

Annex 1: Measurement diagrams to
TEST REPORT
 No.: 16-1-0050601T40a

According to:
FCC Regulations
 Part 22, Part 24, Part 27

ISED-Regulations
 RSS-132 Issue 3, RSS-133 Issue 6,
 RSS-139 Issue 2, RSS-Gen Issue 4
 RSS-130 Issue 1

for

peiker acoustic GmbH & Co. KG

GSM/ WCDMA/ LTE Telematics US Module
V1231-0

FCC-ID: QWY-V1231-0
 ISED ID: 6588A-V12310
 PMN: V1231-0
 HVIN: V1231-0








| Laboratory Accreditation and Listings | | |
|--|---|--|
|  Deutsche Akkreditierungsstelle D-PL-12047-01-01 Accredited EMC-Test Laboratory |  Industry Canada Reg. No.: 3462D-1 Reg. No.: 3462D-2 Reg. No.: 3462D-3 |  Voluntary Controls for Electromagnetic Emissions Reg. No.: R-20013, C-20009, T-20006, G-20013 |
|   |  |  MRA US-EU 0003 |
| accredited according to DIN EN ISO/IEC 17025 | | |
| CETECOM GmbH Laboratory Radio Communications & Electromagnetic Compatibility Im Teelbruch 116 • 45219 Essen • Germany Registered in Essen, Germany, Reg. No.: HRB Essen 8984 Tel.: + 49 (0) 20 54 / 95 19-954 • Fax: + 49 (0) 20 54 / 95 19-964 E-mail: info@cetecom.com • Internet: www.cetecom.com | | |
| Laboratory Accreditation and Listings | | |

Table of contents

| | |
|--|----------|
| 1. MEASUREMENT DIAGRAMS LTE-MODE | 3 |
| 1.1. Power conducted LTE-Band 2..... | 3 |
| 1.2. Power conducted LTE-Band 4..... | 4 |
| 1.3. Power conducted LTE-Band 5..... | 5 |
| 1.4. Power conducted LTE-Band 7..... | 6 |
| 1.5. Power conducted LTE-Band 12..... | 7 |
| 1.6. PAPR-Value (CCDF plots)..... | 8 |
| 1.7. Spurious emissions radiated (LTE Band 2)..... | 68 |
| 1.8. Spurious emissions radiated (LTE Band 4)..... | 81 |
| 1.9. Spurious emissions radiated (LTE Band 5)..... | 95 |
| 1.10. Spurious emissions radiated (LTE Band 12)..... | 109 |
| 1.11. Spurious emissions radiated (LTE Band 7)..... | 125 |
| 1.12. Radiated emissions – band-edge (LTE Band 2) with signal bandwidth of 1.4MHz..... | 146 |
| 1.13. Radiated emissions – band-edge (LTE Band 4) with signal bandwidth of 1.4MHz..... | 163 |
| 1.14. Radiated emissions – band-edge (LTE Band 5)..... | 180 |
| 1.15. Radiated emissions – band-edge (LTE Band 12)..... | 197 |
| 1.16. Radiated emissions – band-edge (LTE Band 7)..... | 214 |
| 1.17. 26dBc Emission bandwidth | 221 |
| 1.18. 99% occupied bandwidth..... | 303 |
| 1.19. Spurious emissions conducted (LTE Band 2)..... | 383 |
| 1.20. Spurious emissions conducted (LTE Band 4)..... | 389 |
| 1.21. Spurious emissions conducted (LTE Band 5)..... | 399 |
| 1.22. Spurious emissions conducted (LTE Band 7)..... | 411 |
| 1.23. Spurious emissions conducted (LTE Band 12)..... | 423 |
| Conducted emissions – band - edge (LTE Band 2)..... | 435 |
| 1.24. Conducted emissions – band - edge (LTE Band 4)..... | 447 |
| 1.25. Conducted emissions – band - edge (LTE Band 5)..... | 459 |
| 1.26. Conducted emissions – band - edge (LTE Band 12)..... | 467 |
| 1.27. Conducted emissions – band - edge (LTE Band 7)..... | 476 |
| 1.28. Spektrum-Mask frequency error accord. RSS-130 (LTE Band 12)..... | 500 |

1. Measurement diagrams LTE-mode

1.1. Power conducted LTE-Band 2

| LTE-Band 2 | | | | QPSK-Modulation | | | 16-QAM-Modulation | | | max. modulation QPSK | max. modulation 16QAM | max. bandwidth | modem max. value transmission |
|----------------------|------------------|------------------------------|------------------------------|---------------------------|--------------------------|-----------------------|---------------------------|--------------------------|-----------------------|-----------------------------|------------------------------|----------------|----------------------------------|
| channel bandwidth | ARFCN ch. no. | ARFCN- Frequency (MHz) | Resource block allocation | Peak detector (dBm) | RMS detector (dBm) | PAR Factor (dB) | Peak detector (dBm) | RMS detector (dBm) | PAR Factor (dB) | | | | |
| 14 MHz | 18607 | 1850.7 | 1RB low | 27,38 | 22,88 | 4,5024 | 27,484 | 22,205 | 5,2792 | 23,039 | 22,286 | 23,0386 | |
| | | | 1RB High | 27,54 | 22,89 | 4,6526 | 27,519 | 22,074 | 5,4451 | | | | |
| | | | 50%RB mid | 27,57 | 23,04 | 4,5304 | 27,546 | 22,286 | 5,2591 | | | | |
| | | | 100%RB | 27,94 | 21,88 | 6,0383 | 27,633 | 20,939 | 6,6946 | | | | |
| | 18900 | 1880 | 1RB low | 27,48 | 22,5 | 4,9749 | 27,511 | 22,011 | 5,5001 | | | | |
| | | | 1RB High | 27,43 | 22,55 | 4,8822 | 27,508 | 21,846 | 5,6626 | | | | |
| | | | 50%RB mid | 27,57 | 22,58 | 4,9879 | 27,514 | 21,951 | 5,5634 | | | | |
| | | | 100%RB | 27,94 | 21,46 | 6,4832 | 27,575 | 20,601 | 6,9738 | | | | |
| | 19193 | 1909.3 | 1RB low | 26,81 | 22,17 | 4,6381 | 26,848 | 21,498 | 5,3506 | | | | |
| | | | 1RB High | 26,54 | 22,19 | 4,3484 | 26,66 | 21,546 | 5,1141 | | | | |
| | | | 50%RB mid | 26,66 | 22,3 | 4,3682 | 26,821 | 21,373 | 5,4477 | | | | |
| | | | 100%RB | 26,9 | 21,08 | 5,82 | 26,757 | 20,352 | 6,4056 | | | | |
| 3 MHz | 18615 | 1851.5 | 1RB low | 27,22 | 23,05 | 4,1716 | 27,212 | 22,31 | 4,9016 | 23,052 | 22,376 | 23,0516 | |
| | | | 1RB High | 27,27 | 22,96 | 4,3141 | 27,449 | 22,376 | 5,0722 | | | | |
| | | | 50%RB mid | 26,6 | 21,94 | 4,6632 | 27,192 | 22,084 | 5,1077 | | | | |
| | | | 100%RB | 27,48 | 21,85 | 5,824 | 27,278 | 20,998 | 6,2802 | | | | |
| | 18900 | 1880 | 1RB low | 27,26 | 22,64 | 4,6163 | 27,409 | 22,022 | 5,3866 | | | | |
| | | | 1RB High | 27,14 | 22,44 | 4,7001 | 27,277 | 21,873 | 5,4046 | | | | |
| | | | 50%RB mid | 26,36 | 21,49 | 4,8722 | 27,251 | 21,905 | 5,3465 | | | | |
| | | | 100%RB | 27,53 | 21,51 | 6,0778 | 27,482 | 20,655 | 6,8272 | | | | |
| | 19185 | 1908.5 | 1RB low | 26,64 | 22,36 | 4,277 | 26,709 | 21,793 | 4,9199 | | | | |
| | | | 1RB High | 26,35 | 22,28 | 4,0732 | 26,384 | 21,45 | 4,9344 | | | | |
| | | | 50%RB mid | 25,86 | 21,13 | 4,735 | 26,536 | 21,423 | 5,1128 | | | | |
| | | | 100%RB | 26,69 | 21,2 | 5,492 | 27,126 | 20,299 | 6,8268 | | | | |
| 5 MHz | 18625 | 1852.5 | 1RB low | 27,48 | 23,25 | 4,2306 | 27,471 | 22,748 | 4,7229 | 23,225 | 22,748 | 23,2472 | |
| | | | 1RB High | 27,35 | 23,03 | 4,3169 | 27,365 | 22,353 | 5,0115 | | | | |
| | | | 50%RB mid | 27,12 | 21,99 | 5,1355 | 27,366 | 22,119 | 5,2471 | | | | |
| | | | 100%RB | 27,43 | 21,93 | 5,5007 | 27,897 | 21 | 6,897 | | | | |
| | 18900 | 1880 | 1RB low | 27,64 | 23,24 | 4,4004 | 27,524 | 22,14 | 5,3845 | | | | |
| | | | 1RB High | 27,17 | 22,6 | 4,5685 | 27,185 | 22,002 | 5,1626 | | | | |
| | | | 50%RB mid | 26,85 | 21,45 | 5,4043 | 27,253 | 21,668 | 5,5844 | | | | |
| | | | 100%RB | 27,16 | 21,53 | 5,8234 | 27,447 | 20,575 | 6,8717 | | | | |
| | 19195 | 1907.5 | 1RB low | 26,87 | 22,58 | 4,2971 | 27,029 | 21,995 | 5,0342 | | | | |
| | | | 1RB High | 26,36 | 22,24 | 4,1141 | 26,469 | 21,734 | 4,7395 | | | | |
| | | | 50%RB mid | 26,3 | 21,12 | 5,1789 | 26,601 | 21,314 | 5,2864 | | | | |
| | | | 100%RB | 26,69 | 21,11 | 5,5774 | 27 | 20,206 | 6,7936 | | | | |
| 10 MHz | 18650 | 1855 | 1RB low | 27,76 | 23,61 | 4,1447 | 27,816 | 23,062 | 4,754 | 23,61 | 23,06 | 23,911 | |
| | | | 1RB High | 27,67 | 23,36 | 4,3095 | 27,744 | 22,775 | 4,9684 | | | | |
| | | | 50%RB mid | 27,09 | 22,05 | 5,042 | 26,944 | 21,218 | 5,7282 | | | | |
| | | | 100%RB | 28,17 | 22,17 | 5,9964 | 27,589 | 21,112 | 6,477 | | | | |
| | 18900 | 1880 | 1RB low | 27,55 | 23,08 | 4,4664 | 27,711 | 22,344 | 5,3664 | | | | |
| | | | 1RB High | 27,03 | 22,48 | 4,5447 | 27,132 | 21,977 | 5,1558 | | | | |
| | | | 50%RB mid | 26,81 | 21,59 | 5,2233 | 26,295 | 20,599 | 5,6954 | | | | |
| | | | 100%RB | 28,11 | 21,62 | 6,4863 | 27,4 | 20,695 | 6,7048 | | | | |
| | 19150 | 1905 | 1RB low | 27,02 | 22,85 | 4,1713 | 27,052 | 22,431 | 4,6209 | | | | |
| | | | 1RB High | 26,46 | 22,36 | 4,0974 | 26,426 | 21,711 | 4,7146 | | | | |
| | | | 50%RB mid | 26,2 | 21,37 | 4,8335 | 25,929 | 20,321 | 5,6076 | | | | |
| | | | 100%RB | 27,28 | 21,42 | 5,8634 | 27,627 | 20,331 | 7,2961 | | | | |
| 15 MHz | 18675 | 1857.5 | 1RB low | 27,83 | 23,35 | 4,4812 | 27,892 | 22,75 | 5,1419 | 23,544 | 22,895 | 23,5443 | |
| | | | 1RB High | 28,19 | 23,54 | 4,641 | 28,047 | 22,895 | 5,1625 | | | | |
| | | | 50%RB mid | 27,5 | 22,22 | 5,2824 | 27,84 | 22,314 | 5,526 | | | | |
| | | | 100%RB | 28,24 | 22,28 | 5,9603 | 28,317 | 21,386 | 6,9306 | | | | |
| | 18900 | 1880 | 1RB low | 27,33 | 22,96 | 4,3724 | 27,356 | 22,577 | 4,779 | | | | |
| | | | 1RB High | 27,07 | 22,56 | 4,5067 | 27,261 | 22,386 | 4,875 | | | | |
| | | | 50%RB mid | 26,63 | 21,5 | 5,1026 | 27,261 | 21,689 | 5,572 | | | | |
| | | | 100%RB | 28,11 | 21,63 | 6,4839 | 27,768 | 20,704 | 7,0637 | | | | |
| | 19125 | 1902.5 | 1RB low | 26,8 | 22,59 | 4,2044 | 26,983 | 22,143 | 4,8397 | | | | |
| | | | 1RB High | 26,58 | 22,56 | 4,0338 | 26,498 | 22,066 | 4,4321 | | | | |
| | | | 50%RB mid | 26,32 | 21,25 | 5,0669 | 26,618 | 21,324 | 5,2934 | | | | |
| | | | 100%RB | 27,65 | 21,32 | 6,3288 | 27,239 | 20,336 | 6,9033 | | | | |
| 20 MHz | 18700 | 1860 | 1RB low | 28,06 | 23,45 | 4,8081 | 28,146 | 22,961 | 5,1852 | 23,91 | 22,961 | 23,91 | |
| | | | 1RB High | 28,32 | 23,91 | 4,4052 | 28,222 | 22,944 | 5,2773 | | | | |
| | | | 50%RB mid | 27,52 | 22,35 | 5,1727 | 27,862 | 22,333 | 5,529 | | | | |
| | | | 100%RB | 28,61 | 22,49 | 6,245 | 28,003 | 21,525 | 6,4779 | | | | |
| | 18900 | 1880 | 1RB low | 27,61 | 23,47 | 4,1392 | 27,422 | 22,567 | 4,8547 | | | | |
| | | | 1RB High | 27,12 | 22,8 | 4,3198 | 27,288 | 22,322 | 4,9669 | | | | |
| | | | 50%RB mid | 26,61 | 21,56 | 5,0542 | 27,155 | 21,639 | 5,9162 | | | | |
| | | | 100%RB | 27,91 | 21,69 | 6,2193 | 27,949 | 20,716 | 7,2326 | | | | |
| | 19100 | 1900 | 1RB low | 27 | 22,71 | 4,2919 | 27,016 | 22,031 | 4,9848 | | | | |
| | | | 1RB High | 26,63 | 22,62 | 4,0071 | 26,728 | 22,253 | 4,475 | | | | |
| | | | 50%RB mid | 26,23 | 21,29 | 4,9471 | 26,675 | 21,365 | 5,3095 | | | | |
| | | | 100%RB | 27,73 | 21,52 | 6,215 | 27,364 | 20,676 | 6,8888 | | | | |

1.2. Power conducted LTE-Band 4

| LTE-Band 4 | | | | QPSK-Modulation | | | 16-QAM-Modulation | | | max. modulation QPSK | max. modulation 16-QAM | max. channel | absolute max. value |
|-------------------|---------------|-----------------------|---------------------------|---------------------|--------------------|-----------------|---------------------|--------------------|-----------------|----------------------|------------------------|--------------|---------------------|
| channel bandwidth | ARFCN ch. no. | ARFCN-Frequency [MHz] | Resource block allocation | Peak detector [dBm] | RMS detector [dBm] | PAR Factor [dB] | Peak detector [dBm] | RMS detector [dBm] | PAR Factor [dB] | | | | |
| 14 MHz | 19957 | 1710,7 | 1RB low | 27,23 | 22,61 | 4,6187 | 27,247 | 22,112 | 5,1341 | 22,734 | 22,112 | 23,5062 | |
| | | | 1RB high | 27,34 | 22,73 | 4,6053 | 27,441 | 22,012 | 5,4289 | | | | |
| | | | 50%RB mid | 27,43 | 22,71 | 4,7203 | 27,443 | 22,089 | 5,3533 | | | | |
| | | | 100%RB | 27,69 | 21,55 | 6,1334 | 27,406 | 20,693 | 6,7196 | | | | |
| | 20175 | 1732,5 | 1RB low | 27,66 | 23,09 | 4,5668 | 27,556 | 22,462 | 5,0942 | 23,094 | 22,462 | | |
| | | | 1RB high | 27,59 | 22,98 | 4,6122 | 27,544 | 22,266 | 5,278 | | | | |
| | | | 50%RB mid | 27,7 | 23,09 | 4,6084 | 27,624 | 22,174 | 5,4497 | | | | |
| | | | 100%RB | 27,78 | 21,99 | 5,7882 | 27,637 | 21,104 | 6,5336 | | | | |
| | 20393 | 1754,3 | 1RB low | 27,89 | 23,45 | 4,4465 | 27,968 | 22,754 | 5,2134 | 23,508 | 22,76 | | |
| | | | 1RB high | 27,94 | 23,46 | 4,4749 | 28,061 | 22,746 | 5,3144 | | | | |
| | | | 50%RB mid | 27,98 | 23,51 | 4,4696 | 27,902 | 22,76 | 5,1427 | | | | |
| | | | 100%RB | 28,17 | 22,38 | 5,7907 | 27,728 | 21,363 | 6,3653 | | | | |
| 3 MHz | 19965 | 1711,5 | 1RB low | 27,25 | 22,94 | 4,311 | 27,21 | 22,286 | 4,924 | 22,941 | 22,286 | 23,5508 | |
| | | | 1RB high | 27,04 | 22,67 | 4,3698 | 26,941 | 22,139 | 4,8012 | | | | |
| | | | 50%RB mid | 26,48 | 21,95 | 4,5298 | 26,945 | 21,865 | 5,0796 | | | | |
| | | | 100%RB | 27,46 | 21,8 | 5,6632 | 27,201 | 20,817 | 6,3841 | | | | |
| | 20175 | 1732,5 | 1RB low | 27,43 | 23,13 | 4,3013 | 27,367 | 22,491 | 4,8762 | 23,132 | 22,675 | | |
| | | | 1RB high | 27,46 | 23,01 | 4,4524 | 27,512 | 22,675 | 4,8371 | | | | |
| | | | 50%RB mid | 26,65 | 22,08 | 4,5717 | 27,324 | 22,277 | 5,047 | | | | |
| | | | 100%RB | 27,63 | 21,96 | 5,6637 | 27,709 | 21,139 | 6,5704 | | | | |
| | 20385 | 1753,5 | 1RB low | 27,74 | 23,55 | 4,1854 | 27,816 | 23,142 | 4,6733 | 23,551 | 23,142 | | |
| | | | 1RB high | 27,66 | 23,44 | 4,2265 | 27,622 | 22,949 | 4,6734 | | | | |
| | | | 50%RB mid | 26,94 | 22,5 | 4,4424 | 27,677 | 22,763 | 4,9157 | | | | |
| | | | 100%RB | 28,25 | 22,46 | 5,7962 | 27,825 | 21,548 | 6,2774 | | | | |
| 5 MHz | 19975 | 1712,5 | 1RB low | 27,37 | 23,03 | 4,3433 | 27,335 | 22,379 | 4,9558 | 23,028 | 22,379 | 23,614 | |
| | | | 1RB high | 27,2 | 22,78 | 4,424 | 27,189 | 22,161 | 5,0283 | | | | |
| | | | 50%RB mid | 26,83 | 21,66 | 5,1731 | 27,199 | 21,948 | 5,2514 | | | | |
| | | | 100%RB | 27,76 | 21,72 | 6,0394 | 27,781 | 20,842 | 6,9388 | | | | |
| | 20175 | 1732,5 | 1RB low | 27,47 | 23,26 | 4,2111 | 27,478 | 22,447 | 5,0315 | 23,263 | 22,466 | | |
| | | | 1RB high | 27,35 | 23,06 | 4,2896 | 27,434 | 22,466 | 4,9681 | | | | |
| | | | 50%RB mid | 27,1 | 22,09 | 5,0028 | 27,409 | 22,331 | 5,0784 | | | | |
| | | | 100%RB | 27,43 | 21,96 | 5,4711 | 27,882 | 21,198 | 6,6846 | | | | |
| | 20375 | 1752,5 | 1RB low | 27,89 | 23,64 | 4,2519 | 27,887 | 23,016 | 4,8711 | 23,641 | 23,016 | | |
| | | | 1RB high | 27,64 | 23,56 | 4,0849 | 27,7 | 22,807 | 4,8931 | | | | |
| | | | 50%RB mid | 27,46 | 22,5 | 4,9524 | 27,747 | 22,725 | 5,0218 | | | | |
| | | | 100%RB | 28,24 | 22,48 | 5,7579 | 28,45 | 21,546 | 6,9033 | | | | |
| 10 MHz | 20000 | 1715 | 1RB low | 27,43 | 22,98 | 4,4498 | 27,481 | 22,482 | 4,999 | 23,01 | 22,521 | 24,05 | |
| | | | 1RB high | 27,5 | 23,01 | 4,4868 | 27,495 | 22,521 | 4,9734 | | | | |
| | | | 50%RB mid | 26,73 | 21,67 | 5,0615 | 26,571 | 20,865 | 5,7062 | | | | |
| | | | 100%RB | 27,43 | 21,72 | 5,7161 | 27,831 | 20,664 | 7,1671 | | | | |
| | 20175 | 1732,5 | 1RB low | 27,4 | 23,21 | 4,1005 | 27,378 | 22,659 | 4,7188 | 23,149 | 23,067 | | |
| | | | 1RB high | 27,75 | 23,49 | 4,2616 | 27,8 | 23,067 | 4,7328 | | | | |
| | | | 50%RB mid | 26,92 | 21,99 | 4,9343 | 26,589 | 21,148 | 5,441 | | | | |
| | | | 100%RB | 28,22 | 22,03 | 6,1821 | 27,771 | 21,152 | 6,6184 | | | | |
| | 20350 | 1750 | 1RB low | 28,19 | 24,05 | 4,1499 | 27,994 | 23,053 | 4,9415 | 24,05 | 23,405 | | |
| | | | 1RB high | 27,91 | 23,97 | 3,9436 | 27,998 | 23,405 | 4,5934 | | | | |
| | | | 50%RB mid | 27,36 | 22,50 | 4,8531 | 26,902 | 21,541 | 5,3615 | | | | |
| | | | 100%RB | 28,54 | 22,44 | 6,0994 | 28,302 | 21,457 | 6,8451 | | | | |
| 15 MHz | 20025 | 1717,5 | 1RB low | 27,96 | 23,48 | 4,4785 | 27,921 | 22,928 | 4,9939 | 23,483 | 22,928 | 23,954 | |
| | | | 1RB high | 27,56 | 23,01 | 4,5563 | 27,611 | 22,306 | 5,3046 | | | | |
| | | | 50%RB mid | 27,23 | 22,12 | 5,1071 | 27,657 | 22,296 | 5,3613 | | | | |
| | | | 100%RB | 28,41 | 22,02 | 6,3878 | 27,996 | 21,092 | 6,9042 | | | | |
| | 20175 | 1732,5 | 1RB low | 27,39 | 23,23 | 4,1674 | 27,372 | 22,61 | 4,7619 | 23,227 | 22,61 | | |
| | | | 1RB high | 27,39 | 23,07 | 4,3211 | 27,536 | 22,576 | 4,9597 | | | | |
| | | | 50%RB mid | 27,14 | 22,21 | 4,9314 | 27,607 | 22,418 | 5,1866 | | | | |
| | | | 100%RB | 28,43 | 22,15 | 6,2789 | 28,163 | 21,175 | 6,9877 | | | | |
| | 20325 | 1747,5 | 1RB low | 28,11 | 23,95 | 4,1566 | 27,614 | 22,785 | 4,8289 | 23,954 | 23,246 | | |
| | | | 1RB high | 27,81 | 23,72 | 4,081 | 27,86 | 23,246 | 4,6142 | | | | |
| | | | 50%RB mid | 27,46 | 22,64 | 4,8191 | 27,905 | 22,731 | 5,1743 | | | | |
| | | | 100%RB | 28,4 | 22,52 | 5,8856 | 28,275 | 21,504 | 6,7705 | | | | |
| 20 MHz | 20050 | 1720 | 1RB low | 28,13 | 23,53 | 4,6035 | 28,329 | 23,095 | 5,2341 | 23,53 | 23,095 | 23,8254 | |
| | | | 1RB high | 27,72 | 22,97 | 4,7512 | 27,657 | 22,455 | 5,2018 | | | | |
| | | | 50%RB mid | 27,41 | 22,17 | 5,2423 | 27,933 | 22,215 | 5,7855 | | | | |
| | | | 100%RB | 28,18 | 22,02 | 6,1646 | 28,09 | 21,093 | 6,997 | | | | |
| | 20175 | 1732,5 | 1RB low | 27,37 | 23,19 | 4,1798 | 27,383 | 22,797 | 4,5855 | 23,254 | 22,797 | | |
| | | | 1RB high | 27,51 | 23,25 | 4,2561 | 27,547 | 22,723 | 4,8237 | | | | |
| | | | 50%RB mid | 27,07 | 22,2 | 4,8729 | 27,554 | 22,365 | 5,1895 | | | | |
| | | | 100%RB | 28,5 | 22,19 | 6,3174 | 27,948 | 21,254 | 6,694 | | | | |
| | 20300 | 1745 | 1RB low | 27,54 | 23,36 | 4,183 | 27,566 | 22,635 | 4,9315 | 23,825 | 23,181 | | |
| | | | 1RB high | 27,84 | 23,83 | 4,0162 | 27,945 | 23,181 | 4,7636 | | | | |
| | | | 50%RB mid | 27,38 | 22,57 | 4,8123 | 27,945 | 22,788 | 5,569 | | | | |
| | | | 100%RB | 28,62 | 22,45 | 6,1711 | 28,334 | 21,642 | 6,6916 | | | | |

1.3. Power conducted LTE-Band 5

| LTE-Band 5 | | | | QPSK-Modulation | | | 16-QAM-Modulation | | | max. modulation QPSK | max. modulation 16-QAM | max. channel | absolute max. value |
|-------------------|---------------|-----------------------|---------------------------|---------------------|--------------------|-----------------|---------------------|--------------------|-----------------|----------------------|------------------------|--------------|---------------------|
| channel bandwidth | ARFCN ch. no. | ARFCN-Frequency [MHz] | Resource block allocation | Peak detektor [dBm] | RMS detektor [dBm] | PAR Faktor [dB] | Peak detektor [dBm] | RMS detektor [dBm] | PAR Faktor [dB] | | | | |
| 14 MHz | 20407 | 824.7 | 1RB low | 27,38 | 23,11 | 4,2764 | 27,176 | 22,425 | 4,7508 | 23,18 | 22,42 | 23,38 | 23,73 |
| | | | 1RB high | 27,46 | 23,18 | 4,2756 | 27,328 | 22,342 | 4,9858 | | | | |
| | | | 50%RB mid | 27,61 | 23,06 | 4,5482 | 27,572 | 22,289 | 5,2836 | | | | |
| | | | 100%RB | 28,04 | 21,91 | 6,131 | 27,823 | 20,95 | 6,8731 | | | | |
| | 20525 | 836.5 | 1RB low | 27,95 | 23,1 | 4,8485 | 27,972 | 22,469 | 5,503 | 23,38 | 22,56 | | |
| | | | 1RB high | 27,97 | 23,22 | 4,756 | 27,974 | 22,538 | 5,4361 | | | | |
| | | | 50%RB mid | 28,40 | 23,38 | 5,0204 | 28,33 | 22,564 | 5,7662 | | | | |
| | | | 100%RB | 28,12 | 22,36 | 5,7586 | 28,212 | 21,465 | 6,7473 | | | | |
| | 20643 | 848.3 | 1RB low | 28,01 | 23,33 | 4,6781 | 28,042 | 23,015 | 5,0273 | 23,37 | 23,05 | | |
| | | | 1RB high | 28,07 | 23,37 | 4,6928 | 28,101 | 22,721 | 5,3804 | | | | |
| | | | 50%RB mid | 28,23 | 23,29 | 4,9409 | 28,53 | 23,047 | 5,4825 | | | | |
| | | | 100%RB | 28,69 | 22,52 | 6,1702 | 28,185 | 21,594 | 6,5908 | | | | |
| 3 MHz | 20415 | 825.5 | 1RB low | 27,36 | 23,24 | 4,118 | 27,457 | 22,565 | 4,8922 | 23,24 | 22,57 | 23,65 | 23,15 |
| | | | 1RB high | 27,59 | 23,21 | 4,3722 | 27,445 | 22,522 | 4,9229 | | | | |
| | | | 50%RB mid | 26,8 | 22,11 | 4,6951 | 27,47 | 22,414 | 5,0556 | | | | |
| | | | 100%RB | 27,75 | 22,16 | 5,5916 | 27,441 | 21,099 | 6,3418 | | | | |
| | 20525 | 836.5 | 1RB low | 28,23 | 23,65 | 4,5814 | 28,05 | 22,549 | 5,5008 | 23,65 | 22,86 | | |
| | | | 1RB high | 27,98 | 23,52 | 4,4657 | 27,983 | 22,811 | 5,1719 | | | | |
| | | | 50%RB mid | 27,43 | 22,48 | 4,9436 | 28,115 | 22,865 | 5,25 | | | | |
| | | | 100%RB | 28,44 | 22,35 | 6,0885 | 28,453 | 21,272 | 7,1807 | | | | |
| | 20635 | 847.5 | 1RB low | 27,65 | 23,29 | 4,3633 | 27,934 | 22,922 | 5,012 | 23,31 | 23,15 | | |
| | | | 1RB high | 27,79 | 23,31 | 4,4815 | 28,267 | 23,153 | 5,1142 | | | | |
| | | | 50%RB mid | 27,56 | 22,75 | 4,8097 | 28,151 | 22,929 | 5,2224 | | | | |
| | | | 100%RB | 28,49 | 22,77 | 5,7155 | 28,071 | 21,672 | 6,3996 | | | | |
| 5 MHz | 20425 | 826.5 | 1RB low | 27,63 | 23,62 | 4,0096 | 27,553 | 22,644 | 4,9095 | 23,65 | 22,91 | 23,73 | 23,63 |
| | | | 1RB high | 28,03 | 23,65 | 4,3843 | 27,779 | 22,908 | 4,8705 | | | | |
| | | | 50%RB mid | 27,31 | 22,03 | 5,2769 | 27,798 | 22,555 | 5,2435 | | | | |
| | | | 100%RB | 27,66 | 22,09 | 5,5704 | 28,275 | 21,171 | 7,1042 | | | | |
| | 20525 | 836.5 | 1RB low | 28,28 | 23,73 | 4,5584 | 28,133 | 22,769 | 5,3643 | 23,73 | 22,93 | | |
| | | | 1RB high | 27,88 | 23,40 | 4,4834 | 28,042 | 22,927 | 5,1144 | | | | |
| | | | 50%RB mid | 27,64 | 22,22 | 5,4286 | 28,253 | 22,61 | 5,6428 | | | | |
| | | | 100%RB | 27,99 | 22,13 | 5,8671 | 28,601 | 21,266 | 7,3354 | | | | |
| | 20625 | 846.5 | 1RB low | 27,57 | 23,29 | 4,2732 | 27,757 | 22,831 | 4,9258 | 23,36 | 23,63 | | |
| | | | 1RB high | 27,81 | 23,36 | 4,4454 | 28,454 | 23,629 | 4,8253 | | | | |
| | | | 50%RB mid | 27,89 | 22,61 | 5,2779 | 28,204 | 22,876 | 5,3281 | | | | |
| | | | 100%RB | 29,18 | 22,69 | 6,4892 | 28,584 | 21,808 | 6,7764 | | | | |
| 10 MHz | 20450 | 829 | 1RB low | 27,36 | 22,98 | 4,3813 | 27,432 | 22,411 | 5,0201 | 23,09 | 22,82 | 23,36 | 22,75 |
| | | | 1RB high | 27,94 | 23,09 | 4,8492 | 27,926 | 22,817 | 5,1092 | | | | |
| | | | 50%RB mid | 27,73 | 22,34 | 5,3887 | 27,185 | 21,41 | 5,7744 | | | | |
| | | | 100%RB | 28,16 | 22,04 | 6,1217 | 28,513 | 21,073 | 7,4398 | | | | |
| | 20525 | 836.5 | 1RB low | 27,83 | 23,18 | 4,6559 | 27,691 | 22,44 | 5,254 | 23,36 | 22,72 | | |
| | | | 1RB high | 27,66 | 23,36 | 4,2982 | 27,642 | 22,723 | 4,9192 | | | | |
| | | | 50%RB mid | 27,6 | 22,17 | 5,4284 | 27,287 | 21,404 | 5,8823 | | | | |
| | | | 100%RB | 28,57 | 22,16 | 6,4115 | 28,521 | 21,12 | 7,4011 | | | | |
| | 20600 | 844 | 1RB low | 27,62 | 23,29 | 4,336 | 27,71 | 22,751 | 4,9592 | 23,29 | 22,75 | | |
| | | | 1RB high | 27,65 | 23,26 | 4,3941 | 27,787 | 22,641 | 5,1462 | | | | |
| | | | 50%RB mid | 27,48 | 22,46 | 5,0211 | 27,064 | 21,405 | 5,6592 | | | | |
| | | | 100%RB | 28,69 | 22,32 | 6,3694 | 28,095 | 21,29 | 6,8054 | | | | |

