

FCC TEST REPORT (PART 24)

REPORT NO.: RF140717C05-1

MODEL NO.: YSAR02-3G

FCC ID: Y6YYSAR023G

RECEIVED: Jul. 17, 2014

TESTED: Aug. 22, 2014 ~ Aug. 23, 2014

ISSUED: Sep. 19, 2014

APPLICANT: YANMAR CO., LTD.

ADDRESS: Umeda Gate Tower, 1-9, Tsurunocho, Kita-ku,

Osaka, Japan

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.

This report should not be used by the client to claim product certification, approval, or endorsement by TAF or any government agencies.





This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification

Report No.: RF140717C05-1 1 of 25 Report Format Version 5.0.0



TABLE OF CONTENTS

RE	ELEASE CONTROL RECORD	3
1	CERTIFICATION	
2	SUMMARY OF TEST RESULTS	5
	2.1 MEASUREMENT UNCERTAINTY	
	2.2 TEST SITE AND INSTRUMENTS	6
3	GENERAL INFORMATION	7
	3.1 GENERAL DESCRIPTION OF EUT	7
	3.2 CONFIGURATION OF SYSTEM UNDER TEST	8
	3.3 DESCRIPTION OF SUPPORT UNITS	9
	3.4 TEST ITEM AND TEST CONFIGURATION	10
	3.5 EUT OPERATING CONDITIONS	. 11
	3.6 GENERAL DESCRIPTION OF APPLIED STANDARDS	. 11
4	TEST TYPES AND RESULTS	
	4.1 OUTPUT POWER MEASUREMENT	. 12
	4.1.1 LIMITS OF OUTPUT POWER MEASUREMENT	. 12
	4.1.2 TEST PROCEDURES	
	4.1.3 TEST SETUP	
	4.1.4 TEST RESULTS	
	4.2 RADIATED EMISSION MEASUREMENT	
	4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT	. 16
	4.2.2 TEST PROCEDURES	
	4.2.3 DEVIATION FROM TEST STANDARD	
	4.2.4 TEST SETUP	. 17
	4.2.5 TEST RESULTS	
5		
6	APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT E	
	THE LAB	. 25



RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF140717C05-1	Original release	Sep. 19, 2014

Report No.: RF140717C05-1 3 of 25 Report Format Version 5.0.0



1 CERTIFICATION

PRODUCT: Controller Mobile Communicator

MODEL: YSAR02-3G

BRAND: YANMAR

APPLICANT: YANMAR CO., LTD.

TESTED: Aug. 22, 2014 ~ Aug. 23, 2014

TEST SAMPLE: Identical Prototype

STANDARDS: FCC Part 24, Subpart E

The above equipment (model: YSAR02-3G) 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 : , **DATE** : Sep. 19, 2014

Gina Liu / Specialist

APPROVED BY : _______, DATE : _____ Sep. 19, 2014

Sam Chen / Senior Project Engineer



2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 24 & Part 2						
STANDARD SECTION	TEST TYPE	RESULT	REMARK			
2.1046 24.232	Equivalent Isotropically Radiated Power	PASS	Meet the requirement of limit.			
2.1053 24.238	Radiated Spurious Emissions		Meet the requirement of limit. Minimum passing margin is -41.32dB at 42.42MHz.			

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	2.93 dB
Radiated emissions	200MHz ~1000MHz	2.95 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.



