







RADIO REPORT FCC 47 CFR Part 15C ISED RSS-210 Periodic operation in the 40.66-40.70 MHz and above 70 MHz band	
Report Reference No	G0M-2301-1843-TFC231PT-V03
Testing Laboratory	Eurofins Product Service GmbH
Address	Storkower Str. 38c 15526 Reichenwalde Germany
Accreditation	    DAkkS - Registration number : D-PL-12092-01-03 (ISED) ISED Testing Laboratory site: 3470A DAkkS - Registration number : D-PL-12092-01-04 (FCC) FCC Filed Test Laboratory, Reg.-No.: 96970
Applicant	Glaubitz GmbH & Co.KG
Address	Görlitzer Straße 53 02763 Zittau GERMANY
Test Specification	47 CFR Part 15C RSS-210, Issue 10, 2020-04 RSS-Gen, Issue 5, Amendment 2, 2021-02
Non-Standard Test Method	None
Equipment under Test (EUT):	
Product Description	Wireless Remote Control
Model(s)	ECU-WRC-WK
Additional Model(s)	None
Brand Name(s)	None
Hardware Version(s)	V2.0
Software Version(s)	V1.0
FCC ID	2BB4K-ECUWRC
IC	30970-ECUWRC
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	2023-06-13	
Report:		
Compiled by	Wilfried Treffke	
Tested by (+ signature) (Responsible for Test)	Wilfried Treffke	
Approved by (+ signature) (Senior Radio Expert)	Radwan Jaafar	
Date of Issue	2024-05-22	
Total number of pages	39	
General Remarks:		
<p>The test results presented in this report relate only to the object tested.</p> <p>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.</p> <p>This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.</p>		
Additional Comments:		
None		

ADDITIONAL VARIANTS

Additional Variants (not tested and not evaluated variants)		
Not-tested Variant	Description	
1	Product Type Description	Wireless Remote Control
	Model name	ECU-WRC-WOK
	Brand name	-
	Hardware Version	V2.0
	Software Version	V1.0
	HVIN	ECU-WRC-WOK
	PMN	ECU-WRC-WOK
	FVIN	2.0
	HMN	n/a
Comment: Those named additional variants above have not been tested. Those additional variants of the series have been declared by the manufacturer. The test report explicitly states that those variants were neither tested nor assessed nor evaluated.		

VERSION HISTORY

Version History			
Version	Issue Date	Remarks	Revised By
01	2023-11-30	Initial Release	--
02	2024-04-29	Replaced document: G0M-2301-1843-TFC231PT-V01 Replaced by: G0M-2301-1843-TFC231PT-V02 Changes: Page 13 - 14: <ul style="list-style-type: none"> Additional test setup photos added 	St. Liebich
03	2024-05-22	Replaced document: G0M-2301-1843-TFC231PT-V02 Replaced by: G0M-2301-1843-TFC231PT-V03 Changes: Page 39: <ul style="list-style-type: none"> Plot update 	St. Liebich

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

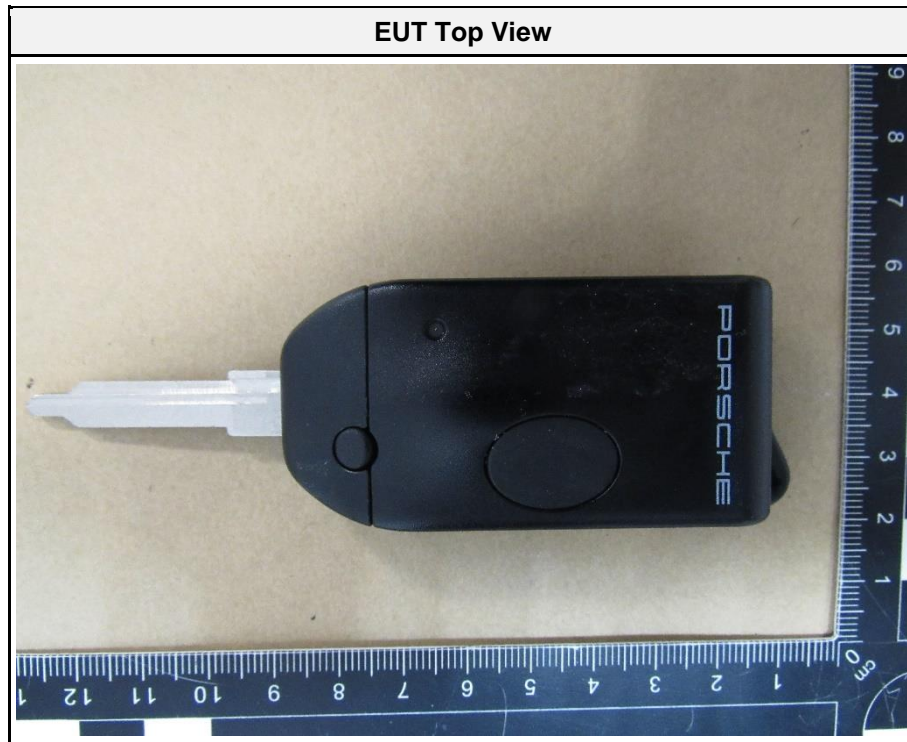
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1 Equipment (Test Item) Under Test

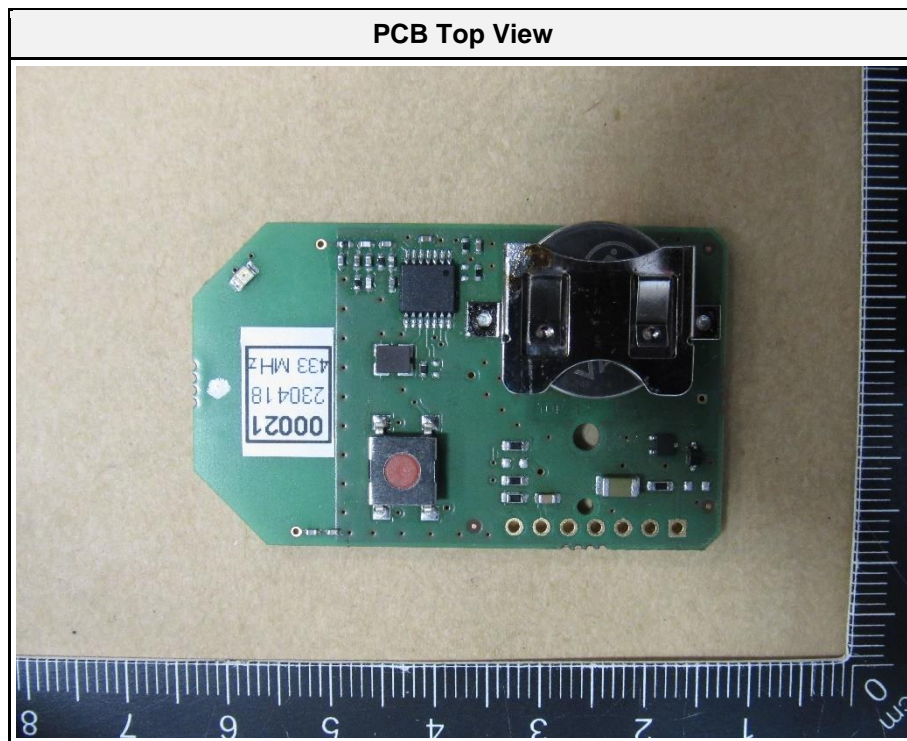
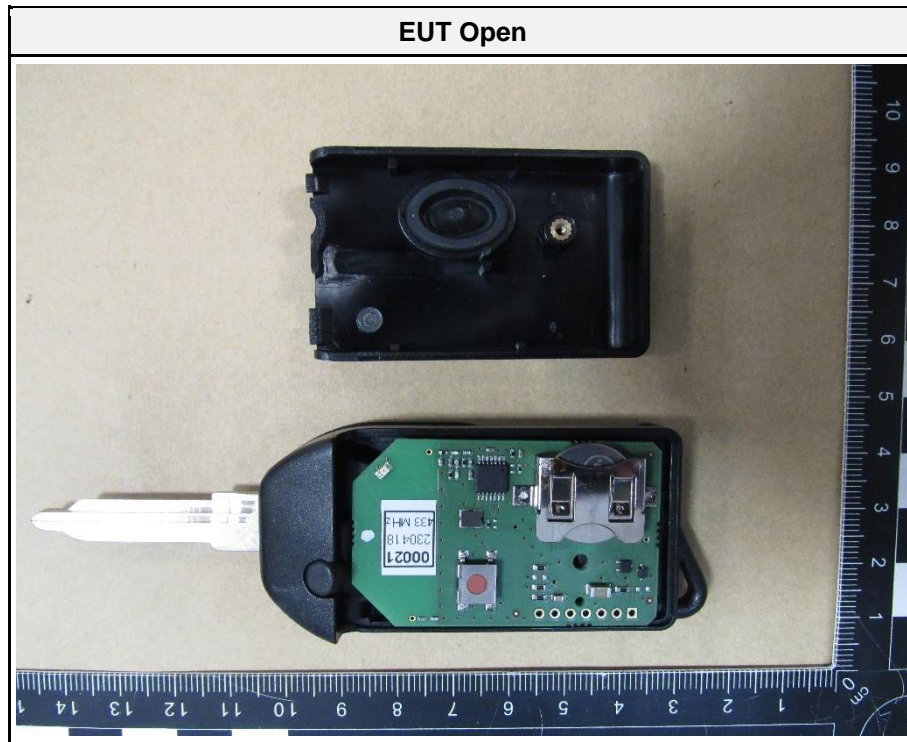
Description	Wireless Remote Control	
Model	ECU-WRC-WK	
Additional Model(s)	None	
Brand Name(s)	None	
Serial Number(s)	0008 / 0002	
Test Sample Id(s)	44566 / 44568	
Hardware Version(s)	V2.0	
Software Version(s)	V1.0	
PMN	ECU-WRC-WK	
HVIN	ECU-WRC-WK	
FVIN	2.0	
HMN	N/A	
FCC ID	2BB4K-ECUWRC	
IC	30970-ECUWRC	
Equipment type	End Product	
Radio type	Transmitter	
Radio technology	custom	
Modulation	ASK	
Number of antenna ports	1	
Antenna	Type	integrated
	Model	PCB Loop
	Manufacturer	Glaubitz GmbH & Co.KG
	Gain	unspecified
Supply Voltage	V_{NOM}	3.0 VDC
Operating Temperature	T_{NOM}	25 °C
AC/DC-Adaptor	Model	None
Manufacturer	Glaubitz GmbH & Co.KG Görlitzer Straße 53 02763 Zittau GERMANY	

