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RADIO TEST REPORT

Report ID:
REP141525

Project number:
PRJ0092733

Type of assessment:
Final product testing

Applicant:
Camden Door Controls

Description of product:
Kinetic RF Transmitter

Model(s)/HVIN(s):
50-31F036

Product marketing name (PMN):
Kinetic Transmitter End-point

FCC identifier:
FCC ID: 2AHAB-KT

ISED certification number:
IC: 8725A-KT

Specifications:

- FCC 47 CFR Part 15 Subpart C, §15.249
- RSS-210, Issue 11, June 2024, Annex B.10

Date of issue: August 12, 2026

Tarek Elkholy, EMC/RF Engineer
Tested by

Signature

Atefeh Beiginezhad, EMC/RF Specialist
Reviewed by

Signature

Lab locations

Company name	Nemko Canada Inc.
Facilities	**Ottawa site:** 303 River Road, Ottawa, ON, Canada, K1V 1H2 Tel: +1 613 737 9680 Test site registration number: CA2040 **Montréal site:** 292 Labrosse Avenue, Pointe-Claire, QC, Canada, H9R 5L8 Tel: +1 514 694 2684 Test site registration number: CA2041 **Cambridge site:** 1-130 Saltsman Drive, Cambridge, ON, Canada, N3E 0B2 Tel: +1 519 650 4811 Test site registration number: CA0101
Website	www.nemko.com

Limits of responsibility

Note that the results contained in this report relate only to the items tested and were obtained in the period between the date of initial receipt of samples and the date of issue of the report.
This test report has been completed in accordance with the requirements of ISO/IEC 17025. All results contained in this report are within Nemko Canada's ISO/IEC 17025 accreditation.

Copyright notification

Table of Contents

Section 1 Report summary

1.1 Test specifications

FCC 47 CFR Part 15 Subpart C, Clause 15.249	Operation within the bands 902–928 MHz, 2400–2483.5 MHz, 5725–5875 MHZ, and 24.0–24.25 GHz.
RSS-210, Issue 11, June 2024, Annex B.10	Devices operating in the bands 902-928 MHz, 2400-2483.5 MHz, 5725-5875 MHz and 24-24.25 GHz

1.2 Test methods

RSS-Gen, Issue 5, February 2021	General Requirements for Compliance of Radio Apparatus
ANSI C63.10-2020 + Cor.1-2023 + C63.10a-2024	American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices

1.3 Exclusions

None

1.4 Statement of compliance

Statement of Conformity:

The reported results have been evaluated against the specified limits of the standard(s) listed in **Section 1.1** of this report.

Conformity with the specified requirements is determined by comparing the measured results directly to the applicable limits. Measurement uncertainty is not applied to adjust or attribute to the measured value for the purpose of compliance determination.

In the configuration tested, the **Equipment Under Test (EUT)** was found to be compliant. Unless otherwise noted in **Section 1.3**, all testing was performed against the relevant requirements of the applicable test standard(s).

The results obtained indicate that the product under test complies in full with the requirements tested, and the test results relate only to the items tested.

Refer to the **Summary of Test Results** section for full details.

1.5 Test report revision history

Table 1.5-1: *Test report revision history*

Revision #	Date of issue	Details of changes made to test report
REP141525	August 12, 2026	Original report issued

Section 2 Engineering considerations

2.1 Modifications incorporated in the EUT for compliance

There were no modifications performed to the EUT during this assessment.

2.2 Technical judgment

None

2.3 Model variant declaration

There were no model variants declared by the applicant.

2.4 Deviations from laboratory tests procedures

No deviations were made from laboratory procedures.

Section 3 Test conditions

3.1 Atmospheric conditions

Temperature	15 °C – 35 °C
Relative humidity	20 % – 75 %
Air pressure	86 kPa (860 mbar) – 106 kPa (1060 mbar)

When it is impracticable to carry out tests under these conditions, a note to this effect stating the ambient temperature and relative humidity during the tests shall be recorded and stated.

3.2 Power supply range

The normal test voltage for equipment to be connected to the mains shall be the nominal mains voltage. For the purpose of the present document, the nominal voltage shall be the declared voltage, or any of the declared voltages ±5 %, for which the equipment was designed.

Section 4 Information provided by the applicant

4.1 Disclaimer

This section contains information provided by the applicant and has been utilized to support the test plan. Inaccurate information provided by the applicant can affect the validity of the results contained within this test report. Nemko accepts no responsibility for the information contained within this section and the impact it may have on the test plan and resulting measurements.

4.2 Applicant / Manufacturer

Applicant name	Camden Door Controls
Applicant address	2395 Skymark Avenue, Mississauga, Ontario, L4W 4Y6, Canada
Manufacturer name	Same as applicant
Manufacturer address	Same as applicant

4.3 EUT information

Product	Kinetic Transmitter End-point
Model	50-31F036
Serial number	000001
Power supply requirements	DC: 2.5 V (Powered by internal induction generator)
Product description and theory of operation	The device is a sub-1GHz RF transmitter that uses power generated by internal induction generator to transmit a short RF message to a door controller (receiver). The generator converts mechanical energy to electrical energy, enabling harvested energy to provide power to transfer data via RF technology and eliminating the need for batteries.

4.4 Radio technical information

Radio type	Sub 1 GHz radio
Frequency band	902–928 MHz
Frequency	915.22 MHz
Field strength, dBµV/m @ 3 m	72.2 dBµV/m @ 3 m
Measured BW (kHz), 99% OBW	112 kHz
Type of modulation	2FSK
Transmitter spurious, dBµV/m @ 3 m	44.82 dBµV/m at 1830.5 MHz
Antenna information	Wire, 24 AWG unshielded, 3 in.