2.2 TEST SITE AND INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver Agilent	N9038A	MY51210203	Jan. 17, 2014	Jan. 16, 2015
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 21, 2013	Dec. 20, 2014
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Feb. 27. 2014	Feb. 26, 2015
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-969	Feb. 19, 2014	Feb. 18, 2015
HORN Antenna SCHWARZBECK	BBHA 9170	9170-480	Dec. 18, 2013	Dec. 17, 2014
Preamplifier EMCI	EMC 012645	980115	Dec. 26, 2013	Dec. 25, 2014
Preamplifier EMCI	EMC 184045	980116	Jan. 13, 2014	Jan. 12, 2015
Preamplifier EMCI	EMC 330H	980112	Dec. 27, 2013	Dec. 26, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309219/4 2950114	Oct. 18, 2013	Oct. 17, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Oct. 18, 2013	Oct. 17, 2014
RF signal cable Worken	RG-213	NA	Nov. 07, 2013	Nov. 06, 2014
Software BV ADT	E3 6.120103	NA	NA	NA
Antenna Tower MF	MFA-440H	NA	NA	NA
Turn Table MF	MFT-201SS	NA	NA	NA
Antenna Tower &Turn Table Controller MF	MF-7802	NA	NA	NA
Power Splitter Woken	2-18GHz 2Way SMA Fwd.:30W/Rev.:2W Isolated Power	COM412W5E3	Apr. 17, 2014	Apr. 16, 2015
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
Communications Tester-Wireless	E5515C	MY52102544	Sep. 05, 2012	Sep. 04, 2014
Radio Communication Analyzer	MT8820C	6201300640	Aug. 01, 2013	Jul. 31, 2015

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

- The calibration interval of the Communications Tester-Wireless and Radio Communication Analyzer are 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
- 3. The test was performed in HwaYa Chamber 10.
- 4. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 5. The FCC Site Registration No. is 690701.
- 6. The IC Site Registration No. is IC 7450F-10.



3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	Controller Mobile Communicator			
MODEL NO.	YSAR02-3G			
POWER SUPPLY	12Vdc			
	GPRS	GMSK		
MODULATION TYPE	EDGE	GMSK, 8PSK		
	WCDMA	BPSK		
FREQUENCY RANGE	GPRS/EDGE	1850.2MHz ~ 1909.8MHz		
FREQUENCT KANGE	WCDMA	1852.4MHz ~ 1907.6MHz		
	GPRS	640.03mW		
MAX. EIRP POWER	EDGE	312.75mW		
	WCDMA	135.89mW		
ANTENNA TYPE	Cellular and GNSS Combi Antenna			
I/O PORTS	Refer to users' manual			
DATA CABLE	Refer to NOTE as below			
ACCESSORY DEVICES	Refer to NOTE as below			

NOTE:

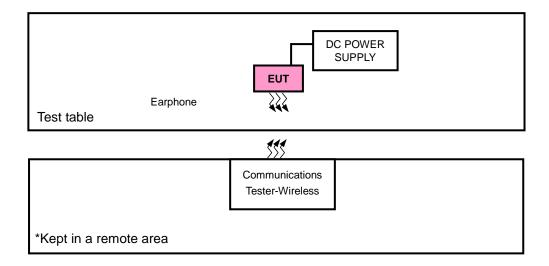
1. The EUT contains following accessory devices.

ITEM	BRAND	MODEL	SPECIFICATION
Cellular Module	U-blox	LISA-U200	

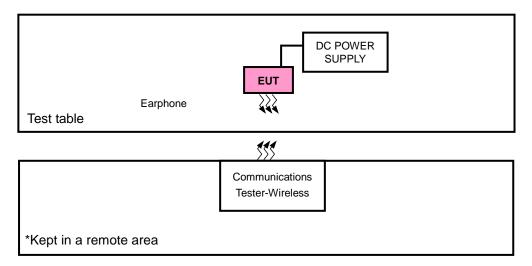
2. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.



3.2 CONFIGURATION OF SYSTEM UNDER TEST



FOR E.I.R.P. TEST





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
1	Communications Tester-Wireless	Agilent	8960	MY50260642	NA
2	DC Power Supply	Topward	3303D	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	NA

NOTE:

- 1. All power cords of the above support units are non shielded (1.8m).
- 2. Item 1 was provided by client.



