RF Exposure Information – MPE Calculations

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The total number of pages in this report is 5.

1   APPLICANT DETAILS

Table 1 Applicant Details	
Company Name	Assa Abloy Hospitality AS
Address:	Anolitveien 1-3
	1400 Ski
	Norway
e-mail	info@assaabloy.com
Telephone:	+47 692 45 000
Contact Name	Susan Janson
e-mail	Susan.janson@assaabloy.com
Telephone:	+46 10 47 48 592

2   DETAILS OF DEVICE

Table 2 Details of device	
Description of device:	BLE Module
Manufacturer:	Assa Abloy Hospitality AS
Model Name:	681402004
FCC ID:	Y7V-681402004
DUT Status	Final prototype

3   EVALUATION

3.1   SUMMARY

This device (details found in table 2) is at a distance of 20 cm compliant with the General Population/Uncontrolled Exposure requirements found in FCC rule part 1.1310 Table 1(B). For more details please see chapter 4.

3.2   APPLICABLE STANDARDS

FCC 47 CFR §2.1093

FCC 47 CFR §1.1307

FCC 47 CFR §1.1310

FCC KDB 447498 D01 General RF Exposure Guidance v05r02

IEEE C95.1-2005

4 DETAILED MPE CALCULATIONS

MPE Calculations for Mobile Equipment General population/ Uncontrolled use							
Frequency (MHz)	P (dBm)	P (mW)	G (dBi)	G (Numerical)	r (cm)	S (mW/cm²)	Exposure Limit (mW/cm²)
2450	4.0	2.51	3.5	2.24	20	**0.001**	**1.0**

According to Friis formula:

$$S = \frac{P * G}{4\pi * r^2}$$

Where **S** is power density in **mW/cm²**, **P** is power in **mW**, **G** is antenna gain numerically and **r** is minimum separation distance in **cm**.

5   AMENDMENT HISTORY

Version	Date	Author(s)/ Function	Reviewed by	Approved by	Nature of Changes
Initial Draft	2015-01-27	Kent Lorentzon			
1.0	2015-02-10	Kent Lorentzon			First Release
1.1	2015-03-06	Kent Lorentzon			Added rule part to 3.2 Revised summary.
1.2	2015-03-09	Kent Lorentzon	Håkan Sjöberg	Håkan Sjöberg	Revised calculation to maximum theoretical power