4.5 EUT setup details

4.5.1 Radio exercise details

Operating conditions	EUT was operated through special software and powered using external audio wave form generator to make module transmit continuously. However, in real time application EUT will not be connected to any type of power source, it works on a concept of Kinetic energy.
Transmitter state	Transmitter set into continuous mode.

4.5.2 EUT setup configuration

Table 4.5-1: *EUT interface ports*

Description	Qty.
DC Power port (testing purpose)	1

Table 4.5-2: *Support equipment*

Description	Brand name	Model, Part number, Serial number, Revision level
Arbitrary Waveform Generator	Rigol	MN: DG2041A

Table 4.5-3: *Inter-connection cables*

Cable description	From	To	Length (m)
Power port	EUT	Waveform generator	<3

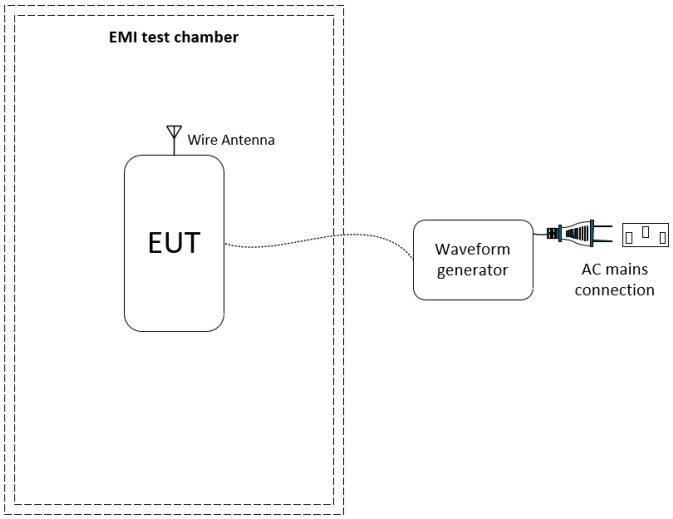


Figure 4.5-1: *Radiated testing block diagram*

Section 5 Summary of test results

5.1 location

Test location (s)	Cambridge

5.2 Testing period

Test start date	December 17, 2025	Test end date	December 17, 2025

5.3 Sample information

Receipt date	December 17, 2025	Nemko sample ID number(s)	PRJ00927330001

5.4 FCC test results

Table 5.4-1: *FCC general requirements results*

Part	Test description	Verdict
Generic requirements		
§15.207(a)	Conducted limits	Not applicable
§15.31(e)	Variation of power source	Pass
§15.31(m)	Number of tested frequencies	Pass
§15.203	Antenna requirement	Pass

Notes: EUT is powered through kinetic energy, only for test purpose it was DC powered via arbitrary Waveform Generator.

Table 5.4-2: *FCC Part 15 Subpart C, intentional radiators test results*

Part	Test description	Verdict
§15.249(a)	Field strength of emissions from intentional radiators	Pass
§15.249(b)	Fixed Point-to-Point operation in the 24.0–24.25 GHz band	Not applicable[1]
§15.249(d)	Spurious emissions (except harmonics)	Pass

Notes: [1]EUT is not a Fixed, point-to-point operating system

5.5 ISED test results

Table 5.5-1: *ISED general requirements results*

Part	Test description	Verdict
RSS-Gen, 6.7	Occupied bandwidth	Pass
RSS-Gen, 6.9	Operating bands and selection of test frequencies	Pass
RSS-Gen, 7.3	Receiver radiated emission limits	Not applicable[1]
RSS-Gen, 7.4	Receiver conducted emission limits	Not applicable[1]
RSS-Gen, 8.8	AC powerline conducted emissions limits	Not applicable

Notes: [1]According to sections 5.2 and 5.3 of RSS-Gen, Issue 5 the EUT does not have a stand-alone receiver neither scanner receiver, therefore exempt from receiver requirements.
EUT is powered through kinetic energy, only for test purpose it was DC powered via arbitrary Waveform Generator.

Table 5.5-2: *ISED RSS-210 Annex B.10 requirements results*

Part	Test description	Verdict
(a), (b)	Field strength of fundamental and harmonic emissions	Pass

Notes: EUT is powered through kinetic energy, only for test purpose it was DC powered via arbitrary Waveform Generator.

Section 6 Test equipment

6.1 Test equipment list

Table 6.1-1: *Equipment list*

Equipment	Manufacturer	Model no.	Asset no.	Cal cycle	Next cal.
Receiver/spectrum analyzer	Rohde & Schwarz	ESR26	FA002969	1 year	May 28, 2026
3 m EMI test chamber	TDK	SAC-3	FA003012	1 year	March 9, 2026
Vector signal generator	Rohde & Schwarz	SMW200A	FA002970	1 year	March 26, 2026
Antenna mast	SUNAR	TLT2	FA003007	—	NCR
Bilog antenna (30–2000 MHz)	SUNAR	JB3	FA002108	1 year	April 8, 2026
Preamp (1–18 GHz)	ETS Lindgren	124334	FA002956	1 year	April 11, 2026
Horn antenna (1–18 GHz)	ETS Lindgren	3117	FA002911	1 year	June 2, 2026
High pass filter (1.2-12 GHz)	Microwave circuits	H1G212G1	FA003031	—	NCR
50 Ω SMA coax cable	Huber + Suhner	None	FA003056	1 year	Aug 6, 2026
50 Ω coax cable	Huber + Suhner	None	FA003402	1 year	Aug 6, 2026
50 Ω coax cable	Huber + Suhner	None	FA003047	1 year	Aug 6, 2026

Note: NCR - no calibration required
All equipment related to the contribution of measurement has been included in this list. Such items include, but are not limited to, cables, attenuators, directional couplers, and pre-amps.

