



RF EXPOSURE REPORT

REPORT NO.: SA121113C11

MODEL NO.: VIP2502

FCC ID: ACQ-VIP2502

RECEIVED: Oct. 04, 2012

TESTED: Oct. 04 ~ Dec. 18, 2012

ISSUED: Dec. 18, 2012

APPLICANT: Motorola Mobility, LLC.

ADDRESS: 101 Tournament Drive Horsham, PA 19044 United States

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
SA121113C11	Original release	Dec. 18, 2012

1. CERTIFICATION

PRODUCT: VIP2502 set top box

MODEL: VIP2502

BRAND: Motorola

APPLICANT: Motorola Mobility, LLC.

TESTED: Oct. 04 ~ Dec. 18, 2012

TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: FCC Part 2 (Section 2.1091)

FCC OET Bulletin 65, Supplement C (01-01)

IEEE C95.1

The above equipment (Model: VI P2502) 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


Pettie Chen / Senior Specialist

, DATE : Dec. 18, 2012

APPROVED BY


Ken Liu / Manager

, DATE : Dec. 18, 2012

2. RF EXPOSURE

2.1 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

2.2 MPE CALCULATION FORMULA

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

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

2.3 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 **Mobile Device**.

2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MODULATION MODE	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
5180-5240	802.11a	16.55	6.12	20	0.037	1
	802.11n (20MHz)	16.60	6.12	20	0.037	1
	802.11n (40MHz)	16.97	6.12	20	0.041	1
5260-5320	802.11a	23.02	6.12	20	0.163	1
	802.11n (20MHz)	23.24	6.12	20	0.172	1
	802.11n (40MHz)	23.91	6.12	20	0.200	1
5500-5700	802.11a	23.01	6.82	20	0.191	1
	802.11n (20MHz)	23.23	6.82	20	0.201	1
	802.11n (40MHz)	23.90	6.82	20	0.235	1
5745-5825	802.11a	29.99	6.42	20	0.870	1
	802.11n (20MHz)	29.99	6.42	20	0.870	1
	802.11n (40MHz)	29.85	6.42	20	0.843	1

NOTE:

For 5180~5320MHz: Directional gain = 0.1dBi + 10log(4) = 6.12dBi

For 5500~5700MHz: Directional gain = 0.8dBi + 10log(4) = 6.82dBi

For 5745~5825MHz: Directional gain = 0.4dBi + 10log(4) = 6.42dBi