RADIO REPORT

FCC 47 CFR Part 15C

Periodic operation in the 40.66-40.70 MHz and above 70 MHz band

Report Reference No	G0M-2303-1995-TFC231PT-P023-V02
Testing Laboratory	Eurofins Product Service GmbH
Address	Storkower Str. 38c 15526 Reichenwalde Germany
Accreditation	DAkkS - Registration number : D-PL-12092-01-04 (FCC) FCC Filed Test Laboratory, Reg.-No.: 96970
Applicant	BodyCAP
Address	3 Rue du Docteur Laennc 14200 Hérouville saint clair France
Test Specification	47 CFR Part 15C
Non-Standard Test Method	None
Equipment under Test (EUT):	
Product Description	Core Body temperature monitoring equipement
Model(s)	eCelsius Performance Pill P023-P
Additional Model(s)	None
Brand Name(s)	eCelsius Performance system
Hardware Version(s)	V5
Software Version(s)	V1.0.5.2
FCC ID	2AENH017
Test Result	**PASSED**

Possible test case verdicts:		
Required by standard but not tested	N/T	
Not required by standard	N/R	
Not applicable to EUT	N/A	
Test object does meet the requirement	P(PASS)	
Test object does not meet the requirement	F(FAIL)	
Testing:		
Test Lab Temperature	20 - 23 °C	
Test Lab Humidity	32 – 38 %	
Date of receipt of test item	2024-03-21 (Sample 48075) 2024-04-26 (Sample 48344) 2024-04-23 (Sample 48318)	
Report:		
Compiled by	Ehsan Sohrabi	
Tested by (+ signature) (Responsible for Test)	Ehsan Sohrabi	
Approved by (+ signature) (Test Lab Engineer)	Florian Voigt	
Date of Issue	2024-08-28	
Total number of pages	50	
General Remarks:		
The test results presented in this report relate only to the object tested. **The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report.** This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.		
Additional Comments:		

VERSION HISTORY

Version History			
Version	Issue Date	Remarks	Revised By
01	2024-06-27	Initial Release	--
02	2024-08-28	Replaced document: G0M-2303-1995-TFC231PT-P023-V01 Replaced by: G0M-2303-1995-TFC231PT-P023-V02 Reason: Correction of Duty cycle and DCCF	E. Sohrabi

ABBREVIATIONS AND ACRONYMS

Acronyms	
Acronym	Description
EUT	Equipment Under Test
FCC	Federal Communications Commission
ISED	Innovation, Science and Economic Development Canada
RBW	Resolution bandwidth
RMS	Root mean square
VBW	Video bandwidth
V_{NOM}	Nominal supply voltage

REPORT INDEX

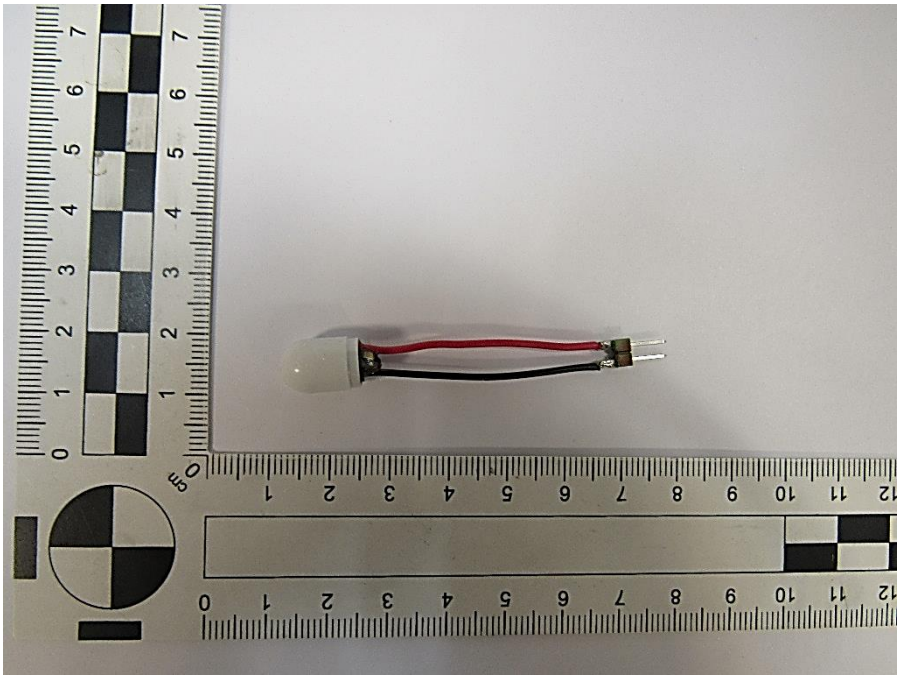
1 Equipment (Test Item) Under Test

Description	Core Body temperature monitoring equipement		
Model	eCelsius Performance Pill P023-P		
Additional Model(s)	None		
Brand Name(s)	eCelsius Performance system		
Sample Identification	EUT #	Sample-ID	Serial Number
	EUT 1 EUT 2 EUT 3	Radiated: 48344 Radiated: 48318 Conducted: 48075	Prototype
Hardware Version(s)	V5		
Software Version(s)	1.0.5.2		
FCC ID	2AENH017		
Equipment type	End Product		
Radio type	Transceiver		
Radio technology	SRD		
Modulation	GFSK		
Number of antenna ports	1		
Antenna	Type	Integrated antenna	
	Model	PCB Antenna	
	Manufacturer	BodyCAP	
	Gain	0dBi (customer declaration)	
Supply Voltage	V_{NOM}	3.1 VDC	
Operating Temperature	T_{NOM}	37 °C	
AC/DC-Adaptor	None		
Manufacturer	Selha 38 Rue Lavoisier, 76260 Eu		