Table 6.1-2: *Automation software details*

Test description	Manufacturer of Software	Details
Radio/EMC test software	Rohde & Schwarz	EMC32, Software for EMC Measurements, Version 10.60.00

Table 6.1-3: *Measurement uncertainty calculations based on equipment list*

Measurement	Measurement uncertainty, ±dB
Radiated spurious emissions (30 MHz to 1 GHz)	4.14
Radiated spurious emissions (1 GHz to 6 GHz)	4.74
Radiated spurious emissions (6 GHz to 18 GHz)	5.33
RF Output power on antenna port	1.46

Notes: UKAS Lab 34, TIA-603 and ETSI TR 100 028-1&2 have been used as guidance for measurement uncertainty reasonable estimations with regards to previous experience and validation of data. Nemko Canada Inc. follows these test methods in order to satisfy ISO/IEC 17025 requirements for estimation of uncertainty of measurement for wireless products. Measurement uncertainty calculations assume a coverage factor of K = 2 with 95% certainty.

Section 7 Testing data

7.1 Variation of power source

7.1.1 References, definitions and limits

FCC §15.31 (e):

For intentional radiators, measurements of the variation of the input power or the radiated signal level of the fundamental frequency component of the emission, as appropriate, shall be performed with the supply voltage varied between 85% and 115% of the nominal rated supply voltage. For battery operated equipment, the equipment tests shall be performed using a new battery.

7.1.2 Test summary

Verdict	Pass		
Test date	December 17, 2025	Temperature	24 °C
Tested by	Tarek Elkholy	Air pressure	974 mbar
Test location	Cambridge	Relative humidity	31 %

7.1.3 Observations, settings and special notes

The testing was performed as per ANSI C63.10 Section 5.13.

a) Where the device is intended to be powered from an external power adapter, the voltage variations shall be applied to the input of the adapter provided with the device at the time of sale. If the device is not marketed or sold with a specific adapter, then a typical power adapter shall be used.
b) For devices, where operating at a supply voltage deviating ±15% from the nominal rated value may cause damages or loss of intended function, test to minimum and maximum allowable voltage per manufacturer's specification and document in the report.
c) For devices with wide range of rated supply voltage, test at 15% below the lowest and 15% above the highest declared nominal rated supply voltage.
d) For devices obtaining power from an input/output (I/O) port (USB, firewire, etc.), a test jig is necessary to apply voltage variation to the device from a support power supply, while maintaining the functionalities of the device.
e) For battery-operated equipment, the equipment tests shall be performed using a variable power supply.

7.1.4 Test data

EUT Power requirements:	☐ AC	☒ DC	☐ Battery
If EUT is an AC or a DC powered, was the noticeable output power variation observed?	☐ YES	☒ NO	☐ N/A
If EUT is battery operated, was the testing performed using fresh batteries?	☐ YES	☐ NO	☒ N/A
If EUT is rechargeable battery operated, was the testing performed using fully charged batteries?	☐ YES	☐ NO	☒ N/A

7.2 Number of frequencies

7.2.1 References, definitions and limits

FCC §15.31:

(m) Measurements on intentional radiators or receivers shall be performed and, if required, 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 the following table.

RSS-Gen, Clause 6.9:

Except where otherwise specified, measurements shall be performed for each frequency band of operation for which the radio apparatus is to be certified, with the device operating at the frequencies in each band of operation shown in table below. The frequencies selected for measurements shall be reported in the test report.

Table 7.2-1: *Frequency Range of Operation*

Frequency range over which the device operates (in each band)	Number of test frequencies required	Location of measurement frequency inside the operating frequency range
1 MHz or less	1	Center (middle of the band)
1–10 MHz	2	1 near high end, 1 near low end
Greater than 10 MHz	3	1 near high end, 1 near center and 1 near low end

Notes: "near" means as close as possible to or at the centre / low end / high end of the frequency range over which the device operates.

7.2.2 Test summary

Verdict	Pass		
Test date	December 17, 2025	Temperature	24 °C
Tested by	Tarek Elkholy	Air pressure	974 mbar
Test location	Cambridge	Relative humidity	31 %

7.2.3 Observations, settings and special notes

ANSI C63.10, Clause 5.6.2.1:

The number of channels tested can be reduced by measuring the center channel bandwidth first and then applying the following relaxations as appropriate:

a) For each operating mode, if the measured channel bandwidth on the middle channel is at least 150% of the minimum permitted bandwidth, then it is not necessary to measure the bandwidth on the high and low channels.

b) For multiple-input multiple-output (MIMO) systems, if the measured channel bandwidth on testing the middle channel exceeds the minimum permitted bandwidth by more than 50% on one transmit chain, then it is not necessary to repeat testing on the other chains.

c) If the measured channel bandwidth on the middle channel is less than 50% of the maximum permitted bandwidth, then it is not necessary to measure the bandwidth on the high and low channels.

ANSI C63.10, Clause 5.6.2.2:

For devices with multiple operating modes, measurements on the middle channel can be used to determine the worst-case mode(s). The worst-case modes are as follows:

a) Band edge requirements—Measurements on the mode with the widest bandwidth can be used to cover the same channel (center frequency) on modes with narrower bandwidth that have the same or lower output power for each modulation family (e.g., OFDM and direct sequence spread spectrum).

b) Spurious emissions—Measure the mode with the highest output power and the mode with the highest output power spectral density for each modulation family (e.g., OFDM and direct sequence spread spectrum).

c) In-band PSD—Measurements on the mode with the narrowest bandwidth can be used to cover all modes within the same modulation family of an equal or lower output power provided the result is less than 50% of the limit.

