

FCC TEST REPORT (BLUETOOTH)

REPORT NO.: RF140319C32B-1

MODEL NO.: A1402

MARKETING NAME: B1-730xx (x = $0 \sim 9$, $A \sim Z$, . , / , - or Blank)

FCC ID: HLZA1402

RECEIVED: Apr. 25, 2014

TESTED: May 02, 2014

ISSUED: May 13, 2014

APPLICANT: Acer Incorporated

ADDRESS: 8F., No.88, Sec. 1, Xintai 5th Rd., Xizhi Dist., New

Taipei City 221, Taiwan

ISSUED BY: Bureau Veritas Consumer Products Services (H.K.)

Ltd., Taoyuan Branch

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist.,

New Taipei City, Taiwan, R.O.C.

TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei

Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF140319C32B-1	Original release	May 13, 2014

Report No.: RF140319C32B-1 Reference No.: 140425C12 3 of 26



1. CERTIFICATION

PRODUCT: Tablet Computer

MODEL NO.: A1402

MARKETING NAME: B1-730xx (x = $0 \sim 9$, $A \sim Z$, . , / , - or Blank)

BRAND: Acer

APPLICANT: Acer Incorporated

TESTED: May 02, 2014

TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: FCC Part 15, Subpart C (Section 15.247)

ANSI C63.10-2009

This report is issued as a supplementary report of **RF140319C32-1**. This report shall be used combined together with its original report.

PREPARED BY: Coghe We, DATE: May 13, 2014

Maggie Wu / Specialist

APPROVED BY : , **DATE** : May 13, 2014

Ken Liu / Senior Manager

NOTE: Test items for radiated emission below 1GHz and conducted emission test were performed for this addendum. Other testing data refer to original report.

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2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

	APPLIED STANDARD: FCC Part 15, Subpart C			
STANDARD SECTION	TEST TYPE AND LIMIT	RESULT	REMARK	
15.207	AC Power Conducted Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -8.59dB at 0.18508MHz.	
15.247(a)(1) (iii)	Number of Hopping Frequency Used	PASS	Refer to NOTE below	
15.247(a)(1) (iii)	Dwell Time on Each Channel	PASS	Refer to NOTE below	
15.247(a)(1)	Hopping Channel Separation Spectrum Bandwidth of a Frequency Hopping Sequence Spread Spectrum System	PASS	Refer to NOTE below	
15.247(b)	Maximum Peak Output Power	PASS	Refer to NOTE below	
15.247(d)	Transmitter Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.0dB at 344.66MHz.	
15.247(d)	Band Edge Measurement	PASS	Refer to NOTE below	
15.203	Antenna Requirement	PASS	No antenna connector is used.	

NOTE: Test item for radiated emission below 1GHz and conducted emission test were performed for this addendum. Other testing data refer to original report.

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
Conducted emissions	150kHz ~ 30MHz	2.44 dB
	30MHz ~ 200MHz	3.34 dB
Radiated emissions	200MHz ~1000MHz	3.35 dB
Radiated 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	Tablet Computer
MODEL NO.	A1402
MARKETING NAME	B1-730xx (x = 0~9, A~Z, . , / , - or Blank)
POWER SUPPLY	5.35Vdc (Adapter) 5Vdc (Host equipment) 3.8Vdc (Battery)
MODULATION TYPE	GFSK, π /4-DQPSK, 8DPSK
MODULATION TECHNOLOGY	FHSS
TRANSFER RATE	1/2/3Mbps
OPERATING FREQUENCY	2402 ~ 2480MHz
NUMBER OF CHANNEL	79
MAX. OUTPUT POWER	1.081mW
ANTENNA TYPE	Refer to NOTE as below
ANTENNA CONNECTOR	N/A
I/O PORTS	Refer to user's manual
DATA CABLE	(1) 1.15m USB cable without core (Original, Brand: MEC IMEX INC.)(2) 1.15m USB cable without core (New, Brand: Component User Industry Co., Ltd.)
ACCESSORY DEVICES	Adapter, Battery

NOTE:

- 1. This is a supplementary report of RF140319C32-1. This report shall be combined together with its original report.
- 2. This report is prepared for FCC class II permissive change. The differences compared with the original report are:
 - a. The internal frame of original sample is changed.
 - b. Added components (LCM, Touch, adapter and USB cable).
 - c. The TN samples' antenna gain is lower than IPS sample's (original sample), but the antenna location and type are the same.

SAMPLE	ANTENNA TYPE	ANTENNA GAIN (dBi)
IPS	PCB	-2.6
TN	PCB	-3.3

Therefore, test items for radiated emission below 1GHz and conducted emissions had been re-tested and presented in this report.