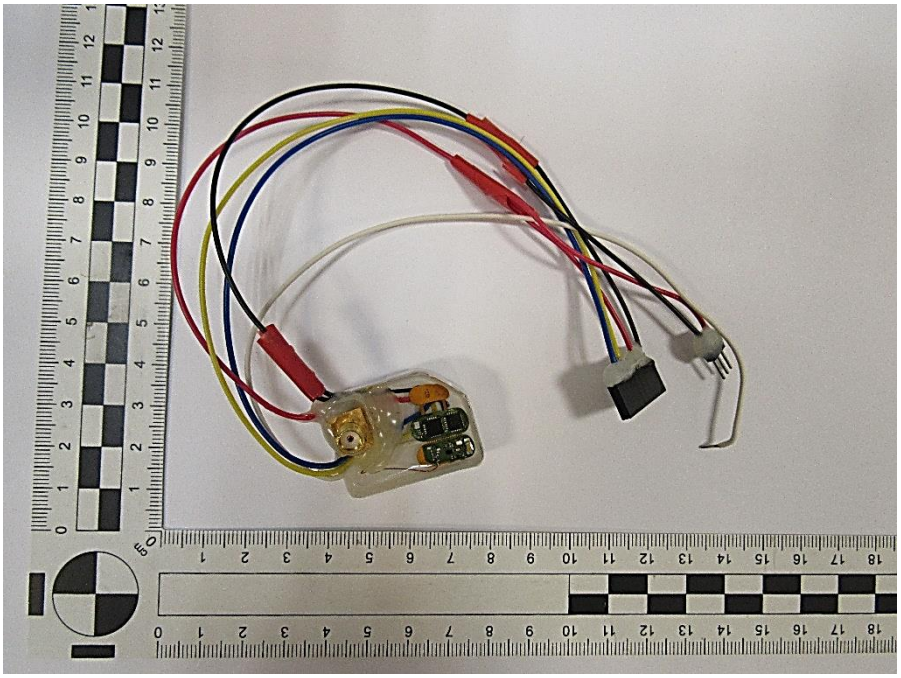
1.1 Photos – Equipment External

EUT 1- Radiated

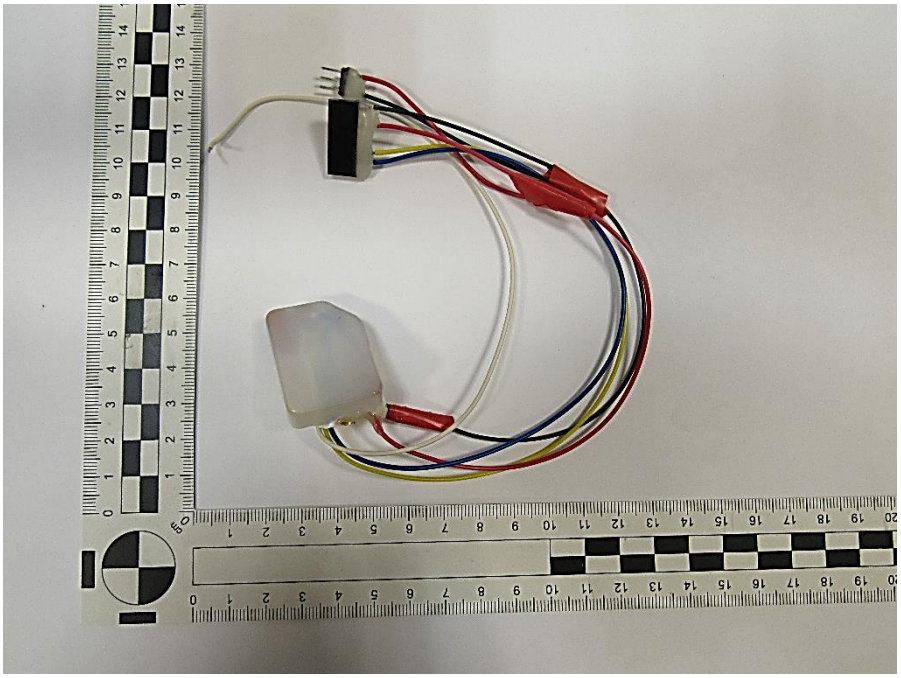
EUT 2- Radiated

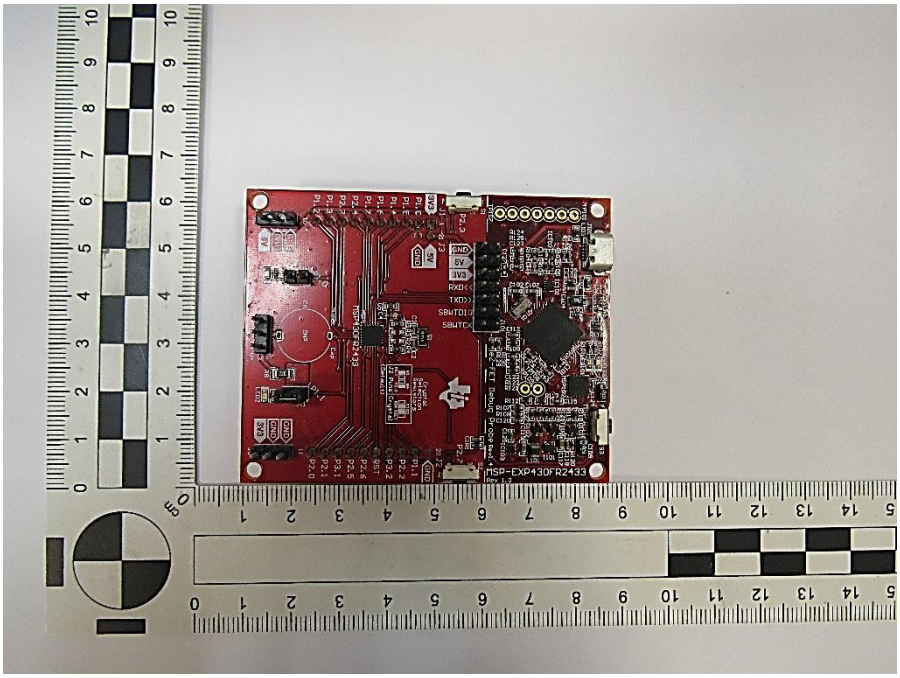


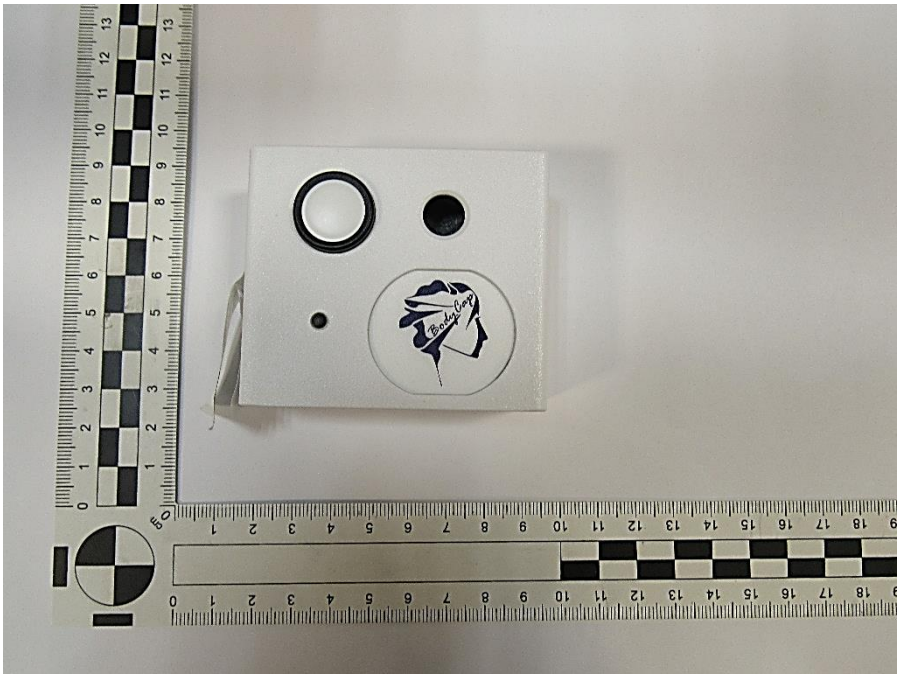
EUT top view - Conducted sample



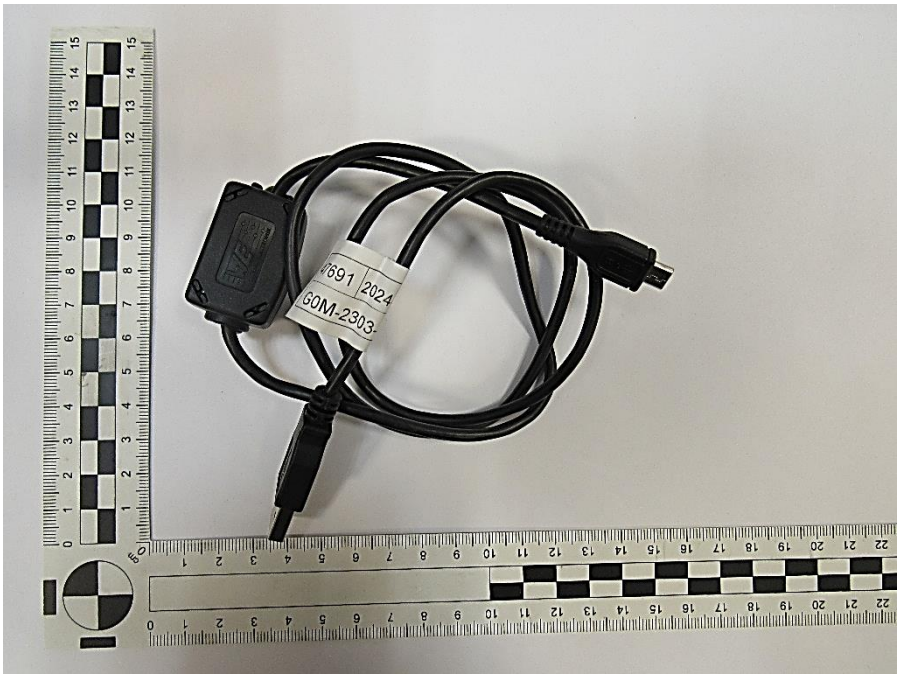
EUT bottom view - Conducted sample

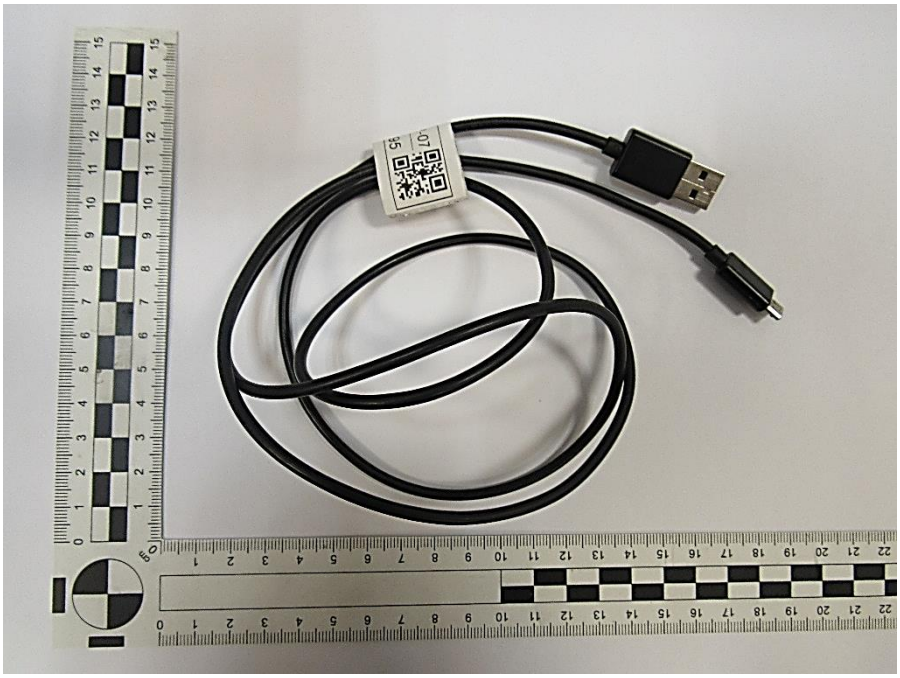


AE: Module for programming top view


Activator


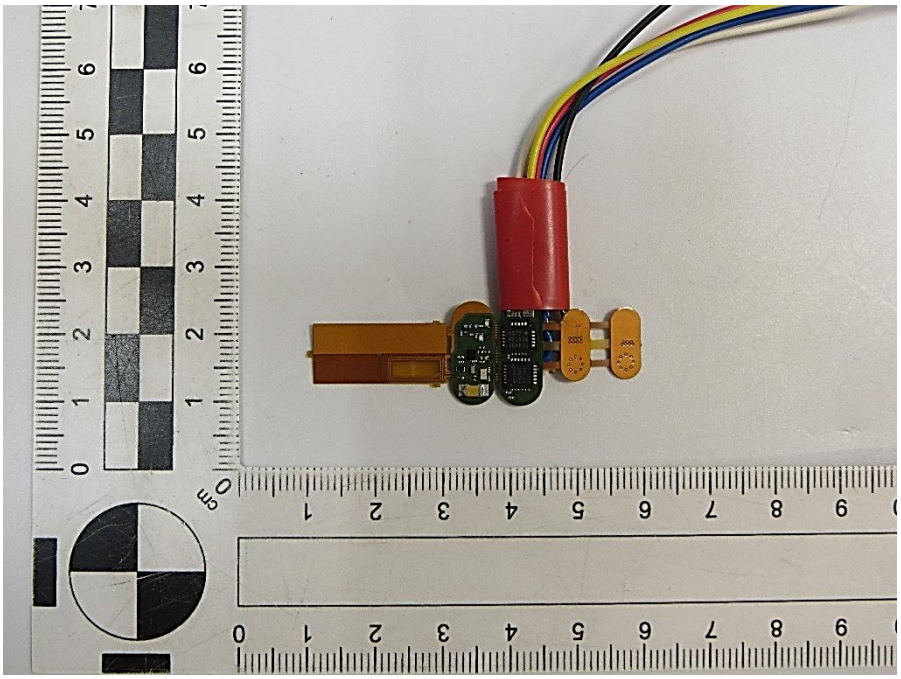
Monitor


Activator cable


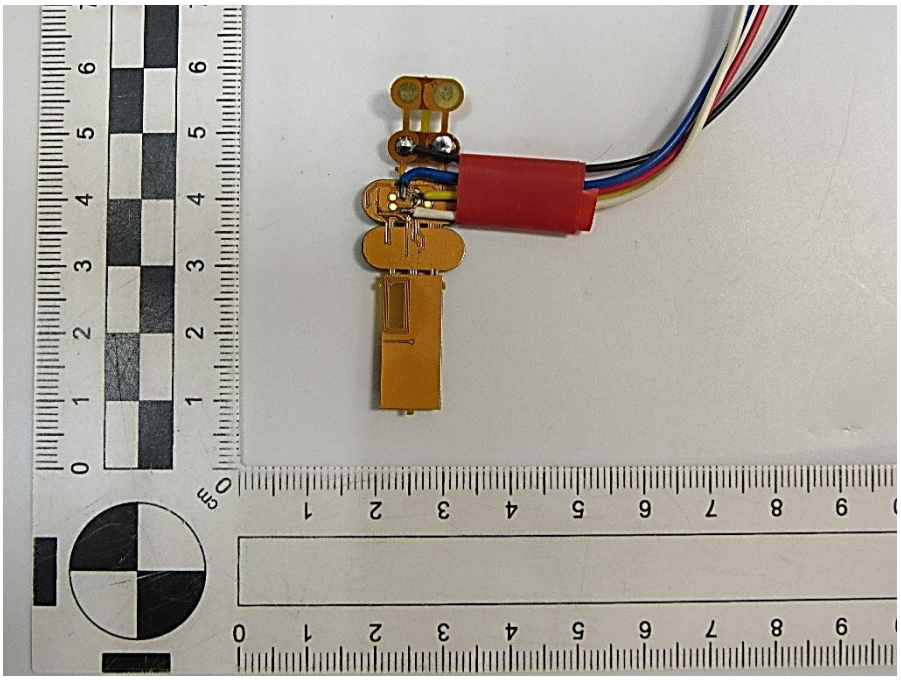
USB cable for monitor


1.2 Photos – Equipment Internal

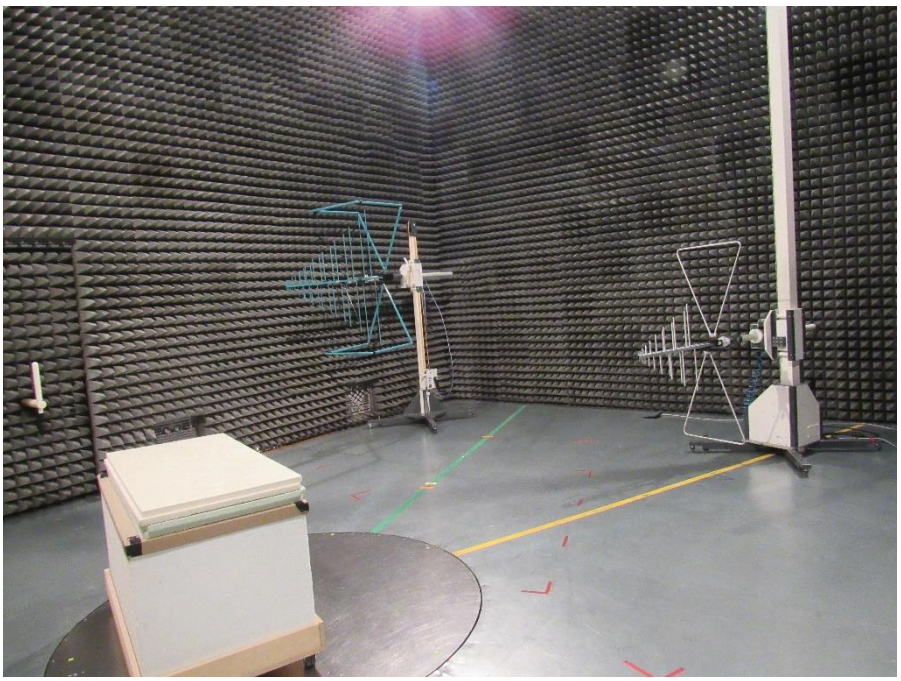
PCB top view - P023

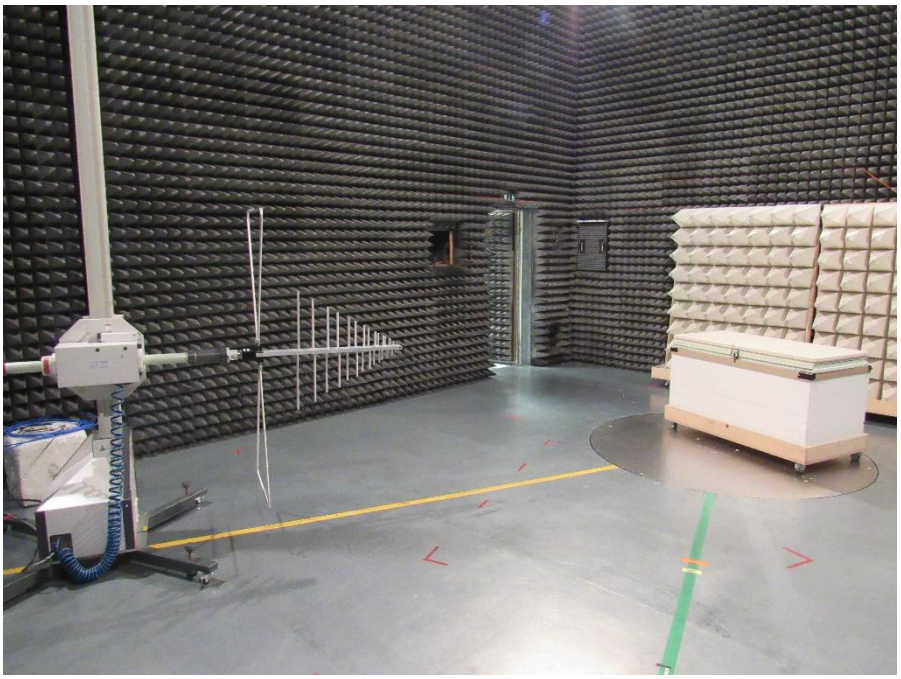


PCB bottom view - P023

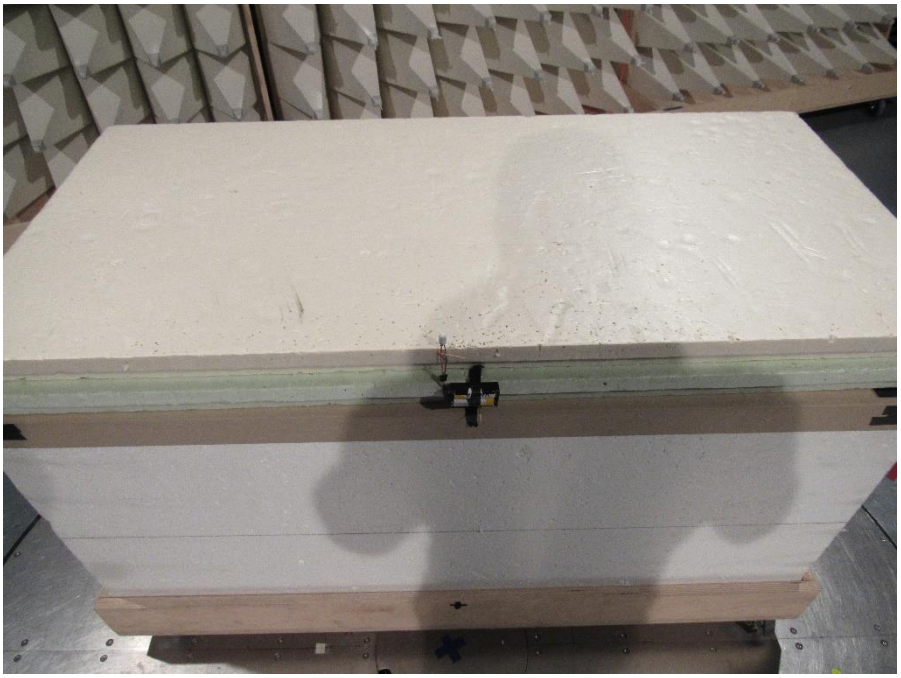


1.3 Photos – Test Setup

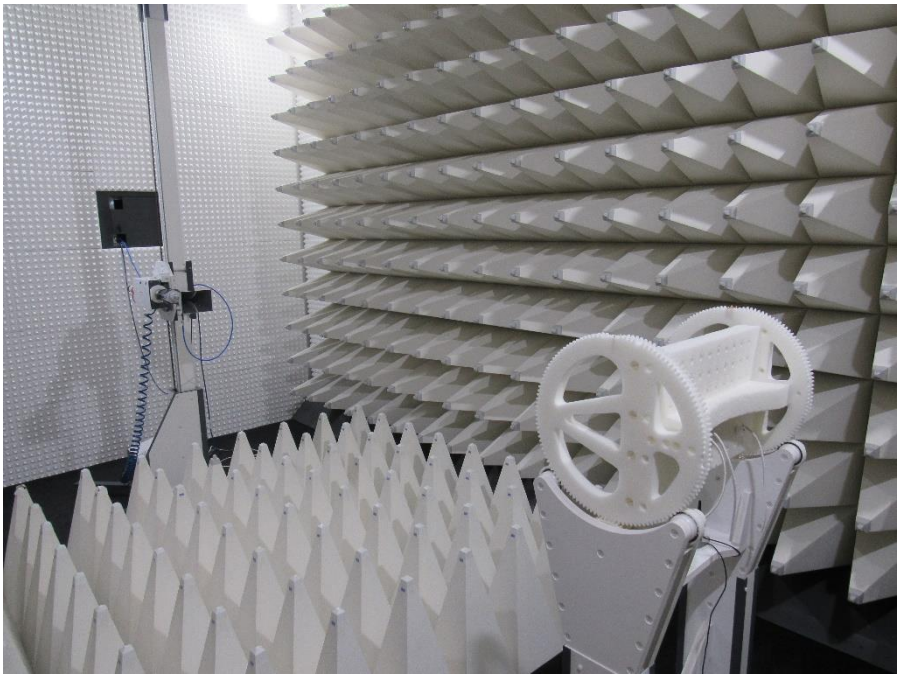
Setup for measurements below 1 GHz


Setup for measurements below 1 GHz


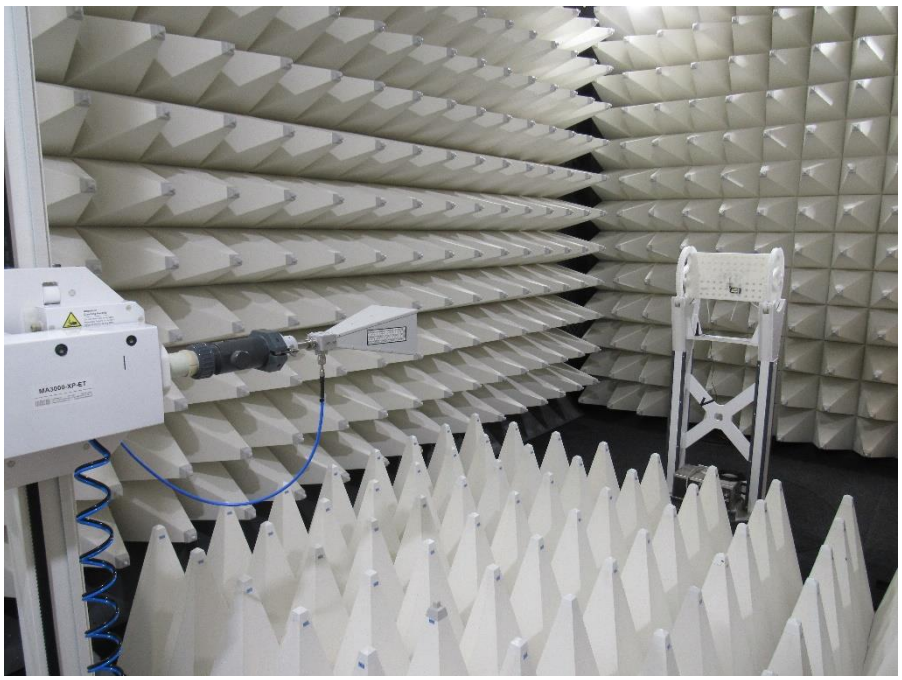
EUT test setup below 1 GHz



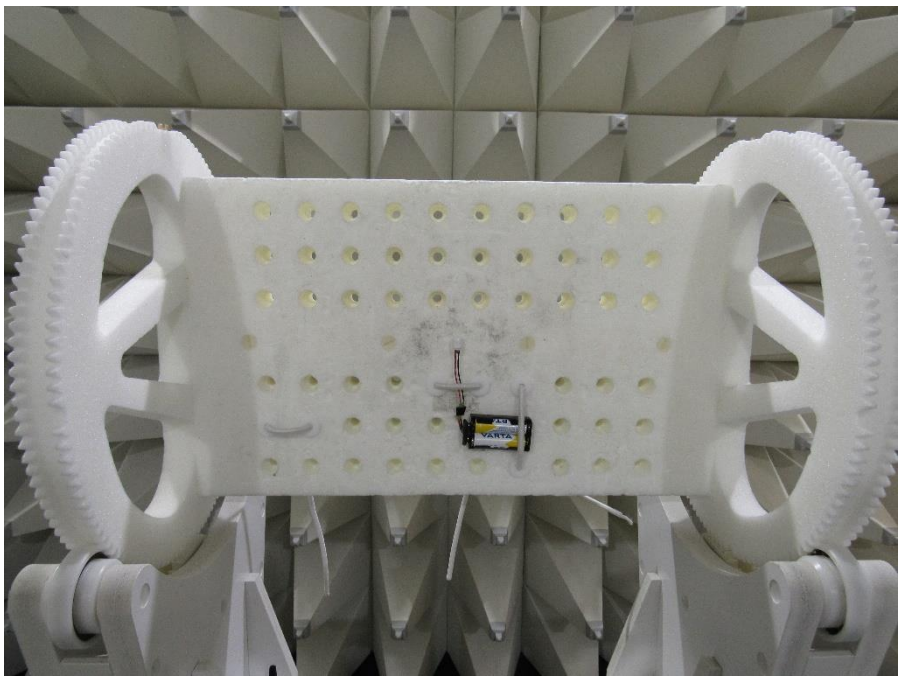
Setup for measurements above 1 GHz



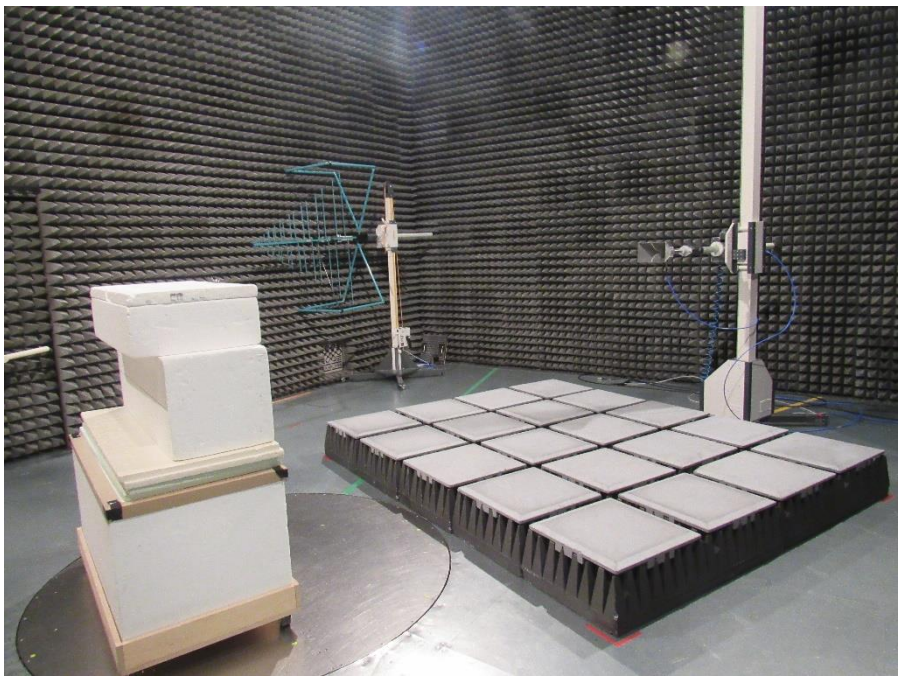
Setup for measurements above 1 GHz



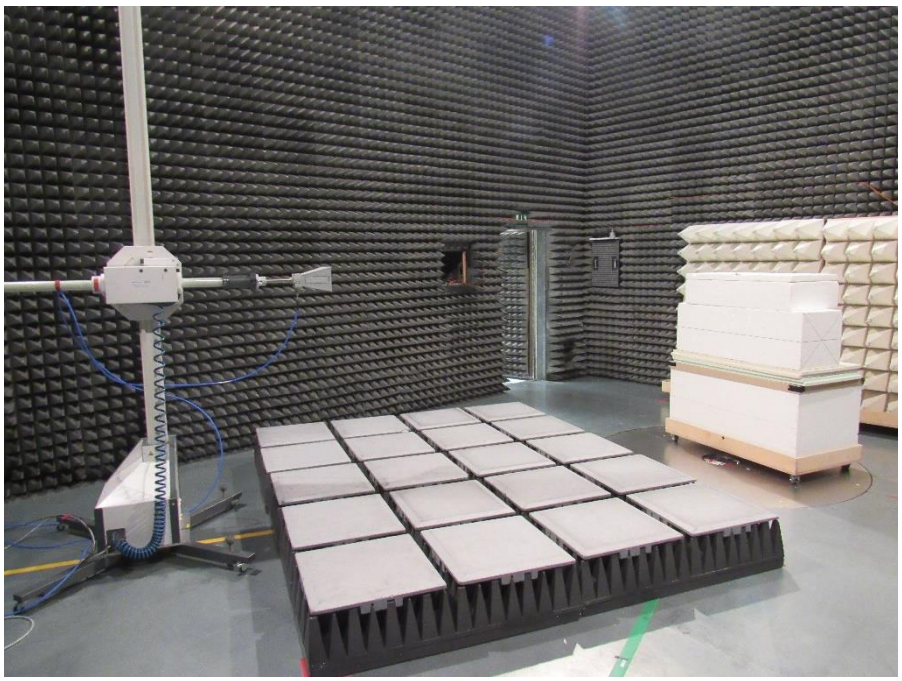
EUT test setup above 1 GHz



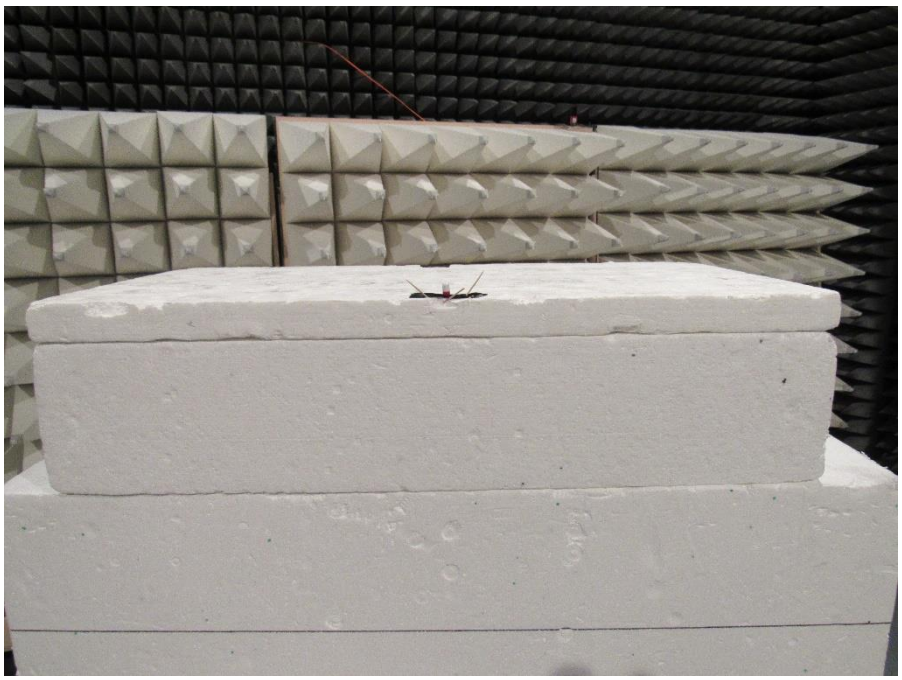
Setup for measurements above 1 GHz



Setup for measurements above 1 GHz



EUT setup above 1 GHz



1.4 Support Equipment

Product Type	Device	Manufacturer	Model	Comment
AE	Laptop	Lenovo	---	To connect the EUT to uniflash software
AE	eCelsius Medical Monitor	BodyCAP	P040-M	P040-M
AE	eCelsius Medical Activator	BodyCAP	P030-M	P030-M
AE	Module for programming	---	---	For programming the pill
