



Testing Tomorrow's Technology

Application

For

Title 47 USC Part 2, Subpart J, Paragraph 2.907 Equipment Authorization of Certification for an Intentional Radiator per Part 15, Subpart C, Paragraphs 15.207 and 15.209

And

**Industry Canada, Radio Standards Specifications:
RSS Gen Issue 5 and RSS-210 Issue 10**

For the

Radio Systems Corporation

SmartDoor™

Model: 300-3670

FCC ID: KE3-3003670

IC: 2721A-3003670

Issue Date: May 23, 2022

Test Dates: March 3-7, 2022 and May 8-20, 2022

UST Project No.: 22-0144

Total Pages in This Report : 20

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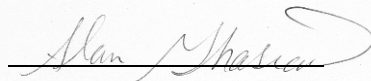


Testing Tomorrow's Technology

I, Alan Ghasiani, certify that I am authorized to sign for the Test Agency and that all of the statements in this report and in the Exhibits attached hereto are true and correct to the best of my knowledge and belief:

US TECH (Agent Responsible For Test):

Name: Alan Ghasiani

Signature: 

Title: Compliance Engineer – President

Date: May 23, 2022



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US Tech Test Report:
FCC ID:
IC:
Test Report Number:
Issue Date:
Customer:
Model:

FCC Part 15.207/209 Certification/ RSS-210
KE3-3003670
2721A-3003670
22-0144
May 23, 2022
Radio Systems Corporation
300-3670

MEASUREMENT TECHNICAL REPORT

COMPANY NAME: Radio Systems Corporation
MODEL: 300-3670
FCC ID: KE3-3003670
IC ID: 2721A-3003670
DATE: May 23, 2022

This report concerns (check one): Original grant Class II Permissive Change

Equipment type: Low Power Transmitter General Field Limits (9 kHz–30 MHz)

Transmitter details:

Frequency of operation: 125.0 kHz and 134.4 kHz

Type of modulation: AM

Data/Bit Rate: N/A

Antenna Gain: integral antenna (Coil)

Maximum Output Power: 123.12 dBuV/m @ 3 meter

Software used to program EUT: N/A

EUT firmware number: 0.2.3

Power setting: Maximum setting

Summary of Test Results

FCC & ISED Rule	Description of Test	Result
RSS-Gen 6.7	99% Occupied Bandwidth	PASS
15.209 & RSS-Gen 6.13, RSS-210, 7.2	Spurious Radiated Emissions	PASS
15.207 & RSS-Gen 8.8, RSS- 210, 7.2	Power line Conducted Emissions	PASS

Table of Contents

<u>Paragraph</u>	<u>Title</u>	<u>Page</u>
1	General Information.....	6
1.1	Purpose of this Report.....	6
1.2	Characterization of Test Sample.....	6
1.3	Product Description	6
1.4	Configuration of Tested System.....	7
1.5	Test Facility.....	7
2	Tests and Measurements.....	9
2.1	Test Equipment.....	9
2.2	Modifications to EUT Hardware	9
2.3	Number of Measurements for Intentional Radiators (15.31(m)).....	10
2.4	Frequency Range of Radiated Measurements (Part 15.33).....	10
2.4.1	Intentional Radiator.....	10
2.4.2	Unintentional Radiator	10
2.5	Measurement Detector Function and Bandwidth (CFR 15.35)	11
2.5.1	Detector Function and Associated Bandwidth.....	11
2.5.2	Corresponding Peak and Average Requirements	11
2.5.3	Pulsed Transmitter Averaging	11
2.6	EUT Antenna Requirements (CFR 15.203)	12
2.7	Restricted Bands of Operation (Part 15.205).....	12
2.8	Intentional Radiator, Power Line Conducted Emissions (CFR 15.207).....	12
2.9	Intentional Radiator, Radiated Emissions (CFR 15.209, (IC RSS 210))	12
2.10	99% Occupied Bandwidth (IC RSS Gen, 6.7)	13
2.11	AC Power line Emissions (CFR 15.207).....	16
2.12	Intentional Radiator, Spurious Radiated Emissions (CFR 15.209).....	17
2.13	Radiated Emission Limits - General Requirements	17
2.14	Radiated Emissions.....	18
2.16	Measurement Uncertainty	23
2.16.1	Conducted Emissions Measurement Uncertainty	23
2.16.2	Radiated Emissions Measurement Uncertainty	23
3	Conclusions	23

List of Figures

US Tech Test Report:
FCC ID:
IC:
Test Report Number:
Issue Date:
Customer:
Model:

FCC Part 15.207/209 Certification/ RSS-210
KE3-3003670
2721A-3003670
22-0144
May 23, 2022
Radio Systems Corporation
300-3670

<u>Figures</u>	<u>Title</u>	<u>Page</u>
Figure 1.	EUT Test Configuration – Radiated Emissions.....	8
Figure 2.	99% Occupied Bandwidth at 125.0 kHz.....	14
Figure 3	99% Occupied Bandwidth at 134.4 kHz.....	15
Figure 4.	Radiated Emissions, Horizontal 30 – 1000 MHz.....	21
Figure 5.	Radiated Emissions, Vertical 30 – 1000 MHz.....	21

List of Tables

<u>Table</u>	<u>Title</u>	<u>Page</u>
Table 1.	EUT and Peripherals.....	8
Table 2.	Test Instruments.....	9
Table 3.	Number of Test Frequencies for Intentional Radiators.....	10
Table 4.	Allowed Antenna(s).....	12
Table 5.	99% Occupied Bandwidth.....	13
Table 6.	Radiated Emissions 9 kHz to 30 MHz (15.209) for 125.0 kHz.....	18
Table 6.	Radiated Emissions 9 kHz to 30 MHz (15.209) for 134.4 kHz.....	19
Table 7.	Spurious Radiated Emissions (CFR 15.209), 30 - 1000 MHz.....	20
Table 8.	Spurious Radiated Emissions (CFR 15.209), Above 1000 MHz.....	22

