Prediction of MPE

1. Declaration of RF exposure compliance for exemption from routine evaluation limits

Applicant:	race result AG Joseph-von-Fraunhofer-Str. 11 76327 Pfinztal Germany
Nemko ident. no.:	379011
Number of pages:	2
Product	Chip2go
Model name:	RR06
FCC ID:	SZO-RR06
Manufacturer:	race result AG Joseph-von-Fraunhofer-Str. 11 76327 Pfinztal Germany
Exposure Conditions:	During normal operation, user extremities can come within 20 cm of the internal antenna and therefore product is considered as “Portable”.
4.3.1. Standalone SAR test exclusion considerations:	**Calculation for the antenna 1**

Nemko

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density
P = power input to the antenna
G = power gain of the antenna in the direction of interest relative to isotropic radiator
R = distance to the center of radiation of the antenna

PWR in dBm	Maximum peak output power at antenna input terminal:	27,5	dBm
	Maximum peak output power at antenna input terminal:	562,3	mW
Ant. gain in dBi	Antenna gain(maximum):	3	dBi
	Maximum antenna gain:	2,0	numeric
Use the duty cycle from test report or 100%	Time Averaging:	100	%
Separation distance from antenna to user in cm.	Prediction distance:	20	cm
Freq. in MHz	Prediction frequency:	917	MHz
	FCC MPE limit for uncontrolled exposure at prediction frequency:	0,61	mW/cm^2
	IC MPE limit for uncontrolled exposure at prediction frequency:	2,77	W/m^2
	Power density at prediction frequency:	0,22	mW/cm^2
	This equates to:	2,23	W/m^2

4.3.1. Standalone SAR test exclusion considerations:	**Calculation for the antenna 2** **Prediction of MPE limit at a given distance** Equation from page 18 of OET Bulletin 65, Edition 97-01 $$S = \frac{PG}{4\pi R^2}$$ where: S = power density P = power input to the antenna G = power gain of the antenna in the direction of interest relative to isotropic radiator R = distance to the center of radiation of the antenna

PWR in dBm →	Maximum peak output power at antenna input terminal:	15,1	dBm
	Maximum peak output power at antenna input terminal:	32,4	mW
Ant. gain in dBi →	Antenna gain(maximum):	3	dBi
	Maximum antenna gain:	2,0	numeric
Use the duty cycle from test report or 100% →	Time Averaging:	100	%
Separation distance from antenna to user in cm. →	Prediction distance:	20	cm
Freq. in MHz →	Prediction frequency:	917	MHz
	FCC MPE limit for uncontrolled exposure at prediction frequency:	0,61	mW/cm^2
	IC MPE limit for uncontrolled exposure at prediction frequency:	2,77	W/m^2
	Power density at prediction frequency:	0,01	mW/cm^2
	This equates to:	0,13	W/m^2

2. Attestation

ATTESTATION: I attest that the testing was performed by a FCC listed test laboratory, that the test measurements were made in accordance with the above-mentioned departmental standard(s), and that the radio equipment identified in this application has been subject to all applicable test conditions specified in the departmental standards and all of the requirements of the standards have been met.

Signature:	
Date:	January 22, 2021
Name:	Peter Lukas, Lab Manager