CBL	USB cable	---	---	To connect the activator to the laptop
SFT	uniflash	---	SI.8.5.4539	For EUT configuration
Description:				
AE	Auxiliary Equipment			
SIM	Simulator			
CBL	Connecting Cable			
SFT	Software			
Comment:				

1.5 Duty cycle correction factor (Method of calculation of average field strength)

1.5.1 Information

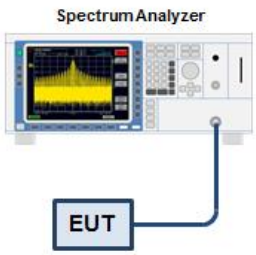
Test Information	
Measurement Method	ANSI C63.10 11.6

1.5.2

Requirements	
Duty cycle	Duty cycle correction
≥ 98 %	No correction required
< 98 %	Correction required (20 x Log_{10}(1/DC)

1.5.3 Setup

Test Setup



1.5.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	R&S	FSP30	EF00312	2023-08	2024-08

1.5.5 Procedure

Test Procedure

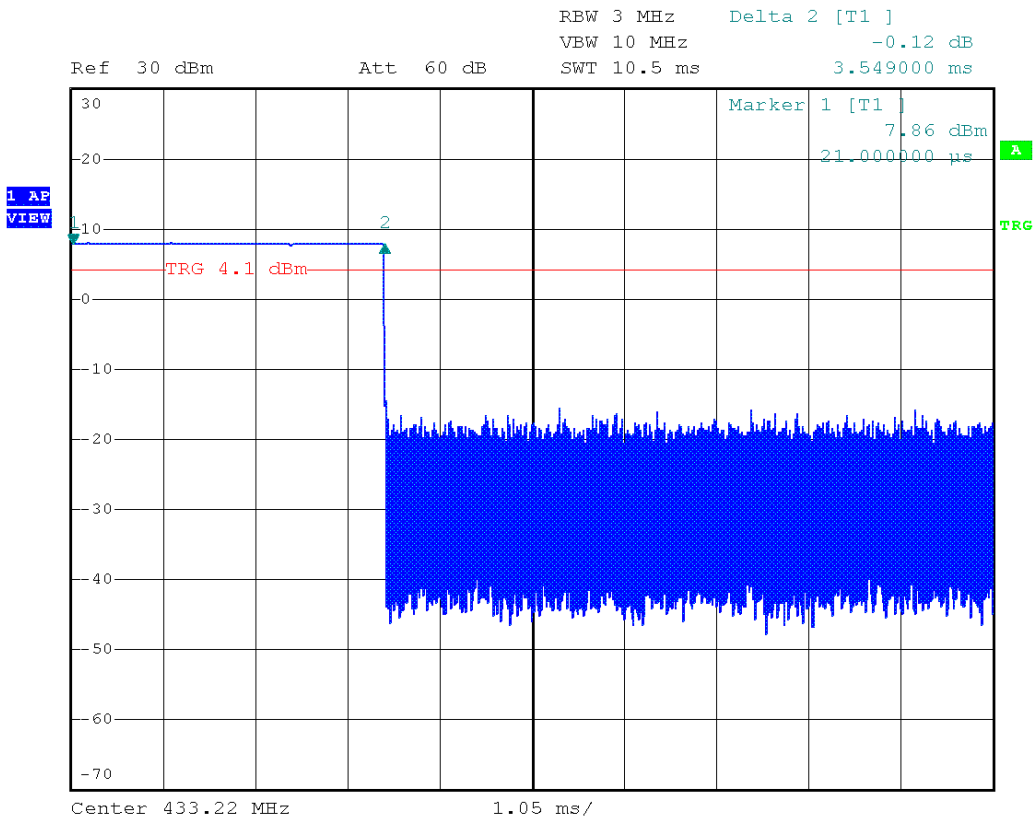
1. EUT set to test mode
2. Span is set to zero span
3. Detector set to peak
4. Sweep time is set long enough to capture at least 5 bursts
5. Envelope peak value of emission spectrum is selected
6. The maximum burst duration T_{ON} is measured using two markers set to the start and the end of the longest burst
7. The minimum idle duration T_{OFF} is measured using two markers set to the start and the end of the shortest idle period
8. Calculation of $T_{TOTAL} = T_{ON} + T_{OFF}$ but not exceeding 100 ms
9. The averaging duty cycle is calculated by AVDC = T_{ON} (ms) / T_{TOTAL} (ms)
10. The averaging duty cycle calculation factor is calculated by AVDCCF = 20 x log (AVDC)

1.5.6 Results

Average Duty Cycle Calculation Results					
Mode	T_{ON}	T_{TOTAL} (measured)	T_{TOTAL} (corrected)	Duty Cycle	Average Calculation Factor [dB]
Normal	3.549 ms	15040 ms	100 ms	0.035	-29.12

