RF TEST REPORT

FCC / ISED

APPLICANT

Onity Inc

MODEL NAME

Trillium 2.0 Lock, BLE, RFID

FCC ID

R32-10108567P1

ISED ID

5058A -10108567P1

REPORT NUMBER

HA2507-0188-R02-01

TEST REPORT

Date of Issue
September 18, 2025

Test Site
HCT America, Inc.
840 Yosemite Way, Milpitas, CA 95035, USA

Applicant	Onity Inc
Applicant Address	Onity Inc. 4001 Fairview Industrial Drive SE, Fairview Industrial, Salem OR 97302, USA
FCC ID	R32-10108567P1
ISED ID	5058A -10108567P1
Model Name	Trillium 2.0 Lock, BLE, RFID
EUT Type	Doorlock
Modulation Type	ASK
FCC Classification	Low Power Communication Device Transmitter (DXX)
FCC Rule Part(s)	Part 15.225, Part 15.209, Part 15.207
ISED Rule Part(s)	RSS-210 Issue 11 (June 2024) RSS-Gen Issue 5 Amd 2 (February 2021)
Test Procedure	ANSI C63.10-2020, KDB 558074 D01 v05r02

The device bearing the trade name and model specified above, has been shown to comply with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures required. The results of testing in this report apply only to the product which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

HCT America, Inc. certifies that no party to application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C 862

Tested By	**Reviewed By**
John Park	Sunwoo Kim
Test Engineer	Technical Manager

REVISION HISTORY

The revision history for this document is shown in table.

TEST REPORT NO.	DATE	DESCRIPTION
HA2507-0188-R02	August 28, 2025	Initial Issue
HA2507-0188-R02-01	September 18, 2025	Update Standard: ANSI c63.10-2013 to 2020 Update radiated test: Add part 15.225 test result

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HCT America, Inc., 840 Yosemite Way, Milpitas, CA 95035, USA TEL: +1-510-933-8848 FAX: +1-510-933-8849

1. GENERAL INFORMATION

EUT DESCRIPTION

Product Name (PMN)	Trillium 2.0 Lock, BLE, RFID
Model number (HVIN)	10108567P1
Product Commercial Model Number (CMN)	10108587P1
Serial Number	MXCEN901682302225770
Power Supply	6.0 V d.c. (1.5 V d.c., x 4 AA battery, Serial connection)
RF Specification	Bluetooth 5.0 LE (1M/2M), RFID (13.56 MHz)
Transmitter Chain	1
Operating Environment	Indoor & Outdoor
Operating Temperature	-20 °C ~ +55 °C

RF SPECIFICATION SUBJECT TO THE REPORT

RF Specification	RFID (HF)
Frequency Range	13.56 MHz
Max. RF Output Power	55.72 dBuV/m @3m
Modulation Type	ASK
Number of Channels	1 channel
Antenna Specification	Loop antenna
Firmware Version [1)]	1.22
Hardware Version [1)]	R4A
Date(s) of Tests	August 06, 2025 ~ September 18, 2025

Notes:
1. Firmware and Hardware Version are as received by the client.

2. METHODOLOGY

The measurement procedure described in ANSI C63.10(Version : 2020) 'the American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices'.

EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

EUT EXERCISE

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. According to its specifications, the EUT must comply with the requirements of the Section 15.207, 15.209 and 15.225 under the FCC Rules Part 15 Subpart C and RSS-GEN issue 5, RSS-210 issue 11.

GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 6.2 of ANSI C63.10. (Version :2020) Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane below 1GHz. Above 1GHz with 1.5m using absorbers between the EUT and receive antenna. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3 m away from the receiving antenna, which varied from 1 m to 4 m to find out the highest emission. Also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. To find out the maximum emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes according to the requirements in Section 6.4 of ANSI C63.10. (Version: 2020)

DESCRIPTION OF TEST MODES

The EUT has been tested per test setup instruction provided by the manufacturer under continuous Tx operating condition. Testing was performed at the Tx mode using BTLE WWOR Script Manager was provided by the manufacturer.

3. INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment's, which is traceable to recognized national standards. Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5 (Version : 2017).

4. FACILITIES AND ACCREDITATIONS

FACILITIES

The SAC (Semi-Anechoic Chamber) and conducted measurement facility used to collect the radiated data are located at 840 Yosemite Way, Milpitas, CA 95035, USA.
The site is constructed in conformance with the requirements of ANSI C63.4. (Version :2014) and CISPR Publication 22.

CABID : 25729

EQUIPMENT

Radiated emissions are measured with one or more of the following types of Linearly polarized antennas: tuned dipole, bi-conical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers. Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, “Radio Interference Measuring Apparatus and Measurement Methods.”

5. ANTENNA REQUIREMENTS

According to FCC 47 CFR §15.203:
"An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can 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."

(1) The antenna of this E.U.T is permanently attached and there is no provision for connection to an external antenna.
(2) The E.U.T Complies with the requirement of §15.203

According to RSS-Gen Issue 5 (Section 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 (and in the notice to be included in the user manual, provided below).

When measurements at the antenna port are used to determine the RF output power, the effective gain of the device's antenna shall be stated, based on a measurement or on data from the antenna's manufacturer.

The test report shall state the RF power, output power setting and spurious emission measurements with each antenna type that is used with the transmitter being tested.

6. MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2020.

All measurement uncertainty values are shown with a coverage factor of k = 2 to indicate a 95 % level of confidence. The measurement data shown herein meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Parameter	Expanded Uncertainty (±dB)
Occupied Bandwidth	± 120.66 kHz
Radiated Emissions (below 1 GHz)	± 5.29 dB

7. DESCRIPTION OF TESTS

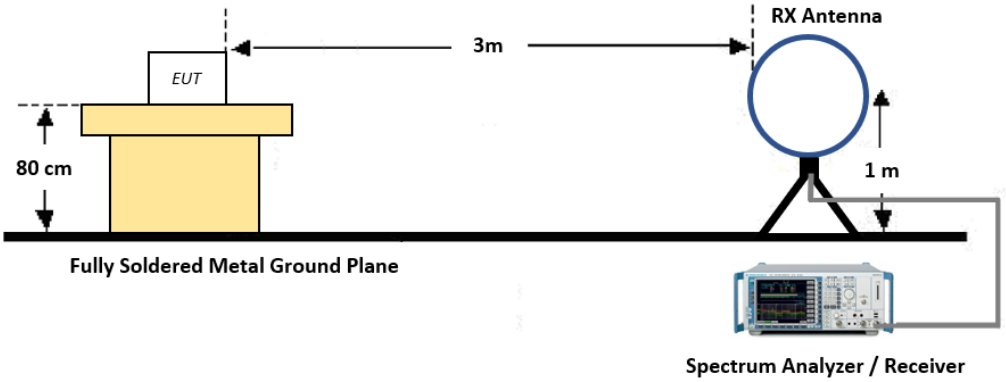
7.1. 20 dB BANDWIDTH / 99 % BANDWIDTH

Limit

20 dB bandwidth : According to §15.215(c), the bandwidth at 20 dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the receive antenna while the EUT is operating in transmission mode at the appropriate frequencies.

99% Bandwidth : Section 6.7, RSS-Gen Issue 5

Test Configuration



Test Procedure (20 dB Bandwidth)

The Spectrum Analyzer setting :

- RBW = 1 kHz
- VBW ≥ 3 x RBW
- Detector = Peak
- Trace mode = max hold
- Sweep = auto couple
- Allow the trace to stabilize

Test Procedure (99 % Bandwidth)

The transmitter output is connected to the spectrum analyzer.

- RBW = 1 kHz
- VBW ≒ 3 x RBW
- Detector = Peak
- Trace mode = max hold
- Sweep = auto couple
- Allow the trace to stabilize

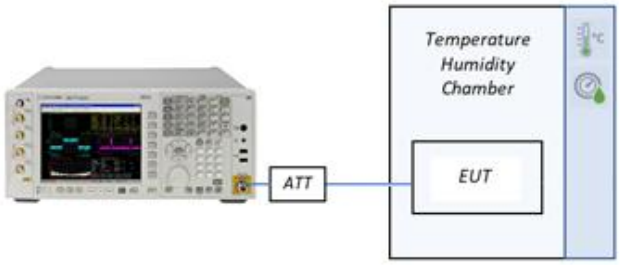
Notes:
Bandwidth measurement feature in the spectrum analyzer was used to measure 20 dB bandwidth (X dB bandwidth function) and 99 % bandwidth.

7.2. FREQUENCY STABILITY

Limit

§15.225 (e), RSS-210 Issue 11
The frequency tolerance of the carrier signal shall be maintained within ±0.01% of the operating frequency.

Test Configuration



Test Procedure

For battery operated equipment, the equipment tests shall be performed using a new battery.

1) Turn the EUT OFF and place it inside the environmental temperature chamber. For devices that have oscillator heaters, energize only the heater circuit.
2) Set the temperature control on the chamber to the highest specified in the regulatory requirements for the type of device and allow the oscillator heater and the chamber temperature to stabilize.
3) While maintaining a constant temperature inside the environmental chamber, turn the EUT ON and record the operating frequency at startup, and at 2 minutes, 5 minutes, and 10 minutes after the EUT is energized. Four measurements in total are made.
4) Frequency tolerance of the carrier signal shall be maintained within +/- 0.01% of the operating frequency.

Notes:

- Temperature humidity chamber is used to adjust the temperature between -20°C and + 50°C
- The primary supply voltage was adjusted between 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

7.3. RADIATED EMISSION

RADIATION EMISSION LIMIT

FCC : 47 CFR § 15.209		
Frequency (MHz)	**Field Strength (uV/m)**	**Measurement Distance (m)**
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

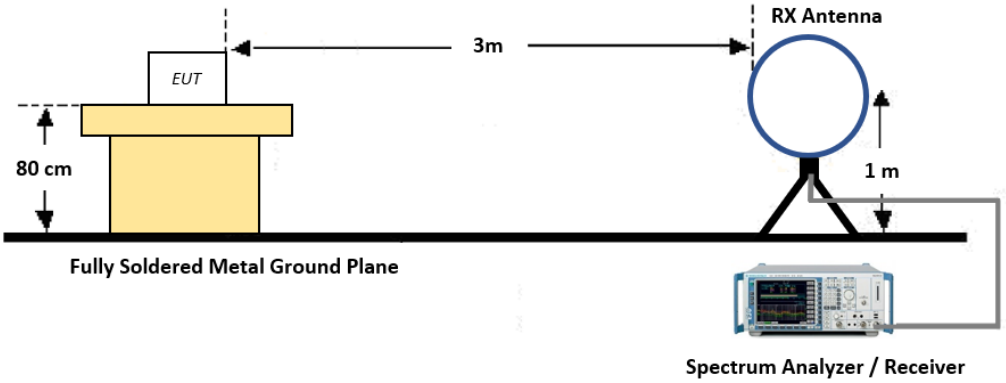
ISED : RSS-GEN Section 8.9		
Frequency (MHz)	**Field Strength (uA/m)**	**Measurement Distance (m)**
0.009 – 0.490	6.37/F(kHz)	300
0.490 – 1.705	63.7/F(kHz)	30
1.705 – 30	0.08	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Operation within the band 13.110 MHz – 14.010 MHz