3. The EUT has WLAN and Bluetooth functions, which cannot operate simultaneously.



4. The EUT consumes power from the following battery & adapters.

BATTERY	
BRAND:	Mcnair
MODEL:	L83-5178-552-00-4
RATING:	14Wh, 3680mAh, 3.8Vdc

ADAPTER 1 (ORIGINAL APPROVED)		
BRAND:	DELTA Electronics, INC.	
MODEL:	ADP-10HW A	
INPUT:	100-240Vac, 50-60Hz, 0.4A	
OUTPUT:	5.35Vdc, 2A	
POWER LINE:	DC 1.15m USB cable without core	

ADAPTER 2 (NEW)		
BRAND:	Chicony	
MODEL:	W12-010N3A	
INPUT:	100-240Vac, 50/60Hz, 0.3A	
OUTPUT:	5.35Vdc, 2A	
POWER LINE:	DC 1.15m USB cable without core	



5. The configurations of the EUT are defined as below.

				(Config	J .
Part	Descriptions	Part number	Supplier	1 (IPS)	2 (TN)	3 (TN)
	Clovertrail 1.6GHz	Intel Z2560 1.6GHz	Intel	٧	٧	٧
Ducati PCBA	16GB EMMC	H26M52003EQR	Hynix	٧	٧	٧
	1GB KPDDR2	EDB8164B3PD-1D-F(FCBGA)	Elpida	٧	٧	٧
LCM	7" 800x1280 IPS	KD070D21-39NA-A15	KingDisplay	٧		
LCIVI	7" TN 600x1024	KD070D27-39NB-A13	KingDisplay		٧	٧
		CFF3325-7	HLT	٧		
Touch	GG Touch	M070QF08-V1	Gtronics		٧	
		CTP070588-01	AVD			٧
Battery	14Wh, 3680mAh, 3.8Vdc	3165142P	Oceansun	٧	٧	٧
Speaker	0.5wattx2	XHB160902B08-11	Jiashan Haosheng Electronic Co.,LTD	٧	٧	٧
		KEEH1544WBL-40L	Kingstate	٧		
Microphone	Microphone+cable	HSC-0092	Tianjin BSE Electronics Co.,Ltd		٧	٧
Camera	2MP	GNDF130958R	Guangdong Lite Array Co.,Ltd.	٧	٧	٧
Camera	VGA	GNBF130959R	Guangdong Lite Array Co.,Ltd.	٧	٧	٧
Antenna	WiFi-GPS antenna	QTNKVWIPB01+A	Well Green Technology	٧	٧	٧
Casing	Hosuing	TBC	Shen Long / Da Ding	٧	٧	٧
FPC	PCBA to LCM	JD3767A0	J&T FLEX TECHNOLOGY CO.,LTD.	٧	٧	٧



6. Radiated emission 30 ~ 1000MHz test has been pre-tested under the following test modes. **Test mode 1** was the worst case for final test and recorded in the report.

Test Mode	Test Condition
1	Config. 1 + USB cable (1) + Adapter 1
2	Config. 1 + USB cable (1) + Adapter 2
3	Config. 2 + USB cable (1) + Adapter 1
4	Config. 2 + USB cable (1) + Adapter 2
5	Config. 3 + USB cable (1) + Adapter 1
6	Config. 3 + USB cable (1) + Adapter 2
7	Config. 1 + USB cable (2) + Adapter 1

7. Conducted emission test has been pre-tested under the following test modes. **Test mode 5** was the worst case for final test and recorded in the report.

Test Mode	Test Condition
1	Config. 1 + USB cable (1) + Adapter 1
2	Config. 1 + USB cable (1) + Adapter 2
3	Config. 2 + USB cable (1) + Adapter 1
4	Config. 2 + USB cable (1) + Adapter 2
5	Config. 3 + USB cable (1) + Adapter 1
6	Config. 3 + USB cable (1) + Adapter 2

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



3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT	APPLICABLE TO			
CONFIGURE MODE	RE<1G	PLC	DESCRIPTION	
А	V	-	Config. 1, USB cable (1), powered by adapter 1	
В	-	V	Config. 3, USB cable (1), powered by adapter 1	

Where

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**. NOTE: "-"means no effect.

RADIATED EMISSION TEST (BELOW 1 GHz):

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

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

EUT CONFIGURE MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	PACKET TYPE
А	0 to 78	39	FHSS	GFSK	DH5

POWER LINE CONDUCTED EMISSION:

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

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

EUT CONFIGURE MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	PACKET TYPE
В	0 to 78	39	FHSS	GFSK	DH5

TEST CONDITION:

APPLICABLE TO ENVIRONMENTAL CONDITIONS		INPUT POWER	TESTED BY
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Ted Chang
PLC	25deg. C, 65%RH	120Vac, 60Hz	Jones Chang

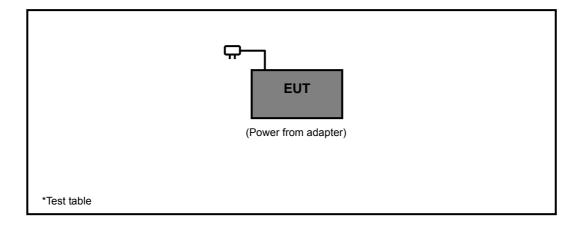
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3.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit.