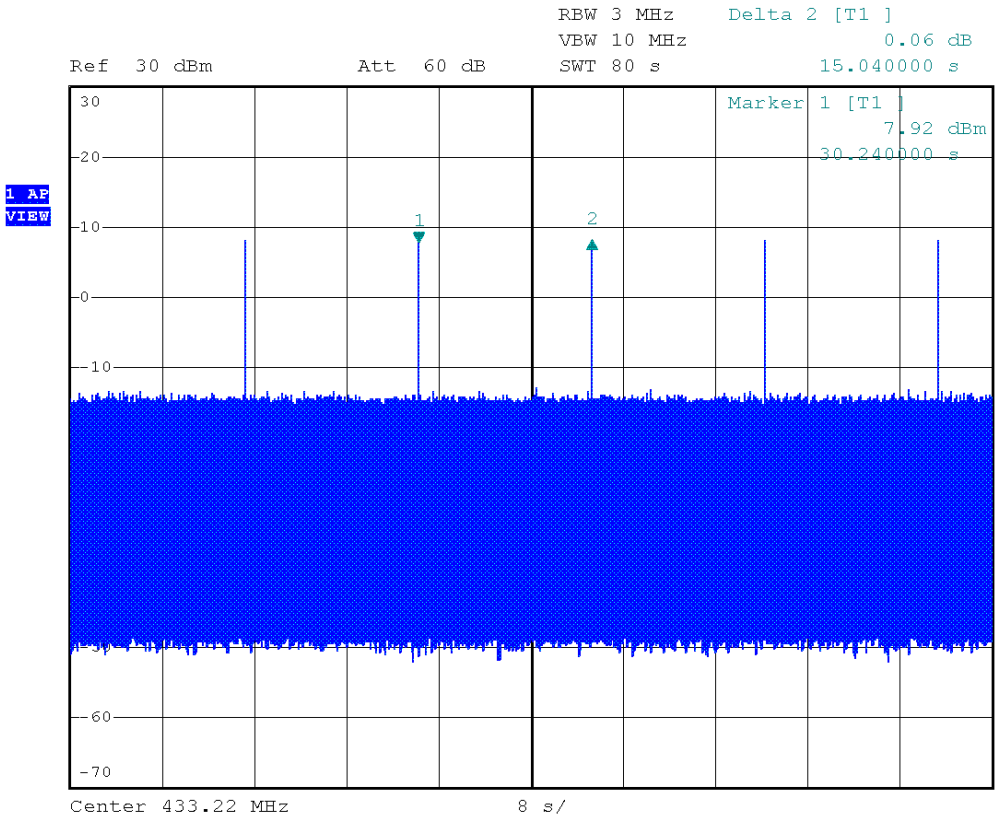
Duty Cycle T_{ON}

Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48075
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-03-26
Operating Conditions:	Tnom/Vnom
Mode:	Normal



Duty Cycle T_{ON} + T_{off}

Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48075
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-03-26
Operating Conditions:	Tnom/Vnom
Mode:	Normal



1.6 Test Modes

Mode	Description
Transmit	Mode = Transmit Modulation = GFSK Duty cycle = 100 % Pulse repetition time = 0 ms Pulse length = N/A
Normal	Mode = Transmit Modulation = GFSK Duty cycle = 0.0236 % Pulse repetition time = 15040 ms Pulse length = 3.55 ms
Transmit DC	Mode = Transmit Modulation = GFSK Duty cycle = 0.35 % Pulse repetition time = 1000 ms Pulse length = 3.55 ms
Comment: --	

1.7 Test Frequencies

Designator	Mode	Channel	Frequency [MHz]
F1	Tx / Rx	1	433.22
F2	Tx / Rx	8	434.62

1.8 Sample emission level calculation

The following is a description of terms and a sample calculation, as appears in the radiated emissions data table. The numbers used in the calculation are for example only. There is no direct correlation to the specific data taken for the product described in this document:

Reading:

This is the reading obtained on the spectrum analyzer in dBµV. Any external preamplifiers used are taken into account through internal analyzer settings.

A.F.:

This is the antenna factor for the receiving antenna. It is a conversion factor, which converts electric fields strengths to voltages, which can be measured directly on the spectrum analyzer. It is treated as a loss in dB. Cable losses have been included with the A.F. to simplify the calculations. The antenna factor is used in calculations as follows:

Reading on Analyzer (dBµV) + A.F. (dB) = Net field strength (dBµV/m)

Net:

This is the net field strength measurement (as shown above).

Limit:

This is the FCC Class B radiated emission limit (in units of dBµV/m). The FCC limits are given in units of µV/m. The following formula is used to convert the units of µV/m to dBµV/m:

Limit (dBµV/m) = 20*log (µV/m)

Margin:

This is the margin of compliance below the FCC limit. The units are given in dB. A negative margin indicates the emission was below the limit. A positive margin indicates that the emission exceeds the limit.

Example only:

Reading + AF	= Net Reading	:	Net reading	- FCC limit	= Margin
+21.5 dBµV	+ 26 dB = 47.5 dBµV/m	:	47.5 dBµV/m	- 57.0 dBµV/m	= -9.5 dB

2 Result Summary

FCC 47 CFR Part 15C				
Product Standard Reference	**Requirement**	**Reference Method**	**Result**	**Remarks**
FCC 15.231(a)(1)	Deactivation of manually operated transmitter	non specific	N/R	EUT not manually operated
FCC 15.231(a)(2)	Cease of transmission of automatically operated transmitter	non specific	N/R	We tested according to FCC 15.231(e)
FCC 15.231(e)	Limit of transmission time	non specific	PASS	---
FCC 15.231(a)(4)	Radio control during emergencies	non specific	N/R	EUT not for emergencies
FCC 15.231(a)(5)	Transmission of set-up information for security systems	non specific	N/R	EUT not for security systems
FCC 15.231(c)	Emission bandwidth	non specific	PASS	---
FCC 15.231(d)	Emission bandwidth for the 40.66-40.70 MHz band	non specific	N/R	EUT is not operating in the 40.66-40.70 MHz band
FCC 15.231(d)	Frequency Stability for the 40.66-40.70 MHz band	non specific	N/R	EUT is not operating in the 40.66-40.70 MHz band
FCC 15.231(e)	Reduced field strength and spurious emissions of radiators operating at a rate exceeding 15.231(a)	ANSI C63.10	PASS	---
FCC 15.207	AC power line conducted emissions	ANSI C63.10	N/R	EUT exclusively battery powered
Comment: The Decision Rule is applied on the basis of ETSI TR 102 273 and ETSI TR 100 028. These standards provide guidance on how to calculate and apply measurement uncertainty whilst providing maximum uncertainties allowance. In all cases due consideration will be given to ILAC-G8:09/2019. Where a result is considered conditional in respect of its proximity to the limit line, the customer would be made aware of situation so that they can make an informed decision on how to proceed.				

Possible Test Case Verdicts	
PASS	Test object does meet the requirements
FAIL	Test object does not meet the requirements
N/T	Required by standard but not tested
N/R	Not required by standard for the test object

2.1 Test Conditions and Results – Limit of transmission time

2.1.1 Information

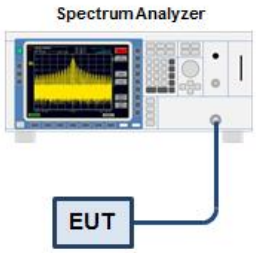
Test Information	
Reference	FCC 15.231 (e)
Measurement Method	non specific
Operator	Ehsan Sohrabi
Date	2024-03-26

2.1.2 Limits

Limits
The duration of each transmission shall not be greater than one second and the silent period between transmissions shall be at least 30 times the duration of the transmission but in no case less than 10 seconds.

2.1.3 Setup

Test Setup



2.1.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	R&S	FSP30	EF00312	2023-08	2024-08

2.1.5 Procedure

Test Procedure

1. EUT set to test mode
2. Center frequency is set to test frequency
3. Span it set to zero span
4. Resolution bandwidth is set large enough to accurately capture transmission bursts
5. Total transmission time is measured

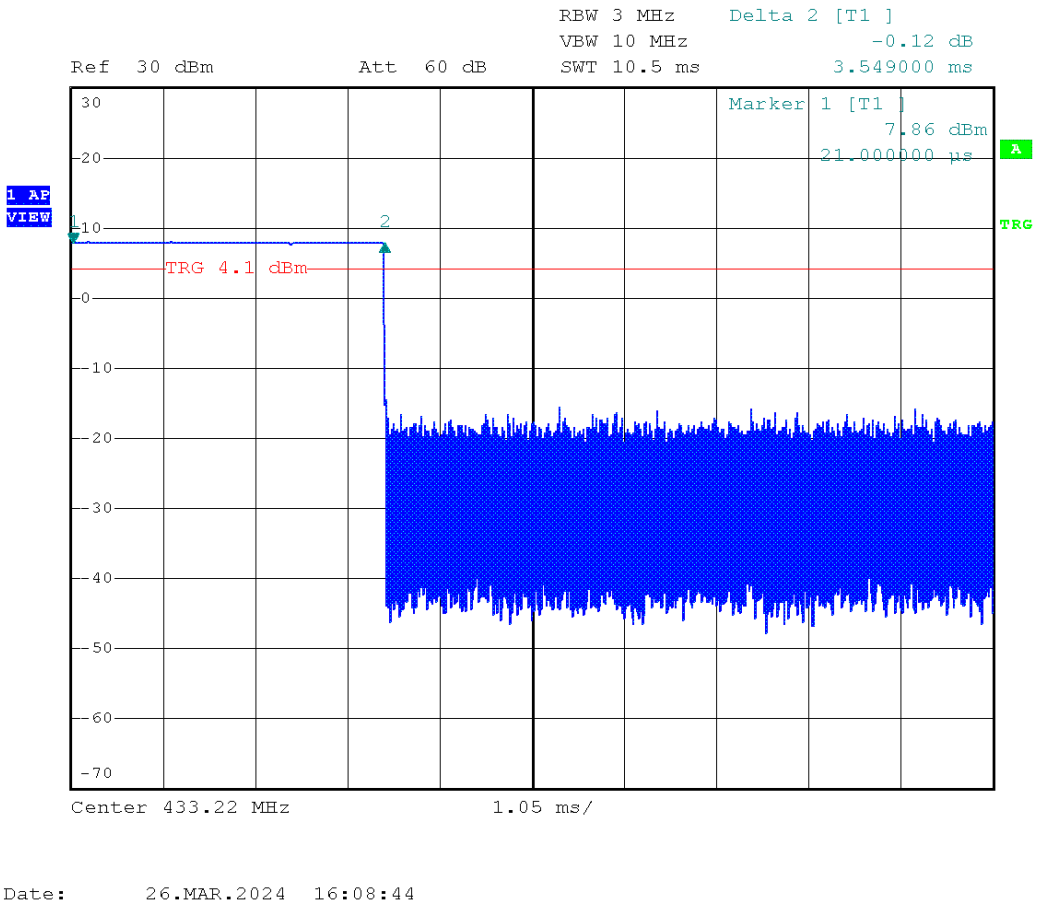
2.1.6 Results

Test Results			
Channel [MHz]	Duration of one burst [s]	Limit [s]	Margin [s]
433.22	0.00354	1	-0.996

Test Results			
Channel [MHz]	Silent period [s]	Limit [s]	Margin [s]
433.22	15.09	10	5.09

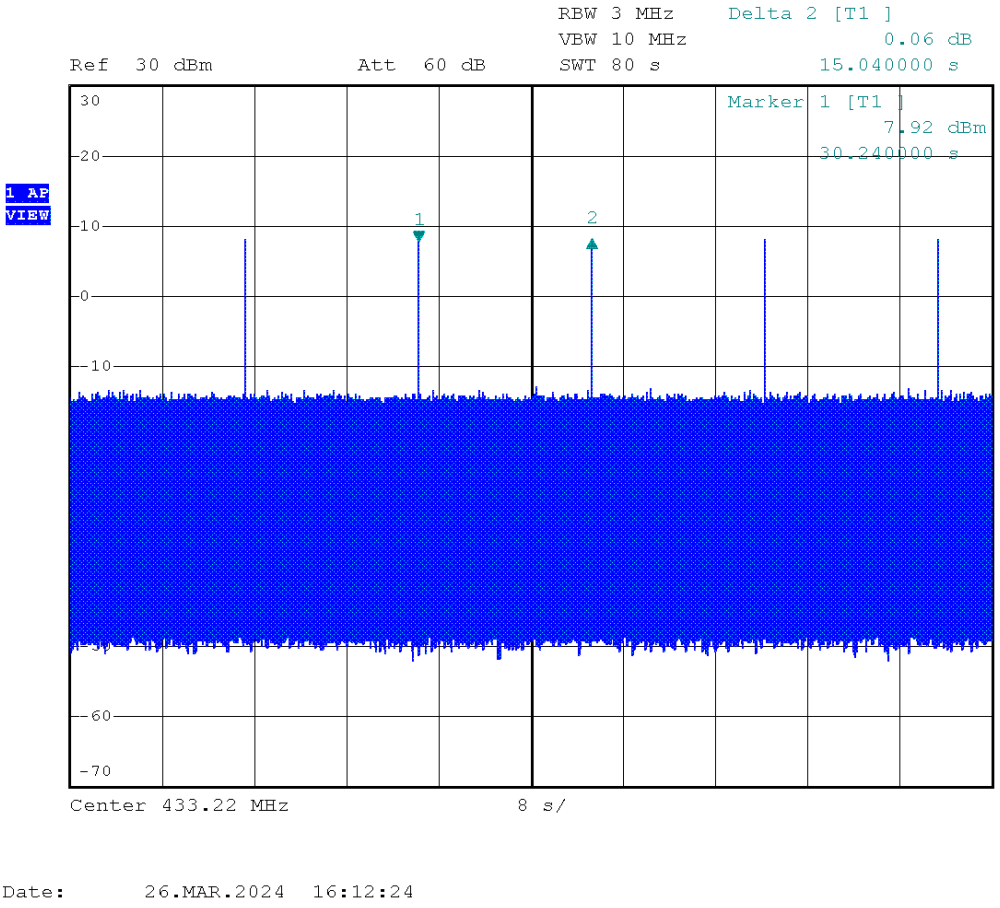
Ton

Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48075
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-03-26
Operating Conditions:	Tnom/Vnom
Mode:	Normal
Note 1:	CH= 433.22, Duration of one burst



Toff

Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48075
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-03-26
Operating Conditions:	Tnom/Vnom
Mode:	Normal
Note 1:	CH= 433.22, Silent period



2.2 Test Conditions and Results – Reduced field strength of fundamental and spurious emissions

2.2.1 Information

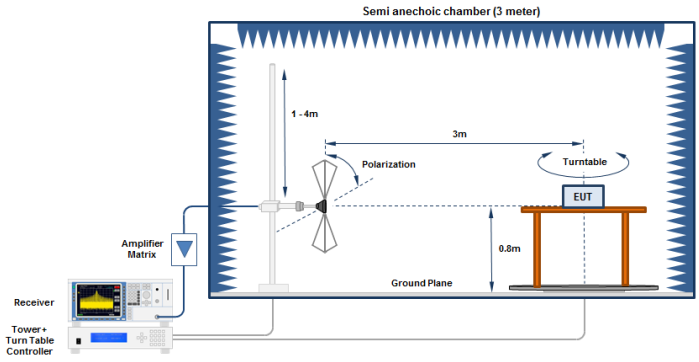
Test Information	
Reference	FCC 15.231(e)
Measurement Uncertainty	± 5.95 dB
Measurement Method	ANSI C63.10 6.4, 6.5, 6.6, 11.12
Operator	Ehsan Sohrabi
Date	2024-05-29 - 2024-06-06

