Test report issued under the responsibility of:
EMITECH LYON LABORATORY
MRA US-EU Designation Number: FR0013
Canadian CAB Identifier: FR0007

This report cancels and replaces the test report N° RCE-EMIESS24A674FIS-02AV0

F.C.C. / IC REPORT

CFR47 FCC Part 15: 2024
ICES-003 / NMB-003 edition 7: 2020
ANSI C63.4: 2014

FCCID: 2BBS9-HBK04

Company ..... :	**Fischer Connectors**
Address..... :	Chemin du Glapin 20 CH-1162 SAINT PREX - SWITZERLAND
Test item description. ..... :	**USB HUB**
Trade Mark. ..... :	Fischer Connectors
Manufacturer..... :	Fischer Connectors
Model/Type reference..... :	KEYSTONE 4
Ratings..... :	5 or 10 - 20Vdc
Testing Laboratory ..... :	**EMITECH LYON LABORATORY**
Address..... :	ZI de Mi-Plaine 7 rue Georges Méliès 69680 CHASSIEU - FRANCE
Report Reference No..... :	**RCE-EMIESS24A674FIS-02Av0**
Test procedure. ..... :	FCC Certification IC Verification process
Diffusion..... :	Gaspard SIESTRUNCK
Applicant's name. ..... :	Fischer Connectors
Date of issue..... :	August 22, 2024
Total number of pages..... :	20
Revision..... :	1
Compiled by..... :	T. DESVIGNE (Tests technician)
Approved by (+ signature). ..... :	T. LEDRESSEUR (Technical Manager)

Duplication of this test report is only permitted for an integral photographic facsimile. It includes the number of pages referenced here above. This document is the result of testing a specimen or a sample of the product submitted. It does not imply an assessment of the conformity of the whole manufactured products of the tested sample.

REPORT INDEX:

REVISION HISTORY:

Revision	Date	Modified pages	Modifications
0	April 11, 2024	/	Creation
1	August 22, 2024	1	Correction of FCCID indicated

1. GENERAL INFORMATIONS

This document submits the results of Electromagnetic Compatibility tests performed on the equipment **USB HUB KEYSTONE 4** (denominated hereafter E.U.T.: equipment under test) according to documents listed in §2 of this test report.

In addition of technical requirements, additional administrative requirements are mandatory in order to fully respect FCC Rules:

User/Integration manual must include required statement.

Special accessories (shielded cable, special connectors…) required to enable compliance must be marketed with the device.

Device must be labelled as required per FCC Rules.

Device sample and/or technical construction file shall be made available upon reasonable request of the Commission.

Failure to comply with any of these requirements may cause forfeiture penalty according to §1.80 of FCC Rules.

▪ See identifying sheet on EUT (appendix 1).

Definition of class from CFR47 FCC Part 15: 2024
Class A digital device. A digital device that is marketed for use in a commercial, industrial or business environment, exclusive of a device which is marketed for use by the general public or is intended to be used in the home.

Class B digital device. A digital device that is marketed for use in a residential environment notwithstanding use in commercial, business and industrial environments. Examples of such devices include, but are not limited to, personal computers, calculators, and similar electronic devices that are marketed for use by the general public.

TESTING PROCEDURE AND TESTING LOCATION:

Testing Location ..... :	**Laboratoire EMITECH LYON**
FCC registration number	FR0013
ICES registration number	FR0007
Address. ..... :	ZI de Mi-Plaine 7 rue Georges Méliès 69680 CHASSIEU FRANCE
Test procedure. ..... :	FCC Certification IC Verification process
Tested by ..... :	T. DESVIGNE
Date of receipt of test item ..... :	N/A
Date of performance of tests ..... :	From March the 19 to 20 to March 2024

APPLICANT'S GENERAL INFORMATIONS:

Company name ..... :	***FISCHER CONNECTORS SA***
Company address. ..... :	Chemin du Glapin 20 CH-1162 SAINT PREX SWITZERLAND
Person present during the tests. ..... :	Mr Tomislav HAJAK, Ms Ameny CHAABANI
Responsible. ..... :	John SPEYRER

GENERAL REMARKS:

The information in italics is declared by the manufacturer and is under his responsibility
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.

"(See Enclosure #)" refers to additional information appended to the report.
"(See appended table)" refers to a table appended to the report.
Throughout this report, the decimal separator is point.

