

# **Variant FCC Test Report**

Report No.: RF140312C09F

FCC ID: P4Q-N435

Test Model: N435

Received Date: Dec. 22, 2015

Test Date: Jan. 06, 2016 ~ Jan. 29, 2016

**Issued Date:** Feb. 16, 2016

Applicant: MiTAC International Corp.

Address: Building B, No. 209, Sec. 1, Nan Gang Rd., Nan Gang Dist., Taipei 11568,

Taiwan, R.O.C.

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

(R.O.C)

Test Location (1): No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan

Hsien 333, Taiwan, R.O.C.

Test Location (2): No.215, Sec. 3, Beixin Rd., Xindian Dist., New Taipei City 231, Taiwan,

R.O.C





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## **Release Control Record**

Issue No.	Description	Date Issued
RF140312C09F	Original Release	Feb. 16, 2016

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### **Certificate of Conformity**

Product: Tablet PC

Brand: Mio; Mitac; Code; Janam; Stryker

Test Model: N435

Sample Status: Production Unit

**Applicant:** MiTAC International Corp.

**Test Date:** Jan. 06, 2016 ~ Jan. 29, 2016

**Standards:** 47 CFR FCC Part 15, Subpart C (Section 15.247)

ANSI C63.10:2009

The above equipment 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.

Evonne Lin, Date:

Evonne Liu / Specialist

Sterley W Feb. 16, 2016

Approved by: **Date:** Feb. 16, 2016

Stanley Wu / Assistant Manager

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### 2 Summary of Test Results

	47 CFR FCC Part 15, Subpart C (SECTION 15.247)						
FCC Clause	Test Item	Result	Remarks				
15.207	15.207 AC Power Conducted Emission		Meet the requirement of limit.  Minimum passing margin is -14.51dB at 0.18903MHz.				
15.247(a)(1) (iii)	Number of Hopping Frequency Used	PASS	Refer to Note				
15.247(a)(1) (iii)	Dwell Time on Each Channel	PASS	Refer to Note				
15.247(a)(1)	Hopping Channel Separation     Spectrum Bandwidth of a     Frequency Hopping Sequence     Spread Spectrum System	PASS	Refer to Note				
15.247(b)	Maximum Peak Output Power	PASS	Refer to Note				
15.205 & 209	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -14.19dB at 2496MHz.				
15.247(d)	Band Edge Measurement	PASS	Refer to Note				
15.247(d)	Antenna Port Emission	PASS	Refer to Note				
15.203	Antenna Requirement	PASS	Refer to Note				

Note: Only conducted and radiated Emission test were performed for this addendum. Refer to original report for other test data.

# 2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT:

The listed uncertainties are the worst case uncertainty for the entire range of measurement. Please note that the uncertainty values are provided for informational purposes only and are not used in determining the PASS/FAIL results.

Measurement	Frequency	Expended Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150 kHz ~ 30 MHz	2.44 dB
Radiated Emissions up to 1 GHz	30 MHz ~ 200 MHz	2.0153 dB
Radiated Effissions up to 1 GHz	200 MHz ~1000 MHz	2.0224 dB
Radiated Emissions above 1 GHz	1 GHz ~ 18 GHz	1.0121 dB
Radiated Emissions above 1 GHZ	18 GHz ~ 40 GHz	1.1508 dB

### 2.2 Modification Record

There were no modifications required for compliance.



### 3 General Information

### 3.1 General Description of EUT

Product	Tablet PC
Brand	Mio ; Mitac ; Code ; Janam ; Stryker
Test Model	N435
Status of EUT	Production Unit
Power Supply Rating	5.0Vdc (adapter) 3.7Vdc (Li-ion battery)
Modulation Type	GFSK, π/4-DQPSK, 8DPSK
Transfer Rate	1/2/3 Mbps
Operating Frequency	2402 ~ 2480 MHz
Number of Channel	79
Antenna Type	PCB antenna with 3.3 dBi gain
Antenna Connector	N/A
Accessory Device	Refer to Note as below
Data Cable Supplied	Refer to Note as below

#### Note:

- 1. This report is issued as a supplementary report to BV ADT report no.: RF140312C09-6. The differences compared with original report are adding LCD Panel 2. Therefore, only conducted and radiated Emission had been retest.
- 2. The EUT contains following accessory devices.