List of Attachments

Agency Agreements	Application Forms
Letter of Confidentiality	Equipment Label(s)
Block Diagram(s)	Schematic(s)
Test Configuration Photographs	Internal Photographs
External Photographs	ISED Cover Letter
Theory of Operation	User's Manual

US Tech Test Report:
FCC ID:
IC:
Test Report Number:
Issue Date:
Customer:
Model:

FCC Part 15.207/209 Certification/ RSS-210
KE3-3003670
2721A-3003670
22-0144
May 23, 2022
Radio Systems Corporation
300-3670

1 General Information

1.1 Purpose of this Report

This report is prepared as a means of conveying test results and information concerning the suitability of this exact product for public distribution according to the FCC Rules and Regulations Part 15, Sections 207 and 209, and IC RSS 210 Issue 10.

1.2 Characterization of Test Sample

The sample used for testing was received by US Tech on March 3, 2022 in good operating condition.

1.3 Product Description

The Equipment under Test (EUT) is the Radio Systems Corporation, SmartDoor™ Electronic Pet Door, model: 300-3670. This electronic pet door is designed to allow the pet access to go outside when needed without assistance. The pet door has 3 basic modes of operation: Auto, Locked, and Unlocked. These modes can be set manually at any time or controlled by a timed schedule. The Auto mode is the mode that exercises the LF-RFID feature. A collar is worn by the pet to activate the door. The door operates at either 125.0 kHz or 134.4 kHz depending on the LF-RFID signal that is detected and will read the RFID to either allow access to the pet or deny access. The EUT has an additional wireless feature, it is also equipped with Wi-Fi and Bluetooth technology to communicate with a user's mobile phone over Bluetooth via app or local area network over WiFi. With the app the user can set schedules, control the doors settings and mode of operation, and monitor last known location of the pet (inside/outside).

The EUT operates either on four, 1.5 V, type D-cell, alkaline batteries, or by an AC/DC adaptor. AC/DC adaptor operates with an input of 100-240V, 50/60Hz, and 1A max and output of 12V, 2A, and 24W.

The EUT contains wireless radio a module that has been approved under the following identification numbers: FCC ID: VPYLBEE59B1LV and IC: 772C-LBEE59B1LV The wireless radio is a dual band radio operating in both 2.4 and 5 GHz band.

This report conveys test results related to the 125.0 kHz and 134.4 kHz intentional radiator part of the device.

US Tech Test Report:
FCC ID:
IC:
Test Report Number:
Issue Date:
Customer:
Model:

FCC Part 15.207/209 Certification/ RSS-210
KE3-3003670
2721A-3003670
22-0144
May 23, 2022
Radio Systems Corporation
300-3670

1.4 Configuration of Tested System

The Test Sample was tested per *ANSI C63.4:2014, Methods of Measurement of Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz (2014)* for FCC subpart B Unintentional Radiators requirements and per *ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices* for FCC subpart C Intentional Radiators.

A list of EUT and Peripherals is found in Table 1 below. A test configuration diagram of the tested system is shown in Figure 1. Test configuration photographs are provided in separate appendices.

1.5 Test Facility

Testing was performed at US Tech's measurement facility at 3505 Francis Circle, Alpharetta, GA 30004. This site has been fully described and registered with the FCC. Its designation number is US5301. Additionally, this site has also been fully described and submitted to Industry Canada (IC), and has been approved under file number 9900A-1.

1.6 Related Submittals

The EUT is subject to the additional following FCC authorizations:

- a) SDoC under Section 15 Subpart B as an Unintentional Radiator; this report is provided under separate cover.

Table 1. EUT and Peripherals

EUT/ MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC/ IC ID	CABLES P/D
SmartDoor™ (EUT) Radio Systems Corp.	300-3670	Engineering sample	Pending FCC ID: KE3-3003670 IC ID: 2721A-3003670 Contains FCC ID: VPYLBEE59B1LV IC ID: 772C-LBEE59B1LV	P U
PERIPHERAL/ MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC/ IC ID	CABLES P/D
AC/DC Adapter Panda J ensin Technology	TP03-120200US	Engineering Sample	N/A	P

