

Suggested settings for WMBUS T mode

- Measurements were done on 6 CC1125 EMs @ 40MHz
- The sensitivity measurements are done with a 3 byte package. 20% PER equals 1% BER.
- The PER vs level measurements are done with a 30byte package, 50 packages are sent pr level.
- Operating conditions are 2.0V -3.6V, 3.0V typical, -40° - 85°, 25° typical.

Settings

| | |
|------------------|----|
| SYNC3 | AA |
| SYNC2 | AA |
| SYNC1 | A4 |
| SYNC0 | 3D |
| SYNC_CFG1 | 9 |
| SYNC_CFG0 | B |
| DEVIATION_M | 47 |
| MODCFG_DEV_E | 6 |
| DCFILT_CFG | C |
| PREAMBLE_CFG1 | 18 |
| PREAMBLE_CFG0 | 17 |
| FREQ_IF_CFG | 0 |
| IQIC | 0 |
| CHAN_BW | 1 |
| MDMCFG1 | C6 |
| MDMCFG0 | 5 |
| DRATE2 | A4 |
| DRATE1 | 7A |
| DRATE0 | E1 |
| AGC_REF | 40 |
| AGC_CS_THR | FD |
| AGC_GAIN_ADJUST | 0 |
| AGC_CFG3 | 3 |
| AGC_CFG2 | 20 |
| AGC_CFG1 | A9 |
| AGC_CFG0 | C0 |
| PA_CFG2 | 7F |
| PA_CFG1 | 56 |
| PA_CFG0 | 78 |
| IF_MIX_CFG | 0 |
| FREQOFF_CFG | 20 |
| TOC_CFG | CB |
| SOFT_TX_DATA_CFG | 0 |

Results

Sensitivity:

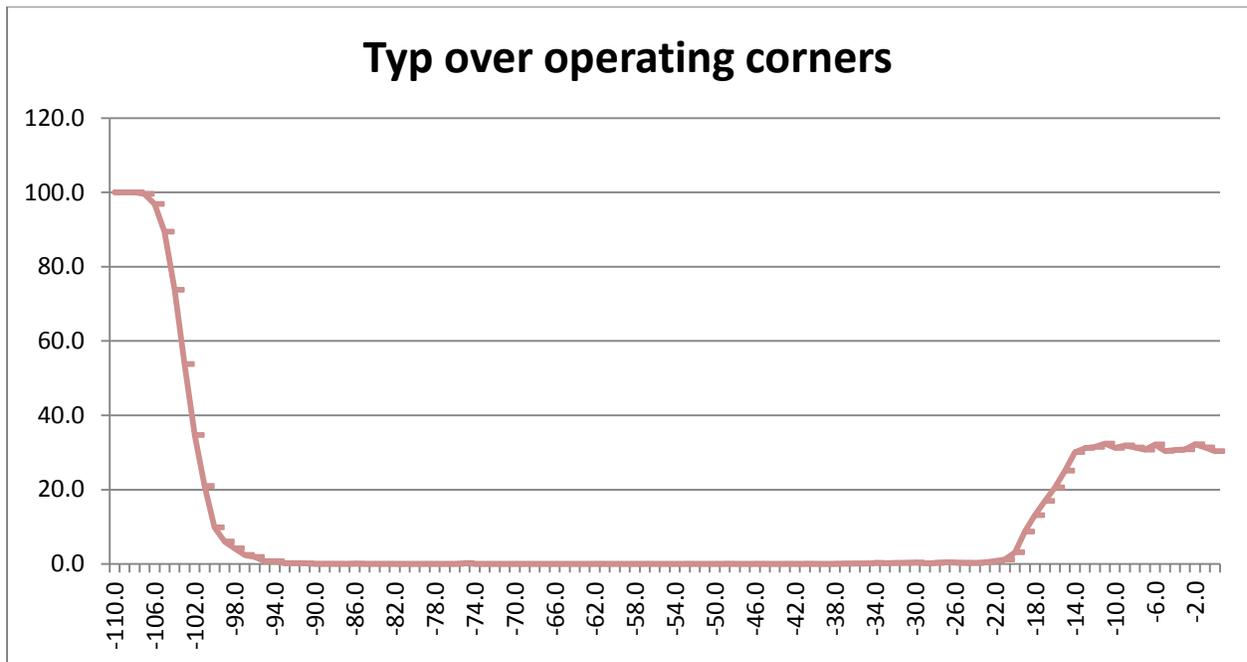
Typical over operating corners:

-103.2 @ 88kbps (-12% datarate tolerance)

