

FCC TEST REPORT

REPORT NO.: RF990804C13

MODEL NO.: K7910

FCC ID: FSUKK002

RECEIVED: Aug. 04, 2010

TESTED: Aug. 06 ~ Aug. 10, 2010

ISSUED: Aug. 12, 2010

APPLICANT: KYE SYSTEMS CORP.

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CHUNG, TAIPEI HSIEN, 241, TAIWAN, R.O.C.

ISSUED BY: Bureau Veritas Consumer Products Services

(H.K.) Ltd., Taoyuan Branch

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Table of Contents

1.	CERTIFICATION	3
2.	SUMMARY OF TEST RESULTS	4
2.1	MEASUREMENT UNCERTAINTY	4
3.	GENERAL INFORMATION	5
3.1	GENERAL DESCRIPTION OF EUT	5
3.2	DESCRIPTION OF TEST MODES	6
3.2.1	CONFIGURATION OF SYSTEM UNDER TEST	6
3.2.2	TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL	7
3.3	GENERAL DESCRIPTION OF APPLIED STANDARDS	8
3.4	DESCRIPTION OF SUPPORT UNITS	8
4.	TEST TYPES AND RESULTS	9
4.1	RADIATED EMISSION MEASUREMENT	9
4.1.1	LIMITS OF RADIATED EMISSION MEASUREMENT	9
4.1.2	TEST INSTRUMENTS	.10
4.1.3	TEST PROCEDURES	. 11
4.1.4	DEVIATION FROM TEST STANDARD	. 11
4.1.5	TEST SETUP	.12
4.1.6	EUT OPERATING CONDITIONS	.12
4.1.7	TEST RESULTS	.13
4.2	BAND EDGES MEASUREMENT	.19
4.2.1	LIMITS OF BAND EDGES MEASUREMENT	.19
4.2.2	TEST INSTRUMENTS	.19
4.2.3	TEST PROCEDURE	.19
4.2.4	DEVIATION FROM TEST STANDARD	.19
4.2.5	EUT OPERATING CONDITION	.19
4.2.6	TEST RESULTS	.20
5.	PHOTOGRAPHS OF THE TEST CONFIGURATION	.22
6.	INFORMATION ON THE TESTING LABORATORIES	.23
7.	APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES	
	TO THE EUT BY THE LAB	.24



1. CERTIFICATION

PRODUCT: 2.4GHz Wireless Keyboard

BRAND: KYE

MODEL NO.: K7910

APPLICANT: KYE SYSTEMS CORP.

TESTED: Aug. 06 ~ Aug. 10, 2010

TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: FCC Part 15, Subpart C (Section 15.249)

ANSI C63.4-2003

The above equipment (model: K7910) have 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: , DATE: Aug. 12, 2010

Pettie Chen / Specialist

ACCEPTANCE : Long Cheh , DATE: Aug. 12, 2010

Responsible for RF Long Chen / Senior Engineer

APPROVED BY : , DATE : Aug. 12, 2010

Gary Chang / Assistant Manager



2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C (Section 15.249)					
STANDARD PARAGRAPH TEST TYPE RESULT REMARK					
15.207	Conducted Emission Test	NA	Power supply is 3Vdc from batteries.		
15.209 15.249	Radiated Emission Test Band Edge Measurement Limit: 50dB less than the peak value of fundamental frequency or meet radiated emission limit in section 15.209		Meet the requirement of limit. Minimum passing margin is -16.4dB at 4896.00MHz.		

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:

MEASUREMENT	FREQUENCY	UNCERTAINTY
	30MHz ~ 200MHz	3.19 dB
Radiated emissions	200MHz ~1000MHz	3.21 dB
Nacialed emissions	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

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



3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	2.4GHz Wireless Keyboard
MODEL NO.	K7910
FCC ID	FSUKK002
POWER SUPPLY	3Vdc from batteries (1.5V AAA x 2) (Keyboard) 5.0Vdc from host equipment (Receiver)
MODULATION TYPE	GFSK
DATA RATE	1Mbps
OPERATING FREQUENCY	2402 ~ 2480MHz
NUMBER OF CHANNEL	79
ANTENNA TYPE	PCB antenna with -2.22dBi
DATA CABLE	NA
I/O PORT	NA
ACCESSORY DEVICES	Nano receiver (Brand: TOSHIBA, Model: PA3844D, FCC ID: CJ6UPA3844RD)

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

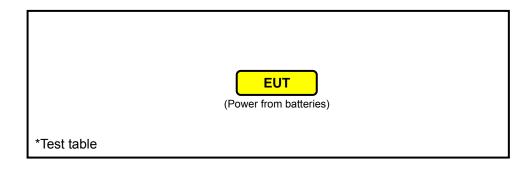


3.2 DESCRIPTION OF TEST MODES

79 channels are provided to this EUT.

Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
0	2402	27	2429	54	2456
1	2403	28	2430	55	2457
2	2404	29	2431	56	2458
3	2405	30	2432	57	2459
4	2406	31	2433	58	2460
5	2407	32	2434	59	2461
6	2408	33	2435	60	2462
7	2409	34	2436	61	2463
8	2410	35	2437	62	2464
9	2411	36	2438	63	2465
10	2412	37	2439	64	2466
11	2413	38	2440	65	2467
12	2414	39	2441	66	2468
13	2415	40	2442	67	2469
14	2416	41	2443	68	2470
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	51	2453	78	2480
25	2427	52	2454		
26	2428	53	2455		

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST





3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE		APPLICA	ABLE TO		DESCRIPTION
MODE	RE≥1G	RE<1G	PLC	вм	
-	\checkmark	\checkmark	NOTE	V	-

Where PLC: Power Line Conducted Emission RE<1G: Radiated Emission below 1GHz

RE≥1G: Radiated Emission above 1GHz **BM:** Bandedge Measurement **NOTE:** No need to concern of Conducted Emission due to the EUT is powered by battery.

RADIATED EMISSION TEST (ABOVE 1 GHz):

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and antenna ports (if EUT with antenna diversity architecture).

Following channel(s) was (were) selected for the final test as listed below.

AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TYPE
0 to 78	0, 46, 78	GFSK

RADIATED EMISSION TEST (BELOW 1 GHz):

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and antenna ports (if EUT with antenna diversity architecture).

Following channel(s) was (were) selected for the final test as listed below.

AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TYPE
0 to 78	78	GFSK

BANDEDGE MEASUREMENT:

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations and antenna ports (if EUT with antenna diversity architecture).

Following channel(s) was (were) selected for the final test as listed below.

AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TYPE
0 to 78	0, 78	GFSK

TEST CONDITION:

APPLICABLE TO ENVIRONMENTAL CONDITIONS		INPUT POWER	TESTED BY
RE≥1G	26deg. C, 67%RH, 1009 hPa	3Vdc	Antony Lee
RE<1G	26deg. C, 65%RH, 1009 hPa	3Vdc	Antony Lee
ВМ	26deg. C, 65%RH, 1009 hPa	3Vdc	Antony Lee

Report No.: RF990804C13 7 Report Format Version 3.0.1



3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C (Section 15.249)
ANSI C63.4-2003

All test items 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.



4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209, 15.249 as following:

15.209 Limit					
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			
15.249 Limit					
Fundamental Frequency	Field Strength of Fundamental (millivolts/meter)	Field Strength of Harmonics (microvolts/meter)			
902 ~ 928 MHz	50	500			
2400 ~ 2483.5 MHz	50	500			
5725 ~ 5875 MHz	50	500			
24 ~ 24.25 GHz	250	2500			

NOTE:

- 1. The lower limit shall apply at the transition frequencies.
- 2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
- 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.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESI7	838496/016	Dec. 29, 2009	Dec. 28, 2010
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Jan. 11, 2010	Jan. 10, 2011
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Apr. 28, 2010	Apr. 27, 2011
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-408	Jan. 05, 2010	Jan. 04, 2011
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170242	Dec. 25, 2009	Dec. 24, 2010
Preamplifier Agilent	8449B	3008A01961	Nov. 04, 2009	Nov. 03, 2010
Preamplifier Agilent	8447D	2944A10738	Nov. 04, 2009	Nov. 03, 2010
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	274041/4	Aug. 28, 2009	Aug. 27, 2010
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	283397/4	Aug. 28, 2009	Aug. 27, 2010
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA	NA
Turn Table ADT.	TT100.	TT93021704	NA	NA
Turn Table Controller ADT.	SC100.	SC93021704	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 test was performed in HwaYa Chamber 4.
- 3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 4. The FCC Site Registration No. is 988962.
- 5. The IC Site Registration No. is IC7450F-4.