7.2.4 Test data

Table 7.2-2: *Test channels selection*

Start of Frequency range, MHz	End of Frequency range, MHz	Frequency range bandwidth, MHz	Operating channel, MHz
902	928	26	915.22

This EUT has only one channel of operation: 915.22 MHz

7.3 Antenna requirement

7.3.1 References, definitions and limits

FCC §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. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

FCC §15.249:

(b) Fixed, point-to-point operation as referred to in this paragraph shall be limited to systems employing a fixed transmitter transmitting to a fixed remote location. Point-to-multipoint systems, omnidirectional applications, and multiple co-located intentional radiators transmitting the same information are not allowed. Fixed, point-to-point operation is permitted in the 24.05–24.25 GHz band subject to the following conditions

(3) Antenna gain must be at least 33 dBi. Alternatively, the main lobe beamwidth must not exceed 3.5 degrees. The beamwidth limit shall apply to both the azimuth and elevation planes. At antenna gains over 33 dBi or beamwidths narrower than 3.5 degrees, power must be reduced to ensure that the field strength does not exceed 2500 millivolts/meter.

RSS-Gen, Clause 6.8:

The applicant for equipment certification shall provide a list of all antenna types that may be used with the transmitter, where applicable (i.e. for transmitters with detachable antenna), indicating the maximum permissible antenna gain (in dBi) and the required impedance for each antenna. The test report shall demonstrate the compliance of the transmitter with the limit for maximum equivalent isotropically radiated power (e.i.r.p.) specified in the applicable RSS, when the transmitter is equipped with any antenna type, selected from this list.

For expediting the testing, measurements may be performed using only the antenna with highest gain of each combination of transmitter and antenna type, with the transmitter output power set at the maximum level. However, the transmitter shall comply with the applicable requirements under all operational conditions and when in combination with any type of antenna from the list provided in the test report.

7.3.2 Test summary

Verdict	Pass		
Test date	December 17, 2025	Temperature	24 °C
Tested by	Tarek Elkholy	Air pressure	974 mbar
Test location	Cambridge	Relative humidity	31 %

7.3.3 Observations, settings and special notes

None

7.3.4 Test data

Must the EUT be professionally installed? ☐ YES ☒ NO

Does the EUT have detachable antenna(s)? ☐ YES ☒ NO

If detachable, is the antenna connector(s) non-standard? ☐ YES ☐ NO ☒ N/A

Table 7.3-1: *Antenna information*

Antenna type	Connector type
Wire, 24AWG unshielded, 3 in.	Soldered

7.4 Field strength of fundamental and harmonic emissions

7.4.1 References, definitions and limits

FCC §15.249:

(a) Except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following FCC table. Field strength limits are specified at a distance of 3 meters.

RSS-210, Annex B.10

Devices operating in the frequency bands listed in table B2 may be used for any application and shall comply with the following requirements:

a. The field strength of fundamental and harmonic emissions measured at the distance of 3 m shall not exceed the limits in table B2.

b. Emissions radiated outside of the specified frequency bands, except for harmonic emissions, shall be attenuated by at least 50 dB below the level of the fundamental emission or to the general field strength limits listed in RSS-Gen, whichever is less stringent.

Table 7.4-1: *FCC field strength limits*

Fundamental frequencies, MHz	Field strength of fundamental		Field strength of harmonics	
	mV/m	dBµV/m	µV/m	dBµV/m
902–928	50	94	500	54
2400–2483.5	50	94	500	54
5725–5875	50	94	500	54
24.0–24.25	250	108	2500	68

Table 7.4-2: *ISED Table B2: Field strength limits for fundamental and harmonic emissions*

Fundamental frequencies, MHz	Field strength (mV/m) of fundamental emissions		Field strength (mV/m) of harmonic emissions	
	mV/m	dBµV/m	mV/m	dBµV/m
902-928	50	94	0.5	54

7.4.2 Test summary

Verdict	Pass		
Test date	December 17, 2025	Temperature	24 °C
Tested by	Tarek Elkholy	Air pressure	974 mbar
Test location	Cambridge	Relative humidity	31 %

7.4.3 Observations, settings and special notes

The spectrum was searched from 30 MHz to 10th harmonic of fundamental frequency to identify any harmonics.
Radiated measurements were performed at a distance of 3 m.

Spectrum analyzer settings for frequencies below 1000 MHz:

Detector mode	Peak
Resolution bandwidth	500 kHz
Video bandwidth	2 MHz
Trace mode	Max Hold

Spectrum analyzer settings for peak measurements at the frequencies above 1000 MHz:

Detector mode	Peak
Resolution bandwidth	1 MHz
Video bandwidth	3 MHz
Trace mode	Max Hold