FCC : 47 CFR § 15.225 (a), (b), (c), (d) / ISED : RSS-211 ANNEX B.6		
Frequency (MHz)	**Field Strength (uV/m)**	**Measurement Distance (m)**
13.553 – 13.567	15,848	30
13.410 ≤ f ≤ 13.553 13.567 ≤ f ≤ 13.710	334	30
13.110 ≤ f ≤ 13.410 13.710 ≤ f ≤ 14.010	106	30

Test Configuration

Below 30 MHz



Test Procedure of Radiated spurious emissions (Below 30 MHz)

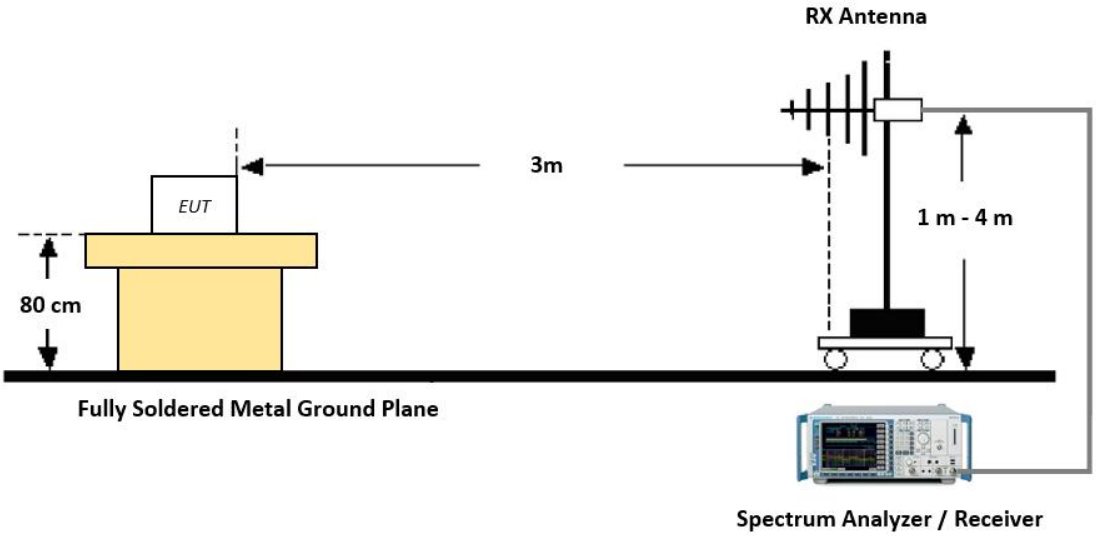
1. The EUT was placed on a non-conductive table located on semi-anechoic chamber.
2. The loop antenna was placed at a location 3m from the EUT
3. The EUT is placed on a turntable, which is 0.8m above ground plane.
4. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
5. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
6. Distance Correction Factor (0.009 MHz – 0.490 MHz) = 40*log(3 m/300 m) = - 80 dB
   Measurement Distance: 3 m
7. Distance Correction Factor (0.490 MHz – 30 MHz) = 40*log(3 m/30 m) = - 40 dB
   Measurement Distance: 3 m
8. Spectrum Setting

   - Frequency Range = 9 kHz ~ 30 MHz
   - Detector = Peak
   - Trace = Max hold
   - RBW = 9 kHz
   - VBW ≥ 3*RBW

9. Total = Reading Value + Antenna Factor (A.F) + Cable Loss (C.L) + Distance Factor (D.F)

Adequate comparison measurements were confirmed against an open field site since the test was performed at alternative site (3m SAC) other than the open area test site. Sufficient test was made to demonstrate that the alternative site produces result that correlate with the one of test made at the open field site based on KDB 414788.

30 MHz - 1 GHz



Test Procedure of Radiated spurious emissions (Below 1GHz)

1. The EUT was placed on a non-conductive table located on semi-anechoic chamber.
2. The EUT is placed on a turntable, which is 0.8m above ground plane.
3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.
4. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
5. Spectrum Setting

(1) Measurement Type (Peak):
- Measured Frequency Range: 30 MHz – 1 GHz
- Detector = Peak
- Trace = Max hold
- RBW = 100 kHz
- VBW ≥ 3*RBW

(2) Measurement Type(Quasi-peak):
- Measured Frequency Range: 30 MHz – 1 GHz
- Detector = Quasi-Peak
- RBW = 120 kHz

In general, the method (1) is mainly used

6. Total = Reading Value + Antenna Factor (A.F) + Cable Loss (C.L)

7.4. AC LINE CONDUCTED EMISSIONS

LIMIT

47 CFR § 15.207, RSS-GEN Section 8.8

For an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies, within the band 150 kHz to 30 MHz, shall not exceed the limits in the following table, as measured using a 50 µH/50 ohms line impedance stabilization network (LISN).

Frequency Range (MHz)	Limits (dBµV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50

*Decreases with the logarithm of the frequency.

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

Test Configuration

See test photographs attached in Annex A for the actual connections between EUT and support equipment.

Test Procedure

1. The EUT is placed on a wooden table 80 cm above the reference ground plane.
2. The EUT is connected via LISN to a test power supply.
3. The measurement results are obtained as described below:
4. Detectors : Quasi Peak and Average Detector.

According to FCC KDB 174176 D01 Line Conducted FAQ v01r01 :

Devices Operating Above 30 MHz

For a device with a permanent or detachable antenna operating above 30 MHz, measurements must be performed with the antenna connected as specified in clause 6.2 of ANSI C63.10-2020.

