Product Service

Choose certainty.
Add value.

Report On

RF Exposure Assessment of the
Motorola Solutions
LXN 500 LTE B14 Portable Infrastructure

FCC ID: AZ492FT7102

Document 75939219 Report 4 Issue 02 December 2017

Product Service

TÜV SÜD Product Service, Octagon House, Concorde Way, Segensworth North,
Fareham, Hampshire, United Kingdom, PO15 5RL
Tel: +44 (0) 1489 558100. Website: www.tuv-sud.co.uk

REPORT ON

RF Exposure Assessment of the
Motorola Solutions
LXN 500 LTE B14 Portable Infrastructure

Document 75939219 Report 4 Issue 02

December 2017

PREPARED FOR

Motorola Solutions Israel Ltd
2 Hanegev St
Airport City
Israel
70199

PREPARED BY

Steven White
Project Manager – RF & Telecoms

APPROVED BY

Matt Russell
Authorised Signatory

DATED

21 December 2017

Product Service

CONTENTS

Section **Page No**

1 REPORT SUMMARY 3

1.1 Introduction 4
1.2 Regional Requirements 5
1.3 Product Information 6
1.3.1 Technical Description 6
1.3.2 Supported Features 6
1.3.3 Maximum Conducted Powers 6
1.3.4 Antennas 6
1.3.5 Support equipment and ancillaries 7
1.3.6 EUT Configurations 7
1.4 Brief Summary of Results 8
1.4.1 Configuration 1 - LTE FDD 14 MIMO 9
1.4.2 Configuration 2 - LTE FDD 14 SISO 10
1.4.3 Configuration 3 - WLAN 11
1.4.4 Configuration 4 - LTE FDD 14 MIMO + WLAN 12
1.4.5 Configuration 5 - LTE FDD 14 SISO + WLAN 13

2 TEST DETAILS 14

2.1 Rationale for Assessment of the RF Exposure 15
2.2 Test Result Details 16
2.2.1 Configuration 1 - LTE FDD 14 MIMO 16
2.2.2 Configuration 2 - LTE FDD 14 SISO 17
2.2.3 Configuration 3 - WLAN 18
2.2.4 Configuration 4 - LTE FDD 14 MIMO + WLAN (Exposure Level at Compliance Boundary) 19
2.2.5 Configuration 5 - LTE FDD 14 SISO + WLAN (Exposure Level at Compliance Boundary) 20
2.2.6 Configuration 4 - LTE FDD 14 MIMO + WLAN (Exposure Level as Fraction of Limit) 21
2.2.7 Configuration 5 - LTE FDD 14 SISO + WLAN (Exposure Level as Fraction of Limit) 22

3 DISCLAIMERS AND COPYRIGHT 23

3.1 Disclaimers and Copyright 24

ANNEX A REGIONAL REQUIREMENTS A.2

Product Service

SECTION 1

REPORT SUMMARY

RF Exposure Assessment of the
Motorola Solutions
LXN 500 LTE B14 Portable Infrastructure

1.1 INTRODUCTION

The information contained in this report is intended to show verification of the RF Exposure Assessment of the Motorola Solutions LTE B14 Portable Infrastructure to the requirements of the applied test specifications.

Objective	To perform RF Exposure Assessment to determine the Equipment Under Test's (EUT's) compliance of the applied rules.
Applicant	Motorola Solutions Inc.
Manufacturer	Motorola Solutions Israel Ltd
Manufacturing Description	LTE B14 Portable Infrastructure
Model Number(s)	SQM01SUM0309A
Product Name	LXN 500
Test Specification/Issue/Date	CFR 47 Pt1.1310 (2016) Health Canada Safety Code 6

1.2 REGIONAL REQUIREMENTS

The table below shows the regional requirements that are referenced in this test report. A full list of the requirements is shown in Annex A.

Report Reference	Regional Requirement
FCC	CFR 47 Pt1.1310 (2016)
ISED	Health Canada Safety Code 6

1.3 PRODUCT INFORMATION

1.3.1 Technical Description

The Equipment under test was a Motorola Solutions LXN 500 Portable Infrastructure.

A full technical description can be found in the manufacturer's documentation.

All reported calculations were carried out on the relevant information supplied for the LXN 500 to demonstrate compliance with the applied test specification(s). The sample assessed was found to comply with the requirements of the applied rules.