POSSIBLE TEST CASE VERDICTS:

Test case does not apply to the test object.:	N/A
Test case not performed..... :	N/P
Test object does meet the requirement..... :	P (Pass)
Test object does not meet the requirement. ..... :	F (Fail)

DEFINITIONS AND ABBREVIATIONS:

E.U.T.	Equipment Under Test	A.E.	Ancillary Equipment	Pk	Peak detector
RBW	Resolution BandWidth	VBW	Video BandWidth	QP	Quasi-peak detector
OATS	Open Area Test Site	FAR	Full Anechoic Room	Av	Average detector
VP	Vertical Polarization	HP	Horizontal Polarization	RMS	Root Mean Square
RF	Radio Frequency	N.T.R	Nothing To Report	N/C	Not Communicated

2. REFERENCE DOCUMENTS

NORMATIVE REFERENCES:
The testing methods related throughout this report are those listed below. They are applied on the whole test report even though the extensions (version, date and amendment) are not repeated. CFR47 FCC part 15 Edition 2024: Code of federal regulations. Title 47 – Telecommunication. Chapter 1 – Federal communication commission. Part 15 – Radio frequency devices. Subpart B – Unintentional radiators. ANSI C63.4 Edition 2014: Methods of Measurement of radio-noise. Emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz. ICES-003 / NMB-003 edition 7: 2020 and ICES-Gen / NMB-Gen: 2024 Information Technology Equipment (Including Digital Apparatus) — Limits and Methods of Measurement

3. EQUIPMENT TECHNICAL DESCRIPTION

3.1. Test Conditions

Test item description. ..... :	*USB HUB*
Model/Type reference..... :	*KEYSTONE 4*
Trade Mark. ..... :	*Fischer Connectors*
Serial number (S/N)..... :	*1000-1783124-00000001*
Part number (P/N). ..... :	*143056*
Software version..... :	*N/A*
Firmware version. ..... :	*N/A*
Type of sample. ..... :	*Pre-serial*
Function(s)..... :	*Wearable USB 2.0 Hub, System powered by battery or telephone.* *Enables communication between the host (i.e. telephone) and up to 3 devices using USB 2.0 communication.*
Manufacturer name. ..... :	*FISCHER CONNECTORS SA*
Address. ..... :	Chemin du Glapin 20 CH-1162 SAINT PREX SWITZERLAND
General product information..... :	*N/A*

3.2. E.U.T. Marking plate

See certification documents

3.3. E.U.T. General view

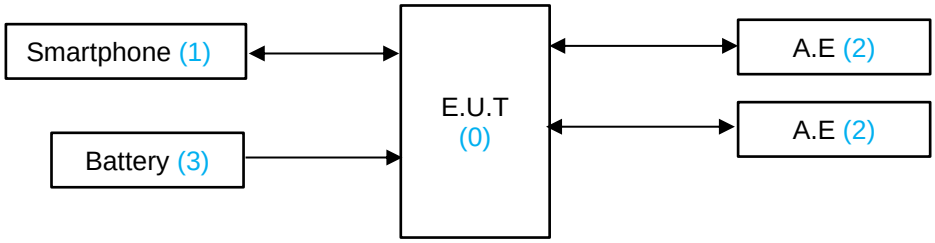
See certification documents

3.4. E.U.T. Mechanical and Electrical Design

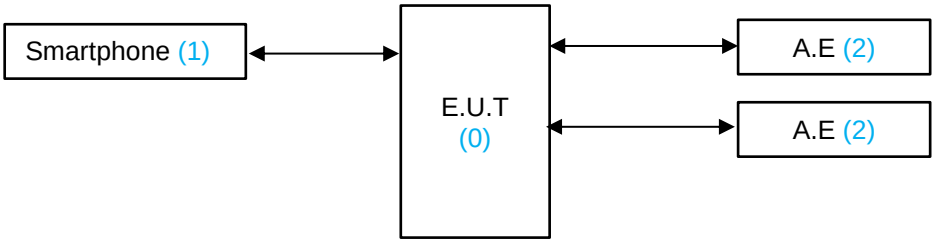
Power supply. ..... :	*5 or 15Vdc*
Power supply range. ..... :	*5 or 10 - 20Vdc*
Power type. ..... :	*Battery*
Power (W). ..... :	*<5W*
Nominal current (A). ..... :	*<1A*
Dimensions (L x W x H) (m). ..... :	*0.270 x 0.038 x 0.017*
Weight (kg). ..... :	*0.12*
Temperature range (°C). ..... :	*-32°C to +55°C*
Ground bounding strap. ..... :	*No*
Comments. ..... :	*N/A*

3.5. E.U.T. Input/Output ports

Supply with battery (15V)



Supply with Smartphone (5V)



PORT	NAME	TYPE	LENGTH	CABLE TYPE	COMMENTS
0	Enclosure	N/E	N/A	Metal	
1	Smartphone link	N/E	N/A	U.S.B	
2	A.E link	N/E	N/A	U.S.B	
3	Battery link	DC	N/A	Shielded	

DC ... : Direct current port
N/E .. : Non Electrical port

3.6. Supporting Equipment Used During Test

Sample subject to the tests was tested with following equipment.

