FCC REPORT

Applicant: COBY COMMUNICATIONS LTD.

Address of Applicant: Unit C-E, 8/F, PO Shau Centre, 115 How Ming Stree,

Kowloon, Hong Kong

Equipment Under Test (EUT)

Product Name: NETBOOK

Model No.: NBPC1025

FCC ID: S7INBPC1165-1025

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247:2010

Date of sample receipt: 19 Jun., 2012

Date of Test: 20 Jun., to 20 Aug., 2012

Date of report issued: 06 Sep., 2012

Test Result: PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Bruce Zhang Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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2 Version

Version No.	Date	Description		
00	06 Sep., 2012	Original		

Prepared By: Date: 06 Sep., 2012

Project Engineer

Check By: Date: 06 Sep., 2012

Reviewer



3 Contents

			Page
1	CO	OVER PAGE	1
2	VE	RSION	2
3	СО	ONTENTS	3
4	TE	ST SUMMARY	4
5	GE	NERAL INFORMATION	5
	5.1	CLIENT INFORMATION	5
	5.2	GENERAL DESCRIPTION OF E.U.T.	
	5.3	TEST ENVIRONMENT AND MODE	
	5.4	TEST FACILITY	
	5.5	TEST LOCATION	
	5.6	OTHER INFORMATION REQUESTED BY THE CUSTOMER	
	5.7	TEST INSTRUMENTS LIST	
	5.8	Spurious Emission	9
	5.8	3.1 Radiated Emission Method	9
6	TE	ST SETUP PHOTO	12
7	EU	T CONSTRUCTIONAL DETAILS	13

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4 Test Summary

Test Item	Section in CFR 47	Result	
Antenna requirement	15.203/15.247 (c)	Pass	
AC Power Line Conducted Emission	15.207	Pass	
Conducted Peak Output Power	15.247 (b)(3)	Pass	
6dB Occupied Bandwidth	15.247 (a)(2)	Pass	
Power Spectral Density	15.247 (e)	Pass	
Band Edge	15.247(d)	Pass	
Spurious Emission	15.205/15.209	Pass	

Pass: The EUT complies with the essential requirements in the standard.

Remarks:

This report was base on the report No.: CCIS12060009001
 The model NBPC1165 and NBPC1025 have same PCB layout, Interior structure and electrical circuits and RF module, the difference is the size of product.

Model No.:	NBPC1165	NBPC1025	
Display Type	11.6 " TFT LCD	10" TFT LCD	

2. So in this report just test the below items:

Spurious Emission :below 1GHz (Radiated Emission Method)

Other test items please refer to the report No.: CCIS12060009001

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Page 4 of 17



5 General Information

5.1 Client Information

Applicant:	COBY COMMUNICATIONS LTD.		
Address of Applicant:	Unit C-E, 8/F , PO Shau Centre, 115 How Ming Stree, Kowloon, Hong Kong		
Manufacturer/ Factory:	SHENZHEN COBY COMMUNICATIONS CO., LTD		
Address of Manufacturer/ Factory:	Block2-3,2nd Industrial Zone.Taoxia Residents' Committee,DaLang Sub-district,Bao An District,ShenZhen city,China		

5.2 General Description of E.U.T.

Draduat Namo	NETBOOK		
Product Name:			
Model No.:	NBPC1025		
Operation Frequency:	2412MHz~2462MHz (802.11b/802.11g/802.11n(H20))		
Operation requeitcy.	2422MHz~2452MHz (802.11n(H40))		
Changel aumherer	11 for 802.11b/802.11g/802.11(H20)		
Channel numbers:	9 for 802.11n(H40)		
Channel separation:	5MHz		
Modulation technology:	Direct Sequence Spread Spectrum (DSSS)		
(IEEE 802.11b)	Direct dequence opical opecitain (2000)		
Modulation technology:	Orthogonal Frequency Division Multiplexing(OFDM)		
(IEEE 802.11g/802.11n)	Change har Frequency Division maniplexing (CF Divi)		
Data speed (IEEE 802.11b):	1Mbps, 2Mbps, 5.5Mbps, 11Mbps		
Data speed (IEEE 802.11g):	6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps,54Mbps		
Data speed (IEEE 802.11n):	Up to 150Mbps		
Antenna Type:	PIFA		
Antenna gain:	-1.68dBi		
	Model:PS36IBFAK2400B		
AC adapter 1:	Input:AC100-240V~50/60Hz 1.0A		
	Output:DC15.0V/2400mA		
	Model: PS36IBFAY2400S		
AC adapter 2:	Input: AC100-240V~50/60Hz 1.0A		
	Output: DC15.0V/2400mA		
Remark:	Based on pre-scan, the adapter 1 was the worst case, so all test items were performed with adapter 1.		