3.3.1 CONFIGURATION OF SYSTEM UNDER TEST



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3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart C (15.247) FCC Public Notice DA 00-705 ANSI C63.10-2009

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

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.



4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

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

NOTE:

- 1. The lower limit shall apply at the transition frequencies.
- 2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
- 3. 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.

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4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESIB7	100187	Jan. 02, 2014	Jan. 01, 2015
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Mar. 03, 2014	Mar. 02, 2015
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Feb. 26, 2014	Feb. 25, 2015
HORN Antenna SCHWARZBECK	9120D	209	Sep. 12, 2013	Sep. 11, 2014
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 15, 2013	Jul. 14, 2014
Preamplifier Agilent	8447D	2944A10633	Oct. 07, 2013	Oct. 06, 2014
Preamplifier Agilent	8449B	3008A01964	Aug. 26, 2013	Aug. 25, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	214378/4	Aug. 26, 2013	Aug. 25, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 106	12738/6 +309224/4	Aug. 26, 2013	Aug. 25, 2014
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	017303	NA	NA
Turn Table BV ADT	TT100	TT93021703	NA	NA
Turn Table Controller BV ADT	SC100	SC93021703	NA	NA
High Speed Peak Power Meter	ML2495A	0824011	Jul. 29, 2013	Jul. 28, 2014
Power Sensor	MA2411B	0738171	Jul. 29, 2013	Jul. 28, 2014

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 3.
- 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 IC 7450F-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 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 1 MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.

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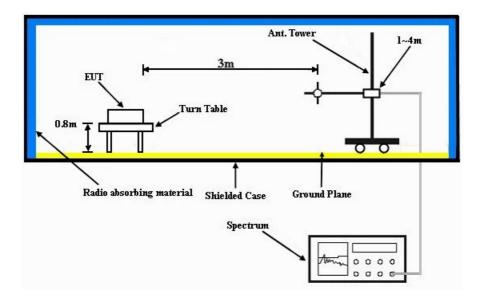
3. All modes of operation were investigated and the worst-case emissions are reported.

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

- a. Placed the EUT on the test table.
- b. Set the EUT in transmission condition continuously at specific channel frequency.



4.1.7 TEST RESULTS

BELOW 1GHz WORST-CASE DATA: GFSK

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 39	FREQUENCY RANGE	Below 1000MHz	
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak	
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH	TESTED BY	Jones Chang	

	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	132.95	39.5 QP	43.5	-4.0	2.00 H	256	54.40	-14.90
2	201.00	40.7 QP	43.5	-2.8	2.00 H	59	57.30	-16.60
3	272.94	42.8 QP	46.0	-3.2	1.00 H	260	55.70	-12.90
4	344.66	45.0 QP	46.0	-1.0	1.00 H	211	56.50	-11.50
5	490.70	36.3 QP	46.0	-9.7	1.49 H	158	44.90	-8.60
6	564.58	34.9 QP	46.0	-11.1	1.49 H	95	42.20	-7.30
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M	
NO.	NO. FREQ. (MHz) LEVEL LIMIT MARGIN (dB) ANTENNA ANGLE RAW VALUE FACTO							CORRECTION FACTOR (dB/m)
1	72.67	33.3 QP	40.0	-6.7	1.00 V	204	50.20	-16.90
2	270.99	34.3 QP	46.0	-11.7	1.00 V	134	47.30	-13.00
3	344.87	41.8 QP	46.0	-4.2	1.00 V	168	53.30	-11.50
4	418.76	39.3 QP	46.0	-6.7	1.00 V	197	49.20	-9.90
5	490.70	31.8 QP	46.0	-14.2	1.00 V	157	40.40	-8.60
6	566.52	33.4 QP	46.0	-12.6	1.50 V	126	40.70	-7.30

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)

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- 2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB)
 - Pre-Amplifier Factor (dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value



4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBµV)		
	Quasi-peak	Average	
0.15 ~ 0.5	66 to 56	56 to 46	
0.5 ~ 5	56	46	
5 ~ 30	60	50	

NOTE: 1. The lower limit shall apply at the transition frequencies.