Product	Brand	Model	Description
Adapter 1	TPT	MII050200	I/P: 100-240Vac, 50-60Hz, 0.3A O/P: 5Vdc, 2A
Adapter 2	SINPRO	MPU16A-102	I/P: 100-240Vac, 47-63Hz, 0.33-0.18A O/P: 5Vdc, 2.6A
Battery	Tian Yu	SJS3060	3.7Vdc, 3060mAh
BCR Scanner 1 (2D LED)	Honeywell	N5600, N56X3, N56X0, N5603	
BCR Scanner 2 (2D)	Code	CR8012	
BCR Scanner 3 (2D Laser)	Honeywell	N5603, N56X3	
LCD Panel 1	TIANME	TM059YDH01	5.88 inch
LCD Panel 2	SHANGHAI TIANMA MICRO-ELECTRONICS	TM057JDHP04	5.7 inch
Front Camera	LITE-ON	10P2SA511	
Rear Camera	LITE-ON	10P2SF130	
WWAN Module	Ublox	LISA-U200	
WLAN, BT Module	Jorjin	WG7833-B0 & WX7833-B0	

3. 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.

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#### **Description of Test Modes** 3.2

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		

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### 3.2.1 Test Mode Applicability and Tested Channel Detail

EUT CONFIGURE		APPLICABLE TO		DESCRIPTION
MODE	RE≥1G	RE<1G	PLC	DESCRIPTION
-	V	V	<b>V</b>	-

Where

**RE≥1G:** Radiated Emission above 1GHz

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

#### NOTE:

- 1. For Radiated emission test, pre-tested GFSK,  $\pi$ /4-DQPSK, 8DPSK modulation type and found GFSK was the worse, therefore chosen for the final test and presented in the test report.
- 2. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on X-plane.

### RADIATED EMISSION TEST (ABOVE 1GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- 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
-	0 to 78	78	FHSS	GFSK	DH5

### RADIATED EMISSION TEST (BELOW 1GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- 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
•	0 to 78	78	FHSS	GFSK	DH5

### **POWER LINE CONDUCTED EMISSION TEST:**

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

EUT CONFIGUR MODE	E AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	PACKET TYPE
-	0 to 78	78	FHSS	GFSK	DH5

### **TEST CONDITION:**

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	25deg. C, 65%RH	120Vac, 60Hz	Karl Lee
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Charles Hsiao
PLC	25deg. C, 68%RH	120Vac, 60Hz	Toby Tian

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## 3.3 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Product	Brand	Model No.	Serial No.	FCC ID
A.	Bluetooth Tester	R&S	CBT	100980	N/A
B.	Earphone	N/A	N/A	N/A	N/A

#### Note:

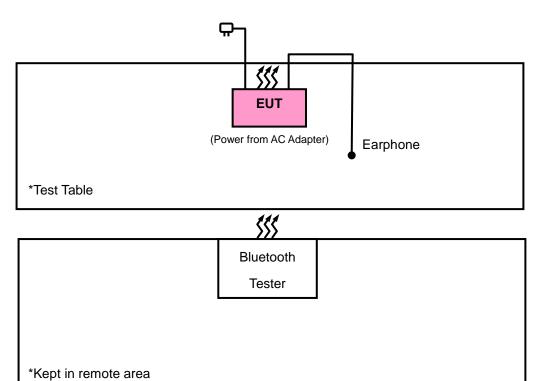
1. All power cords of the above support units are non-shielded (1.8m).

No.	Signal Cable Description Of The Above Support Units
1.	N/A
2.	N/A

#### Note:

1. All power cords of the above support units are non-shielded (1.8m).

### 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 specifications of 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 has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

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### 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 Agilent Technologies	N9038A	MY52260177	May 19, 2015	May 18, 2016
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 17, 2015	Dec. 16, 2016
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Feb. 04, 2015	Feb. 03, 2016
HORN Antenna SCHWARZBECK	BBHA 9170	9170-480	Jan. 08, 2016	Jan. 07, 2017
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-969	Feb. 09, 2015	Feb. 08, 2016
Bluetooth Tester	СВТ	100980	Apr. 27, 2015	Apr. 26, 2017
Loop Antenna	EM-6879	269	Jul. 31, 2015	Jul. 30, 2016
Agilent Communications Tester-Wireless	8960 Series 10	MY53201073	Jul. 03, 2015	Jul. 02, 2017
Preamplifier Agilent	310N	187226	Jun. 29, 2015	Jun. 28, 2016
Preamplifier Agilent	83017A	MY39501357	Jun. 29, 2015	Jun. 28, 2016
Power Meter Anritsu	ML2495A	1232002	Sep. 21, 2015	Sep. 20, 2016
Power Sensor Anritsu	MA2411B	1207325	Sep. 21, 2015	Sep. 20, 2016
RF signal cable ETS-LINDGREN	5D-FB	Cable-CH1-01(R FC-SMS-100-SM S-120+RFC-SMS -100-SMS-400)	Jun. 27, 2015	Jun. 26, 2016
RF signal cable ETS-LINDGREN	8D-FB	Cable-CH1-02(R FC-SMS-100-SM S-24)	Jun. 27, 2015	Jun. 26, 2016
Software BV ADT	E3 8.130425b	NA	NA	NA
Antenna Tower MF	NA	NA	NA	NA
Turn Table MF	NA	NA	NA	NA
Antenna Tower &Turn Table Controller MF	MF-7802	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 test was performed in HsinTien Chamber 1.
- 3. The horn antenna and preamplifier (model: 83017A) are used only for the measurement of emission frequency above 1 GHz if tested.
- 4. The FCC Site Registration No. is 149147.
- 5. The IC Site Registration No. is IC7450I-1.

