Maximum Permissible Exposure

Equipment	:	**Philips HUE Motion sensor**
Brand Name	:	**PHILIPS**
Model No.	:	**9290012607**
FCC ID	:	**2AGBW9290012607X**
Standard	:	**IEEE C95.1**
Applicant **Manufacturer**	:	**Philips Lighting(China) Investment Co., Ltd.** Building 9, Lane 888, Tianlin Road, Minhang District, Shanghai 200233 China

The product sample received on May 12, 2016 and completely tested on Jun. 21, 2016. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in 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

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Revision History

Report No.	Version	Description	Issued Date
FA650628	Rev. 01	Initial issue of report	Jul. 12, 2016

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	($900 / f^2$)*	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				
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	($180/f^2$)*	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^2)
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)

1.1.3 Result of Maximum Permissible Exposure (Zigbee)

RF General Information					
Frequency Range (MHz)	**Protocol**	**Ch. Frequency (MHz)**	**Channel Number**	**Number of Transmit Chains (N_{TX})**	**RF Output Power (dBm)**
2400-2483.5	Zigbee	2405-2475	1-15[15]	1	3.68
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			
Condition	**RF Output Power (dBm)**			
Modulation Mode	**RF Output Power**	**DG (dBi)**	**EIRP Power**	**PD (S) (mW/cm²)**
Zigbee	3.68	3.14	6.82	0.00096
Maximum Permissible Exposure Limit (mW/cm²)				1
Note 1: N_{TX} = Number of Transmit Chains				