1.3.2 Supported Features

The following radio access technologies and frequency bands are supported by the equipment under test.

Radio Access Technology	LTE FDD 14 MIMO
	LTE FDD14 SISO
	WLAN
Transmit Frequency Band	758 MHz to 768 MHz
	2400 MHz to 2483.5 MHz

1.3.3 Maximum Conducted Powers

The following maximum powers were used during calculations

LTE FDD 14 MIMO	33.26 dBm*
LTE FDD14 SISO	30.25 dBm
WLAN	29.51 dBm

*MIMO power is determined as twice the SISO power, since no beam forming is implemented and consequently the LTE MIMO antennas emit uncorrelated signal waveforms

1.3.4 Antennas

The following upper bound antennas gains were used during calculations.

No.	Model	Gain (dBi)
1	LTE FDD 14 MIMO	6
2	LTE FDD 14 SISO	6
3	WLAN	10

1.3.5 Support equipment and ancillaries

Vehicle 4 port antenna and cables:

AN000226A01	Laird Combo antenna VLQ69273 (4 ports)
CB000613A01	Laird Combo LTE antenna VLQ69273 (4 ports) cable
CB000548A01	Laird Combo WiFi antenna VLQ69273 (4 ports) cable
CB000133A01	Laird Combo GPS antenna VLQ69273 (4 ports) cable

Note: The 4-port antenna can also be used in buildings/fixed installations (providing there is a suitable ground plane/structure). Stated distances for RF exposure, apply for both fixed and vehicular use.

Vehicle 3 port antenna and cables:

AN000036A01	Laird combo antenna (3 ports) - Base
85013016001	Laird combo antenna (3 ports) - Whip
CB000613A01	Laird combo antenna (3 ports) LTE cable
CB000133A01	Laird combo antenna (3 ports) GPS cable
CB000548A01	Laird combo antenna (3 ports) WiFi cable

Vehicle power cable

CB000540A01	Vehicle power cable

1.3.6 EUT Configurations

Portable Infrastructure operating in LTE Band 14 and WLAN 2.4 GHz modes.

1.4 BRIEF SUMMARY OF RESULTS

The wireless device described within this report has been shown to be capable of compliance with the basic restrictions related to human exposure to electromagnetic fields for both General Public and Occupational exposure. The calculations shown in this report were made in accordance with the procedures specified in the applied test specification(s).

The calculations were made using the lowest operational frequency supported within each band of operation as this required the application of the lowermost exposure limit within the band.

Configuration	Required Compliance Boundary (m)	
	Occupational	General Population
LTE FDD 14 MIMO	0.20	0.53
LTE FDD 14 SISO	0.14	0.38
WLAN	0.15	0.37
LTE FDD 14 MIMO + WLAN	0.25	0.64
LTE FDD 14 SISO + WLAN	0.21	0.53

Table 1 – Compliance Boundary Results

1.4.1 Configuration 1 - LTE FDD 14 MIMO

Regional Requirement	Calculated RF exposure level at compliance boundary of 0.20 m					
	S Field (W/m^2)		E Field (V/m)		H Field (A/m)	
	Result	Limit	Result	Limit	Result	Limit
FCC*	1.6778	2.5267	N/A	N/A	N/A	N/A
ISED	16.7776	17.7718	79.5299	81.8544	0.2110	0.2171

* Requirement and Result in mW/cm^2

Table 2 – Occupational Results

The calculations show that the EUT complies with the occupational exposure levels described in the CFR 47 Pt1.1310 (2016) and Health Canada Safety Code 6 at the point of investigation, 0.20 m.

Regional Requirement	Calculated RF exposure level at compliance boundary of 0.53 m					
	S Field (W/m^2)		E Field (V/m)		H Field (A/m)	
	Result	Limit	Result	Limit	Result	Limit
FCC*	0.2389	0.5053	N/A	N/A	N/A	N/A
ISED	2.3891	2.4328	30.0113	30.2823	0.0796	0.0803

* Requirement and Result in mW/cm^2

Table 3 – General Population Results

The calculations show that the EUT complies with the general population exposure levels described in the CFR 47 Pt1.1310 (2016) and Health Canada Safety Code 6 at the point of investigation, 0.53 m.