3.4 TEST ITEM AND TEST CONFIGURATION

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports. The worst case was found when positioned on X-plane for EIRP and radiated emission. Following channel(s) was (were) selected for the final test as listed below:

GSM MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
-	EIRP	512 to 810	512, 661, 810	GPRS, EDGE
-	RADIATED EMISSION	512 to 810	661	GPRS, EDGE

WCDMA MODE

EUT CONFIGURE MODE	TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	MODE
-	EIRP	9262 to 9538	9262, 9400, 9538	WCDMA
-	RADIATED EMISSION	9262 to 9538	9400	WCDMA

TEST CONDITION:

TEST ITEM	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
EIRP	26deg. C, 58%RH	3.8Vdc	Howard Kao
RADIATED EMISSION	25deg. C, 65%RH	120Vac, 60Hz	Gavin Wu



3.5 EUT OPERATING CONDITIONS

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency

3.6 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 47 CFR Part 2 FCC 47 CFR Part 24 ANSI/TIA/EIA-603-C 2004

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



4 TEST TYPES AND RESULTS

4.1 OUTPUT POWER MEASUREMENT

4.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

Mobile and portable stations are limited to 2 watts EIRP.

4.1.2 TEST PROCEDURES

EIRP MEASUREMENT:

- a. All measurements were done at low, middle and high operational frequency range. RBW and VBW is 1MHz for GSM, GPRS & EDGE, 5MHz for CDMA & WCDMA, and 10MHz for LTE mode.
- b. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- c. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a tx cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step b. Record the power level of S.G
- d. EIRP = Output power level of S.G TX cable loss + Antenna gain of substitution horn.

CONDUCTED POWER MEASUREMENT:

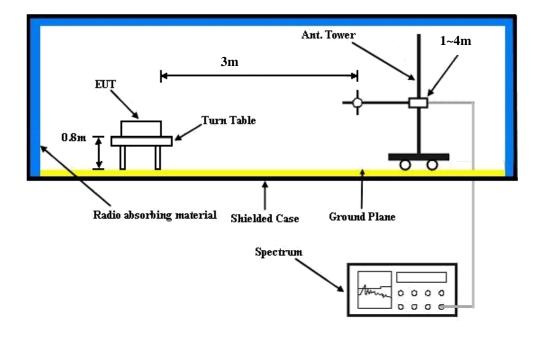
The EUT was set up for the maximum power with GSM, GPRS, EDGE & WCDMA & LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

Report No.: RF140717C05-1 12 of 25 Report Format Version 5.0.0

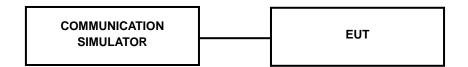


4.1.3 TEST SETUP

EIRP / ERP MEASUREMENT:



CONDUCTED POWER MEASUREMENT:





4.1.4 TEST RESULTS

CONDUCTED OUTPUT POWER (dBm)

Band		GSM1900	
Channel	512	661	810
Frequency (MHz)	1850.2	1880.0	1909.8
GPRS 8 (GMSK, 1 slot)	29.35	29.40	29.27
GPRS 10 (GMSK, 2 slot)	29.34	29.39	29.26
GPRS 11 (GMSK, 3 slot)	28.57	28.62	28.49
GPRS 12 (GMSK, 4 slot)	27.34	27.41	27.26
EDGE 8 (GMSK, 1 Uplink)	29.30	29.35	29.22
EDGE 10 (GMSK, 2 Uplink)	29.29	29.34	29.21
EDGE 11 (GMSK, 3 Uplink)	28.53	28.58	28.45
EDGE 12 (GMSK, 4 Uplink)	27.36	27.39	27.28
EDGE 8 (8PSK, 1 Uplink)	25.47	25.52	25.39
EDGE 10 (8PSK, 2 Uplink)	25.68	25.73	25.60
EDGE 11 (8PSK, 3 Uplink)	24.85	24.90	24.77
EDGE 12 (8PSK, 4 Uplink)	23.72	23.77	23.64