Devices Operating Below 30 MHz

For a device with a permanent or detachable antenna operating at or below 30 MHz, the FCC will accept measurements performed with a suitable dummy load in lieu of the antenna under the following conditions:

(1) Perform the AC power-line conducted tests with the antenna connected to determine compliance with Section 15.207 limits outside the transmitter's fundamental emission band;

(2) Retest with a dummy load in lieu of the antenna to determine compliance with Section 15.207 limits within the transmitter's fundamental emission band. For a detachable antenna, remove the antenna and connect a suitable dummy load to the antenna connector. For a permanent antenna, remove the antenna and terminate the RF output with a dummy load or network which simulates the antenna in the fundamental frequency band. All measurements must be performed as specified in clause 6.2 of ANSI C63.10-20.

Sample Calculation

Quasi-peak(Final Result) = Reading Value + Correction Factor

8. SUMMARY OF TEST RESULTS

Test Description	FCC Part Section(s)	IC Part Section(s)	Test Limit	Test Condition	Test Result
20 dB Bandwidth	§15.215 (c)	-	N/A	Radiated	PASS
Occupied Bandwidth	-	Section 6.7 RSS-GEN	N/A		PASS
Radiated E-Field Emissions 13.553 MHz - 13.567 MHz	§15.225 (a)	Annex B.6 (a)(i) RSS-210	cf. Section 7.3		PASS
Radiated E-Field Emissions 13.410 MHz ≤ f ≤ 13.553 MHz 13.567 MHz ≤ f ≤ 13.710 MHz	§15.225 (b)	Annex B.6 (a)(ii) RSS-210	cf. Section 7.3		PASS
Radiated E-Field Emissions 13.110 MHz ≤ f ≤ 13.410 MHz 13.710 MHz ≤ f ≤ 14.010 MHz	§15.225 (c)	Annex B.6 (a)(iii) RSS-210	cf. Section 7.3		PASS
Radiated Spurious Emissions	15.209	Section 8.9 RSS-GEN	cf. Section 7.3		PASS
Frequency Stability	§15.225 (e)	RSS-210, B.6	cf. Section 7.2		PASS
AC Power line Conducted Emissions	§15.207	RSS-GEN, 8.8	cf. Section 7.4	Conducted	N/A [1)]

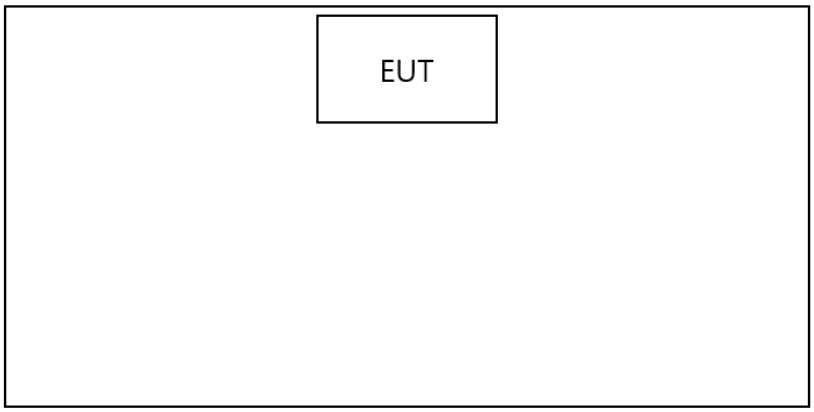
Notes:
1. Not applicable since the device is operated by batteries.

WORST CASE CONFIGURATION

RADIATED TEST

All X, Y, and Z positions for horizontal / vertical antenna polarization were investigated to find the worst-case position. X position was selected for the final evaluation.

TEST CONFIGURATION

Radiated Emission


LIST OF SUPPORT EQUIPMENT

Equipment Type	Model No.	Serial No.	Manufacturer	Qty	Note

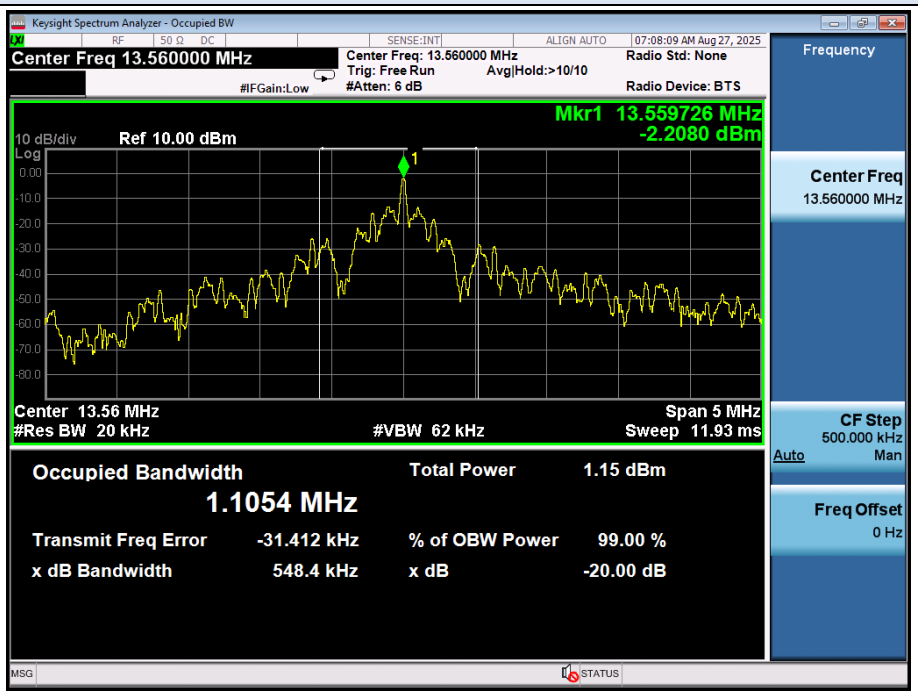
9. TEST RESULT

9.1 20 dB BANDWIDTH / 99% BANDWIDTH

HF		20 dB Bandwidth (kHz)	99% Bandwidth (kHz)	Limit
Frequency (MHz)	Modulation	Result	Result	
13.56	ASK	548.4	1 105.4	N/A

