RF Exposure Exhibit	
Manufacturer Name	TCGP
Manufacturer Address	13135 W Libson Rd Waukesha, WI 53005
Product Name Brand/Model No.	0149
Date Received	January 6, 2026
Assessment Dates	January 6 & 9, 2026
Specifications	FCC "Code of Federal Regulations" Title 47 Part 1, Subpart I FCC 447498 D04 Interim General RF Exposure Guidance v01 RSS-102 Issue 6
Test Facility	Elite Electronic Engineering, Inc. 1516 Centre Circle, Downers Grove, IL 60515
Signature	
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1. Exhibit Revision History

Revision	Date	Description
–	3/19/2026	Created

2. Introduction

The FCC, Innovation, Science and Economic Development Canada, European Union and Australia/New Zealand publish standards regarding the evaluation of the RF Exposure hazard of radio communications devices. An evaluation has been performed on the TCGP Demolition Hammer (Model No. 0149) pursuant to the relevant requirements.

3. Subject of Investigation

This document presents the demonstration of RF Exposure compliance on a Demolition Hammer, (hereinafter referred to as the Equipment under Test (EUT)). The EUT was identified as follows:

EUT Identification	
Description	Demolition Hammer
Model/Part No.	0149
S/N	N/A

The EUT is capable of operating in the following bands of the radio spectrum:

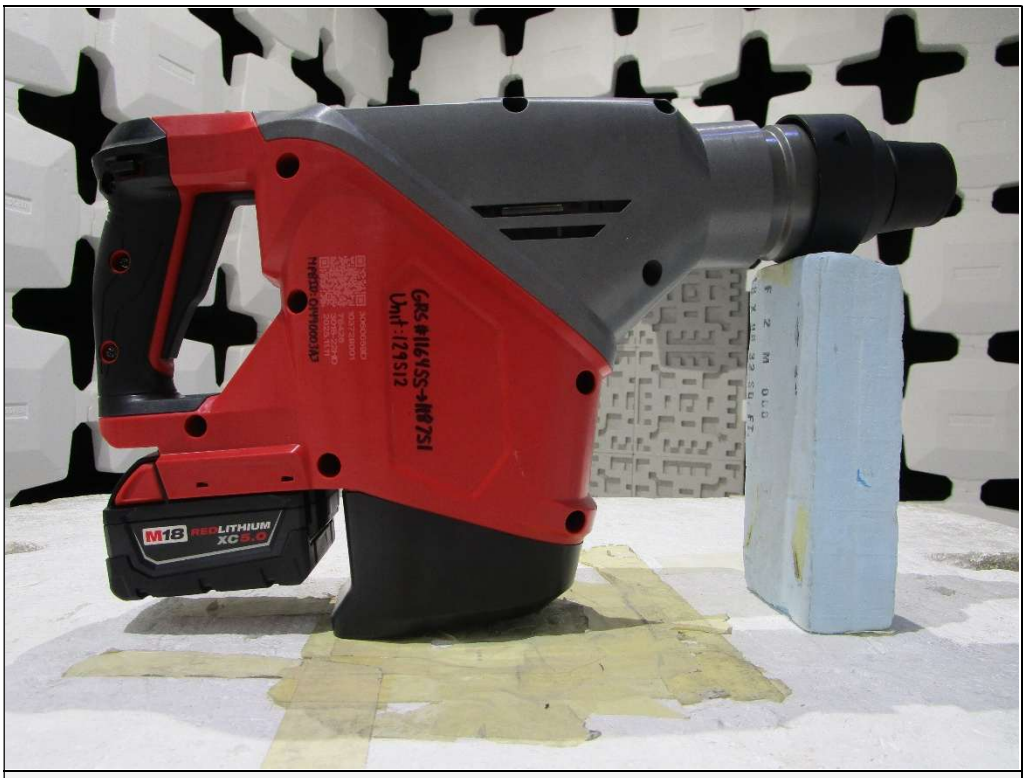
Radio Spectrum Bands of Operation	
Bluetooth	2400MHz to 2483.5MHz

4. Standards and Requirements

The tests were performed to selected portions of, and in accordance with the following specifications.