7.4.4 Test data

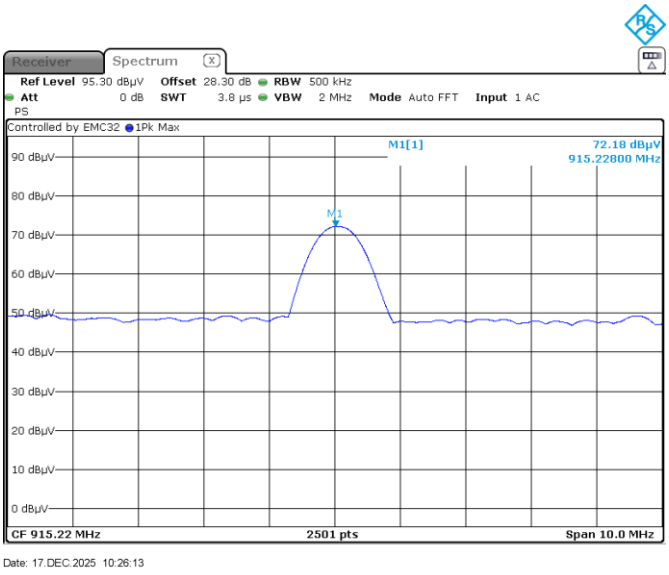


Figure 7.4-1: *Field strength of fundamental emission*

Test data, continued

Table 7.4-3: *Field strength of fundamental and harmonic emissions test results*

Fundamental frequency, MHz	Fundamental emissions field strength, dBµV/m	Fundamental emissions field strength limit, dBµV/m	Margin, dB	Harmonics emissions field strength, dBµV/m	Harmonics emissions field strength limit, dBµV/m	Margin, dB
915.22	72.2	94.0	21.8	44.8	54.0	9.2

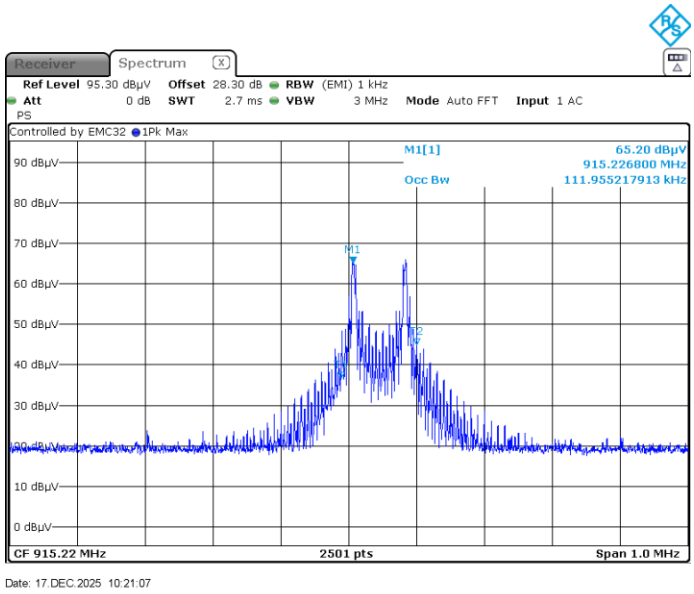


Figure 7.4-2: *OBW of fundamental emission*

Test data, continued

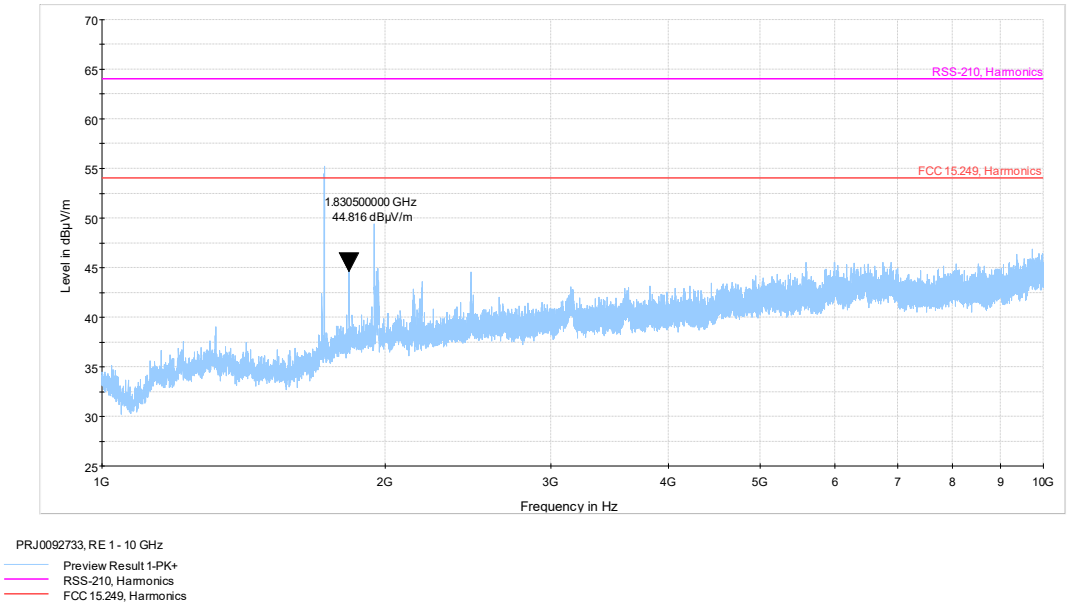


Figure 7.4-3: *Field strength of spurious emissions (harmonics)*

Notes *Only 2nd harmonic was identified while scanning the spectrum domain up to 10 times the fundamental frequency.*
Applicable ISED harmonics limit lines are aligned with the FCC limit lines.

