

FCC TEST REPORT (ANT+)

REPORT NO.: RF140630C01-6

MODEL NO.: F-02G

FCC ID: VQK-F02G

RECEIVED: Aug. 05, 2014

TESTED: Aug. 21 ~ Aug. 23, 2014

ISSUED: Sep. 12, 2014

APPLICANT: FUJITSU LIMITED

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ISSUED BY: Bureau Veritas Consumer Products Services

(H.K.) Ltd., Taoyuan Branch

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

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF140630C01-6	Original release	Sep. 12, 2014

Report No.: RF140630C01-6 3 of 21 Report Format Version 5.0.0



1. CERTIFICATION

PRODUCT: Smart Phone

MODEL NO.: F-02G

BRAND: FUJITSU

APPLICANT: FUJITSU LIMITED

TESTED: Aug. 21 ~ Aug. 23, 2014

TEST SAMPLE: ENGINEERING SAMPLE

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

ANSI C63.10-2009

The above equipment (model: F-02G) 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: Celine Chou / Specialist Sep. 12, 2014

/ i____ , DATE : Sep. 12, 2014 APPROVED BY:

Ken Liu / Senior 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 3.8Vdc from battery			
15.209 15.249 15.249 (d)	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	PASS	Meet the requirement of limit. Minimum passing margin is -3.7dB at 30.00MHz.			

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	3.63 dB	
Padiated emission	200MHz ~1000MHz	3.64 dB	
Radiated emission	1GHz ~ 18GHz	2.29 dB	
	18GHz ~ 40GHz	2.29 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	Smart Phone
MODEL NO.	F-02G
POWER SUPPLY	3.8Vdc (Battery) 5Vdc (Adapter or cradle when normal charging) 9Vdc (Adapter or cradle when quick charging)
MODULATION TYPE	GFSK
DATA RATE	1Mbps
OPERATING FREQUENCY	2402 ~ 2480MHz
NUMBER OF CHANNEL	79
ANTENNA TYPE	λ/4 Monopole antenna with -6.2dBi gain
DATA CABLE	N/A
I/O PORT	Refer to user's manual
ACCESSORY DEVICES	Refer to Note as below

NOTE:

1. The EUT contains the following accessories.

PRODUCT BRAND		MODEL	DESCRIPTION	
Battery NTT docomo N		NA	3.8Vdc, 3500mA, 13.3Wh	
	Fujitsu Limited		Input: 5.0Vdc, 1.5A	
Cradle		F47	9.0Vdc, 1.5A	
Craule			Output: 5.0Vdc, 1.5A	
			9.0Vdc, 1.5A	

2. The following adapter is support unit only.

PRODUCT	BRAND	MODEL	DESCRIPTION
			Input: 100-240Vac, 0.12A, 50-60Hz, 0.4A
	NTT docomo	AC Adaptor 05	Output: 5.0Vdc, 1.5A
Adapter			9.0Vdc, 1.5A
			Power line:
			1.25m cable with two cores attached on adapter

- 3. SW version is R15Ae.
- 4. HW version is V2.1.0.
- 5. IMEI Code: 354014060011288.
- 6. 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 CONFIGURE		APPLICABLE TO			DESCRIPTION
MODE	RE≥1G	RE<1G	PLC	вм	DESCRIPTION
-	V	V	NOTE 2	√	-

Where **RE<1G**: Radiated Emission below 1GHz

RE≥1G: Radiated Emission above 1GHz

PLC: Power Line Conducted Emission

BM: Bandedge Measurement

NOTE 1: The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Z-plane.**

NOTE 2: 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 axis 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 TYPE
-	0 to 78	0, 39, 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 axis 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 TYPE
-	0 to 78	0	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.