- Federal Communications Commission "Code of Federal Regulations", Title 47, Chapter I, Subchapter A, Part 1, Subpart I, Section 1.1307
- Federal Communications Commission "Code of Federal Regulations", Title 47, Chapter I, Subchapter A, Part 1, Subpart I, Section 1.1310
- KDB 447498 D04 – “RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices”
- RSS-102, Issue 6 Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)

5. Photographs of EUT



6. Limits and Requirements

6.1. Requirements mandated by the FCC

Equipment pursuing compliance to the requirements with respect to the limits of human exposure to RF provided in FCC 1.1310, need follow the criteria in FCC 1.1307(b)(1).

Equipment exemption qualification must be demonstrated pursuant to FCC 1.1307(b)(3).

For single RF sources (i.e., any single portable device, mobile device or fixed RF source), the EUT is exempt if:

- FCC 1.1307(b)(3)(i)(A) - The available maximum time-averaged power is no more than 1 mW, regardless of separation distance.
- FCC 1.1307(b)(3)(i)(B) - The available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW). This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive).
- FCC 1.1307(b)(3)(i)(C) – The available maximum ERP (watts) shall not exceed the calculated ERP_{th} (watts) in this section. For the exemption to apply, the separation distance, R (meters), must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

If it is determined that the equipment under investigation is not exempt from routine evaluation an assessment must be performed to determine compliance in regards to the RF exposure limits by means of measurement or calculation of the electric field, magnetic field, power density or SAR.

It may be the case that a minimum separation distance will need to be calculated or measured and maintained from the source of RF to meet radiofrequency radiation exposure restrictions.

Per 1.1310(e)(1), the power density shall not exceed the levels below:

Specific Absorption Rate (SAR) - SAR Limits for Occupational/Controlled Exposure			
Frequency Range (MHz)	Whole Body SAR Limit (W/kg)	Peak Spatial AVG SAR Limit (W/kg)	Peak Spatial Extremities SAR Limit 10g (W/kg)
0.1 - 6000	0.4	8	20
Specific Absorption Rate (SAR) - SAR Limits for General/Uncontrolled Exposure			
Frequency Range (MHz)	Whole Body SAR Limit (W/kg)	Peak Spatial AVG SAR Limit 1g (W/kg)	Peak Spatial Extremities SAR Limit 10g (W/kg)
0.1 - 6000	0.08	1.6	4

Limits for Maximum Permissible Exposure (MPE) - Limits for Occupational/Controlled Exposure			
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)
0.3 - 3.0	614	1.63	*100
3.0 – 30	1842 / f	4.89 / f	*900 / f^2
30 – 300	61.4	0.163	1.0
300 – 1,500	—	—	f / 300
1,500 – 100,000	—	—	5
Limits for Maximum Permissible Exposure (MPE) - Limits for General/Uncontrolled Exposure			
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)
0.3 – 1.34	614	1.63	*100
1.34 – 30	842 / f	2.19 / f	*180 / f^2
30 – 300	27.5	0.073	0.2
300 – 1,500	—	—	f / 1500
1,500 – 100,000	—	—	1.0
f – Frequency in MHz * – Plane wave Equivalent Power Density			

6.2. Requirements mandated by Innovation, Science and Economic Development Canada

Equipment exemption qualification must be demonstrated pursuant to RSS-102 Issue 6 section 6. If it is determined that the equipment under investigation is not exempt, it must be demonstrated that the equipment does not exceed the exposure limits in section 5 of RSS-102 Issue 6 or a minimum separation distance must be calculated to ensure that the exposure limits are met.

Per RSS 102 Section 5, the equipment shall not exceed the levels below:

Specific Absorption Rate (SAR) - SAR Limits for Occupational/Controlled Exposure			
Frequency Range (MHz)	Whole Body SAR Limit (W/kg)	Peak Spatial AVG SAR Limit (W/kg)	Peak Spatial Extremities SAR Limit 10g (W/kg)
0.1 - 6000	0.4	8	20
Specific Absorption Rate (SAR) - SAR Limits for General/Uncontrolled Exposure			
Frequency Range (MHz)	Whole Body SAR Limit (W/kg)	Peak Spatial AVG SAR Limit 1g (W/kg)	Peak Spatial Extremities SAR Limit 10g (W/kg)
0.1 - 6000	0.08	1.6	4

Limits for Occupational/Controlled Exposure			
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (W/m^2)
0.003 – 10*	170	180	—
0.1 – 10*	—	1.6 / f	—
1.29 – 10*	$193 / f^{0.5}$	—	—
10 – 20	61.4	0.163	10
20 – 48	$129.8 / f^{0.25}$	$0.3444 / f^{0.25}$	$44.72 / f^{0.5}$
48 – 100	49.33	0.1309	6.455
100 – 6000	$15.60\ f^{0.25}$	$0.04138\ f^{0.25}$	$0.6455\ f^{0.5}$
6000 – 15000	137	0.364	50
15000 – 150000	137	0.364	50
150000 – 300000	$0.354\ f^{0.5}$	$9.40x10^{-4}\ f^{0.5}$	$3.33x10^{-4}\ f$
Limits for General/Uncontrolled Exposure			
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (W/m^2)
0.003 – 10*	83	90	—
0.1 – 10*	—	0.73 / f	—
1.1 – 10*	$87 / f^{0.5}$	—	—
10 – 20	27.46	0.0728	2
20 – 48	$58.07 / f^{0.25}$	$0.1540 / f^{0.25}$	$8.944 / f^{.05}$
48 – 300	22.06	0.05852	1.291
300 – 6000	$3.142\ f^{0.3417}$	$0.008335\ f^{0.3417}$	$0.02619\ f^{0.6834}$
6000 – 15000	61.4	0.163	10
15000 – 150000	61.4	0.163	10
150000 – 300000	$0.158\ f^{0.5}$	$4.21x10^{-4}\ f^{0.5}$	$6.67x10^{-5}\ f$

f – Frequency in MHz
*Limits only apply to Specific Absorption Rate and Nerve Stimulation requirements.

7. Assessment Results

The following evaluation was performed at a separation distance of 1cm. The separation distance was measured based on the minimum use case separation between the radiating element of the RF source and the end user.

7.1. RF Exposure Evaluation Pertinent to the Requirements of the FCC of a Single RF Source

The table below contains the highest measured, calculated, or reported field strengths and output power.

Radio Access Technology	*f* Transmit Frequency (MHz)	Electric Field Strength (V/m)	P Conducted Output Power (mW)	EIRP (mW)	Duty Cycle
BLE	2402	31.48627286	3.80189396	3.25087297	-48.13

The output power levels listed above were used to complete an exemption assessment. The result is as follows:

Radio Access Technology	*f* Transmit Frequency (MHz)	Time-Averaged Output Power (mW)	Blanket Exemption (mW)	Exemption Rule	Exemption Result
BLE	2402	-182.98516	1	FCC 1.1307(b)(3)(i)(A)	Exempt

It was determined that the EUT is exempt from routine evaluation per FCC 1.1307(b)(3)(i)(A).

7.2. RF Exposure Evaluation Relevant to the Requirements of the ISED of a Single RF Source

The table below contains the highest measured, calculated, or reported field strengths and output power.

Radio Access Technology	*f* Transmit Frequency (MHz)	Electric Field Strength (V/m)	P Conducted Output Power (mW)	EIRP (W)	Duty Cycle
BLE	2402	31.48627286	3.80189396	0.00325087	-48.13

The output power levels listed above were used to complete an exemption assessment. The result is as follows:

Radio Access Technology	*f* Transmit Frequency (MHz)	P Conducted Output Power (mW)	EIRP (W)	SAR Exemption Limit (mW)
BLE	2402	3.80189396	0.00325087	18.154545

Basic Restrictions and Reference Levels	Exempt/ Not Exempt	nI_{RMS}, P or EIRP	Exemption Limit	Notes
Nerve Stimulation	N/A	---	NA	Only applicable to inductive systems operating in the 3kHz to 10MHz range with loop outer dimensions ≥ 100mm and separation distances ≥ 0.15mm and separation distance ≤ 50mm.
SAR	Exempt	3.8mW	18.15mW	---
Localized APD	N/A	---	NA	Only applicable to sources operating in the 7 – 30GHz range if the separation between the user or bystander is ≤ 20cm.
Localized IPD	N/A	---	NA	Only applicable to sources operating in the 6 – 30GHz range.
FRL	N/A	---	NA	Only applicable to sources operating in the 10MHz to 300GHz range if the separation between the user or bystander is > 20cm.

It was determined that the EUT is exempt from all applicable Basic Restrictions and Reference Levels evaluations.

8. Statement of Compliance

The TCGP Demolition Hammer (Model 0149) is exempt from all evaluations of the FCC and Innovation, Science and Economic Development Canada requirements for RF Exposure.