1.4. Power conducted LTE-Band 7

| LTE-Band 7 | | | | QPSK-Modulation | | | 16-QAM-Modulation | | | max. modulation | max. modulation | max. channel | absolute max. value | |
|-------------------|---------------|-----------------------|---------------------------|---------------------|--------------------|-----------------|---------------------|--------------------|-----------------|-----------------|-----------------|--------------|---------------------|--|
| channel bandwidth | ARFCN ch. no. | ARFCN-Frequency [MHz] | Resource block allocation | Peak detektor [dBm] | RMS detektor [dBm] | PAR Faktor [dB] | Peak detektor [dBm] | RMS detektor [dBm] | PAR Faktor [dB] | | | | | |
| 5 MHz | 20775 | | 1RB low | 26,14 | 22,08 | 4,0567 | 26,16 | 21,329 | 4,8311 | 22,082 | | | | |
| | | | 1RB high | 26 | 21,83 | 4,1749 | 25,923 | 21,15 | 4,7733 | | | | | |
| | | | 50%RB mid | 25,64 | 20,7 | 4,9463 | 25,887 | 20,933 | 4,9538 | | | | | |
| | | | 100%RB | 26,49 | 20,73 | 5,7591 | 26,245 | 19,86 | 6,3844 | | | | | |
| | 21100 | | | 1RB low | 26,13 | 21,67 | 4,4642 | 26,234 | 21,008 | 5,226 | 21,666 | 22,082 | 22,08 | |
| | | | | 1RB high | 25,81 | 21,44 | 4,3617 | 25,82 | 20,843 | 4,9775 | | | | |
| | | | | 50%RB mid | 25,51 | 20,38 | 5,1355 | 25,888 | 20,481 | 5,4066 | | | | |
| | | | | 100%RB | 26,49 | 20,3 | 6,1863 | 26,631 | 19,447 | 7,1842 | | | | |
| | 21425 | | | 1RB low | 26,33 | 21,78 | 4,5577 | 26,245 | 21,035 | 5,2107 | 21,776 | | | |
| | | | | 1RB high | 25,94 | 21,49 | 4,455 | 25,873 | 20,923 | 4,9496 | | | | |
| | | | | 50%RB mid | 25,8 | 20,47 | 5,3378 | 26,199 | 20,74 | 5,4598 | | | | |
| | | | | 100%RB | 26,82 | 20,41 | 6,4121 | 26,73 | 19,527 | 7,2034 | | | | |
| 10 MHz | 20800 | | 1RB low | 26,61 | 22,46 | 4,1511 | 26,645 | 21,813 | 4,8326 | 22,463 | | | | |
| | | | 1RB high | 26,65 | 22,19 | 4,4564 | 26,778 | 21,941 | 4,8373 | | | | | |
| | | | 50%RB mid | 25,65 | 20,82 | 4,8244 | 25,341 | 19,946 | 5,3958 | | | | | |
| | | | 100%RB | 26,75 | 21 | 5,7439 | 26,335 | 20,055 | 6,2807 | | | | | |
| | 21000 | | | 1RB low | 26,54 | 22,02 | 4,5179 | 26,452 | 21,22 | 5,2326 | 22,024 | 22,463 | 22,46 | |
| | | | | 1RB high | 26,08 | 21,81 | 4,2719 | 26,186 | 21,419 | 4,7668 | | | | |
| | | | | 50%RB mid | 25,44 | 20,42 | 5,0193 | 24,998 | 19,481 | 5,5162 | | | | |
| | | | | 100%RB | 26,76 | 20,6 | 6,1657 | 26,399 | 19,666 | 6,733 | | | | |
| | 21400 | 2565MHz | | 1RB low | 26,31 | 21,86 | 4,4518 | 26,263 | 21,269 | 4,9938 | 21,86 | | | |
| | | | | 1RB high | 26,2 | 21,8 | 4,3946 | 26,243 | 21,361 | 4,8817 | | | | |
| | | | | 50%RB mid | 25,7 | 20,55 | 5,1445 | 25,256 | 19,585 | 5,6714 | | | | |
| | | | | 100%RB | 26,97 | 20,66 | 6,3036 | 26,656 | 19,784 | 6,8722 | | | | |
| 15 MHz | 20825 | | 1RB low | 26,69 | 22,34 | 4,3467 | 26,331 | 21,734 | 4,5966 | 22,345 | | | | |
| | | | 1RB high | 26,73 | 22,01 | 4,7253 | 26,874 | 21,534 | 5,3397 | | | | | |
| | | | 50%RB mid | 25,7 | 20,78 | 4,9184 | 26,473 | 21,154 | 5,319 | | | | | |
| | | | 100%RB | 27,07 | 20,91 | 6,1596 | 26,853 | 20,04 | 6,8123 | | | | | |
| | 21100 | | | 1RB low | 26,42 | 21,98 | 4,4435 | 26,564 | 21,663 | 4,9011 | 21,979 | 22,34 | 22,34 | |
| | | | | 1RB high | 26,25 | 21,74 | 4,5106 | 26,33 | 21,242 | 5,0886 | | | | |
| | | | | 50%RB mid | 25,56 | 20,54 | 5,0201 | 26,119 | 20,638 | 5,4818 | | | | |
| | | | | 100%RB | 27,16 | 20,57 | 6,5977 | 26,846 | 19,633 | 7,2128 | | | | |
| | 21375 | | | 1RB low | 25,91 | 21,52 | 4,3873 | 25,874 | 20,881 | 4,9929 | 21,52 | | | |
| | | | | 1RB high | 25,86 | 21,52 | 4,3433 | 25,831 | 20,933 | 4,898 | | | | |
| | | | | 50%RB mid | 25,46 | 20,33 | 5,1235 | 26,154 | 20,596 | 5,5678 | | | | |
| | | | | 100%RB | 26,99 | 20,46 | 6,5296 | 26,416 | 19,404 | 7,0118 | | | | |
| 20 MHz | 20850 | | 1RB low | 26,77 | 22,46 | 4,3119 | 26,626 | 21,542 | 5,0844 | 22,455 | | | | |
| | | | 1RB high | 26,84 | 21,97 | 4,8719 | 27,014 | 21,54 | 5,4746 | | | | | |
| | | | 50%RB mid | 26 | 20,84 | 5,162 | 26,575 | 20,951 | 5,6245 | | | | | |
| | | | 100%RB | 27,18 | 20,91 | 6,2688 | 27,153 | 19,926 | 7,2278 | | | | | |
| | 21100 | | | 1RB low | 26,36 | 21,94 | 4,4212 | 26,563 | 21,756 | 4,8069 | 21,938 | 22,455 | 22,46 | |
| | | | | 1RB high | 26,21 | 21,82 | 4,3863 | 26,246 | 21,055 | 5,1903 | | | | |
| | | | | 50%RB mid | 25,59 | 20,52 | 5,0737 | 26,184 | 20,574 | 5,6101 | | | | |
| | | | | 100%RB | 26,86 | 20,62 | 6,2402 | 26,944 | 19,653 | 7,2917 | | | | |
| | 21300 | | | 1RB low | 25,9 | 21,67 | 4,2221 | 25,855 | 21,196 | 4,6596 | 21,674 | | | |
| | | | | 1RB high | 26 | 21,64 | 4,3591 | 26,028 | 20,778 | 5,25 | | | | |
| | | | | 50%RB mid | 25,25 | 20,37 | 4,8788 | 26,06 | 20,544 | 5,5158 | | | | |
| | | | | 100%RB | 26,64 | 20,45 | 6,1911 | 26,338 | 19,455 | 6,8828 | | | | |

1.5. Power conducted LTE-Band 12

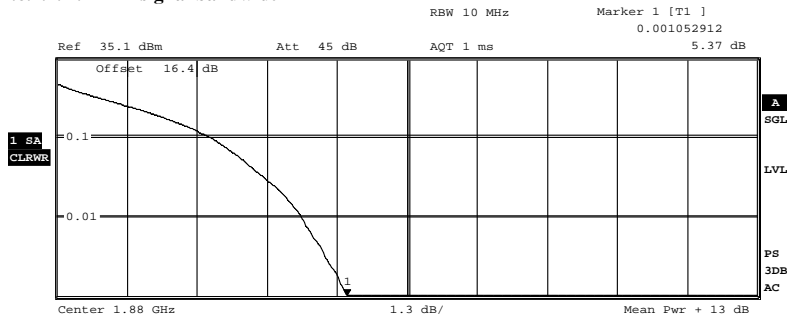
| LTE-Band 12 | | | | QPSK-Modulation | | | 16-QAM-Modulation | | | max. modulation QPSK | max. modulation 16-QAM | max. channel | absolute max. value |
|-------------------|---------------|-----------------------|---------------------------|---------------------|--------------------|-----------------|---------------------|--------------------|-----------------|----------------------|------------------------|--------------|---------------------|
| channel bandwidth | ARFCN ch. no. | ARFCN-Frequency [MHz] | Resource block allocation | Peak detektor [dBm] | RMS detektor [dBm] | PAR Faktor [dB] | Peak detektor [dBm] | RMS detektor [dBm] | PAR Faktor [dB] | | | | |
| 14 MHz | 23017 | 699.7 | 1 RB low | 27,50 | 22,50 | 5,00 | 27,59 | 22,23 | 5,37 | 22,81 | 22,23 | 23,21 | |
| | | | 1 RB high | 27,55 | 22,71 | 4,84 | 27,61 | 22,10 | 5,51 | | | | |
| | | | 50%RB mid | 27,71 | 22,81 | 4,90 | 27,80 | 22,23 | 5,57 | | | | |
| | | | 100%RB | 28,19 | 21,76 | 6,42 | 27,84 | 20,80 | 7,04 | | | | |
| | 23095 | 707.5 | 1 RB low | 27,44 | 22,66 | 4,78 | 27,57 | 21,89 | 5,68 | 22,77 | 21,89 | | |
| | | | 1 RB high | 27,43 | 22,62 | 4,82 | 27,61 | 21,54 | 6,07 | | | | |
| | | | 50%RB mid | 27,75 | 22,77 | 4,99 | 27,94 | 21,45 | 6,49 | | | | |
| | | | 100%RB | 28,00 | 21,48 | 6,53 | 28,11 | 20,34 | 7,76 | | | | |
| | 23173 | 715.3 | 1 RB low | 27,53 | 22,85 | 4,68 | 27,76 | 21,04 | 6,72 | 22,85 | 22,02 | | |
| | | | 1 RB high | 27,48 | 22,53 | 4,95 | 27,53 | 22,02 | 5,51 | | | | |
| | | | 50%RB mid | 27,65 | 22,45 | 5,19 | 27,65 | 21,72 | 5,93 | | | | |
| | | | 100%RB | 27,90 | 21,58 | 6,32 | 27,30 | 20,27 | 7,03 | | | | |
| 3 MHz | 23025 | 700.5 | 1 RB low | 27,38 | 22,84 | 4,54 | 27,57 | 22,22 | 5,35 | 22,97 | 22,36 | | |
| | | | 1 RB high | 27,52 | 22,97 | 4,54 | 27,69 | 22,36 | 5,33 | | | | |
| | | | 50% RB mid | 26,80 | 21,93 | 4,88 | 27,07 | 21,14 | 5,93 | | | | |
| | | | 100% RB | 28,04 | 21,89 | 6,14 | 27,94 | 21,05 | 6,89 | | | | |
| | 23095 | 707.5 | 1 RB low | 27,44 | 22,75 | 4,70 | 27,55 | 21,52 | 6,03 | 22,75 | 21,70 | | |
| | | | 1 RB high | 27,31 | 22,70 | 4,61 | 27,41 | 21,70 | 5,71 | | | | |
| | | | 50% RB mid | 26,82 | 21,67 | 5,15 | 26,80 | 20,97 | 5,83 | | | | |
| | | | 100% RB | 27,92 | 21,62 | 6,30 | 27,42 | 20,62 | 6,80 | | | | |
| | 23165 | 714.5 | 1 RB low | 27,31 | 22,59 | 4,72 | 27,38 | 21,80 | 5,58 | 22,82 | 21,80 | | |
| | | | 1 RB high | 27,24 | 22,82 | 4,42 | 27,28 | 21,55 | 5,73 | | | | |
| | | | 50% RB mid | 26,72 | 21,73 | 5,00 | 26,84 | 20,82 | 6,02 | | | | |
| | | | 100% RB | 27,58 | 21,64 | 5,93 | 28,01 | 20,70 | 7,31 | | | | |
| 5 MHz | 23035 | 701.5 | 1 RB low | 27,47 | 22,89 | 4,58 | 27,53 | 22,25 | 5,28 | 23,21 | 22,26 | | |
| | | | 1 RB high | 27,73 | 23,21 | 4,52 | 27,86 | 22,26 | 5,61 | | | | |
| | | | 50% RB mid | 27,24 | 21,86 | 5,37 | 27,65 | 21,74 | 5,91 | | | | |
| | | | 100% RB | 27,99 | 21,88 | 6,10 | 28,11 | 20,74 | 7,37 | | | | |
| | 23095 | 707.5 | 1 RB low | 27,50 | 22,71 | 4,79 | 27,55 | 21,66 | 5,88 | 22,71 | 22,19 | | |
| | | | 1 RB high | 27,35 | 22,60 | 4,76 | 27,49 | 21,53 | 5,96 | | | | |
| | | | 50% RB mid | 27,07 | 21,75 | 5,32 | 27,65 | 22,19 | 5,46 | | | | |
| | | | 100% RB | 27,43 | 21,64 | 5,79 | 28,10 | 20,50 | 7,60 | | | | |
| | 23155 | 713.5 | 1 RB low | 27,37 | 22,74 | 4,63 | 27,46 | 21,78 | 5,67 | 22,74 | 22,07 | | |
| | | | 1 RB high | 27,31 | 22,64 | 4,67 | 27,40 | 22,07 | 5,34 | | | | |
| | | | 50% RB mid | 27,06 | 21,65 | 5,40 | 27,80 | 21,65 | 6,15 | | | | |
| | | | 100% RB | 27,58 | 21,61 | 5,97 | 28,54 | 20,88 | 7,66 | | | | |
| 10 MHz | 23060 | 704 | 1 RB low | 27,71 | 23,06 | 4,64 | 27,73 | 22,56 | 5,17 | 23,06 | 22,56 | | |
| | | | 1 RB high | 27,74 | 22,97 | 4,77 | 27,81 | 21,90 | 5,91 | | | | |
| | | | 50% RB mid | 27,43 | 21,82 | 5,61 | 27,37 | 20,96 | 6,41 | | | | |
| | | | 100% RB | 28,08 | 21,93 | 6,15 | 28,36 | 21,04 | 7,32 | | | | |
| | 23095 | 707,5 | 1 RB low | 27,50 | 22,85 | 4,65 | 27,65 | 22,54 | 5,11 | 22,85 | 22,54 | | |
| | | | 1 RB high | 27,40 | 22,75 | 4,66 | 27,40 | 21,90 | 5,49 | | | | |
| | | | 50% RB mid | 27,07 | 21,73 | 5,34 | 27,07 | 20,83 | 6,24 | | | | |
| | | | 100% RB | 28,33 | 21,87 | 6,46 | 28,30 | 20,66 | 7,63 | | | | |
| | 23130 | 711 | 1 RB low | 27,33 | 22,73 | 4,60 | 27,45 | 21,65 | 5,79 | 22,81 | 21,98 | | |
| | | | 1 RB high | 27,26 | 22,81 | 4,46 | 27,30 | 21,98 | 5,32 | | | | |
| | | | 50% RB mid | 27,13 | 21,72 | 5,41 | 27,10 | 20,62 | 6,48 | | | | |
| | | | 100% RB | 27,86 | 21,92 | 5,94 | 27,57 | 20,67 | 6,90 | | | | |

1.6. PAPR-Value (CCDF plots)

1.6.1. LTE Band 2

Worst-Case of each maximum Peak to Average power value was tested with the CCDF method

1.6.1.1. 1.4MHz signal bandwidth

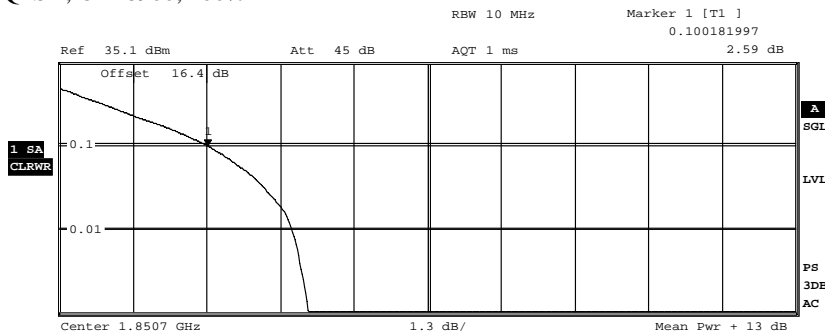


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 21.61 dBm |
| Peak | 27.64 dBm |
| Crest | 6.03 dB |
| 10 % | 2.83 dB |
| 1 % | 4.54 dB |
| .1 % | 5.40 dB |
| .01 % | 5.98 dB |

Date: 2.MAY.2017 14:04:12

QPSK, CH18900, 100% RB

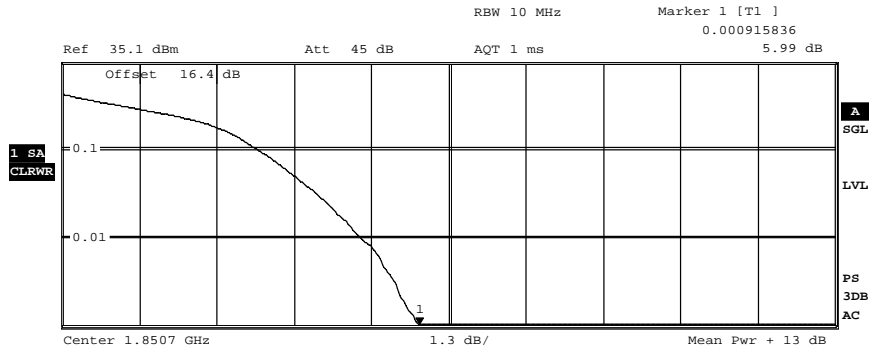


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 22.95 dBm |
| Peak | 27.41 dBm |
| Crest | 4.46 dB |
| 10 % | 2.60 dB |
| 1 % | 4.10 dB |
| .1 % | 4.40 dB |
| .01 % | 4.46 dB |

Date: 2.MAY.2017 13:53:04

QPSK, 1.4MHz CH18607, 50% RB

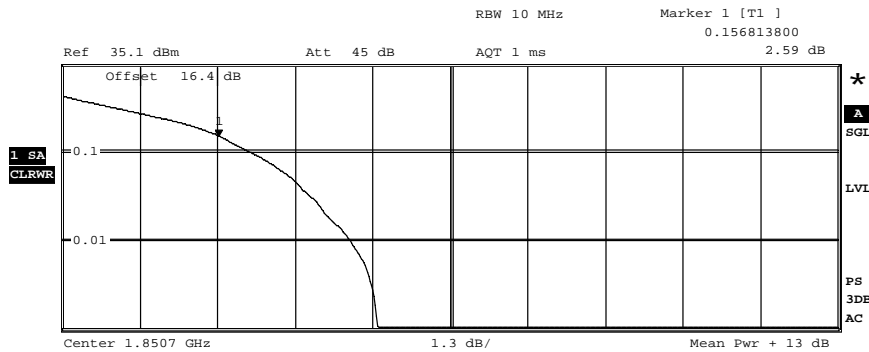


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 20.88 dBm |
| Peak | 27.27 dBm |
| Crest | 6.39 dB |
| 10 % | 3.29 dB |
| 1 % | 5.00 dB |
| .1 % | 5.98 dB |
| .01 % | 6.31 dB |

Date: 2.MAY.2017 14:00:23

QAM, 1.4MHz CH18607, 100% RB



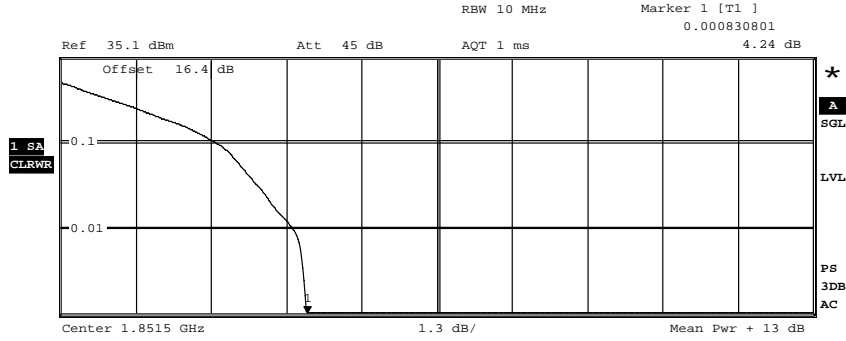
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 22.05 dBm |
| Peak | 27.41 dBm |
| Crest | 5.36 dB |
| 10 % | 3.17 dB |
| 1 % | 4.81 dB |
| .1 % | 5.29 dB |
| .01 % | 5.35 dB |

Date: 2.MAY.2017 13:57:47

QAM, 1.4MHz CH18607, 50% RB

1.6.1.2. 3MHz signal bandwidth

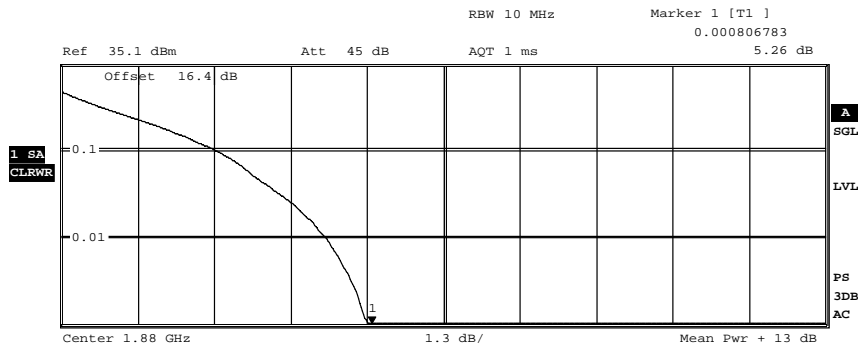


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 22.88 dBm |
| Peak | 27.21 dBm |
| Crest | 4.33 dB |
| 10 % | 2.69 dB |
| 1 % | 4.00 dB |
| .1 % | 4.25 dB |
| .01 % | 4.31 dB |

Date: 2.MAY.2017 14:24:06

QPSK, 3MHz CH18615, 1 RB low

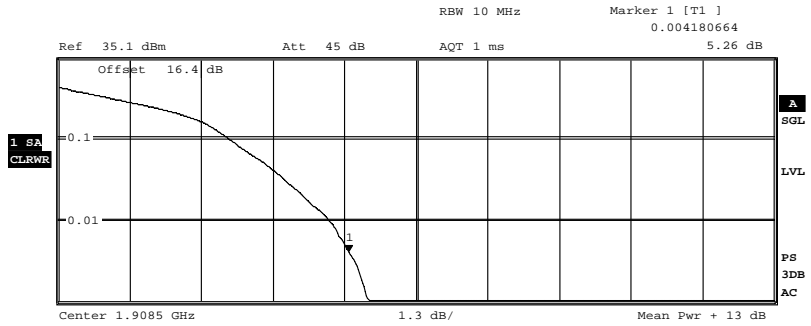


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 21.65 dBm |
| Peak | 27.43 dBm |
| Crest | 5.78 dB |
| 10 % | 2.63 dB |
| 1 % | 4.50 dB |
| .1 % | 5.23 dB |
| .01 % | 5.60 dB |

Date: 2.MAY.2017 14:37:00

QPSK, 3MHz CH18900, 100% RB

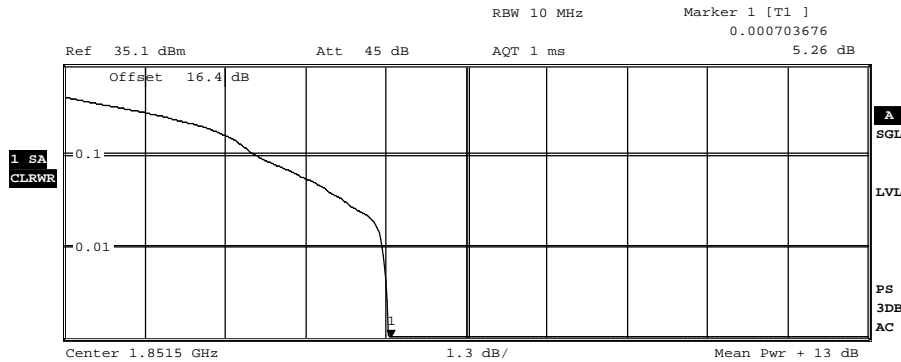


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 20.29 dBm |
| Peak | 26.44 dBm |
| Crest | 6.16 dB |
| 10 % | 3.10 dB |
| 1 % | 4.92 dB |
| .1 % | 5.65 dB |
| .01 % | 6.06 dB |

Date: 2.MAY.2017 14:46:10

QAM, 3MHz CH19185, 100% RB



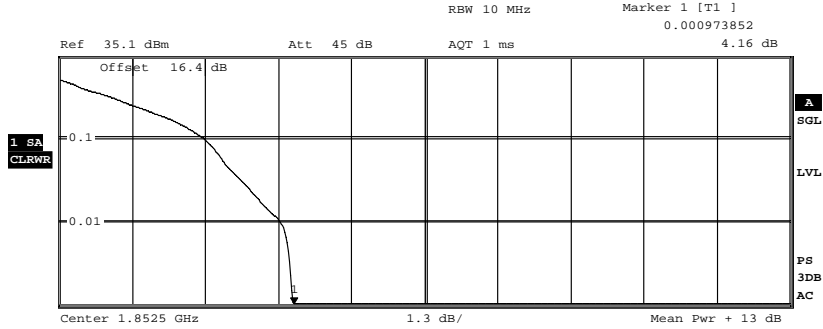
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 22.04 dBm |
| Peak | 27.42 dBm |
| Crest | 5.38 dB |
| 10 % | 3.10 dB |
| 1 % | 5.15 dB |
| .1 % | 5.25 dB |
| .01 % | 5.33 dB |

Date: 2.MAY.2017 14:27:29

QAM, 3MHz CH18615, 1 RB high.WMF

1.6.1.3. 5MHz signal bandwidth



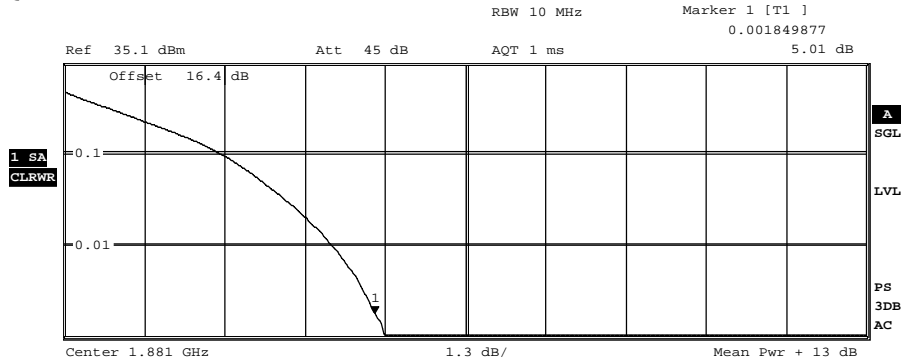
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 23.01 dBm
 Peak 27.28 dBm
 Crest 4.27 dB

| | |
|-------|---------|
| 10 % | 2.58 dB |
| 1 % | 3.92 dB |
| .1 % | 4.17 dB |
| .01 % | 4.23 dB |

Date: 2.MAY.2017 15:06:38

QPSK, 5MHz CH18625, 1 RB low



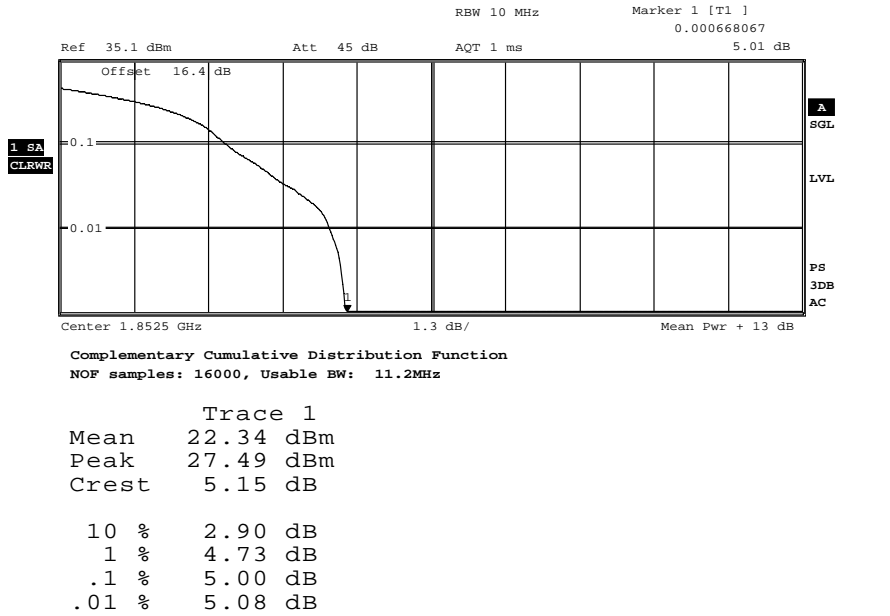
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 21.61 dBm
 Peak 27.58 dBm
 Crest 5.97 dB

| | |
|-------|---------|
| 10 % | 2.52 dB |
| 1 % | 4.33 dB |
| .1 % | 5.19 dB |
| .01 % | 5.88 dB |

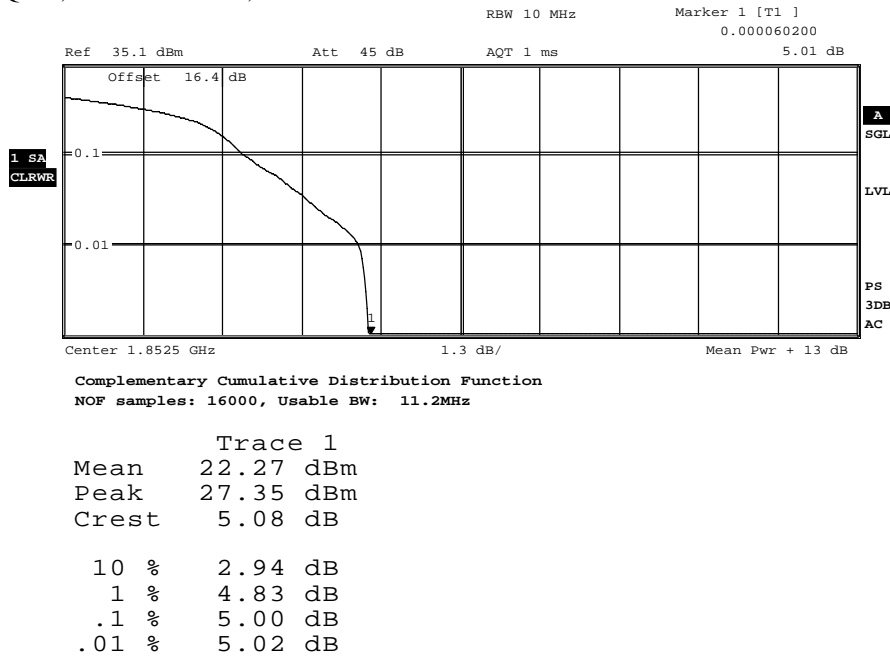
Date: 2.MAY.2017 15:16:15

QPSK, 5MHz CH18900 100 RB.WMF



Date: 2.MAY.2017 15:08:15

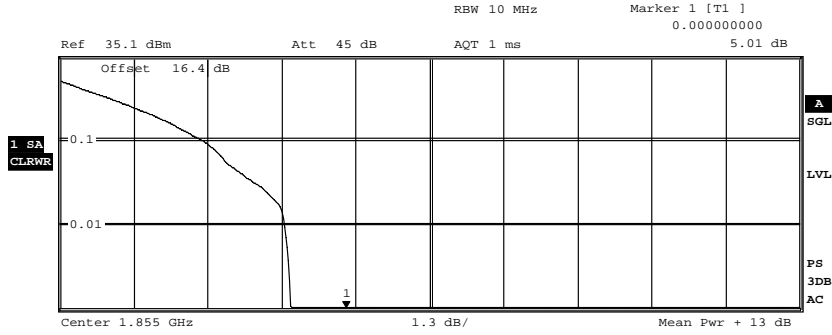
QAM, 5MHz CH18625, 1 RB low



Date: 2.MAY.2017 15:09:27

QAM, 5MHz CH18625, 100 RB.WMF

1.6.1.4. 10MHz signal bandwidth

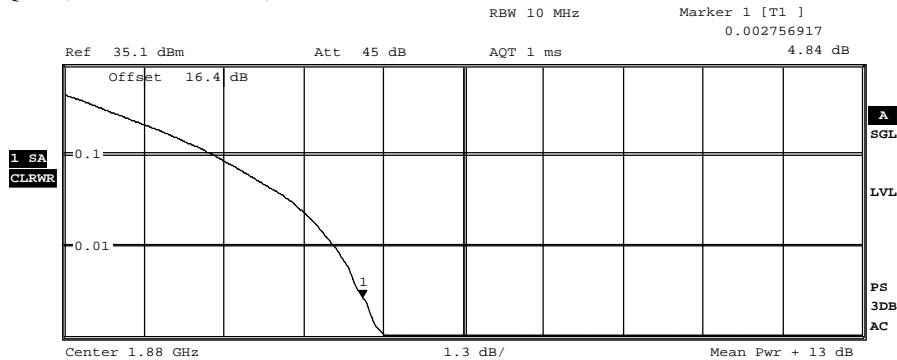


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| | |
|-------|-----------|
| | Trace 1 |
| Mean | 23.11 dBm |
| Peak | 27.30 dBm |
| Crest | 4.19 dB |
| 10 % | 2.52 dB |
| 1 % | 3.96 dB |
| .1 % | 4.06 dB |
| .01 % | 4.13 dB |