▣ TEST PLOTS

HF (ASK) : 20dB / 99% Bandwidth



Notes:

9.2 FREQUENCY STABILITY

Operating Frequency	13.56 MHz
Reference Voltage	6 VDC

Versus Temp.		2 Minutes			Limit	
Temp. (°C))	Voltage (V)	Measured freq. (MHz)	Frequency Dev. (Hz)	Frequency Drift (ppm)	(Hz)	(ppm)
+50	6.0	13.559 674	0.002 406	24.060 472	1 356	100
+40	6.0	13.559 645	0.002 618	26.181 932		
+30	6.0	13.559 610	0.002 874	28.743 068		
+20(Ref.)	6.0	13.559 604	0.002 923	29.226 844		
+10	6.0	13.559 616	0.002 830	28.296 903		
+0	6.0	13.559 631	0.002 724	27.240 560		
-10	6.0	13.559 666	0.002 460	24.596 239		
-20	6.0	13.559 737	0.001 937	19.373 304		

Versus Temp.		5 Minutes			Limit	
Temp. (°C))	Voltage (V)	Measured freq. (MHz)	Frequency Dev. (Hz)	Frequency Drift (ppm)	(Hz)	(ppm)
+50	6.0	13.559 701	0.002 202	22.020 280	1 356	100
+40	6.0	13.559 660	0.002 511	25.110 546		
+30	6.0	13.559 603	0.002 929	29.288 127		
+20(Ref.)	6.0	13.559 609	0.002 887	28.866 888		
+10	6.0	13.559 613	0.002 854	28.541 298		
+0	6.0	13.559 631	0.002 724	27.242 773		
-10	6.0	13.559 663	0.002 487	24.865 339		
-20	6.0	13.559 731	0.001 981	19.813 201		

Versus Temp.		10 Minutes			Limit	
Temp. (°C))	Voltage (V)	Measured freq. (MHz)	Frequency Dev. (Hz)	Frequency Drift (ppm)	(Hz)	(ppm)
+50	6.0	13.559 709	0.002 143	21.429 130	1 356	100
+40	6.0	13.559 663	0.002 482	24.816 888		
+30	6.0	13.559 607	0.002 902	29.017 109		
+20(Ref.)	6.0	13.559 609	0.002 886	28.862 389		
+10	6.0	13.559 612	0.002 859	28.591 814		
+0	6.0	13.559 630	0.002 725	27.252 286		
-10	6.0	13.559 663	0.002 489	24.889 381		
-20	6.0	13.559 727	0.002 016	20.163 643		

Versus Temp.				Limit (Hz)
Temp. (°C))	Voltage (V)	Measured freq. (Hz)	Frequency Dev. (Hz)	
+20	5.1	13 559 610.644	389.356	1 356
+20	6.0	13 559 603.684	396.316	
+20	6.9	13 559 610.627	389.373	

9.3 Operation within the band 13.110 MHz – 14.010 MHz

Test Mode HF (ASK)

Operating Frequency 13.56 MHz

Measured Frequency Range : 13.553 MHz-13.567 MHz							
Frequency (MHz)	Polarization	Reading (dBuV)	Corr. [1] (dB)	Total (dBuV/m)	Limit (dBuV/m) [2]	Margin (dB)	Measurement Type
13.560 [3]	H	35.70	-19.98	15.72	84	68.28	QP
13.560 [3]	V	31.25	-19.98	11.27	84	72.73	QP
13.560 [3]	Bent over	27.01	-19.98	7.03	84	76.97	QP

Measured Frequency Range : 13.410 MHz-13.553 MHz and 13.567 MHz-13.710 MHz							
Frequency (MHz)	Polarization	Reading (dBuV)	Corr. [1] (dB)	Total (dBuV/m)	Limit (dBuV/m) [2]	Margin (dB)	Measurement Type
13.470	H	5.29	-19.98	-14.69	50.5	65.19	QP
13.606	H	5.34	-19.98	-14.64	50.5	65.14	QP
13.508	V	5.35	-19.98	-14.63	50.5	65.13	QP
13.615	V	5.13	-19.98	-14.85	50.5	65.35	QP
13.482	Bent over	5.32	-19.98	-14.66	50.5	65.16	QP
13.612	Bent over	5.29	-19.98	-14.69	50.5	65.19	QP