PRODUCT TYPE	MANUFACTURER	MODEL	COMMENTS
Phone	Samsung	/	Provided by the customer
Metal box	/	/	Fischer Connectors
USB loads x 2	/	/	Fischer Connectors
Battery	/		EUT was powered with laboratory power supply

3.7. Auxilliary Equipement (A.E.)

See certification documents

3.8. EMC Environment and Performance Criteria

According to manufacturer's declarations :

Electromagnetic environment.	:	*Industrial*
Professional use ?	:	*Yes*
Typical mounting	:	*Transportable equipment*
Internal frequencies	:	*2.17 MHz, 3.1 MHz, 6 MHz, 24 MHz, 250 MHz*
Higher frequency	:	*250 MHz*
Configurations	:	*- E.U.T. supplied by phone* *- E.U.T. supplied by battery*
Comments	:	*N/A*

a) EUT OPERATION MODES:

MODE #	DESCRIPTION
1	*Supplied by 15V (battery)*
2	*Supplied by 5V (Phone)*

4. E.U.T. REQUIREMENTS FOR FCC RULES

4.1. Subpart A - General

This part sets out the regulations under which an intentional, unintentional, or incidental radiator may be operated without an individual license. It also contains the technical specifications, administrative requirements and other conditions relating to the marketing of part 15 devices.

The user notice **"USB HUB KEYSTONE 4"**, shall include the following informations:

a) LABELLING REQUIREMENTS (§15.19):

Equipment authorization: Supplier's Declaration of Conformity (SDoC) or Certification

List of different **type of devices** and associated "*statement on product"*:

§15.19(a)(3) - All other devices:

"This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

§15.19(a)(5) - When the device is so small:

The statement of §15.19(a) shall be placed in the user manual and must also either be placed on the device packaging or on a removable label attached to the device.

Compliance information (§2.1077):

The identification, by name, address and telephone number or internet contact information, of the responsible party, as defined in § 2.909 of the standard. The responsible party for Supplier's Declaration of Conformity must be located within the United States.

Identification (§2.1074):

(a) Devices subject only to Supplier's Declaration of Conformity shall be uniquely identified by the party responsible for marketing or importing the equipment within the United States.

(b) Devices subject to authorization under Supplier's Declaration of Conformity may be labelled with the following logo on a voluntary basis as a visual indication that the product complies with the applicable FCC requirements.

(image size: 6.7 x 2.8" ;3.5 x 1.4" ;1.6 x .7")

The label shall be located in a conspicuous location on the device.
The label shall not be a stick-on, paper label. The label on these products shall be permanently affixed to the product and shall be readily visible (font of at least 4-point or larger) to the purchaser at the time of purchase.

b) INFORMATION TO USER (§15.21):

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that:

"The party responsible is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment"

4.2. Subpart B - Unintentional Radiators

In addition to Subpart A, the user notice **"USB HUB KEYSTONE 4"**, shall include the following informations:

a) INFORMATION TO USER (§15.105):
Equipment authorization: Supplier's Declaration of Conformity (SDoC) or Certification **§15.105(a) - For a Class A digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:** *"NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense."*

4.3. ISED

Labelling Requirements
The label shall contain:
CAN ICES-3 (A)/NMB-3(A)

Information to user required by RSS-Gen standard:

User Notice
User manuals for licence-exempt radio apparatus shall contain the following text, or an equivalent notice, that shall be displayed in a conspicuous location, either in the user manual or on the device, or both:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le manuel d'utilisation des appareils radio exempts de licence doit contenir l'énoncé qui suit, ou l'équivalent, à un endroit bien en vue dans le manuel d'utilisation ou sur l'appareil, ou encore aux deux endroits :

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.
L'exploitation est autorisée aux deux conditions suivantes :
1) L'appareil ne doit pas produire de brouillage;
2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The user manual shall contain each statement ask by the OEM integrator manual of the module.