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### 4.1.3 Test Procedures

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. 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 height of antenna 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

#### Note:

- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1GHz.
- 2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor (10 log(1/duty cycle)).
- The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.
- 5. All modes of operation were investigated and the worst-case emissions are reported.

				_
4.1.4	Deviation	from	Test	Standard

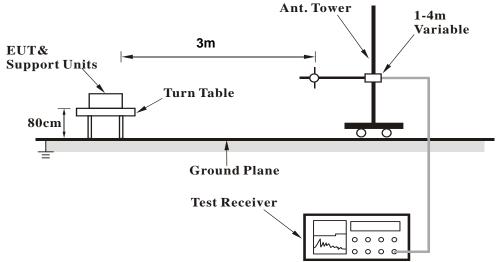
No deviation.

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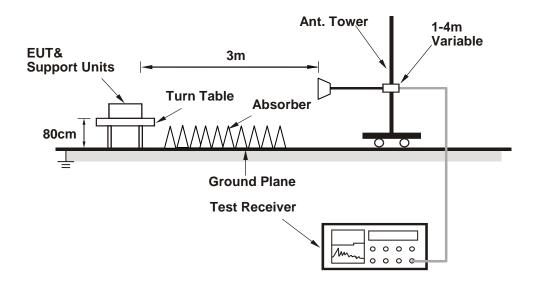


### 4.1.5 Test Set Up

# <Frequency Range below 1GHz>



## <Frequency Range above 1GHz>



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:**

### **GFSK**

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 78	FREQUENCY RANGE	1GHz ~ 25GHz	
INPUT POWER	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Karl Lee	

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2378	39.14	37.48	54	-14.86	31.78	5.37	35.49	188	171	Average
2378	56.13	54.47	74	-17.87	31.78	5.37	35.49	188	171	Peak
2480	98.99	97.03			31.88	5.5	35.42	188	171	Average
2480	101.52	99.56			31.88	5.5	35.42	188	171	Peak
2496	39.81	37.79	54	-14.19	31.9	5.53	35.41	188	171	Average
2496	57.04	55.02	74	-16.96	31.9	5.53	35.41	188	171	Peak
		ANTEN	NA POLA	RITY & T	EST DIST	ANCE: V	'ERTICAL	AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2324	39.04	37.53	54	-14.96	31.73	5.3	35.52	117	116	Average
2324	56.57	55.06	74	-17.43	31.73	5.3	35.52	117	116	Peak
2480	96.54	94.58			31.88	5.5	35.42	117	116	Average
2480	99.07	97.11			31.88	5.5	35.42	117	116	Peak
2484	39.35	37.39	54	-14.65	31.88	5.5	35.42	117	116	Average
2484	55.87	53.91	74	-18.13	31.88	5.5	35.42	117	116	Peak

### **REMARKS:**

- 1. Emission Level = Read Level + Antenna Factor + Cable Loss Preamp Factor Margin value = Emission level - Limit value
- 2. 2480MHz: Fundamental frequency.

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## **BELOW 1GHz WORST-CASE DATA:**

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 78	FREQUENCY RANGE	30MHz ~ 1GHz	
INPUT POWER	120Vac, 60 Hz		Peak (PK) Quasi-peak (QP)	
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Charles Hsiao	

	ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M									
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
91.02	19.42	41.1	43.5	-24.08	8.98	1.11	31.77	194	150	Peak
161.22	18.58	38.6	43.5	-24.92	10.73	1.52	32.27	107	152	Peak
192.27	25.13	45.27	43.5	-18.37	10.51	1.61	32.26	127	215	Peak
473.6	19.47	30.22	46	-26.53	18.81	2.56	32.12	190	188	Peak
647.2	22.91	29.97	46	-23.09	22.1	2.99	32.15	164	229	Peak
800.5	25.74	29.88	46	-20.26	24.6	3.32	32.06	145	332	Peak
		ANTEN	NA POLA	RITY & T	EST DIST	ANCE: V	'ERTICAL	AT 3 M		
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
48.09	19.98	42.9	40	-20.02	8.4	0.9	32.22	148	9	Peak
197.13	21.09	41.03	43.5	-22.41	10.73	1.61	32.28	107	161	Peak
243.57	19.03	36.59	46	-26.97	12.71	1.85	32.12	118	190	Peak
446.3	18.3	30.01	46	-27.7	17.95	2.49	32.15	132	11	Peak
590.5	20.85	29.44	46	-25.15	20.73	2.87	32.19	180	159	Peak
834.8	25.11	29.95	46	-20.89	23.65	3.38	31.87	126	236	Peak