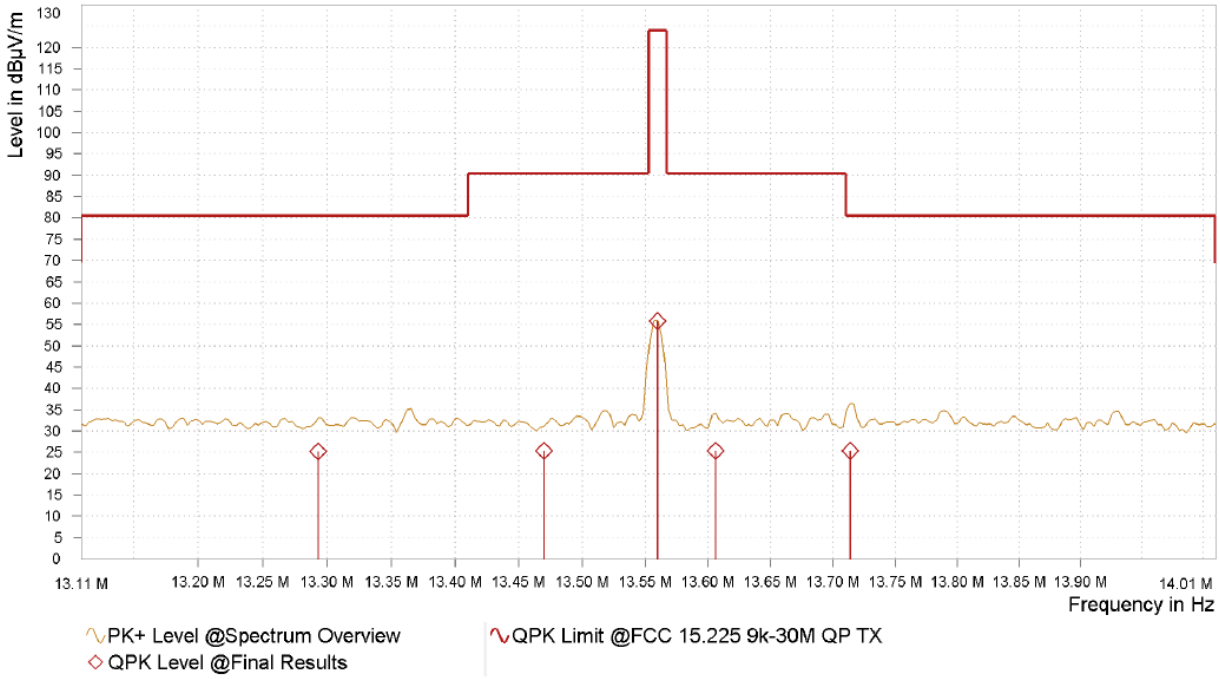
Measured Frequency Range : 13.110 MHz – 13.410 MHz and 13.710 MHz-14.010 MHz							
Frequency (MHz)	Polarization	Reading (dBuV)	Corr. [1] (dB)	Total (dBuV/m)	Limit (dBuV/m) [2]	Margin (dB)	Measurement Type
13.293	H	5.22	-19.97	-14.75	40.5	55.25	QP
13.714	H	5.33	-19.98	-14.65	40.5	55.15	QP
13.342	V	5.35	-19.97	-14.62	40.5	55.12	QP
13.760	V	5.45	-19.98	-14.53	40.5	55.03	QP
13.328	Bent over	5.24	-19.97	-14.73	40.5	55.23	QP
13.766	Bent over	5.27	-19.98	-14.71	40.5	55.21	QP

Notes:

1. Correction Factor: Antenna Factor + Cable loss + Distance factor
   - Distance factor = 40 log (specific distance / test distance) (dB)
   - Distance factor of 9kHz-150kHz: 40log(300/3) = 80 (dB)
   - Distance factor of 150kHz-30MHz: 40log(30/3) = 40 (dB)
2. Test was proceed in 3 meters distance.
3. Fundamental frequency for 13.56 MHz band

▣ TEST PLOTS

Operation within the band 13.110 MHz – 14.010 MHz



Notes:

1. The worst case is reported.

9.4 RADIATED SPURIOUS EMISSIONS

Radiated Spurious Emission

Test Mode	HF (ASK)
Operating Frequency	13.56 MHz

Frequency Range : 9 kHz – 30MHz

Frequency (MHz)	Polarization	Reading (dBuV)	Corr. [1)] (dB)	Total (dBuV/m)	Limit (dBuV/m) [2)]	Margin (dB)	Measurement Type
0.016	V	46.12	-59.36	-13.24	43.44	56.68	QP
0.017	H	49.35	-59.38	-10.03	43.15	53.18	QP
0.017	Bent over	42.42	-59.38	-16.96	43.15	60.11	QP
13.560 [3)]	H	35.70	-19.98	15.72	30	14.28	QP
13.560 [3)]	V	31.25	-19.98	11.27	30	18.73	QP
13.560 [3)]	Bent over	27.01	-19.98	7.03	30	22.97	QP

Notes:

1. Correction Factor: Antenna Factor + Cable loss + Distance factor
   - Distance factor = 40 log (specific distance / test distance) (dB)
   - Distance factor of 9kHz-150kHz: 40log(300/3) = 80 (dB)
   - Distance factor of 150kHz-30MHz: 40log(30/3) = 40 (dB)
2. Test was proceed in 3 meters distance.
3. Fundamental frequency for 13.56 MHz band

Frequency Range : Below 1 GHz

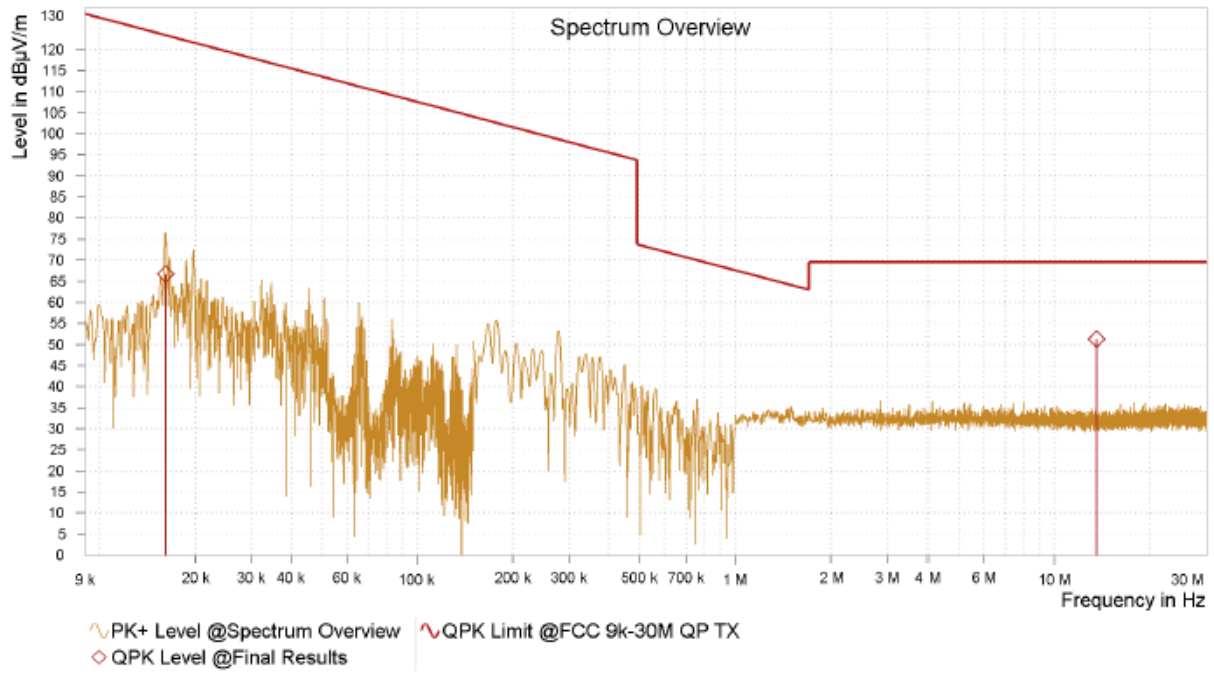
Frequency (MHz)	Polarization	Reading (dBuV)	Corr. [(1)] (dB)	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Measurement Type
224.078	V	1.43	18.59	20.02	46.00	25.98	QP
224.092	H	7.00	18.59	25.59	46.00	20.41	QP