1.1 Photos – Equipment External

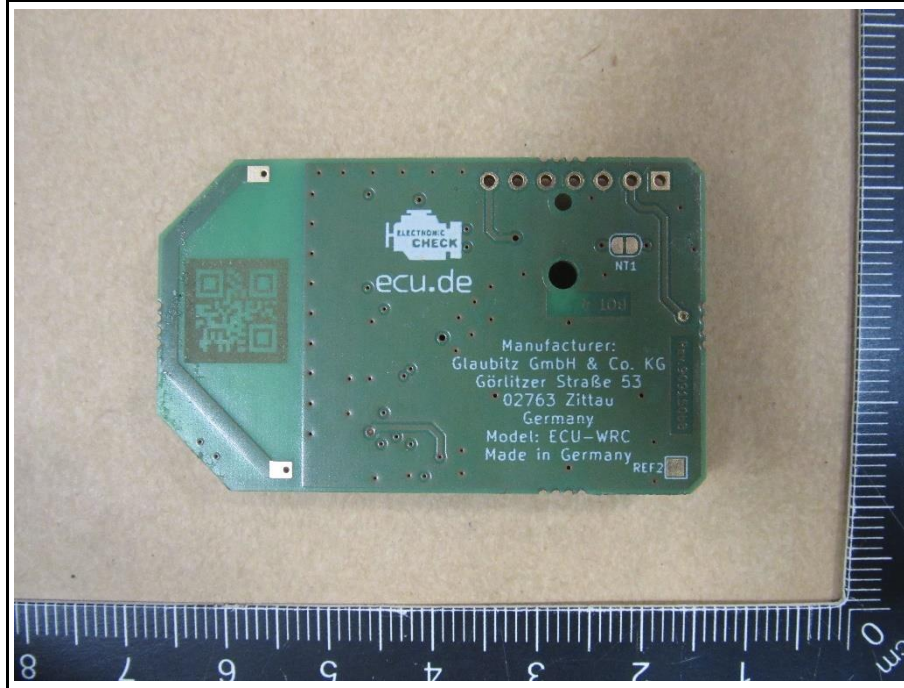




1.2 Photos – Equipment Internal

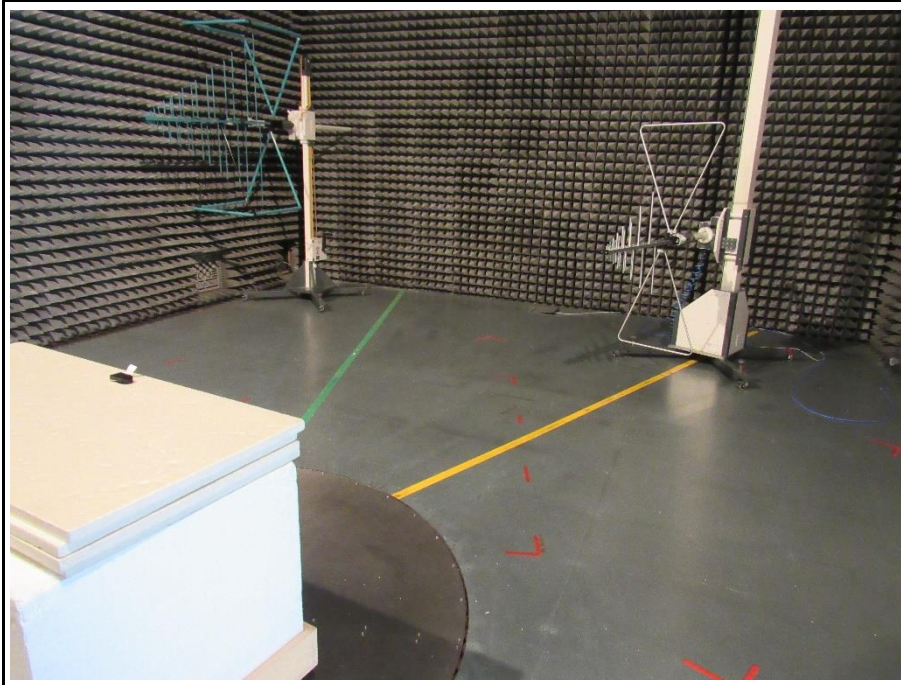


PCB Bottom View

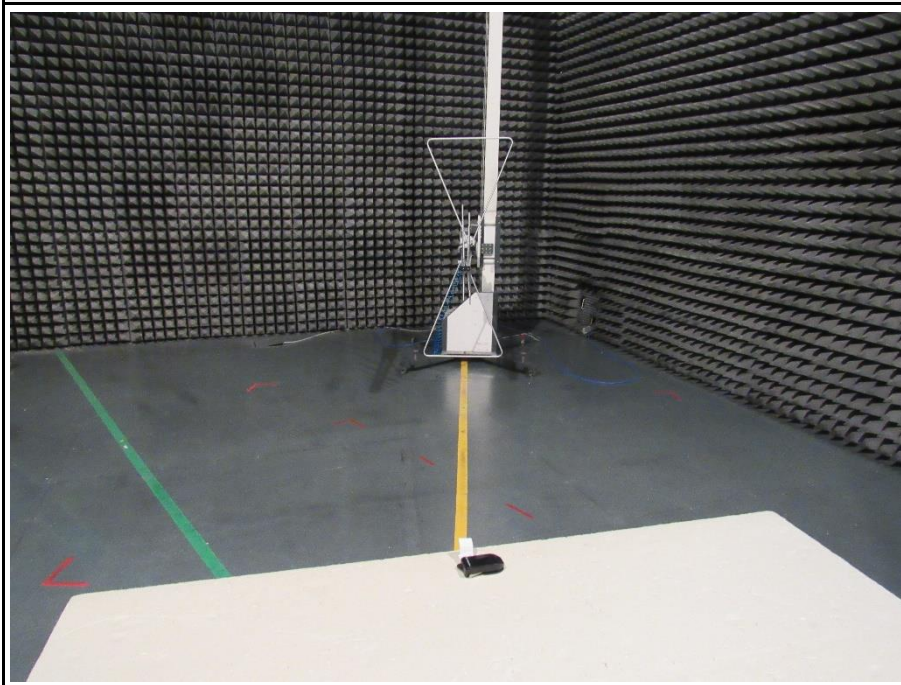


1.3 Photos – Test Setup

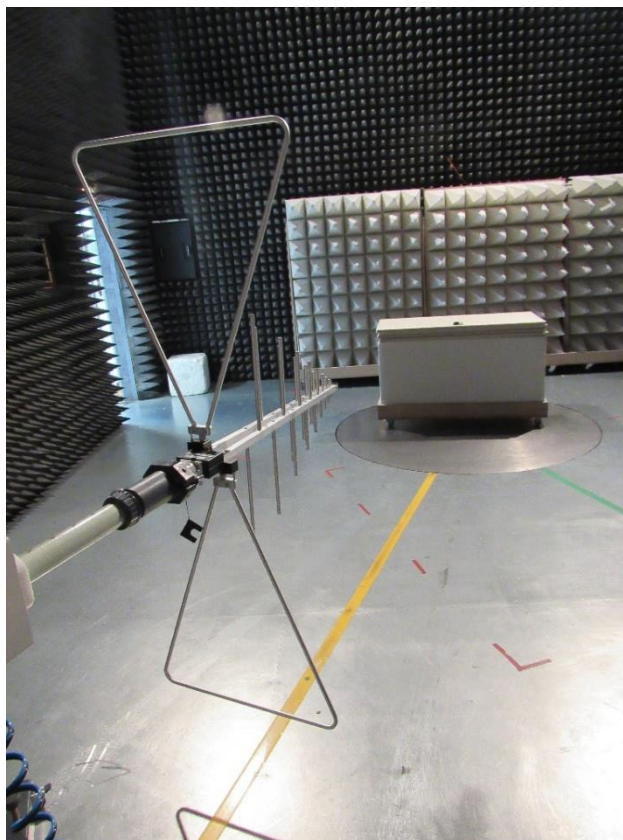
Radiated Setup < 1 GHz – View A



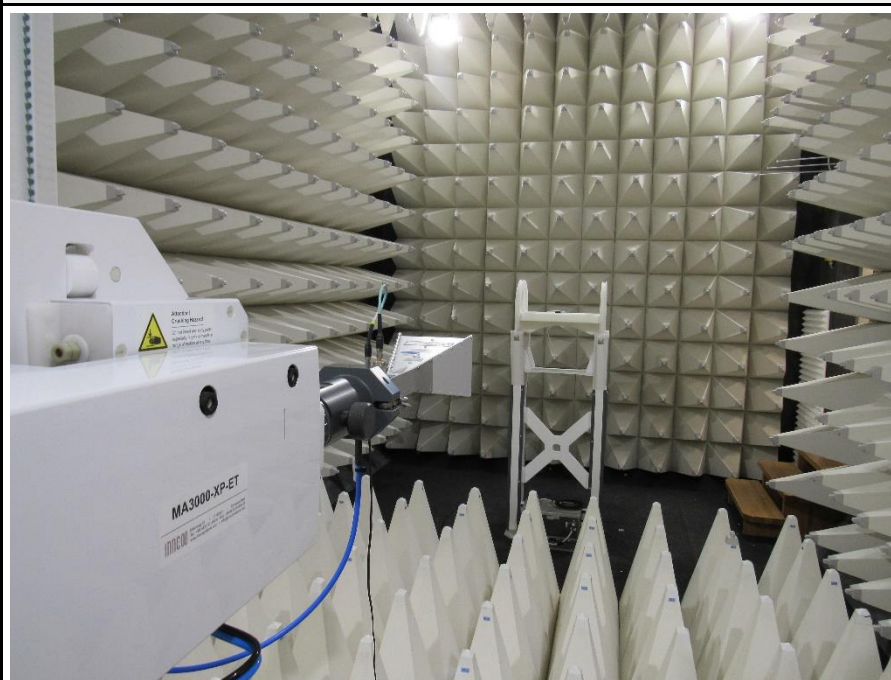
Radiated Setup < 1 GHz – View B



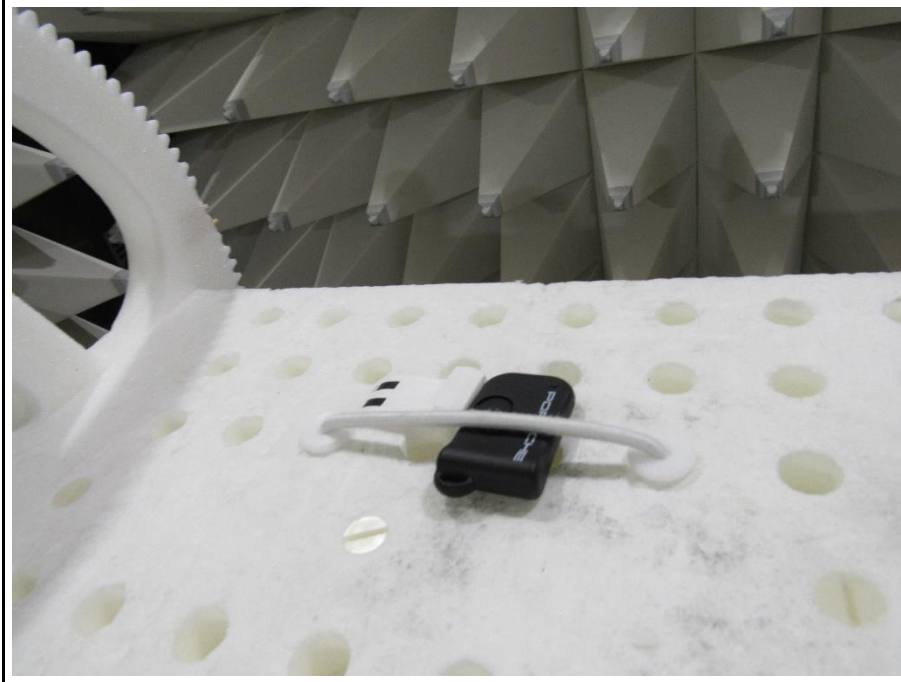
Radiated Setup < 1 GHz – View C



Radiated Setup > 1 GHz – View A



Radiated Setup > 1 GHz – View B



1.4 Support Equipment

Product Type	Device	Manufacturer	Model	Comment
None				
Description:				
AE	Auxiliary Equipment			
SIM	Simulator			
CBL	Connecting Cable			
SFT	Software			
Comment:				

1.5 Test mode duty cycle

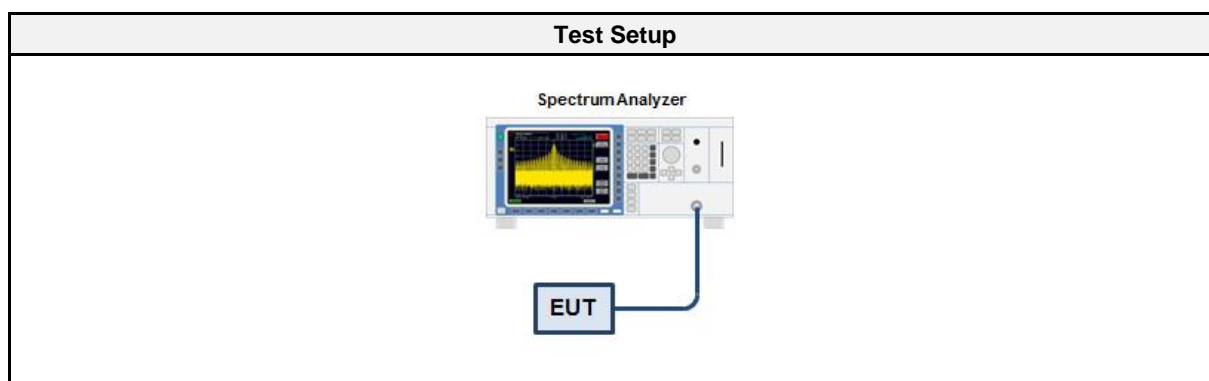
1.5.1 Information

Test Information	
Measurement Method	ANSI C63.10 11.6

1.5.2 Requirements

Requirements	