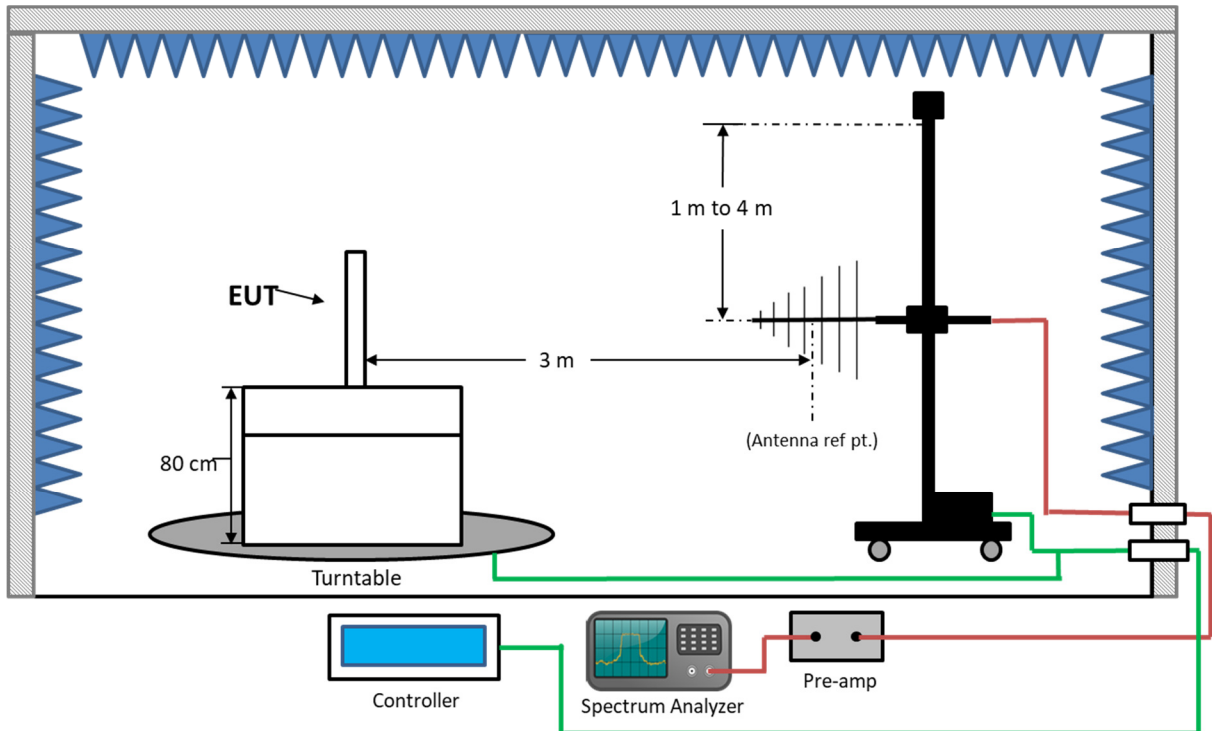


Figure 1. EUT Test Configuration – Radiated Emissions

US Tech Test Report:
FCC ID:
IC:
Test Report Number:
Issue Date:
Customer:
Model:

FCC Part 15.207/209 Certification/ RSS-210
KE3-3003670
2721A-3003670
22-0144
May 23, 2022
Radio Systems Corporation
300-3670

2 Tests and Measurements

2.1 Test Equipment

The table below lists test equipment used to evaluate this product. Model numbers, serial numbers and their calibration status are indicated.

Table 2. Test Instruments

TEST INSTRUMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	CALIBRATION DUE DATE
Spectrum Analyzer	Agilent	E4407B	US41442935	9/02/2022 2 yr.
Spectrum Analyzer	Hewlett-Packard	8593E	3205A00124	5/29/2022 Extended 2 yr.
Loop Antenna	EMCO	6502	9810-3246	6/3/2023 2 yr
Biconical Antenna	EMCO	3110B	9306-1708	8/17/2023 2 yr
Log Periodic Antenna	EMCO	3146	9110-3236	12/13/2023 2 yr.
Horn Antenna	EMCO	3115	9107-3723	2/3/2023 2 yr
Rf Preamp 100 kHz To 1.3 GHz	Hewlett-Packard	8447D	1937A02980	6/9/2022
Preamp 1.0 GHz To 26.0 GHz	Hewlett-Packard	8449B	3008A00480	8/27/2022

Note: The calibration interval of the above test instruments are 12 months unless stated otherwise and all calibrations are traceable to NIST/USA.

2.2 Modifications to EUT Hardware

No modifications were made to the EUT during testing.

2.3 Number of Measurements for Intentional Radiators (15.31(m))

Measurements of intentional radiators or receivers shall be performed and reported for each band in which the device can be operated with the device operating at the number of frequencies in each band specified in Table 3 below.

Table 3. Number of Test Frequencies for Intentional Radiators

Frequency Range over which the device operates	Number of Frequencies	Location in the Range of operation
1 MHz or less	1	Middle
1 to 10 MHz	2	1 near the top 1 near the bottom
Greater than 10 MHz	3	1 near top 1 near middle 1 near bottom

The EUT operates at 125.0 kHz and 134.4kHz ; therefore, two test frequency was used.

2.4 Frequency Range of Radiated Measurements (Part 15.33)

2.4.1 Intentional Radiator

The spectrum shall be investigated for the intentional radiator from the lowest RF signal generated in the EUT, without going below 9 kHz to the 10th harmonic of the highest fundamental frequency generated or 40 GHz, whichever is the lowest.

2.4.2 Unintentional Radiator

For the digital device using an internal frequency above 1000MHz, the investigated frequency range shall be 30 MHz to 5 times the highest internal clock frequency or 40GHz, whichever is the lowest.

US Tech Test Report:
FCC ID:
IC:
Test Report Number:
Issue Date:
Customer:
Model:

FCC Part 15.207/209 Certification/ RSS-210
KE3-3003670
2721A-3003670
22-0144
May 23, 2022
Radio Systems Corporation
300-3670

2.5 Measurement Detector Function and Bandwidth (CFR 15.35)

The radiated and conducted emissions limits shown herein are based on the parameters described in the following sections.

2.5.1 Detector Function and Associated Bandwidth

On frequencies below 1000 MHz, the limits herein are based upon measurement equipment employing a CISPR Quasi-peak detector function and related measurement bandwidths (i.e. 9 kHz from 150 kHz to 30 MHz and 120 kHz from 30 MHz to 1000 MHz). Alternatively, measurements may be made with equipment employing a peak detector function as long as the same bandwidths specified for the quasi-peak device are used.

2.5.2 Corresponding Peak and Average Requirements

Above 1000 MHz, radiated limits are based on measuring instrumentation employing an average detector function. When average radiated emissions are specified there is also a corresponding Peak requirement, as measured using a peak detector, of 20 dB greater than the average limit. For all measurements above 1000 MHz the Resolution Bandwidth shall be at least 1 MHz.

2.5.3 Pulsed Transmitter Averaging

When the radiated emissions limit is expressed as an average value, and the transmitter is pulsed, the measured field strength shall be determined by applying a Duty Cycle Correction Factor based upon dividing the total ON time during the first 100 ms period by 100 ms (or by the period if less than 100 ms). The duty cycle may be expressed logarithmically in dB.