Notes:

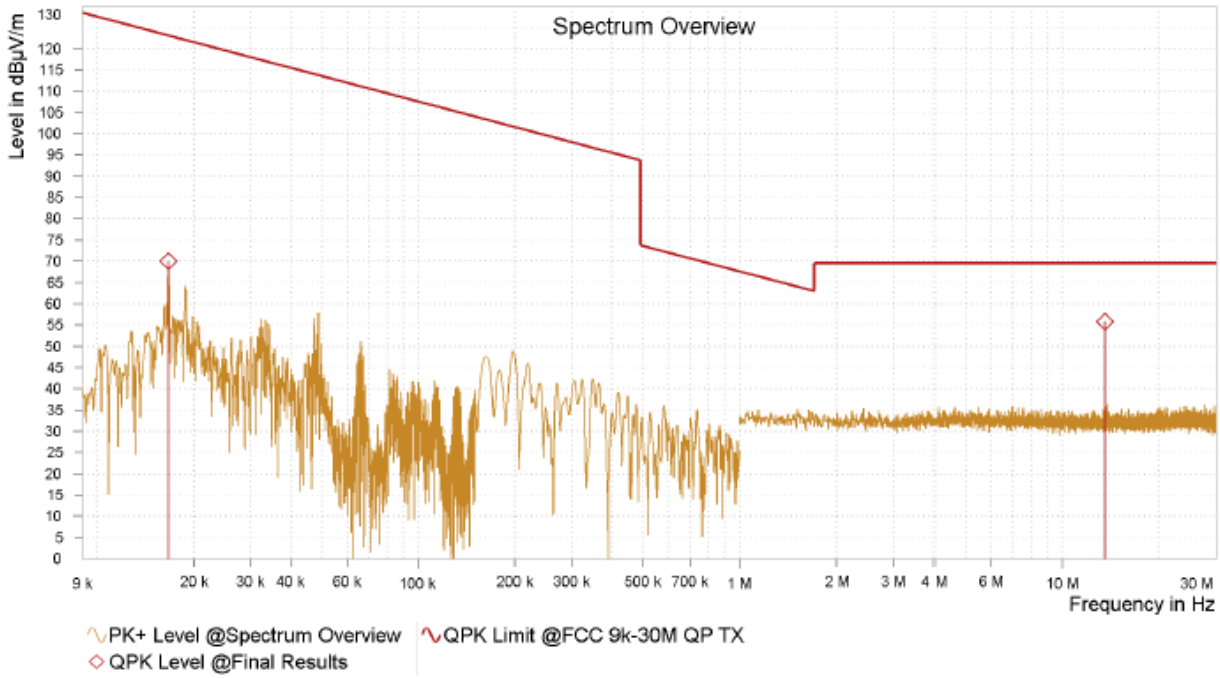
1. Correction Factor: Antenna Factor + Cable loss