Duty cycle	Duty cycle correction
≥ 98 %	No correction required
< 98 %	Correction required ($10 \times \log_{10}(1/DC)$)

1.5.3 Setup



1.5.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSU 26	EF01003	2023-08	2024-08

1.5.5 Procedure

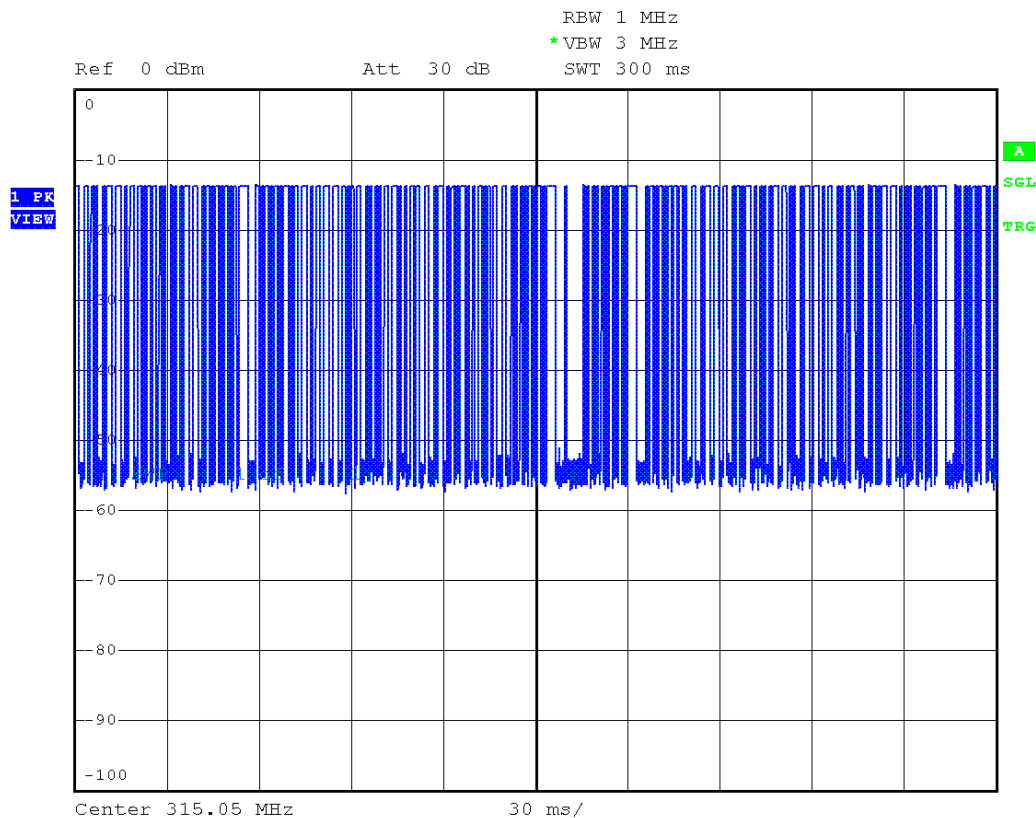
Test Procedure
<ol style="list-style-type: none"> EUT set to test mode Span is set to zero span Detector set to peak Sweep time is set long enough to capture at least 5 bursts Envelope peak value of emission spectrum is selected The maximum burst duration T_{ON} is measured using two markers set to the start and the end of the longest burst The minimum idle duration T_{OFF} is measured using two markers set to the start and the end of the shortest idle period The duty cycle is calculated by $DC = T_{ON} / (T_{ON} + T_{OFF})$ The duty cycle correction is calculated by $DC = 10 \times \log_{10}(T_{ON} / (T_{ON} + T_{OFF}))$