5. RESULT SUMMARY

5.1. CFR47 FCC Part 15: 2024

TEST DESIGNATION	SEVERITY	VERDICT	BASIC STANDARDS / COMMENTS
Equipment under test Power Supply:			
Auxiliary Equipment Power Supply :			15 Vdc
Subpart A - general			
15.19 labelling requirements		Done	Note 1
15.21 Information to user		N/P	Note 2
15.23 Home-built devices		N/A	
15.25 Kits		N/A	
15.27 Special Accessories		N/P	Note 3
15.29 Inspection by the Commission		N/P	Note 4
15.31 Measurement standards		N/P	Note 5
15.32 Test procedure for CPU boards and computer power supplies		N/A	
15.33 Frequency range of radiated measurements		Done	Note 6, Noticed in the § 7.2
15.35 Measurement detector functions and bandwidths		Done	Noticed in the § 7.2
15.37 Transition provisions for compliance with the rules		Done	Noticed in the § 7.2
Subpart B – Unintentional radiators			
15.101 Equipment authorization Supplier's Declaration of Conformity (SDoC) Certification		N/A	Certification
15.102 CPU boards and power supplies used in personal computers		N/A	
15.103 Exempted device		N/A	
15.105 Information to the user		Done	Note 7
15.107 (b) Conducted voltage emission (measurement: 150kHz – 30MHz)		N/A	Battery supplied
15.109 (b) Radiated Electric field emission (measurement: 30MHz – 2GHz)	Class A	Pass	Measurement up to 2GHz Nothing to report Measuring distance: 3 meters
15.111 Antenna power conduction limits for receivers		N/A	
15.113 Power line carrier systems		N/A	
15.115 TV interface devices, including cable system terminal devices		N/A	
15.117 TV broadcast receivers		N/A	
15.118 Cable ready consumer electronics equipment		N/A	
15.120 Program blocking technology requirements for TV receivers		N/A	
15.121 Scanning receivers and frequency converters used with scanning receivers		N/A	
15.123 Labelling of digital cable ready products		N/A	

Note 1: Device must be labelled as required.
Note 2: User/Integration manual must include required statement.
Note 3: Special accessories (shielded cable, special connectors…) required to enable compliance must be marketed with the device.
Note 4: Device sample and/or technical construction file shall be made available upon reasonable request of the Commission.
Note 5: See ANSI C63.4-2014.
Note 6: Upper frequency depending on the highest frequency generated or used in the device (including certified RF Modular if applicable).
Note 7: User/Integration manual must include required statement.

- **In emission:**

Sample subject to the test complies with technical prescriptions of the following standards according to limits specified in this test report:

- CFR47 FCC part 15 Edition 2024
- ICES-003 / NMB-003 edition 7: 2020

Measuring distance of 3 meters: quote from CFR47 FCC part 15 Edition 2024, §15.31.f.1

"At frequencies at or above 30 MHz, measurements may be performed at a distance other than what is specified provided: measurements are not made in the near field except where it can be shown that near field measurements are appropriate due to the characteristics of the device; and it can be demonstrated that the signal levels needed to be measured at the distance employed can be detected by the measurement equipment. Measurements shall not be performed at a distance greater than 30 meters unless it can be further demonstrated that measurements at a distance of 30 meters or less are impractical. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse linear-distance for field strength measurements; inverse-linear-distance-squared for power density measurements)."

Nota Bene: To declare, or not, the compliance with the specifications, it was not explicitly taken into account of uncertainty associated with the results with the exception of emission tests based on CISPR standards.

5.2. ICES-003 / NMB-003 edition 7: 2020

TEST DESIGNATION	SEVERITY	VERDICT	BASIC STANDARDS / COMMENTS
Equipment under test Power Supply: Auxiliary Equipment Power Supply :			 15 Vdc
Test procedure ICES-003 § 2.3 Normative reference		Done	ANSI C63.4
Test procedure ANSI 63.4 §7 AC power-line conducted emission measurements §8 Radiated emission measurements	 Class A	 N/A Pass	 Battery supplied Verification report Class A Nothing to report

TESTS PERFORMED	MODIFICATION
Part 15.109 (b) Radiated emission: Electric field	None

6. MEASUREMENT UNCERTAINTY

Uncertainties values presented below are required by standards:

PARAMETER	MAXIMAL EMITECH UNCERTAINTY	STANDARD UNCERTAINTY
Radiated emission (SAC) 30MHz – 1GHz (FAR) 1GHz - 2GHz	 ± 5.1 - 5.2 dB ± 5.0 / 5.2 dB	 ± 5.3 - 6.3 dB ± 5.2 dB

For the calculation of expanded uncertainty, the confidence interval is 95 % (k=2).

