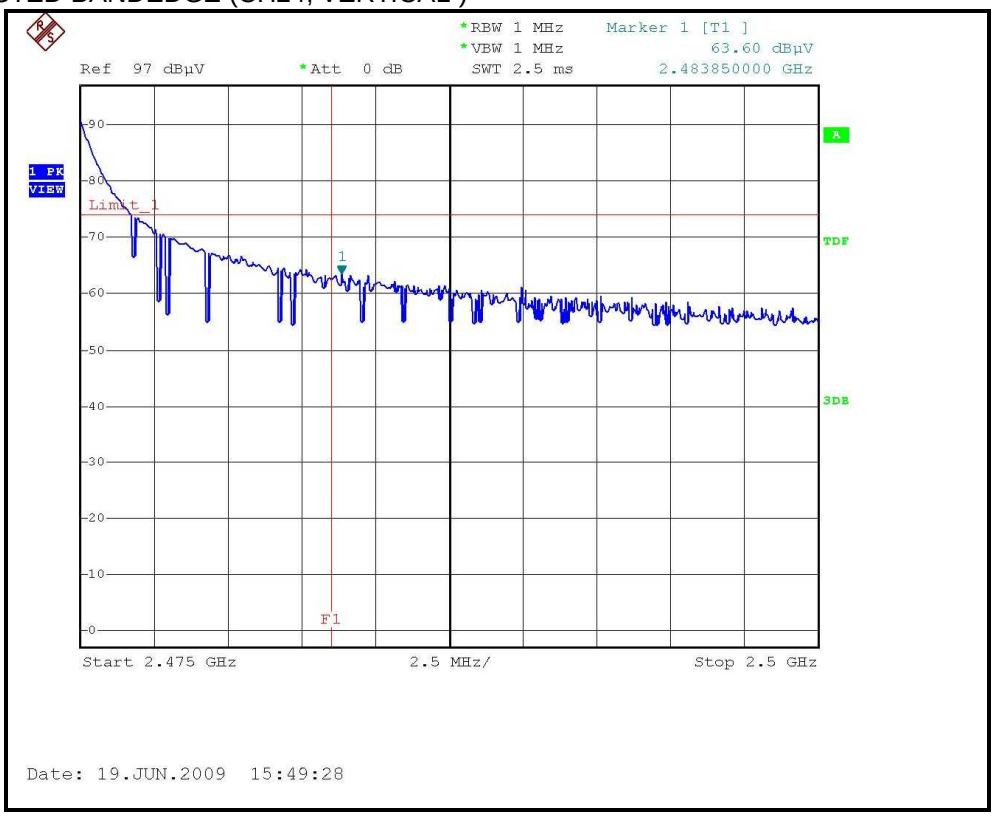
RESTRICTED BANDEDGE (CH1, VERTICAL)



RESTRICTED BANDEDGE (CH24, HORIZONTAL)



RESTRICTED BANDEDGE (CH24, VERTICAL)



4.2 CONDUCTED - OUT BAND MEASUREMENT

4.2.1 LIMITS OF CONDUCTED - OUT BAND MEASUREMENT

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSP40	100037	Aug. 09, 2008	Aug. 08, 2009

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.2.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 100 kHz with suitable frequency span including 300 MHz bandwidth from band edge. The band edges was measured and recorded.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