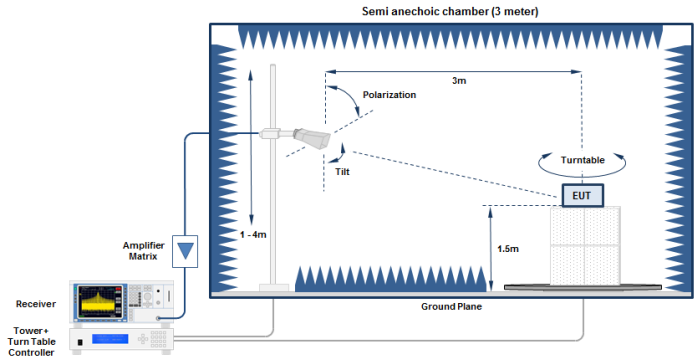
2.2.2 Limits

Limits			
Fundamental Frequency [MHz]	Fundamental Limit [dBµV/m]	Spurious Limit [dBµV/m]	Measurement distance [m]
40.66-40.70	60.00	40.00	3
70-130	53.97	33.97	3
130-174	53.97 – 63.52	33.97 – 43.52	3
174-260	63.52	43.52	3
260-470	63.52 – 73.97	43.52 – 53.97	3
> 470	73.97	53.97	3
Detector = Quasi-Peak or Average			

2.2.3 Setup

Test Setup 30 MHz - 1000 MHz



Test Setup > 1 GHz


2.2.4 Equipment

Test Software			
Description	Manufacturer	Name	Version
EMC Software	DARE Instruments	RadiMation	2020.1.8

Test Equipment 30 - 1000 MHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2022-11	2025-11
EMI Test Receiver	Rohde & Schwarz Vertriebs GmbH	ESU26	EF00887	2024-01	2025-01
Antenna	Schwarzbeck	VULB 9168	EF01824	2022-10	2025-10

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC2	EF01616	2023-12	2024-12
Spectrum Analyzer	Frankonia	FSW 43	EF00896	2023-08	2024-08
Antenna	Schwarzbeck	BBHA 9120B	EF01678	2024-05	2027-05

2.2.5 Procedure

Test Procedure 30 MHz - 1000 MHz
1. EUT is placed on a non conducting support at the center of a turn table 0.8 m above the ground 2. EUT set to test mode 3. The receiver is set to peak detection with max hold 4. The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m 5. All significant emissions are measured again using the corresponding final detector

Test Procedure > 1 GHz
1. EUT is placed on a non conducting support at the center of a turn table 1.5 m above the ground 2. EUT set to test mode 3. The receiver is set to peak detection with max hold 4. The EUT is rotated through 360° and the height of the antenna is varied from 1 m to 4 m 5. All significant emissions are measured again using the corresponding final detector

2.2.6 Results

Test Results - Field strength of fundamental						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
433.22	433.2672	80.80	pk	ver	92.90	-12.10
433.22	433.2672	51.68	avg	ver	72.90	-21.22
433.22	433.2675	74.20	pk	hor	92.90	-18.66
433.22	433.2675	45.08	avg	hor	72.90	-27.82
434.62	434.6693	80.80	pk	ver	92.90	-12.08
434.62	434.6693	51.68	avg	ver	72.90	-21.22
434.62	434.6735	74.30	pk	hor	92.90	-18.63
434.62	434.6735	45.18	avg	hor	72.90	-27.72
Comment 1: We measured the pill in transmit mode to measure peak level and then calculate the average level according to calculation factor (AVDCCF= -29.12 dB). Comment 2: The average level is calculated according to below formula: Average level (dBuV/m) = Peak level (dBuV/m) + AVDCCF						

Test Results - Field strength of spurious emissions						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
433.22	866.53	63.00	pk	hor	72.90	-9.90
433.22	866.53	33.88	avg	hor	52.90	-19.02
433.22	1300	63.38	pk	hor	74.00	-10.62
433.22	1300	34.26	avg	hor	54.00	-19.74
433.22	2166	45.85	pk	hor	74.00	-28.15
433.22	2166	16.73	avg	hor	54.00	-37.27
433.22	3033	59.37	pk	ver	74.00	-14.63
433.22	3033	30.25	avg	ver	54.00	-23.75
433.22	3466	62.42	pk	ver	74.00	-11.58
433.22	3466	33.30	avg	ver	54.00	-20.70
433.22	3900	53.18	pk	ver	74.00	-20.82
433.22	3900	24.06	avg	ver	54.00	-29.94
434.62	869.33	62.80	pk	hor	72.90	-10.10
434.62	869.33	33.68	avg	hor	52.90	-19.22
434.62	1304	61.67	pk	hor	74.00	-12.33
434.62	1304	32.55	avg	hor	54.00	-21.45
434.62	2173	48.44	pk	ver	74.00	-25.56
434.62	2173	19.32	avg	ver	54.00	-34.68
434.62	2608	60.78	pk	ver	74.00	-13.22
434.62	2608	31.66	avg	ver	54.00	-22.34
434.62	3042	61.80	pk	ver	74.00	-12.20
434.62	3042	32.68	avg	ver	54.00	-21.32
434.62	3477	63.52	pk	ver	74.00	-10.48
434.62	3477	34.4	avg	ver	54.00	-19.60
434.62	3911	55.12	pk	ver	74.00	-18.88
434.62	3911	26	avg	ver	54.00	-28.00
Comment 1: We measured the pill in transmit mode to measure peak level and then calculate the average level according to calculation factor (AVDCCF= -29.12 dB). Comment 2: The average level is calculated according to below formula: Average level (dBuV/m) = Peak level (dBuV/m) + AVDCCF						

Test Results - Field strength of spurious emissions						
Channel [MHz]	Emission [MHz]	Level [dBµV/m]	Det.	Pol.	Limit [dBµV/m]	Margin [dB]
433.22	1733	55.73	pk	hor	74.00	-18.27
433.22	1733	29.8	avg	hor	54.00	-24.20
433.22	1733	44.37	pk	ver	74.00	-29.63
433.22	1733	24.66	avg	ver	54.00	-29.34
434.62	1738.5	56.74	pk	hor	74.00	-17.26
434.62	1738.5	30.96	avg	hor	54.00	-23.04
434.62	1738.5	47.49	pk	ver	74.00	-26.51
434.62	1738.5	26.10	avg	ver	54.00	-27.90
Comment 1: For the fourth harmonic we tested the pill in transmit DC mode to measure peak and average level simultaneously.						

2.3 Test Conditions and Results - Emission Bandwidth

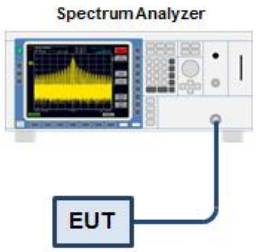
2.3.1 Information

Test Information	
Reference	FCC 15.231(c)
Measurement Method	non specific
Operator	Ehsan Sohrabi
Date	2024-03-26

2.3.2 Limits

Limits
0.25 % of center frequency

2.3.3 Setup

Test Setup


2.3.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum analyzer	R&S	FSP30	EF00312	2023-08	2024-08

2.3.5 Procedure

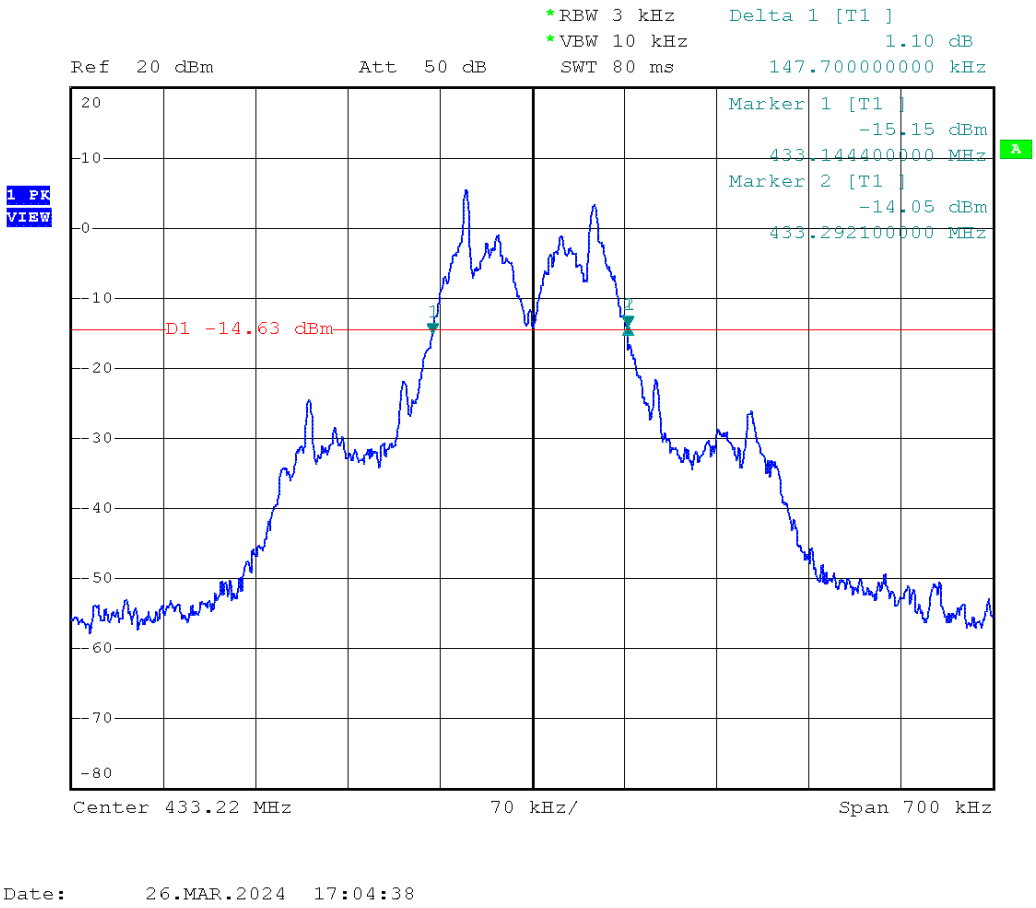
Test Procedure
1. EUT set to test mode (Communication tester is used if needed) 2. Span set to at least twice the emission spectrum 3. Resolution bandwidth set to 1% of span 4. For Industry Canada the occupied bandwidth (99%) is measurement with spectrum analyzer built in measurement function 5. For FCC the 20 dB bandwidth is measurement with spectrum analyzer

2.3.6 Results

Test Results - FCC			
Channel [MHz]	Emission Bandwidth [kHz]	Limit [kHz]	Margin [kHz]
433.22	147.7	1083.05	-935.35
434.62	147.7	1086.55	-938.85

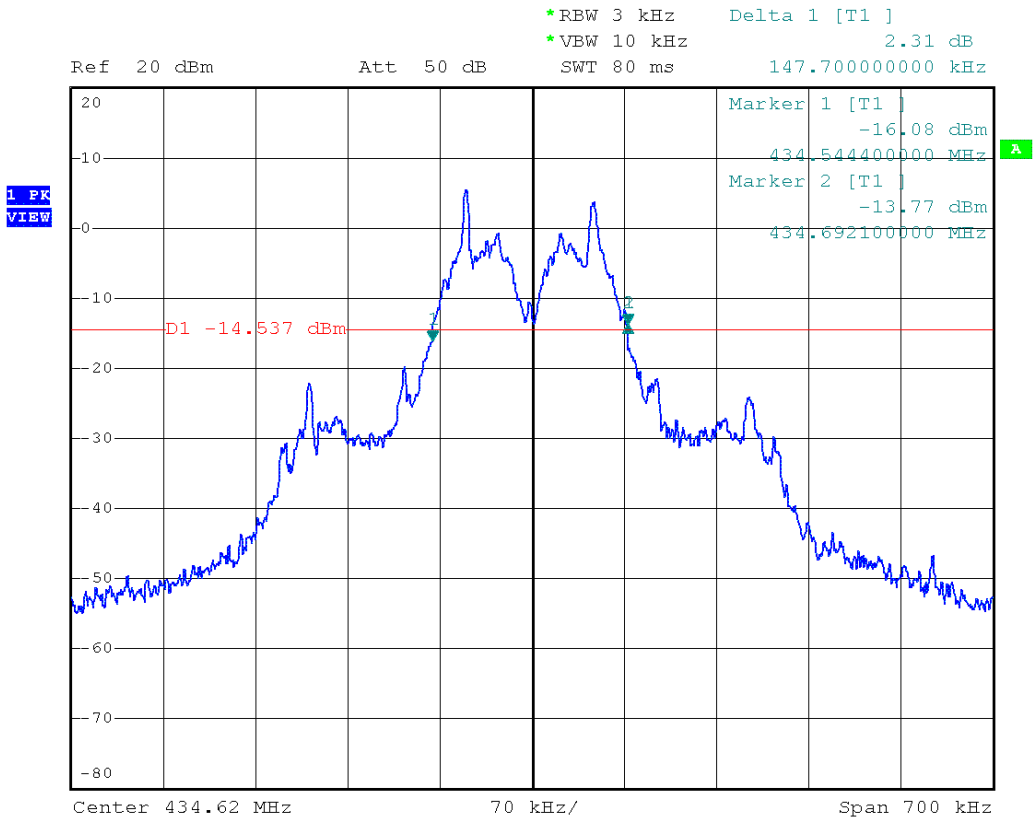
Emission Bandwidth

Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48075
Reference Standards:	FCC 15.231
Reference Method:	ANSI C63.10:2013, Section 6.9.2
Operating Frequency:	433.22 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-03-26
Emission Bandwidth [kHz]:	147.7
Emission Bandwidth Limit [kHz]:	1083.05
Mode:	Transmit