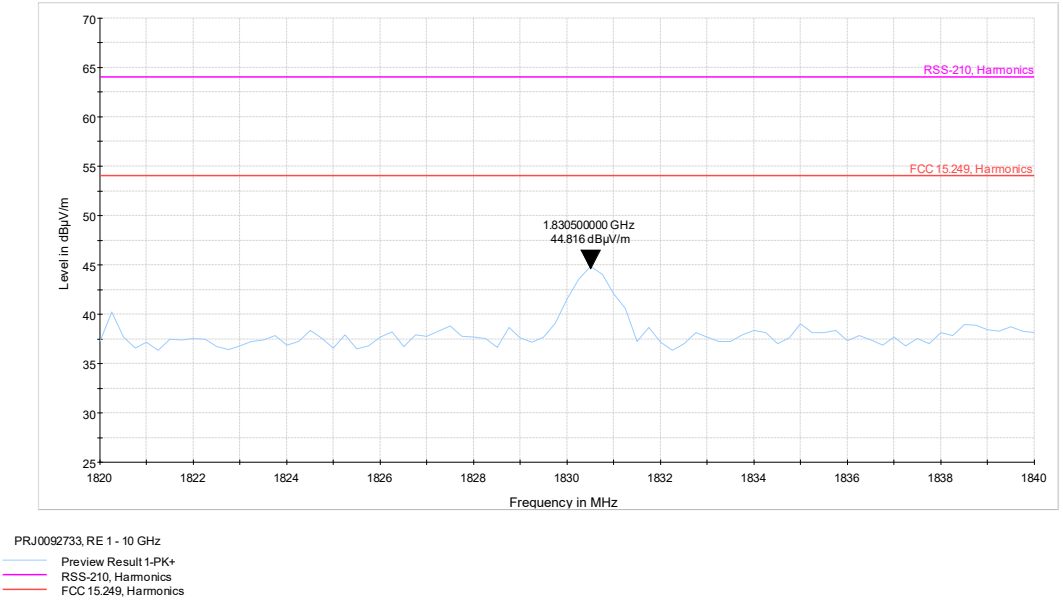


Figure 7.4-4: *Field strength of spurious emissions (harmonics)*

Notes *All measurement results indicated in the plot were taken with a peak detector.*
Applicable ISED harmonics limit lines are aligned with the FCC limit lines.

7.5 Spurious emissions (except for harmonics)

7.5.1 References, definitions and limits

FCC §15.249:

(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

(e) As shown in § 15.35(b), for frequencies above 1000 MHz, the field strength limits in paragraphs (a) and (b) of this section are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For point-to-point operation under paragraph (b) of this section, the peak field strength shall not exceed 2500 millivolts/meter at 3 meters along the antenna azimuth.

RSS-210, Annex B.10

b. Emissions radiated outside of the specified frequency bands, except for harmonic emissions, shall be attenuated by at least 50 dB below the level of the fundamental emission or to the general field strength limits listed in RSS-Gen, whichever is less stringent.

Table 7.5-1: *15.209 and RSS-Gen emissions field strength limits*

Frequency, MHz	Field strength of emissions		Measurement distance, m
	µV/m	dBµV/m	
0.009–0.490	2400/F	$67.6 - 20 \times \log_{10}(F)$	300
0.490–1.705	24000/F	$87.6 - 20 \times \log_{10}(F)$	30
1.705–30.0	30	29.5	30
30–88	100	40.0	3
88–216	150	43.5	3
216–960	200	46.0	3
above 960	500	54.0	3

Notes: In the emission table above, the tighter limit applies at the band edges. For frequencies above 1 GHz the limit on peak RF emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test

Table 7.5-2: *ISED restricted frequency bands*

MHz	MHz	MHz	GHz
0.090–0.110	12.57675–12.57725	399.9–410	7.25–7.75
0.495–0.505	13.36–13.41	608–614	8.025–8.5
2.1735–2.1905	16.42–16.423	960–1427	9.0–9.2
3.020–3.026	16.69475–16.69525	1435–1626.5	9.3–9.5
4.125–4.128	16.80425–16.80475	1645.5–1646.5	10.6–12.7
4.17725–4.17775	25.5–25.67	1660–1710	13.25–13.4
4.20725–4.20775	37.5–38.25	1718.8–1722.2	14.47–14.5
5.677–5.683	73–74.6	2200–2300	15.35–16.2
6.215–6.218	74.8–75.2	2310–2390	17.7–21.4
6.26775–6.26825	108–138	2483.5–2500	22.01–23.12
6.31175–6.31225	149.9–150.05	2655–2900	23.6–24.0
8.291–8.294	156.52475–156.52525	3260–3267	31.2–31.8
8.362–8.366	156.7–156.9	3332–3339	36.43–36.5
8.37625–8.38675	162.0125–167.17	3345.8–3358	Above 38.6
8.41425–8.41475	167.72–173.2	3500–4400	
12.29–12.293	240–285	4500–5150	
12.51975–12.52025	322–335.4	5350–5460	

Notes: Certain frequency bands listed in this table and above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to related devices are set out in the 200 and 300 series of RSS.

References, definitions and limits - Continued

Table 7.5-3: *FCC restricted frequency bands*

MHz	MHz	MHz	GHz
0.090–0.110	16.42–16.423	399.9–410	4.5–5.15
0.495–0.505	16.69475–16.69525	608–614	5.35–5.46
2.1735–2.1905	16.80425–16.80475	960–1240	7.25–7.75
4.125–4.128	25.5–25.67	1300–1427	8.025–8.5
4.17725–4.17775	37.5–38.25	1435–1626.5	9.0–9.2
4.20725–4.20775	73–74.6	1645.5–1646.5	9.3–9.5
6.215–6.218	74.8–75.2	1660–1710	10.6–12.7
6.26775–6.26825	108–121.94	1718.8–1722.2	13.25–13.4
6.31175–6.31225	123–138	2200–2300	14.47–14.5
8.291–8.294	149.9–150.05	2310–2390	15.35–16.2
8.362–8.366	156.52475–156.52525	2483.5–2500	17.7–21.4
8.37625–8.38675	156.7–156.9	2690–2900	22.01–23.12
8.41425–8.41475	162.0125–167.17	3260–3267	23.6–24.0
12.29–12.293	167.72–173.2	3332–3339	31.2–31.8
12.51975–12.52025	240–285	3345.8–3358	36.43–36.5
12.57675–12.57725	322–335.4	3600–4400	Above 38.6
13.36–13.41			