**REMARKS:** Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor Margin value = Emission level - Limit value

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### 4.2 Conducted Emission Measurement

### 4.2.1 Limits of Conducted Emission Measurement

Fragues av (MHz)	Conducted Limit (dBuV)			
Frequency (MHz)	Quasi-peak	Average		
0.15 - 0.5	66 - 56	56 - 46		
0.50 - 5.0	56	46		
5.0 - 30.0	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	ESCI	100613	Nov. 16, 2015	Nov. 15, 2016
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond1-01	Dec. 26, 2015	Dec. 25, 2016
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Feb. 26, 2015	Feb. 25, 2016
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 24, 2015	Jul. 23, 2016
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.

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

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#### 4.2.3 Test Procedures

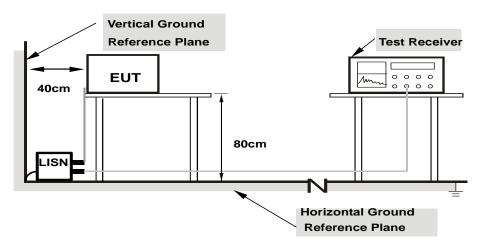
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling 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. Emission levels under (Limit 20dB) was 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 Condition

Same as 4.1.6.

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### 4.2.7 Test Results

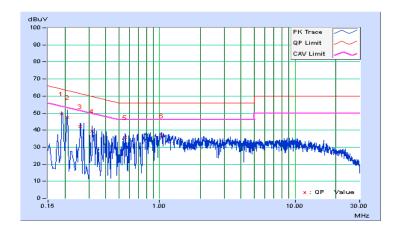
### **CONDUCTED WORST-CASE DATA: GFSK**

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25℃, 65%RH
Tested by	Toby Tian	Test Date	2016/1/29

Phase Of Power : Line (L)										
	Frequency	Correction	Reading Value		Emission Level		Limit		Margin	
No		Factor	(dBuV) (dl		dBuV) (dBuV)		uV)	(dB)		
	(MHz)	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18903	10.10	39.47	26.06	49.57	36.16	64.08	54.08	-14.51	-17.92
2	0.20865	10.12	37.36	19.30	47.48	29.42	63.26	53.26	-15.78	-23.84
3	0.25932	10.12	31.83	16.06	41.95	26.18	61.45	51.45	-19.50	-25.27
4	0.31813	10.13	29.21	16.84	39.34	26.97	59.76	49.76	-20.42	-22.79
5	0.55273	10.17	25.58	11.85	35.75	22.02	56.00	46.00	-20.25	-23.98
6	1.03757	10.29	26.39	11.85	36.68	22.14	56.00	46.00	-19.32	-23.86

### 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



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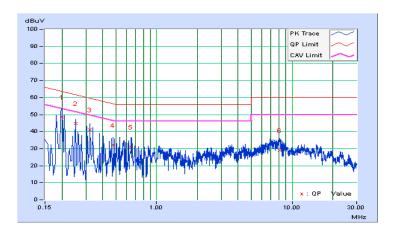


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25℃, 65%RH
Tested by	Toby Tian	Test Date	2016/1/29

Phase Of Power : Neutral (N)										
No	Frequency	Correction Factor	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
110	(MHz)	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19978	10.04	38.60	25.72	48.64	35.76	63.62	53.62	-14.98	-17.86
2	0.25166	10.07	34.62	17.83	44.69	27.90	61.70	51.70	-17.01	-23.80
3	0.32204	10.11	31.02	13.91	41.13	24.02	59.65	49.65	-18.53	-25.64
4	0.47844	10.16	21.98	5.31	32.14	15.47	56.37	46.37	-24.23	-30.90
5	0.64657	10.18	20.91	4.35	31.09	14.53	56.00	46.00	-24.91	-31.47
6	8.07948	10.56	18.26	6.60	28.82	17.16	60.00	50.00	-31.18	-32.84

### 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





	A D T
5 Pictures of Test Arrangements	
Please refer to the attached file (Test Setup Photo).	
( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	



### Appendix - 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:

Linko EMC/RF Lab

Hsin Chu EMC/RF/Telecom Lab

Tel: 886-2-26052180 Fax: 886-2-26051924 Tel: 886-3-6668565 Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety

Tel: 886-3-3183232 Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com Web Site: www.bureauveritas-adt.com

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

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