

Report No. : FA421348

RF Exposure Evaluation Report

APPLICANT : Lyve Minds, Inc.

EQUIPMENT: Set Top Box

BRAND NAME: Lyve

MODEL NAME : BPH01

FCC ID : 2ABQW-BPH

STANDARD : 47 CFR Part 2.1091

We, SPORTON INTERNATIONAL INC., would like to declare that the device has been evaluated in accordance with 47 CFR Part 2.1091, and pass the limit. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by: Eric Huang / Deputy Manager

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Approved by: Jones Tsai / Manager





SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: 2ABQW-BPH Page Number : 1 of 7
Report Issued Date : Apr. 02, 2014

Report No. : FA421348

Table of Contents

1.	ADM	INISTRATION DATA	4
	1.1.	Testing Laboratory	4
	1.2.	Applicant	4
	1.3.	Manufacturer	4
2.	DES	CRIPTION OF EQUIPMENT UNDER TEST (EUT)	5
3.	MAX	IMUM RF AVERAGE OUTPUT POWER AMONG PRODUCTION UNITS	5
4.	RFE	XPOSURE LIMIT INTRODUCTION	6
5.	RAD	IO FREQUENCY RADIATION EXPOSURE EVALUATION	7
	5.1.	Standalone Power Density Calculations	7
	52	Collocated Power Density Calculations	7

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: 2ABQW-BPH Page Number : 2 of 7
Report Issued Date : Apr. 02, 2014



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Revision History

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FA421348	Rev. 01	Initial issue of report	Apr. 02, 2014

TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: 2ABQW-BPH Page Number : 3 of 7
Report Issued Date : Apr. 02, 2014

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RF Exposure Evaluation Report

1. Administration Data

1.1. Testing Laboratory

Test Site	SPORTON INTERNATIONAL INC.			
	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park,			
Test Site Location	Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.			
Test Site Location	TEL: +886-3-327-3456			
	FAX: +886-3-328-4978			

1.2. Applicant

Company Name	Lyve Minds, Inc.
Address	10001 N. De Anza Blvd, Ste 300 Cupertino, CA 95014

1.3. Manufacturer

Company Name	FIH Mobile Limited
Address	No.4, Mingsheng St.,Tu-Cheng Dist., New Taipei City 23679, Taiwan

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TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: 2ABQW-BPH Page Number : 4 of 7
Report Issued Date : Apr. 02, 2014

Report No.: FA421348



2. <u>Description of Equipment Under Test (EUT)</u>

	Product Feature & Specification						
EUT Type	Set Top Box						
Brand Name	Lyve						
Model Name	BPH01						
FCC ID	2ABQW-BPH						
Frequency Range	WLAN 2.4GHz Band: 2412 MHz ~ 2462 MHz WLAN 5.2GHz Band: 5180 MHz ~ 5240 MHz WLAN 5.3GHz Band: 5260 MHz ~ 5320 MHz WLAN 5.5GHz Band: 5500 MHz ~ 5700 MHz WLAN 5.8GHz Band: 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz						
Mode	802.11a/b/g/n/ac HT20/HT40/VHT20/VHT40 Bluetooth v2.1+EDR Bluetooth v4.0-LE						
Antenna Type	WLAN: PIFA Antenna Bluetooth: PIFA Antenna						
HW Version	DVT						
SW Version	V0.150						
EUT Stage	Production Unit						

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

3. Maximum RF average output power among production units

	Average Power (dBm)					
Mode / Band	1Mbps (GFSK)	2Mbps (π/4-DQPSK)	3Mbps (8-DPSK)	BT4.0-LE (GFSK)		
2.4 GHz Bluetooth	8	4	4	4		

Pand / Fraguency (MUz)	IEEE 802.11 Average Power (dBm)					
Band / Frequency (MHz)	11b	11g	HT20	HT40		
2.4GHz Band	21	15	13	13		

Pand / Fraguency (MUz)	IEEE 802.11 Average Power (dBm)							
Band / Frequency (MHz)	11a	HT20	HT40	VHT20	VHT40	VHT80		
5.2GHz Band	17							
5.3GHz Band	17	16	16	16	16	16		
5.5GHz Band	20					16		
5.8GHz Band	20							

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TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: 2ABQW-BPH Page Number : 5 of 7 Report Issued Date: Apr. 02, 2014

Report No.: FA421348



4. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
8.	(A) Limits for O	ccupational/Controlled Expos	ures	21
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/	f 4.89/1	*(900/f2)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
	(B) Limits for Gene	ral Population/Uncontrolled I	xposure	
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/	f 2.19/1	*(180/f2)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = Power Density

P = Output Power at Antenna Terminals

G = Gain of Transmit Antenna (linear gain)

R = Distance from Transmitting Antenna

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TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: 2ABQW-BPH Page Number : 6 of 7

Report Issued Date: Apr. 02, 2014

Report No.: FA421348



RF Exposure Evaluation Report

5. Radio Frequency Radiation Exposure Evaluation

5.1. Standalone Power Density Calculations

Band	Frequency (MHz)	Antenna Gain (dBi)	Maximum Power (dBm)	EIDD	Average	Power Density at 20cm (mW/cm2)		Power Density / Limit
WLNA2.4GHz Band	2412	4.83	21.0	0.38	382.82	0.076	1.000	0.076
WLNA5GHz Band	5180	5.57	20.0	0.36	360.58	0.072	1.000	0.072
Bluetooth	2402	4.83	8.0	0.02	19.19	0.004	1.000	0.004

Note: For conservativeness, the lowest uplink frequency of each band is used to determine the MPE limit of that band

5.2. Collocated Power Density Calculations

WLAN	Bluetooth	Σ (Power Density / Limit)
Power Density	Power Density	of
/ Limit	/ Limit	WLAN+Bluetooth
0.076	0.004	0.08

Note:

- 1. Σ (Power Density / Limit): This is a summation of [(power density for each transmitter/antenna included in the simultaneous transmission)/ (corresponding MPE limit)], for WLAN + Bluetooth.
- 2. Considering the WLAN collocation with Bluetooth transmitter of the EIRP performance listed in the table above, the aggregated (power density /limit) is smaller than 1, and MPE of 2 collocated transmitters is compliant

Conclusion:

According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.

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TEL: 886-3-327-3456 FAX: 886-3-328-4978 FCC ID: 2ABQW-BPH Page Number : 7 of 7
Report Issued Date : Apr. 02, 2014

Report No. : FA421348