

2.5 Exposure of Humans to RF Fields

2.5.1 Specification Reference

ISED Canada RSS-GEN Issue 4, section 3.2

2.5.2 Guide

ISED Canada RSS-102 Issue 5, section 2.5 and ISED Canada SPR-002, Issue 1

2.5.3 Equipment Under Test and Modification State

OLYMPUS SLIDEVIEW VS200, S/N: VS20-BU-L: S/N 1906129191; VS20-LOADER: SN 190718407 - Modification State 1

2.5.4 Date of Test

2019-07-15 and 2019-07-18

2.5.5 Test Method

This test was performed in accordance with ISED Canada RSS-102, Issue 5, chapter 2.5 and ISED Canada SPR-002, Issue 1, chapter 6.5

Test according to RSS-102 is based on test results according to section Fehler! Verweisquelle konnte nicht gefunden werden. of this report.

Test according to SPR-002 was performed as worst case measurement with direct contact to EUT.

2.5.6 Environmental Conditions

Ambient Temperature 26.0 °C Relative Humidity 42.0 %



2.5.7 **Test Results**

$$EIRP = \frac{(FS \cdot D)^2}{30}$$

In accordance with ISED Canada RSS-102, Issue 5, chapter 2.5:

Maximum Radiated Fields Strength:

68.9 dBµV/m (at 3 m distance and 125 kHz)

(Scanner, see chapter Fehler! Verweisquelle konnte nicht gefunden werden. of this test

report)

Calculated Equivalent Radiated Power:

2.786 mW (e.i.r.p.)

Minimum separation distance:

≤ 5 mm

SAR Evaluation Excemption Limit:

71 mW

In accordance with ISED Canada SPR-002, Issue 1, chapter 6.5:

Test distance:

Direct contact to EUT

Tested frequency:

125 kHz

Measured maximum value (Loader):

1.42 V/m

0.0473 A/m

Measured maximum value (Scanner):

58.18 V/m

0.9319 A/m

Limb Exposure Limit:

83 V/m

90 A/m

Relaxation Factor:

1.0

2.5.8 Test Location and Test Equipment Used

This test was carried out in Semi anechoic room - cabin no. 8 and radio lab.

Instrument	Manufacturer	Type No	TE No	Calibration Period (months)	Calibration Due
EMI test receiver	Rohde & Schwarz	ESW 26	28268	12	2020-06
Loop antenna	Rohde & Schwarz	HFH2-Z2	18876	36	2019-07-31
Electromagnetic radiation meter	EMR-200	AT-0023	19590	36	2019-10-31
Electric field probe	Type 8.3	AU-0008	19591	36	2019-10-31
Magnetic field probe	Type 12.1	W-0018	19592	36	2019-10-31

Table 13

TU - Traceability Unscheduled O/P Mon - Output Monitored using calibrated equipment N/A - Not Applicable



2.6 SAR exclusion threshold

2.6.1 Specification Reference

KDB 447498 D01 V06, section 4.3.1 c) 2)

2.6.2 Equipment Under Test and Modification State

Model: DAC Universal; Type: MK IV, S/N: 1044 - Modification State 0

2.6.3 Date of Test

2019-04-01

2.6.4 Test Method

Carrier level is based on test result according to section Fehler! Verweisquelle konnte nicht gefunden werden. of this report.

2.6.5 Test Result

Maximum Radiated Fields Strength: (see chapter Fehler! Verweisquelle konnte nicht gefunden werden. of this test report)

68.9 dBµV/m (at 3 m distance and 125 kHz)

Calculated Equivalent Radiated Power:

2.786 mW (e.i.r.p.)

Minimum separation distance:

 \leq 5 mm (50 mm)

1-g numeric threshold:

 $(3.0 (1 + log_{10}(100/0.125))/2 = 5.85$

SAR test exclusion limit (for 1-g):

 $5.85 \cdot 50 / \sqrt{(0.1)} = 925 \text{ mW}$

Note 1:For test distances below 5 mm according to 4.3.1 a) the test distance is fixed to 5 mm. However, according to 4.3.1 c), the limit is based on a fixed test distance of 50 mm for test distances smaller than 50 mm at frequencies below 100 MHz.

Note 2:The calculation of the power limit is based on f = 100 MHz and d = 50 mm, however, the correction of the numeric threshold is based on the real frequency of f = 125 kHz

$$EIRP = \frac{(FS \cdot D)^2}{30}$$

$$Num. Thresh. (f < 100 MHz, d < 50 mm) = \frac{1}{2} (Num. Thresh. \left(1 + log_{10}. \frac{100 MHz}{f}\right))$$

$$P_{lim} = (Num. Thresh.) (d in mm) / \sqrt{(f in GHz)}$$