Date: 2.MAY.2017 15:19:06

QPSK, 10MHz CH18650, 1 RB low

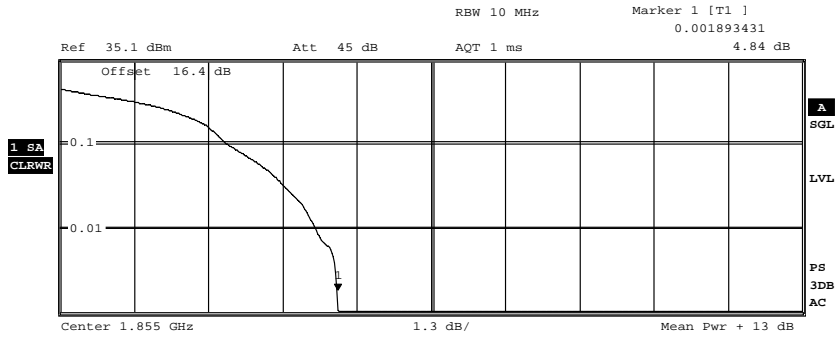


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| | |
|-------|-----------|
| | Trace 1 |
| Mean | 21.81 dBm |
| Peak | 27.99 dBm |
| Crest | 6.19 dB |
| 10 % | 2.44 dB |
| 1 % | 4.40 dB |
| .1 % | 5.31 dB |
| .01 % | 5.88 dB |

Date: 2.MAY.2017 15:22:04

QPSK, 10MHz CH18900, 100% RB

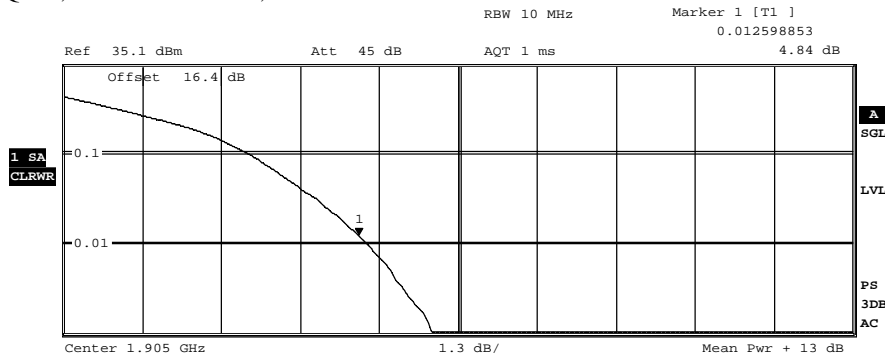


Complementary Cumulative Distribution Function
NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 22.29 dBm |
| Peak | 27.30 dBm |
| Crest | 5.01 dB |
| 10 % | 2.92 dB |
| 1 % | 4.48 dB |
| .1 % | 4.88 dB |
| .01 % | 4.96 dB |

Date: 2.MAY.2017 15:20:14

QAM, 10MHz CH18650, 1 RB low



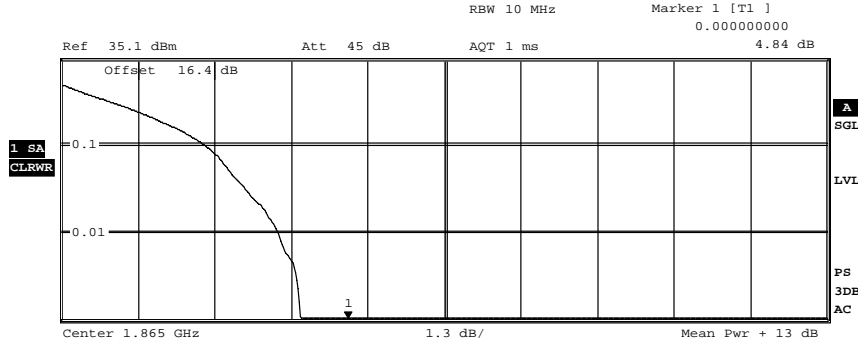
Complementary Cumulative Distribution Function
NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 20.33 dBm |
| Peak | 26.87 dBm |
| Crest | 6.54 dB |
| 10 % | 3.06 dB |
| 1 % | 4.98 dB |
| .1 % | 6.06 dB |
| .01 % | 6.50 dB |

Date: 2.MAY.2017 15:24:16

QAM, 10MHz CH19150, 100% RB

1.6.1.5. 15MHz signal bandwidth



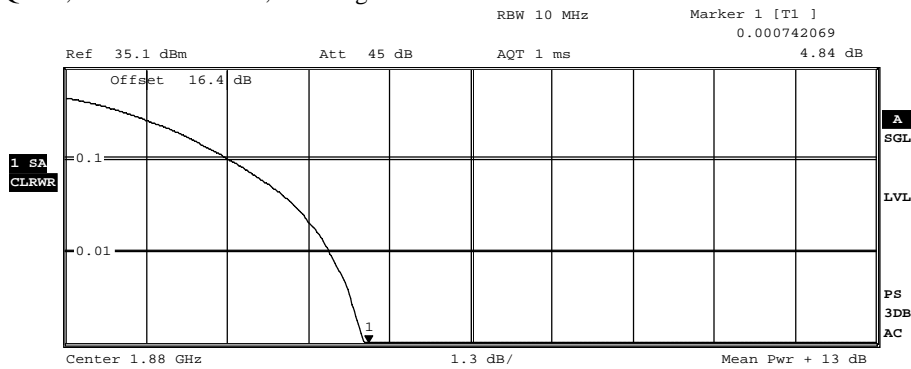
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 23.42 dBm
 Peak 27.57 dBm
 Crest 4.15 dB

10 % 2.44 dB
 1 % 3.67 dB
 .1 % 4.06 dB
 .01 % 4.10 dB

Date: 2.MAY.2017 15:28:51

QPSK, 15MHz CH18675, 1 RB high



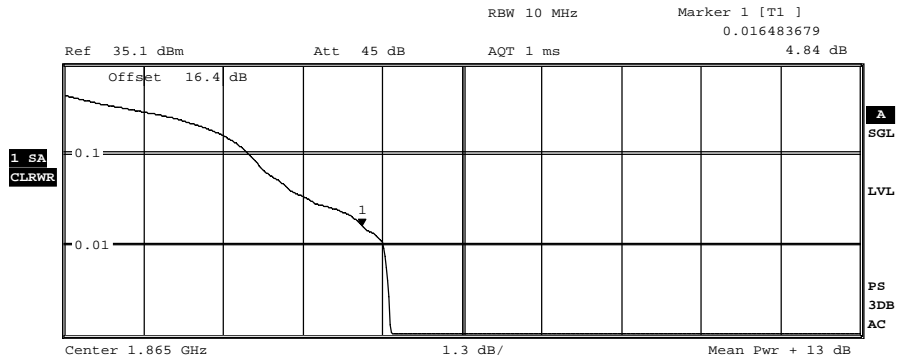
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 20.93 dBm
 Peak 26.02 dBm
 Crest 5.09 dB

10 % 2.63 dB
 1 % 4.23 dB
 .1 % 4.79 dB
 .01 % 5.06 dB

Date: 2.MAY.2017 15:34:59

QPSK, 15MHz CH18900, 100% RB

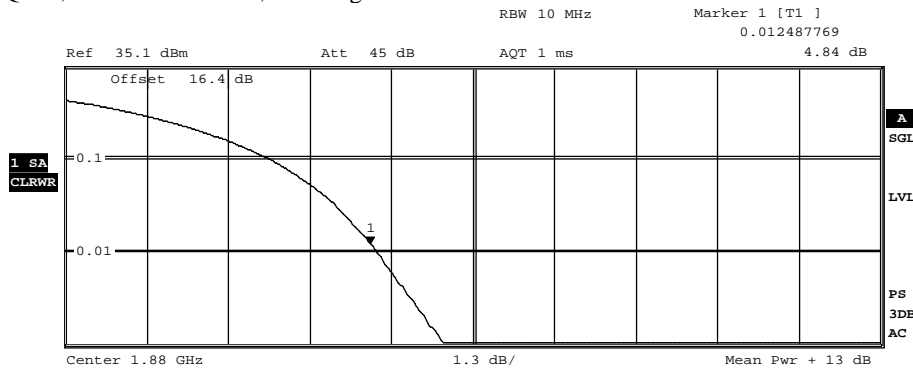


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 22.23 dBm |
| Peak | 27.57 dBm |
| Crest | 5.34 dB |
| 10 % | 3.00 dB |
| 1 % | 5.21 dB |
| .1 % | 5.33 dB |
| .01 % | 5.35 dB |

Date: 2.MAY.2017 15:31:02

QAM, 15MHz CH18675, 1 RB high



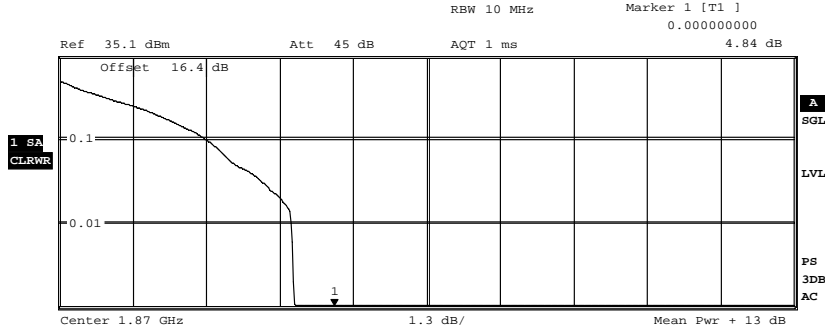
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 20.01 dBm |
| Peak | 27.01 dBm |
| Crest | 7.00 dB |
| 10 % | 3.25 dB |
| 1 % | 4.96 dB |
| .1 % | 6.02 dB |
| .01 % | 6.54 dB |

Date: 2.MAY.2017 15:37:22

QAM, 15MHz CH18900, 100% RB

1.6.1.6. 20MHz signal bandwidth

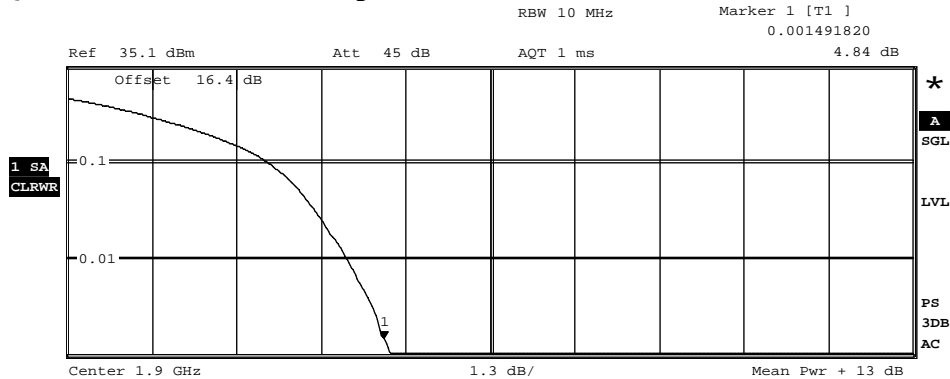


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 23.47 dBm |
| Peak | 27.68 dBm |
| Crest | 4.22 dB |
| 10 % | 2.58 dB |
| 1 % | 4.10 dB |
| .1 % | 4.17 dB |
| .01 % | 4.21 dB |

Date: 2.MAY.2017 15:47:48

QPSK, 20MHz CH18700, 1 RB high

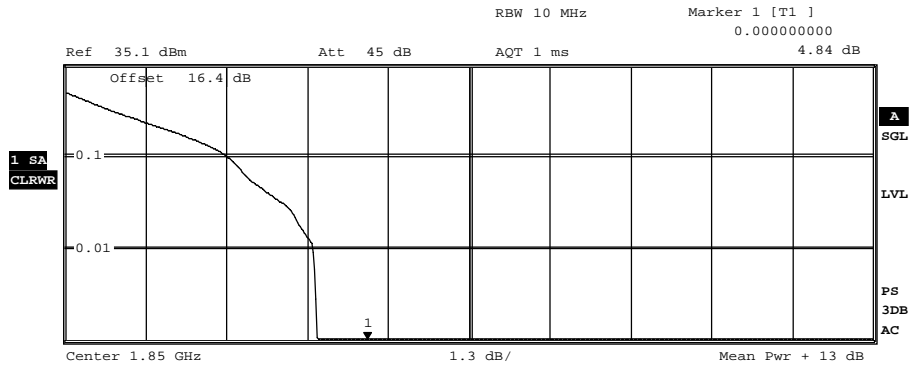


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 19.06 dBm |
| Peak | 24.44 dBm |
| Crest | 5.38 dB |
| 10 % | 3.08 dB |
| 1 % | 4.29 dB |
| .1 % | 5.02 dB |
| .01 % | 5.31 dB |

Date: 2.MAY.2017 15:54:16

QPSK, 20MHz CH19100, 100 RB

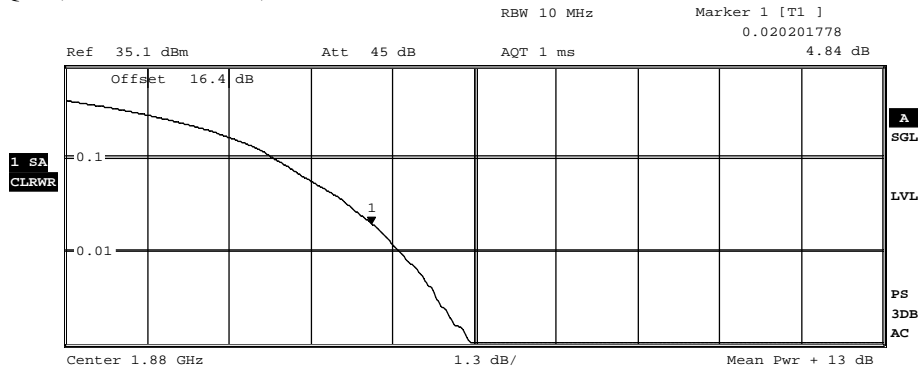


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 23.08 dBm |
| Peak | 27.20 dBm |
| Crest | 4.12 dB |
| 10 % | 2.60 dB |
| 1 % | 4.00 dB |
| .1 % | 4.06 dB |
| .01 % | 4.13 dB |

Date: 2.MAY.2017 15:49:24

QAM, 20MHz CH18700, 1 RB low



Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 18.64 dBm |
| Peak | 25.74 dBm |
| Crest | 7.09 dB |
| 10 % | 3.31 dB |
| 1 % | 5.31 dB |
| .1 % | 6.48 dB |
| .01 % | 7.06 dB |

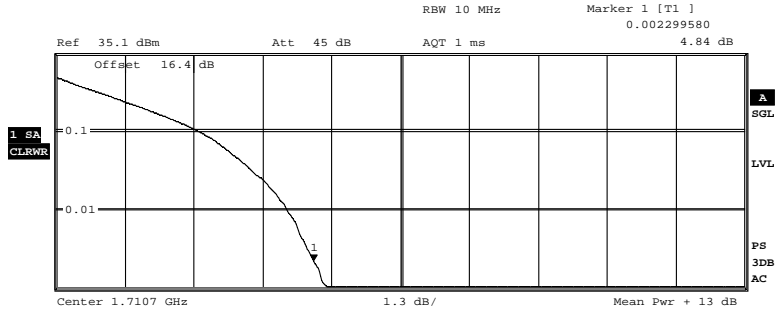
Date: 2.MAY.2017 15:52:33

QAM, 20MHz CH18900, 100% RB

1.6.2. LTE Band 4

Worst-Case of each maximum Peak to Average power value was tested with the CCDF method

1.6.2.1. 1.4MHz signal bandwidth



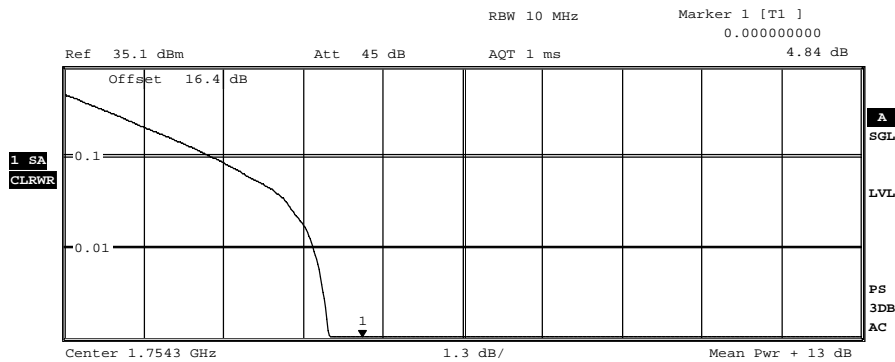
Complementary Cumulative Distribution Function
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
Mean 21.93 dBm
Peak 27.80 dBm
Crest 5.87 dB

10 % 2.71 dB
1 % 4.35 dB
.1 % 5.13 dB
.01 % 5.81 dB

Date: 2.MAY.2017 16:18:57

QPSK 1.4 MHz CH19957, 100% RB



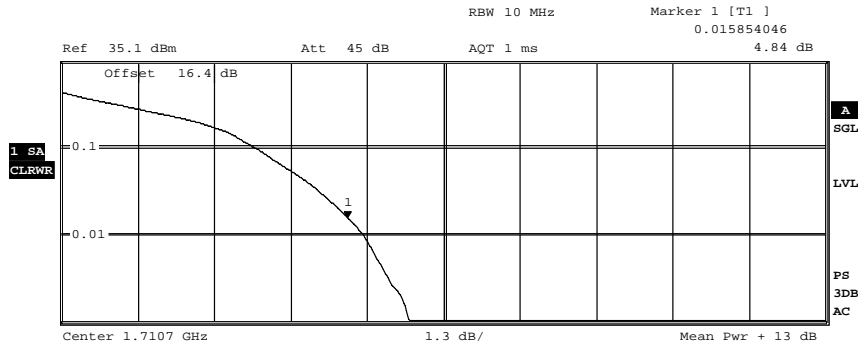
Complementary Cumulative Distribution Function
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
Mean 23.94 dBm
Peak 28.36 dBm
Crest 4.42 dB

10 % 2.42 dB
1 % 4.06 dB
.1 % 4.31 dB
.01 % 4.40 dB

Date: 2.MAY.2017 16:25:43

QPSK 1.4 MHz CH20393, 50% RB



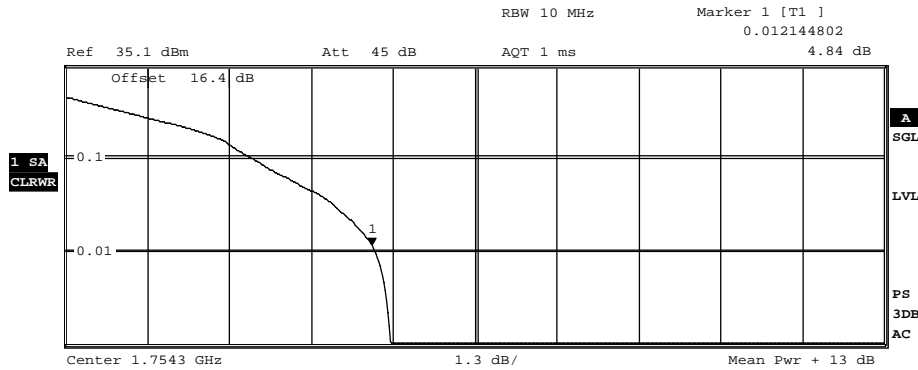
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 20.90 dBm
 Peak 27.17 dBm
 Crest 6.27 dB

10 % 3.29 dB
 1 % 5.13 dB
 .1 % 5.92 dB
 .01 % 6.25 dB

Date: 2.MAY.2017 16:21:10

QAM 1.4 MHz CH19957, 100% RB



Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

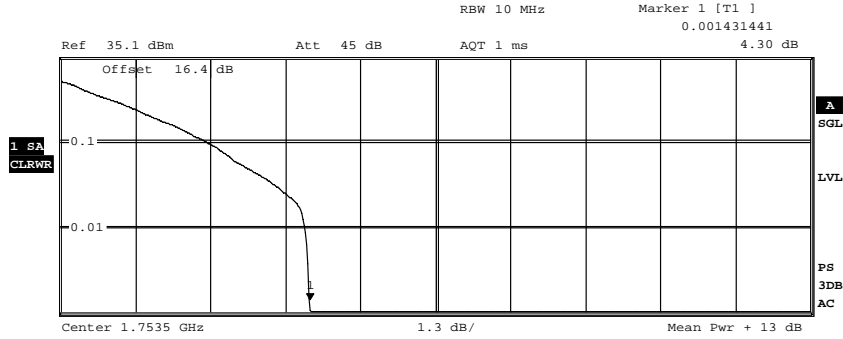
Trace 1
 Mean 23.18 dBm
 Peak 28.44 dBm
 Crest 5.26 dB

10 % 2.96 dB
 1 % 4.92 dB
 .1 % 5.17 dB
 .01 % 5.21 dB

Date: 2.MAY.2017 16:24:15

QAM 1.4 MHz CH20393, 50% RB

1.6.2.2. 3MHz signal bandwidth

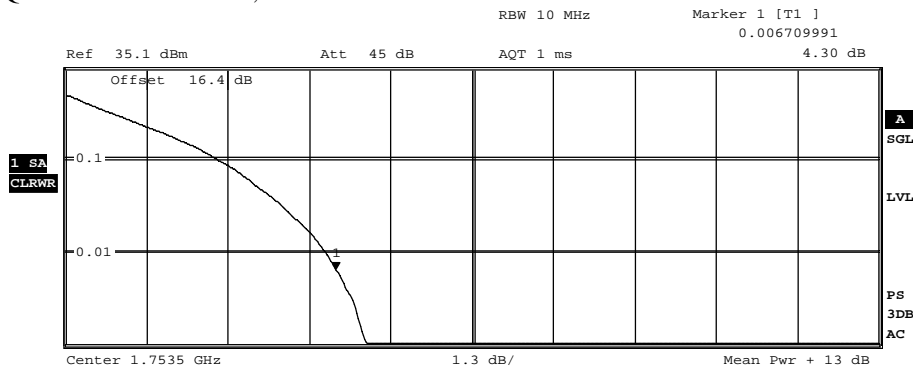


Complementary Cumulative Distribution Function
NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 23.63 dBm |
| Peak | 28.08 dBm |
| Crest | 4.45 dB |
| 10 % | 2.54 dB |
| 1 % | 4.23 dB |
| .1 % | 4.33 dB |
| .01 % | 4.40 dB |

Date: 2.MAY.2017 16:39:46

QPSK 3 MHz CH20385, 1 RB low

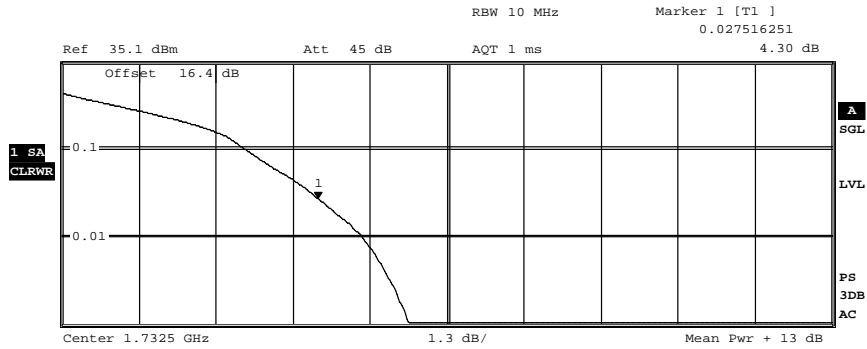


Complementary Cumulative Distribution Function
NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 23.18 dBm |
| Peak | 28.36 dBm |
| Crest | 5.18 dB |
| 10 % | 2.44 dB |
| 1 % | 4.15 dB |
| .1 % | 4.81 dB |
| .01 % | 5.13 dB |

Date: 2.MAY.2017 16:50:28

QPSK 3 MHz CH20385, 100% RB



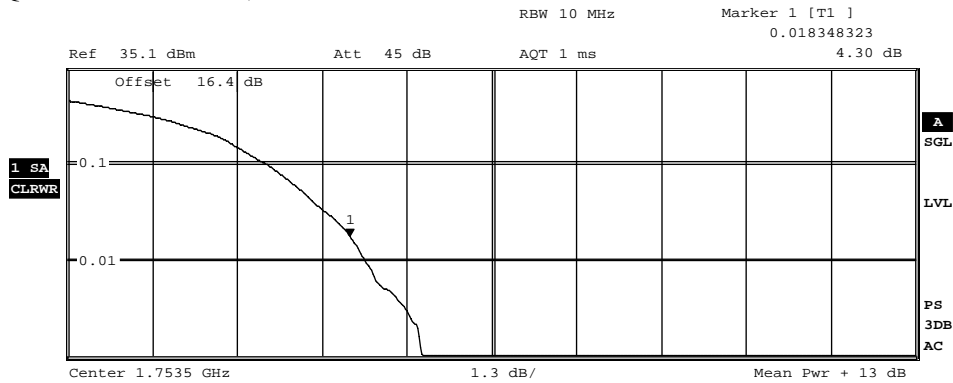
Complementary Cumulative Distribution Function
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
Mean 21.21 dBm
Peak 27.61 dBm
Crest 6.40 dB

10 % 3.08 dB
1 % 5.06 dB
.1 % 5.85 dB
.01 % 6.15 dB

Date: 2.MAY.2017 16:44:06

QAM 3 MHz CH20175, 50%RB



Complementary Cumulative Distribution Function
NOF samples: 16000, Usable BW: 11.2MHz

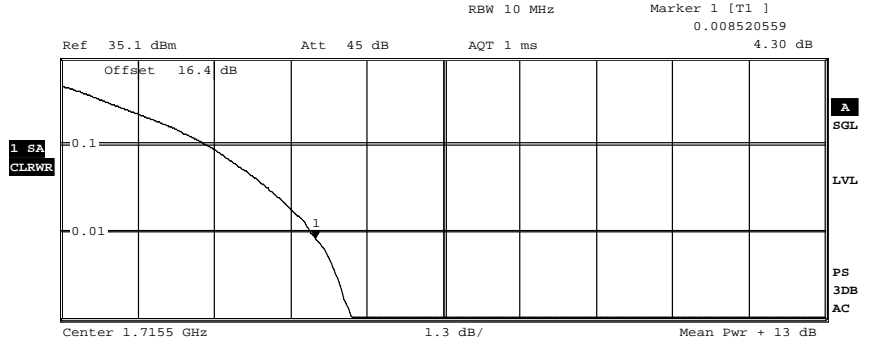
Trace 1
Mean 22.86 dBm
Peak 28.43 dBm
Crest 5.57 dB

10 % 3.04 dB
1 % 4.56 dB
.1 % 5.44 dB
.01 % 5.50 dB

Date: 2.MAY.2017 16:41:16

QAM 3 MHz CH20385, 1 RB low

1.6.2.3. 5MHz signal bandwidth



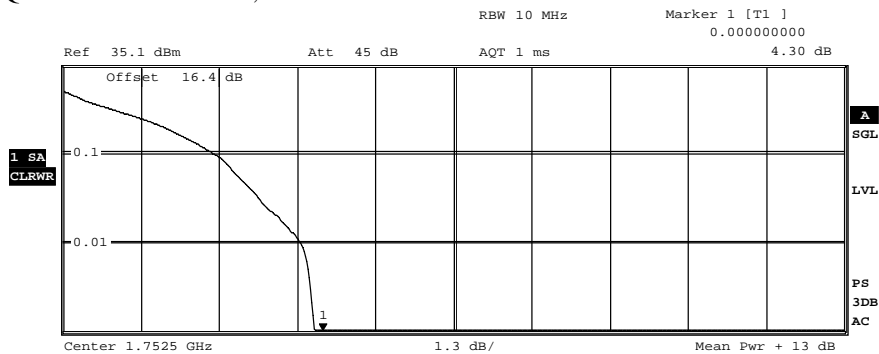
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 21.82 dBm
 Peak 27.47 dBm
 Crest 5.65 dB

10 % 2.48 dB
 1 % 4.23 dB
 .1 % 4.94 dB
 .01 % 5.60 dB

Date: 2.MAY.2017 17:06:16

QPSK 5 MHz CH19975, 100% RB



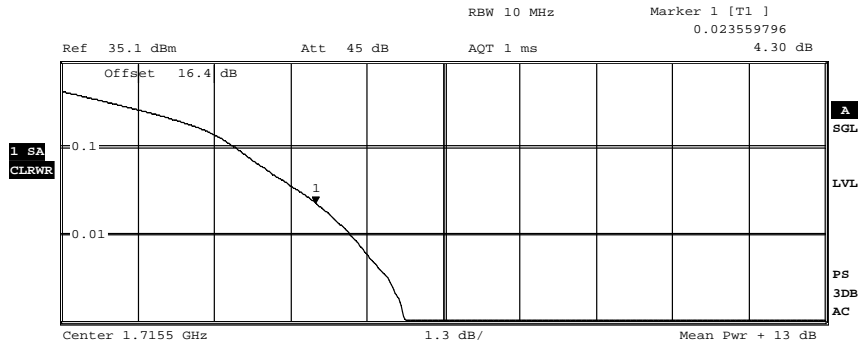
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 23.80 dBm
 Peak 28.08 dBm
 Crest 4.27 dB

10 % 2.50 dB
 1 % 3.94 dB
 .1 % 4.19 dB
 .01 % 4.25 dB

Date: 2.MAY.2017 17:15:15

QPSK 5 MHz CH20375, 1 RB low



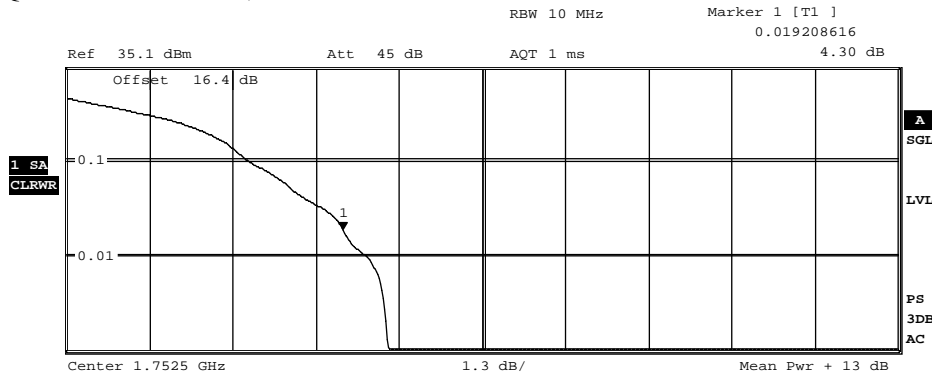
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 20.73 dBm
 Peak 27.69 dBm
 Crest 6.95 dB

10 % 2.96 dB
 1 % 4.92 dB
 .1 % 5.85 dB
 .01 % 6.50 dB

Date: 2.MAY.2017 17:07:57

QAM 5 MHz CH19975, 100% RB



Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

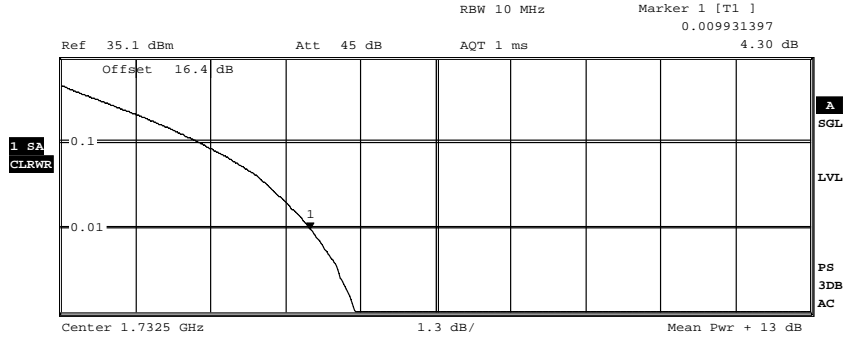
Trace 1
 Mean 22.92 dBm
 Peak 28.08 dBm
 Crest 5.15 dB