1.4.2 Configuration 2 - LTE FDD 14 SISO

Regional Requirement	Calculated RF exposure level at compliance boundary of 0.14 m					
	S Field (W/m^2)		E Field (V/m)		H Field (A/m)	
	Result	Limit	Result	Limit	Result	Limit
FCC*	1.7121	2.5267	N/A	N/A	N/A	N/A
ISED	17.1212	17.7718	80.3401	81.8544	0.2131	0.2171

* Requirement and Result in mW/cm^2

Table 4 – Occupational Results

The calculations show that the EUT complies with the occupational exposure levels described in the CFR 47 Pt1.1310 (2016) and Health Canada Safety Code 6 at the point of investigation, 0.14 m.

Regional Requirement	Calculated RF exposure level at compliance boundary of 0.38 m					
	S Field (W/m^2)		E Field (V/m)		H Field (A/m)	
	Result	Limit	Result	Limit	Result	Limit
FCC*	0.2324	0.5053	N/A	N/A	N/A	N/A
ISED	2.3239	2.4328	29.5990	30.2823	0.0785	0.0803

* Requirement and Result in mW/cm^2

Table 5 – General Population Results

The calculations show that the EUT complies with the general population exposure levels described in the CFR 47 Pt1.1310 (2016) and Health Canada Safety Code 6 at the point of investigation, 0.38 m.

1.4.3 Configuration 3 - WLAN

Regional Requirement	Calculated RF exposure level at compliance boundary of 0.15 m					
	S Field (W/m^2)		E Field (V/m)		H Field (A/m)	
	Result	Limit	Result	Limit	Result	Limit
FCC*	3.1594	5.0000	N/A	N/A	N/A	N/A
ISED	31.5942	31.6229	109.1364	109.1886	0.2895	0.2896

* Requirement and Result in mW/cm^2

Table 6 – Occupational Results

The calculations show that the EUT complies with the occupational exposure levels described in the CFR 47 Pt1.1310 (2016) and Health Canada Safety Code 6 at the point of investigation, 0.15 m.

Regional Requirement	Calculated RF exposure level at compliance boundary of 0.37 m					
	S Field (W/m^2)		E Field (V/m)		H Field (A/m)	
	Result	Limit	Result	Limit	Result	Limit
FCC*	0.5193	1.0000	N/A	N/A	N/A	N/A
ISED	5.1926	5.3478	44.2445	44.8977	0.1174	0.1191

* Requirement and Result in mW/cm^2

Table 7 – General Population Results

The calculations show that the EUT complies with the general population exposure levels described in the CFR 47 Pt1.1310 (2016) and Health Canada Safety Code 6 at the point of investigation, 0.37 m.

1.4.4 Configuration 4 - LTE FDD 14 MIMO + WLAN

The tables below show the summed fractional results from the antenna port summary in section 2.2. Where the result is less than one, the EUT is deemed compliant.

Regional Requirement	Calculated RF exposure level at compliance boundary of 0.25 m as a fraction of the limit		
	S Field	E Field	H Field
FCC	0.6525	N/A	N/A
ISED	0.9639	0.9639	0.9639

Table 8 – Occupational Results

The calculations show that the EUT complies with the occupational exposure levels described in the CFR 47 Pt1.1310 (2016) and Health Canada Safety Code 6 at the point of investigation, 0.25 m.

The tables below show the summed fractional results from the antenna port summary in section 2.2. Where the result is less than one, the EUT is deemed compliant.

Regional Requirement	Calculated RF exposure level at compliance boundary of 0.64 m as a fraction of the limit		
	S Field	E Field	H Field
FCC	0.4978	N/A	N/A
ISED	0.9981	0.9981	0.9981

Table 9 – General Population Results

The calculations show that the EUT complies with the general population exposure levels described in the CFR 47 Pt1.1310 (2016) and Health Canada Safety Code 6 at the point of investigation, 0.64 m.

1.4.5 Configuration 5 - LTE FDD 14 SISO + WLAN

The tables below show the summed fractional results from the antenna port summary in section 2.2. Where the result is less than one, the EUT is deemed compliant.

Regional Requirement	Calculated RF exposure level at compliance boundary of 0.21 m as a fraction of the limit		
	S Field	E Field	H Field
FCC	0.6236	N/A	N/A
ISED	0.9379	0.9379	0.9379

Table 10 – Occupational Results

The calculations show that the EUT complies with the occupational exposure levels described in the CFR 47 Pt1.1310 (2016) and Health Canada Safety Code 6 at the point of investigation, 0.21 m.