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 3 meter semi-anechoic chamber. 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 lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

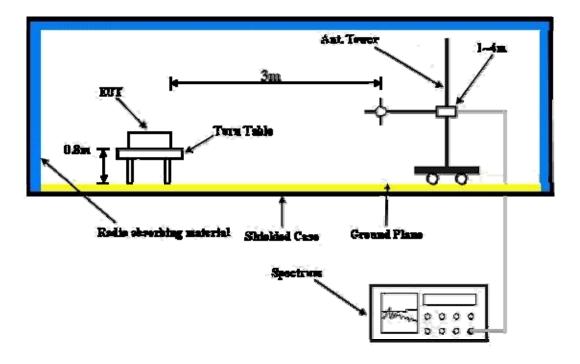
- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
- 2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
- 3. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation.



4.1.5 TEST SETUP



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT OPERATING CONDITIONS

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



4.1.7 TEST RESULTS

ABOVE 1GHz DATA

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 0	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	INPUT POWER 3Vdc		Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	26deg. C, 67%RH 1006 hPa	TESTED BY	Antony 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	2390.00	40.7 PK	74.0	-33.3	1.06 H	158	7.20	33.50			
2	2390.00	29.2 AV	54.0	-24.8	1.06 H	158	-4.30	33.50			
3	2398.00	42.5 PK	74.0	-31.5	1.14 H	159	9.00	33.50			
4	2398.00	33.7 AV	54.0	-20.3	1.14 H	159	0.20	33.50			
5	2400.00	52.2 PK	74.0	-21.8	1.14 H	161	18.70	33.50			
6	2400.00	1.7 AV	54.0	-52.3	1.14 H	161	-31.80	33.50			
7	*2402.00	88.7 PK	114.0	-25.3	1.14 H	161	55.20	33.50			
8	*2402.00	38.2 AV	94.0	-55.8	1.14 H	161	4.70	33.50			
9	4804.00	57.2 PK	74.0	-16.8	1.02 H	149	17.30	39.90			
10	4804.00	6.7 AV	54.0	-47.3	1.02 H	149	-33.20	39.90			

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 (0.3 ms / 100 ms) = -50.5 dB



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 0	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	3Vdc	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	26deg. C, 67%RH 1006 hPa	TESTED BY	Antony Lee	

	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	2390.00	40.8 PK	74.0	-33.2	1.02 V	56	7.30	33.50			
2	2390.00	28.9 AV	54.0	-25.1	1.02 V	56	-4.60	33.50			
3	2398.00	41.9 PK	74.0	-32.1	1.03 V	71	8.40	33.50			
4	2398.00	29.9 AV	54.0	-24.1	1.03 V	71	-3.60	33.50			
5	2400.00	53.7 PK	74.0	-20.3	1.02 V	69	20.20	33.50			
6	2400.00	3.2 AV	54.0	-50.8	1.02 V	69	-30.30	33.50			
7	*2402.00	86.8 PK	114.0	-27.2	1.02 V	69	53.30	33.50			
8	*2402.00	36.3 AV	94.0	-57.7	1.02 V	69	2.80	33.50			
9	4804.00	56.9 PK	74.0	-17.1	1.69 V	311	17.00	39.90			
10	4804.00	6.4 AV	54.0	-47.6	1.69 V	311	-33.50	39.90			

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 (0.3 ms / 100 ms) = -50.5 dB



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 46	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	3Vdc	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	26deg. C, 67%RH 1006 hPa	TESTED BY	Antony Lee	

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
NO.	FREQ. (MHz)	EMISSION LEVEL	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA	TABLE ANGLE	RAW VALUE	CORRECTION		
4	*0.4.40.00	(dBuV/m)	114.0	24.0	4.40.11	(Degree)	` ′	(dB/m)		
1	*2448.00	89.1 PK	114.0	-24.9	1.10 H	166	55.40	33.70		
2	*2448.00	38.6 AV	94.0	-55.4	1.10 H	166	4.90	33.70		
3	4896.00	57.6 PK	74.0	-16.4	1.03 H	135	17.40	40.20		
4	4896.00	7.1 AV	54.0	-46.9	1.03 H	135	-33.10	40.20		
		ANTENNA	A POLARITY	Y & TEST DI	STANCE: V	ERTICAL A	T 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	*2448.00	86.1 PK	114.0	-27.9	1.68 V	85	52.40	33.70		
2	*2448.00	35.6 AV	94.0	-58.4	1.68 V	85	1.90	33.70		
3	4896.00	56.9 PK	74.0	-17.1	1.71 V	331	16.70	40.20		
4	4896.00	6.4 AV	54.0	-47.6	1.71 V	331	-33.80	40.20		