Emission Bandwidth

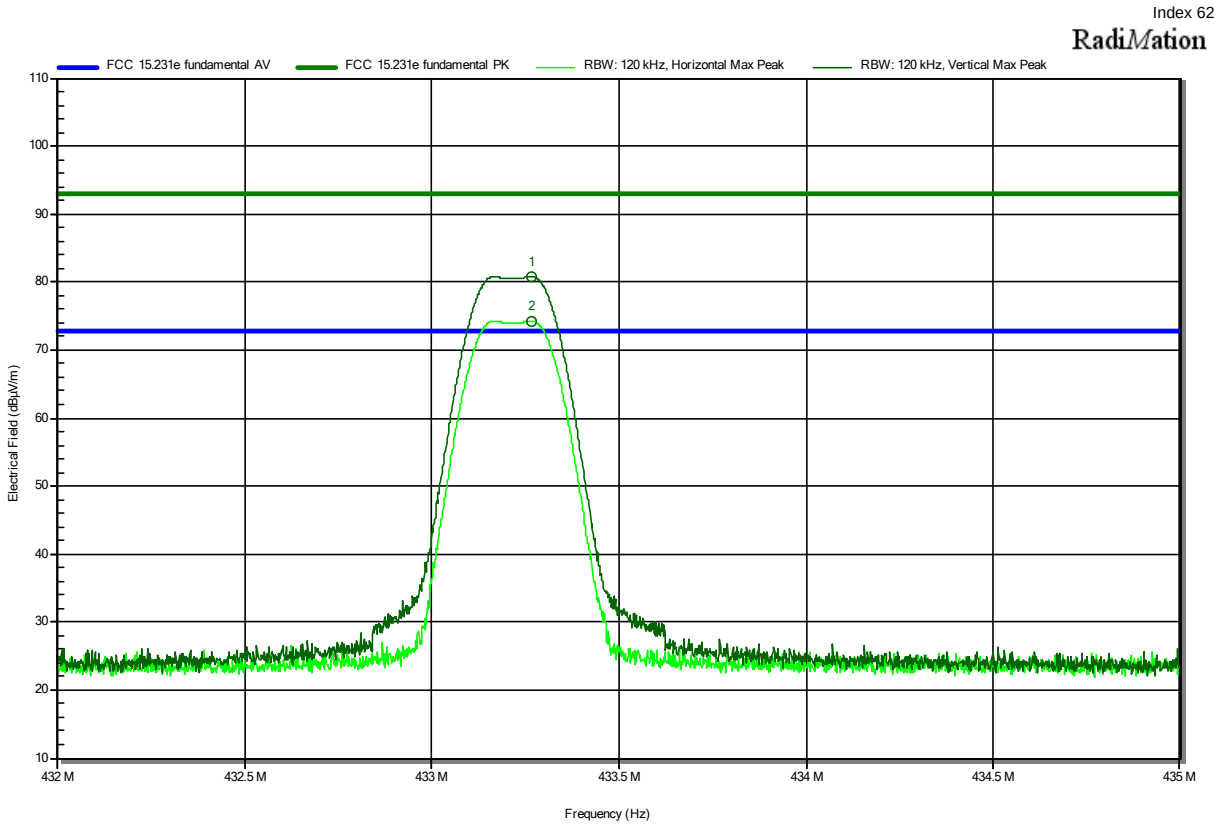
Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48075
Reference Standards:	FCC 15.231
Reference Method:	ANSI C63.10:2013, Section 6.9.2
Operating Frequency:	434.62 MHz
Operating Conditions:	Tnom/Vnom
Operator:	Ehsan Sohrabi
Test Site:	Eurofins Product Service GmbH
Test Date:	2024-03-26
Emission Bandwidth [kHz]:	147.7
Emission Bandwidth Limit [kHz]:	1086.55
Mode:	Transmit



ANNEX A Field strength of fundamental

Radiated Spurious Emissions according to 47 CFR Part 15 Subpart C §15.231

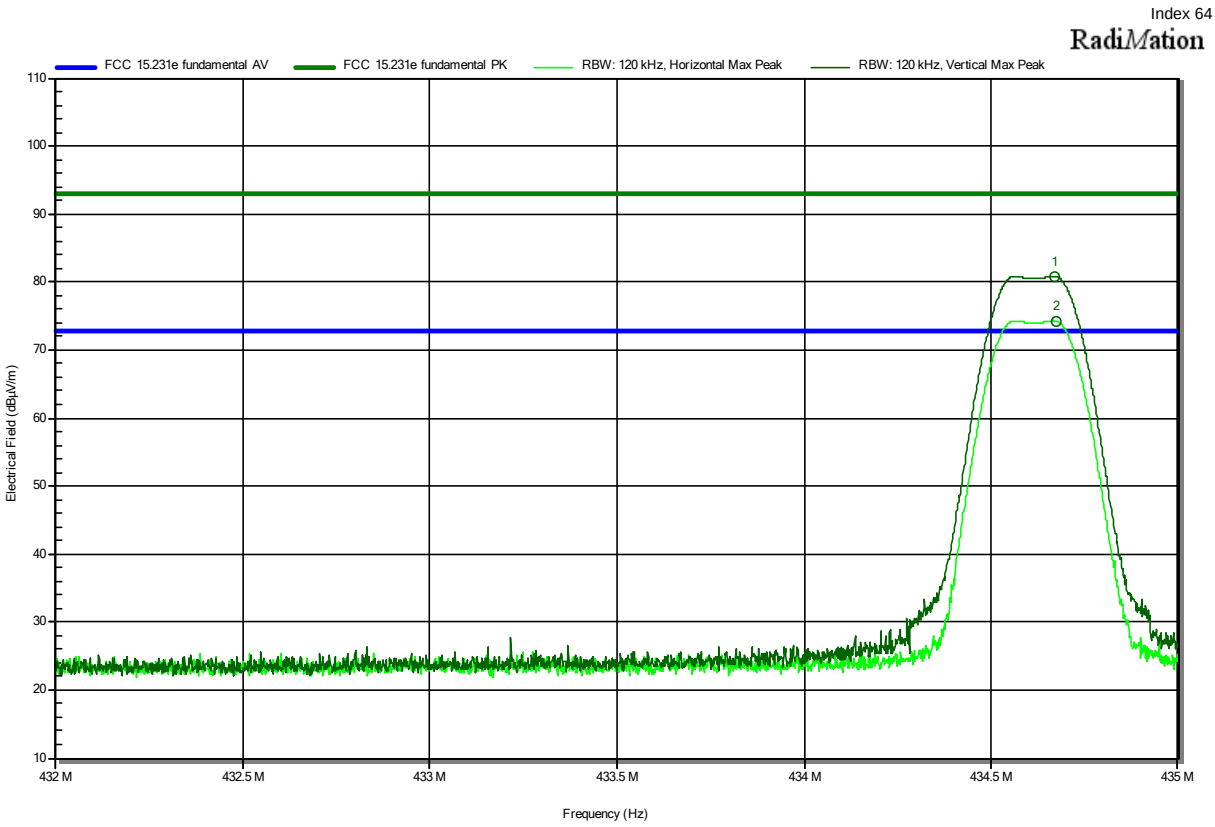
Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48318
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 3.1 VDC
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Tx; GFSK; CH= 433.22 MHz, P023 pill, Transmit
Test Date:	2024-05-29



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
433.2672 MHz	80.8 dBµV/m	92.9 dBµV/m	-12.1 dB	Pass	Vertical
433.2675 MHz	74.2 dBµV/m	92.9 dBµV/m	-18.66 dB	Pass	Horizontal

Radiated Spurious Emissions according to 47 CFR Part 15 Subpart C §15.231

Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48318
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 3.1 VDC
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Tx; GFSK; CH= 434.62 MHz, P023 pill, Transmit
Test Date:	2024-05-29

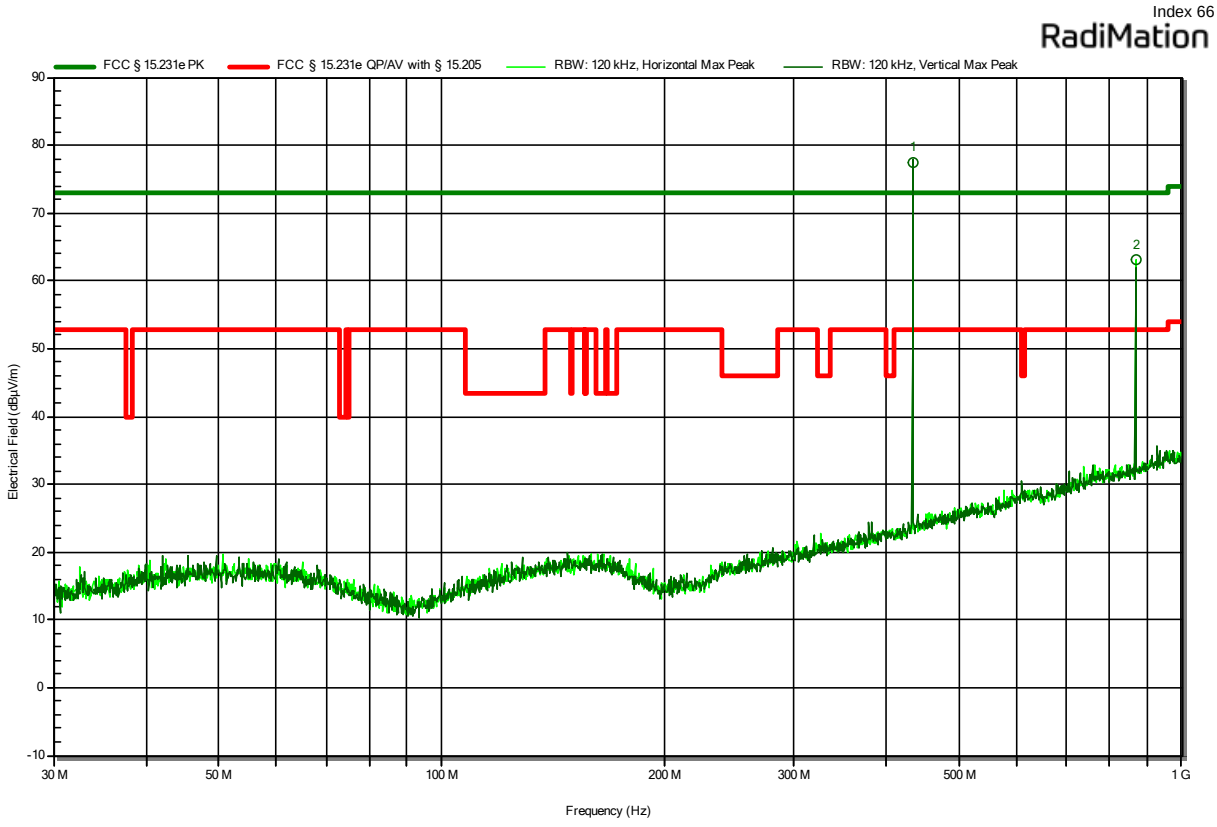


Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
434.6693 MHz	80.8 dBµV/m	92.9 dBµV/m	-12.08 dB	Pass	Vertical
434.6735 MHz	74.3 dBµV/m	92.9 dBµV/m	-18.63 dB	Pass	Horizontal

ANNEX B Transmitter spurious emissions

Radiated Spurious Emissions according to 47 CFR Part 15 Subpart C §15.231

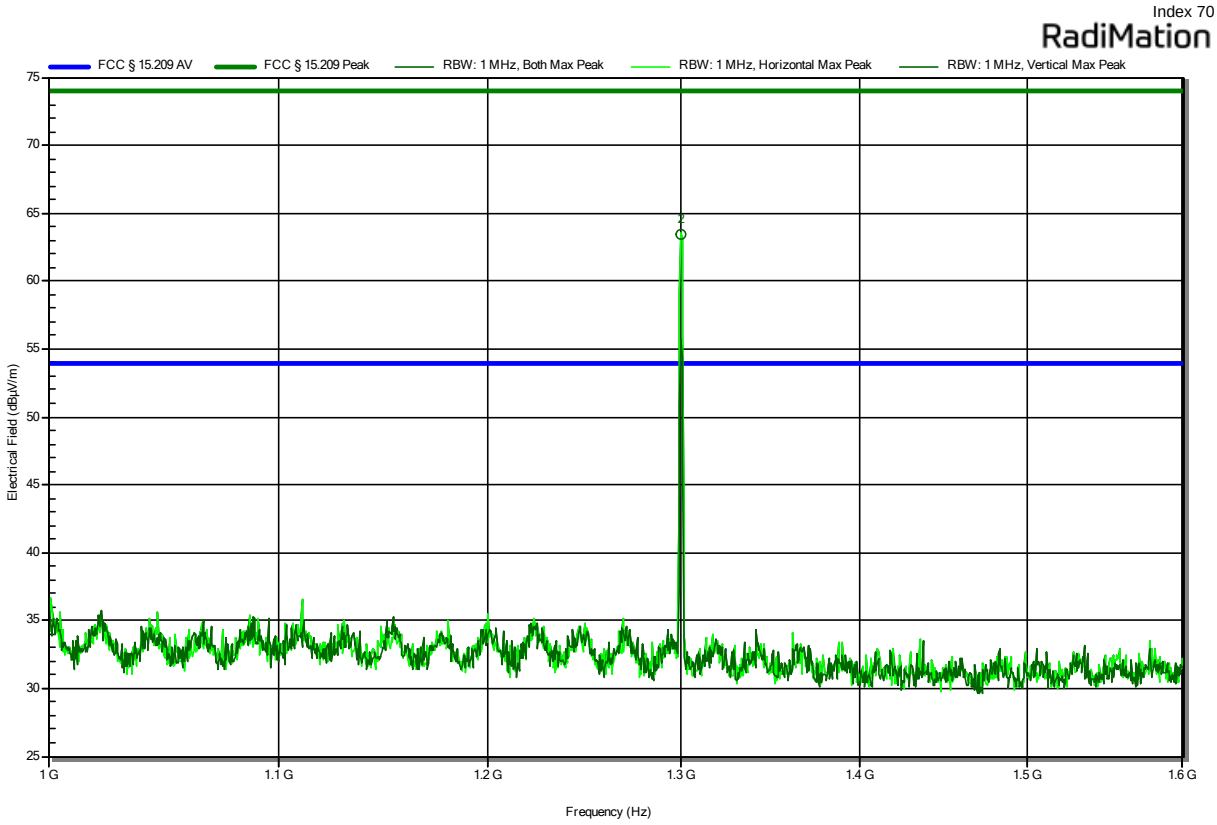
Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48318
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 3.1 VDC
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Tx; GFSK; CH= 433.22 MHz, P023 pill, Transmit
Test Date:	2024-05-29



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
433.229 MHz	77.5 dBµV/m	72.9 dBµV/m	4.60 dB	Carrier	Vertical
866.5315 MHz	63 dBµV/m	72.9 dBµV/m	-9.90 dB	Pass	Horizontal