SAC: Semi Anechoic Chamber
FAR: Fully Anechoic Room

7. TEST CONDITIONS AND RESULTS

7.1. Radiated Electric Field emission (measurement 30 MHz – 6 GHz)

Reference standard:	CFR47 FCC part 15 Edition 2024 ICES-003 / NMB-003 Edition 7 : 2020
Test method:	Part 15.109(b) & ANSI C63.4 : 2014

General test setup:

EUT is set on an insulating support at 80/150cm above the ground reference plane.

First (peak) measurements were performed at an antenna to EUT separation distance of 3-meter. The EUT was rotated 360° about its azimuth with the receive antenna located in horizontal and vertical polarities and, for SAC method, at various heights.

Final measurements (quasi-peak) were then performed in a reference test site that complies to CISPR 16-1-4. The EUT was rotated 360° about its azimuth and, for SAC method, adjusting the receive antenna height from 1 to 4 m.

All frequencies were investigated in both horizontal and vertical antenna polarization, where applicable.

Following measurements are performed all around the E.U.T. (0° → 360°)

TESTED CONFIGURATION	PARAMETER	SEVERITY	RESULT TAB.	VERDICT
Operating mode #1	30MHz-1GHz	Class A	EMI4567	**PASS**
Operating mode #2	30MHz-1GHz	Class A	EMI4566	**PASS**
Operating mode #1	1GHz-6GHz	Class A	EMI4496	**PASS**
Operating mode #2	1GHz-6GHz	Class A	EMI4495	**PASS**

LABORATORY PARAMETERS:	REQUIRED PRIOR TO THE TEST	DURING THE TEST
Ambient Temperature	15 to 35 °C	See Graph
Relative Humidity	30 to 60 %	See Graph
Atmospheric pressure	860 to 1060 hPa	See Graph
TEST METHOD DEVIATION: N/A		
Supplementary information: Fmax = 250 MHz		

TEST EQUIPMENT USED					
CATEGORY	**BRAND**	**TYPE**	**IDENTIFIER**	**CAL. DATE**	**CAL. DUE**
Software	Nexio	BAT EMC	0000		
Antenna	Emco	3146A	5609	14/12/2021	14/02/2025
Antenna	Emco	3104	5645	26/05/2023	26/07/2026
Antenna	Schwarzbeck	BBHA 9120D	6970	16/12/2021	16/02/2025
Cable	/	N-10m	7537	16/11/2023	16/01/2026
Cable	HYTEM	N-10.5m	7655	16/11/2023	16/01/2026
Cable	HYTEM	N-6m	7695	19/07/2023	19/09/2025
High Amplifier	Agilent Technologies	8449B	10262	19/03/2024	19/05/2025
Cable	H&S	N-3m	15202	26/07/2022	26/09/2024
Cable	H&S	SF104N	15892	19/07/2023	19/09/2025
Cable	H&S	SF106N	15920	22/06/2023	22/08/2025
Cable	H&S	SF106N	15935	31/05/2023	31/07/2025
Low amplifier	RFPA	RF306000-27-LNA+ATT6dB	16188	06/02/2024	06/04/2025
receiver	Rohde & Schwarz	ESIB7	16531	13/03/2024	13/05/2026

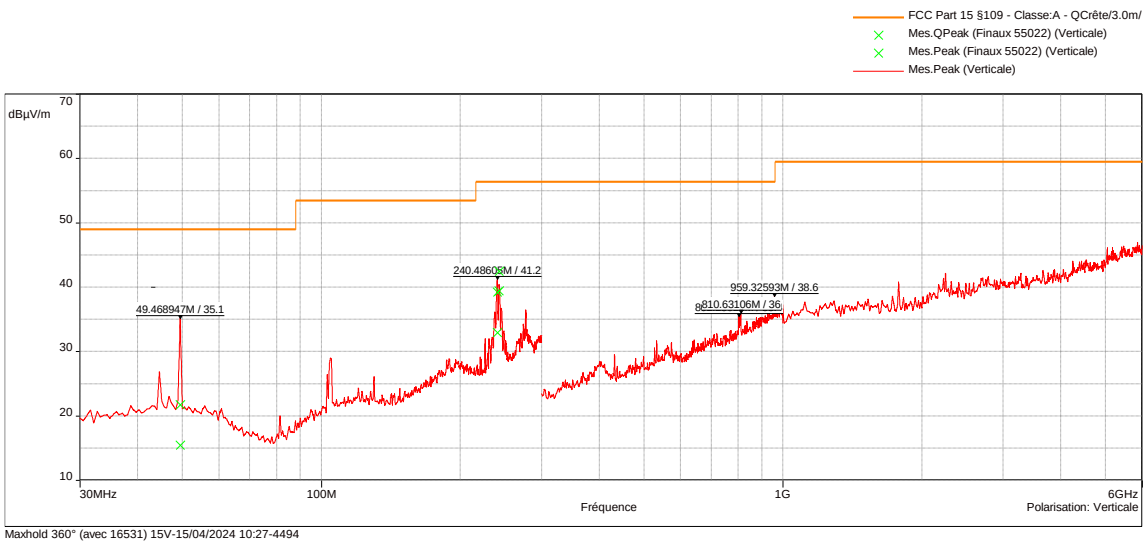
BAT-EMC software version: V3.18.0.27 Blank cells = Permanent validity