10 % 2.83 dB
 1 % 4.67 dB
 .1 % 5.04 dB
 .01 % 5.10 dB

Date: 2.MAY.2017 17:16:50

QAM 5 MHz CH20375, 1 RB low

1.6.2.4. 10MHz signal bandwidth

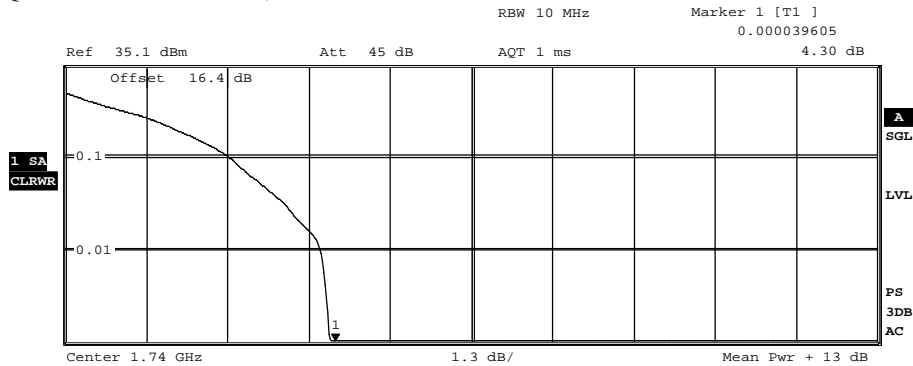


Center 1.7325 GHz 1.3 dB/ Mean Pwr + 13 dB
 Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 22.41 dBm |
| Peak | 28.17 dBm |
| Crest | 5.76 dB |
| 10 % | 2.40 dB |
| 1 % | 4.31 dB |
| .1 % | 5.10 dB |
| .01 % | 5.44 dB |

Date: 2.MAY.2017 17:20:19

QPSK 10 MHz CH20175, 100% RB

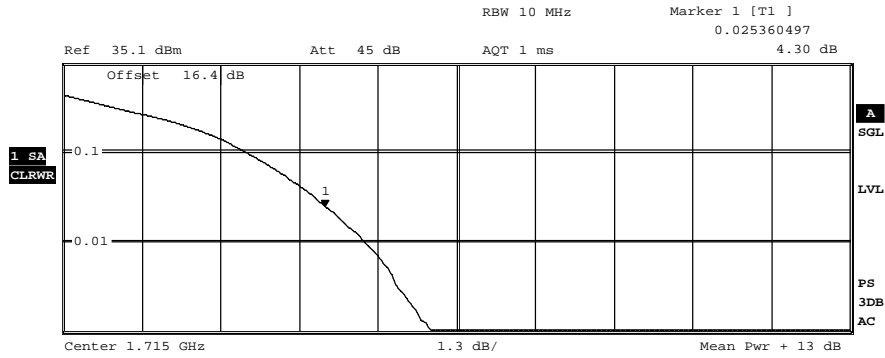


Center 1.74 GHz 1.3 dB/ Mean Pwr + 13 dB
 Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 19.22 dBm |
| Peak | 23.53 dBm |
| Crest | 4.31 dB |
| 10 % | 2.63 dB |
| 1 % | 4.08 dB |
| .1 % | 4.23 dB |
| .01 % | 4.31 dB |

Date: 2.MAY.2017 17:25:00

QPSK 10 MHz CH20350, 1 RB low



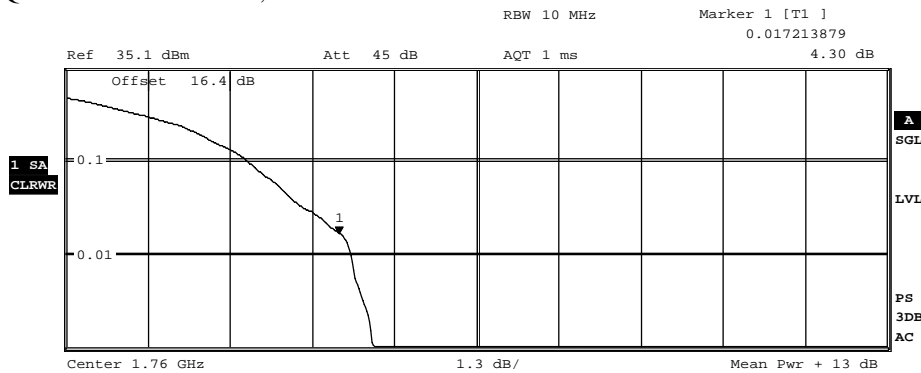
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 20.99 dBm
 Peak 27.75 dBm
 Crest 6.76 dB

| | |
|-------|---------|
| 10 % | 3.02 dB |
| 1 % | 4.98 dB |
| .1 % | 6.06 dB |
| .01 % | 6.71 dB |

Date: 2.MAY.2017 17:18:34

QAM 10 MHz CH20000, 100%RB



Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

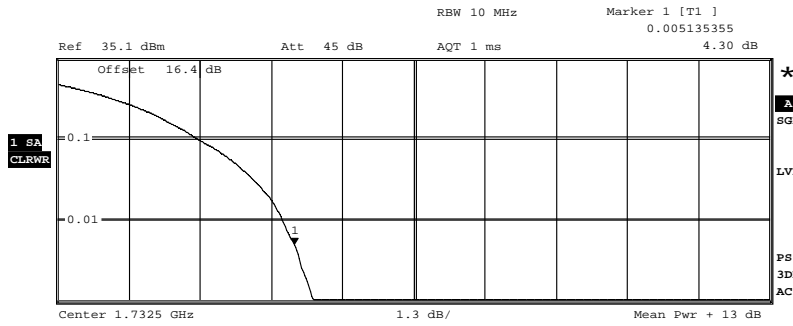
Trace 1
 Mean 21.20 dBm
 Peak 26.19 dBm
 Crest 4.99 dB

| | |
|-------|---------|
| 10 % | 2.88 dB |
| 1 % | 4.52 dB |
| .1 % | 4.85 dB |
| .01 % | 4.94 dB |

Date: 2.MAY.2017 17:27:53

QAM 10 MHz CH20350, 1 RB high

1.6.2.5. 15MHz signal bandwidth

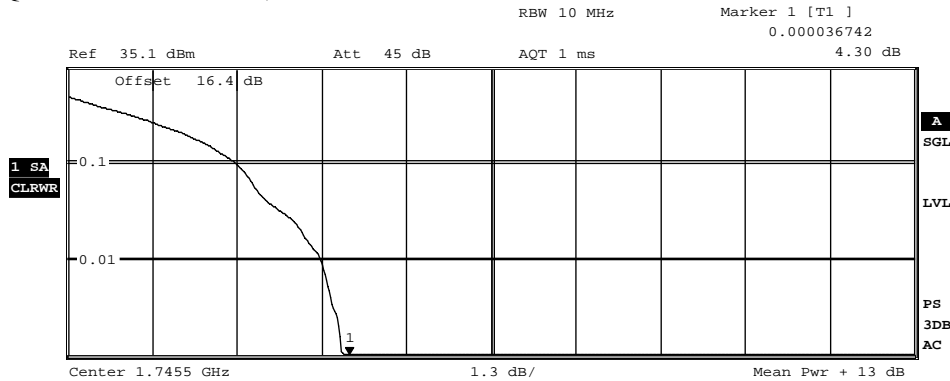


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 21.75 dBm |
| Peak | 26.90 dBm |
| Crest | 5.15 dB |
| 10 % | 2.56 dB |
| 1 % | 4.10 dB |
| .1 % | 4.67 dB |
| .01 % | 5.04 dB |

Date: 2.MAY.2017 17:34:02

QPSK 15 MHz CH20175, 100% RB

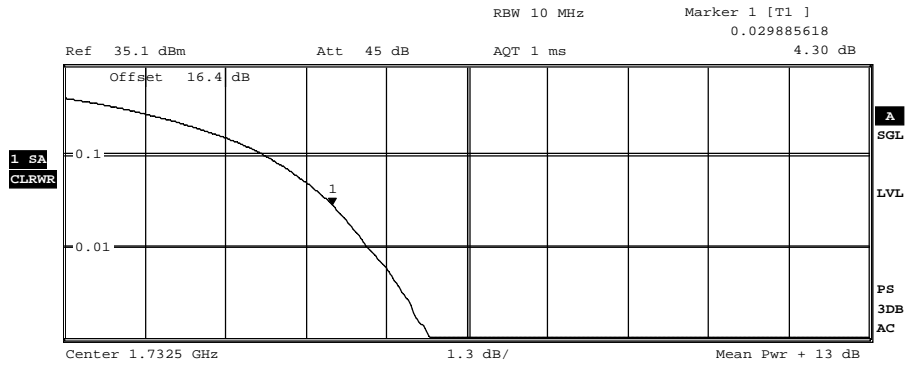


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 22.58 dBm |
| Peak | 26.93 dBm |
| Crest | 4.35 dB |
| 10 % | 2.58 dB |
| 1 % | 3.88 dB |
| .1 % | 4.21 dB |
| .01 % | 4.29 dB |

Date: 2.MAY.2017 17:38:13

QPSK 15 MHz CH20325, 1 RB low



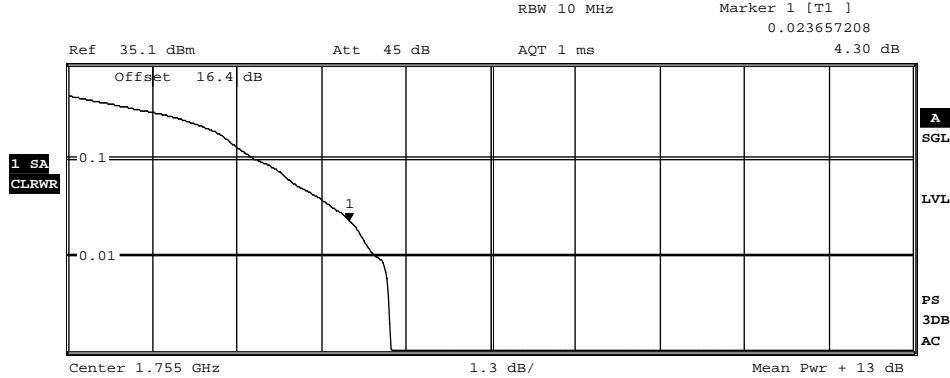
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1

| | |
|-------|-----------|
| Mean | 20.68 dBm |
| Peak | 27.61 dBm |
| Crest | 6.92 dB |
| 10 % | 3.25 dB |
| 1 % | 4.88 dB |
| .1 % | 5.92 dB |
| .01 % | 6.50 dB |

Date: 2.MAY.2017 17:35:32

QAM 15 MHz CH20175, 100% RB



Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

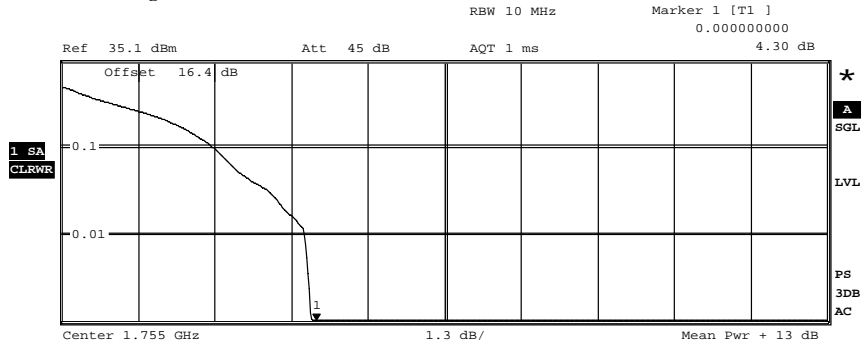
Trace 1

| | |
|-------|-----------|
| Mean | 22.69 dBm |
| Peak | 27.66 dBm |
| Crest | 4.97 dB |
| 10 % | 2.90 dB |
| 1 % | 4.73 dB |
| .1 % | 4.98 dB |
| .01 % | 4.98 dB |

Date: 2.MAY.2017 17:40:16

QAM 15 MHz CH20325, 1 RB high

1.6.2.6. 20MHz signal bandwidth



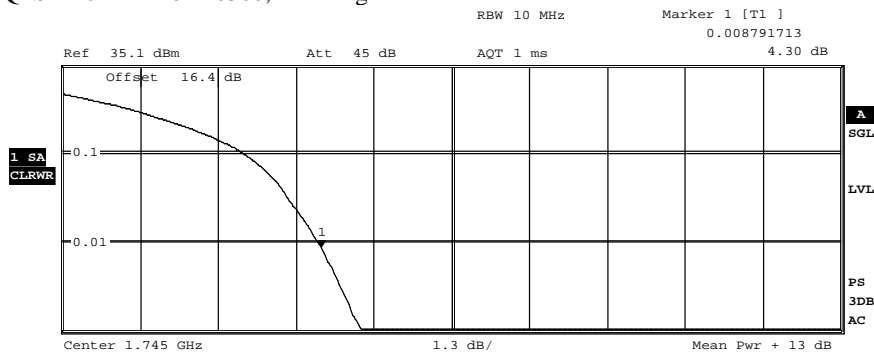
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 23.42 dBm
 Peak 27.66 dBm
 Crest 4.24 dB

10 % 2.56 dB
 1 % 4.13 dB
 .1 % 4.23 dB
 .01 % 4.25 dB

Date: 2.MAY.2017 17:48:30

QPSK 20 MHz CH20300, 1 RB high



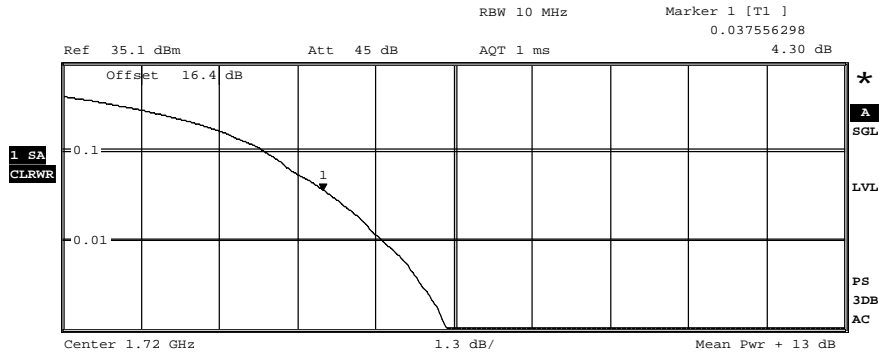
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 20.67 dBm
 Peak 26.36 dBm
 Crest 5.69 dB

10 % 3.02 dB
 1 % 4.27 dB
 .1 % 4.98 dB
 .01 % 5.38 dB

Date: 2.MAY.2017 17:50:55

QPSK 20 MHz CH20300, 100% RB



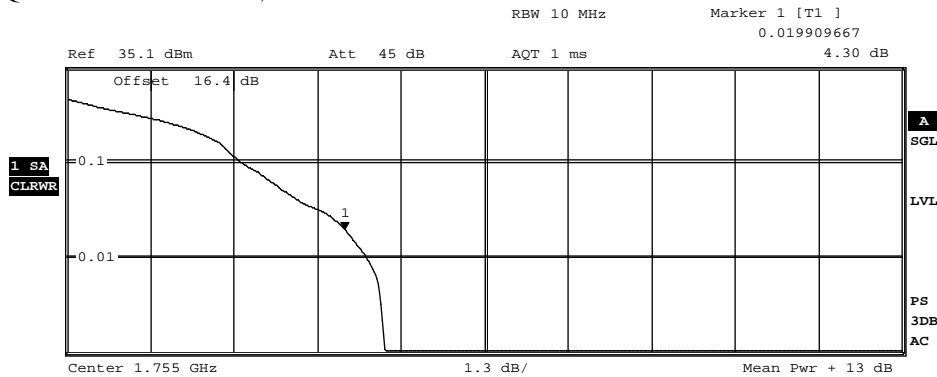
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 19.30 dBm
 Peak 26.44 dBm
 Crest 7.14 dB

10 % 3.35 dB
 1 % 5.31 dB
 .1 % 6.42 dB
 .01 % 6.90 dB

Date: 2.MAY.2017 17:44:04

QAM 20 MHz CH20050, 100% RB



Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 22.82 dBm
 Peak 27.80 dBm
 Crest 4.98 dB

10 % 2.71 dB
 1 % 4.67 dB
 .1 % 4.96 dB
 .01 % 5.00 dB

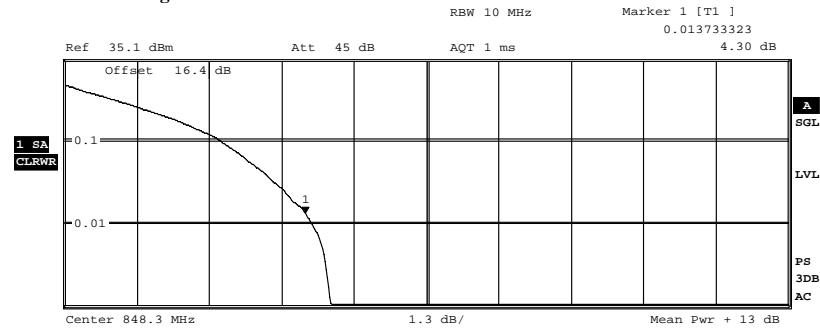
Date: 2.MAY.2017 17:47:11

QAM 20 MHz CH20300, 1 RB high

1.6.3. LTE Band 5

Worst-Case of each maximum Peak to Average power value was tested with the CCDF method

1.6.3.1. 1.4MHz signal bandwidth

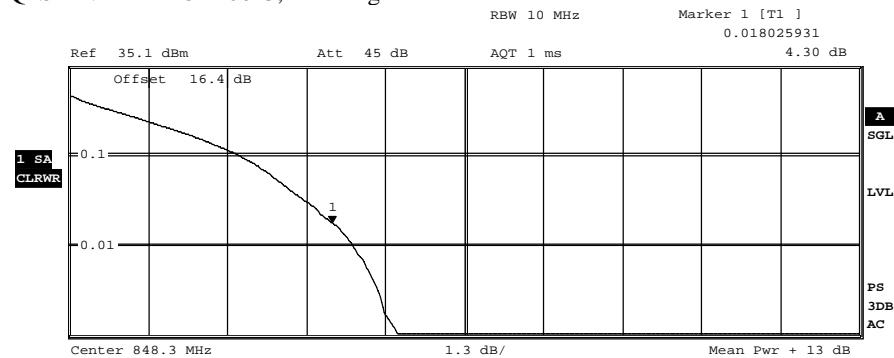


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 23.15 dBm |
| Peak | 28.07 dBm |
| Crest | 4.92 dB |
| 10 % | 2.79 dB |
| 1 % | 4.44 dB |
| .1 % | 4.79 dB |
| .01 % | 4.88 dB |

Date: 2.MAY.2017 17:58:22

QPSK 1.4 MHz CH20643, 1 RB high

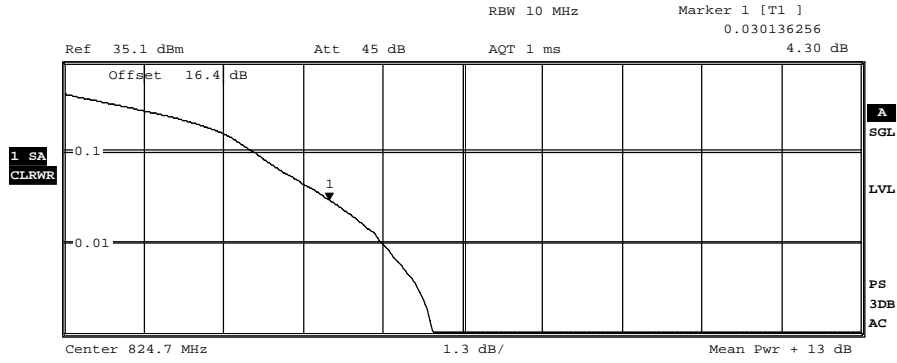


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 22.04 dBm |
| Peak | 28.35 dBm |
| Crest | 6.31 dB |
| 10 % | 2.79 dB |
| 1 % | 4.67 dB |
| .1 % | 5.42 dB |
| .01 % | 6.21 dB |

Date: 2.MAY.2017 18:00:09

QPSK 1.4 MHz CH20643, 100 RB



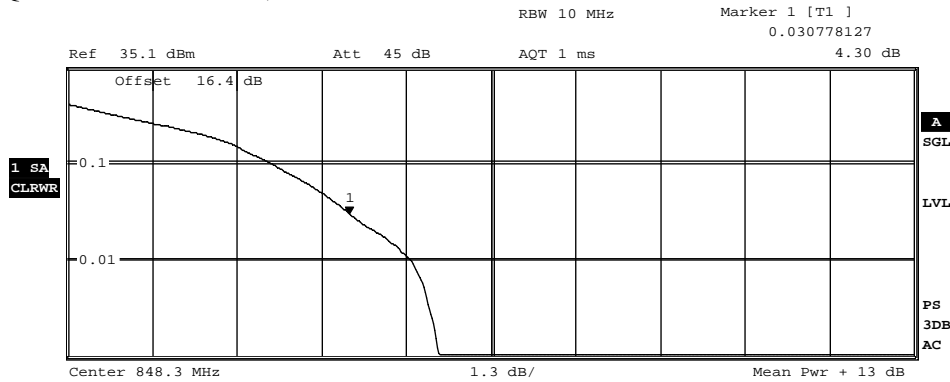
Complementary Cumulative Distribution Function
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
Mean 20.78 dBm
Peak 27.10 dBm
Crest 6.32 dB

10 % 3.10 dB
1 % 5.19 dB
.1 % 6.02 dB
.01 % 6.25 dB

Date: 2.MAY.2017 17:55:15

QAM 1.4 MHz CH20407, 100% RB



Complementary Cumulative Distribution Function
NOF samples: 16000, Usable BW: 11.2MHz

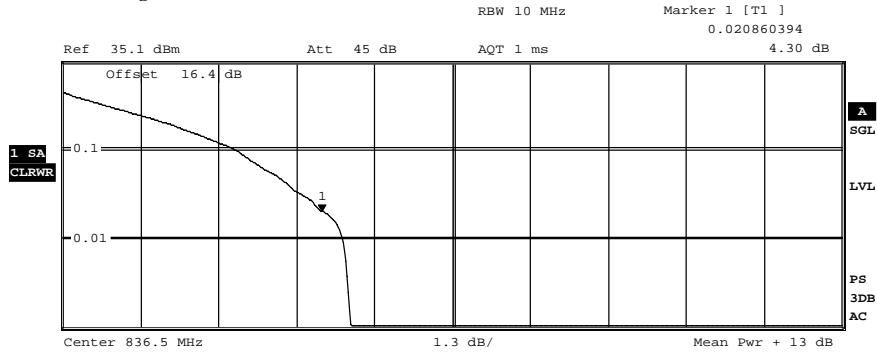
Trace 1
Mean 22.39 dBm
Peak 28.28 dBm
Crest 5.89 dB

10 % 3.15 dB
1 % 5.27 dB
.1 % 5.71 dB
.01 % 5.81 dB

Date: 2.MAY.2017 18:02:51

QAM 1.4 MHz CH20643, 50% RB

1.6.3.2. 3MHz signal bandwidth

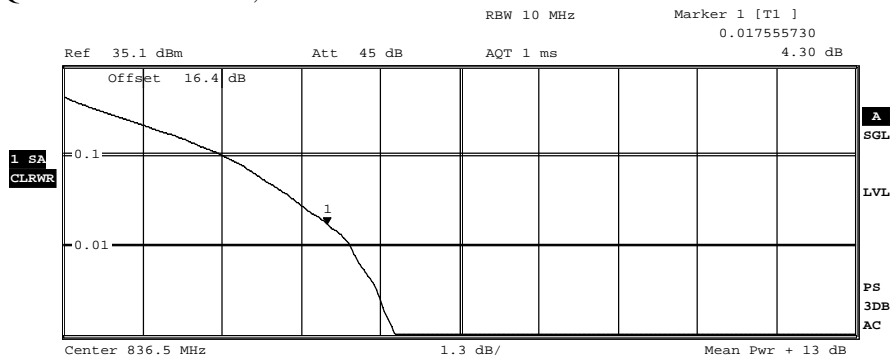


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 22.70 dBm |
| Peak | 27.52 dBm |
| Crest | 4.82 dB |
| 10 % | 2.88 dB |
| 1 % | 4.67 dB |
| .1 % | 4.81 dB |
| .01 % | 4.83 dB |

Date: 2.MAY.2017 18:06:40

QPSK 3 MHz CH20525, 1 RB low

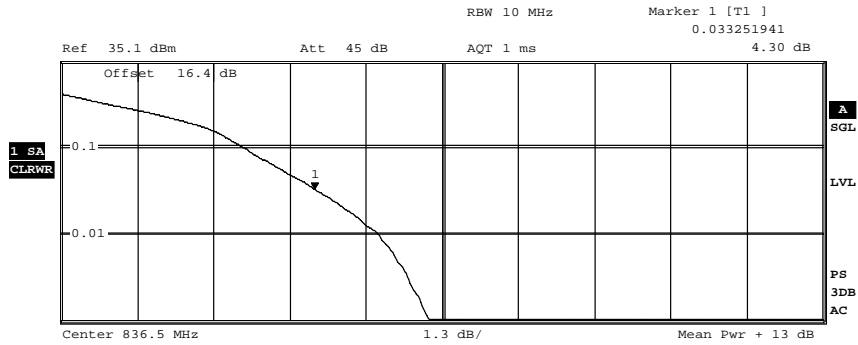


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 22.19 dBm |
| Peak | 28.22 dBm |
| Crest | 6.03 dB |
| 10 % | 2.63 dB |
| 1 % | 4.71 dB |
| .1 % | 5.44 dB |
| .01 % | 5.92 dB |

Date: 2.MAY.2017 18:10:28

QPSK 3 MHz CH20525, 100% RB



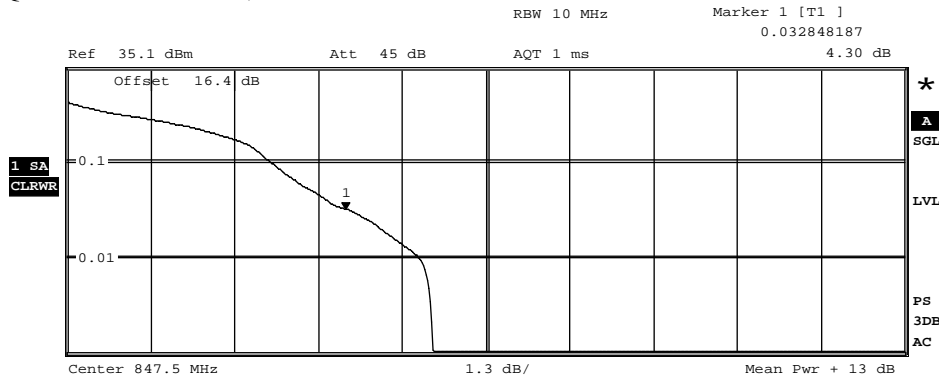
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 21.14 dBm
 Peak 28.22 dBm
 Crest 7.09 dB

10 % 3.10 dB
 1 % 5.42 dB
 .1 % 6.27 dB
 .01 % 6.77 dB

Date: 2.MAY.2017 18:12:00

QAM 3 MHz CH20525, 100% RB



Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

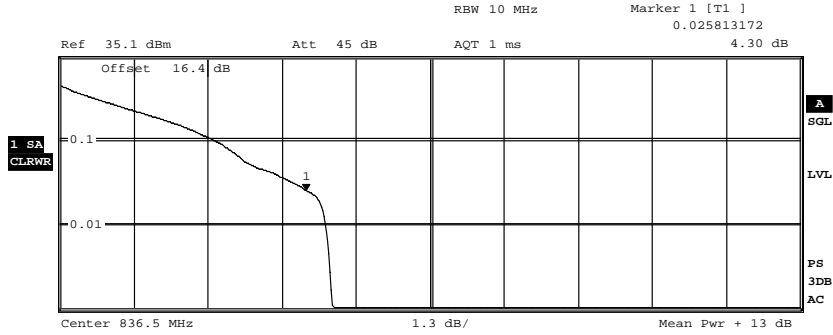
Trace 1
 Mean 22.18 dBm
 Peak 27.93 dBm
 Crest 5.75 dB

10 % 3.17 dB
 1 % 5.46 dB
 .1 % 5.69 dB
 .01 % 5.75 dB

Date: 2.MAY.2017 18:14:30

QAM 3 MHz CH20635, 1 RB high

1.6.3.3. 5MHz signal bandwidth

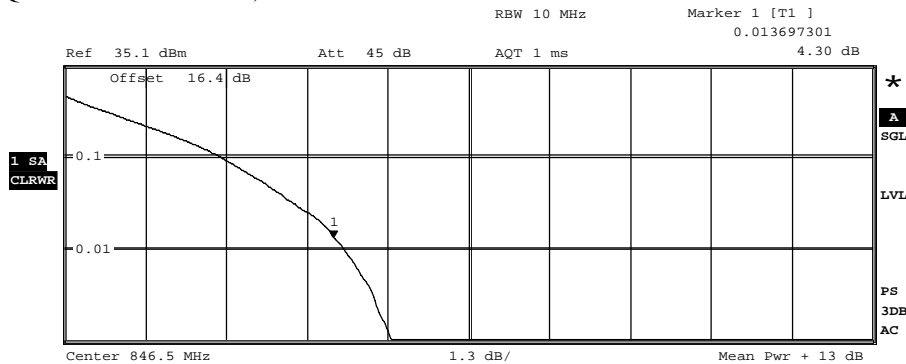


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 22.70 dBm |
| Peak | 27.59 dBm |
| Crest | 4.89 dB |
| 10 % | 2.73 dB |
| 1 % | 4.67 dB |
| .1 % | 4.79 dB |
| .01 % | 4.83 dB |

Date: 2.MAY.2017 18:18:48

QPSK 5 MHz CH20525, 1 RB low

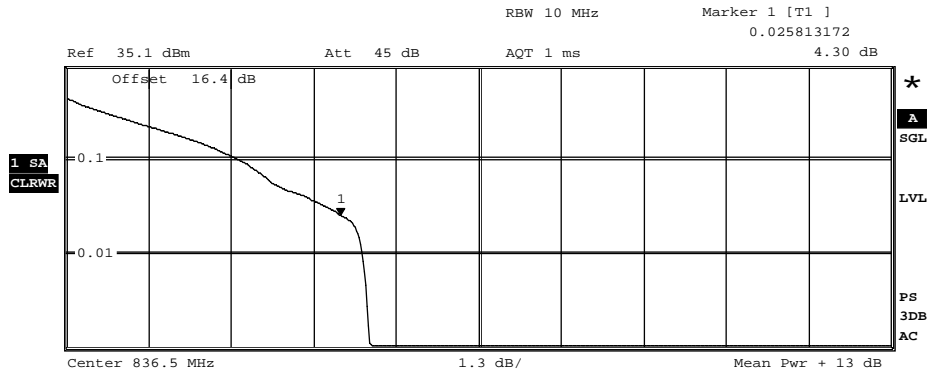


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 22.77 dBm |
| Peak | 28.42 dBm |
| Crest | 5.65 dB |
| 10 % | 2.52 dB |
| 1 % | 4.48 dB |
| .1 % | 5.25 dB |
| .01 % | 5.54 dB |

Date: 2.MAY.2017 18:24:43

QPSK 5 MHz CH20625, 100% RB



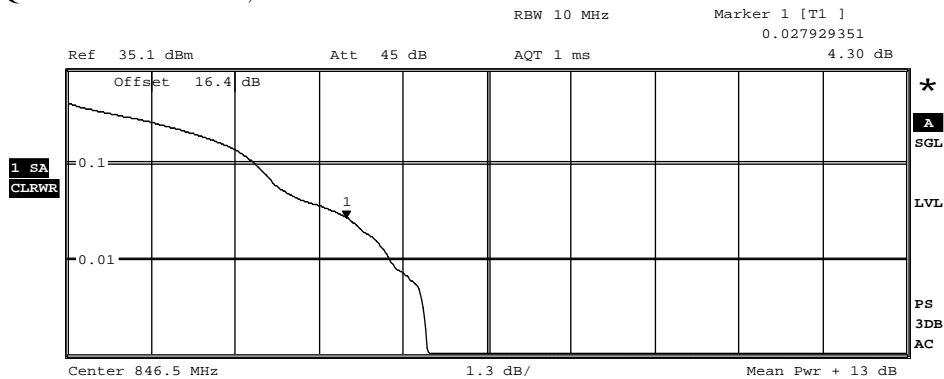
Complementary Cumulative Distribution Function
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1

| | |
|-------|-----------|
| Mean | 22.70 dBm |
| Peak | 27.59 dBm |
| Crest | 4.89 dB |
| | |
| 10 % | 2.73 dB |
| 1 % | 4.67 dB |
| .1 % | 4.79 dB |
| .01 % | 4.83 dB |

Date: 2.MAY.2017 18:20:48

QAM 5 MHz CH20525, 100% RB



Complementary Cumulative Distribution Function
NOF samples: 16000, Usable BW: 11.2MHz