Radiated Spurious Emissions according to 47 CFR Part 15 Subpart C §15.231

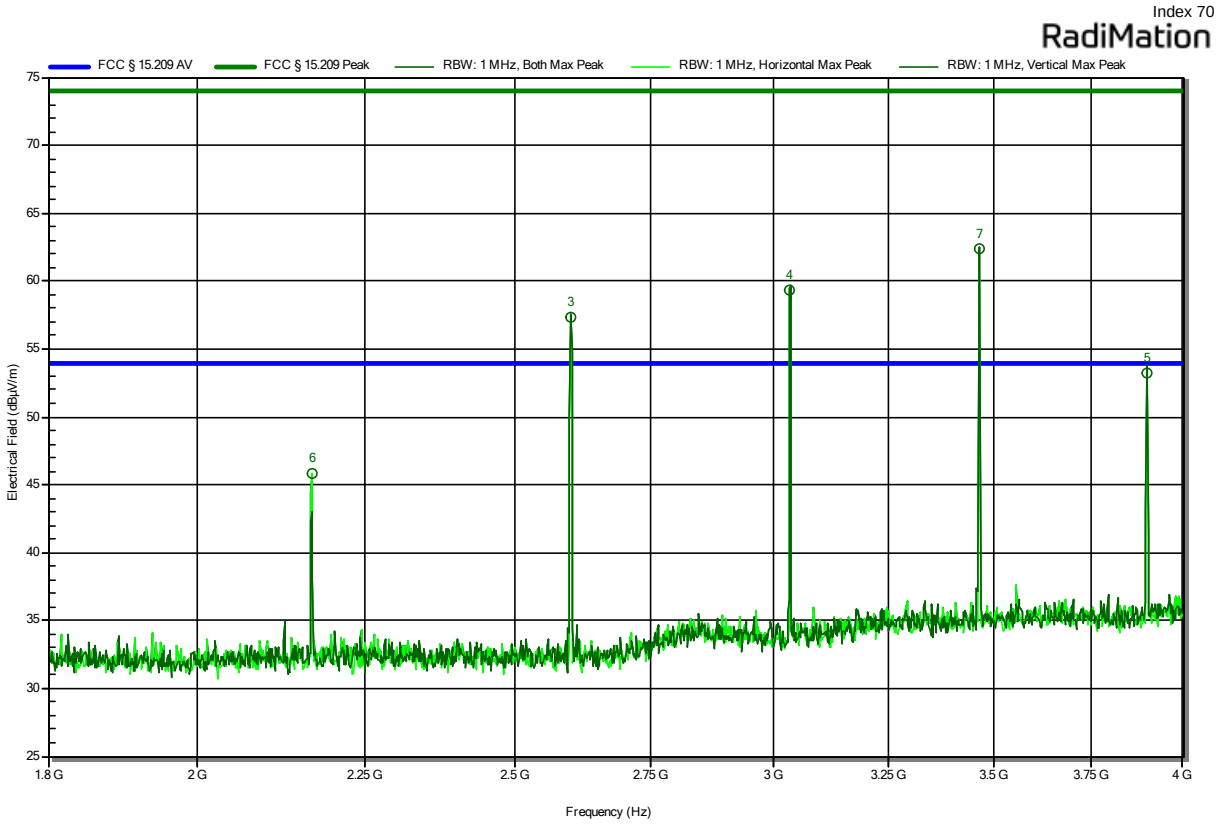
Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48318
Test Site:	Eurofins Product Service GmbH
Operator:	Ehsan Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 3.1 VDC
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; GFSK; CH= 433.22 MHz, P023 pill, Transmit
Test Date:	2024-05-30



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
1.3 GHz	63.38 dBµV/m	74 dBµV/m	-10.62 dB	Pass	Horizontal

Radiated Spurious Emissions according to 47 CFR Part 15 Subpart C §15.231

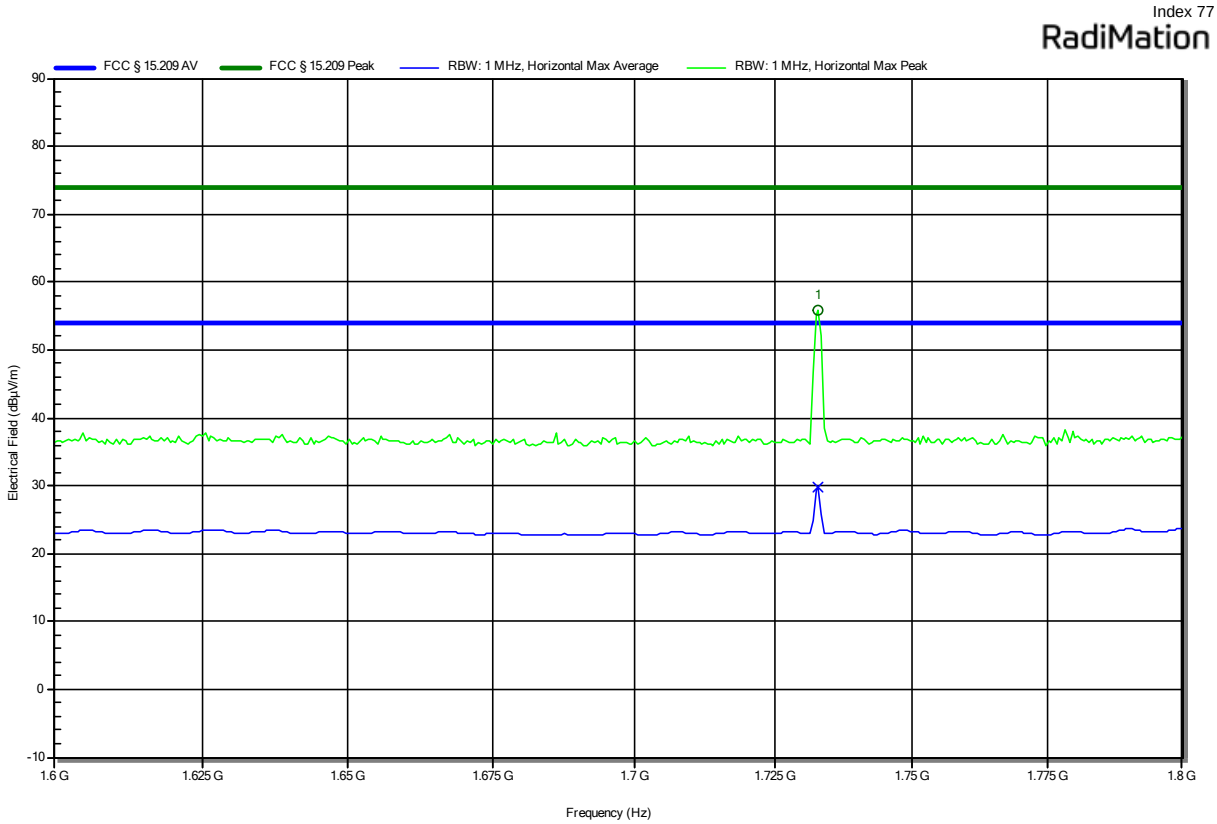
Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48318
Test Site:	Eurofins Product Service GmbH
Operator:	Ehsan Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 3.1 VDC
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; GFSK; CH= 433.22 MHz, P023 pill, Transmit
Test Date:	2024-05-30



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
2.166 GHz	45.85 dBµV/m	74 dBµV/m	-28.15 dB	Pass	Horizontal
2.599 GHz	57.35 dBµV/m	74 dBµV/m	-16.65 dB	Pass	Vertical
3.033 GHz	59.37 dBµV/m	74 dBµV/m	-14.63 dB	Pass	Vertical
3.466 GHz	62.42 dBµV/m	74 dBµV/m	-11.58 dB	Pass	Vertical
3.9 GHz	53.18 dBµV/m	74 dBµV/m	-20.82 dB	Pass	Vertical

Radiated Spurious Emissions according to 47 CFR Part 15 Subpart C §15.231

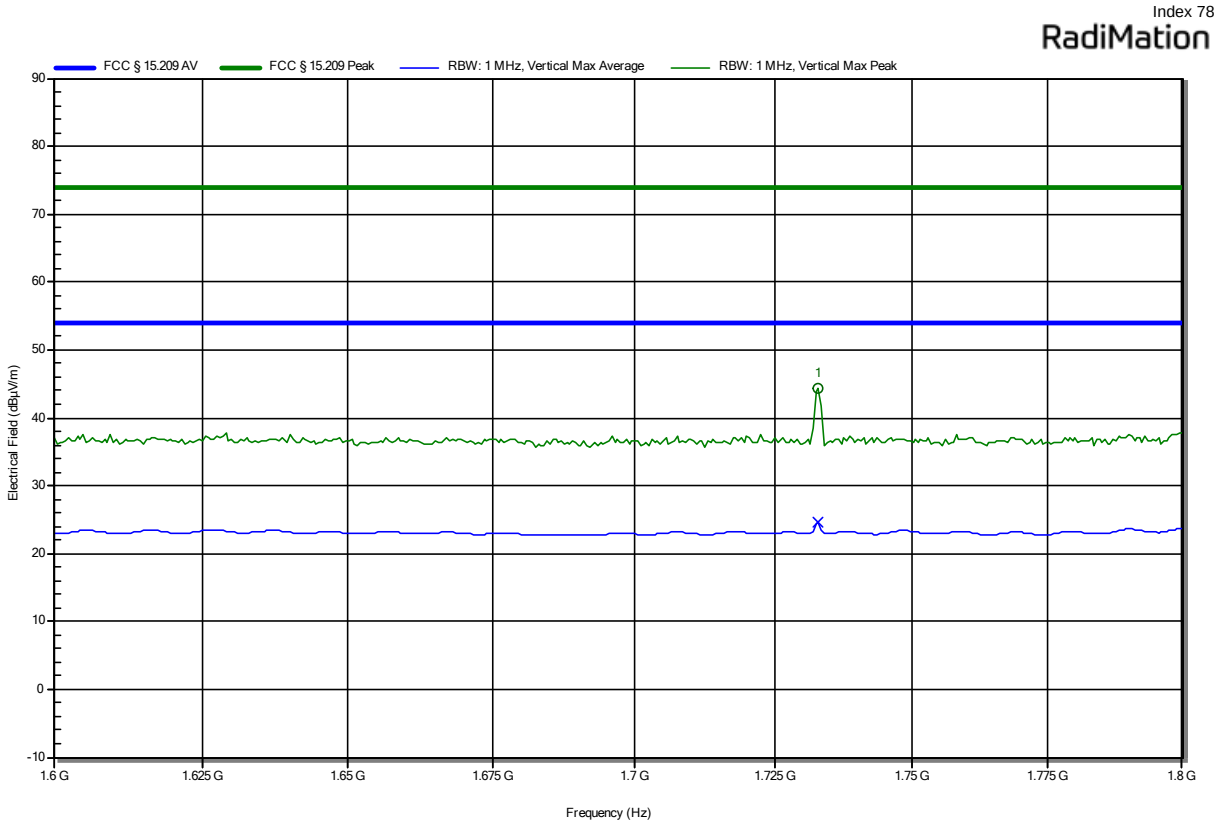
Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48344
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2023.2.6
Test Conditions:	Tnom: 22 °Celsius, Vnom: 3.1 VDC
Antenna:	Schwarzbeck BBHA 9120D
Measurement distance:	3 m
Mode:	Tx; GFSK; CH= 433.22 MHz, P023 pill, Transmit DC
Test Date:	2024-06-06
Note:	Antenna Horizontal, 4th Harmonic



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
1733 MHz	55.73 dBµV/m	74 dBµV/m	-18.27 dB	Pass	Horizontal

Radiated Spurious Emissions according to 47 CFR Part 15 Subpart C §15.231

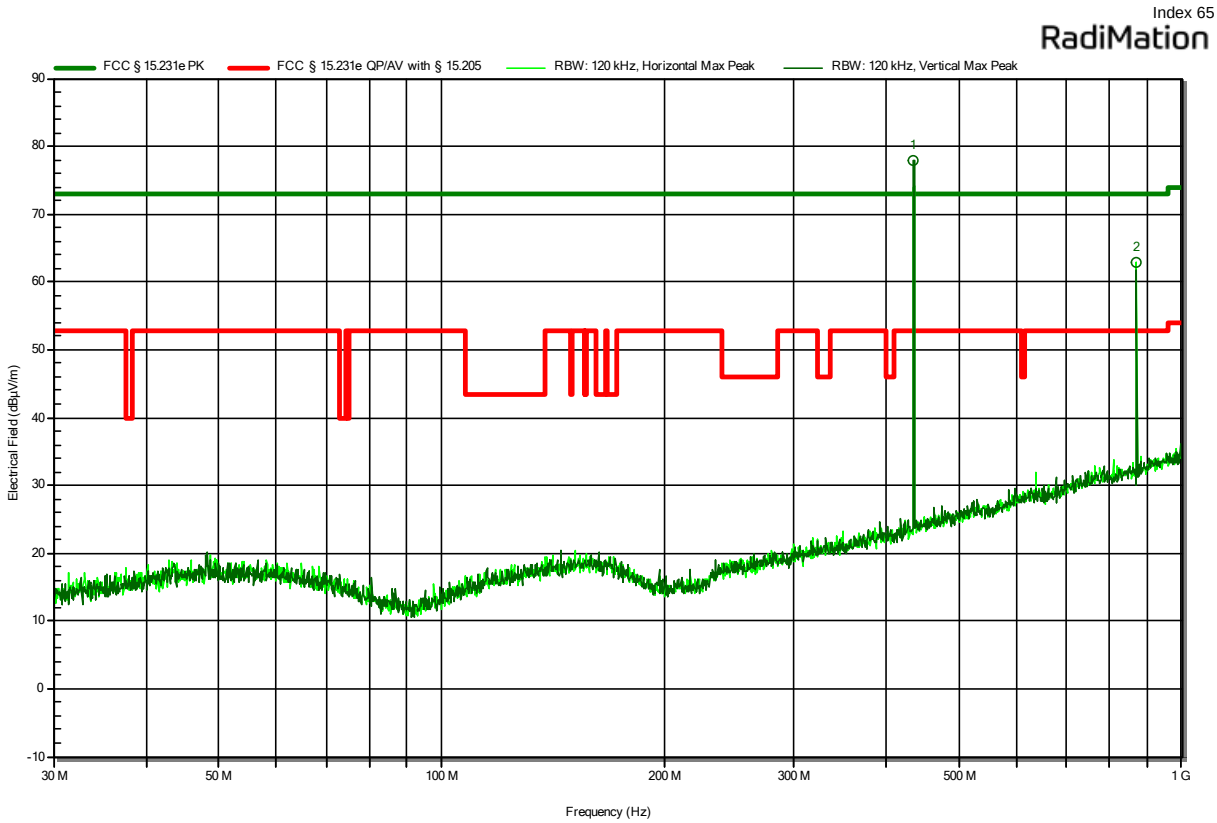
Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48344
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2023.2.6
Test Conditions:	Tnom: 22 °Celsius, Vnom: 3.1 VDC
Antenna:	Schwarzbeck BBHA 9120D
Measurement distance:	3 m
Mode:	Tx; GFSK; CH= 433.22 MHz, P023 pill, Transmit DC
Test Date:	2024-06-06
Note:	Antenna Vertical, 4th Harmonic



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
1733 MHz	44.37 dBµV/m	74 dBµV/m	-29.63 dB	Pass	Vertical