EUT CONFIGURE MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TYPE
-	0 to 78	0, 78	GFSK

TEST CONDITION:

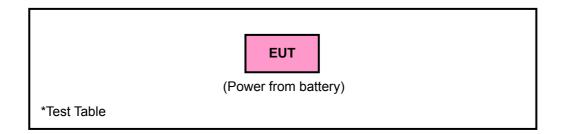
APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	25deg. C, 65%RH	3.9Vdc	Ted Chang
RE<1G	25deg. C, 65%RH	3.9Vdc	Ted Chang
ВМ	25deg. C, 60%RH	3.9Vdc	Antony Lee



3.3 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit.

3.3.1 CONFIGURATION OF SYSTEM UNDER TEST



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 (Section 15.249)

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 BAND EDGE MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION AND BAND EDGE MEASUREMENT

The field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following

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

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 as below table, whichever is the lesser attenuation

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.



4.1.2 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
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Feb. 11, 2014	Feb. 10, 2015
BILOG Antenna SCHWARZBECK	VULB9168	9168-156	Feb. 25, 2014	Feb. 24, 2015
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-209	Sep. 12, 2013	Sep. 11, 2014
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Feb. 17, 2014	Feb. 16, 2015
Preamplifier	8449B	3008A01911	Aug. 22, 2013	Aug. 21, 2014
Agilent	0 44 9D	3006A01911	Aug. 22, 2014	Aug. 21, 2015
Preamplifier Agilent	8447D	2944A10638	Oct. 18, 2013	Oct. 17, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	248780/4 309222/4 274092/4	Aug. 26, 2013	Aug. 25, 2014
RF signal cable Worken	5D-FB	Cable-HYCH9-01	Aug. 11, 2014	Aug. 10, 2015
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA	NA
Turn Table EMCO	2087-2.03	NA	NA	NA
Antenna Tower &Turn Table Controller EMCO	2090	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 Chamber 9.
- 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 215374.
- 5. The IC Site Registration No. is IC 7450F-9.



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.

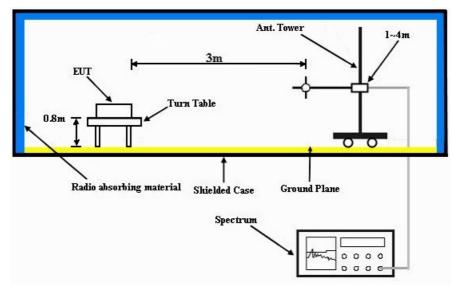
4.1.4 DEVIATION FROM TEST STANDARD

No deviation.

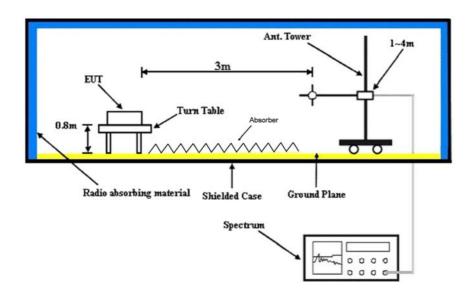


4.1.5 TEST SETUP

Frequency range 30MHz~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

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 0	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	3.9Vdc	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang	

		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	2390.00	49.4 PK	74.0	-24.6	1.00 H	214	54.60	-5.20
2	2390.00	36.3 AV	54.0	-17.7	1.00 H	214	41.50	-5.20
3	2400.00	43.0 PK	74.0	-31.0	1.00 H	216	48.20	-5.20
4	2400.00	21.5 AV	54.0	-32.5	1.00 H	216	26.70	-5.20
5	*2402.00	88.4 PK	114.0	-25.6	1.00 H	216	55.60	32.80
6	*2402.00	66.9 AV	94.0	-27.1	1.00 H	216	34.10	32.80
7	4804.00	45.3 PK	74.0	-28.7	1.00 H	229	43.80	1.50
8	4804.00	32.6 AV	54.0	-21.4	1.00 H	229	31.10	1.50
		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	2390.00	49.9 PK	74.0	-24.1	1.00 V	191	55.10	-5.20
2	2390.00	37.0 AV	54.0	-17.0	1.00 V	191	42.20	-5.20
3	0400.00	40 0 DI	74.0	-31.2	1.00 V	198	48.00	-5.20
	2400.00	42.8 PK	74.0	-31.2	1.00 V	150	40.00	0.20
4	2400.00	42.8 PK 21.4 AV	74.0 54.0	-32.6	1.00 V	198	26.60	-5.20
4 5								
_	2400.00	21.4 AV	54.0	-32.6	1.00 V	198	26.60	-5.20
5	2400.00 *2402.00	21.4 AV 82.2 PK	54.0 114.0	-32.6 -31.8	1.00 V 1.00 V	198 198	26.60 49.40	-5.20 32.80