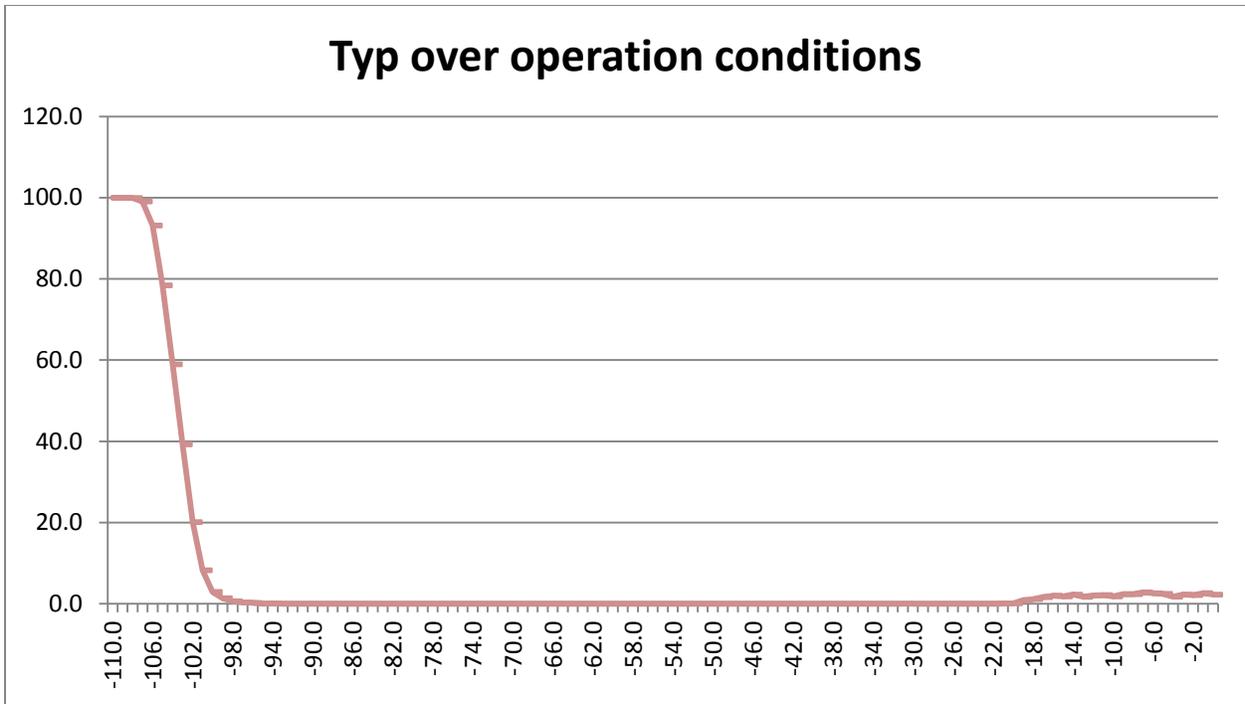
-103.2 @ 100kbps (nominal datarate)

-102.3 @ 112kbps (12% datarate tolerance)

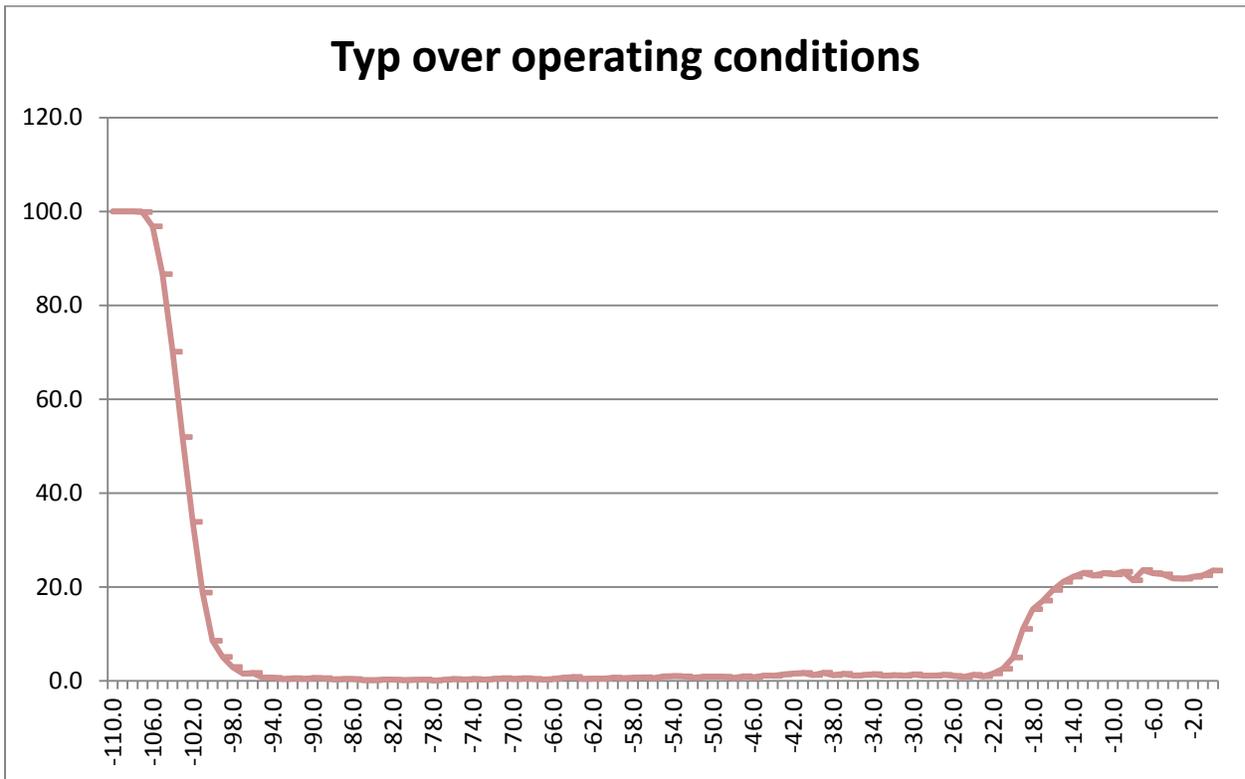
PER vs level:



PER vs level for 88kbps



PER vs level for 100kbps



PER vs level for 112kbps