TEST SETUP PHOTOS – E.U.T. ON AZIMUTH 0° / FROM 30 MHZ TO 200 MHZ / VP
See certification documents

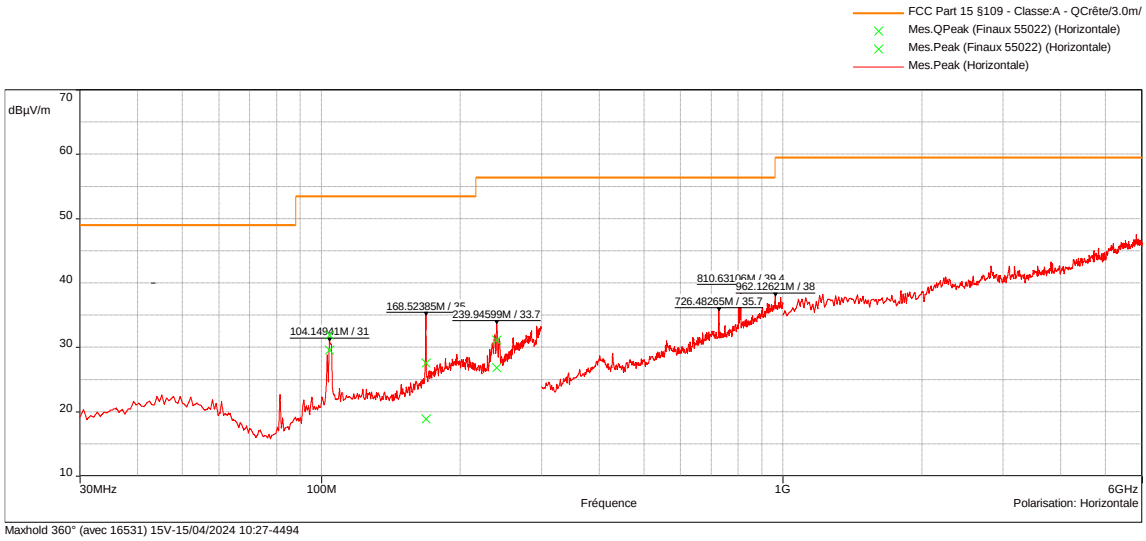
RADIATED ELECTRIC FIELD MEASUREMENT - TABULATED RESULTS							
MAXHOLD 360° 15V						EMI4494	
Test Freq. (MHz)	Detector (Pk/QP/Av)	Ant. position	Azimuth (°)	Ant. Height (cm)	Level dB (µV/m)	Limit dB (µV/m)	Margin (dB)
802.23	QP	V	0	100	34.15	56.40	-28.59
810.63	QP	V	0	100	32.21	56.40	-30.28
959.32	QP	V	0	100	35.61	56.40	-27.52
726.48	QP	H	0	100	30.64	56.40	-31.79
810.63	QP	H	0	100	31.87	56.40	-30.41
962.13	QP	H	0	100	34.98	59.50	-30.61
Supplementary information :							

RADIATED ELECTRIC FIELD MEASUREMENT - TABULATED RESULTS							
MAXHOLD 360° (AVEC 16531) 5V						EMI4517	
Test Freq. (MHz)	Detector (Pk/QP/Av)	Ant. position	Azimuth (°)	Ant. Height (cm)	Level dB (µV/m)	Limit dB (µV/m)	Margin (dB)
440.29	QP	V	0	100	25.15	56.40	-37.06
490.77	QP	V	0	100	25.84	56.40	-36.01
572.12	QP	V	0	100	28.73	56.40	-34.03
566.52	QP	H	0	100	29.09	56.40	-33.68
726.48	QP	H	0	100	31.35	56.40	-31.79
810.63	QP	H	0	100	31.74	56.40	-30.41
Supplementary information:							