1.5.6 Results

Duty Cycle Results		
Mode	Duty Cycle	Correction Factor [dB]
Normal	0.53	-5.57

Duty Cycle

Project Number: G0M-2301-1843
 Applicant: Glaubitz GmbH & Co.KG
 Model Description: Wireless Remote Control
 Model: ECU-WRC-WK
 Test Sample ID: 44566
 Reference Standards: FCC 15.231, RSS-210
 Reference Method: ANSI C63.10:2013, Section 7.5
 Operating Frequency: 315.05 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Wilfried Treffke
 Test Site: Eurofins Product Service GmbH
 Test Date: 2023-11-01
 Maximum Duty Cycle: 0.53
 Maximum Duty Cycle [%]: 53
 Duty Cycle Correction [dB]: -5.57



Date: 1.NOV.2023 11:48:39

1.6 Test Modes

Mode	Description
Transmit	Mode = Transmit Modulation = ASK Duty cycle = 100 %
Normal	Mode = Transmit Modulation = ASK Duty cycle = 53 %
Comment:	

1.7 Test Frequencies

Designator	Mode	Channel	Frequency [MHz]
F1	Tx	0	315.05

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:

$$\text{Reading on Analyzer (dB}\mu\text{V)} + \text{A.F. (dB)} = \text{Net field strength (dB}\mu\text{V/m)}$$

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:

$$\text{Limit (dB}\mu\text{V/m)} = 20 \cdot \log (\mu\text{V/m})$$

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, ISED RSS-210				
Product Standard Reference	Requirement	Reference Method	Result	Remarks
ISED RSS-210 5 ISED RSS-Gen 6.7	Occupied Bandwidth	ANSI C63.10-2013	N/R	Informational only
FCC 15.231(a)(1) ISED RSS-210 A1.1.1(a)	Deactivation of manually operated transmitter	non specific	PASS	--
FCC 15.231(a)(2) ISED RSS-210 A1.1.1(b)	Cease of transmission of automatically operated transmitter	non specific	N/R	manually operated transmitter
FCC 15.231(a)(3) ISED RSS-210 A1.1.1(c)	Total transmission time	non specific	N/R	manually operated transmitter
FCC 15.231(a)(4) ISED RSS-210 A1.1.1(d)	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(b),(e) ISED RSS-210 A1.1.2	Field strength of fundamental and spurious emissions	ANSI C63.10	PASS	--
FCC 15.231(c) ISED RSS-210 A1.1.3	Emission bandwidth	non specific	PASS	--
FCC 15.231(d) ISED RSS-210 A1.1.3	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) ISED RSS-210 A1.1.4	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) ISED RSS-210 A1.1.5	Reduced field strength and spurious emissions of radiators operating at a rate exceeding 15.231(a)	ANSI C63.10	N/R	No reduction used
ISED RSS-210 5 ISED RSS-Gen 7.3	Receiver radiated spurious emissions	ANSI C63.10	N/R	EUT is a transmitter only
FCC 15.207 ISED RSS-210 5 RSS-Gen 7.2	AC power line conducted emissions	ANSI C63.10	N/R	EUT exclusively battery powered
<p>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.</p>				

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

3 Test Conditions and Results

3.1 Test Conditions and Results - Occupied bandwidth

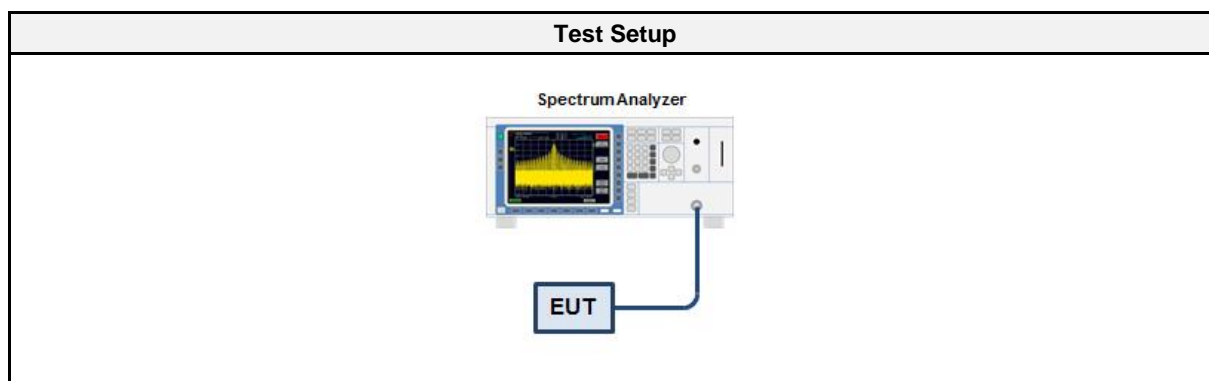
3.1.1 Information

Test Information	
Reference	ISED RSS-210 5 / ISED RSS-Gen 6.7
Measurement Method	ANSI C63.10 6.9.3
Measurement Uncertainty	$\pm 1.26 \%$
Operator	Wilfried Treffke
Date	2023-11-01

3.1.2 Limits

Limits
None (Informational only)

3.1.3 Setup



3.1.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSU 26	EF01003	2023-08	2024-08

3.1.5 Procedure

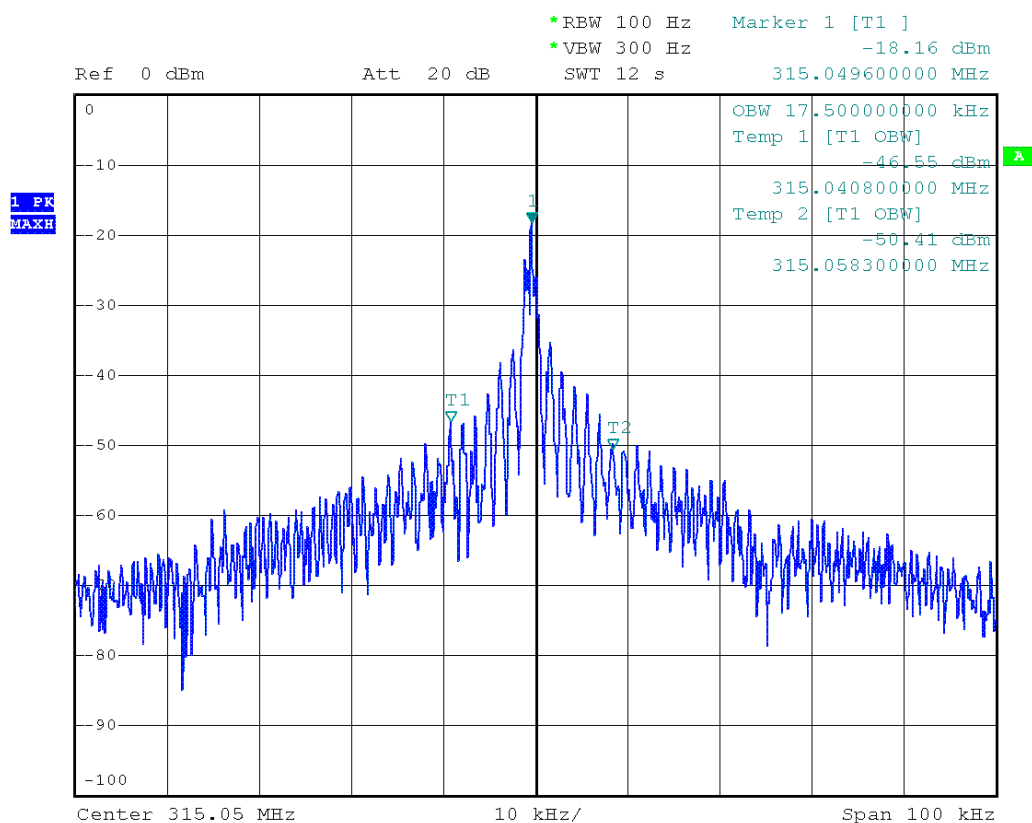
Test Procedure
<ol style="list-style-type: none"> 1. EUT transmitter is activated in test mode under normal conditions 2. The spectrum analyzer is set to peak detection and maximum hold with a span twice the emission spectrum 3. The resolution bandwidth is set to 1 % of the bandwidth 4. The occupied bandwidth is measured with the build-in analyzer function