▣ TEST PLOTS

Radiated Spurious Emission 9 kHz – 30 MHz (Antenna Position 90°) : HF ASK



Radiated Spurious Emission 9 kHz – 30 MHz (Antenna Position 180°) : HF ASK

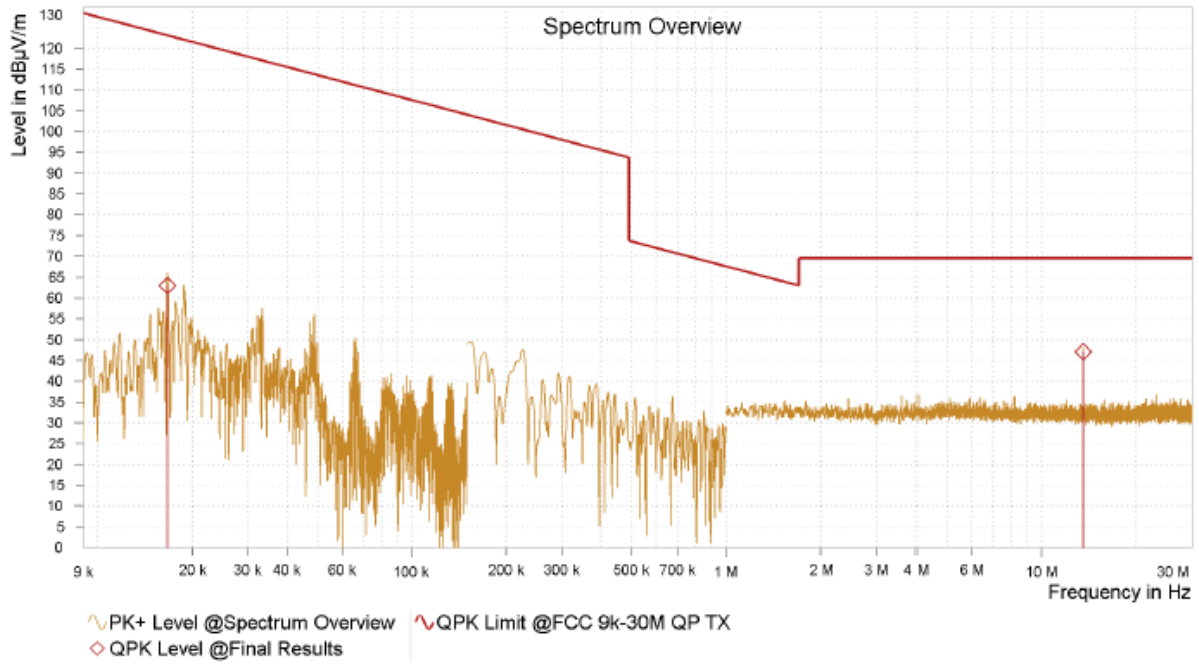


Notes:

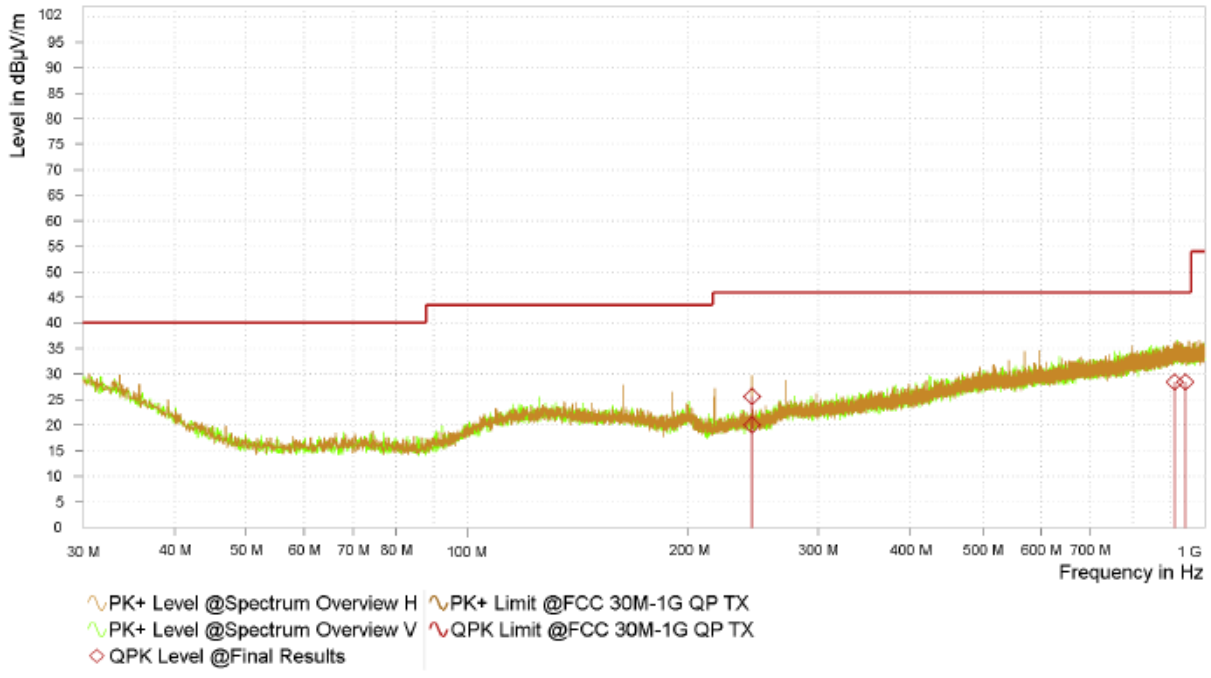
1. The worst case is reported.

▣ TEST PLOTS

Radiated Spurious Emission 9 kHz – 30 MHz (Antenna Position 90°) : HF ASK



Radiated Spurious Emission 30 MHz – 1 GHz : HF ASK



10. LIST OF TEST EQUIPMENT

No.	Instrument	Model No.	Calibration Due (mm/dd/yy)	Manufacture	Serial No.
☒	Signal Analyzer (1 Hz ~ 40.0 GHz)	ESW44	03/18/2026	Rohde & Schwarz	103176
☒	Signal Analyzer (10 Hz ~ 26.5 GHz)	N9020A	07/16/2026	Keysight	MY52091291
☒	Loop Antenna (0.009 MHz ~ 30 MHz)	HLA 6121	03/03/2027	TESEQ	43964
☒	BI-LOG Antenna (30 MHz ~ 6 GHz)	JB6	10/22/2026	Sunol	A071116
☒	Temp & Humidity Chamber	SH-662	10/14/2025	ESPEC	93019836
☒	Test Software	R&S®ELEKTRA	-	Rhode & Schwarz	-

Note:

1. Equipment listed above that calibrated during the testing period was set for test after the calibration.
2. Equipment listed above that has a calibration due date during the testing period, the testing is completed before equipment expiration date

APPENDIX A. TEST SETUP PHOTOS

The setup photos are provided as a separate document

HCT America, Inc., 840 Yosemite Way, Milpitas, CA 95035, USA TEL: +1-510-933-8848 FAX: +1-510-933-8849

APPENDIX B. PHOTOGRAPHS OF EUT

B.1. EXTERNAL PHOTOS

The external photos are provided as a separate document

B.2. INTERNAL PHOTOS

The internal photos are provided as a separate document

END OF TEST REPORT

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