7.5.2 Test summary

Verdict	Pass		
Test date	December 17, 2025	Temperature	24 °C
Tested by	Tarek Elkholy	Air pressure	974 mbar
Test location	Cambridge	Relative humidity	31 %

7.5.3 Observations, settings and special notes

- As part of the current assessment, the test range of 9 kHz to 10th harmonic has been fully considered and compared to the actual frequencies utilized within the EUT. Since the EUT contains a transmitter in the GHz range, the EUT has been deemed compliant without formal testing in the 9 kHz to 30 MHz test range, therefore formal test results (tabular data and/or plots) are not provided within this test report.
- The spectrum was searched from 30 MHz to 10th harmonic of the fundamental frequency.
- Radiated measurements were performed at a distance of 3 m.
- The fundamental signal is shown in the plot below 1 GHz.
- No emissions were detected at any of the restricted bands.

Spectrum analyser settings for radiated measurements within restricted bands below 1 GHz:

Resolution bandwidth:	100 kHz
Video bandwidth:	300 kHz
Detector mode:	Peak
Trace mode:	Max Hold

Spectrum analyser settings for radiated measurements within restricted bands above 1 GHz:

Resolution bandwidth:	1 MHz
Video bandwidth:	3 MHz
Detector mode:	Peak/RMS
Trace mode:	Max Hold/Power averaging