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 (0.3 ms / 100 ms) = -50.5 dB



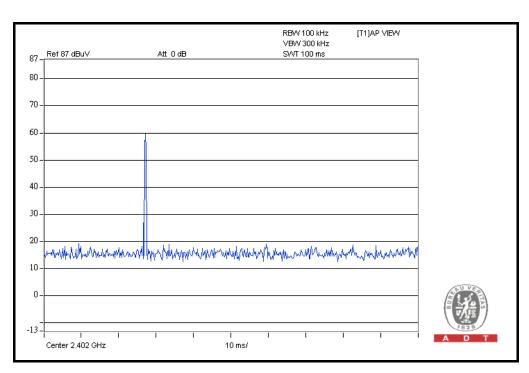
EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 78	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	3Vdc	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	26deg. C, 67%RH 1006 hPa	TESTED BY	Antony Lee	

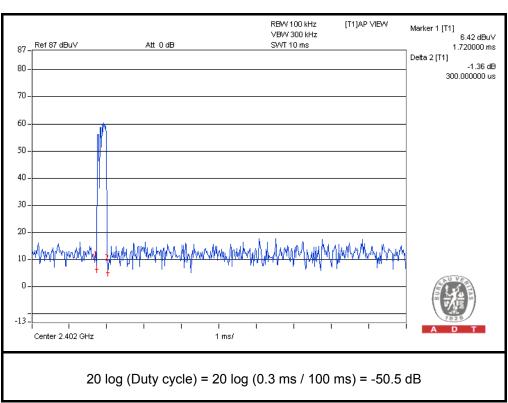
		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	AT 3 M	
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2480.00	89.2 PK	114.0	-24.8	1.10 H	159	55.40	33.80
2	*2480.00	38.7 AV	94.0	-55.3	1.10 H	159	4.90	33.80
3	2483.50	55.5 PK	74.0	-18.5	1.10 H	159	21.70	33.80
4	2483.50	5.0 AV	54.0	-49.0	1.10 H	159	-28.80	33.80
5	2485.50	40.9 PK	74.0	-33.1	1.08 H	163	7.00	33.90
6	2485.50	31.1 AV	54.0	-22.9	1.08 H	163	-2.80	33.90
7	4960.00	56.8 PK	74.0	-17.2	1.03 H	138	16.50	40.30
8	4960.00	6.3 AV	54.0	-47.7	1.03 H	138	-34.00	40.30
		ANTENNA	A POLARIT	Y & TEST DI	STANCE: V	ERTICAL A	T 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	*2480.00	86.1 PK	114.0	-27.9	1.03 V	73	52.30	33.80
2	*2480.00	35.6 AV	94.0	-58.4	1.03 V	73	1.80	33.80
3	2483.50	54.2 PK	74.0	-19.8	1.03 V	73	20.40	33.80
4	2483.50	3.7 AV	54.0	-50.3	1.03 V	73	-30.10	33.80
5	2485.50	42.7 PK	74.0	-31.3	1.02 V	68	8.80	33.90
6	2485.50	29.2 AV	54.0	-24.8	1.02 V	68	-4.70	33.90
7	4960.00	56.7 PK	74.0	-17.3	1.75 V	326	16.40	40.30
8	4960.00	6.2 AV	54.0	-47.8	1.75 V	326	-34.10	40.30

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 (0.3 ms / 100 ms) = -50.5 dB









BELOW 1GHz WORST-CASE DATA

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 78	FREQUENCY RANGE	Below 1000MHz	
INPUT POWER	3Vdc	DETECTOR FUNCTION	Quasi-Peak	
ENVIRONMENTAL CONDITIONS	26deg. C, 67%RH 1006 hPa	TESTED BY	Antony 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	66.84	18.9 QP	40.0	-21.1	1.25 H	316	6.20	12.70		
2	113.50	19.6 QP	43.5	-23.9	1.25 H	208	8.80	10.80		
3	191.28	20.1 QP	43.5	-23.4	2.00 H	220	8.00	12.10		
4	274.88	19.6 QP	46.0	-26.4	1.25 H	10	5.20	14.40		
5	576.25	24.6 QP	46.0	-21.4	1.50 H	46	2.00	22.60		
6	821.23	27.0 QP	46.0	-19.0	2.25 H	187	0.20	26.80		
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 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	43.51	18.1 QP	40.0	-21.9	1.00 V	10	4.00	14.10		
2	64.90	19.6 QP	40.0	-20.4	2.25 V	319	6.80	12.80		
3	113.50	19.4 QP	43.5	-24.1	1.00 V	223	8.60	10.80		
4	146.56	21.9 QP	43.5	-21.6	1.75 V	163	7.50	14.40		
5	385.70	25.2 QP	46.0	-20.8	1.75 V	166	7.50	17.70		
٦	000.10	20.2 @1	40.0	20.0	1.10	100	1.00	17.70		

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.