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Operation	Operation Frequency each of channel							
Channel Frequency Channel Frequency Channel Frequency Channel Frequency								
1	2412MHz	4	2427MHz	7	2442MHz	10	2457MHz	
2	2417MHz	5	2432MHz	8	2447MHz	11	2462MHz	
3	2422MHz	6	2437MHz	9	2452MHz			

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

802.11b/802.11g/802.11n (H20)

Channel	Frequency		
The lowest channel	2412MHz		
The middle channel	2437MHz		
The Highest channel	2462MHz		

802.11n (H40)

Channel	Frequency
The lowest channel	2422MHz
The middle channel	2437MHz
The Highest channel	2452MHz

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Page 6 of 17



5.3 Test environment and mode

Operating Environment:			
Temperature:	24.0 °C		
Humidity:	54 % RH		
Atmospheric Pressure:	1010 mbar		
Test mode:			
Operation mode	Keep the EUT in transmitting with modulation.		

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

Mode	Data rate		
802.11b	1Mbps		
802.11g	6Mbps		
802.11n(H20)	6.5Mbps		
802.11n(H40)	13.5Mbps		

Final Test Mode:

According to ANSI C63.4 standards, the test results are both the "worst case" and "worst setup" 1Mbps for 802.11b, 6Mbps for 802.11n, 6.5Mbps for 802.11n(H20) and 13.5 Mbps for 802.11n(H40).

5.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

● FCC —Registration No.: 817957

China Certification & Inspection Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in out files. Registration 817957, February 27, 2012

● Industry Canada (IC)

The 3m Semi-anechoic chamber of China Certification & Inspection Services Co., Ltd. Has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

5.5 Test Location

All tests were performed at:

China Certification & Inspection Services Co., Ltd.

Address: 1st Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District, Shenzhen,

China

Tel: 0755-23118282 Fax: 0755-23116366

5.6 Other Information Requested by the Customer

None.

China Certification & Inspection Services Co., Ltd. 1st Floor, Block No.2, Laodong Industrial Zone, Xixiang Road Baoan District, Shenzhen, China 518102

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5.7 Test Instruments list

Radia	Radiated Emission:							
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (dd-mm-yy)	Cal.Due date (dd-mm-yy)		
1	3m Semi- Anechoic Chamber	SAEMC	9(L)*6(W)* 6(H)	CCIS0001	June 09 2012	June 09 2013		
2	Control Room	ZhongYu Electron	6.2(L)*2.5(W)* 2.4(H)	CCIS0002	N/A	N/A		
3	BiConiLog Antenna	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	CCIS0005	June 04 2012	June 04 2013		
4	Double -ridged waveguide horn	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	CCIS0006	May 30 2012	May 30 2013		
5	EMI Test Software	AUDIX	E3	N/A	N/A	N/A		
6	Coaxial Cable	CCIS	N/A	CCIS0016	Apr. 01 2012	Apr. 01 2013		
7	Coaxial Cable	CCIS	N/A	CCIS0017	Apr. 01 2012	Apr. 01 2013		
8	Coaxial cable	CCIS	N/A	CCIS0018	Apr. 01 2012	Apr. 01 2013		
9	Coaxial Cable	CCIS	N/A	CCIS0019	Apr. 01 2012	Apr. 01 2013		
10	Coaxial Cable	CCIS	N/A	CCIS0087	Apr. 01 2012	Apr. 01 2013		
11	Amplifier(10KHz- 1.3GHz)	HP	8447D	CCIS0003	Apr. 01 2012	Apr. 01 2013		
12	Amplifier(1GHz- 18GHz)	Compliance Direction Systems Inc.	PAP-1G18	CCIS0011	June 09 2012	June 09 2013		
13	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	GTS218	Apr. 01 2012	Mar. 31 2013		
14	Horn Antenna	ETS-LINDGREN	3160	GTS217	Mar. 30 2012	Mar. 29 2013		
15	Printer	Нр	HP LaserJet P1007	N/A	N/A	N/A		
16	Positioning Controller	UC	UC3000	CCIS0015	N/A	N/A		

