

## **Attachment MPE**

**Type / Model Name** : mURM ver. 2.0

**Product Description**: UHF RFID Reader

**Applicant**: TSS COMPANY s.r.o.

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84104 Bratislava

SLOVAKIA

**Manufacturer**: TSS COMPANY s.r.o.

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Attachment to Test Report No. :

T42777-00-00JP

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The test report merely corresponds to the test sample. It is not permitted to copy extracts of these test results without the written permission of the test laboratory.



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# 1 SAR Test Exclusion Threshold calculation - FCC

The calculation is done according to: KDB 447498 D01 General RF Exposure Guidance v06

Calculation formula according to KDB 447498 D01 Part 4.3.1a)

 $(\max power\ of\ transmitter\ [mW])\ \div (\min.test\ separation\ distance\ [mm])\ \times (\sqrt{TX\ frequency[GHz]}\le 3.0$ 

#### Calculation:

Max power <sup>1</sup> [mW]	Separation distance <sup>2</sup> [mm]	TX frequency <sup>3</sup> [GHz]	Result	Limit <sup>4</sup>	verdict
26	15	0.92725	1.7	3.0	Requirement fullfilled

<sup>&</sup>lt;sup>1</sup>maximum power of the transmitter according to datasheet mURMver2.0\_Operational\_Description, page 12 table 4 <sup>2</sup>minimum separation distance according to datasheet mURMver2.0\_Operational\_Description, page 12 table 11 <sup>3</sup>maximum transmission frequency according to datasheet mURMver2.0\_Operational\_Description, page 12 table 1 <sup>4</sup>applicable exclusion limt according to KDB 447498 D01

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## 2 RF Exposure - Exemption Limits - ISED

The calculation is done according to: RSS-102 Issue 5, March 2015

#### Calculation of EIRP:

Max power conducted <sup>1</sup> [mW]	Antenna gain² [dB]	Antenna gain² (Factor)	Max power EIRP [mW]	Antenna type
26	4.5	2.9	76	DAE915R7865AGDZ1-T
26	1.5	1.4	37	DAE915R3540CGDD3-T

<sup>&</sup>lt;sup>1</sup>maximum power conducted according to datasheet mURMver2.0\_Operational\_Description, page 12 table 4 <sup>2</sup>antenna gain according to datasheet mURMver2.0\_Operational\_Description, page 12 table 11

Comparission with Exemtion limits according to Table 1 of RSS-102

TX frequency <sup>1</sup> [MHz]	Separation distance <sup>2</sup> [mm]	Max power EIRP [mW]	Applicable exemption limit <sup>3</sup> [mW]	verdict	Antenna type
927,25	30	76	81	Requirement fullfilled	DAE915R7865AGDZ1-T
927,25	15	37	40	Requirement fullfilled	DAE915R3540CGDD3-T

<sup>&</sup>lt;sup>1</sup>maximum transmission frequency according to datasheet mURMver2.0\_Operational\_Description, page 12 table 1 <sup>2</sup>minimum separation distance according to datasheet mURMver2.0\_Operational\_Description, page 12 table 11 <sup>3</sup>apllicable exemption limit according to RSS-102, linear interpolation was made to get the limit for 927,25 MHz