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 (50 x 0.169 ms / 100 ms) = -21.5 dB Please see page 17 for plotted duty.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 39	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	3.9Vdc		Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang	

		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	*2441.00	92.6 PK	114.0	-21.4	1.00 H	220	59.60	33.00
2	*2441.00	71.1 AV	94.0	-22.9	1.00 H	220	38.10	33.00
3	4882.00	44.7 PK	74.0	-29.3	1.00 H	29	43.10	1.60
4	4882.00	31.7 AV	54.0	-22.3	1.00 H	29	30.10	1.60
		ANTENNA	POLARIT	/ & 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	*2441.00	84.4 PK	114.0	-29.6	1.00 V	258	51.40	33.00
2	*2441.00	62.9 AV	94.0	-31.1	1.00 V	258	29.90	33.00
3	4882.00	45.0 PK	74.0	-29.0	1.00 V	185	43.40	1.60
	4882.00	31.8 AV	54.0	-22.2	1.00 V	185	30.20	1.60

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 (50 x 0.169 ms / 100 ms) = -21.5 dB Please see page 17 for plotted duty.

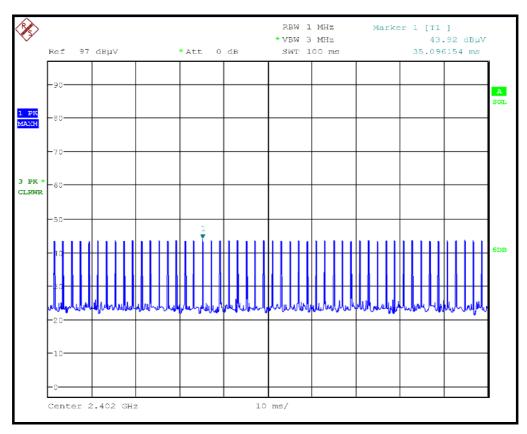


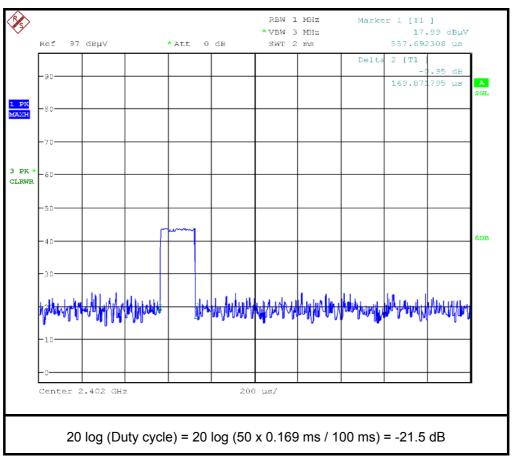
EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 78	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	3.9Vdc		Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang	

