RF EXPOSURE ANALYSIS

EQUIPMENT

Equipment:	Sander
Type/Model:	AROS-B 150NV
Additional type/model:	AOS-B 130NV
Manufacturer:	Mirka Ltd.
Tested by request of:	Mirka Ltd.

Reference test report: Intertek Test report No. 1713667STO-002, Ed. 2

Operating frequencies: 2402 - 2480 MHz

REQUIREMENT

EN 50663:2017
CFR 47 §1.1310
RSS-102 issue 5 (2015)
Radiocommunications (Electromagnetic Radiation – Human Exposure)
NZS 2772.1:1999

CALCULATIONS

Highest measured conducted output power is 1.4 dBm peak.
Antenna gain is 2 dBi. EIRP is then 3.4 dBm equal to 2.2 mW

LIMITS & EVALUATIONS:

Standard	Reference for limit	Limit	Unit	Values	Result
EN 50663:2017	EN62479[1]	20	mW	2.2	PASS
CFR 47 §1.1310	KDB 447498 D01[2]	3.0	N/A	0.3	PASS
RSS-102 issue 5 (2015)	RSS-102 issue 5 (2015)[3]	4	mW	2.2	PASS
Radiocommunications (Electromagnetic Radiation – Human Exposure)	Radiation Protection Standard for Maximum Exposure Levels to Radiofrequency Fields – 3 kHz to 300 GHz[4]	20	mW	2.2	PASS
NZS 2772.1:1999	NZS 2772.1:1999[5]	20	mW	2.2	PASS

[1]From Table A.1 for general public and head and trunk

[2]1-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by: [(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·[√f(GHz)] ≤ 3.0. Test separation distance is taken as 5 mm and maximum power is 2 mW at 2.4 GHz.

[3]Section 2.5.1, table 1, based on a separation distance of 5 mm and frequency of 2450 MHz.

[4]Table S1, General public exposure

[5] Section 3.7.3: In some circumstances an RF exposure evaluation may not be required. This is the case with low-power devices whose nominal average RF radiated power does not exceed 20 mW and which do not produce exceptionally high instantaneous fields.

Summary:

All requirements are fulfilled

Date of issue: 2018-11-16

Issued by: Robert Hietala

Intertek Semko AB, Radio & EMC