7.5.4 Test data

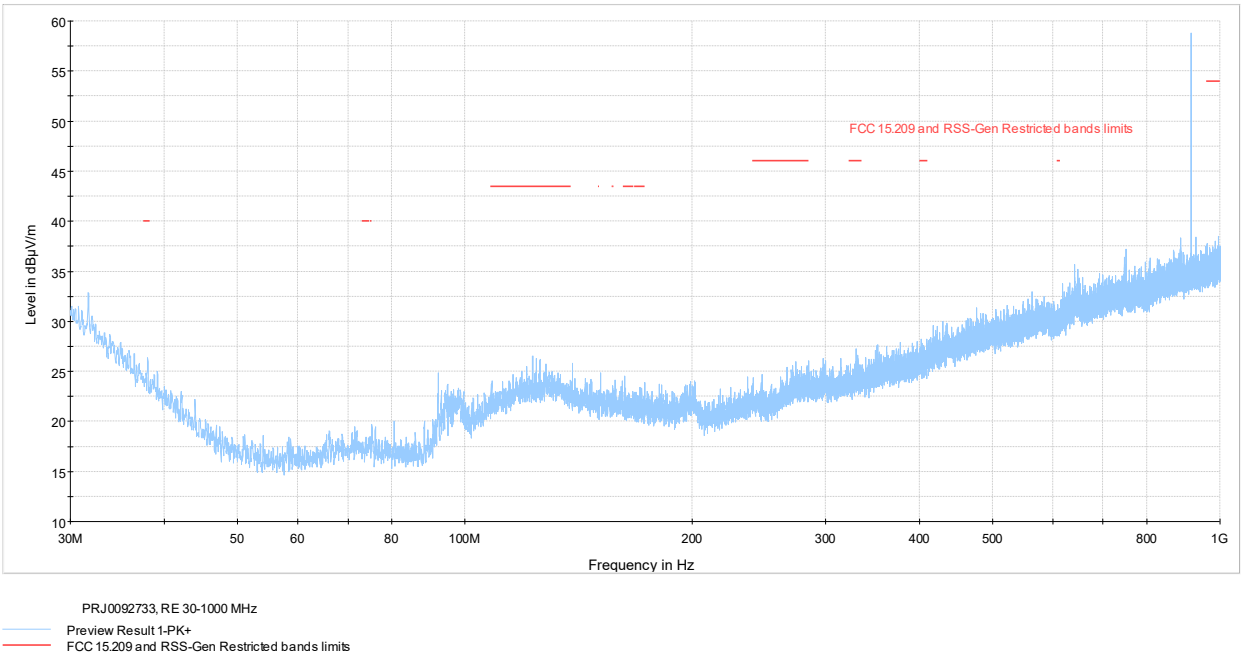


***Figure 7.5-1**: Radiated spurious emissions below 1000 MHz*

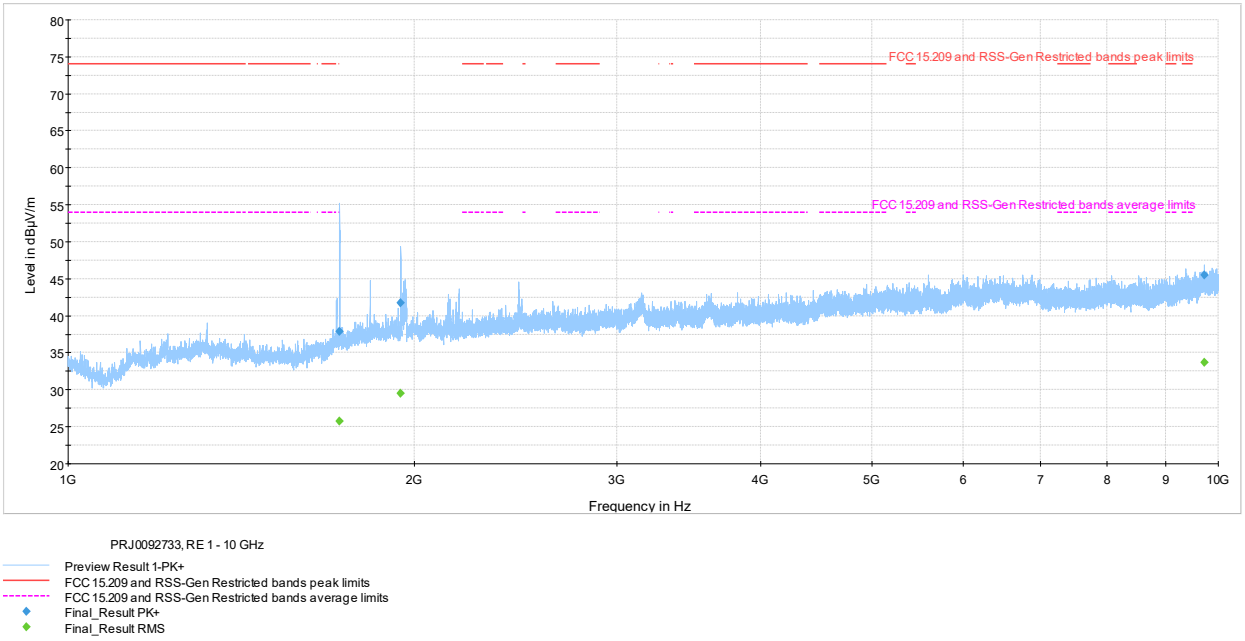
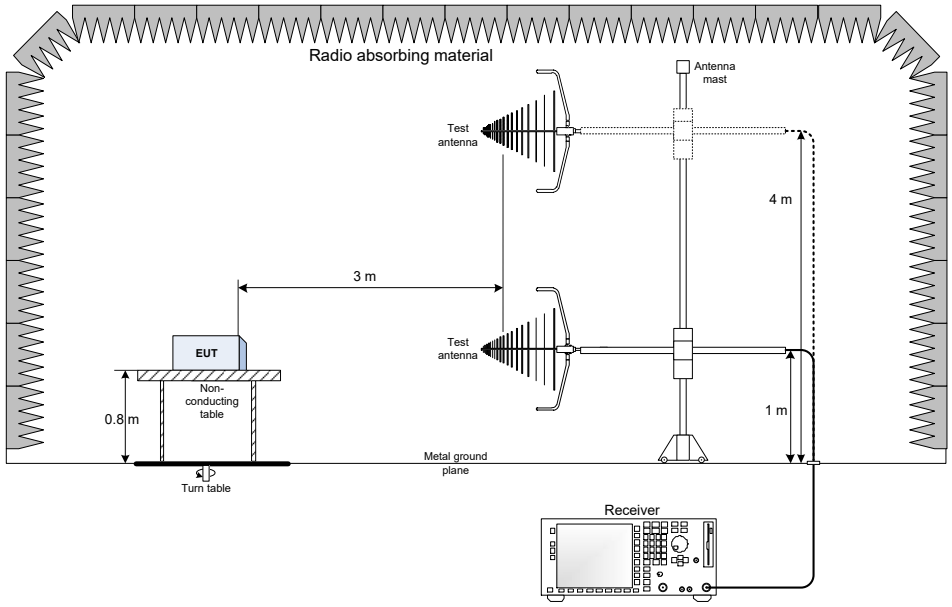


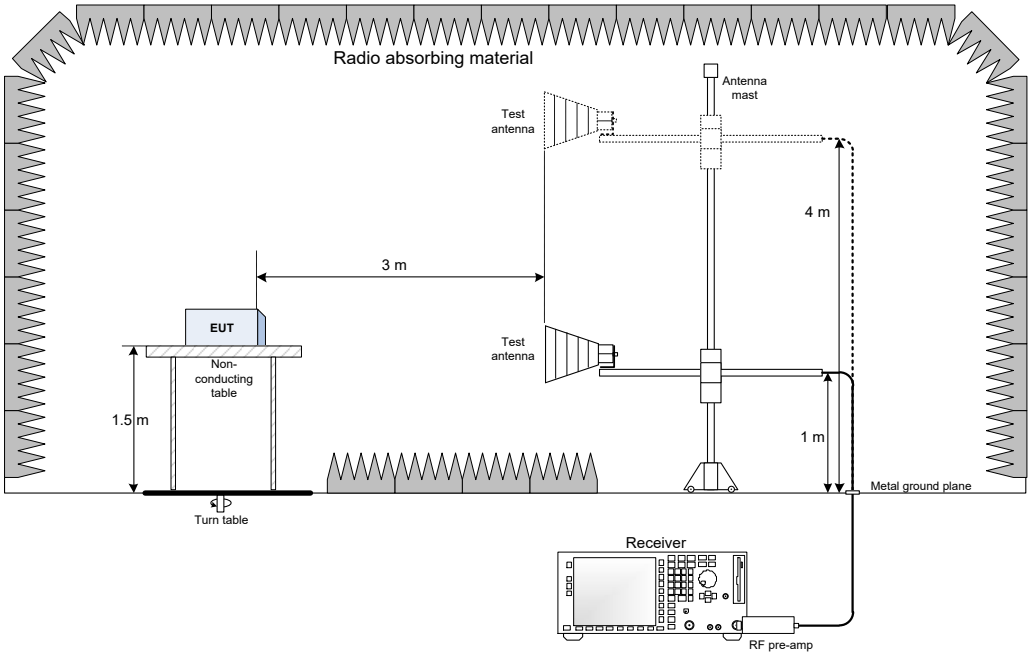
***Figure 7.5-2:** Radiated spurious emissions above 1000 MHz*

Section 8 Test setup diagrams

8.1 Radiated emissions set-up for frequencies below 1 GHz



8.2 Radiated emissions set-up for frequencies above 1 GHz



End of the test report