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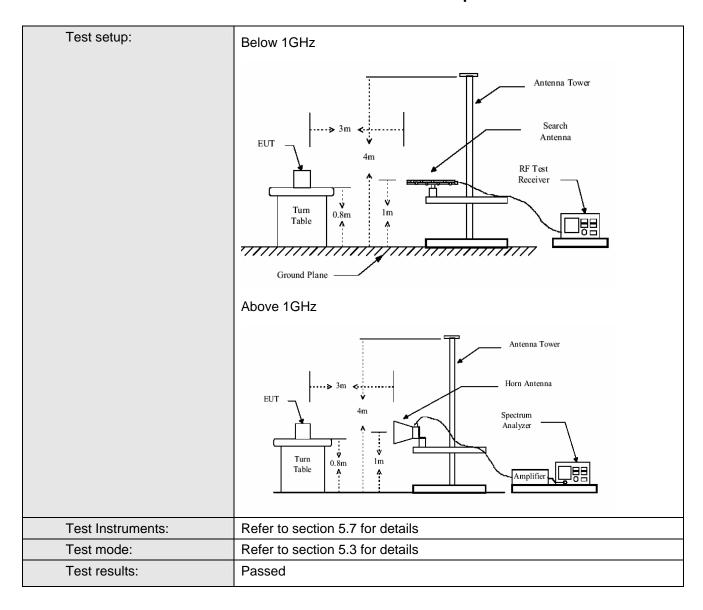
5.8 Spurious Emission

5.8.1 Radiated Emission Method

Test Requirement:	FCC Part15 C Section 15.209 and 15.205									
Test Method:	ANSI C63.4:2003									
Test Frequency Range:	30MHz to 25GHz									
Test site:	Measurement Distance: 3m									
Receiver setup:										
·	Frequency	Detector	RBW	VBW	Remark					
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value					
	Above 1GHz	Peak	1MHz	3MHz	Peak Value					
	Above Toriz	Peak	1MHz	10Hz	Average Value					
Limit:										
	Frequency 30MHz-88MHz		Limit (dBuV/m @3m)		Remark					
			40.0		Quasi-peak Value					
	88MHz-21		43.5		Quasi-peak Value					
	216MHz-960MHz		46.0		Quasi-peak Value					
	960MHz-	1GHZ	54.0		Quasi-peak Value					
	Above 1GHz		54.0 74.0		Average Value					
Test Procedure:	1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation. 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. 3. The antenna 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. 4. 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 rota table was turned from 0 degrees to 360 degrees to find the maximum reading. 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.									

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Project No.: CCIS120600094RF

Below 1GHz

Frequency (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	polarization
38.48	42.25	13.20	1.18	27.12	29.51	40.00	-10.49	Vertical
125.01	47.98	9.70	2.22	29.62	30.28	43.50	-13.22	Vertical
173.21	43.41	9.16	2.68	28.02	27.23	43.50	-16.27	Vertical
277.09	50.13	12.59	2.88	29.50	36.10	46.00	-9.90	Vertical
370.70	49.50	14.51	3.09	29.77	37.33	46.00	-8.67	Vertical
620.71	38.03	18.53	3.91	30.56	29.91	46.00	-16.09	Vertical
135.03	46.63	8.56	2.34	29.45	28.08	43.50	-15.42	Horizontal
180.02	48.07	9.68	2.73	26.51	33.97	43.50	-9.53	Horizontal
185.14	50.57	10.16	2.77	28.30	35.20	43.50	-8.30	Horizontal
267.55	50.30	12.30	2.86	29.54	35.92	46.00	-10.08	Horizontal
372.01	43.43	14.53	3.09	29.78	31.27	46.00	-14.73	Horizontal
620.71	40.35	18.53	3.91	30.56	32.23	46.00	-13.77	Horizontal

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