

## 1 Maximum effective radiated isotropically peak power and occupied bandwidth

#### 1.1 Supply voltage 12 $V_{DC}$ , temperature 20 °C

201003\_6.png: Maximum effective radiated isotropically peak power and occupied bandwidth (variant 1):



#### 201003\_6b.png: Maximum effective radiated isotropically peak power and occupied bandwidth (variant 2):







201003\_6c.png: Maximum effective radiated isotropically peak power and occupied bandwidth (variant 3):

#### 201003\_6d.png: Maximum effective radiated isotropically peak power and occupied bandwidth (variant 4):





#### 1.2 Supply voltage 8 $V_{DC}$ , temperature 20 °C

201003\_44.png: Maximum effective radiated isotropically peak power and occupied bandwidth (variant 1):



### 201003\_44b.png: Maximum effective radiated isotropically peak power and occupied bandwidth (variant 2):







201003\_44c.png: Maximum effective radiated isotropically peak power and occupied bandwidth (variant 3):

201003\_44d.png: Maximum effective radiated isotropically peak power and occupied bandwidth (variant 4):





#### 1.3 Supply voltage 16 V<sub>DC</sub>, temperature 20 °C

201003\_46.png Maximum effective radiated isotropically peak power and occupied bandwidth (variant 1):



#### 201003\_46b.png: Maximum effective radiated isotropically peak power and occupied bandwidth (variant 2):







201003\_46c.png Maximum effective radiated isotropically peak power and occupied bandwidth (variant 3):

201003\_46d.png: Maximum effective radiated isotropically peak power and occupied bandwidth (variant 4):





#### 1.4 Supply voltage 12 V<sub>DC</sub>, temperature 85 °C

201003\_48.png: Maximum effective radiated isotropically peak power and occupied bandwidth (variant 1):



#### 1.5 Supply voltage 12 V<sub>DC</sub>, temperature -40 °C

201003\_58.png: Maximum effective radiated isotropically peak power and occupied bandwidth (variant 1):





#### 2 Maximum average effective radiated isotropically power:

#### 2.1 Supply voltage 12 V<sub>DC</sub>, temperature 20 °C

201003\_5.png: Maximum average effective radiated isotropically power (variant 1):



#### 201003\_5b.png: Maximum average effective radiated isotropically power (variant 2):







201003\_5c.png: Maximum average effective radiated isotropically power (variant 3):

201003\_5d.png: Maximum average effective radiated isotropically power (variant 4):





#### 2.2 Supply voltage 8 $V_{DC}$ , temperature 20 °C





#### 201003\_43b.png: Maximum average effective radiated isotropically power (variant 2):







201003\_43c.png: Maximum average effective radiated isotropically power (variant 3):

#### 201003\_43d.png: Maximum average effective radiated isotropically power (variant 4):





#### 2.3 Supply voltage 16 $V_{DC}$ , temperature 20 °C

201003\_45.png: Maximum average effective radiated isotropically power (variant 1):



#### 201003\_45b.png: Maximum average effective radiated isotropically power (variant 2):







201003\_45c.png: Maximum average effective radiated isotropically power (variant 3):

#### 201003\_45d.png: Maximum average effective radiated isotropically power (variant 4):





#### 2.4 Supply voltage 12 V<sub>DC</sub>, temperature 85 °C

201003\_49.png: Maximum average effective radiated isotropically power (variant 1):



#### 2.5 Supply voltage 12 V<sub>DC</sub>, temperature -40 °C

201003\_59.png: Maximum average effective radiated isotropically power (variant 1):





## 3 Radiated spurious emissions:

201003\_20M-30M: Radiated spurious emissions from 20 MHz to 30 MHz (variant 1):



#### 201003\_20M-30M\_V4: Radiated spurious emissions from 20 MHz to 30 MHz (variant 4):







201003\_30M-1G: Radiated spurious emissions from 30 MHz to 1 GHz (variant 1):









201003\_1-12: Radiated spurious emissions from 1 GHz to 12 GHz:









201003 18-26 5: Radiated spurious emissions from 18 GHz to 26.5 GHz:









201003\_10.png: Radiated spurious emissions from 40 GHz to 55 GHz:

#### 201003\_11.png: Radiated spurious emissions from 55 GHz to 73.5 GHz:



Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. Emissions from 57.340 GHz to 57.402 GHz and 65.359 GHz to 65.781 GHz are a products caused by the harmonic mixer, please refer the plot below for the signal identification.





201003\_11b.png: Radiated spurious emissions from 55 GHz to 73.5 GHz (identification):

### 201003\_8.png: Radiated spurious emissions from 73.5 GHz to 76 GHz:







201003\_9.png: Radiated spurious emissions from 77 GHz to 81 GHz:

#### 201003\_12.png: Radiated spurious emissions from 81 GHz to 110 GHz:



Signal ID function is used. The diagram shows image signals and mixer products. The real input signal is shown, only when USB and LSD traces have the same position on the frequency axis. Emissions from 87.083 GHz to 87.684 GHz and 101.717 GHz to 102.250 GHz are a products caused by the harmonic mixer, please refer the plot below for the signal identification.





201003\_12b.png: Radiated spurious emissions from 81 GHz to 110 GHz (identification):

### 201003\_13.png: Radiated spurious emissions from 110 GHz to 140 GHz:







201003\_14.png: Radiated spurious emissions from 140 GHz to 162 GHz:

#### 201003\_15.png: Radiated spurious emissions from 162 GHz to 170 GHz:







201003\_16.png: Radiated spurious emissions from 170 GHz to 200 GHz:

#### 201003\_17.png: Radiated spurious emissions from 200 GHz to 220 GHz:







201003\_18.png: Radiated spurious emissions from 220 GHz to 231 GHz:

## 4 Frequency stability

201003\_47.png: Frequency stability at 85 °C with 12 VDC:







201003\_50.png: Frequency stability at 50 °C with 12 V<sub>DC</sub>:

#### 201003\_51.png: Frequency stability at 40 °C with 12 V<sub>DC</sub>:







201003\_52.png: Frequency stability at 30 °C with 12 V<sub>DC</sub>:

#### 201003\_40.png: Frequency stability at 20 °C with 12 V<sub>DC</sub>:







201003\_41.png: Frequency stability at 20 °C with 8 VDC:

#### 201003\_42.png: Frequency stability at 20 °C with 16 V<sub>DC</sub>:







201003\_53.png: Frequency stability at 10 °C with 12 V<sub>DC</sub>:

#### 201003\_54.png: Frequency stability at 0 °C with 12 VDC:







201003\_55.png: Frequency stability at -10 °C with 12 V<sub>DC</sub>:

#### 201003\_56.png: Frequency stability at -20 °C with 12 VDC:







201003\_57.png: Frequency stability at -40 °C with 12 V<sub>DC</sub>: