



FCC Part 1 Subpart I  
FCC Part 2 Subpart J  
INDUSTRY CANADA RSS 102 ISSUE 5

RF EXPOSURE REPORT

FOR

DIGITAL WIRELESS ASSAY  
MODEL NUMBER: FRPTK1

FCC ID: 2AEKXFRPTK1  
IC ID: 20260-FRPTK1

REPORT NUMBER: 15U20694-E2V2

ISSUE DATE: SEPTEMBER 23, 2015

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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	9/21/15	Initial Issue	
V2	9/23/15	Updated RF Exposure Report	D. Corona

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## 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** CHURCH & DWIGHT CO., INC.  
**EUT DESCRIPTION:** DIGITAL WIRELESS ASSAY  
**MODEL:** FRPTK1  
**SERIAL NUMBER:** N10L36XCV (Radiated), N10L36YHK (Conducted)  
**DATE TESTED:** MAY 12-15, 2015

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 1 SUBPART I & PART 2 SUBPART J	Pass
INDUSTRY CANADA RSS 102 ISSUE 5	Pass

UL Verification Services Inc. calculated the RF Exposure of the above equipment in accordance with the requirements set forth in the above standards, using test results reported in the test report documents referenced below and/or documentation furnished by the applicant. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations of these calculations. The results show that the equipment is capable of demonstrating compliance with the requirements as documented in this report.

**Note:** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

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## 2. TEST METHODOLOGY

All calculations were made in accordance with FCC OET Bulletin 65 Edition 97-01 and IC Safety Code 6.

## 3. REFERENCES

All measurements were made as documented in test report UL Verification Services Inc. 15U20694-E2V2 for operation in the 2.4 GHz band,

## 4. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://ts.nist.gov/standards/scopes/2000650.htm>.

## 5. STANDALONE SAR TEST EXCLUSION CONSIDERATIONS

### 5.1. FCC RULES

SAR test exclusion in accordance with KDB 447498.

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ , for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where

- $f_{(\text{GHz})}$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 0 mm is applied to determine SAR test exclusion.

Antenna	Tx	Frequency (MHz)	Avg Output power		Separation distances (mm)	Calculated Threshold
			dBm	mW		
BLE Main	BLE	2402	3.71	0.234	0	0.1

Conclusion:

The computed value is  $< 3$ ; therefore, Bluetooth/BLE qualifies for Standalone SAR test exclusion.

## 5.2. IC RULES

The SAR exclusion table from RSS-102 issue 5 is reproduced below:

**Table 1: SAR evaluation – Exemption limits for routine evaluation based on frequency and separation distance<sup>4,5</sup>**

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of ≤5 mm	At separation distance of 10 mm	At separation distance of 15 mm	At separation distance of 20 mm	At separation distance of 25 mm
≤300	71 mW	101 mW	132 mW	162 mW	193 mW
450	52 mW	70 mW	88 mW	106 mW	123 mW
835	17 mW	30 mW	42 mW	55 mW	67 mW
1900	7 mW	10 mW	18 mW	34 mW	60 mW
2450	4 mW	7 mW	15 mW	30 mW	52 mW
3500	2 mW	6 mW	16 mW	32 mW	55 mW
5800	1 mW	6 mW	15 mW	27 mW	41 mW

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of 30 mm	At separation distance of 35 mm	At separation distance of 40 mm	At separation distance of 45 mm	At separation distance of ≥50 mm
≤300	223 mW	254 mW	284 mW	315 mW	345 mW
450	141 mW	159 mW	177 mW	195 mW	213 mW
835	80 mW	92 mW	105 mW	117 mW	130 mW
1900	99 mW	153 mW	225 mW	316 mW	431 mW
2450	83 mW	123 mW	173 mW	235 mW	309 mW
3500	86 mW	124 mW	170 mW	225 mW	290 mW
5800	56 mW	71 mW	85 mW	97 mW	106 mW

The minimum antenna to user distance that will be encountered in normal use is 0mm. This results in an exemption limit of 4mW at 2450MHz.

As the maximum output power is 3.61mW EIRP the DUT qualifies for SAR test exclusion.

## END OF REPORT