The tables below show the summed fractional results from the antenna port summary in section 2.2. Where the result is less than one, the EUT is deemed compliant.

Regional Requirement	Calculated RF exposure level at compliance boundary of 0.53 m as a fraction of the limit		
	S Field	E Field	H Field
FCC	0.4895	N/A	N/A
ISED	0.9644	0.9644	0.9644

Table 11 – General Population Results

The calculations show that the EUT complies with the general population exposure levels described in the CFR 47 Pt1.1310 (2016) and Health Canada Safety Code 6 at the point of investigation, 0.53 m.

SECTION 2

TEST DETAILS

2.1 RATIONALE FOR ASSESSMENT OF THE RF EXPOSURE

The aim of the assessment report is to evaluate the compliance boundary for a set of given input power(s) according to the basic restrictions (directly or indirectly via compliance with reference levels) related to human exposure to radio frequency electromagnetic fields.
The chosen assessment method to establish the compliance boundary in the far-field region is the reference method as defined in the relevant specifications.

The RF exposure assessment is based upon the following criteria:

The SQM01SUM0309A Mobile LTE base station (LXN500) operates with the transmitters active on the antenna ports shown in Section 1.3.3. For each transmitter, the Radio Access Technology (RAT), EIRP inclusive of antenna gain and duty cycle, gain of the antenna and lowest frequency of operation are shown as they contribute to the calculation of S Field, E field and H field values according to the following formulas.
The power flux (S Field):

$$S = \frac{PG_{(\theta,\phi)}}{4\pi r^2}$$

The electric field strength (E Field):

$$E = \frac{\sqrt{30PG}_{(\theta,\phi)}}{r}$$

The magnetic field strength (H Field):

$$H = \frac{E}{\eta_o}$$

Where:

P = Average Power (W)
G = Antenna Gain (dBi)
r = Distance (cm) or (m)
η_o = 377 (Ω)

2.2 TEST RESULT DETAILS

The frequencies shown in the tables below have been chosen based on the lowest possible frequency that the EUT can transmit.

2.2.1 Configuration 1 - LTE FDD 14 MIMO

Antenna Port	Tx No.	Ant No.	RAT	EIRP (W)	Duty Cycle (%)	Gain (dBi)	Frequency (MHz)	RF Exposure Level at compliance boundary of 0.20 m		
								S Field (W/m^2)	E Field (V/m)	H Field (A/m)
1	1	1	LTE FDD 14 MIMO	8.433*	100	6	758.000	16.7776	79.5299	0.2110

Table 12 – Occupational Transmitter Summary

Antenna Port	Tx No.	Ant No.	RAT	EIRP (W)	Duty Cycle (%)	Gain (dBi)	Frequency (MHz)	RF Exposure Level at compliance boundary of 0.53 m		
								S Field (W/m^2)	E Field (V/m)	H Field (A/m)
1	1	1	LTE FDD 14 MIMO	8.433*	100	6	758.000	2.3891	30.0113	0.0796

Table 13 – General Population Transmitter Summary

*In order to base the calculation on worst case conditions within a free-space environment, it was assumed that the EIRP from both LTE Antennas was equal to the sum of the EIRP from each antenna, i.e. 3 dB increase.

2.2.2 Configuration 2 - LTE FDD 14 SISO

Antenna Port	Tx No.	Ant No.	RAT	EIRP (W)	Duty Cycle (%)	Gain (dBi)	Frequency (MHz)	RF Exposure Level at compliance boundary of 0.14 m		
								S Field (W/m^2)	E Field (V/m)	H Field (A/m)
1	1	2	LTE FDD 14 SISO	4.217	100	6	758.000	17.1212	80.3401	0.2131

Table 14 – Occupational Transmitter Summary

Antenna Port	Tx No.	Ant No.	RAT	EIRP (W)	Duty Cycle (%)	Gain (dBi)	Frequency (MHz)	RF Exposure Level at compliance boundary of 0.38 m		
								S Field (W/m^2)	E Field (V/m)	H Field (A/m)
1	1	2	LTE FDD 14 SISO	4.217	100	6	758.000	2.3239	29.5990	0.0785