3.1.6 Results

Test Results		
Mode	Frequency [MHz]	Bandwidth [kHz]
Transmit	315.05	17.5

Occupied / Emission Bandwidth

Project Number: G0M-2301-1843
 Applicant: Glaubitz GmbH & Co.KG
 Model Description: Wireless Remote Control
 Model: ECU-WRC-WK
 Test Sample ID: 44566
 Reference Standards: RSS-210
 Reference Method: ANSI C63.10:2013, Section 6.9.3
 Operating Frequency: 315.05 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Wilfried Treffke
 Test Site: Eurofins Product Service GmbH
 Test Date: 2023-11-01
 Occupied Bandwidth [kHz]: 17.5



Date: 1.NOV.2023 11:42:43

3.2 Test Conditions and Results - Deactivation of manually operated Transmitter

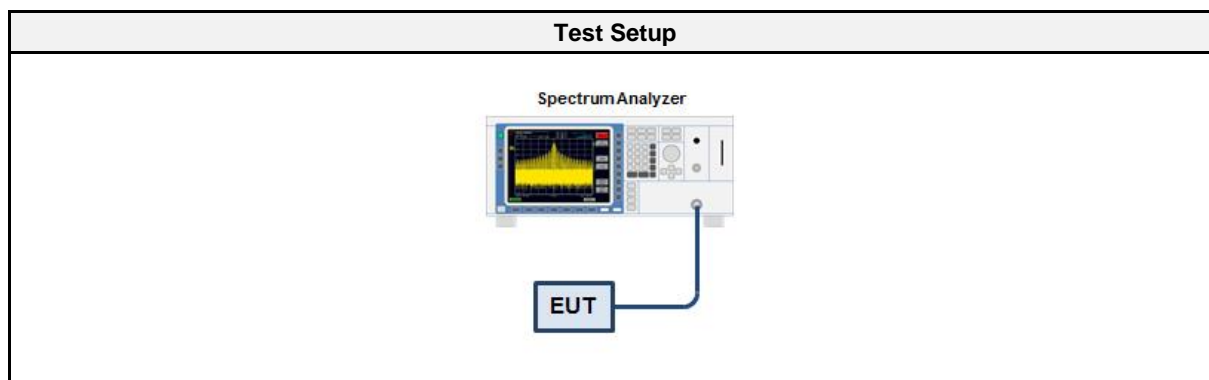
3.2.1 Information

Test Information	
Reference	FCC 15.231(a)(1) / ISCED RSS-210 A1.1.1(a)
Measurement Method	non specific
Measurement Uncertainty	$\pm 1.26 \%$
Operator	Wilfried Treffke
Date	2023-11-01

3.2.2 Limits

Limits
Manually operated transmitter shall employ a switch that will automatically cease transmission within 5 seconds after activation

3.2.3 Setup



3.2.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSU 26	EF01003	2023-08	2024-08

3.2.5 Procedure

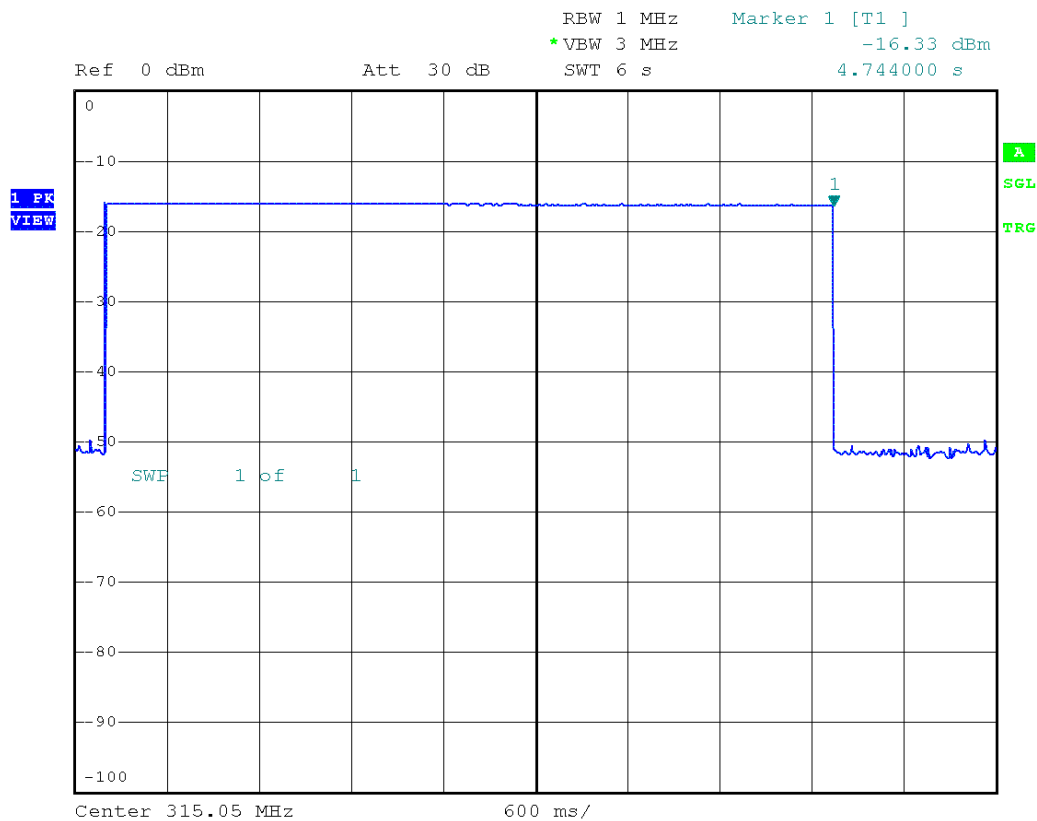
Test Procedure
<ol style="list-style-type: none"> 1. EUT set to normal mode 2. Center frequency is set to test frequency 3. Span it set to zero span 4. Resolution bandwidth is set large enough to accurately capture transmission bursts

3.2.6 Results

Test Results			
Channel [MHz]	Transmission time [s]	Limit [s]	Margin [s]
315.05	4.744	5	-0.26

Transmitter deactivation

Project Number: G0M-2301-1843
 Applicant: Glaubitz GmbH & Co.KG
 Model Description: Wireless Remote Control
 Model: ECU-WRC-WK
 Test Sample ID: 44566
 Reference Standards: FCC 15.231, RSS-210
 Reference Method: ANSI C63.10:2013, Section 7.4
 Operating Frequency: 315.05 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Wilfried Treffke
 Test Site: Eurofins Product Service GmbH
 Test Date: 2023-11-01
 Transmission end time [s]: 4.744
 Transmission time limit [s]: 5.000



Date: 1.NOV.2023 11:31:27

3.3 Test Conditions and Results - Field strength of fundamental and spurious emissions

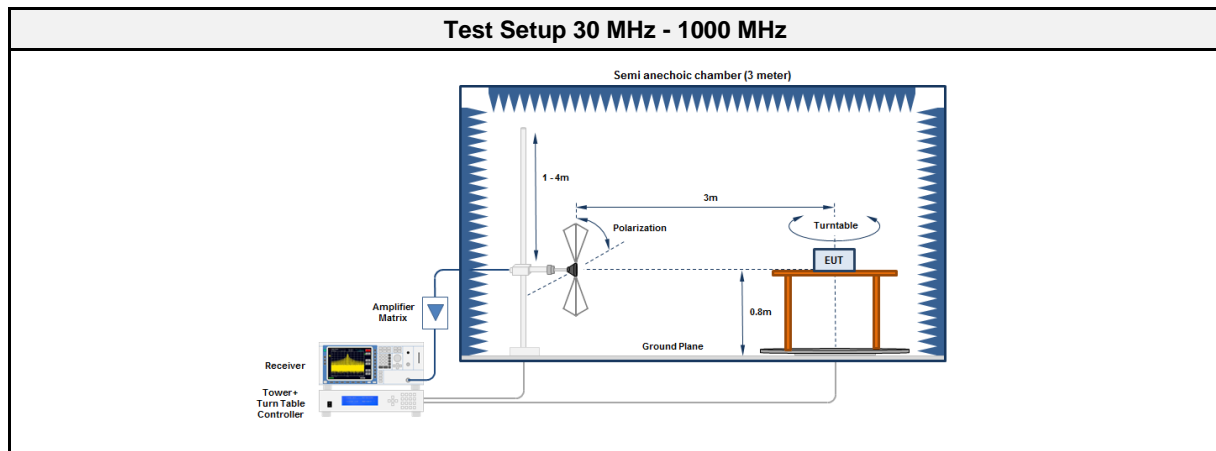
3.3.1 Information

Test Information	
Reference	FCC 15.231(b) / ISED RSS-210 A1.1.2(b)
Measurement Uncertainty	± 5.95 dB
Measurement Method	ANSI C63.10 6.4, 6.5, 6.6, 11.12
Measurement Uncertainty:	± 5.95 dB
Operator	Mr. Siddique
Date	2023-10-19