NOTE: If the transmitter was programmed to transmit at >98% duty cycle, then, wherever applicable (where the detection mode was AVG) the duty cycle factor calculated will be applied.

2.6 EUT Antenna Requirements (CFR 15.203)

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. Only the antenna(s) listed in Table 4 will be used with this module.

Table 4. Allowed Antenna(s)

REPORT REFERENCE	MANUFACTURER	TYPE OF ANTENNA	MODEL	TYPE OF CONNECTOR
Antenna 1	Radio Systems Corp.	Integrated Loop	Integrated loop antenna	solder

Note: This antenna is internally mounted and not user replaceable without damaging the device.

2.7 Restricted Bands of Operation (Part 15.205)

Only spurious emissions can fall in the frequency bands of CFR 15.205. The field strength of these spurious emissions cannot exceed the limits of 15.209. Radiated Harmonics and other Spurious Emissions are examined for this requirement; see paragraph 2.1.

2.8 Intentional Radiator, Power Line Conducted Emissions (CFR 15.207)

Power line conducted emissions testing was performed to ensure that with the EUT in operation (exercising all transmitter functions), the complete system continues to meet the applicable requirements for CFR 15.207. Results are displayed along with the 15.107 power line test data in the sections below.

2.9 Intentional Radiator, Radiated Emissions (CFR 15.209, (IC RSS 210))

Radiated Radio measurements: The EUT was placed into a continuous transmit mode of operation and a preliminary scan was performed on the EUT to find signal frequencies that were caused by the transmitter part of the product. To obtain the worst case results, the EUT was placed on a table top of a non-conductive table, 80 cm above the ground floor. The EUT was positioned 3 meters away from the receiving antenna during testing (1 meter at frequencies above 6 GHz and if the emissions were less than 6 dB from the noise floor). The EUT was tested in vertical orientation representative of the normal configuration. Radiated measurements below 30 MHz were tested with a RBW = 9 kHz; emissions below 1 GHz were tested

US Tech Test Report:
FCC ID:
IC:
Test Report Number:
Issue Date:
Customer:
Model:

FCC Part 15.207/209 Certification/ RSS-210
KE3-3003670
2721A-3003670
22-0144
May 23, 2022
Radio Systems Corporation
300-3670

with a RBW = 120 kHz and radiated measurements above 1 GHz were measured using a RBW =1 MHz. VBW was set to three times the RBW value.

For radiated emissions, any emission that was greater than 20 dB from the applicable limit was not recorded. If radiated emissions above 1 GHz were measured at a distance of 1 meter, the measured value at 1 meter was extrapolated to the results at 3 meters using an inverse distance extrapolation factor of -20 dB/decade. Results are displayed along with the 15.109 test data in the sections below.

2.10 99% Occupied Bandwidth (IC RSS Gen, 6.7)


According to RSS-Gen, 6.7: The occupied bandwidth or the “99% emission bandwidth” is defined as the frequency range between two points, one above and the other below the carrier frequency, within which 99% of the total transmitted power of the fundamental transmitted emission is contained. The occupied bandwidth shall be reported for all equipment in addition to the specified bandwidth required in the applicable RSSs.

Table 5. 99% Occupied Bandwidth

Frequency (kHz)	99% Occupied Bandwidth (kHz)
125	1.7459
134.4	1.7379

Test Date: May 18, 2022

Tested By:

Signature: 

Name: Ian Charboneau

US Tech Test Report:
 FCC ID:
 IC:
 Test Report Number:
 Issue Date:
 Customer:
 Model:

FCC Part 15.207/209 Certification/ RSS-210
 KE3-3003670
 2721A-3003670
 22-0144
 May 23, 2022
 Radio Systems Corporation
 300-3670