Band	WCDMA II					
Channel	9262	9400	9538			
Frequency (MHz)	1852.4	1880.0	1907.6			
RMC 12.2K	23.02	23.09	22.60			
HSDPA Subtest-1	23.01	23.08	22.59			
HSDPA Subtest-2	23.01	23.08	22.59			
HSDPA Subtest-3	23.00	23.07	22.58			
HSDPA Subtest-4	23.01	23.08	22.59			
HSUPA Subtest-1	22.31	22.38	21.89			
HSUPA Subtest-2	20.34	20.41	19.92			
HSUPA Subtest-3	21.16	21.23	20.74			
HSUPA Subtest-4	20.65	20.72	20.23			
HSUPA Subtest-5	20.78	20.85	20.36			



EIRP POWER (dBm)

	GPRS									
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)			
	512	1850.2	-9.55	36.57	27.02	503.73	Н			
	661	1880.0	-9.65	37.22	27.57	572.01	Н			
x	810	1909.8	-9.12	37.18	28.06	640.03	Н			
^	512	1850.2	-12.95	37.65	24.70	295.19	V			
	661	1880.0	-12.66	37.58	24.92	310.67	V			
	810	1909.8	-12.32	37.48	25.16	328.10	V			

EDGE									
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)		
	512	1850.2	-12.55	36.57	24.02	252.46	Н		
	661	1880.0	-12.84	37.22	24.38	274.41	Н		
x	810	1909.8	-12.23	37.18	24.95	312.75	Н		
^	512	1850.2	-15.68	37.65	21.97	157.43	V		
	661	1880.0	-15.48	37.58	22.10	162.29	V		
	810	1909.8	-15.24	37.48	22.24	167.49	V		

WCDMA								
Plane	Channel	Frequency (MHz)	LVL (dBm)	Correction Factor(dB)	EIRP(dBm)	EIRP(mW)	Polarization (H/V)	
	9262	1852.4	-15.58	36.57	20.99	125.66	Н	
	9400	1880.0	-16.09	37.22	21.13	129.84	Н	
x	9538	1907.6	-15.85	37.18	21.33	135.89	Н	
^	9262	1852.4	-19.54	37.65	18.11	64.73	V	
	9400	1880.0	-19.17	37.58	18.41	69.39	V	
	9538	1907.6	-18.78	37.48	18.70	74.13	V	



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit is equal to -13dBm.

4.2.2 TEST PROCEDURES

- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8m height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G
- c. EIRP = Output power level of S.G TX cable loss + Antenna gain of substitution horn.
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power =
 E.I.R.P power 2.15dBi.

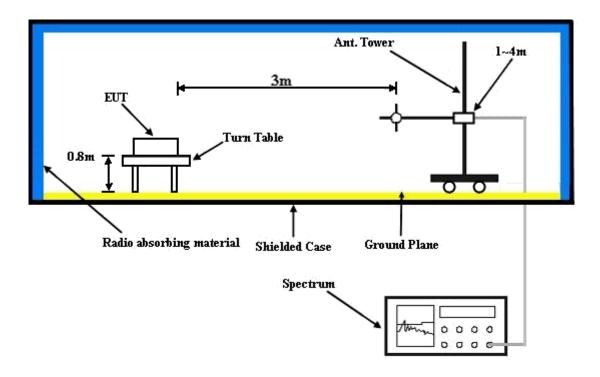
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

4.2.3 DEVIATION FROM TEST STANDARD

No deviation



4.2.4 TEST SETUP



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

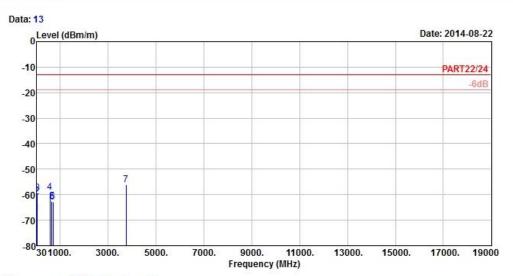


4.2.5 TEST RESULTS

GPRS:



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : GPRS 1900 Link

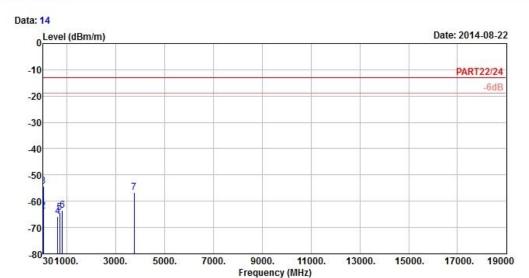
Tested by: Gavin Wu

	Freq	Level	Level	Line	Limit	Factor	Remark	
88	MHz	dBm/m	dBm	dBm/m	dB	dB/m		-
1	31.89	-66.89	-66.50	-13.00	-53.89	-0.39	Peak	
2	41.34	-60.87	-59.48	-13.00	-47.87	-1.39	Peak	
3	55.92	-59.47	-53.97	-13.00	-46.47	-5.50	Peak	
4	577.20	-59.18	-58.19	-13.00	-46.18	-0.99	Peak	
5	659.10	-62.68	-63.40	-13.00	-49.68	0.72	Peak	
6	702.50	-62.93	-64.39	-13.00	-49.93	1.46	Peak	
7 pp	3760.00	-55.97	-47.67	-13.00	-42.97	-8.30	Peak	





Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : GPRS 1900 Link

Tested by: Gavin Wu

Read Limit Over

Freq Level Level Line Limit Factor Remark

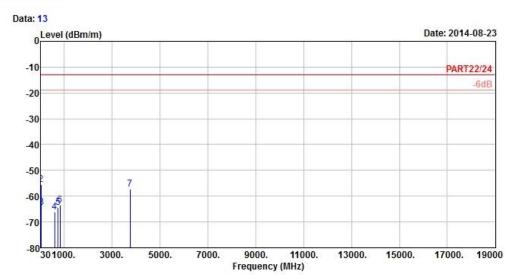
MHz dBm/m dBm dBm/m dB/m 1 31.35 -62.60 -62.94 -13.00 -49.60 0.34 Peak 35.94 -63.80 -61.44 -13.00 -50.80 -2.36 Peak 2 3 pp 42.42 -54.32 -52.99 -13.00 -41.32 -1.33 Peak 627.60 -65.69 -65.83 -13.00 -52.69 699.70 -64.45 -65.88 -13.00 -51.45 0.14 Peak 5 1.43 Peak 817.30 -63.35 -65.58 -13.00 -50.35 2.23 Peak 6 3760.00 -56.63 -48.33 -13.00 -43.63 -8.30 Peak



EDGE:



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL

Remark : EDGE 1900 Link

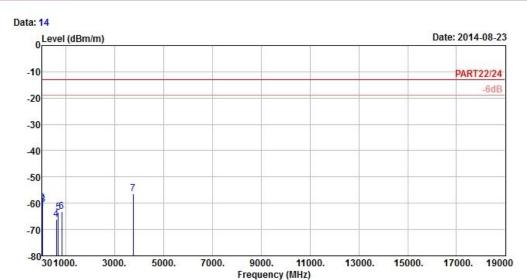
Tested by: Gavin Wu

	Freq	Read Level Level		Limit	Over Limit	Factor	Remark	
88	MHz	dBm/m	dBm	dBm/m	dB	dB/m	3	-
1	31.08	-66.20	-66.54	-13.00	-53.20	0.34	Peak	
2 pp	42.15	-55.51	-54.18	-13.00	-42.51	-1.33	Peak	
3	48.63	-64.22	-60.76	-13.00	-51.22	-3.46	Peak	
4	603.80	-66.06	-65.78	-13.00	-53.06	-0.28	Peak	
5	744.50	-64.22	-65.97	-13.00	-51.22	1.75	Peak	
6	827.80	-63.36	-65.64	-13.00	-50.36	2.28	Peak	
7	3760.00	-57.23	-48.93	-13.00	-44.23	-8.30	Peak	





Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL

Remark : EDGE 1900 Link

Tested by: Gavin Wu

Read Limit Over

Freq Level Line Limit Factor Remark

MHz dBm/m dBm dBm/m dB dB/m

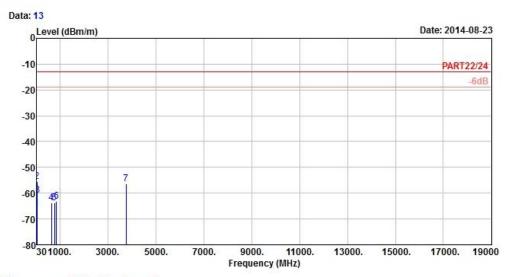
1 31.62 -62.07 -61.68 -13.00 -49.07 -0.39 Peak
2 41.34 -59.91 -58.52 -13.00 -46.91 -1.39 Peak
3 55.38 -60.63 -55.28 -13.00 -47.63 -5.35 Peak
4 606.60 -66.01 -65.76 -13.00 -53.01 -0.25 Peak
5 683.60 -63.40 -64.55 -13.00 -50.40 1.15 Peak
6 830.60 -63.05 -65.35 -13.00 -50.05 2.30 Peak
7 pp 3760.00 -56.41 -48.11 -13.00 -43.41 -8.30 Peak



WCDMA:



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m HORIZONTAL Remark : WCDMA Band II Link

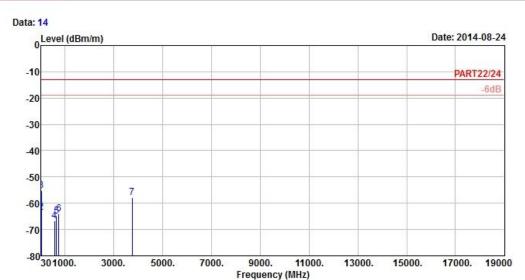
Tested by: Gavin Wu

	Freq	Level	Read Level	Limit	Over Limit	Factor	Remark
88	MHz	dBm/m	dBm	dBm/m	dB	dB/m	·
1	31.35	-65.89	-66.23	-13.00	-52.89	0.34	Peak
2 pp	42.42	-55.47	-54.14	-13.00	-42.47	-1.33	Peak
3	49.17	-60.91	-56.88	-13.00	-47.91	-4.03	Peak
4	642.30	-63.82	-64.22	-13.00	-50.82	0.40	Peak
5	764.10	-63.73	-65.62	-13.00	-50.73	1.89	Peak
6	851.60	-63.10	-65.52	-13.00	-50.10	2.42	Peak
7	3760.00	-56.38	-48.08	-13.00	-43.38	-8.30	Peak





Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5

Condition: PART22/24 3m VERTICAL Remark : WCDMA Band II Link

Tested by: Gavin Wu

5

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark
_	MHz	dBm/m	dBm	dBm/m	dB	dB/m	
	31.35	-62.60	-62.94	-13.00	-49.60	0.34	Peak
	37.02	-63.37	-61.22	-13.00	-50.37	-2.15	Peak
	42.15	-55.31	-53.98	-13.00	-42.31	-1.33	Peak
	568.80	-66.77	-65.54	-13.00	-53.77	-1.23	Peak
	656.30	-64.93	-65.59	-13.00	-51.93	0.66	Peak
	743.80	-63.92	-65.67	-13.00	-50.92	1.75	Peak
	3760.00	-57.96	-49.66	-13.00	-44.96	-8.30	Peak



5 INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved 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 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: 886-3-3270892

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.



6 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB	
No any modifications were made to the EUT by the lab during the test.	
END	