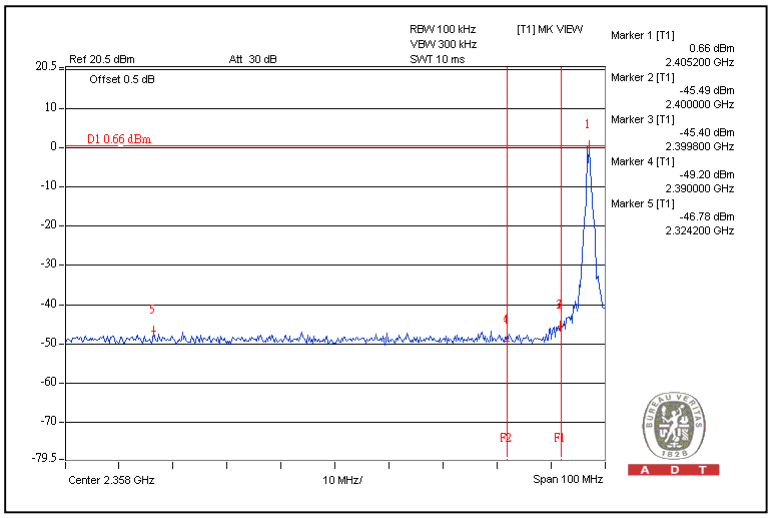
4.2.5 EUT OPERATING CONDITION

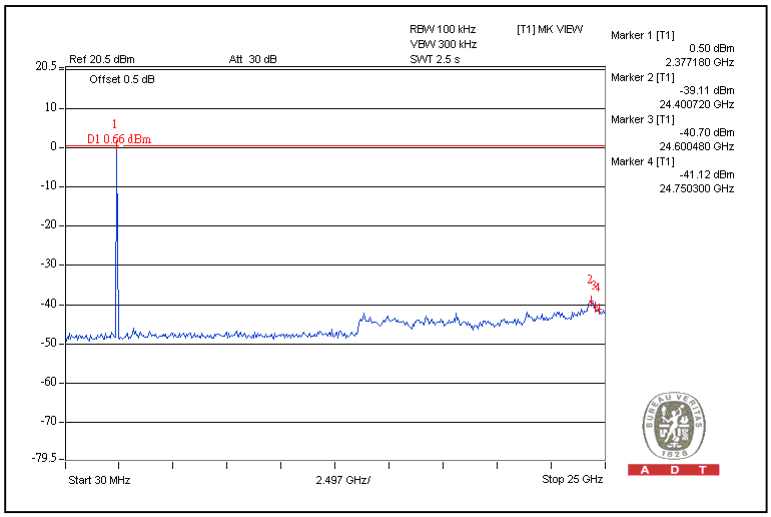
The software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel frequencies individually.

4.2.6 TEST RESULTS

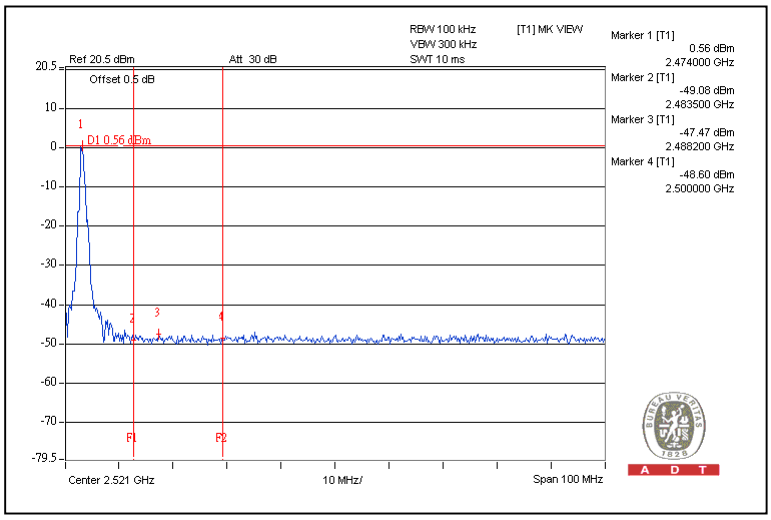
Emissions radiated outside of the specified frequency bands, please refer pages form 13 to 15 for met the requirement of the general radiated emission limits in § 15.209.

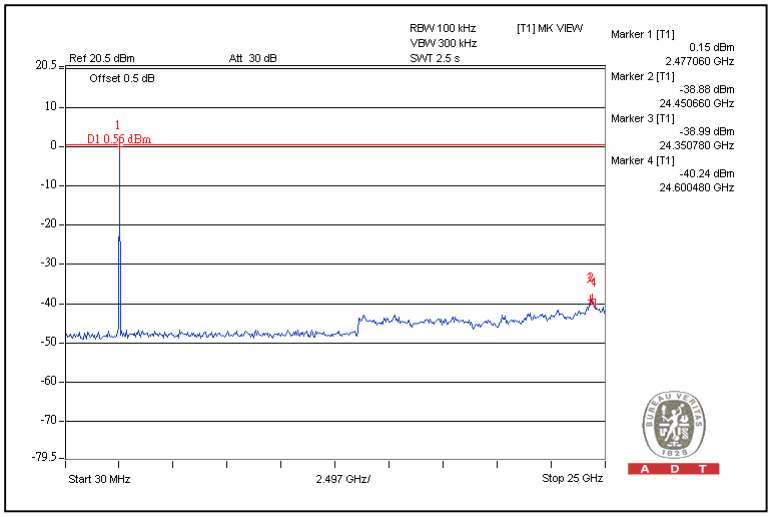
CH1





CH24


RBW 100 kHz
VBW 300 kHz
SWT 10 ms
[T1] MK VIEW
Marker 1 [T1]
0.56 dBm
2.474000 GHz
Marker 2 [T1]
-49.08 dBm
2.483500 GHz
Marker 3 [T1]
-47.47 dBm
2.488200 GHz
Marker 4 [T1]
-48.60 dBm
2.500000 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 0.56 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
F1
F2
Center 2.521 GHz
10 MHz/
Span 100 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
[T1] MK VIEW
Marker 1 [T1]
0.15 dBm
2.477060 GHz
Marker 2 [T1]
-38.88 dBm
24.450660 GHz
Marker 3 [T1]
-38.99 dBm
24.350780 GHz
Marker 4 [T1]
-40.24 dBm
24.600480 GHz
Ref 20.5 dBm
Att 30 dB
Offset 0.5 dB
D1 0.56 dBm
20.5
10
0
-10
-20
-30
-40
-50
-60
-70
-79.5
Start 30 MHz
2.497 GHz/
Stop 25 GHz

5 INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

USA	FCC, NVLAP
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA, CSA
R.O.C.	TAF, BSMI, NCC
Netherlands	Telefication
Singapore	GOST-ASIA (MOU)
Russia	CERTIS (MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5/phtml.
If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:
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Fax: 886-2-26051924

Hsin Chu EMC/RF Lab:
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Email: service@adt.com.tw
Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also.

6 APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

--- END ---