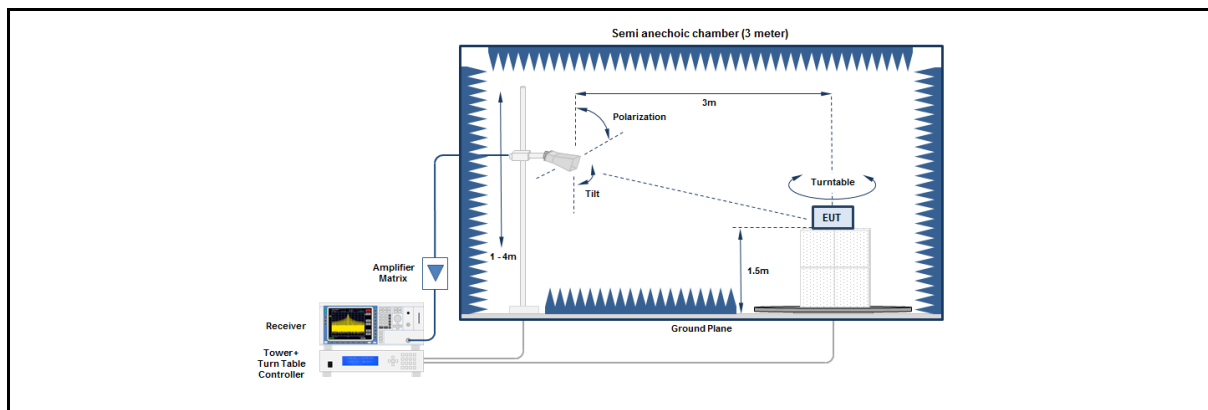
3.3.2 Limits

Limits			
Frequency range [MHz]	Fundamental Limit [dB μ V/m]	Spurious Limit [dB μ V/m]	Measurement distance [m]
40.66-40.70	66.95	46.95	3
70-130	61.94	41.94	3
130-174	61.94 – 71.48	41.94 – 51.48	3
174-260	71.48	51.48	3
260-470	71.48 – 81.94	51.48 – 61.94	3
> 470	81.94	61.94	3
Detector = Quasi-Peak or Average			

3.3.3 Setup



Test Setup > 1 GHz



3.3.4 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
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2023-02	2024-02
Antenna	R&S	HK 116	EF00030	2021-05	2024-05
Antenna	R&S	HL 223	EF00187	2022-06	2025-06

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2022-11	2025-11
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2023-02	2024-02
Antenna	Schwarzbeck	BBHA 9120D	EF00018	2022-12	2025-12

3.3.5 Procedure

Test Procedure 30 MHz - 1000 MHz	
<ol style="list-style-type: none"> 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	
<ol style="list-style-type: none"> 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 	

3.3.6 Results

Test Results - Field strength of fundamental						
Channel [MHz]	Emission [MHz]	Level [dBμV/m]	Det.	Pol.	Limit [dBμV/m]	Margin [dB]
315.05	315.049	63.40	pk	hor	95.60	-32.18
315.05	315.049	63.40	avg	hor	75.60	-12.22

Test Results - Field strength of spurious emissions						
Channel [MHz]	Emission [MHz]	Level [dBμV/m]	Det.	Pol.	Limit [dBμV/m]	Margin [dB]
315.05	1575	38.43	pk	ver	74.00	-35.57
315.05	1890	40.50	pk	ver	74.00	-33.50
315.05	2205	42.82	pk	ver	74.00	-31.18
315.05	2520	47.94	pk	hor	74.00	-26.06

3.4 Test Conditions and Results - Emission Bandwidth

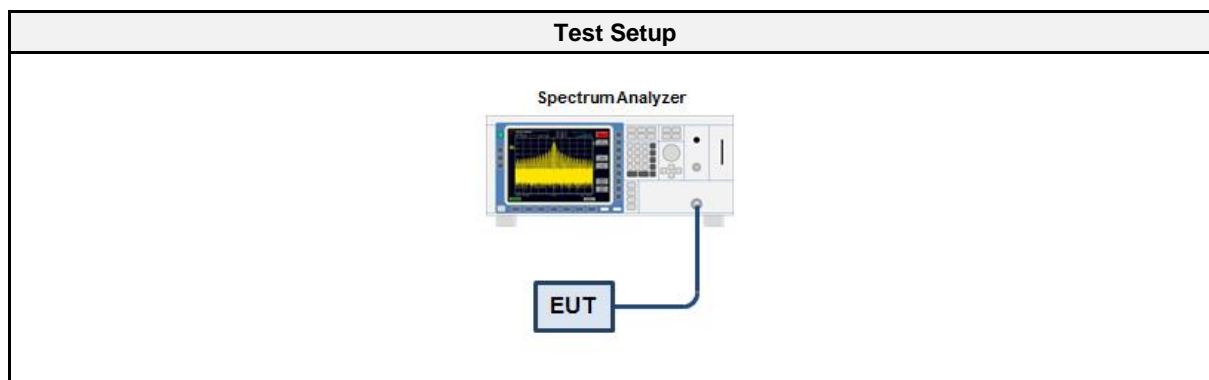
3.4.1 Information

Test Information	
Reference	FCC 15.231(c) / ISED RSS-210 A1.1.3
Measurement Method	non specific
Measurement Uncertainty:	$\pm 1.26 \%$
Operator	Wilfried Treffke
Date	2023-11-01

3.4.2 Limits

Limits
0.25 % of center frequency

3.4.3 Setup



3.4.4 Equipment

Test Equipment					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Spectrum Analyzer	R&S	FSU 26	EF01003	2023-08	2024-08

3.4.5 Procedure

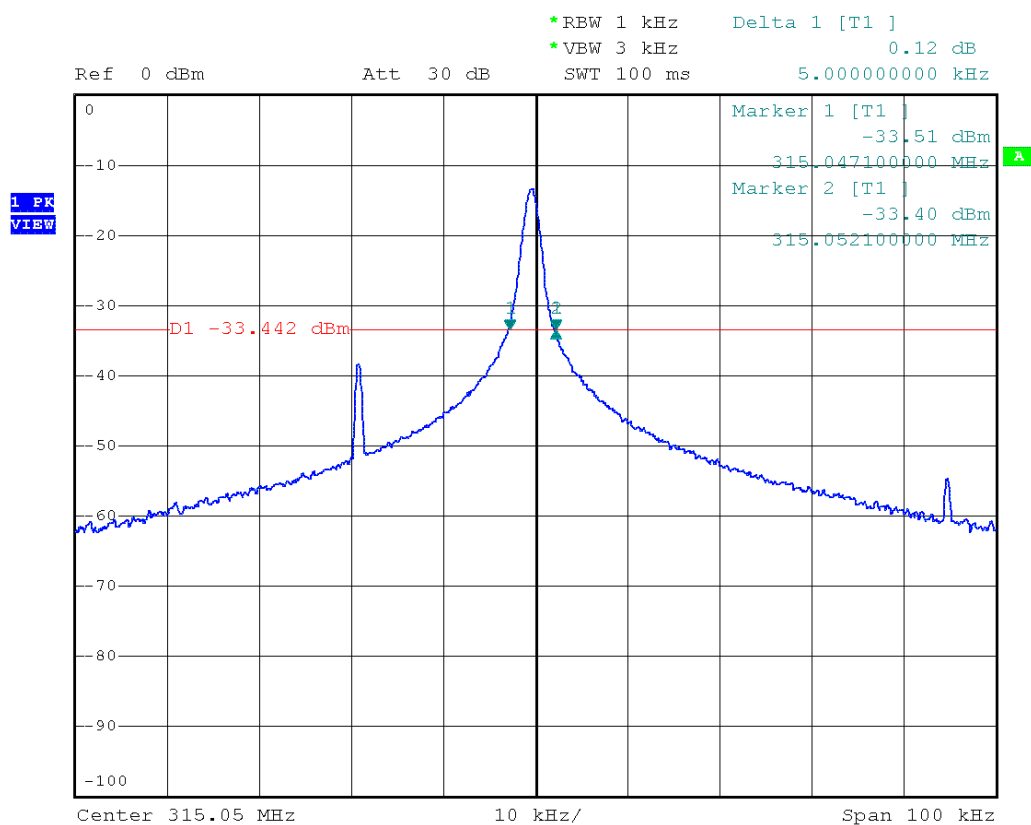
Test Procedure
<ol style="list-style-type: none"> EUT set to test mode (Communication tester is used if needed) Span set to at least twice the emission spectrum Resolution bandwidth set to 1% of span For Industry Canada the occupied bandwidth (99%) is measurement with spectrum analyzer built in measurement function For FCC the 20 dB bandwidth is measurement with spectrum analyzer

3.4.6 Results

Test Results			
Channel [MHz]	Emission Bandwidth [kHz]	Limit [kHz]	Margin [kHz]
315.05	5.0	787.625	-782.63

Emission Bandwidth

Project Number: G0M-2301-1843
 Applicant: Glaubitz GmbH & Co.KG
 Model Description: Wireless Remote Control
 Model: ECU-WRC-WK
 Test Sample ID: 44566
 Reference Standards: FCC 15.231 / ISCED RSS-210 A1.1.3
 Reference Method: ANSI C63.10:2013, Section 6.9.2
 Operating Frequency: 315.05 MHz
 Operating Conditions: Tnom/Vnom
 Operator: Wilfried Treffke
 Test Site: Eurofins Product Service GmbH
 Test Date: 2023-11-01
 Emission Bandwidth [kHz]: 5.0
 Emission Bandwidth Limit [kHz]: 787.625



Date: 1.NOV.2023 11:46:23

Test Report No.: G0M-2301-1843-TFC231PT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

