RF EXPOSURE REPORT

Report No.:	SA160330W009
FCC ID:	ZMOH380GL
Test Model:	H380-GL
Received Date:	Apr. 01, 2016
Test Date:	Apr. 02, 2016 ~ Apr. 21, 2016
Issued Date:	May. 09, 2016
Applicant:	FIBOCOM Wireless Inc.
Address:	5/F, Tower A, Technology Building II, 1057 Nanhai Blvd, Nanshan, Shenzhen, China
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lab Address:	No. 47-2, 14th Ling, Chia Cau 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.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA160330W009	Original release	May. 09, 2016

1 Certificate of Conformity

Product:	WCDMA module with GSM,GPRS,EDGE
Brand:	FIBOCOM
Test Model:	H380-GL
Sample Status:	Identical Prototype
Applicant:	FIBOCOM Wireless Inc.
Test Date:	Apr. 02, 2016 ~ Apr. 21, 2016
Standards:	**FCC Part 2 (Section 2.1091)**
	FCC OET Bulletin 65, Supplement C (01-01)
	IEEE C95.1

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.

Prepared by : _____ , **Date:** May. 09, 2016

Amyee Qian / Engineer

Approved by : _____ , **Date:** May. 09, 2016

William Chung / Manager

2 GENERAL INFORMATI

2.1 GENERAL DESCRIPTION OF EUT

PRODUCT	WCDMA module with GSM,GPRS,EDGE	
BRAND	FIBOCOM	
MODEL NAME	H380-GL	
POWER SUPPLY	3.3Vdc (adapter or host equipment)	
OPERATING TEMPERATURE RANGE	-20 ~ 65℃	
MODULATION TECHNOLOGY	DSSS, OFDM	
MODULATION TYPE	**GPRS/EDGE**	GMSK, 8PSK
	WCDMA	BPSK/QPSK
OPERATING FREQUENCY	**GPRS/EDGE**	824.2MHz ~ 848.8MHz (FOR GPRS 850) 1850.2MHz ~ 1909.8MHz (FOR PCS 1900)
	WCDMA	1852.4MHz ~ 1907.6MHz (FOR WCDMA V) 826.4MHz ~ 846.6MHz (FOR WCDMA II)
ANTENNA TYPE	External Antenna	
ANTENNA GAIN	3dBi gain for GPRS850/WCDMA Band V 5dBi gain for PCS1900/WCDMA Band II	
HW VERSION	V1.0.2	
SW VERSION	H380_V2G.0C.00.02	
I/O PORTS	Refer to user's manual	
CABLE SUPPLIED	N/A	

NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

3 RF EXPOSURE

3.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm^2)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	…	…	F/1500	30
1500-100,000	…	…	1.0	30

F = Frequency in MHz

3.2 MPE CALCULATION FORMULA

Pd = (Pout*G) / (4*pi*r2)

where

Pd = power density in mW/cm2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

a. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Module Approval**.

3.4 CONDUCTED POWER

GPRS & EDGE

Band	GPRS 850			PCS 1900		
Channel	128	189	251	512	661	810
Frequency	824.2	836.4	848.8	1850.2	1880	1909.8
GPRS 8	32.78	**33.27**	32.41	29.24	29.48	**29.67**
GPRS 10	30.66	31.12	30.30	27.04	27.30	27.53
GPRS 11	29.37	29.81	29.00	25.77	26.03	26.25
GPRS 12	27.75	28.21	27.39	24.28	24.51	24.74
EDGE 8 (MCS9)	26.95	27.42	26.62	25.24	25.54	25.77
EDGE 10 (MCS9)	24.94	25.48	24.63	22.98	23.24	23.48
EDGE 11 (MCS9)	23.77	24.22	23.46	22.23	22.52	22.75
EDGE 12 (MCS9)	22.23	22.84	21.92	20.67	20.97	21.22

WCDMA

BAND	WCDMA II			WCDMA V		
CHANNEL	9262	9400	9538	4132	4182	4233
FREQUENCY (MHz)	1852.4	1880.0	1907.6	826.4	836.4	846.6
RMC 12.2K	23.04	22.98	**23.18**	23.19	**23.37**	22.81
HSPA						
HSDPA Subtest-1	22.97	22.92	23.17	23.06	23.30	22.71
HSDPA Subtest-2	22.06	21.98	22.22	22.23	22.37	21.82
HSDPA Subtest-3	21.77	21.74	22.01	21.97	22.09	21.53
HSDPA Subtest-4	21.60	21.50	21.75	21.69	21.85	21.28
HSUPA Subtest-1	22.04	21.95	22.16	22.17	22.36	21.76
HSUPA Subtest-2	20.01	19.98	20.17	20.19	20.33	19.81
HSUPA Subtest-3	20.86	20.82	21.00	21.00	21.13	20.64
HSUPA Subtest-4	20.17	20.15	20.33	20.26	20.41	20.04
HSUPA Subtest-5	22.25	22.17	22.39	22.53	22.57	22.09

3.5 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

GPRS

Band	Frequency (MHz)	Operating Mode	Antenna Gain (dBi)	Conducted Time Average Power (dBm)	E.I.R.P Power (mW)/8	Power Density (mW/cm^2)	limit (mW/cm^2)	PASS / FAIL
GPRS 850	836.4	GPRS12	3	33.27	529.554	0.105	0.56	PASS
PCS 1900	1909.8	GPRS12	5	29.67	366.362	0.073	1.00	PASS

WCDMA

Band	Frequency (MHz)	Operating Mode	Antenna Gain (dBi)	Conducted Time Average Power (dBm)	E.I.R.P Power (mW)	Power Density (mW/cm^2)	limit (mW/cm^2)	PASS / FAIL
WCDMA850	836.4	RMC12.2k	3	23.37	433.511	0.086	0.56	PASS
WCDMA1900	1852.4	RMC12.2k	5	23.18	657.658	0.131	1.00	PASS