

RAPPORTO DI PROVA

TEST REPORT

Rif. / Ref. n.	TSupPhotos_FCC178523_1	Data Emissione / Issue Date:	10/05/2021	Pagine / Pages:	9
Scopo delle prove Test object	Prove di tipo in accordo alla Norma Type test according to standards 47 CFR FCC part 15.247				
Richiedente Applicant	Paradox Engineering SA Via Passeggiata 7 – 6883 Novazzano – CH Tel.: +41 912330100				
Marchio commerciale Trade mark					
Fabbricante Manufacturer	MinebeaMitsumi Inc. 3-9-6 Mita, Minato-ku, Tokyo 108-8330 Tel.: 81-3-6758-6711				
Prodotto Product	Multi radio gateway				
Modello testato Testing model	GWVG001US (PE Mini IoT Gateway)				
Identificativo FCC FCC ID	2AKPQGWVG001				
Data ricevimento campioni Date of test samples receipt	24/02/2021				
Campioni verificati No. of tested samples	1 – Sampled by the manufacturer				
Data verifiche Testing date	From 24/02/2021 to 03/03/2021				
Sito di prova Testing site	PRSLAB S.r.l. Unipersonale - Via Campagna 92 - 22020 Faloppio - Como - Italy				
Esito delle valutazioni Assessment results	CONFORME / COMPLIANT				
Verifiche effettuate da Verifications carried out by	Daniele AOSANI Tecnico laboratorio EMC & RADIO EMC & RADIO Test Engineer				
Approvato Approved by	Riccardo PFEIFFER Responsabile laboratori EMC & RADIO EMC & RADIO Laboratory manager				

I risultati delle prove riportati nel presente rapporto di prova si riferiscono solo ai campioni esaminati.

The test results reported in this test report shall refer only to the samples tested

Il campione è stato fornito dal cliente ed i risultati si riferiscono al campione così come ricevuto

The sample has been provided by the customer and the results apply to the sample as received

Questo Report non può essere riprodotto in modo parziale, salvo espressa autorizzazione scritta da parte del Laboratorio

This report may not be partially reproduced, except with the prior written permission of the issuing Laboratory

CONTENUTO

TABLE OF CONTENTS

0. RELEASE CONTROL RECORD	3
1. DECISION RULE	3
2. INFORMATION PROVIDED BY CUSTOMER.....	3
3. GENERAL REMARKS	3
4. TECHNICAL INFORMATION OF EQUIPMENT UNDER TEST (EUT).....	4
4.1 EUT Identification	4
4.2 Radio module technical data	5
5. PHOTOGRAPHIC DOCUMENTATION	6

0. RELEASE CONTROL RECORD

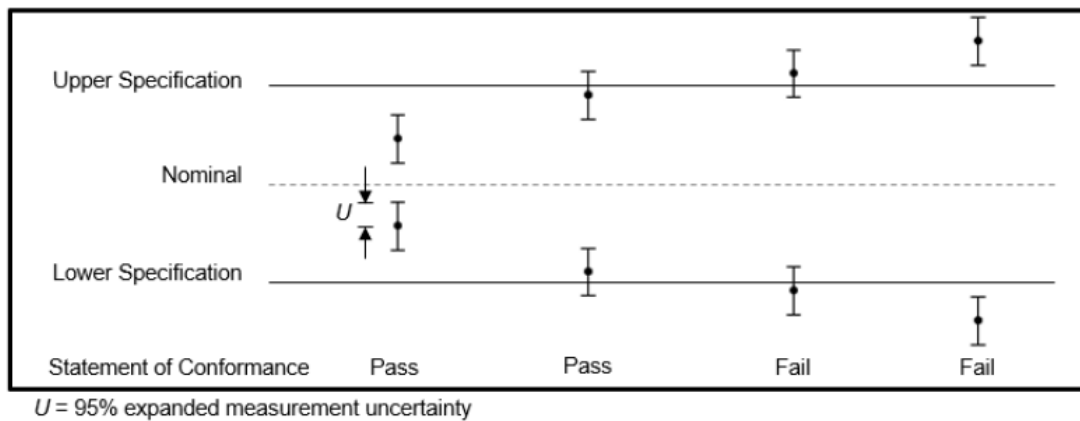
TEST REPORT NUMBER	REASON OF CHANGE	DATE OF ISSUE
TSupPhotos_FCC178523_0	Original release	05/03/2021
TSupPhotos_FCC178523_1	Add "Conducted Emissions" photo setup	10/05/2021

This document is valid in last revision that deletes and replaces the previous one

1. DECISION RULE

PRS LAB specifies that, if the decision rules of conformity of the test results are not indicated in detail in the standard/s object of tests, it takes as a decision rule for the declaration of conformity the simple binary system ($w = 0$) stated in the ILAC-G8-09:2019 document.

The decision rule is applicable for all parts of standard



Statements of conformity are reported as:

- Pass: the measured value is below the acceptance limit, $AL=TL$.
- Fail: the measured value is above the acceptance limit, $AL=TL$.

