Prüfbericht-Nr.: *Test Report No.:*	60210081-001	**Auftrags-Nr.:** *Order No.:*	23870054	Seite 1 von 4 *Page 1 of 4*
Kunden Referenz-Nr.: Client Reference No.:	-	**Auftragsdatum** *Order date:*	2018-08-01	
Auftraggeber: *Client:*	Sony Mobile Communication AB Nya Vattentornet, 223 62 Lund, Sweden			
Prüfgegenstand: *Test item:*	Connected Gym – Puck			
Bezeichnung / Typ-Nr.: *Identification / Type No.:*	XD-0021 PY7-15706B			
Auftrags-Inhalt: *Order content:*	RF Exposure Evaluation			
Prüfgrundlage: *Test specification:*	FCC 47 CFR §2.1091			
Wareneingangsdatum: *Date of receipt:*	N/A			
Prüfmuster-Nr.: *Test sample No.:*	N/A			
Prüfzeitraum: *Testing period:*	N/A			
Ort der Prüfung: *Place of testing:*	Lund, Sweden			
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland Sweden			
Prüfergebnis: *Test results:*	See detail in report			

Geprüft von *Tested by:*	Niall Forrester Test Engineer		**Kontrolliert von** *Reviewed by:*	Per Isacsson Lab Manager	
2018-12-19	N. Forr		2018-12-19		
Datum *Date*	**Name / Stellung** *Name / Position*	**Unterschrift** *Signature*	**Datum** *Date*	**Name / Stellung** *Name / Position*	**Unterschrift** *Signature*

Sontiges /
Other:

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.
This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test or accreditation mark/logo

Revisions
Revisions

Revision Revision	**Datum** Date	**Anmerkung** Remark	**Verfasser** Author
Draft	2018-12-17	Initial Draft	Niall Forrester
001	2018-12-19	First release	Niall Forrester

Note: Latest revision report will replace all previous reports

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PRODUCT INFORMATION

1.1 Equipment under Test (EUT) description

Model name:	Connected Gym
Manufacturer:	Sony Mobile Communications Inc,
Model number:	PUCK 3.1
Type Number:	XD-0021
FCC ID:	PY7-15706B
Description:	Connected Gym digitalize a gym without replacing the gym machines. The main unit report repetitions to the system while the puck is used as machine identifier

1.2 Wireless Technologies and Frequency Bands supported by the DUT

Technology	Band	Frequency Range (Tx)	Evaluation Performed
Bluetooth Low Energy	2.4 GHz	2400 MHz – 2483.5 MHz	YES

1.3 Conducted Power and Antenna Gain

Technology	Band	Maximum Conducted Output Power (dBm)	Antenna Gain (dBi)
Bluetooth Low Energy	2.4 GHz	-3.0	-3.0

Maximum Power and Antenna Gain are based on details supplied by the device manufacturer.

EVALUATION

1.4 Summary

At 20cm, the device is compliant with the "General Population / Uncontrolled" requirements set out in FCC 47 CFR §1.1310 Table 1 (B) for all wireless technologies supported by the device.

1.5 Detailed Calculations

The Power Density at 20cm separation distance has been calculated for each of the transmitter technologies supported by the device according to a re-arrangement of the Friis formula, as below:

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

Where:

- "S" is power density in mW/cm²
- "P" is maximum avg. conducted power (incl. tolerances) in mW according to data from the manufacturer
- "G" is the peak antenna gain (numerical) according to data from the manufacturer
- "r" is the separation distance (20 cm)

Technology	Band	Frequency* (MHz)	Power (dBm)	P (mW)	Gain (dBi)	G (Numerical)	r (cm)	S (mW/cm²)	Limit** (mW/cm²)
Bluetooth Low Energy	2.4 GHz	2400	-3.00	0.50	-3.00	0.50	20	0.000050	1.0

*The lowest frequency in each band has been chosen, to give the most conservative limit

**The limits listed are from FCC 47 CFR §1.1310 Table 1 (B): "Limits for General Population/Uncontrolled"

From 1500MHz to 100000MHz, the limit is 1.0 mW/cm²

*****END OF REPORT*****