		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	91.0 PK	114.0	-23.0	1.00 H	53	57.90	33.10
2	*2480.00	69.5 AV	94.0	-24.5	1.00 H	53	36.40	33.10
3	2483.50	43.8 PK	74.0	-30.2	1.00 H	53	48.70	-4.90
4	2483.50	22.3 AV	54.0	-31.7	1.00 H	53	27.20	-4.90
5	4960.00	45.3 PK	74.0	-28.7	1.00 H	233	43.50	1.80
6	4960.00	31.8 AV	54.0	-22.2	1.00 H	233	30.00	1.80
		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)
NO .	*2480.00	LEVEL		MARGIN (dB)		ANGLE		FACTOR
	` ,	LEVEL (dBuV/m)	(dBuV/m)	, ,	HEIGHT (m)	ANGLE (Degree)	(dBuV)	FACTOR (dB/m)
1	*2480.00	LEVEL (dBuV/m) 84.7 PK	(dBuV/m)	-29.3	HEIGHT (m) 1.00 V	ANGLE (Degree)	(dBuV) 51.60	FACTOR (dB/m) 33.10
1 2	*2480.00 *2480.00	LEVEL (dBuV/m) 84.7 PK 63.2 AV	(dBuV/m) 114.0 94.0	-29.3 -30.8	1.00 V 1.00 V	ANGLE (Degree)	(dBuV) 51.60 30.10	FACTOR (dB/m) 33.10 33.10
1 2 3	*2480.00 *2480.00 2483.50	LEVEL (dBuV/m) 84.7 PK 63.2 AV 42.4 PK	(dBuV/m) 114.0 94.0 74.0	-29.3 -30.8 -31.6	1.00 V 1.00 V 1.00 V	ANGLE (Degree) 3 3	(dBuV) 51.60 30.10 47.30	FACTOR (dB/m) 33.10 33.10 -4.90

- **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 (50 x 0.169 ms / 100 ms) = -21.5 dB Please see page 17 for plotted duty.









BELOW 1GHz WORST-CASE DATA

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 0	FREQUENCY RANGE	Below 1000MHz	
INPUT POWER	3.9Vdc	DETECTOR FUNCTION	Quasi-Peak	
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Ted Chang	

		ANTENNA	POLARITY	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	30.00	21.3 QP	40.0	-18.7	1.51 H	90	37.00	-15.70			
2	118.60	20.6 QP	43.5	-22.9	2.00 H	250	36.90	-16.30			
3	149.70	27.6 QP	43.5	-15.9	2.00 H	257	41.20	-13.60			
4	303.60	23.8 QP	46.0	-22.2	1.01 H	312	36.20	-12.40			
5	474.60	26.8 QP	46.0	-19.2	1.51 H	185	36.20	-9.40			
6	833.70	32.6 QP	46.0	-13.4	1.01 H	211	35.30	-2.70			
		ANTENNA	A 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)			
NO.	FREQ. (MHz)	LEVEL		MARGIN (dB)	7	ANGLE		FACTOR			
	, ,	LEVEL (dBuV/m)	(dBuV/m)	, ,	HEIGHT (m)	ANGLE (Degree)	(dBuV)	FACTOR (dB/m)			
1	30.00	LEVEL (dBuV/m) 36.3 QP	(dBuV/m) 40.0	-3.7	HEIGHT (m)	ANGLE (Degree)	(dBuV) 52.00	FACTOR (dB/m) -15.70			
1 2	30.00 62.60	LEVEL (dBuV/m) 36.3 QP 31.3 QP	(dBuV/m) 40.0 40.0	-3.7 -8.7	1.00 V	ANGLE (Degree) 238	(dBuV) 52.00 46.20	FACTOR (dB/m) -15.70 -14.90			
1 2 3	30.00 62.60 121.70	LEVEL (dBuV/m) 36.3 QP 31.3 QP 17.2 QP	(dBuV/m) 40.0 40.0 43.5	-3.7 -8.7 -26.3	1.00 V 1.99 V 1.99 V	ANGLE (Degree) 238 15	(dBuV) 52.00 46.20 33.30	FACTOR (dB/m) -15.70 -14.90 -16.10			

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)
 - Pre-Amplifier Factor (dB)
- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission Level Limit value



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

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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.

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



7. APPENDIX A – MODIFICATION 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