Radiated Spurious Emissions according to 47 CFR Part 15 Subpart C §15.231

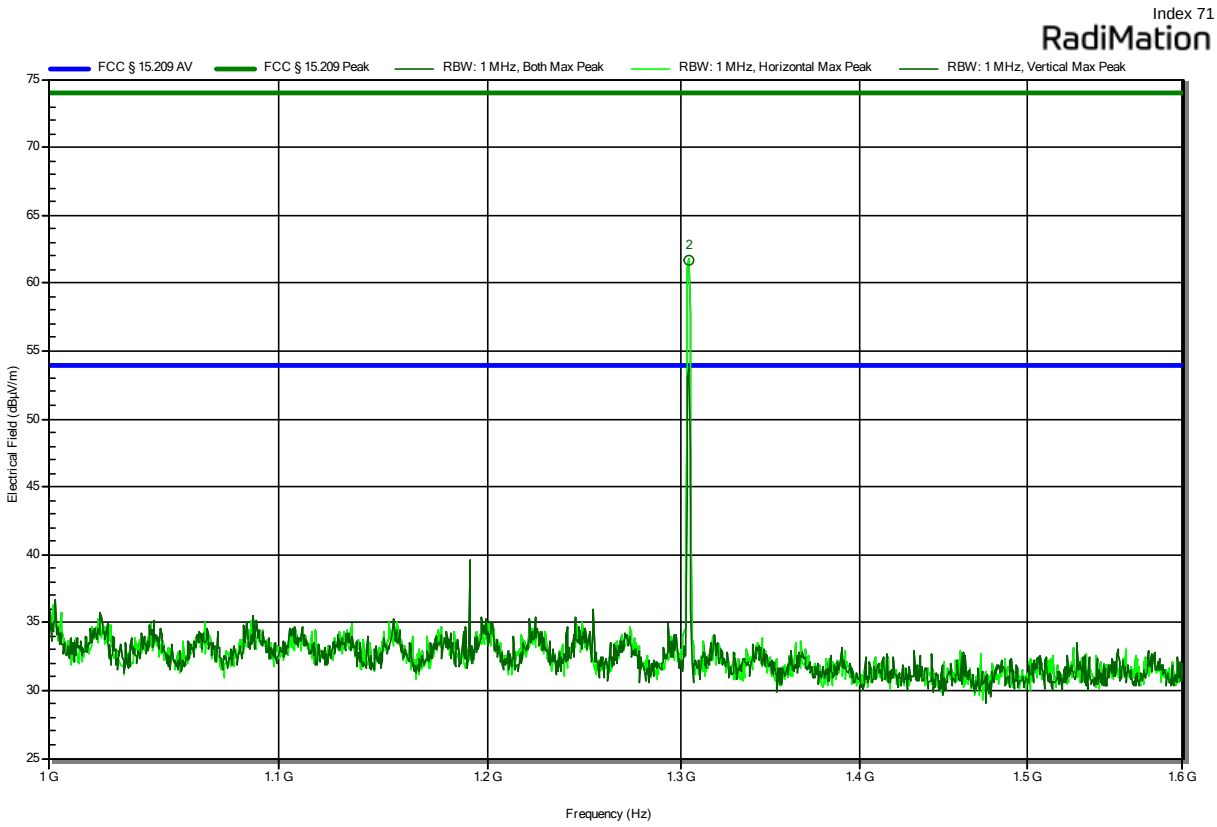
Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48318
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 3.1 VDC
Antenna:	Schwarzbeck VULB 9168
Measurement distance:	3 m
Mode:	Tx; GFSK; CH= 434.62 MHz, P023 pill, Transmit
Test Date:	2024-05-29



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
434.6193 MHz	77.9 dBµV/m	72.9 dBµV/m	5.0 dB	Carrier	Vertical
869.3347 MHz	62.8 dBµV/m	72.9 dBµV/m	-10.1 dB	Pass	Horizontal

Radiated Spurious Emissions according to 47 CFR Part 15 Subpart C §15.231

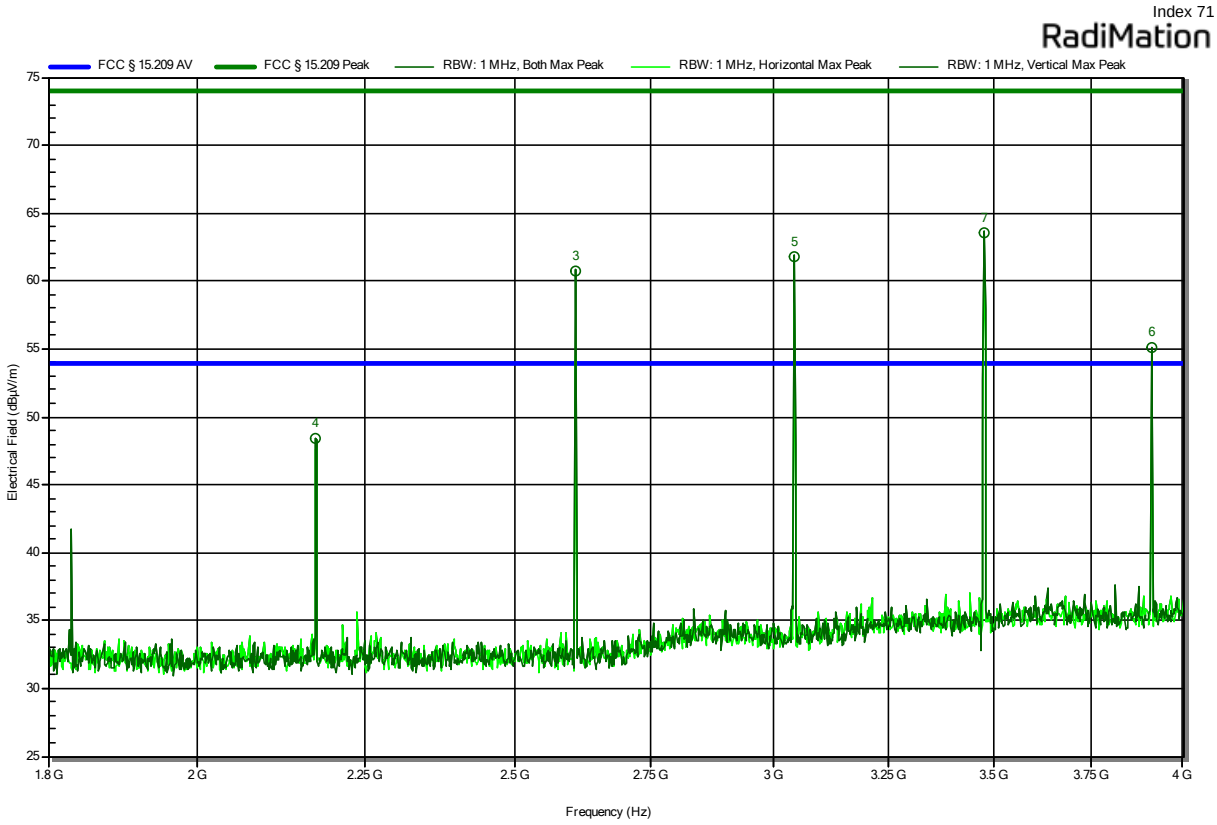
Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48318
Test Site:	Eurofins Product Service GmbH
Operator:	Ehsan Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 3.1 VDC
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; GFSK; CH= 434.62 MHz, P023 pill, Transmit
Test Date:	2024-05-30



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
1.304 GHz	61.67 dBµV/m	74 dBµV/m	-12.33 dB	Pass	Horizontal

Radiated Spurious Emissions according to 47 CFR Part 15 Subpart C §15.231

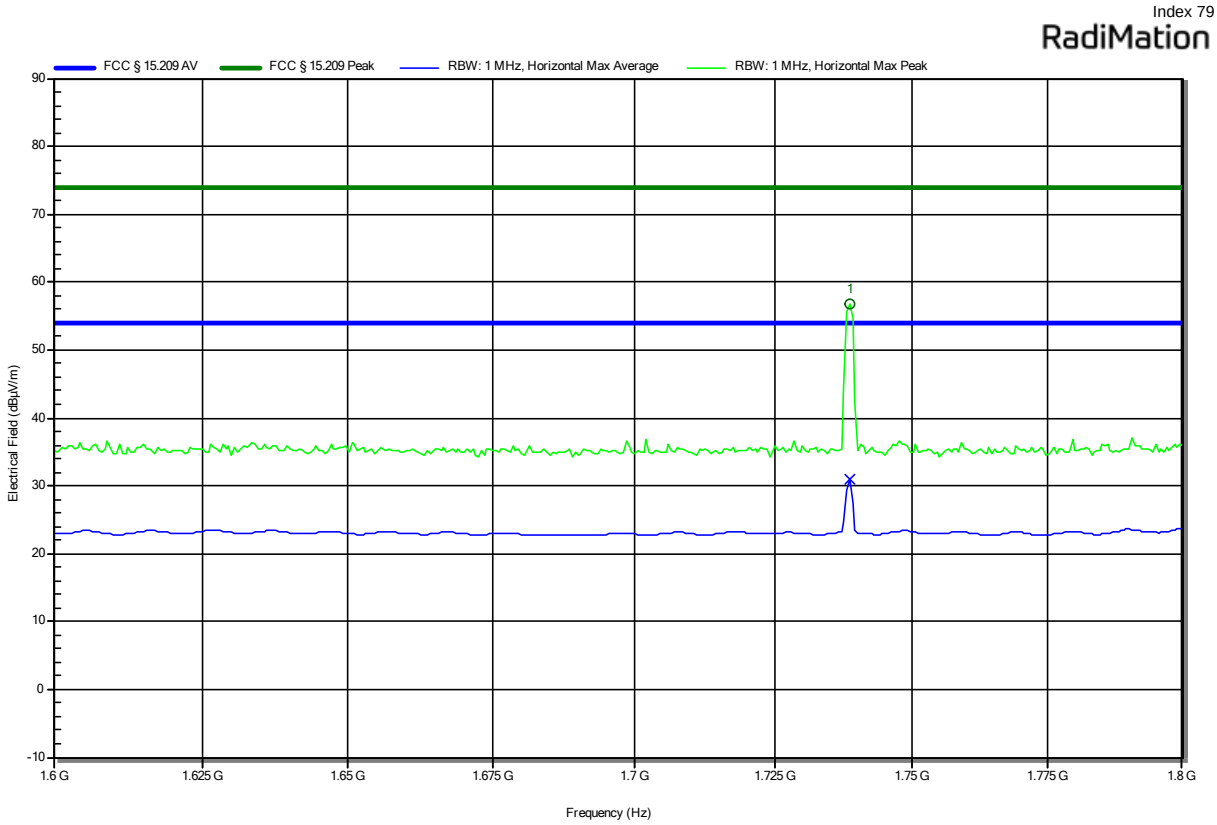
Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48318
Test Site:	Eurofins Product Service GmbH
Operator:	Ehsan Sohrabi
Measurement software:	RadiMation, version 2020.1.8
Test Conditions:	Tnom: 22 °Celsius, Vnom: 3.1 VDC
Antenna:	Schwarzbeck BBHA 9120B
Measurement distance:	3 m
Mode:	Tx; GFSK; CH= 434.62 MHz, P023 pill, Transmit
Test Date:	2024-05-30



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
2.173 GHz	48.44 dBµV/m	74 dBµV/m	-25.56 dB	Pass	Vertical
2.608 GHz	60.78 dBµV/m	74 dBµV/m	-13.22 dB	Pass	Vertical
3.042 GHz	61.8 dBµV/m	74 dBµV/m	-12.2 dB	Pass	Vertical
3.477 GHz	63.52 dBµV/m	74 dBµV/m	-10.48 dB	Pass	Vertical
3.911 GHz	55.12 dBµV/m	74 dBµV/m	-18.88 dB	Pass	Vertical

Radiated Spurious Emissions according to 47 CFR Part 15 Subpart C §15.231

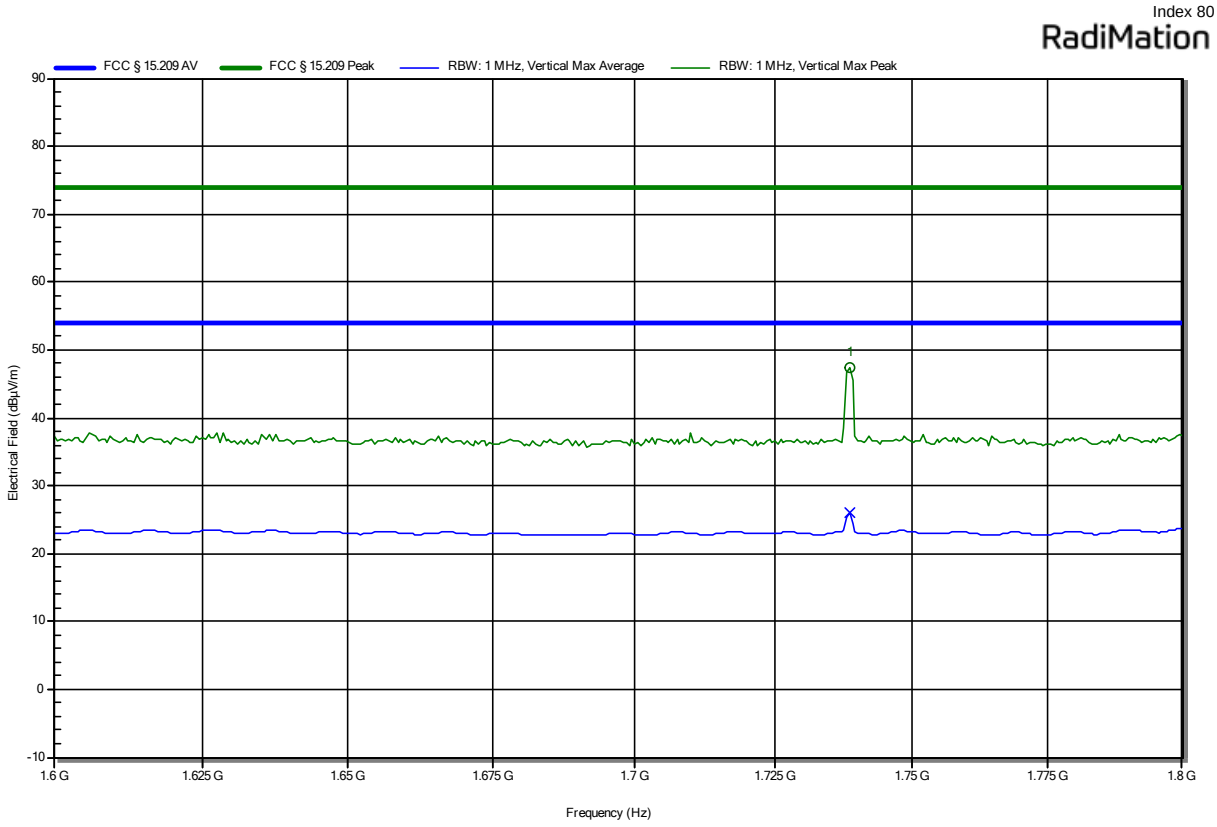
Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48344
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2023.2.6
Test Conditions:	Tnom: 22 °Celsius, Vnom: 3.1 VDC
Antenna:	Schwarzbeck BBHA 9120D
Measurement distance:	3 m
Mode:	Tx; GFSK; CH= 434.62 MHz, P023 pill, Transmit DC
Test Date:	2024-06-06
Note:	Antenna Horizontal, 4th Harmonic



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
1738.5 MHz	56.74 dBµV/m	74 dBµV/m	-17.26 dB	Pass	Horizontal

Radiated Spurious Emissions according to 47 CFR Part 15 Subpart C §15.231

Project Number:	G0M-2303-1995
Applicant:	BodyCAP
Model Description:	Core Body temperature monitoring equipment
Model:	eCelsius Performance Pill P023-P
Test Sample ID:	48344
Test Site:	Eurofins Product Service GmbH
Operator:	Mr. Sohrabi
Measurement software:	RadiMation, version 2023.2.6
Test Conditions:	Tnom: 22 °Celsius, Vnom: 3.1 VDC
Antenna:	Schwarzbeck BBHA 9120D
Measurement distance:	3 m
Mode:	Tx; GFSK; CH= 434.62 MHz, P023 pill, Transmit DC
Test Date:	2024-06-06
Note:	Antenna Vertical, 4th Harmonic



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
1738.5 MHz	47.49 dBµV/m	74 dBµV/m	-26.51 dB	Pass	Vertical

========== END OF THE TEST REPORT ==========