Table 15 – General Population Transmitter Summary

2.2.3 Configuration 3 - WLAN

Antenna Port	Tx No.	Ant No.	RAT	EIRP (W)	Duty Cycle (%)	Gain (dBi)	Frequency (MHz)	RF Exposure Level at compliance boundary of 0.15 m		
								S Field (W/m^2)	E Field (V/m)	H Field (A/m)
1	1	3	WLAN	8.933*	100	10	2400.000	31.5942	109.1364	0.2895

Table 16 – Occupational Transmitter Summary

Antenna Port	Tx No.	Ant No.	RAT	EIRP (W)	Duty Cycle (%)	Gain (dBi)	Frequency (MHz)	RF Exposure Level at compliance boundary of 0.37 m		
								S Field (W/m^2)	E Field (V/m)	H Field (A/m)
1	1	3	WLAN	8.933*	100	10	2400.000	5.1926	44.2445	0.1174

Table 17 – General Population Transmitter Summary

*The client has specified that the calculated 8.933W EIRP, was based on an unrealistic, exaggerated assumption of 10 dBi gain, used to establish very conservative compliance distances.

In fact, the antenna gain shall not exceed 7 dBi, as documented in the Laird antenna data sheets (See FCC Exhibit 11). Such a figure does not take into account, cable losses which are expected to introduce at least 1 dB loss.

Therefore, the resulting maximum EIRP, is at most equal to 29.51 dBm + 7 dBi - 1 dB = 35.51 dBm, in compliance with the 4W EIRP requirement specified by FCC 47 CFR Part 15.247 rules.

2.2.4 Configuration 4 - LTE FDD 14 MIMO + WLAN (Exposure Level at Compliance Boundary)

Antenna Port	Tx No.	Ant No.	RAT	EIRP (W)	Duty Cycle (%)	Gain (dBi)	Frequency (MHz)	RF Exposure Level at compliance boundary of 0.25 m		
								S Field (W/m^2)	E Field (V/m)	H Field (A/m)
1	1	1	LTE FDD 14 MIMO	8.433	100	6	758.000	10.7377	63.6239	0.1688
2	1	3	WLAN	8.933	100	10	2400.000	11.3739	65.4818	0.1737

Table 18 – Occupational Transmitter Summary

Antenna Port	Tx No.	Ant No.	RAT	EIRP (W)	Duty Cycle (%)	Gain (dBi)	Frequency (MHz)	RF Exposure Level at compliance boundary of 0.64 m		
								S Field (W/m^2)	E Field (V/m)	H Field (A/m)
1	1	1	LTE FDD 14 MIMO	8.433	100	6	758.000	1.6384	24.8531	0.0659
2	1	3	WLAN	8.933	100	10	2400.000	1.7355	25.5788	0.0678

Table 19 – General Population Transmitter Summary

2.2.5 Configuration 5 - LTE FDD 14 SISO + WLAN (Exposure Level at Compliance Boundary)

Antenna Port	Tx No.	Ant No.	RAT	EIRP (W)	Duty Cycle (%)	Gain (dBi)	Frequency (MHz)	RF Exposure Level at compliance boundary of 0.21 m		
								S Field (W/m^2)	E Field (V/m)	H Field (A/m)
1	1	2	LTE FDD 14 SISO	4.217	100	6	758.000	7.6094	53.5601	0.1421
2	1	3	WLAN	8.933	100	10	2400.000	16.1195	77.9545	0.2068

Table 20 – Occupational Transmitter Summary

Antenna Port	Tx No.	Ant No.	RAT	EIRP (W)	Duty Cycle (%)	Gain (dBi)	Frequency (MHz)	RF Exposure Level at compliance boundary of 0.53 m		
								S Field (W/m^2)	E Field (V/m)	H Field (A/m)
1	1	2	LTE FDD 14 SISO	4.217	100	6	758.000	1.1946	21.2219	0.0563
2	1	3	WLAN	8.933	100	10	2400.000	2.5307	30.8877	0.0819

Table 21 – General Population Transmitter Summary

2.2.6 Configuration 4 - LTE FDD 14 MIMO + WLAN (Exposure Level as Fraction of Limit)

As the frequency of operation for each transmitter is not the same, in order to evaluate compliance with the limit which is dependent on frequency, the calculated RF exposure fields are divided by the limit to get a fractional exposure value. Any values less than one are compliant with the limit. The tables below show a summary of each antenna port and the summation of the fractional RF exposure results of each transmitter.

