

RF Exposure Evaluation

E.U.T. : Transceiver

Model Number : 1511

Applicant : **Nutek Corporation**

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Approved: 

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1 RF Exposure Evaluation

Maximum measured transmitter power

Frequency Range (MHz)	Continuous transmit power (dBm)	Averaging factor (dB)	Transmit power (dBm)	Tune-up power tolerance (dB)	Total Maximum power	
					(dBm)	(mW)
909.6	12.91	-14.90	-1.99	(±)2	0.01	1.00231
913.8	13.01	-14.90	-1.89	(±)2	0.11	1.02565
918.0	12.90	-14.90	-2.00	(±)2	0.00	1.00000

Averaging factor in dB = $20\log$ (duty cycle)

The duration of one cycle = 196.8ms

Duty Cycle = Ton/duration = 35.4 ms / 196.8ms

Therefore, the averaging factor is found by $20\log 0.179878 = -14.9$ dB

Portable Device

According to §15.247(e)(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio

frequency energy level in excess of the Commission's guidelines.

According to KDB 447498_D01_V06 4.3.1(1)

SAR exclusion thresholds by:

$[\text{max. power of channel, including tune-up tolerance, mW}] / (\text{min, test separation distances, mm}) * [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR

and ≤ 7.5 for 10-g extremity SAR.

Calculation

$$(1.02565/5) * (\sqrt{0.9138}) = 0.19609 \leq 3$$

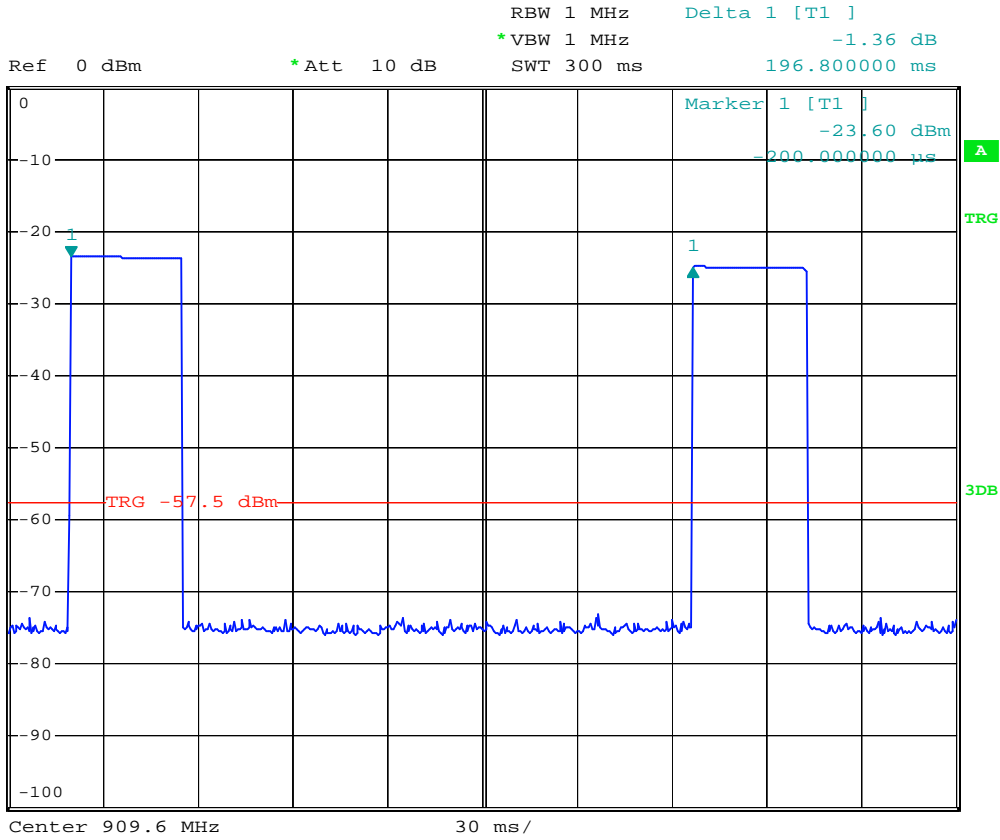
Conclusion:

No SAR is required.

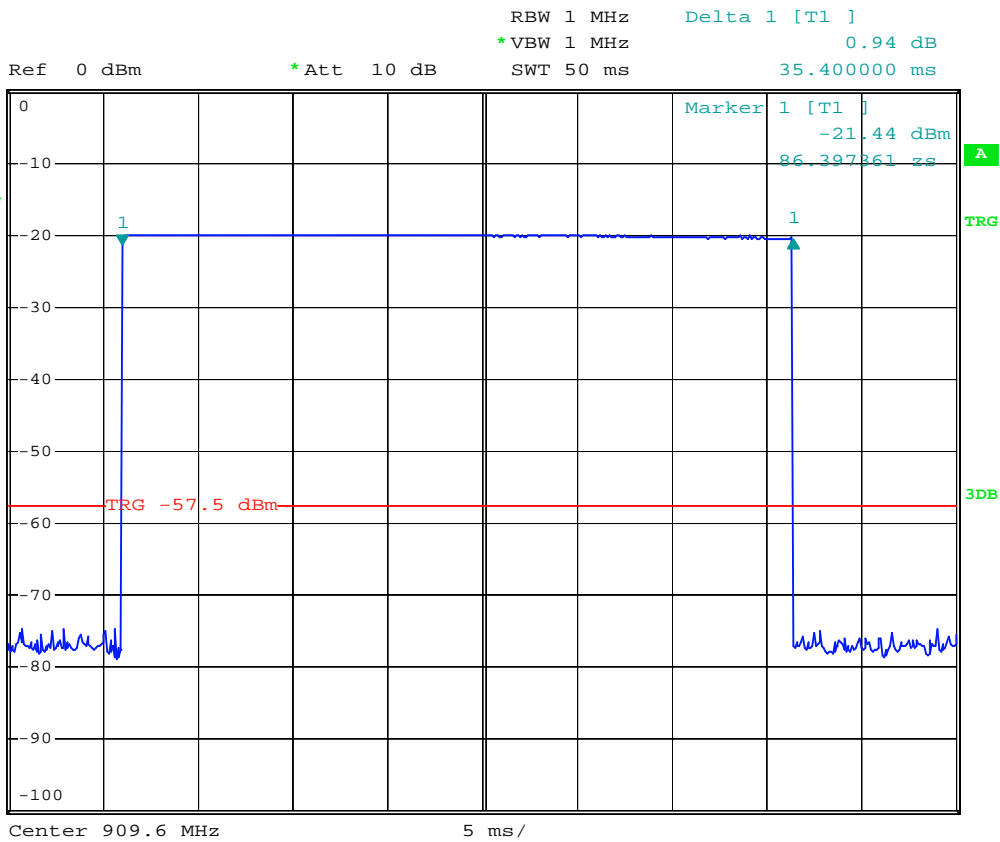
SIMULTANEOUS TRANSMISSION EVALUATION

N/A

Duty Cycle



Duration



Time Slot