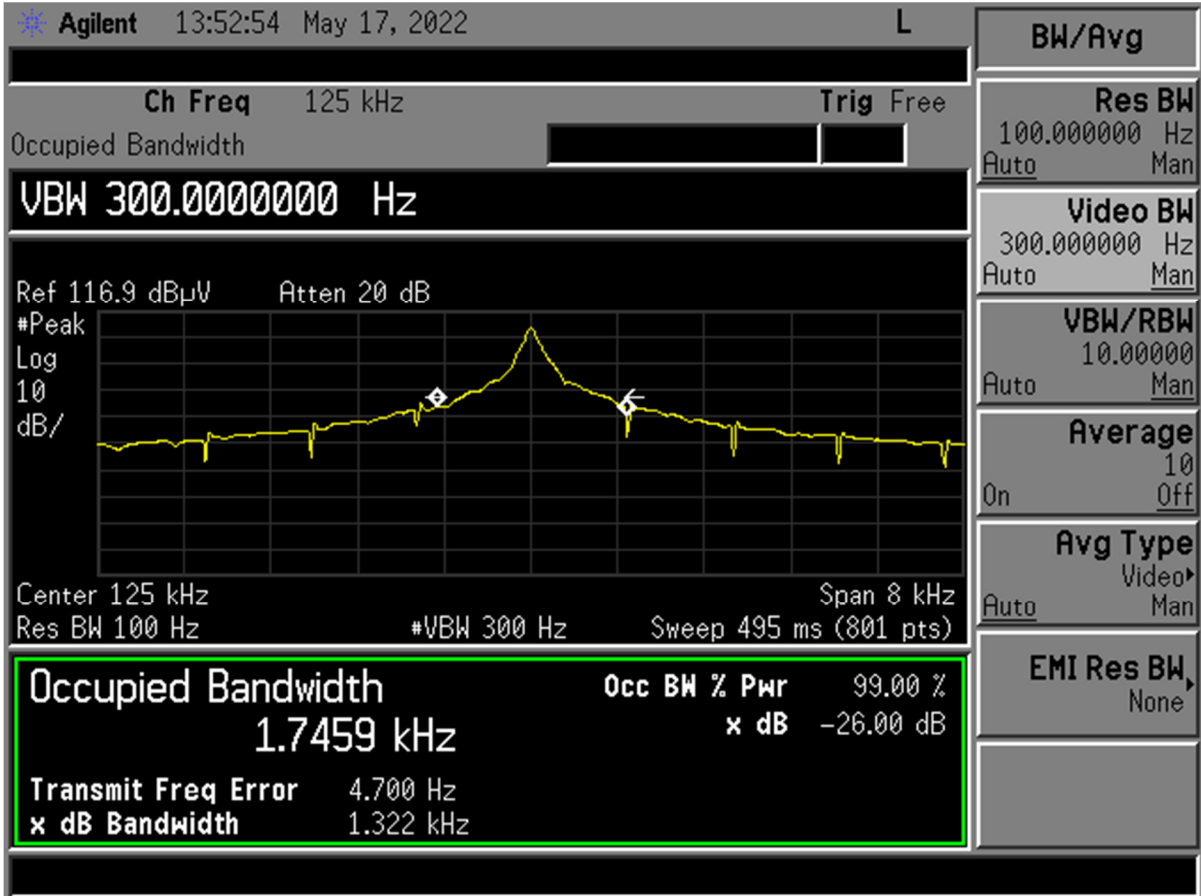


Figure 2. 99% Occupied Bandwidth at 125.0 kHz

US Tech Test Report:
FCC ID:
IC:
Test Report Number:
Issue Date:
Customer:
Model:

FCC Part 15.207/209 Certification/ RSS-210
KE3-3003670
2721A-3003670
22-0144
May 23, 2022
Radio Systems Corporation
300-3670

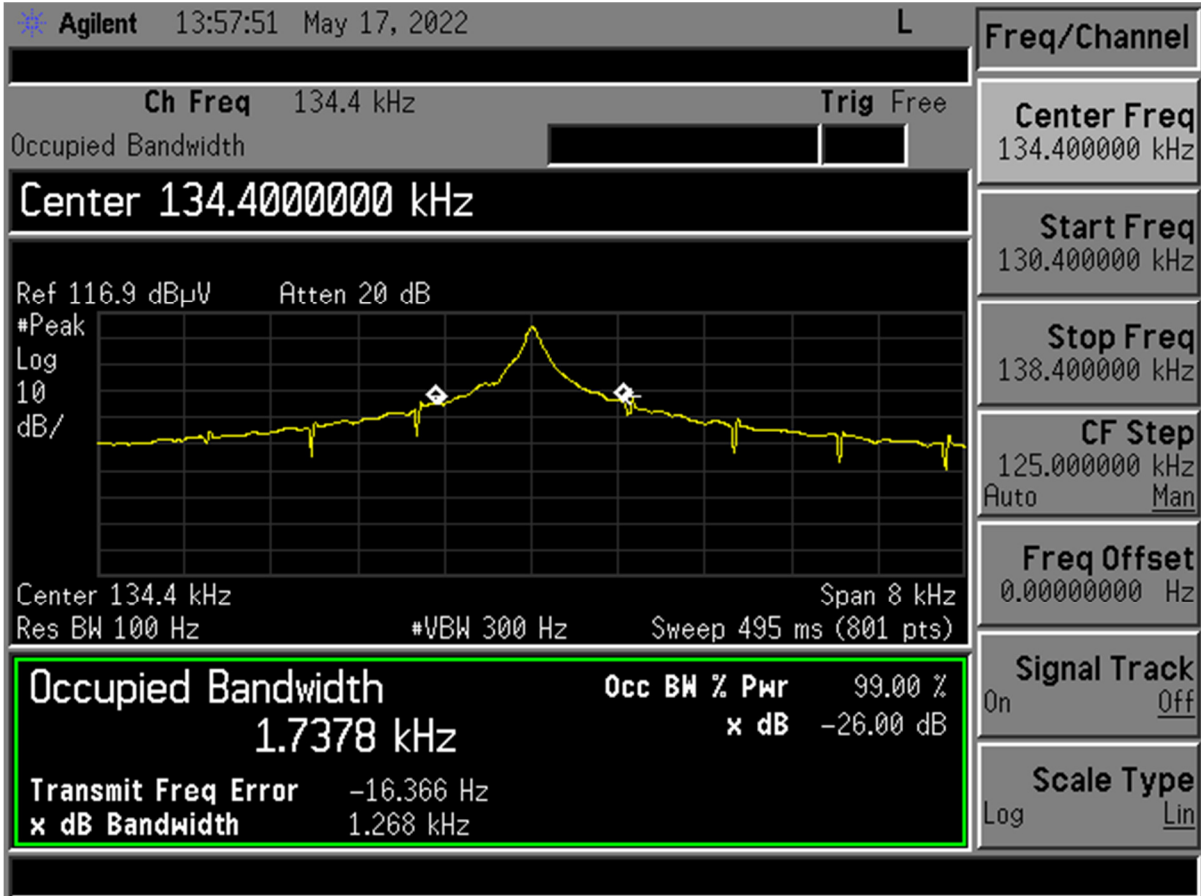


Figure 3 99% Occupied Bandwidth at 134.4 kHz

US Tech Test Report:
 FCC ID:
 IC:
 Test Report Number:
 Issue Date:
 Customer:
 Model:

FCC Part 15.207/209 Certification/ RSS-210
 KE3-3003670
 2721A-3003670
 22-0144
 May 23, 2022
 Radio Systems Corporation
 300-3670

2.11 AC Power line Emissions (CFR 15.207)

The worst-case line conducted emission for the EUT was 2.9 dB below the limit at 0.4568 MHz on the Phase lead. All other conducted emissions were at least 5.6 dB below the limit. This worst-case emission is found in table 4.