RADIATED ELECTRIC FIELD MEASUREMENT - GRAPH			
MAXHOLD 360° (AVEC 16531) 15V		EMI4494	
E.U.T. mode:	#1	**T (°C):**	19.5
Test Date:	19/03/2024	**H (%):**	39.9
Test Operator:	T.DESVIGNE	**P (hPa):**	1009



Maxhold 360° (avec 16531) 15V-15/04/2024 10:27-4494

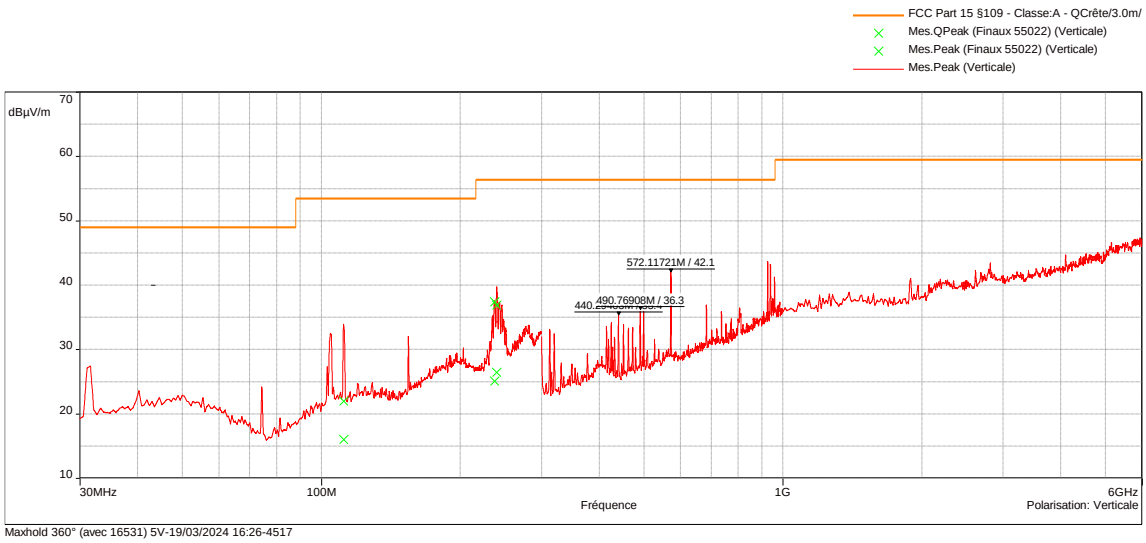


Maxhold 360° (avec 16531) 15V-15/04/2024 10:27-4494

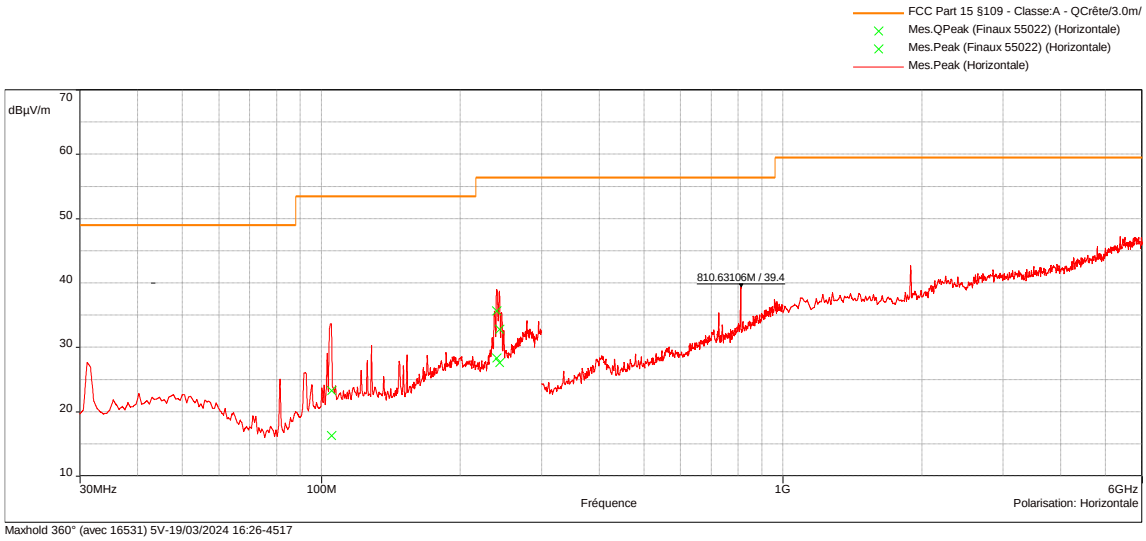
POSITION	FREQUENCIES	RBW	VBW	DETECTOR
Verticale	30MHz-300MHz	100kHz	300kHz	Mes.Peak;
Verticale	300MHz-1GHz	100kHz	300kHz	Mes.Peak;
Horizontale	30MHz-300MHz	100kHz	300kHz	Mes.Peak;
Horizontale	300MHz-1GHz	100kHz	300kHz	Mes.Peak;
Verticale	1GHz-6GHz	1MHz	3MHz	Mes.Peak;
Horizontale	1GHz-6GHz	1MHz	3MHz	Mes.Peak;
Configuration:				
Comments:				