- 2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
- 3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Nov. 29, 2013	Nov. 28, 2014
RF signal cable Woken	5D-FB	Cable-HYC01-01	Dec. 27, 2013	Dec. 26, 2014
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Feb. 13, 2014	Feb. 12, 2015
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 17, 2013	Jul. 16, 2014
Software ADT	BV ADT_Cond_ V7.3.7.3	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.

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- 2. The test was performed in HwaYa Shielded Room 1.
- 3. The VCCI Site Registration No. is C-2040.



4.2.3 TEST PROCEDURES

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emissions levels under (Limit 20dB) were not recorded.

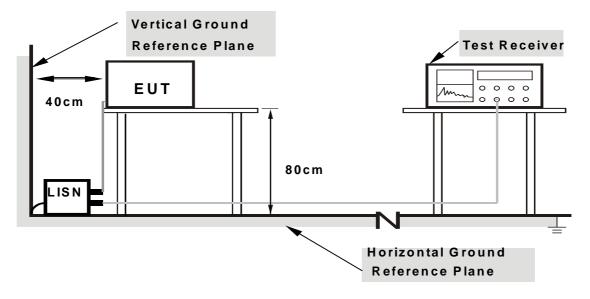
NOTE: All modes of operation were investigated and the worst-case emissions are reported.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.



4.2.5 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.



4.2.7 TEST RESULTS

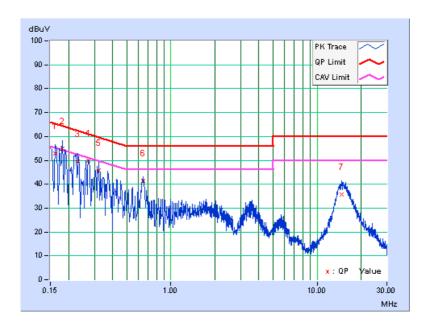
CONDUCTED WORST-CASE DATA: GFSK

PHASE	Line 1	6dB BANDWIDTH	9kHz
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	Freq.	Corr.	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
No		Factor								
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16173	0.11	52.63	37.70	52.74	37.81	65.37	55.37	-12.64	-17.57
2	0.18128	0.10	54.62	39.51	54.72	39.61	64.43	54.43	-9.71	-14.82
3	0.23216	0.09	49.37	35.78	49.46	35.87	62.37	52.37	-12.91	-16.50
4	0.27120	0.10	49.69	37.80	49.79	37.90	61.08	51.08	-11.29	-13.18
5	0.32204	0.10	45.57	32.01	45.67	32.11	59.65	49.65	-13.98	-17.54
6	0.65044	0.15	41.12	32.43	41.27	32.58	56.00	46.00	-14.73	-13.42
7	14.64828	0.81	34.72	27.16	35.53	27.97	60.00	50.00	-24.47	-22.03

REMARKS:

- 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
- 2. The emission levels of other frequencies were very low against the limit.
- 3. Margin value = Emission level Limit value
- 4. Correction factor = Insertion loss + Cable loss
- 5. Emission Level = Correction Factor + Reading Value



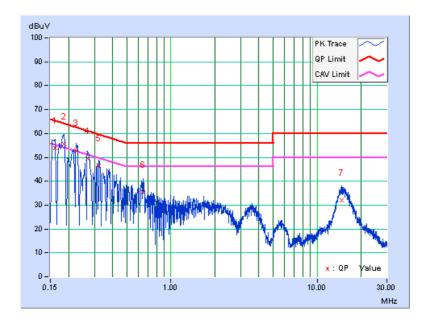


PHASE	Line 2	6dB BANDWIDTH	9kHz

	Freq.	Corr.	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
No		Factor								
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16173	0.06	53.71	38.22	53.77	38.28	65.37	55.37	-11.61	-17.10
2	0.18508	0.08	55.59	40.41	55.67	40.49	64.25	54.25	-8.59	-13.77
3	0.22434	0.10	52.87	39.12	52.97	39.22	62.66	52.66	-9.69	-13.44
4	0.26765	0.12	49.43	36.71	49.55	36.83	61.19	51.19	-11.64	-14.36
5	0.32272	0.14	46.38	31.94	46.52	32.08	59.64	49.64	-13.12	-17.56
6	0.64657	0.19	35.12	25.05	35.31	25.24	56.00	46.00	-20.69	-20.76
7	14.76167	0.77	31.29	23.73	32.06	24.50	60.00	50.00	-27.94	-25.50

REMARKS:

- 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
- 2. The emission levels of other frequencies were very low against the limit.
- 3. Margin value = Emission level Limit value
- 4. Correction factor = Insertion loss + Cable loss
- 5. Emission Level = Correction Factor + Reading Value





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.

If you have any comments, please feel free to contact us at the following:

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

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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 ---

Report No.: RF140319C32B-1

Reference No.: 140425C12