3.5 Test Conditions and Results - Receiver radiated emissions

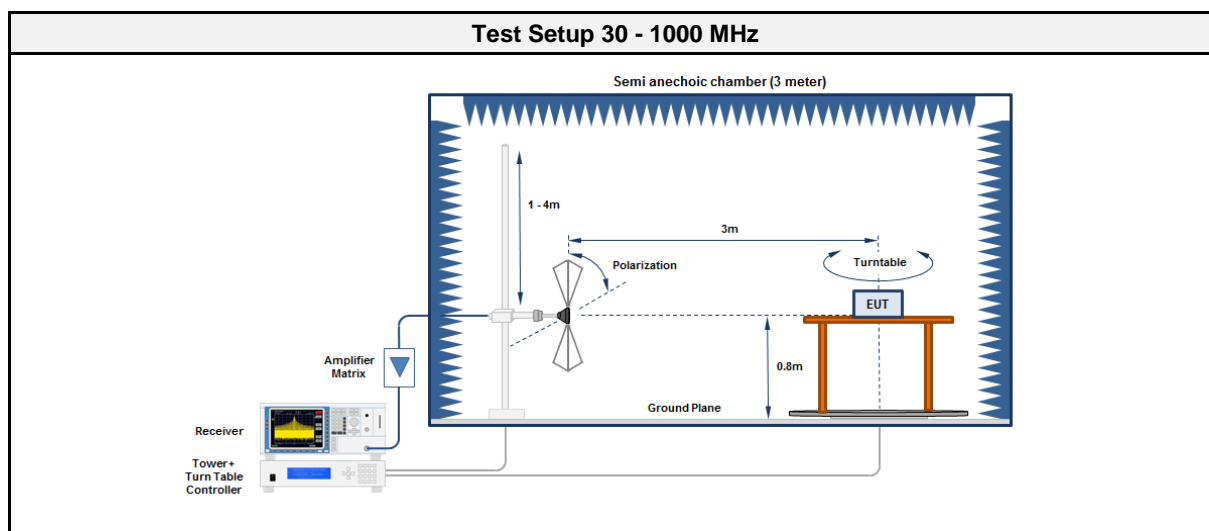
3.5.1 Information

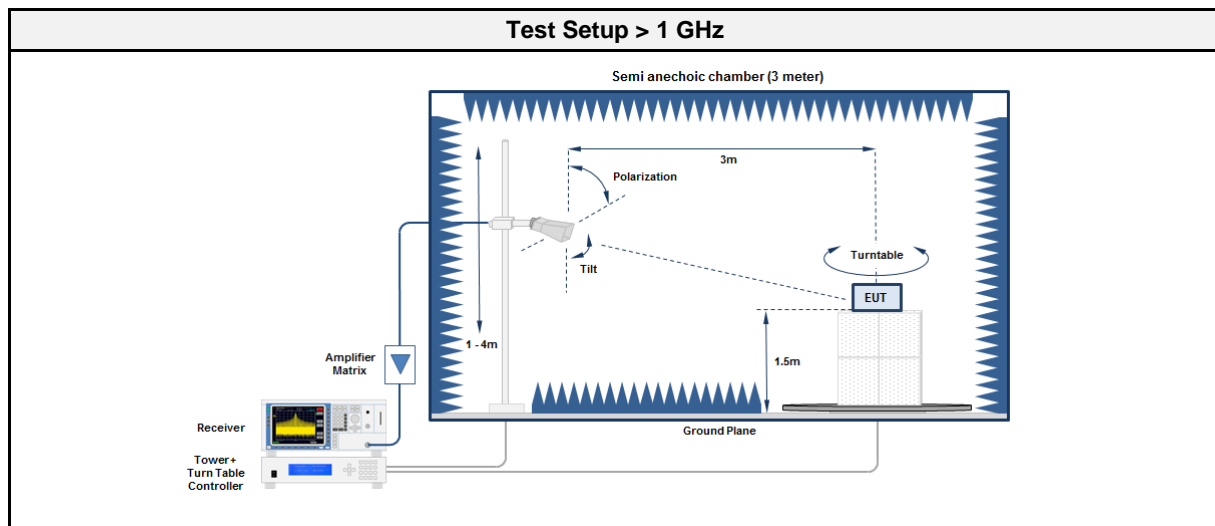
Test Information	
Reference	ISED RSS-210 5 / ISED RSS-Gen 7.3
Measurement Method	ANSI C63.10
Measurement Uncertainty:	± 5.95 dB
Operator	Mr. Siddique
Date	2023-10-19

3.5.2 Limits

Limits				
Frequency [MHz]	Detector	Limit [$\mu\text{V/m}$]	Limit [dB $\mu\text{V/m}$]	Limit Distance [m]
30 - 88	Quasi-Peak	100	40	3
88 - 216	Quasi-Peak	150	43.5	3
216 - 960	Quasi-Peak	200	46	3
960 - 1000	Quasi-Peak	500	54	3
>1000	Average	500	54	3

3.5.3 Setup





3.5.4 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
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2023-02	2024-02
Antenna	R&S	HK 116	EF00030	2021-05	2024-05
Antenna	R&S	HL 223	EF00187	2022-06	2025-06

Test Equipment > 1 GHz					
Description	Manufacturer	Model	Identifier	Cal. Date	Cal. Due
Anechoic Chamber	Frankonia	AC1	EF00062	2022-11	2025-11
Measurement Receiver	Agilent	N9038A-526/WXP	EF01070	2023-02	2024-02
Antenna	Schwarzbeck	BBHA 9120D	EF00018	2022-12	2025-12

3.5.5 Procedure

Test Procedure
<ol style="list-style-type: none"> 1. EUT set to receive mode (Communication tester is used if needed) 2. Span it set according to measurement range 3. Resolution bandwidth below 1 GHz is set according to CISPR 16 with peak/quasi-peakdetector and RBW of 1 MHz with peak/average detector is used above 1 GHz 4. Markers are set to peak emission levels

3.5.6 Results

Test Results						
Channel [MHz]	Emission [MHz]	Level [dBμV/m]	Det.	Pol.	Limit [dBμV/m]	Margin [dB]
315.05	-	-	-	-	-	-
Comments: The stated emission level corresponds to ambient noise floor. No real spurious emission has been measured.						

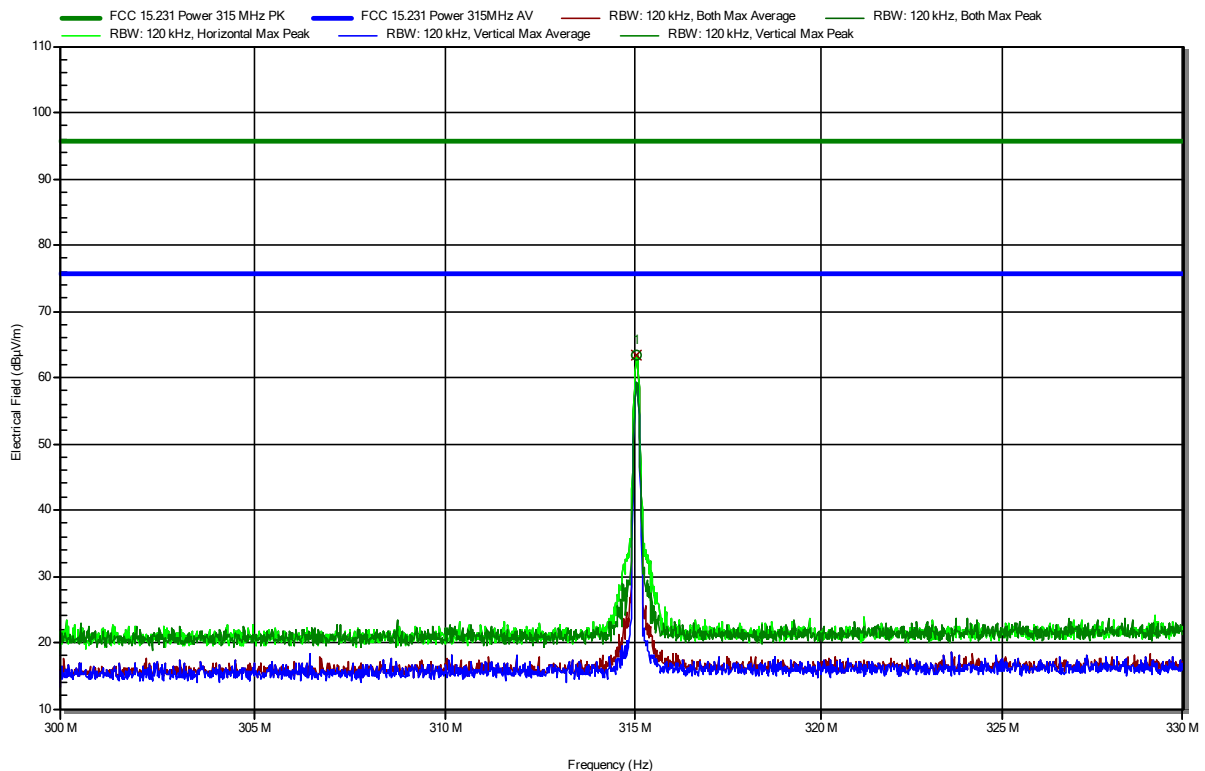
ANNEX A Field strength of fundamental and spurious emissions