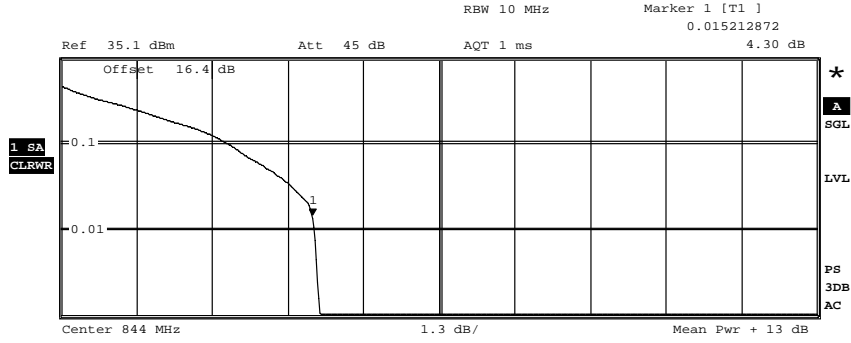
Trace 1

| | |
|-------|-----------|
| Mean | 22.27 dBm |
| Peak | 27.92 dBm |
| Crest | 5.66 dB |
| | |
| 10 % | 2.90 dB |
| 1 % | 5.00 dB |
| .1 % | 5.58 dB |
| .01 % | 5.67 dB |

Date: 2.MAY.2017 18:26:00

QAM 5 MHz CH20625, 1 RB high

1.6.3.4. 10MHz signal bandwidth



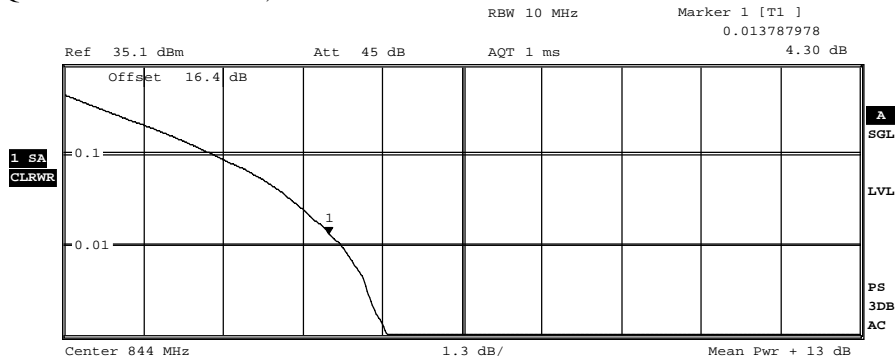
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 22.60 dBm
 Peak 27.15 dBm
 Crest 4.54 dB

10 % 2.85 dB
 1 % 4.35 dB
 .1 % 4.46 dB
 .01 % 4.48 dB

Date: 2.MAY.2017 18:34:48

QPSK 10 MHz CH20600, 1 RB low



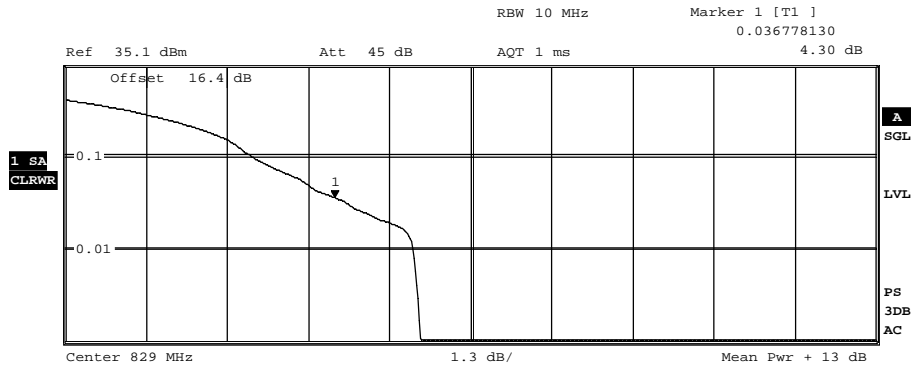
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 22.25 dBm
 Peak 28.27 dBm
 Crest 6.02 dB

10 % 2.46 dB
 1 % 4.52 dB
 .1 % 5.29 dB
 .01 % 5.71 dB

Date: 2.MAY.2017 18:36:01

QPSK 10 MHz CH20600, 100%RB



Center 829 MHz 1.3 dB/ Mean Pwr + 13 dB

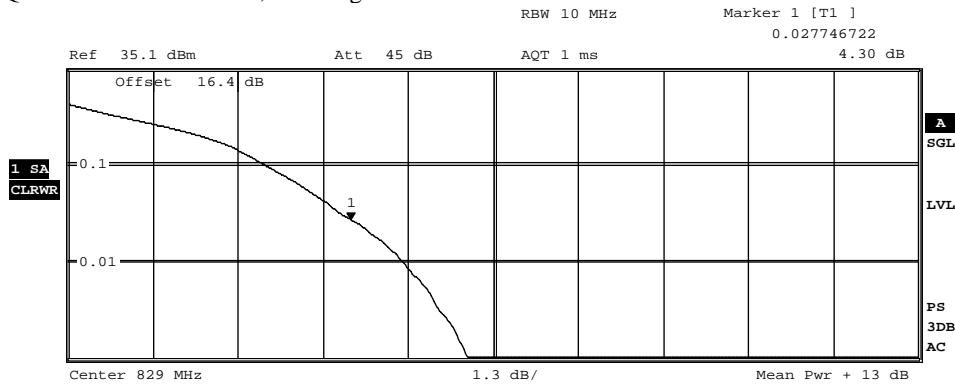
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 22.22 dBm
 Peak 27.99 dBm
 Crest 5.77 dB

10 % 3.00 dB
 1 % 5.58 dB
 .1 % 5.71 dB
 .01 % 5.77 dB

Date: 2.MAY.2017 18:30:26

QAM 10 MHz CH20450, 1 RB high



Center 829 MHz 1.3 dB/ Mean Pwr + 13 dB

Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 21.02 dBm
 Peak 28.06 dBm
 Crest 7.04 dB

10 % 3.02 dB
 1 % 5.13 dB
 .1 % 6.10 dB
 .01 % 6.94 dB

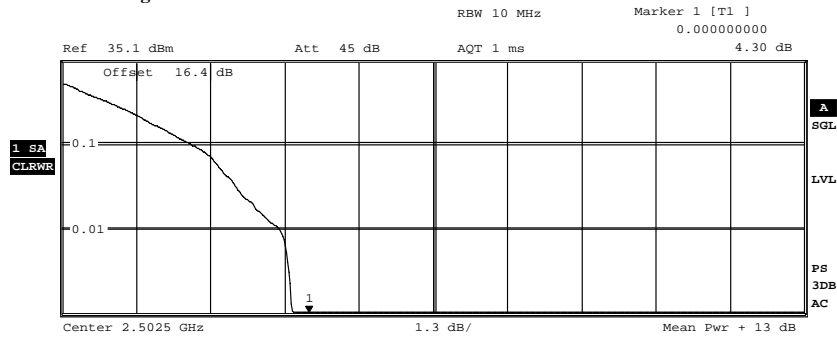
Date: 2.MAY.2017 18:32:31

QAM 10 MHz CH20450, 100 RB

1.6.4. LTE Band 7

Worst-Case of each maximum Peak to Average power value was tested with the CCDF method

1.6.4.1. 5MHz signal bandwidth

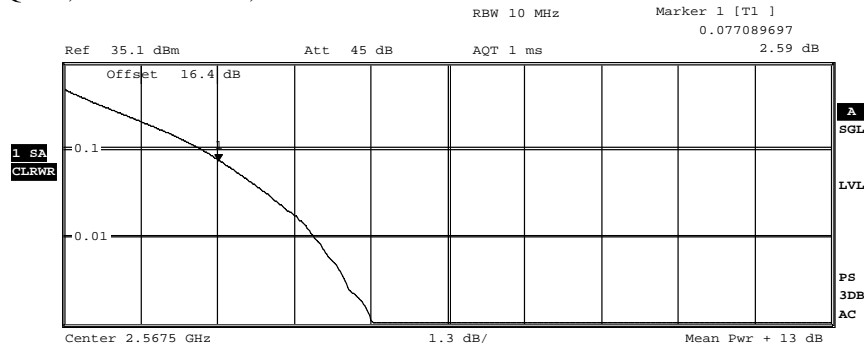


Center 2.5025 GHz 1.3 dB/ Mean Pwr + 13 dB
 Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 21.62 dBm |
| Peak | 25.79 dBm |
| Crest | 4.17 dB |
| 10 % | 2.27 dB |
| 1 % | 3.79 dB |
| .1 % | 4.04 dB |
| .01 % | 4.10 dB |

Date: 3.MAY.2017 09:23:05

QPSK, 5MHz CH20775, 1 RB low

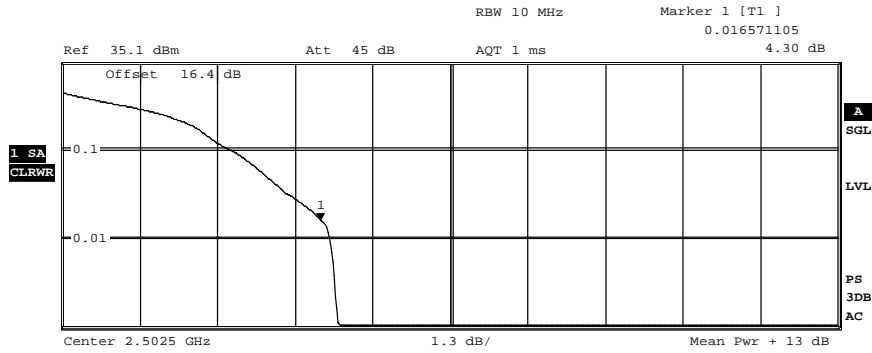


Center 2.5675 GHz 1.3 dB/ Mean Pwr + 13 dB
 Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 20.54 dBm |
| Peak | 26.42 dBm |
| Crest | 5.88 dB |
| 10 % | 2.33 dB |
| 1 % | 4.23 dB |
| .1 % | 5.23 dB |
| .01 % | 5.83 dB |

Date: 3.MAY.2017 09:50:02

QPSK, 5MHz CH21425, 100% RB low



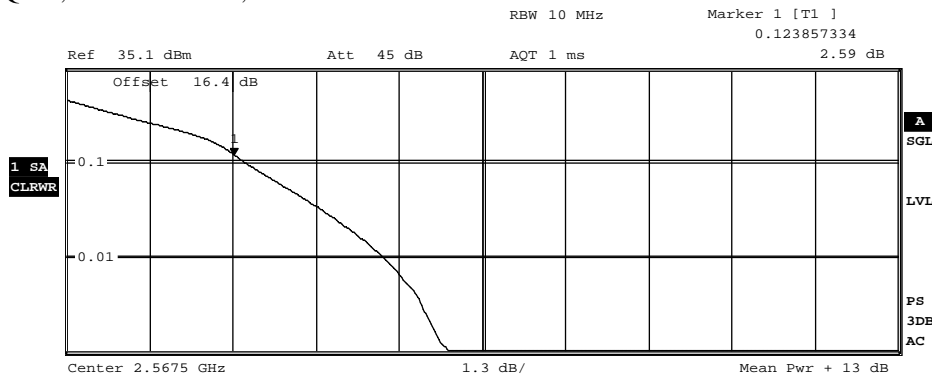
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 21.35 dBm
 Peak 26.07 dBm
 Crest 4.72 dB

| | |
|-------|---------|
| 10 % | 2.81 dB |
| 1 % | 4.48 dB |
| .1 % | 4.63 dB |
| .01 % | 4.71 dB |

Date: 3.MAY.2017 09:27:00

QAM, 5MHz CH20775, 1 RB low



Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

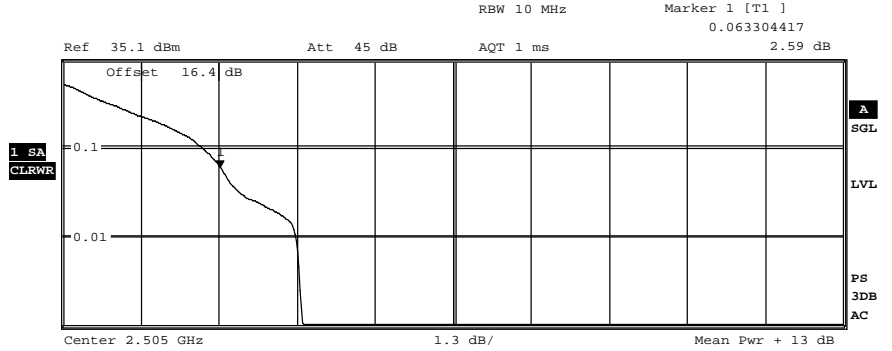
Trace 1
 Mean 19.64 dBm
 Peak 26.49 dBm
 Crest 6.85 dB

| | |
|-------|---------|
| 10 % | 2.79 dB |
| 1 % | 4.96 dB |
| .1 % | 5.98 dB |
| .01 % | 6.56 dB |

Date: 3.MAY.2017 09:51:26

QAM, 5MHz CH21425, 100% RB low

1.6.4.2. 10MHz signal bandwidth

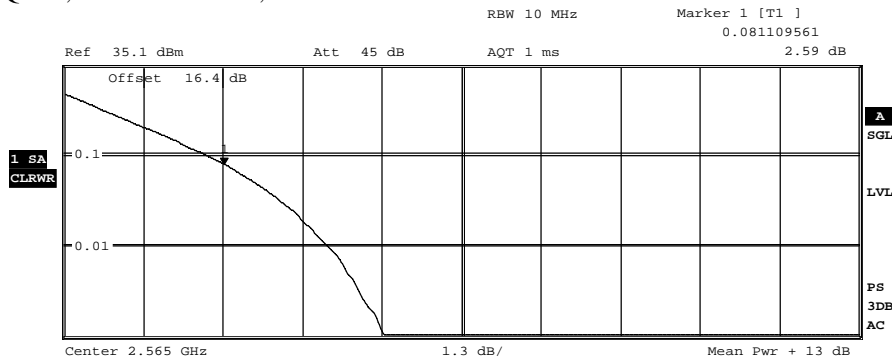


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 21.27 dBm |
| Peak | 25.37 dBm |
| Crest | 4.10 dB |
| 10 % | 2.31 dB |
| 1 % | 3.88 dB |
| .1 % | 4.00 dB |
| .01 % | 4.04 dB |

Date: 3.MAY.2017 09:54:28

QPSK, 10MHz CH20800, 1 RB low

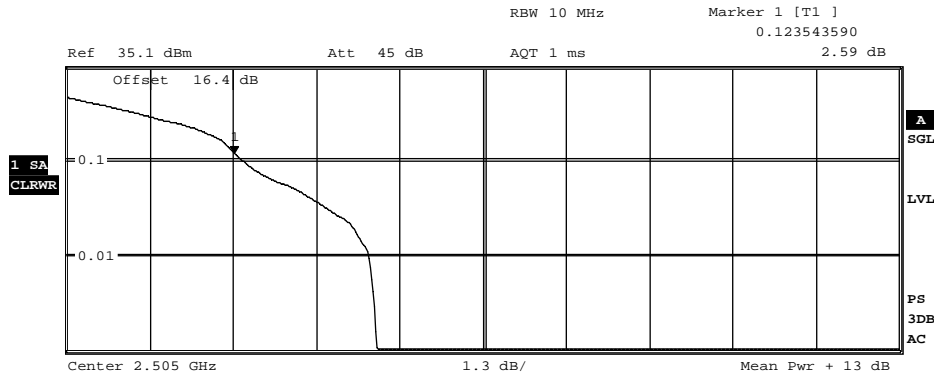


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 20.42 dBm |
| Peak | 26.12 dBm |
| Crest | 5.71 dB |
| 10 % | 2.33 dB |
| 1 % | 4.31 dB |
| .1 % | 5.25 dB |
| .01 % | 5.63 dB |

Date: 3.MAY.2017 09:58:38

QPSK, 10MHz CH21400, 100% RB



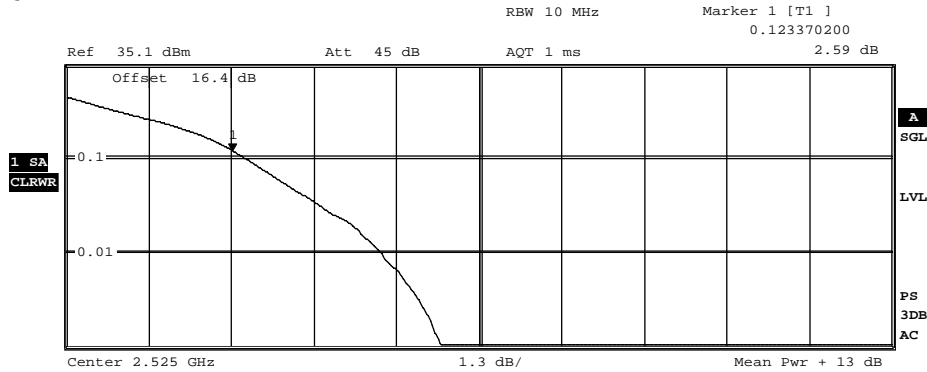
Complementary Cumulative Distribution Function
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
Mean 20.81 dBm
Peak 25.72 dBm
Crest 4.91 dB

10 % 2.75 dB
1 % 4.73 dB
.1 % 4.85 dB
.01 % 4.92 dB

Date: 3.MAY.2017 09:55:25

QAM, 10MHz CH20800, 1 RB low



Complementary Cumulative Distribution Function
NOF samples: 16000, Usable BW: 11.2MHz

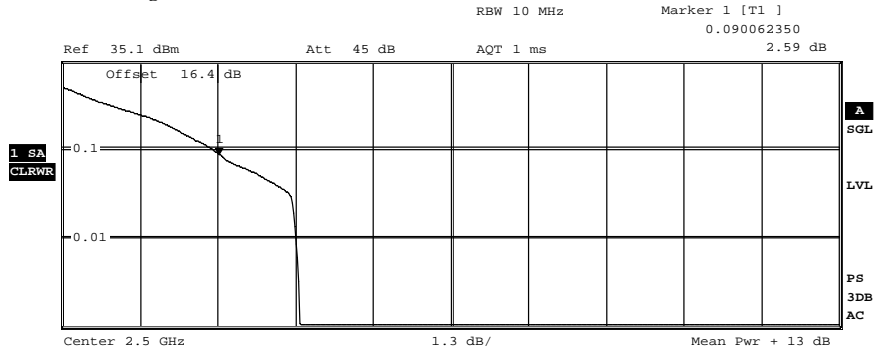
Trace 1
Mean 19.78 dBm
Peak 26.49 dBm
Crest 6.72 dB

10 % 2.83 dB
1 % 4.96 dB
.1 % 5.90 dB
.01 % 6.67 dB

Date: 3.MAY.2017 09:57:01

QAM, 10MHz CH21000, 100% RB

1.6.4.3. 15MHz signal bandwidth

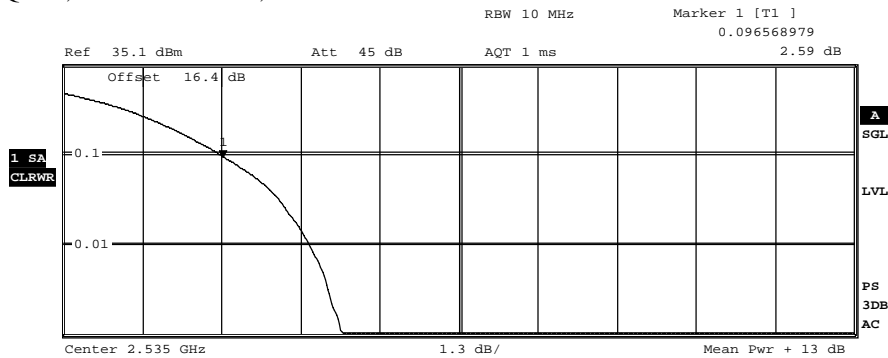


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 21.46 dBm |
| Peak | 25.50 dBm |
| Crest | 4.05 dB |
| 10 % | 2.52 dB |
| 1 % | 3.92 dB |
| .1 % | 3.98 dB |
| .01 % | 4.00 dB |

Date: 3.MAY.2017 10:04:05

QPSK, 15MHz CH20825, 1 RB low

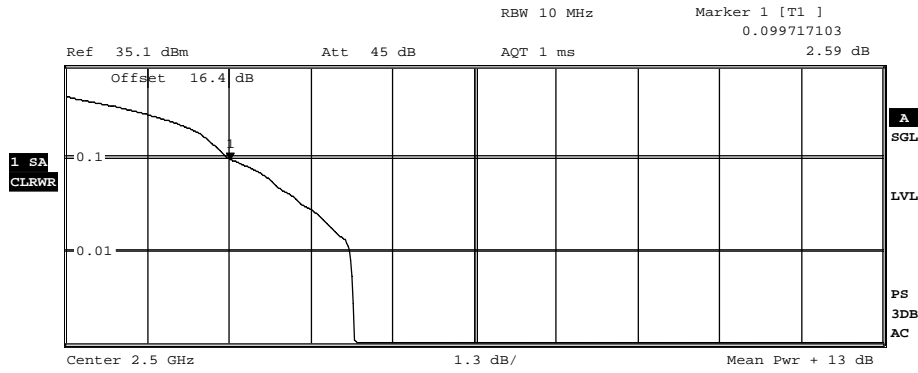


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 20.17 dBm |
| Peak | 25.09 dBm |
| Crest | 4.91 dB |
| 10 % | 2.56 dB |
| 1 % | 4.04 dB |
| .1 % | 4.58 dB |
| .01 % | 4.83 dB |

Date: 3.MAY.2017 10:22:05

QPSK, 15MHz CH21100, 100% RB

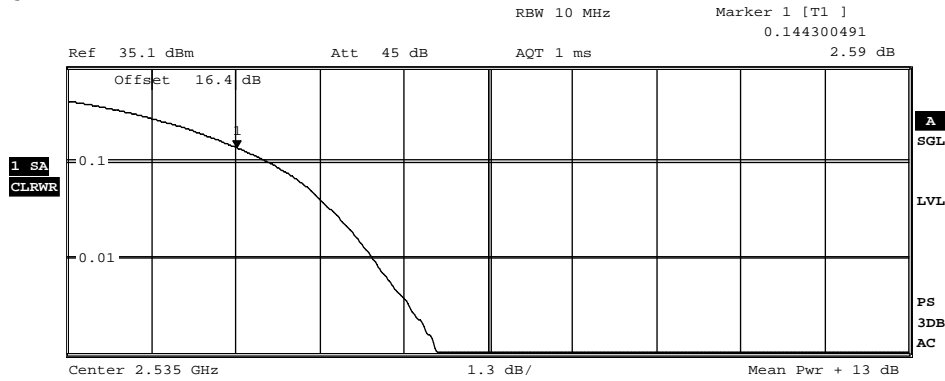


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| | |
|-------|-----------|
| | Trace 1 |
| Mean | 20.63 dBm |
| Peak | 25.29 dBm |
| Crest | 4.66 dB |
| 10 % | 2.60 dB |
| 1 % | 4.52 dB |
| .1 % | 4.60 dB |
| .01 % | 4.67 dB |

Date: 3.MAY.2017 10:05:03

QAM, 15MHz CH20825, 1 RB low



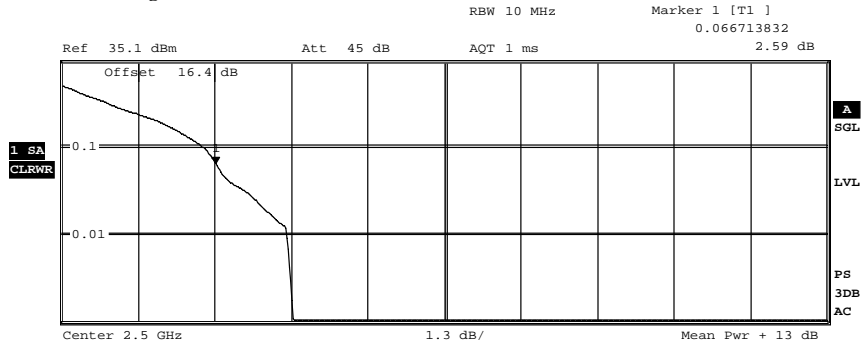
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| | |
|-------|-----------|
| | Trace 1 |
| Mean | 19.19 dBm |
| Peak | 25.58 dBm |
| Crest | 6.39 dB |
| 10 % | 3.10 dB |
| 1 % | 4.71 dB |
| .1 % | 5.71 dB |
| .01 % | 6.29 dB |

Date: 3.MAY.2017 10:23:06

QAM, 15MHz CH21100, 100% RB

1.6.4.4. 20MHz signal bandwidth



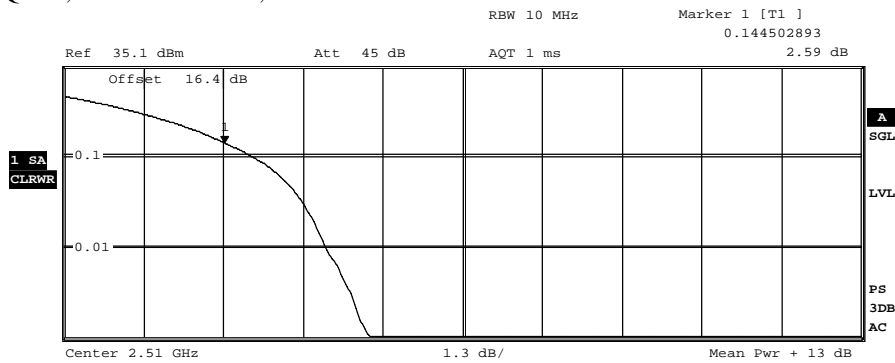
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 21.49 dBm
 Peak 25.43 dBm
 Crest 3.94 dB

10 % 2.40 dB
 1 % 3.83 dB
 .1 % 3.94 dB
 .01 % 3.96 dB

Date: 3.MAY.2017 10:12:35

QPSK, 20MHz CH20850, 1 RB low



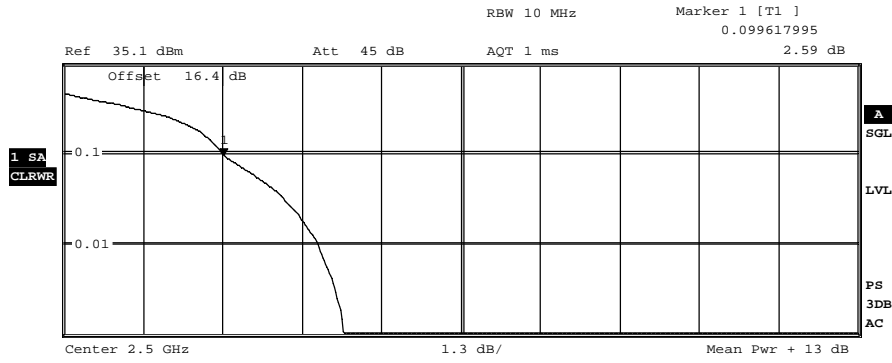
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 18.45 dBm
 Peak 23.97 dBm
 Crest 5.52 dB

10 % 3.06 dB
 1 % 4.27 dB
 .1 % 4.98 dB
 .01 % 5.42 dB

Date: 3.MAY.2017 10:15:53

QPSK, 20MHz CH20850, 100% RB

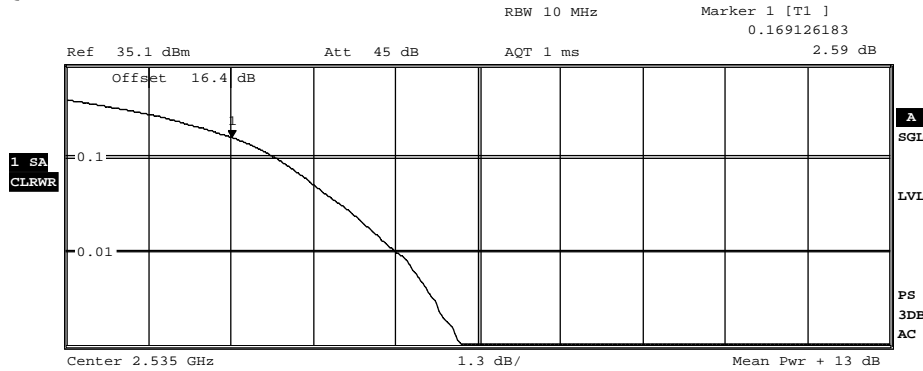


Center 2.5 GHz 1.3 dB/ Mean Pwr + 13 dB
 Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 20.75 dBm |
| Peak | 25.43 dBm |
| Crest | 4.68 dB |
| 10 % | 2.60 dB |
| 1 % | 4.17 dB |
| .1 % | 4.58 dB |
| .01 % | 4.67 dB |

Date: 3.MAY.2017 10:14:04

QAM, 20MHz CH20850, 1 RB low



Center 2.535 GHz 1.3 dB/ Mean Pwr + 13 dB
 Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 18.14 dBm |
| Peak | 25.23 dBm |
| Crest | 7.09 dB |
| 10 % | 3.31 dB |
| 1 % | 5.21 dB |
| .1 % | 6.25 dB |
| .01 % | 6.79 dB |

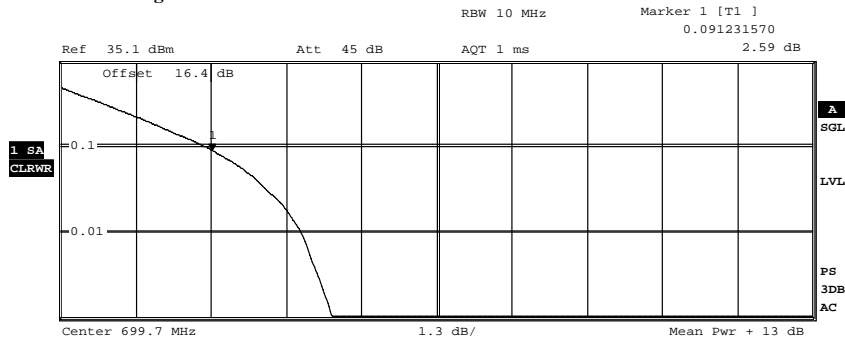
Date: 3.MAY.2017 10:20:08

QAM, 20MHz CH21100, 100% RB

1.6.5. LTE Band 12

Worst-Case of each maximum Peak to Average power value was tested with the CCDF method

1.6.5.1. 1.4MHz signal bandwidth

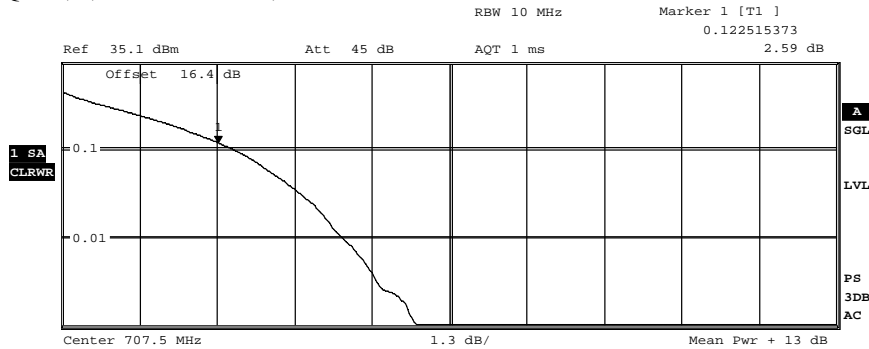


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 22.63 dBm |
| Peak | 27.55 dBm |
| Crest | 4.92 dB |
| 10 % | 2.50 dB |
| 1 % | 4.15 dB |
| .1 % | 4.69 dB |
| .01 % | 4.88 dB |

Date: 3.MAY.2017 10:28:06

QPSK, 1,4 MHz CH23017, 50% RB

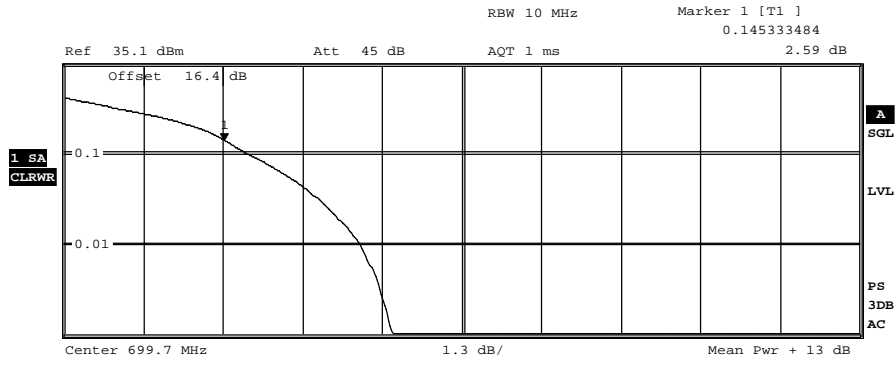


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 21.14 dBm |
| Peak | 27.54 dBm |
| Crest | 6.39 dB |
| 10 % | 2.90 dB |
| 1 % | 4.71 dB |
| .1 % | 5.94 dB |
| .01 % | 6.35 dB |