Definitions

- Guard Band (w): interval between a tolerance limit and a corresponding acceptance limit where length $w=|TL-AL|$.
- Tolerance Limit (TL) (Specification Limit): specified upper or lower bound of permissible values of a property.
- Acceptance Limit (AL): specified upper or lower bound of permissible measured quantity values.

2. INFORMATION PROVIDED BY CUSTOMER


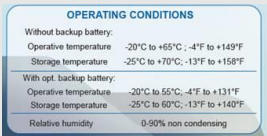
- None

3. GENERAL REMARKS



- The EUT has been tested with the internal welding (on the radio module screen) done in spots, the complete welding of the screen has the same results.

4. TECHNICAL INFORMATION OF EQUIPMENT UNDER TEST (EUT)

4.1 EUT Identification

DESCRIPTION	Multi radio gateway
MODEL NAME	GWWG001US (PE Mini IoT Gateway)
FCC ID	2AKPQGWWG001
SERIAL NO.	N/A
PRSLAB IDENTIFICATION	BC 68/2021 1/1
TRADEMARK	
MANUFACTURER	MinebeaMitsumi Inc.
COUNTRY OF MANUFACTURER	Japan
SINGLE UNIT OR SYSTEM	Single
POWER SOURCE	AC main
	PoE supply
SUPPLY VOLTAGE	115V ~ 60Hz
	48 Vdc from PoE
MAX POWER or MAX ABSORBED CURRENT	30 W
HW VERSION	ELB-PED-0145-04
FW VERSION	3.14
OPERATING TEMPERATURE	
DIMENSIONS	See photographic documentation
EUT STANDING	Wall or pole mounting

4.2 Radio module technical data

CHIP MANUFACTURER	
CHIP MODEL	S2-LP_ST (ELC-ICS-0157)
RADIO CATEGORY	Short Range Device
FREQUENCY BAND	902.42 ÷ 927.58MHz FHSS
NUMBER OF CHANNELS	75
CHANNELS SPACING	340kHz
OCW	200kHz
TYPE OF MODULATION	GFSK
DATA RATE	100kbps
SENSITIVITY	-99dBm @ BER<1%
ANTENNA TYPE	Chip antenna
ANTENNA GAIN	1.59dBi
ANTENNA MODEL	ANT1204F005R0915A (ELC-OTH-0150)
ANTENNA MANUFACTURER	

5. PHOTOGRAPHIC DOCUMENTATION

PHOTO N° 1 – EUT IDENTIFICATION

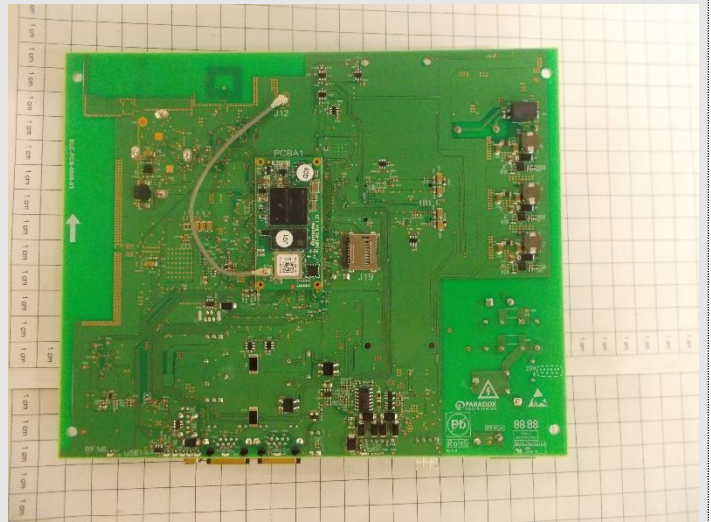
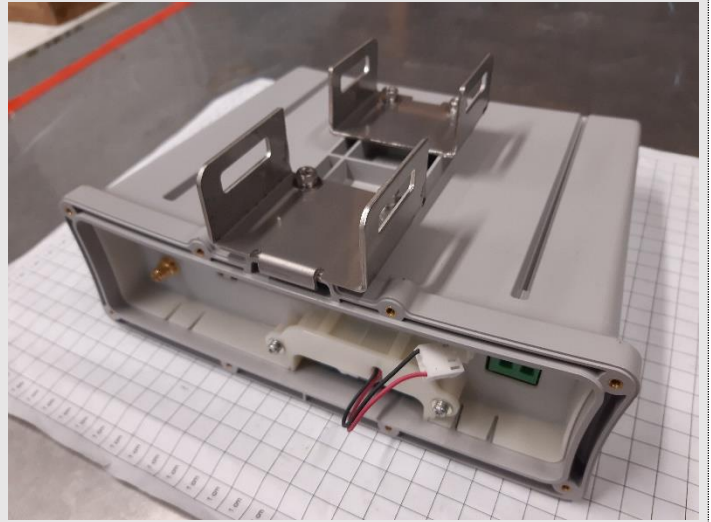


PHOTO N° 2 – RADIATED SETUP



PHOTO N° 3 – CONDUCTED EMISSIONS TEST SETUP



END OF TEST REPORT