4.2 BAND EDGES MEASUREMENT

4.2.1 LIMITS OF BAND EDGES MEASUREMENT

Below –50dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
SPECTRUM ANALYZER R&S	FSP40	100040	Jul. 17, 2010	Jul. 16, 2011

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 and 300 kHz with suitable frequency span including 100 MHz bandwidth from band edge. The band edges was measured and recorded.

The spectrum plots are attached on the following pages.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

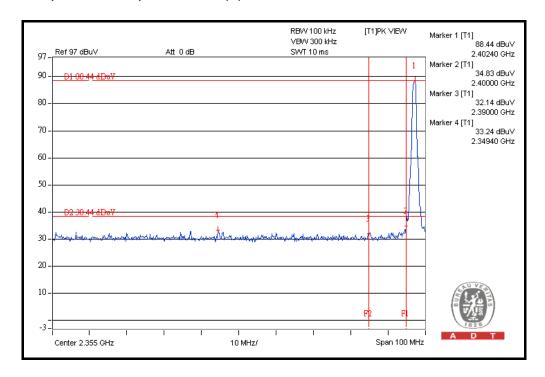
4.2.5 EUT OPERATING CONDITION

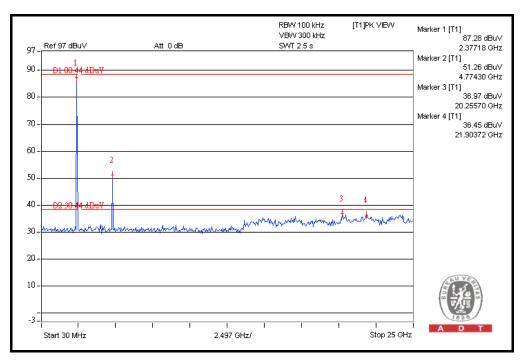
The software provided by client to enable the EUT under transmission condition continuously at lowest and highest channel frequencies individually.



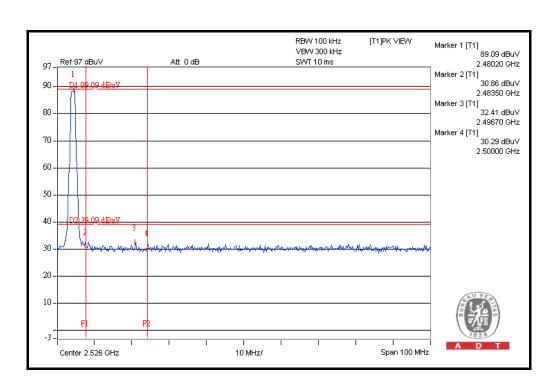
4.2.6 TEST RESULTS

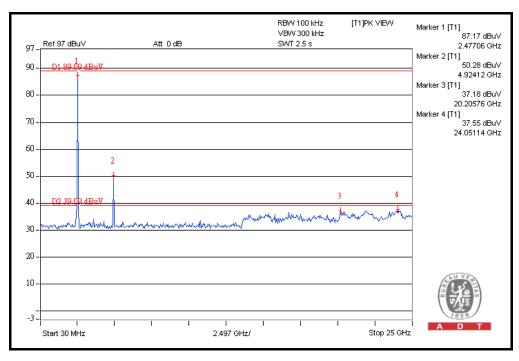
The spectrum plots are attached on the following images. D1 line indicates the highest level, and D2 line indicates the 50dB offset below D1. It shows compliance with the requirement in part 15.249 (d).













	A D T
5. PHOTOGRAPHS OF THE TEST CONFIGURATION	
Please refer to the attached file (Test Setup Photo).	



6. 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 according to ISO/IEC 17025.

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site:

<u>www.adt.com.tw/index.5/phtml</u>. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab: Hsin Chu EMC/RF Lab:

Tel: 886-2-26052180 Tel: 886-3-5935343 Fax: 886-2-26051924 Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Telecom Lab:

Tel: 886-3-3183232 Fax: 886-3-3185050

Web Site: www.adt.com.tw

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



7. 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---