Radiated Spurious Emissions according to 47 CFR § 15.231

Project Number: G0M-2301-1843
 Applicant: Glaubitz GmbH & Co.KG
 Model Description: Wireless Remote Control
 Model: ECU-WRC-WK
 Test Sample ID: 44568
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Siddique
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 25 °Celsius, Vnom: 3.0 VDC (Battery)
 Antenna: Schwarzbeck VULB 9168
 Measurement distance: 3 m
 Mode: Tx; ASK; 315.05 MHz
 Test Date: 2023-10-19
 Note: Power

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RadiMation



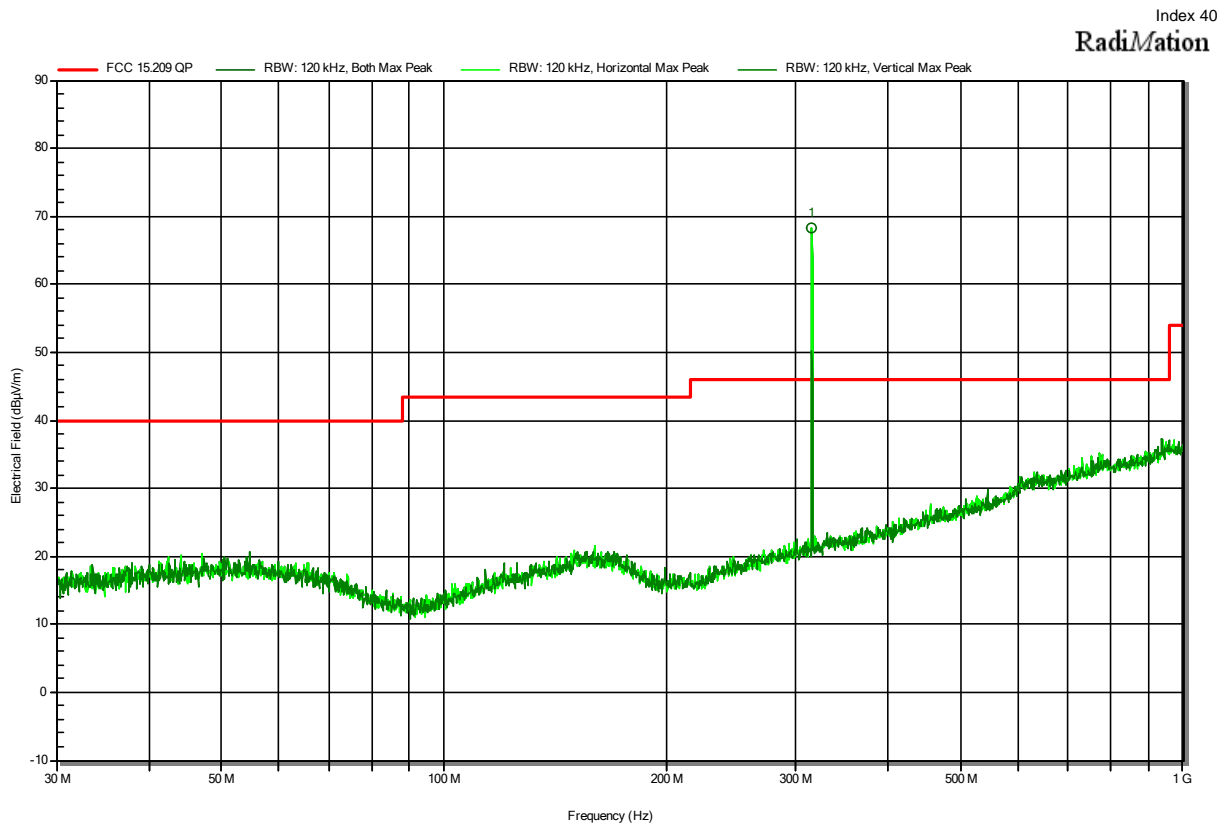
Frequency 315.049 MHz	Peak 63.4 dBµV/m	Peak Limit 95.6 dBµV/m	Peak Difference -32.18 dB	Peak Status Pass	Polarization Horizontal
Frequency 315.049 MHz	Average 63.4 dBµV/m	Average Limit 75.6 dBµV/m	Average Difference -12.22 dB	Average Status Pass	Polarization Horizontal

Test Report No.: G0M-2301-1843-TFC231PT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany

Radiated Spurious Emissions according to 47 CFR § 15.231

Project Number: G0M-2301-1843
 Applicant: Glaubitz GmbH & Co.KG
 Model Description: Wireless Remote Control
 Model: ECU-WRC-WK
 Test Sample ID: 44568
 Test Site: Eurofins Product Service GmbH
 Operator: A.Ibraimov
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 25 °Celsius, Vnom: 3.0 VDC (Battery)
 Antenna: Schwarzbeck VULB 9168
 Measurement distance: 3 m
 Mode: Tx; ASK; 315.05 MHz
 Test Date: 2023-10-18
 Note:



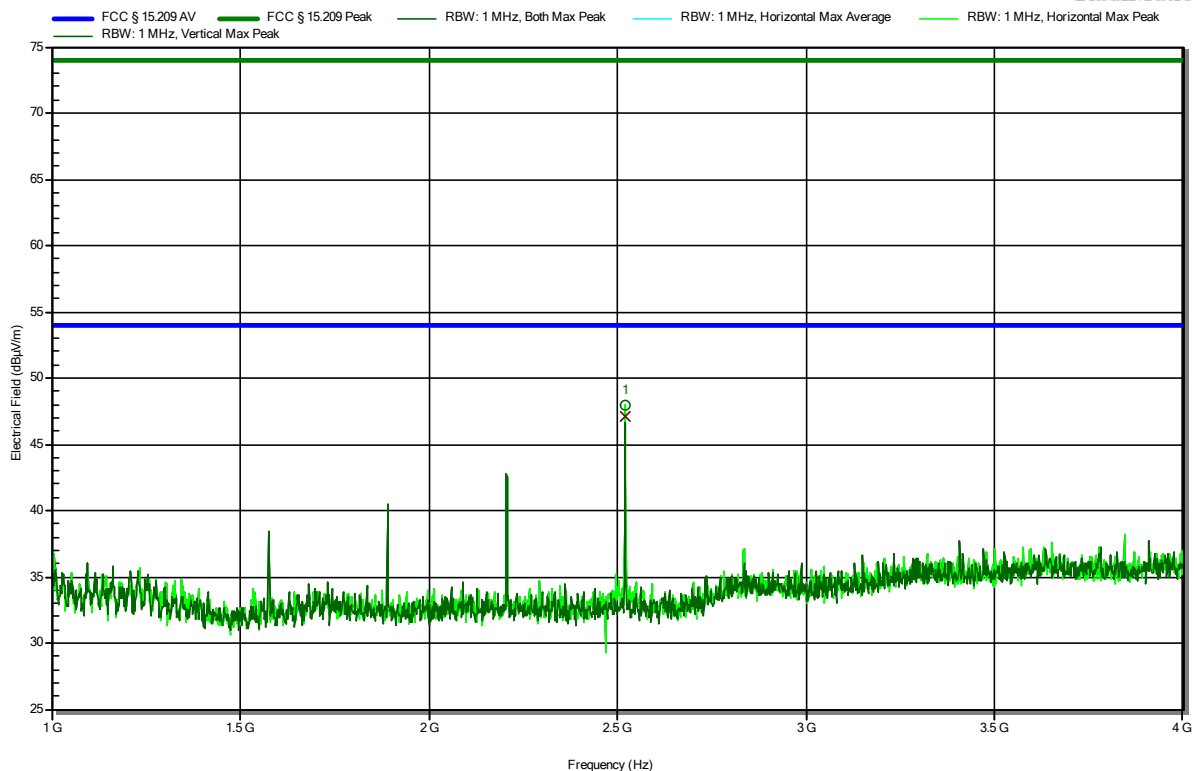
Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
315.0507 MHz	--	--	--	Carrier	Horizontal

Radiated Spurious Emissions according to 47 CFR § 15.231

Project Number: G0M-2301-1843
 Applicant: Glaubitz GmbH & Co.KG
 Model Description: Wireless Remote Control
 Model: ECU-WRC-WK
 Test Sample ID: 44568
 Test Site: Eurofins Product Service GmbH
 Operator: Mr. Siddique
 Measurement software: RadiMation, version 2020.1.8
 Test Conditions: Tnom: 25 °Celsius, Vnom: 3.0 VDC (Battery)
 Antenna: Schwarzbeck BBHA 9120B
 Measurement distance: 3 m
 Mode: Tx; ASK; 315.05 MHz
 Test Date: 2023-10-09
 Note: --

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RadiMation



Frequency	Peak	Peak Limit	Peak Difference	Peak Status	Polarization
2.52 GHz	47.94 dBμV/m	74 dBμV/m	-26.06 dB	Pass	Horizontal
Frequency	Average	Average Limit	Average Difference	Average Status	Polarization
2.52 GHz	47.1 dBμV/m	53.98 dBμV/m	-6.88 dB	Pass	Horizontal

== = END OF TEST REPORT == =

Test Report No.: G0M-2301-1843-TFC231PT-V03

Eurofins Product Service GmbH
 Storkower Str. 38c, D-15526 Reichenwalde, Germany