150 KHz to 30 MHz with 15.207 Limits						
Frequency (MHz)	Test Data (dBuV)	LISN+CL-PA (dB)	Results (dBuV)	AVG Limits (dBuV)	Margin (dB)	Detector PK, QP, or AVG
120 VAC, 60 Hz Phase						
0.1768	39.63	0.08	39.71	54.6	14.9	PK
0.4568	41.21	2.69	43.90	46.8	2.9	PK
0.4568	22.27	2.69	24.96	46.8	21.8	AVG
0.5125	29.27	2.70	31.97	46.0	14.0	PK
1.2660	27.55	0.87	28.42	46.0	17.6	PK
6.6660	29.08	0.34	29.42	50.0	20.6	PK
10.5830	24.50	0.53	25.03	50.0	25.0	PK
22.7000	24.13	1.06	25.19	50.0	24.8	PK
120VAC, 60 Hz Neutral						
0.1512	42.32	0.13	42.45	55.9	13.5	PK
0.4522	41.14	0.06	41.20	46.8	5.6	PK
0.4522	26.31	0.06	26.37	46.8	20.5	AVG
0.5200	29.76	0.07	29.83	46.0	16.2	PK
2.5660	27.36	0.12	27.48	46.0	18.5	PK
7.3830	30.08	0.51	30.59	50.0	19.4	PK
10.0830	25.25	0.69	25.94	50.0	24.1	PK

Sample Calculation at 0.1768 MHz:

Magnitude of Measured Frequency	39.63 dBuV
+Antenna Factor + Cable Loss - Amplifier Gain	0.08 dB/m
Corrected Result	39.71 dBuV/m

Test Date: March 4, 2022
 Tested by:

Signature: 

Name: Ian Charboneau

2.12 Intentional Radiator, Spurious Radiated Emissions (CFR 15.209)

Radiated emissions disturbance Measurements were performed with EUT in constant transmit mode with a 100/300 ms duty cycle and using an instrument having both peak and quasi-peak detectors over the frequency range of 9 kHz to 1 GHz. Measurements of the radiated emissions were made with the receiver antenna at a distance of 3 m from the boundary of the test unit.

The antenna polarization and test sample azimuth were varied during the measurements to find the maximum field strength readings to record.

2.13 Radiated Emission Limits - General Requirements

- (a) Except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3
Above 960	500	3

**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§15.231 and 15.241.

Fundamental Limit calculation:

at 125.0 kHz = $2400/25 = 224.3 \text{ uV/m @ 300 m}$
 Conversion from uV/m to dBuV/m = $20 \log(224.3) = 47.02 \text{ dBuV/m}$
 Conversion from 300 to 3 m = $40 \log(300/3) = 80$
 Limit at 3 meter = $47.02 + 80 = 127.02 \text{ dBuV/m}$

US Tech Test Report:
 FCC ID:
 IC:
 Test Report Number:
 Issue Date:
 Customer:
 Model:

FCC Part 15.207/209 Certification/ RSS-210
 KE3-3003670
 2721A-3003670
 22-0144
 May 23, 2022
 Radio Systems Corporation
 300-3670

2.14 Radiated Emissions

Table 6. Radiated Emissions 9 kHz to 30 MHz (15.209) for 125.0 kHz

Test: FCC Part 15, Part 15.209							
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	AVG Limits (dBuV/m)	Antenna Distance/Polarization	Margin (dB)	Detector Mode
0.125**	110.30	12.42	122.70	125.7*	3m./Loop.	3.0	PK
0.125**	61.01	11.92	72.93	105.7	3m./Loop.	32.8	AVG
0.150	73.21	12.26	85.47	104.1	3m./Loop.	18.6	PK
0.250**	67.01	12.32	79.33	99.6	3m./Loop.	20.3	PK
0.380**	64.08	11.83	75.91	96.1	3m./Loop.	20.2	PK
0.500*	58.41	11.94	70.35	73.6	3m./Loop.	3.3	PK
0.630**	56.62	11.86	68.48	71.7	3m./Loop.	3.2	PK
0.750**	30.36	11.63	41.99	71.7	3m./Loop.	29.7	QP
0.880**	28.56	11.52	40.08	68.8	3m./Loop.	28.7	QP
1.000**	16.56	11.73	28.29	67.6	3m./Loop.	39.3	AVG
1.130**	15.34	11.72	27.06	66.6	3m./Loop.	39.5	AVG
1.250**	14.61	11.73	26.34	65.0	3m./Loop.	38.7	AVG
1.750	47.50	12.01	59.51	69.5	3m./Loop.	10.0	PK

- (*) Falls within the restricted bands of CFR 15.205. Limits based on CFR 15.209(d) & 15.209(e) 20 dB relaxation for peak measurements of CFR 15.35(b).
- (**) Fundamental or harmonic of fundamental
- No other signals detected within 20 dB of specification limit. Harmonics investigated up to the 10th harmonic

Sample Calculation at 0.126 MHz:

Magnitude of Measured Frequency	61	dBuV
+ Antenna Factor + Cable Loss - Amplifier Gain	11.92	dB/m
Corrected Result	72.93	dBuV/m

Test Date: May 17, 2022

Tested By:

Signature: 

Name: Ian Charboneau

US Tech Test Report:
 FCC ID:
 IC:
 Test Report Number:
 Issue Date:
 Customer:
 Model:

FCC Part 15.207/209 Certification/ RSS-210
 KE3-3003670
 2721A-3003670
 22-0144
 May 23, 2022
 Radio Systems Corporation
 300-3670

