

# **Maximum Permissible Exposure**

**Equipment**: Smart Baby Monitor

Brand Name : PHILIPS

Model No. : SCD860/XX, SCD870XX , X=0~9

FCC ID : 2AEFK-SCD860

Standard : ANSI/IEEE C95.1

Applicant : Philips Consumer Lifestyle

High Tech Campus Building 37 G/F, Eindhoven,

the Netherlands

Manufacturer : GEMTEK TECHNOLOGY CO LTD

15-1 ZHONGHUA RD HSINCHU INDUSTRIAL PARK HUKOU HSINCHU HSIEN 303 TAIWAN

The product sample received on Aug. 25, 2014 and completely tested on Oct. 09, 2014. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI/IEEE C95.1 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:

Kevin Liang / Assistant Manager

Testing Laboratory
1190

Report No.: FA482217-02

SPORTON INTERNATIONAL INC. Page No. : 1 of 5
TEL: 886-3-327-3456 Report Version : Rev. 01

FAX: 886-3-327-0973



## Maximum Permissible Exposure

## **Table of Contents**

Report No.: FA482217-02

1	HUMAN EXPOSURE ASSESSMENT	4
1.1	Maximum Permissible Exposure	4
	Limit of Maximum Permissible Exposure	
1.1.2	MPE Calculation Method	4
113	Result of Maximum Permissible Exposure (2 4GHz)	5

SPORTON INTERNATIONAL INC. Page No. : 2 of 5
TEL: 886-3-327-3456 Report Version : Rev. 01

FAX: 886-3-327-0973



## Maximum Permissible Exposure

## **Revision History**

Report No.	Version	Description	Issued Date		
FA482217-02 Rev. 01		Initial issue of report	Feb. 26, 2016		

SPORTON INTERNATIONAL INC.

TEL: 886-3-327-3456 FAX: 886-3-327-0973 Page No. : 3 of 5

Report Version

: Rev. 01

Report No.: FA482217-02



## 1 Human Exposure Assessment

#### 1.1 Maximum Permissible Exposure

#### 1.1.1 Limit of Maximum Permissible Exposure

Limits for Occupational / Controlled Exposure							
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time  E ², H ² or S (minutes)			
0.3-3.0	614	1.63	(100)*	6			
3.0-30	1842 / f	4.89 / f	(900 / f <sup>2</sup> )*	6			
30-300	61.4	0.163	1.0	6			
300-1500	-	-	F/300	6			
1500-100,000	-	-	5	6			
Limits for General Population / Uncontrolled Exposure							

Report No.: FA482217-02

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm²)	Averaging Time  E ², H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	F/1500	30
1500-100,000	-	-	1.0	30

Note 1: f = frequency in MHz; \*Plane-wave equivalent power density

Note 2: For the applicable limit, see FCC 1.1310

#### 1.1.2 MPE Calculation Method

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

S = power density (in appropriate units, e.g. mW/cm<sup>2</sup>)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

SPORTON INTERNATIONAL INC. Page No. : 4 of 5
TEL: 886-3-327-3456 Report Version : Rev. 01

FAX: 886-3-327-0973

#### 1.1.3 Result of Maximum Permissible Exposure (2.4GHz)

RF General Information							
Frequency Range (MHz) IEEE Std. 802.11 Protocol		Ch. Frequency (MHz)	Channel Number	Number of Transmit Chains (N <sub>TX</sub> )	RF Output Power (dBm)		
2400-2483.5	b	2412-2462	1-11 [11]	1	23.25		
2400-2483.5	g	2412-2462	1-11 [11]	1	21.99		
2400-2483.5	n (HT20)	2412-2462	1-11 [11]	1	22.02		
2400-2483.5	n (HT20)	2412-2462	1-11 [11]	2	23.92		
Note 1: PE autout newer specifies that Maximum Conducted (Average) Output Power							

Note 1: RF output power specifies that Maximum Conducted (Average) Output Power.

Worst Maximum RF Output Power Result						
Exposure Environment	General Population / Uncontrolled Exposure					
Separation Distance (cm)	20	20				
Condition	RF Output Power (dBm)					
Modulation Mode	Chain Port 1	Chain Port 2	Sum Chain	Ant. Gain (dBi)	EIRP Power	PD (S) (mW/cm²)
n (HT20)	20.98	20.85	23.92	2.26	26.18	0.08246
Maximum Permissible Exposure Limit (mW/cm²) 1						
Note 1: N <sub>TX</sub> = Number of Transmit Chains						

SPORTON INTERNATIONAL INC.
TEL: 886-3-327-3456

FAX: 886-3-327-0973

Page No. : 5 of 5

Report No.: FA482217-02

Report Version : Rev. 01