Antenna Port	EIRP (W)	Regional Requirement	Calculated RF exposure level at compliance boundary of 0.25 m as a Fraction of the Limit		
			S Field	E Field	H Field
1	8.433	FCC	0.4250	N/A	N/A
		ISED	0.6042	0.6042	0.6041
2	8.933	FCC	0.2275	N/A	N/A
		ISED	0.3597	0.3597	0.3596

Table 22 – Occupational Antenna Port Summary

Antenna Port	EIRP (W)	Regional Requirement	Calculated RF exposure level at compliance boundary of 0.64 m as a Fraction of the Limit		
			S Field	E Field	H Field
1	8.433	FCC	0.3242	N/A	N/A
		ISED	0.6735	0.6736	0.6734
2	8.933	FCC	0.1736	N/A	N/A
		ISED	0.3245	0.3246	0.3245

Table 23 – General Population Antenna Port Summary

2.2.7 Configuration 5 - LTE FDD 14 SISO + WLAN (Exposure Level as Fraction of Limit)

As the frequency of operation for each transmitter is not the same, in order to evaluate compliance with the limit which is dependent on frequency, the calculated RF exposure fields are divided by the limit to get a fractional exposure value. Any values less than one are compliant with the limit. The tables below show a summary of each antenna port and the summation of the fractional RF exposure results of each transmitter.

Antenna Port	EIRP (W)	Regional Requirement	Calculated RF exposure level at compliance boundary of 0.21 m as a Fraction of the Limit		
			S Field	E Field	H Field
1	4.217	FCC	0.3012	N/A	N/A
		ISED	0.4282	0.4282	0.4281
2	8.933	FCC	0.3224	N/A	N/A
		ISED	0.5097	0.5097	0.5097

Table 24 – Occupational Antenna Port Summary

Antenna Port	EIRP (W)	Regional Requirement	Calculated RF exposure level at compliance boundary of 0.52 m as a Fraction of the Limit		
			S Field	E Field	H Field
1	4.217	FCC	0.2364	N/A	N/A
		ISED	0.4911	0.4911	0.4910
2	8.933	FCC	0.2531	N/A	N/A
		ISED	0.4732	0.4733	0.4732

Table 25 – General Population Antenna Port Summary

SECTION 3

DISCLAIMERS AND COPYRIGHT

3.1 DISCLAIMERS AND COPYRIGHT

This report relates only to the actual item/items tested.

ANNEX A

REGIONAL REQUIREMENTS

Frequency Range (MHz)	Power Density (mW/cm^2)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)
0 - 0.3	-	-	-
0.3 - 3	100	614	1.63
3 - 30	900/f^2	1842/f	4.89/f
30 - 300	1	61.4	0.163
300 - 1500	f/300	-	-
1500 - 100000	5	-	-

Table A.1 – CFR 47 Pt1.1310 (2016) Occupational Limits

Frequency Range (MHz)	Power Density (mW/cm^2)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)
0 - 0.3	-	-	-
0.3 - 3	100	614	1.63
3 - 30	180/f^2	824/f	2.19/f
30 - 300	0.2	27.5	0.073
300 - 1500	f/1500	-	-
1500 - 100000	1	-	-

Table A.2 – CFR 47 Pt1.1310 (2016) General Population Limits

Frequency Range (MHz)	Power Density (W/m^2)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)
10 - 20	10	61.4	0.163
20 - 48	44.72/f^0.5	129.8/f^0.25	0.3444/f^0.25
48 - 100	6.455	49.33	0.1309
100 - 6000	0.6455*f^0.5	15.60*f^0.25	0.04138*f^0.25
6000 - 150000	50	137	0.364

Table A.3 – Health Canada Safety Code 6 Occupational Limits

Frequency Range (MHz)	Power Density (W/m^2)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)
10 - 20	2	27.46	0.0728
20 - 48	8.944/f^0.5	58.07/f^0.25	0.1540/f^0.25
48 - 300	1.291	22.06	0.05852
300 - 6000	0.02619*f^0.6834	3.142*f^0.3417	0.008335*f^0.3417
6000 - 15000	10	61.4	0.163

Table A.4 – Health Canada Safety Code 6 General Population Limits