Table 7. Radiated Emissions 9 kHz to 30 MHz (15.209) for 134.4 kHz

Test: FCC Part 15, Part 15.209							
Frequency (MHz)	Test Data (dBuV)	AF+CA-AMP (dB/m)	Results (dBuV/m)	AVG Limits (dBuV/m)	Antenna Distance/Polarization	Margin (dB)	Detector Mode
0.134**	110.70	12.42	123.12	125.7*	3m./Loop.	2.6	PK
0.134**	62.00	11.90	73.90	105.7	3m./Loop.	31.8	AVG
0.150	73.88	12.26	86.14	104.1	3m./Loop.	17.9	PK
0.270**	65.99	11.80	77.79	99.6	3m./Loop.	21.8	PK
0.400**	41.39	11.60	52.99	96.1	3m./Loop.	43.1	PK
0.540**	31.68	11.73	43.41	73.6	3m./Loop.	30.2	QP
0.670**	56.18	11.60	67.78	71.7	3m./Loop.	3.9	PK
0.810**	55.11	11.50	66.61	70.1	3m./Loop.	3.5	PK
0.940**	29.07	11.53	40.60	68.8	3m./Loop.	28.2	QP
1.080**	52.52	11.70	64.22	67.6	3m./Loop.	3.4	PK
1.210**	15.11	11.73	26.84	66.6	3m./Loop.	39.7	AVG
1.340**	13.81	11.73	25.54	65.0	3m./Loop.	39.5	AVG
2.410	45.06	11.61	56.67	69.5	3m./Loop.	12.9	PK

- (*) Falls within the restricted bands of CFR 15.205. Limits based on CFR 15.209(d) & 15.209(e) 20 dB relaxation for peak measurements of CFR 15.35(b).
- (**) Fundamental or harmonic of fundamental
- No other signals detected within 20 dB of specification limit. Harmonics investigated up to the 10th harmonic

Sample Calculation at 0.134 MHz:

Magnitude of Measured Frequency	110.70	dBuV
+ Antenna Factor + Cable Loss - Amplifier Gain	12.42	dB/m
Corrected Result	123.12	dBuV/m

Test Date: May 17, 2022

Tested By:

Signature: 

Name: Ian Charboneau

US Tech Test Report:
 FCC ID:
 IC:
 Test Report Number:
 Issue Date:
 Customer:
 Model:

FCC Part 15.207/209 Certification/ RSS-210
 KE3-3003670
 2721A-3003670
 22-0144
 May 23, 2022
 Radio Systems Corporation
 300-3670

The worst case intentional spurious emissions measurements for the EUT was collected when the EUT was transmitting at 125.0 kHz. This test data is presented below as the representative unwanted spurious emissions for the EUT.

Table 8. Spurious Radiated Emissions (CFR 15.209), 30 - 1000 MHz

30 MHz to 1000 MHz with 15.209 Limits							
Frequency (MHz)	Test Data (dBuV)	AF+CA+DC-AMP (dB/m)	Results (dBuV/m)	QP Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or QP
160.44	45.29	-14.07	31.22	43.5	3m./HORZ	12.3	PK
223.10	46.28	-14.95	31.33	46.0	3m./HORZ	14.7	PK
442.12	42.32	-9.59	32.73	46.0	3m./HORZ	13.3	PK
833.28	41.85	-3.68	38.17	46.0	3m./HORZ	7.8	PK
30.00	41.02	-13.57	27.45	40.0	3m./VERT	12.6	QP
35.00	38.62	-15.09	23.53	40.0	3m./VERT	16.5	QP
40.00	35.74	-16.24	19.50	40.0	3m./VERT	20.5	QP
45.00	37.00	-17.01	19.99	40.0	3m./VERT	20.0	QP
50.00	39.87	-17.50	22.37	40.0	3m./VERT	17.6	QP
60.00	27.30	-18.09	9.21	40.0	3m./VERT	30.8	QP
145.75	47.63	-13.73	33.90	43.5	3m./VERT	9.6	PK
774.42	43.46	-5.64	37.82	46.0	3m./VERT	8.2	PK

Sample Calculation at 74.52 MHz:

Magnitude of Measured Frequency	45.29	dBuV
+ Antenna Factor + Cable Loss - Amplifier Gain	-14.07	dB/m
Corrected Result	31.22	dBuV/m

Test Date: May 17, 2022
 Tested By:

Signature: 