E.U.T. modification(s): No

RADIATED ELECTRIC FIELD MEASUREMENT - GRAPH			
MAXHOLD 360°5V		EMI4517	
E.U.T. mode:	#2	**T (°C):**	19.5
Test Date:	19/03/2024	**H (%):**	39.9
Test Operator:	T.DESVIGNE	**P (hPa):**	1009



Maxhold 360° (avec 16531) 5V-19/03/2024 16:26-4517



Maxhold 360° (avec 16531) 5V-19/03/2024 16:26-4517

POSITION	FREQUENCIES	RBW	VBW	DETECTOR
Verticale	30MHz-300MHz	100kHz	300kHz	Mes.Peak;
Verticale	300MHz-1GHz	100kHz	300kHz	Mes.Peak;
Horizontale	30MHz-300MHz	100kHz	300kHz	Mes.Peak;
Horizontale	300MHz-1GHz	100kHz	300kHz	Mes.Peak;
Verticale	1GHz-6GHz	1MHz	3MHz	Mes.Peak;
Horizontale	1GHz-6GHz	1MHz	3MHz	Mes.Peak;
Configuration:				
Comments:				

E.U.T. modification(s): No

8. APPENDIX I: TECHNICAL SHEET

EMC TECHNICAL SHEETS

Important : To be completed in English if report in English. This information will be reflected in the tests report.

EQUIPMENT

Business N°/Quote :	EMIESS24A674FIS
Product designation :	USB HUB
Product reference :	Keystone 4
Trad mark :	Fischer Connectors
Manufacturer's name :	Fischer Connectors SA
Manufacturer address :	Ch. Du Glapin 20
Type :	○ Serial Equipment ◉ Pre-series ○ Prototype
Serial number (S/N) :	1000-1783124-00000001
Part number (P/N) :	143056
Software version :	-
Firmware version :	-
FCC ID (if radio module) :	-
N° IC (if radio module) :	-
Function (s) :	Wearable USB 2.0 Hub, System powered by battery. Enables communication between the host (i.e. telephone) and up to 2 devices using USB 2.0 communication.

TECHNICAL PART

Power (Voltage/freq) :	VAC 5 or 10-20 VDC ○ 50 Hz ○ 60 Hz ○ Other :
Power supply range :	5 or 10-20 V DC
Power type (AC, DC..) :	DC, Battery
Power (W) :	<5W — Nominal current (A) : <1A
Ground bounding strap :	no
Product Weight (kg) :	0.12
Product dimensions (Lxlxh)(m) :	0.270 x 0.038 x 0.017
Temperature range :	

EMC PART

Electromagnetic environment	○ Residential ○ Commercial ○ Medical ○ Railway ○ Light industry ◉ Industrial (production site) ○ Telecom Center ○ Military ○ Marine ○ Aéronautics/Aviation ○ Automobile ○ 1ere Monte ○ 2eme Monte
Professionnal use :	◉ Professionnal device ○ Device intended for the general public
Typical mounting :	○ Transportable ○ Mobile ○ To integrate ○ Ground mount ○ Portable ○ Wall Mounted
Description of the operating modes	#1 Supplied by 15V DC voltage — #4 #2 Supplied by 5V DC voltage — #5 #3 — #6
Description of the right operation criteria for the immunity tests	Telephone should be functiponal. During the tests, log file is created with coomunication status during the tests. This file should be check after the test.
Sensitive/ critical frequencies :	Not known — Internal frequencies : 400K, 24M, 250M

Tolérances/Criteria

Criterion A :	Product is fully functional. No perturbation or loss in USB communication.
Criterion B :	Loss of some functialities is possible (USB communication). Product is not dammaged following exposure.

Person (s) present during the tests :	Yes ☑ No ☐ Name : Tomislav HAJAK
Name, Date et Signature :	

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Générer

End of test report