Name: Ian Charboneau

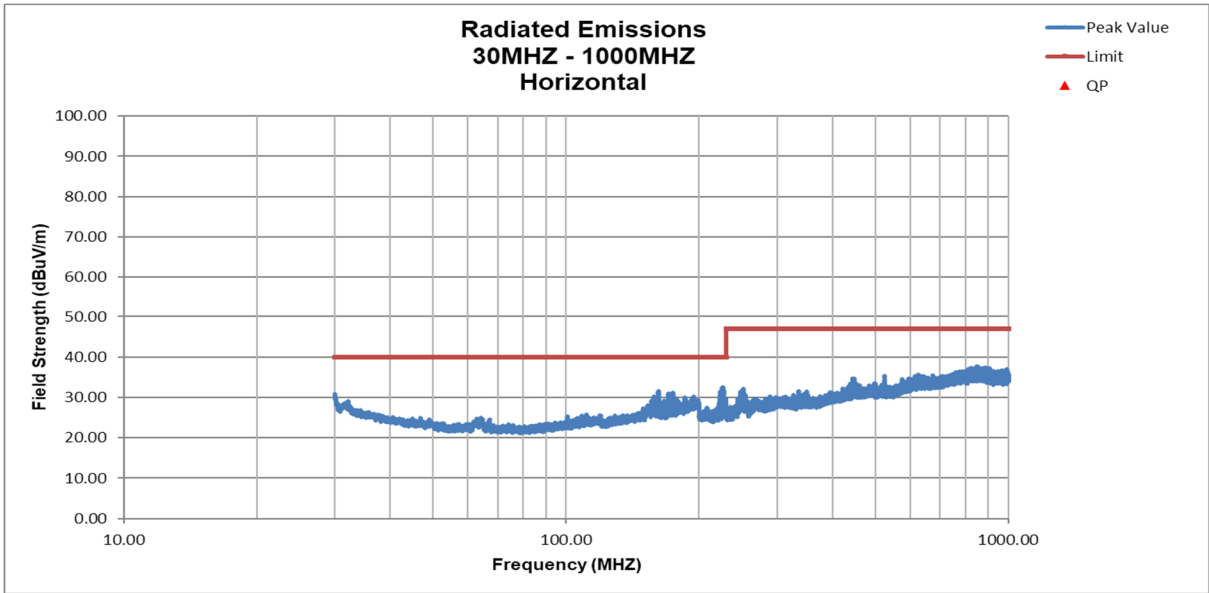


Figure 4. Radiated Emissions, Horizontal 30 – 1000 MHz

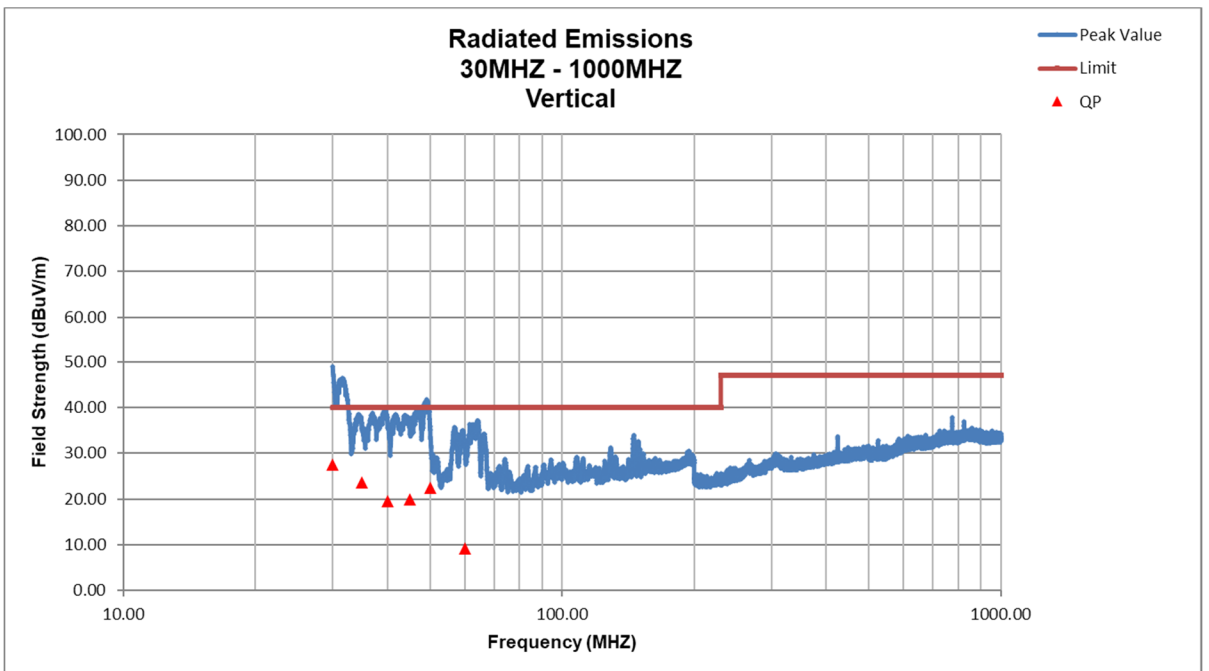


Figure 5. Radiated Emissions, Vertical 30 – 1000 MHz

US Tech Test Report:
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FCC Part 15.207/209 Certification/ RSS-210
KE3-3003670
2721A-3003670
22-0144
May 23, 2022
Radio Systems Corporation
300-3670

Table 9. Spurious Radiated Emissions (CFR 15.209), Above 1000 MHz

Above 1000 MHz with Class B Limits							
Frequency (MHz)	Test Data (dBuv)	AF+CA-AMP (dB/m)	Results (dBuV/m)	AVG Limits (dBuV/m)	Antenna Distance/ Polarization	Margin (dB)	Detector PK, or AVG
No emissions were detected above 1000 MHz.							

Test Date: May 17, 2022

Tested By:

Signature: 

Name: Ian Charboneau

US Tech Test Report:
FCC ID:
IC:
Test Report Number:
Issue Date:
Customer:
Model:

FCC Part 15.207/209 Certification/ RSS-210
KE3-3003670
2721A-3003670
22-0144
May 23, 2022
Radio Systems Corporation
300-3670

2.16 Measurement Uncertainty

The measurement uncertainties given were calculated using the method detailed in CISPR 16-4. A coverage factor of $k=2$ was used to give a level of confidence of approximately 95%.

2.16.1 Conducted Emissions Measurement Uncertainty

Measurement Uncertainty (within a 95% confidence level) for this test is ± 2.85 dB. The EUT is battery powered; therefore, this requirement is not applicable.

2.16.2 Radiated Emissions Measurement Uncertainty

30 MHz to 200 MHz at 3 m:

The measurement uncertainty (with a 95% confidence level) for this test using a Biconical Antenna is ± 5.40 dB.

200 MHz to 1000 MHz at 3 m:

The measurement uncertainty (with a 95% confidence level) for this test using a Log Periodic Antenna is ± 5.19 dB.

Above 1 GHz at 3 m:

The measurement uncertainty (with a 95% confidence level) for this test using a Horn Antenna is ± 5.08 dB.

3 Conclusions

The EUT meets the requirements of Part 15.207/209 of Subpart C and RSS-Gen and RSS-210 based on the test results presented in this test report.