Date: 3.MAY.2017 10:31:39

QPSK, 1,4 MHz CH23095, 100% RB

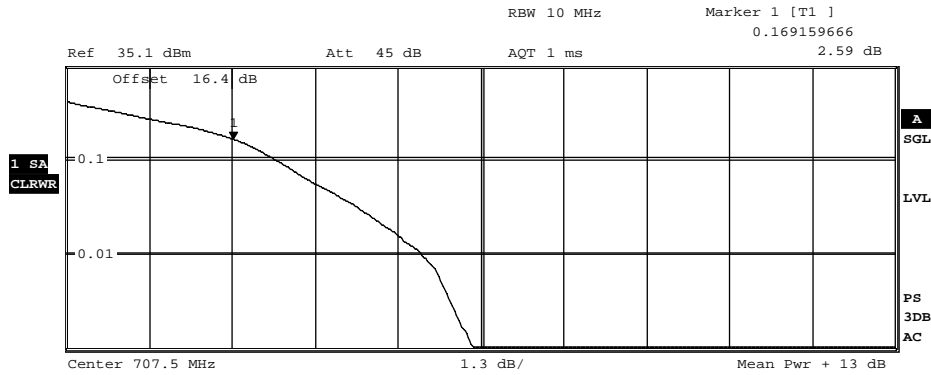


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 21.74 dBm |
| Peak | 27.27 dBm |
| Crest | 5.53 dB |
| 10 % | 3.00 dB |
| 1 % | 4.83 dB |
| .1 % | 5.38 dB |
| .01 % | 5.52 dB |

Date: 3.MAY.2017 10:29:40

QAM, 1,4 MHz CH23017, 50% RB

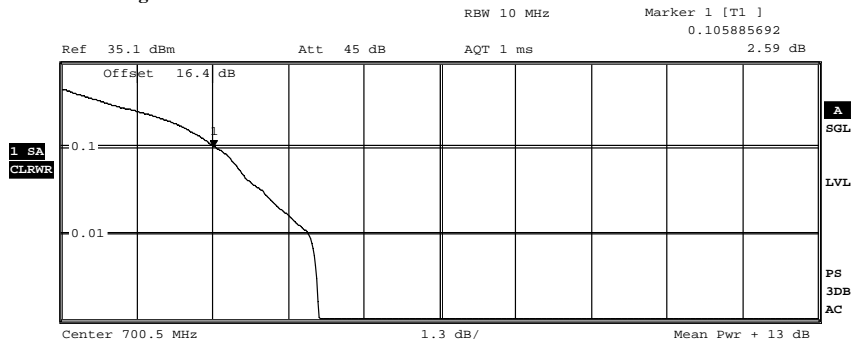


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 20.20 dBm |
| Peak | 27.04 dBm |
| Crest | 6.84 dB |
| 10 % | 3.29 dB |
| 1 % | 5.56 dB |
| .1 % | 6.38 dB |
| .01 % | 6.79 dB |

Date: 3.MAY.2017 10:33:17

QAM, 1,4 MHz CH23095, 100% RB
1.6.5.2. 3MHz signal bandwidth

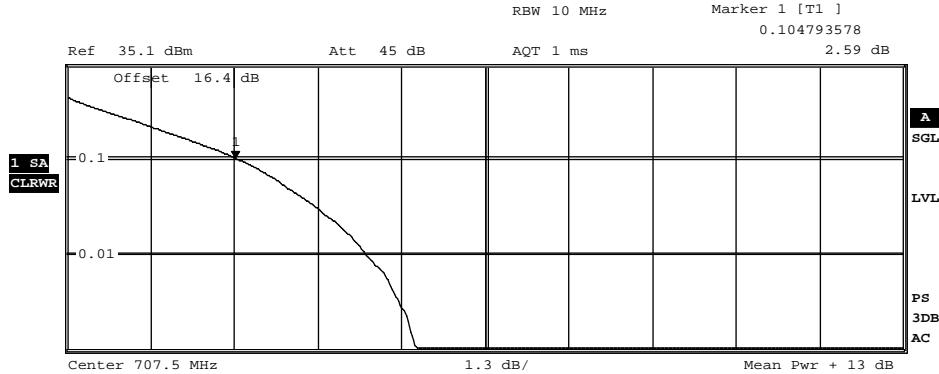


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 22.77 dBm |
| Peak | 27.27 dBm |
| Crest | 4.50 dB |
| 10 % | 2.67 dB |
| 1 % | 4.25 dB |
| .1 % | 4.44 dB |
| .01 % | 4.48 dB |

Date: 3.MAY.2017 10:34:51

QPSK, 3 MHz CH23025, 1 RB high

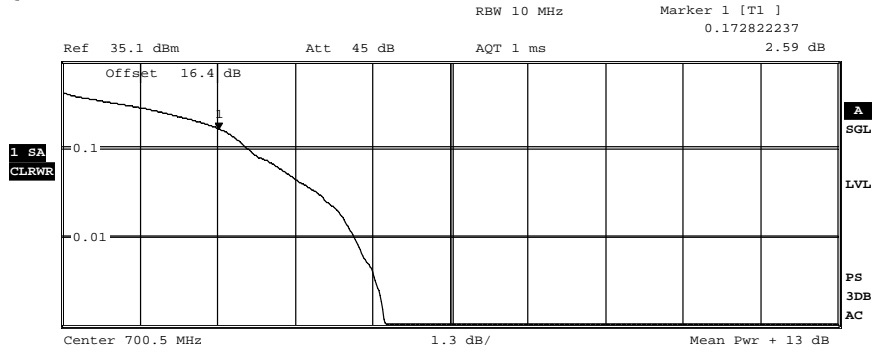


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 21.28 dBm |
| Peak | 27.26 dBm |
| Crest | 5.98 dB |
| 10 % | 2.67 dB |
| 1 % | 4.65 dB |
| .1 % | 5.44 dB |
| .01 % | 5.90 dB |

Date: 3.MAY.2017 10:38:03

QPSK, 3 MHz CH23095, 100% RB

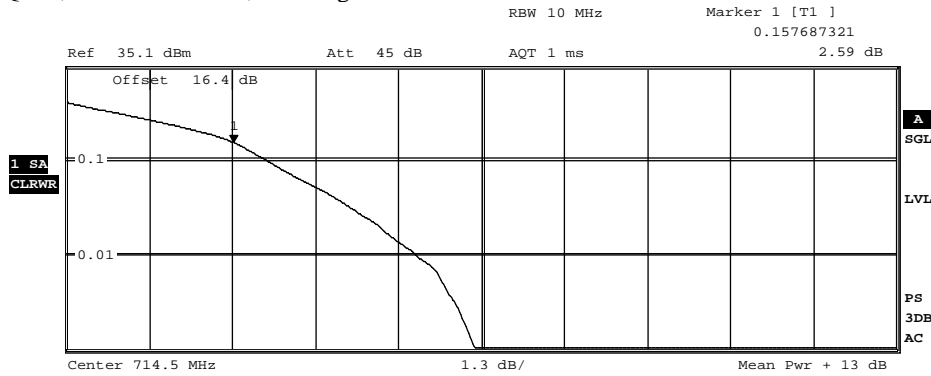


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 21.45 dBm |
| Peak | 26.98 dBm |
| Crest | 5.53 dB |
| 10 % | 3.10 dB |
| 1 % | 4.90 dB |
| .1 % | 5.42 dB |
| .01 % | 5.52 dB |

Date: 3.MAY.2017 10:35:53

QAM, 3 MHz CH23025, 1 RB high



Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

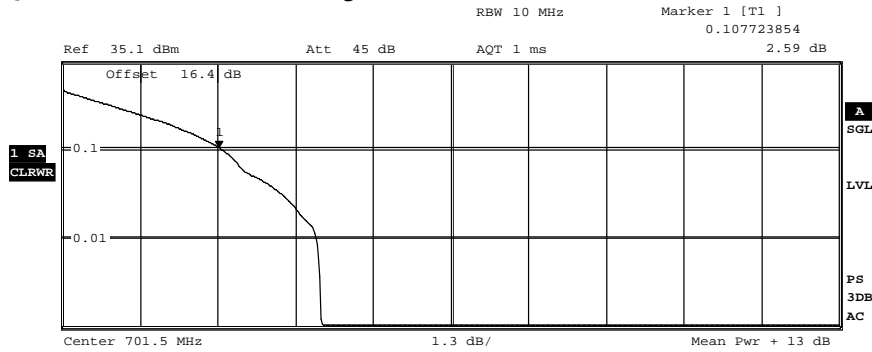
| Trace 1 | |
|---------|-----------|
| Mean | 20.41 dBm |
| Peak | 27.33 dBm |
| Crest | 6.91 dB |
| 10 % | 3.15 dB |
| 1 % | 5.48 dB |
| .1 % | 6.42 dB |
| .01 % | 6.81 dB |

Date: 3.MAY.2017 10:40:03

QAM, 3 MHz CH23165, 100% RB

1.6.5.3. 5MHz signal bandwidth

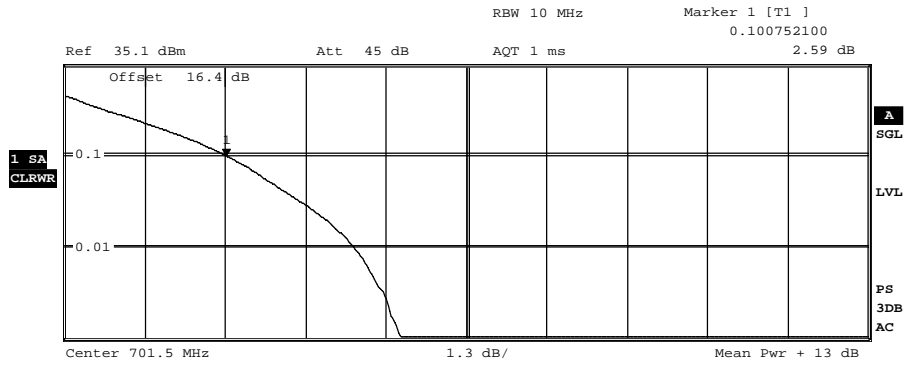
QPSK, 5 MHz CH23035, 1 RB high



Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 22.72 dBm |
| Peak | 27.12 dBm |
| Crest | 4.40 dB |
| 10 % | 2.67 dB |
| 1 % | 4.25 dB |
| .1 % | 4.33 dB |
| .01 % | 4.40 dB |

Date: 3.MAY.2017 10:54:56

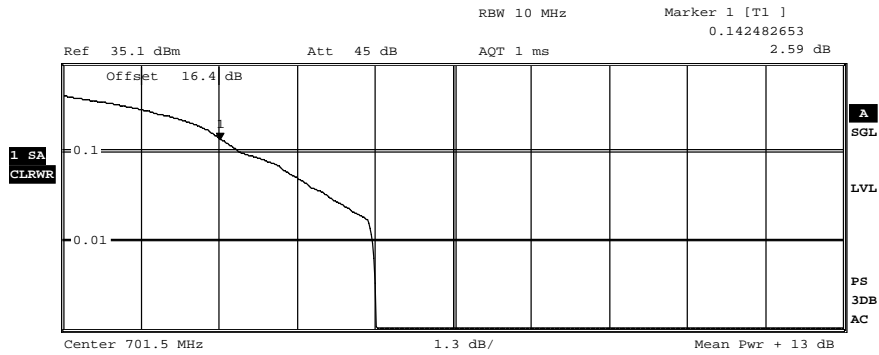


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 21.49 dBm |
| Peak | 27.62 dBm |
| Crest | 6.13 dB |
| 10 % | 2.60 dB |
| 1 % | 4.67 dB |
| .1 % | 5.44 dB |
| .01 % | 5.96 dB |

Date: 3.MAY.2017 10:56:55

QPSK, 5 MHz CH23035, 100% RB.WMF

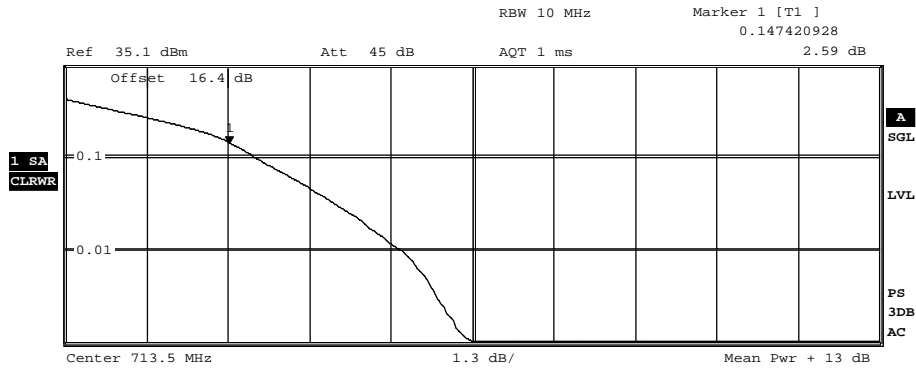


Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 21.76 dBm |
| Peak | 27.05 dBm |
| Crest | 5.29 dB |
| 10 % | 2.96 dB |
| 1 % | 5.17 dB |
| .1 % | 5.23 dB |
| .01 % | 5.27 dB |

Date: 3.MAY.2017 10:56:04

QAM, 5 MHz CH23035, 1 RB high



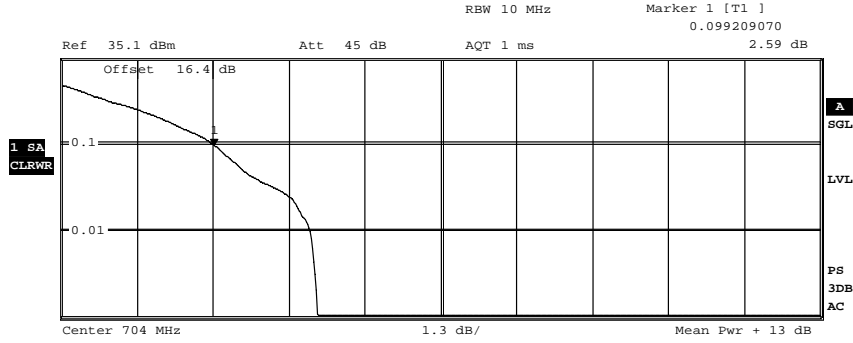
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

| Trace 1 | |
|---------|-----------|
| Mean | 20.44 dBm |
| Peak | 27.68 dBm |
| Crest | 7.24 dB |
| 10 % | 3.04 dB |
| 1 % | 5.35 dB |
| .1 % | 6.56 dB |
| .01 % | 7.19 dB |

Date: 3.MAY.2017 10:58:21

QAM, 5 MHz CH23155, 100% RB

1.6.5.4. 10MHz signal bandwidth



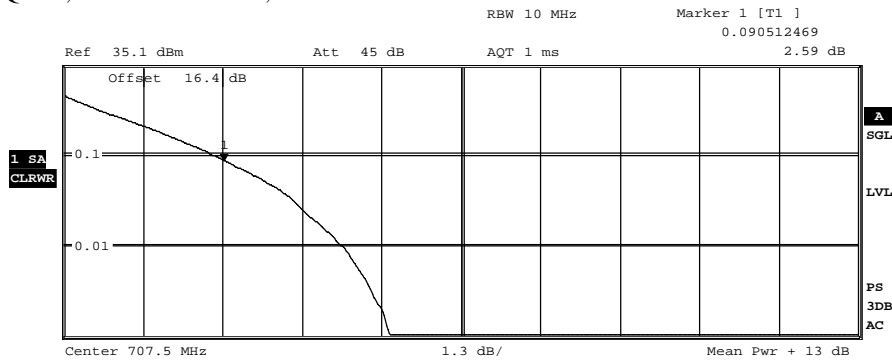
Complementary Cumulative Distribution Function
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
Mean 22.65 dBm
Peak 27.12 dBm
Crest 4.47 dB

10 % 2.60 dB
1 % 4.27 dB
.1 % 4.40 dB
.01 % 4.46 dB

Date: 3.MAY.2017 11:00:39

QPSK, 10 MHz CH23060, 1 RB low



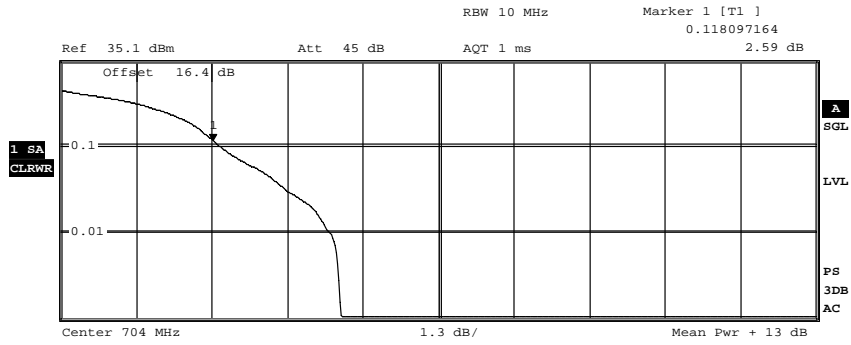
Complementary Cumulative Distribution Function
NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
Mean 21.40 dBm
Peak 27.82 dBm
Crest 6.42 dB

10 % 2.46 dB
1 % 4.54 dB
.1 % 5.33 dB
.01 % 6.17 dB

Date: 3.MAY.2017 11:04:03

QPSK, 10 MHz CH23095, 100% RB



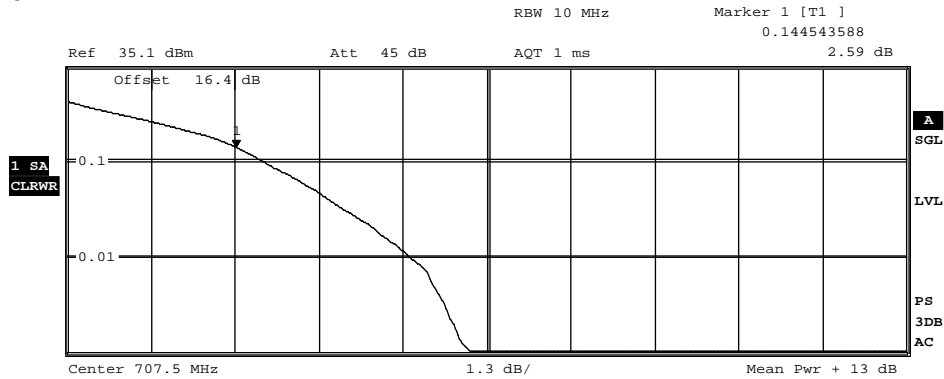
Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 22.25 dBm
 Peak 27.12 dBm
 Crest 4.87 dB

10 % 2.73 dB
 1 % 4.60 dB
 .1 % 4.83 dB
 .01 % 4.88 dB

Date: 3.MAY.2017 11:01:43

QAM, 10 MHz CH23060, 1 RB low



Complementary Cumulative Distribution Function
 NOF samples: 16000, Usable BW: 11.2MHz

Trace 1
 Mean 20.41 dBm
 Peak 27.40 dBm
 Crest 6.99 dB

10 % 3.04 dB
 1 % 5.31 dB
 .1 % 6.25 dB
 .01 % 6.71 dB

Date: 3.MAY.2017 11:05:08

QAM, 10 MHz CH23095, 100% RB

1.7. Spurious emissions radiated (LTE Band 2)

1.7.1. Magnetic field strength radiated (LTE Band 2)

Diagram No. 2.20_RSE_R_Ch18700_BW_20

| | | |
|--------------------------|---|-------------|
| Date: | 18.04.2017 | Page 1 of 3 |
| Test description: | Magnetic Field Strength Measurement related to 30/300 m distance | |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance | |
| Version of Testsoftware: | EMC32 V9.25.0 | |
| Distance correction: | used accord. table, pls. see test report | |
| Technical Data: | Please see page 2 for detailed data of measurement setup | |
| Rec. antenna (pre-scan): | height 1.00 m, parallel and 90° to EUT polarisation | |
| Used filter: | bypass | |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 | |
| EUT Position: | EUT Standing | |
| Operator: | Mah | |
| Operating conditions: | Humidity: 35%rH; Temperature: 21°C | |
| Power during tests: | 12V DC | |
| Comment 1: | LTE Band2 Ch:18700, BW:20MHz, RB: 1 High, QPSK | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum

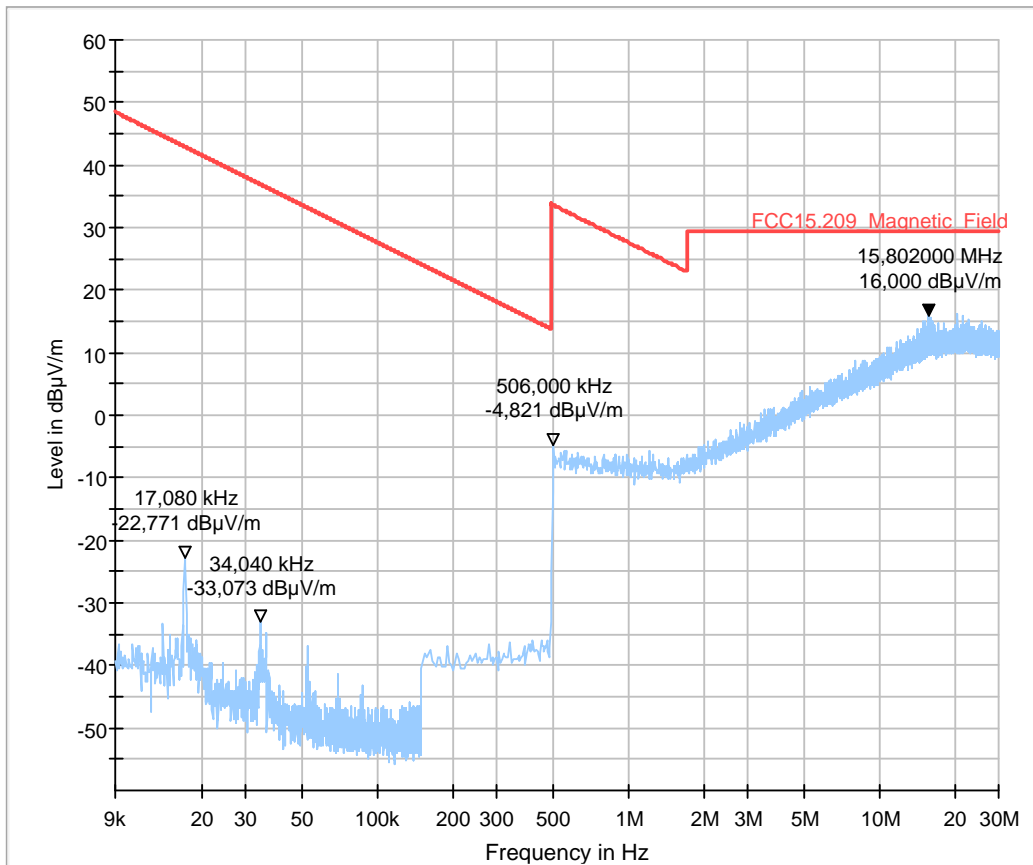


Diagram No. 2.20a_RSE_R_Ch18700_BW_20

| | |
|--------------------------|---|
| Test description: | Date: 10.04.2017 Page 1 of 1 |
| Test site and distance: | Magnetic Field Strength Measurement related to 30/300 m distance |
| Version of Testsoftware: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Distance correction: | EMC32 V9.25.0 |
| Technical Data: | used accord. table, pls. see test report |
| Rec. antenna (pre-scan): | Please see page 2 for detailed data of measurement setup |
| Used filter: | height 1.00 m, parallel and 90° to EUT polarisation |
| Test specification: | bypass |
| | FCC 15.205 § 15.209; RSS-Gen: Issue 4 |
| Operator: | HLA |
| Operating conditions: | LTE Band2 Ch:18700, BW:20MHz, RB: 1 High, QPSK |
| Power during tests: | 12V DC |
| Comment 1: | Channel low |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum

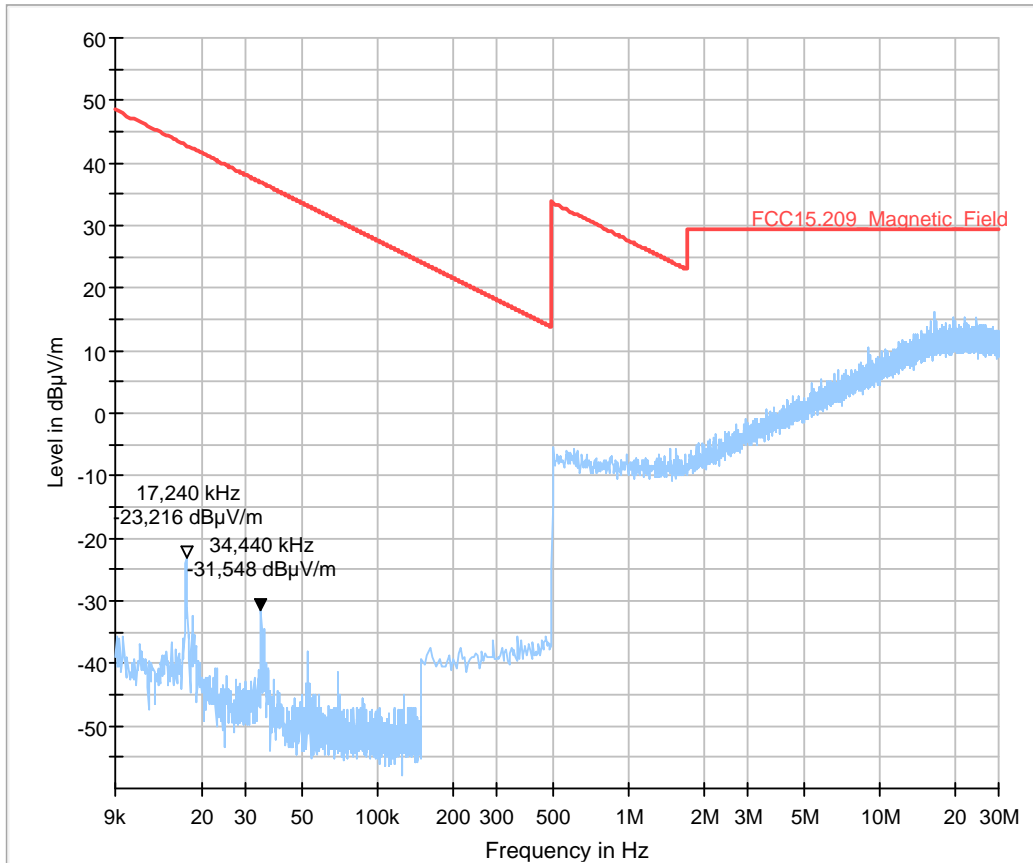


Diagram No. 2.21_RSE_R_Ch18900_BW_20

Test description:
 Test site and distance:
 Version of Testsoftware:
 Distance correction:
 Technical Data:
 Rec. antenna (pre-scan):
 Used filter:
 Test specification:
 EUT Position:
 Operator:
 Operating conditions:
 Power during tests:
 Comment 1:

Date: 18.04.2017 Page 1 of 3
 Magnetic Field Strength Measurement related to 30/300 m distance
 Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
 EMC32 V9.25.0
 used accord. table, pls. see test report
 Please see page 2 for detailed data of measurement setup
 height 1.00 m, parallel and 90° to EUT polarisation
 bypass
 FCC 15.205 § 15.209; RSS-Gen: Issue 4
 EUT Standing
 Mah
 Humidity: 35%rH; Temperature: 21°C
 12V DC
 LTE Band2 Ch:18900, BW:20MHz, RB: 1 low, QPSK

EUT Information

Manufacturer:
 EUT:

peiker acoustic GmbH & Co. KG
 V1231-0

 HW version:
 SW version:
 Serial number:
 Connected Interfaces:

 V1231-0_Ver.1
 MPSS.TH.2.0.2-00256
 004402580040446
 Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna
 LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables

Power Supply:
 Comments:

12VDC
 -

Full Spectrum

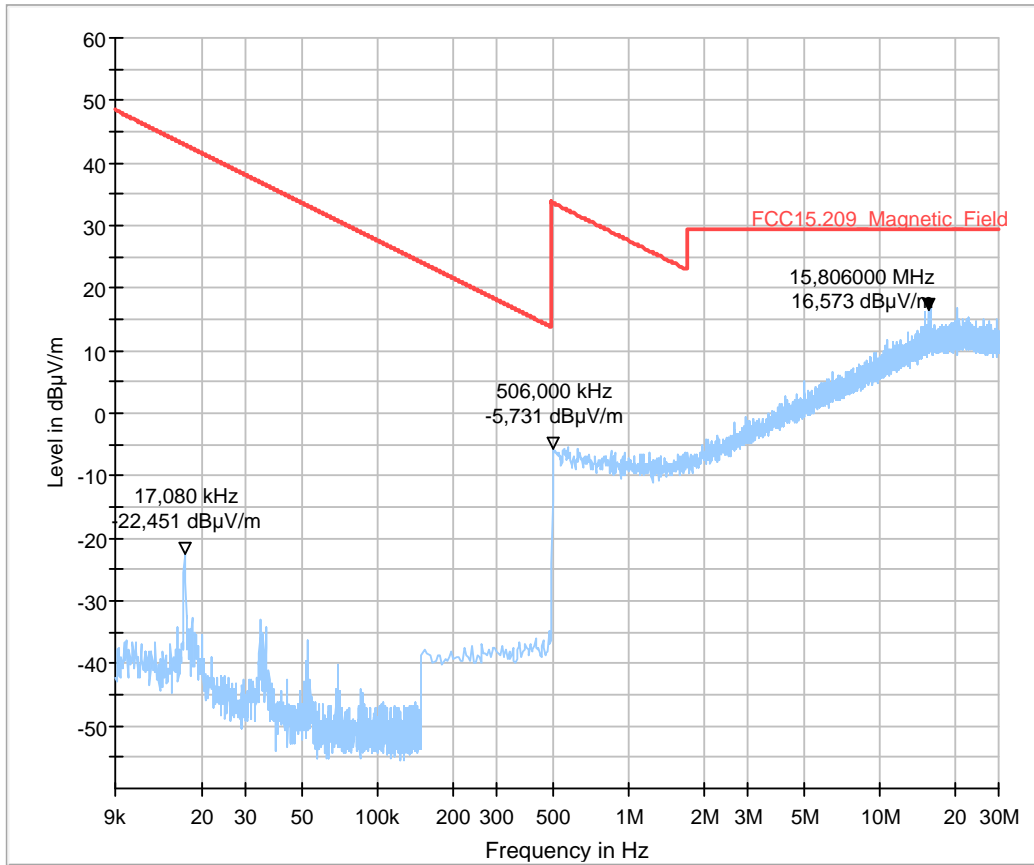


Diagram No. 2.21a_RSE_R_Ch18900_BW_20

| | | |
|--------------------------|---|-------------|
| Date: | 10.04.2017 | Page 1 of 1 |
| Test description: | Magnetic Field Strength Measurement related to 30/300 m distance | |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance | |
| Version of Testsoftware: | EMC32 V9.25.0 | |
| Distance correction: | used accord. table, pls. see test report | |
| Technical Data: | Please see page 2 for detailed data of measurement setup | |
| Rec. antenna (pre-scan): | height 1.00 m, parallel and 90° to EUT polarisation | |
| Used filter: | bypass | |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 | |
| | | |
| Operator: | HLA | |
| Operating conditions: | LTE Band2 Ch:1900, BW:20MHz, RB: 1 low, QPSK | |
| Power during tests: | 12V DC | |
| Comment 1: | - | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum

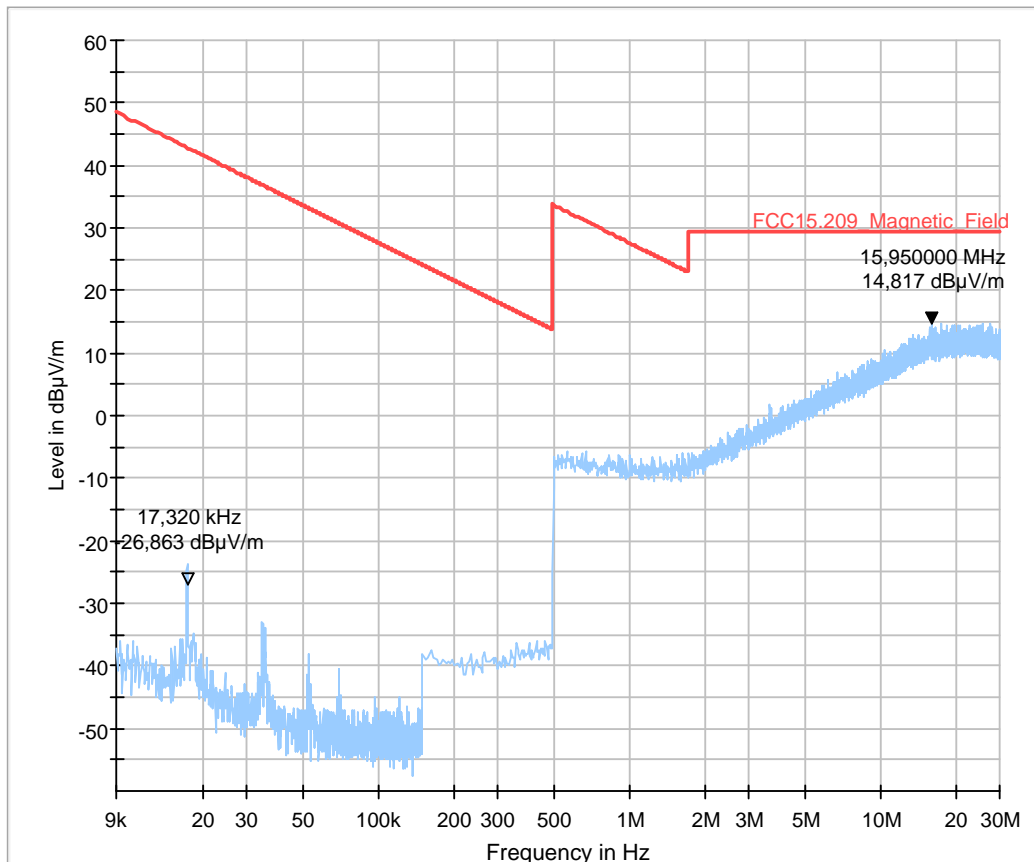


Diagram No. 2.22_RSE_R_Ch19150_BW_20

| | | |
|--------------------------|---|-------------|
| Date: | 18.04.2017 | Page 1 of 3 |
| Test description: | Magnetic Field Strength Measurement related to 30/300 m distance | |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance | |
| Version of Testsoftware: | EMC32 V9.25.0 | |
| Distance correction: | used accord. table, pls. see test report | |
| Technical Data: | Please see page 2 for detailed data of measurement setup | |
| Rec. antenna (pre-scan): | height 1.00 m, parallel and 90° to EUT polarisation | |
| Used filter: | bypass | |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 | |
| EUT Position: | EUT Standing | |
| Operator: | Mah | |
| Operating conditions: | Humidity: 35%rH; Temperature: 21°C | |
| Power during tests: | 12V DC | |
| Comment 1: | LTE Band2 Ch:19150, BW:10MHz, RB: 1 low, QPSK | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum

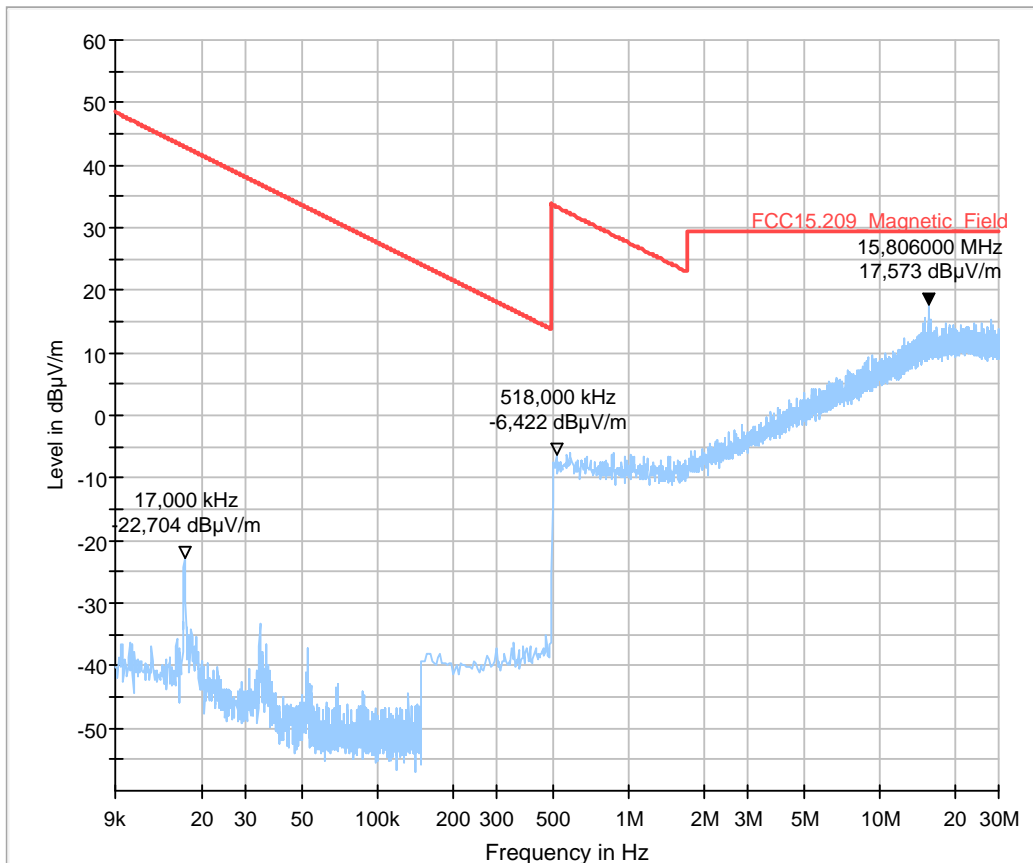


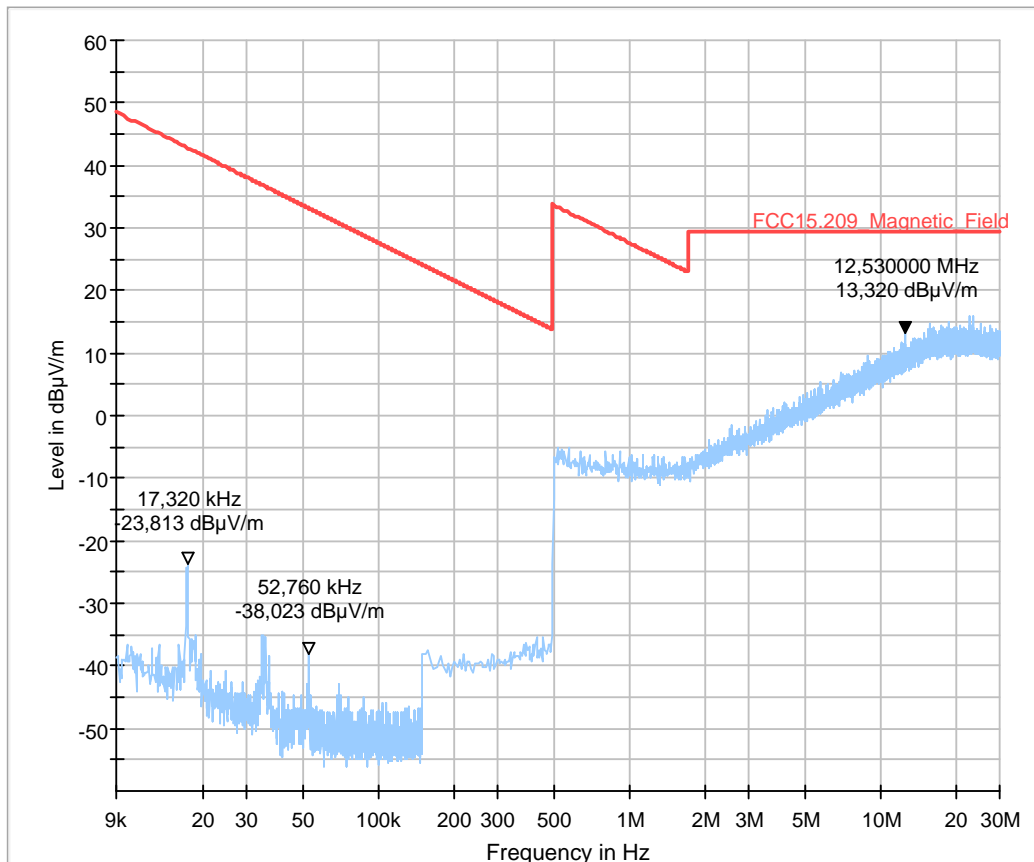
Diagram No. 2.22a_RSE_R_Ch19150_BW_20

| | | |
|--------------------------|---|-------------|
| Date: | 10.04.2017 | Page 1 of 1 |
| Test description: | Magnetic Field Strength Measurement related to 30/300 m distance | |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance | |
| Version of Testsoftware: | EMC32 V9.25.0 | |
| Distance correction: | used accord. table, pls. see test report | |
| Technical Data: | Please see page 2 for detailed data of measurement setup | |
| Rec. antenna (pre-scan): | height 1.00 m, parallel and 90° to EUT polarisation | |
| Used filter: | bypass | |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 | |
| | | |
| Operator: | HLa | |
| Operating conditions: | LTE Band2 Ch:19150, BW:10MHz, RB: 1 low, QPSK | |
| Power during tests: | 12V DC | |
| Comment 1: | - | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.7.2. Emissions above 30MHz (LTE Band 2)

8.20_RSE_R_Ch18700_BW_20_Standing

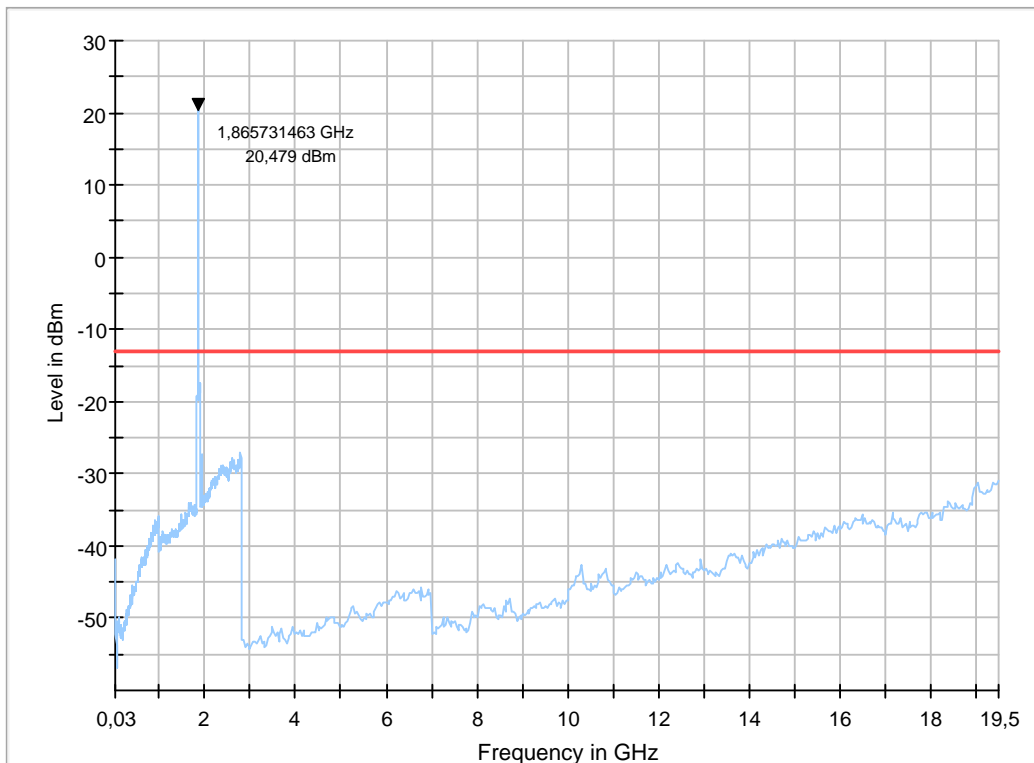
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | UE allocated channel 18700/BW:20/RB:1 high/QPSK |
| Environmental Conditions: | Humidity: 51%rH; Temperature: 20°C |
| Operator: | SLo |
| Comment: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



8.20_RSE_R_Ch18700_BW_20_Laying

Common Information

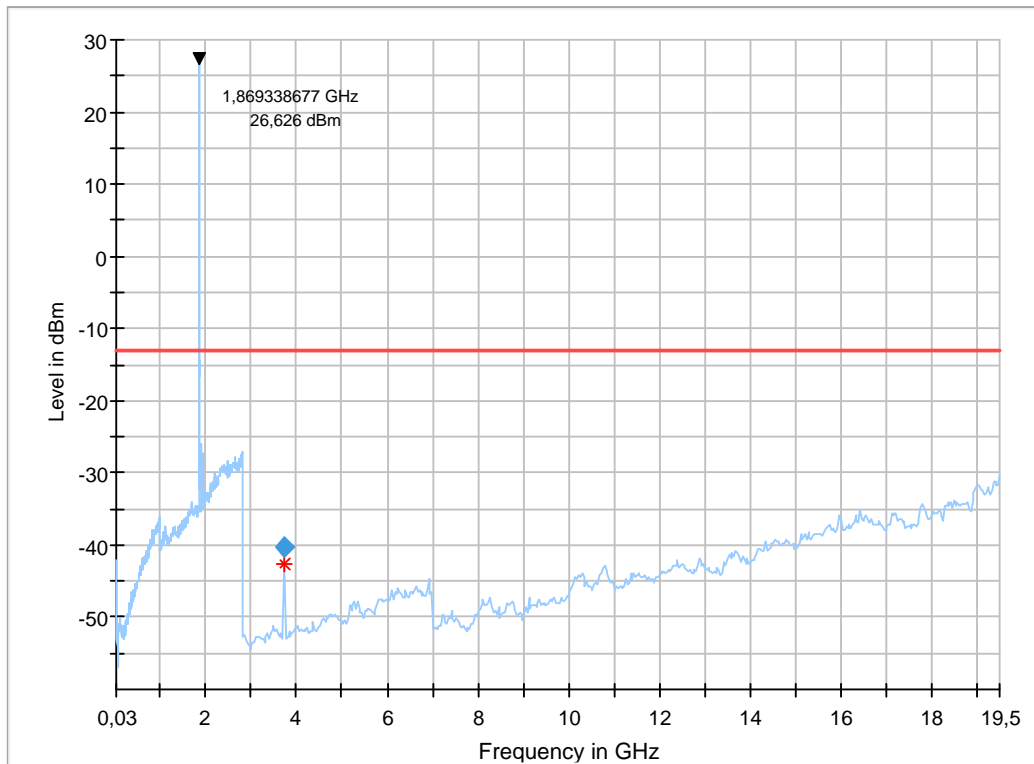
Test Description: Radiated Spurious Emissions LTE Band 2
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 24
 Operating Mode: UE allocated channel 18700/BW:20/RB:1 high/QPSK
 Environmental Conditions: Humidity: 49%RH; Temperature: 21°C
 Operator: SLo
 Comment: EUT - laying position

EUT Information

Manufacturer: peiker acoustic GmbH & Co. KG
 EUT: V1231-0

 HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



Final Result

| Frequency (MHz) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|-------------|-------------|-----------------|-----|---------------|-----------------|------------|
| 3737.825651 | 13.00 | 27.36 | 10000.0 | V | 328.0 | 0.0 | -95.0 |

8.21_RSE_R_Ch18900_BW_20_Standing

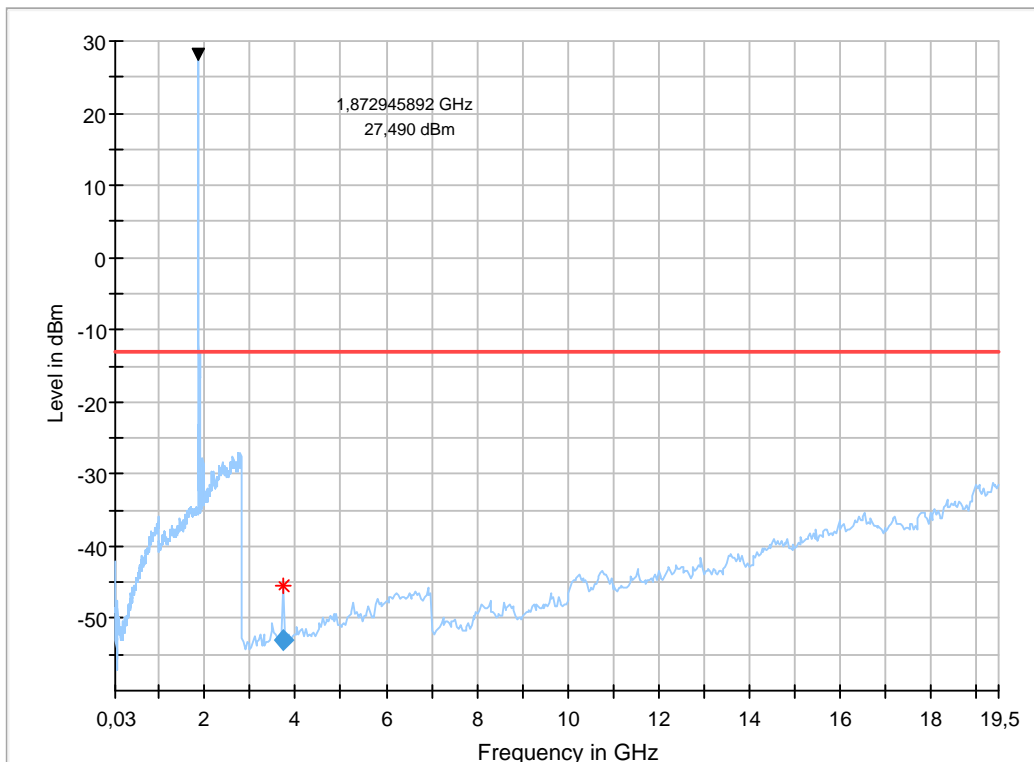
Common Information

| | |
|---------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | UE allocated channel 18900/BW:20/RB:1 low/QPSK |
| Environmental Conditions: | Humidity: 51%rH; Temperature: 20°C |
| Operator: | SLo |
| Comment: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



Final Result

| Frequency (MHz) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|-------------|-------------|-----------------|-----|---------------|-----------------|------------|
| 3736.711423 | -13.00 | 39.99 | 10000.0 | V | 185.0 | 0.0 | -95.0 |

8.21_RSE_R_Ch18900_BW_20_Laying

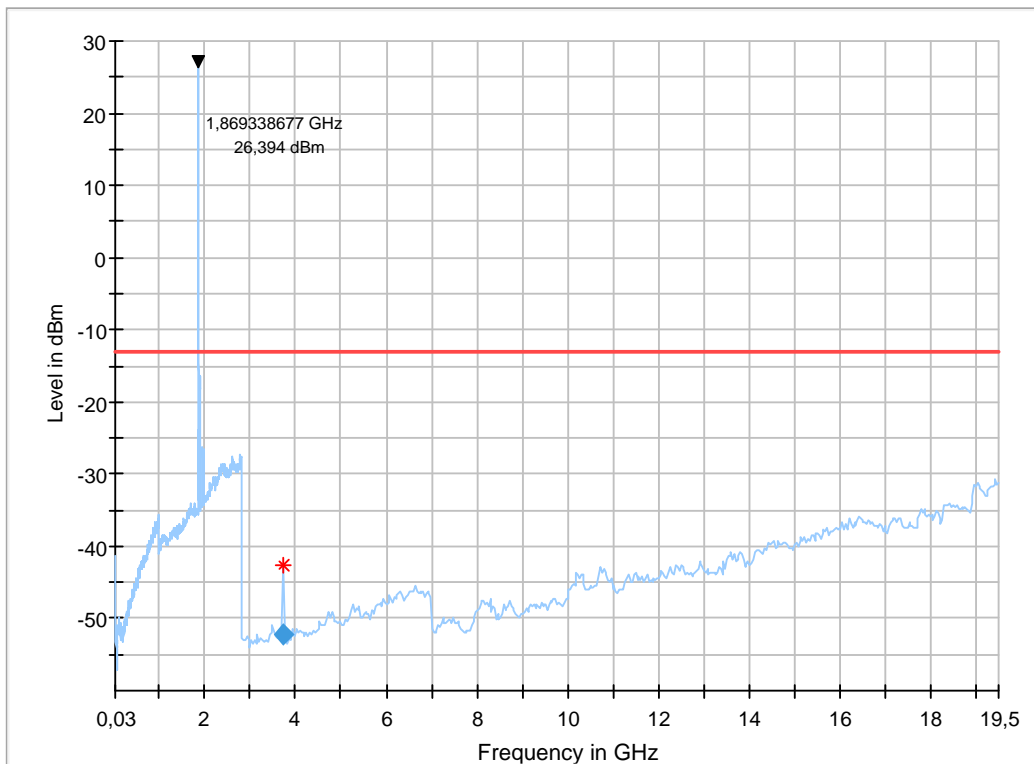
Common Information

| | |
|---------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | UE allocated channel 18900/BW:20/RB:1 low/QPSK |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



Final Result

| Frequency (MHz) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|-------------|-------------|-----------------|-----|---------------|-----------------|------------|
| 3738.038076 | -13.00 | 39.12 | 10000.0 | V | 310.0 | 0.0 | -95.0 |

8.22_RSE_R_Ch19150_BW_20_Standing

Common Information

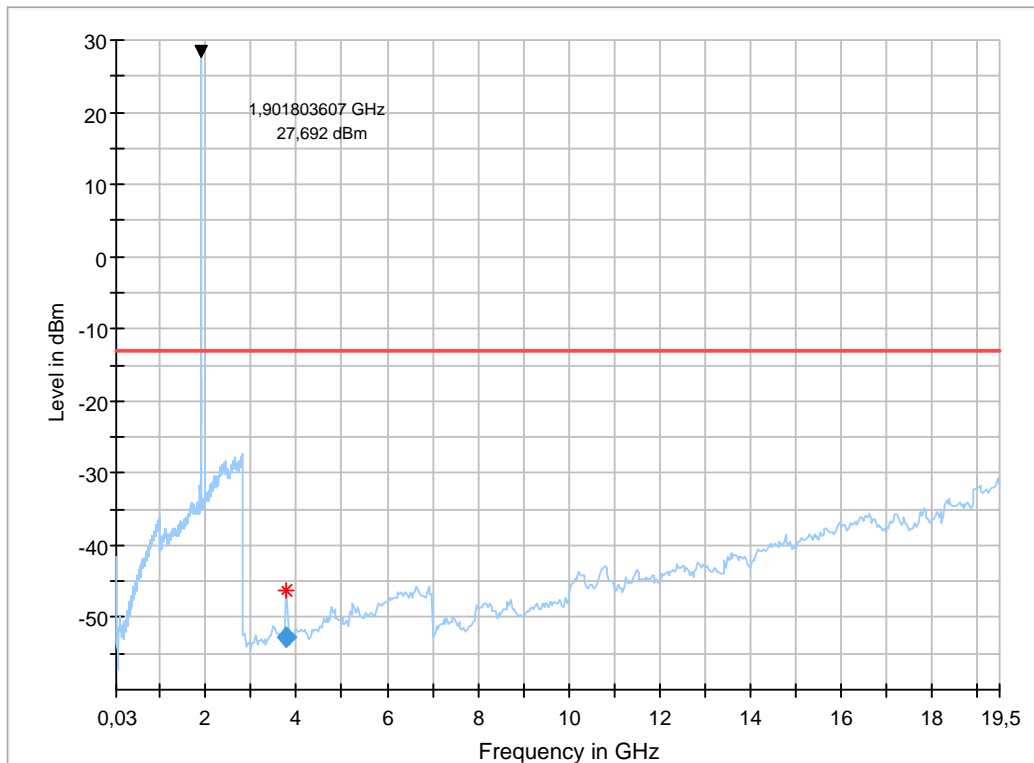
Test Description: Radiated Spurious Emissions LTE Band 2
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 24
 Operating Mode: UE allocated channel 19150/BW:10/RB:1 low/QPSK
 Environmental Conditions: Humidity: 51%rH; Temperature: 20°C
 Operator: SLo
 Comment: EUT - standing position

EUT Information

Manufacturer: peiker acoustic GmbH & Co. KG
 EUT: V1231-0

 HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



Final Result

| Frequency (MHz) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|-------------|-------------|-----------------|-----|---------------|-----------------|------------|
| 3770.579158 | 13.00 | 39.78 | 10000.0 | H | 15.0 | 0.0 | -95.1 |

8.22_RSE_R_Ch19150_BW_20_Laying

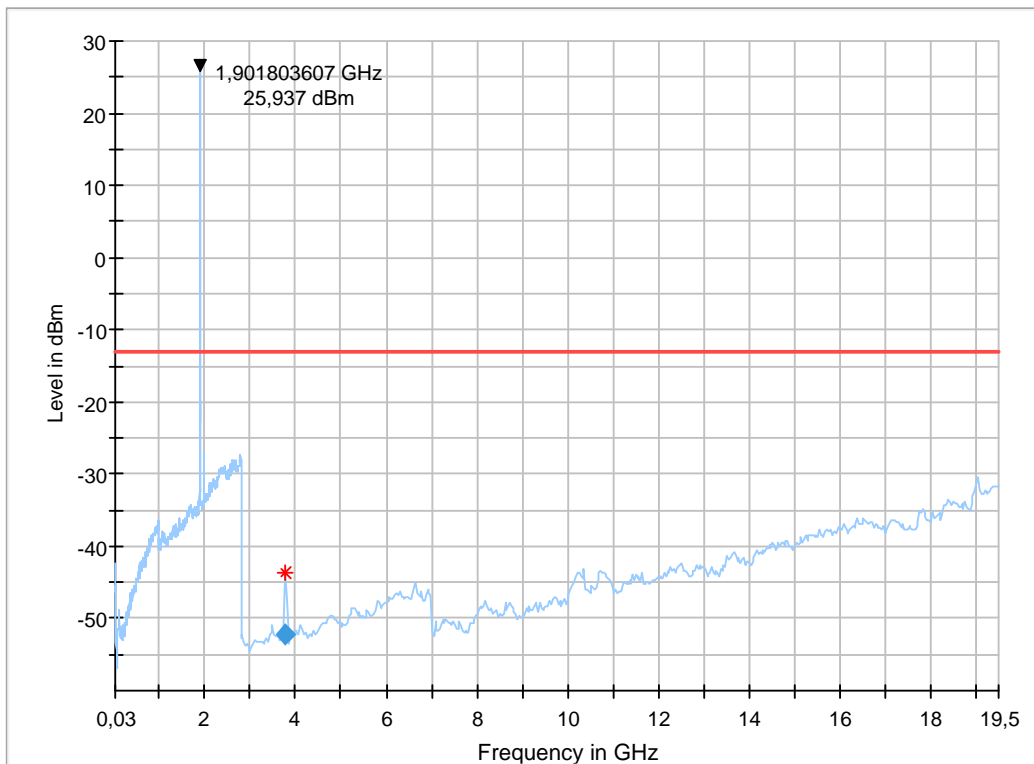
Common Information

| | |
|---------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | UE allocated channel 19150/BW:10/RB:1 low/QPSK |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



Final Result

| Frequency (MHz) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|-------------|-------------|-----------------|-----|---------------|-----------------|------------|
| 3771.272545 | -13.00 | 39.19 | 10000.0 | V | 104.0 | 0.0 | -95.1 |

1.8. Spurious emissions radiated (LTE Band 4)

1.8.1. Magnetic field strength radiated (LTE Band 4)

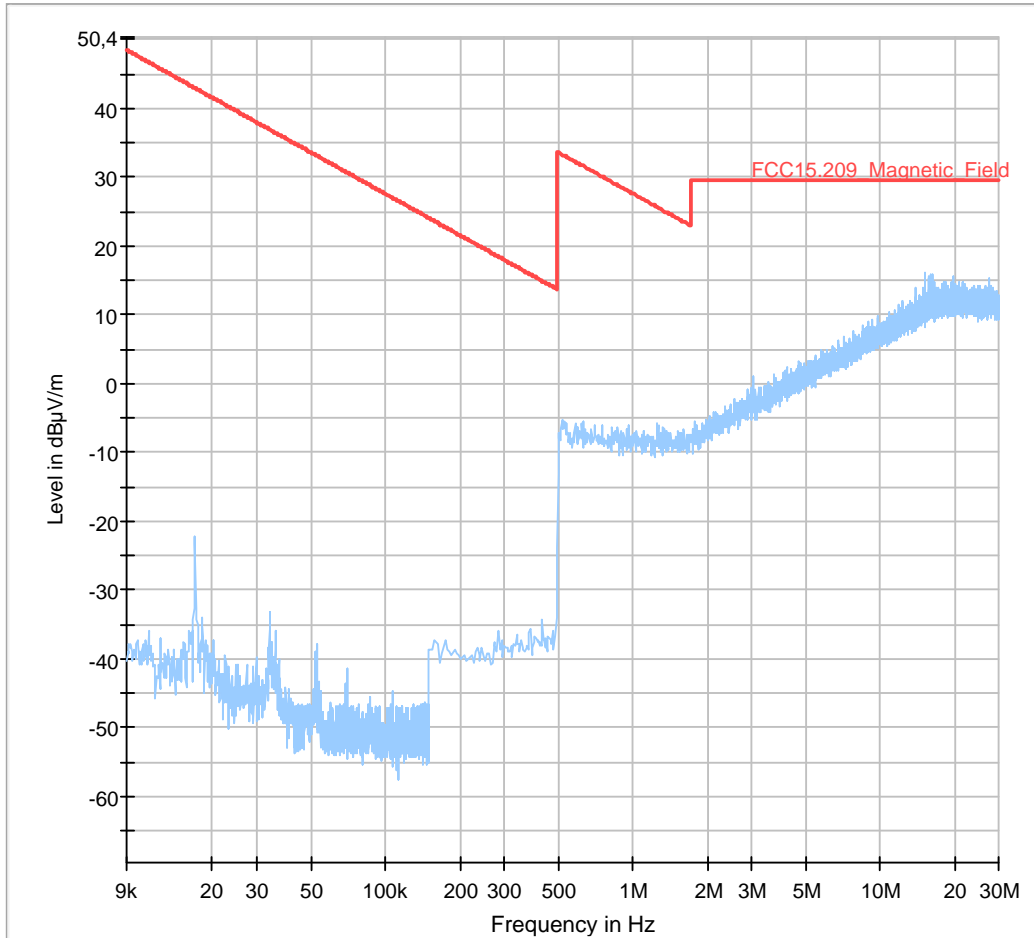
2.40_RSE_R_Ch20050_BW_20_Standing

Common Information

| | |
|--------------------------|---|
| Test Description: | Magnetic Field Strength Measurement related to 30/300 m distance |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Version of testsoftware: | EMC32 V9.25.0 |
| Distance correction: | used accord. table, pls. see test report |
| Technical date: | Please see page 2 for detailed data of measurement setup |
| Rec. antenna (pre-scan): | height 1.00m, parallel and 90° to EUT polarisation |
| Used filter: | bypass |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 |
| Operator: | MBe |
| Power during tests: | 12V DC |
| Comment 1: | EUT standing |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |



2.40b_RSE_R_Ch20050_BW_20_Laying

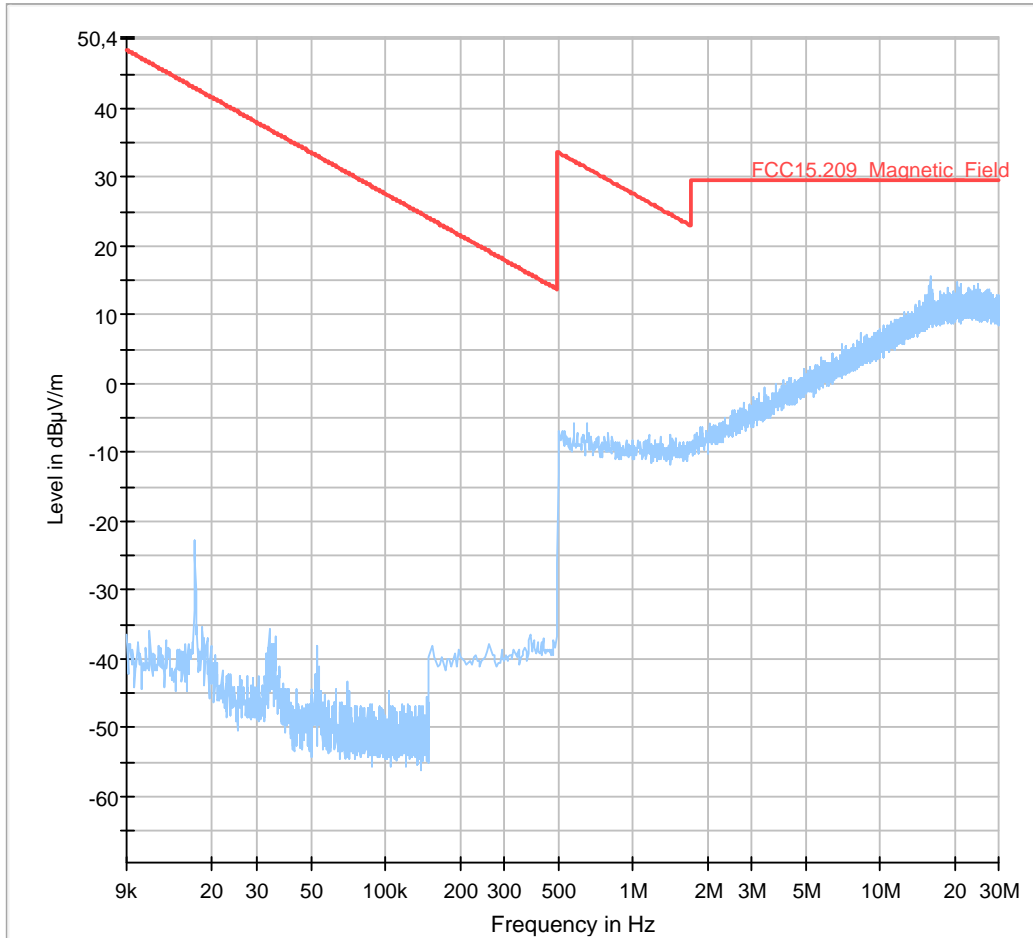
Common Information

| | |
|--------------------------|---|
| Test Description: | Magnetic Field Strength Measurement related to 30/300 m distance |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Version of testsoftware: | EMC32 V9.25.0 |
| Distance correction: | used accord. table, pls. see test report |
| Technical date: | Please see page 2 for detailed data of measurement setup |
| Rec. antenna (pre-scan): | height 1.00m, parallel and 90° to EUT polarisation |
| Used filter: | bypass |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 |

| | |
|---------------------|------------|
| Operator: | MBe |
| Power during tests: | 12V DC |
| Comment 1: | EUT laying |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |



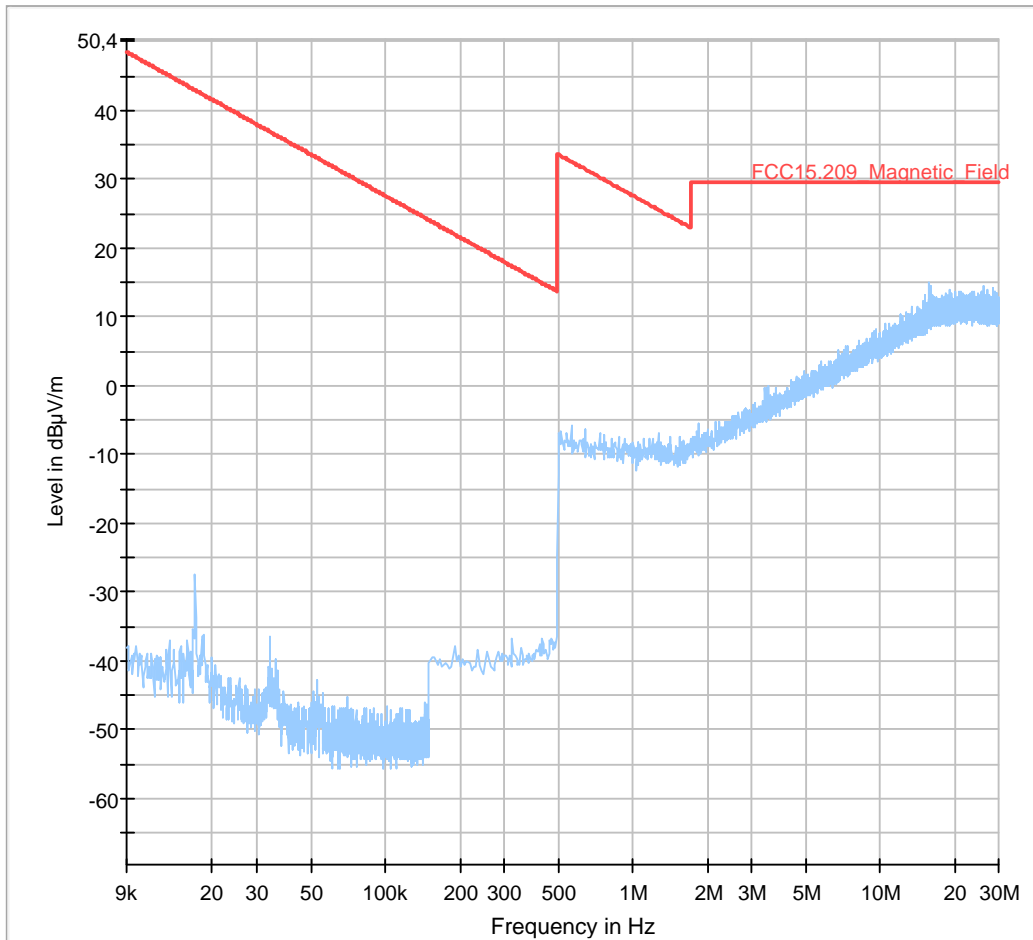
2.41_RSE_R_Ch20175_BW10_Standing

Common Information

| | |
|--------------------------|---|
| Test Description: | Magnetic Field Strength Measurement related to 30/300 m distance |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Version of testsoftware: | EMC32 V9.25.0 |
| Distance correction: | used accord. table, pls. see test report |
| Technical date: | Please see page 2 for detailed data of measurement setup |
| Rec. antenna (pre-scan): | height 1.00m, parallel and 90° to EUT polarisation |
| Used filter: | bypass |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 |
| Operator: | MBe |
| Power during tests: | 12V DC |
| Comment 1: | EUT standing |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |



2.41b_RSE_R_Ch20175_BW10_Laying

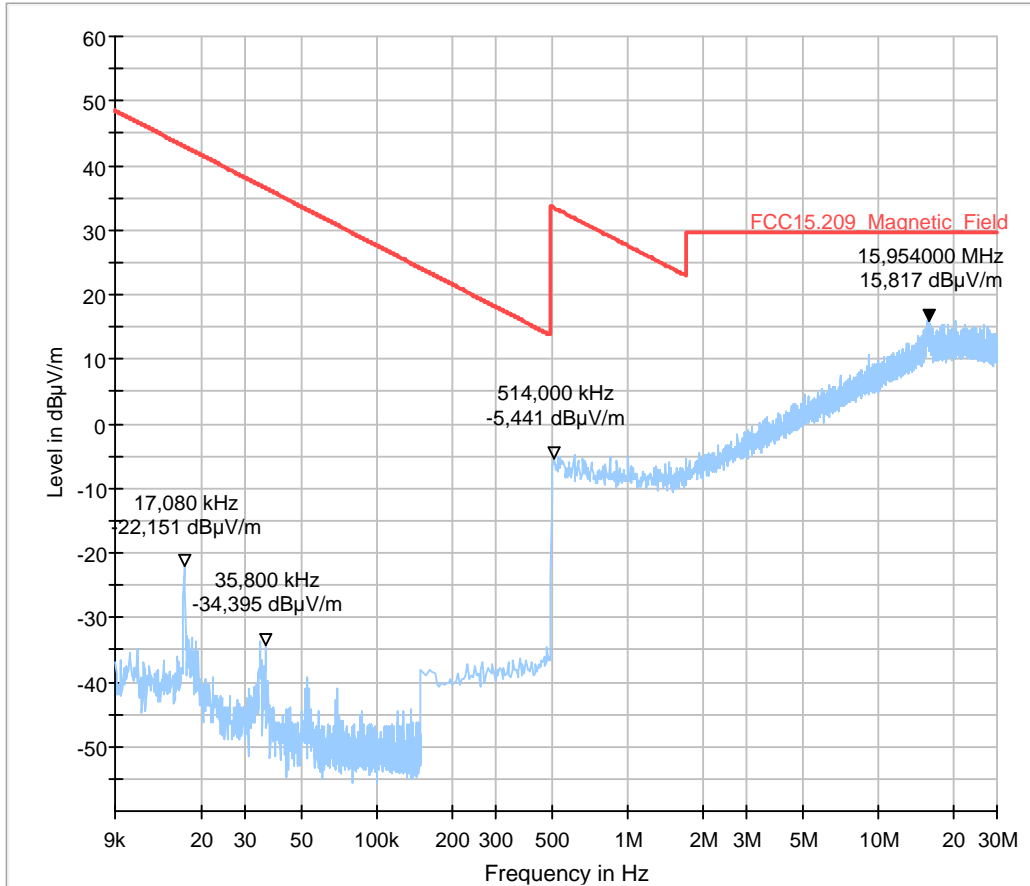
| | |
|--------------------------|---|
| Test Description: | Magnetic Field Strength Measurement related to 30/300 m distance |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Version of testsoftware: | EMC32 V9.25.0 |
| Distance correction: | used accord. table, pls. see test report |
| Technical date: | Please see page 2 for detailed data of measurement setup |
| Rec. antenna (pre-scan): | height 1.00m, parallel and 90° to EUT polarisation |
| Used filter: | bypass |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 |

| | |
|---------------------|------------|
| Operator: | MBe |
| Power during tests: | 12V DC |
| Comment 1: | EUT laying |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | PKD0632AA0 (y) |
| ----- | |
| HW version: | V1231_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



2.42_RSE_R_Ch20350_BW10_Standing

Common Information

| | |
|--------------------------|---|
| Test Description: | Magnetic Field Strength Measurement related to 30/300 m distance |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Version of testsoftware: | EMC32 V9.25.0 |
| Distance correction: | used accord. table, pls. see test report |
| Technical date: | Please see page 2 for detailed data of measurement setup |
| Rec. antenna (pre-scan): | height 1.00m, parallel and 90° to EUT polarisation |
| Used filter: | bypass |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 |

| | |
|---------------------|--------------|
| Operator: | MBe |
| Power during tests: | 12V DC |
| Comment : | EUT standing |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |

Comments: -

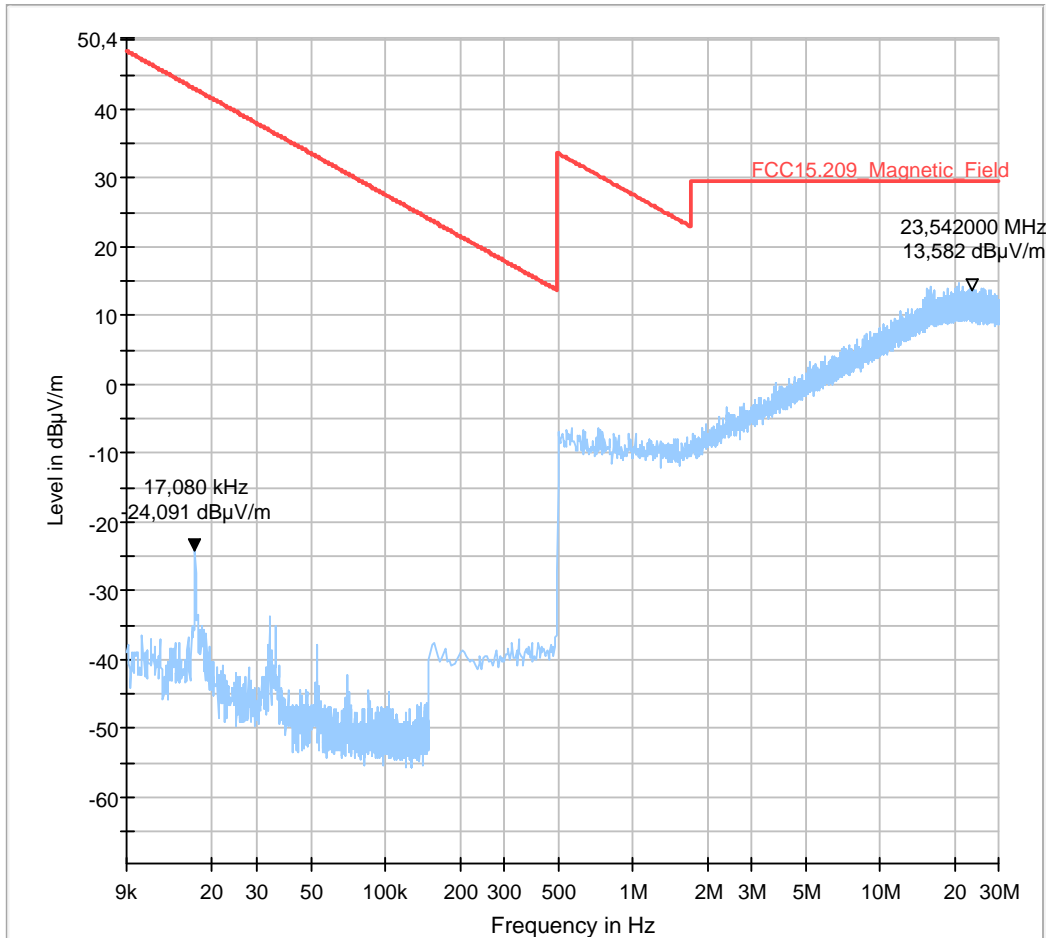


Diagram No. 2.42a_RSE_R_Ch20350_BW_10_Laying

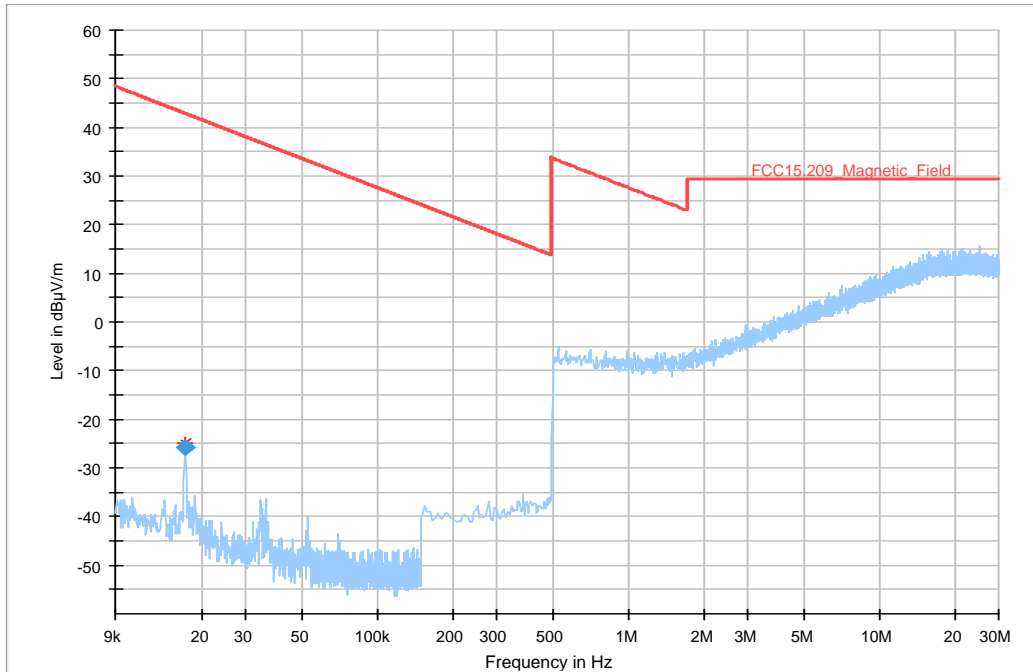
| | |
|--------------------------|---|
| Test description: | Date: 11.04.2017 Page 1 of 2 |
| Test site and distance: | Magnetic Field Strength Measurement related to 30/300 m distance |
| Version of Testsoftware: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Distance correction: | EMC32 V9.25.0 |
| Technical Data: | used accord. table, pls. see test report |
| Rec. antenna (pre-scan): | Please see page 2 for detailed data of measurement setup |
| Used filter: | bypass |
| Test specification: | height 1.00 m, parallel and 90° to EUT polarisation |
| | FCC 15.205 § 15.209; RSS-Gen: Issue 4 |
| Operator: | MAh SRa |
| Operating conditions: | LTE Band4 Ch:20350, BW:10MHz, RB: 1 high, QPSK |
| Power during tests: | 12V DC |
| Comment 1: | EUT laying |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |

Power Supply: 12VDC
 Comments: -

Full Spectrum



Final Result

| Frequency (MHz) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 0.017080 | -25.86 | 42.95 | 68.81 | 1000.0 | 0.200 | 100.0 | V | 6.0 | -58.7 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Comment |
|-----------------|-----------------------|
| 0.017080 | 09:51:27 - 11.04.2017 |

1.8.2. Emissions above 30MHz (LTE Band 4)

8.40_RSE_R_Ch20050_BW_20_Standing

Common Information

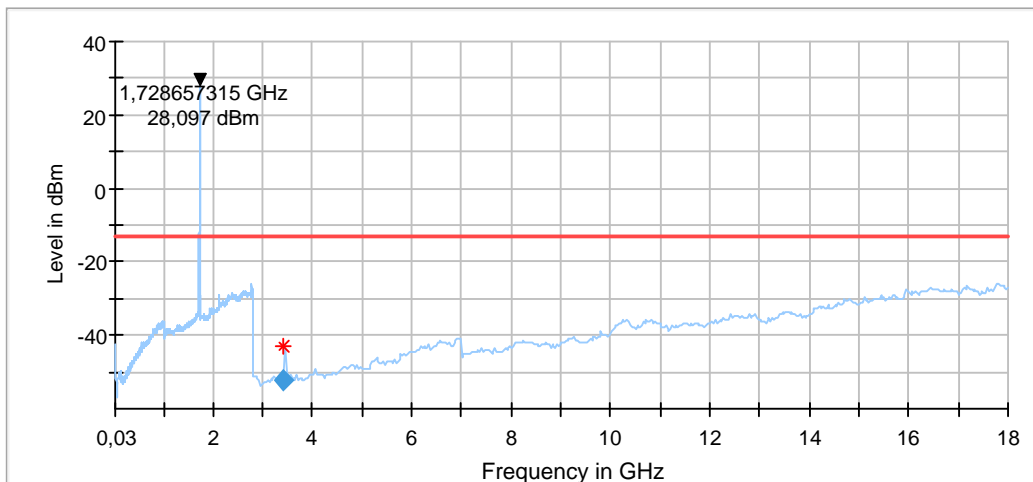
Test Description: Radiated Spurious Emissions LTE Band 4
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 24
 Operating Mode: UE allocated channel 20050/ BW:20 / RB:1high / Position:standing
 Environmental Conditions: Humidity: 35%rH; Temperature: 20°C
 Operator: RIs
 Remarks: EUT - standing position

EUT Information

Manufacturer: peiker acoustic GmbH & Co. KG
 EUT: V1231-0

 HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



Final Result

| Frequency (MHz) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) | Comment |
|-----------------|-------------|-------------|-----------------|-------------|-----|---------------|-----------------|------------|-----------------------|
| 3428.587175 | 13.00 | 39.33 | 10000.0 | 155.0 | H | 43.0 | 0.0 | -94.9 | 18:19:58 - 01.04.2017 |

8.40b_RSE_R_Ch20050_BW_20_Laying

Common Information

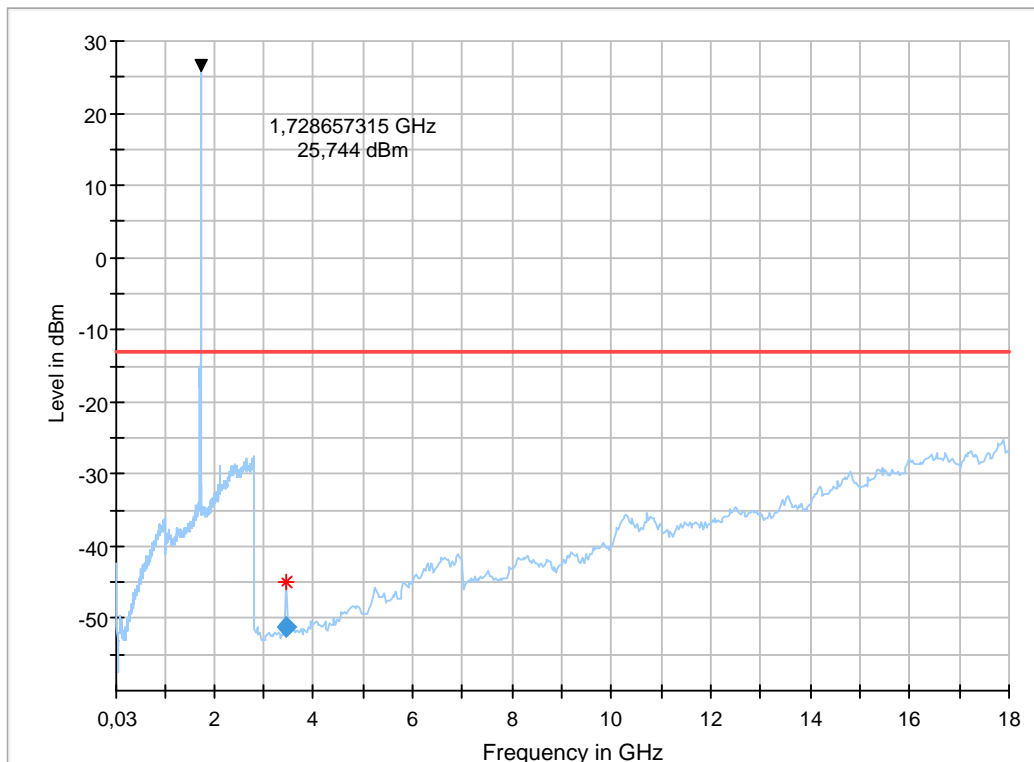
Test Description: Radiated Spurious Emissions LTE Band 4
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 27
 Operating Mode: UE allocated channel 20050/BW:20/RB:1 high/QPSK
 Environmental Conditions: Humidity: 51%rH; Temperature: 20°C
 Operator: SLo
 Comment: EUT - laying position

EUT Information

Manufacturer: peiker acoustic GmbH & Co. KG
 EUT: V1231-0

 HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



Final_Result

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-----------------|-----------------|-------------|-----|---------------|-----------------|------------|
| 3447.344690 | -51.25 | -13.00 | 38.25 | 10000.0 | 1000.000 | 155.0 | V | -8.0 | 0.0 | -94.5 |

(continuation of the "Final_Result" table from column 17 ...)

| Frequency (MHz) | Comment |
|-----------------|---------|
| | |

3447.344690 | 13:13:15 - 02.04.2017

8.41_RSE_R_Ch20175_BW10_Standing

Common Information

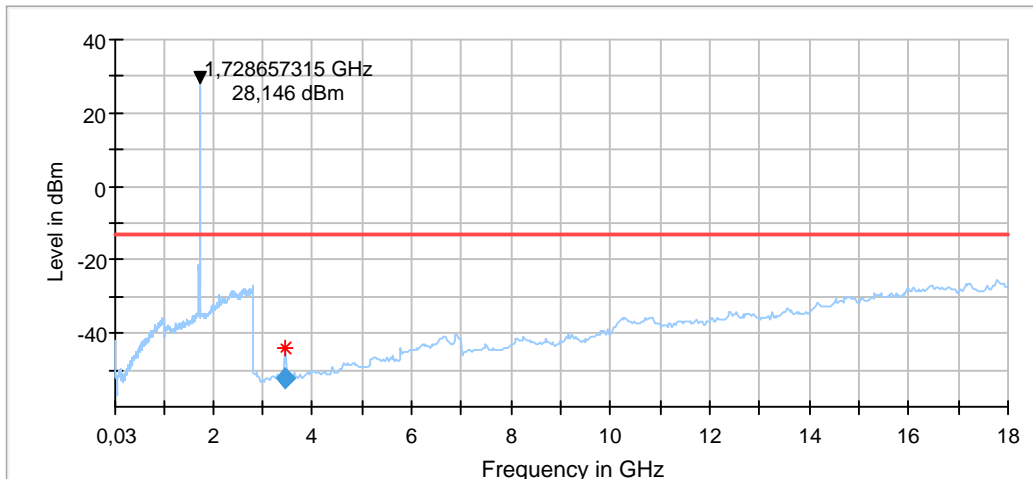
Test Description: Radiated Spurious Emissions LTE Band 4
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 24
 Operating Mode: UE allocated channel 20175/ BW:10 / RB:1low / Position:standing
 Environmental Conditions: Humidity: 35%rH; Temperature: 20°C
 Operator: RIs
 Remarks: EUT - standing position

EUT Information

Manufacturer: peiker acoustic GmbH & Co. KG
 EUT: V1231-0

 HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



Final Result

| Frequency (MHz) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) | Comment |
|-----------------|-------------|-------------|-----------------|-------------|-----|---------------|-----------------|------------|-----------------------|
| 3452.034068 | 13.00 | 39.10 | 10000.0 | 155.0 | H | 47.0 | 0.0 | -94.4 | 17:44:36 - 01.04.2017 |

8.41b_RSE_R_Ch20175_BW10_Laying

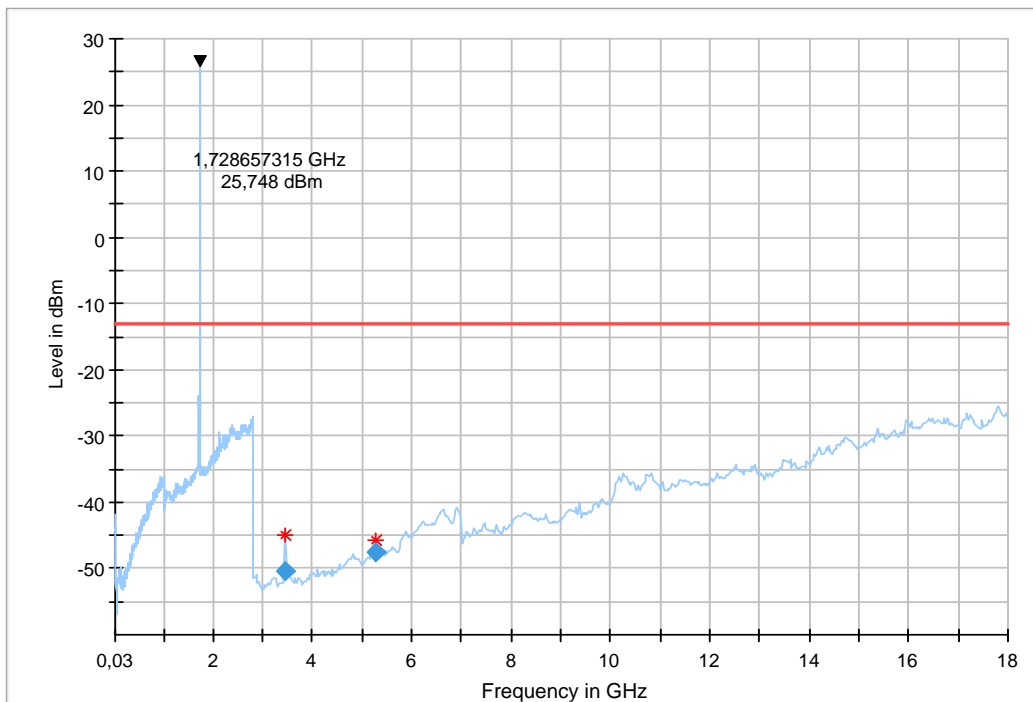
Common Information

| | |
|---------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27 |
| Operating Mode: | UE allocated channel 20175/BW:10/RB:1 low/QPSK |
| Environmental Conditions: | Humidity: 51%rH; Temperature: 20°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



Final Result

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-----------------|-----------------|-------------|-----|---------------|-----------------|------------|
| 3454.679359 | -50.30 | -13.00 | 37.30 | 10000.0 | 1000.000 | 155.0 | V | -8.0 | 0.0 | -94.3 |
| 5276.503006 | -47.57 | -13.00 | 34.57 | 10000.0 | 1000.000 | 155.0 | H | 238.0 | 0.0 | -88.6 |

(continuation of the "Final_Result" table from column 17 ...)

| Frequency (MHz) | Comment |
|-----------------|-----------------------|
| 3454.679359 | 14:01:05 - 02.04.2017 |
| 5276.503006 | 13:56:13 - 02.04.2017 |

8.42_RSE_R_Ch20350_BW10_Standing

Common Information

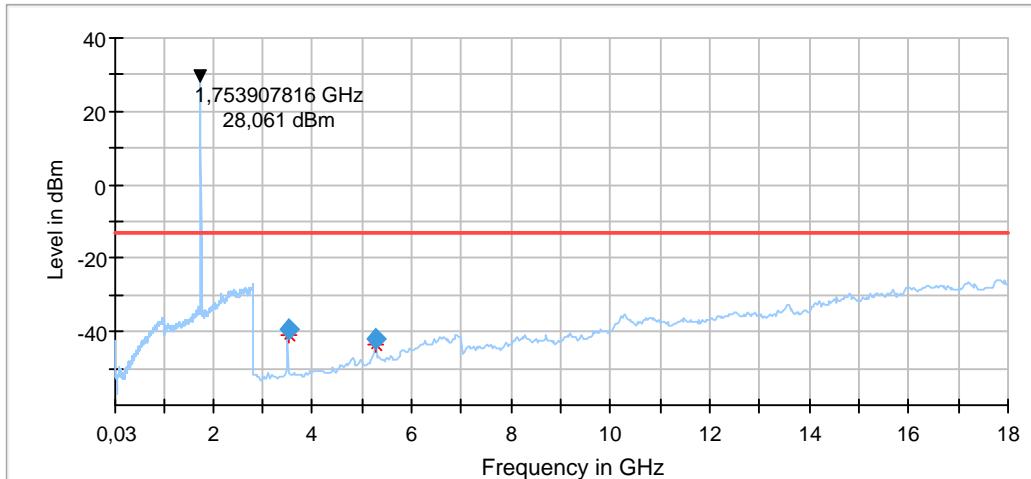
Test Description: Radiated Spurious Emissions LTE Band 4
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 24
 Operating Mode: UE allocated channel 20350/ BW:10 / RB:1high / Position:standing
 Environmental Conditions: Humidity: 35%rH; Temperature: 20°C
 Operator: RIs
 Remarks: EUT - standing position

EUT Information

Manufacturer: peiker acoustic GmbH & Co. KG
 EUT: V1231-0

 HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



Final Result

| Frequency (MHz) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) | Comment |
|-----------------|-------------|-------------|-----------------|-------------|-----|---------------|-----------------|------------|-----------------------|
| 3508.807616 | 13.00 | 26.47 | 10000.0 | 155.0 | H | 45.0 | 0.0 | -93.5 | 17:01:22 - 01.04.2017 |
| 5263.276553 | 13.00 | 29.17 | 10000.0 | 155.0 | H | 314.0 | 0.0 | -88.5 | 17:03:13 - 01.04.2017 |

8.42b_RSE_R_Ch20350_BW10_Laying

Common Information

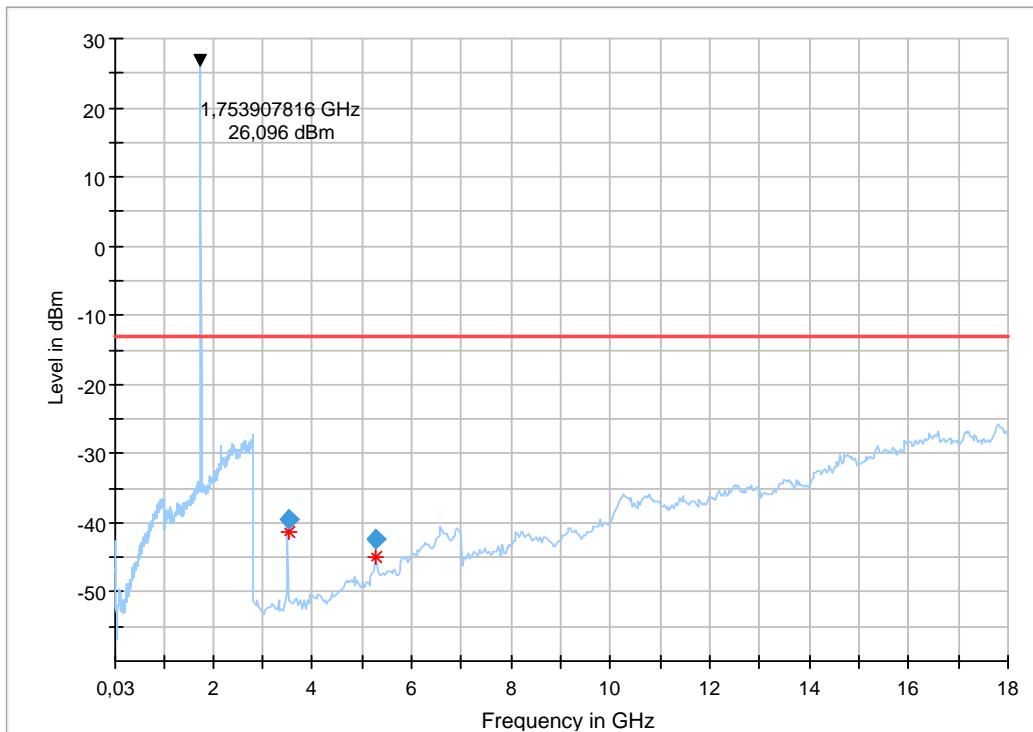
Test Description: Radiated Spurious Emissions LTE Band 4
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 27
 Operating Mode: UE allocated channel 20350/BW:10/RB:1 high/QPSK
 Environmental Conditions: Humidity: 51%rH; Temperature: 20°C
 Operator: SLo
 Comment: EUT - laying position

EUT Information

Manufacturer: peiker acustic GmbH & Co. KG
 EUT: V1231-0

 HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



Final Result

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-----------------|-----------------|-------------|-----|---------------|-----------------|------------|
| 3508.747496 | -39.50 | -13.00 | 26.50 | 10000.0 | 1000.000 | 155.0 | V | 1.0 | 0.0 | -93.5 |
| 5263.216433 | -42.49 | -13.00 | 29.49 | 10000.0 | 1000.000 | 155.0 | V | 176.0 | 0.0 | -88.5 |

(continuation of the "Final_Result" table from column 17 ...)

| Frequency (MHz) | Comment |
|-----------------|-----------------------|
| 3508.747496 | 14:37:56 - 02.04.2017 |
| 5263.216433 | 14:43:44 - 02.04.2017 |

1.9. Spurious emissions radiated (LTE Band 5)

1.9.1. Magnetic field strength radiated (LTE Band 5)

Diagram No. 2.50a_RSE_R_Ch20425_BW_5

| | | |
|--------------------------|---|-------------|
| Date: | 11.04.2017 | Page 1 of 2 |
| Test description: | Magnetic Field Strength Measurement related to 30/300 m distance | |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance | |
| Version of Testsoftware: | EMC32 V9.25.0 | |
| Distance correction: | used accord. table, pls. see test report | |
| Technical Data: | Please see page 2 for detailed data of measurement setup | |
| Rec. antenna (pre-scan): | height 1.00 m, parallel and 90° to EUT polarisation | |
| Used filter: | bypass | |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 | |
| Operator: | MAh RSa | |
| Operating conditions: | LTE Band5 Ch:20425, BW:5MHz, RB: 1 high, QPSK | |
| Power during tests: | 12V DC | |
| Comment 1: | EUT laying | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum

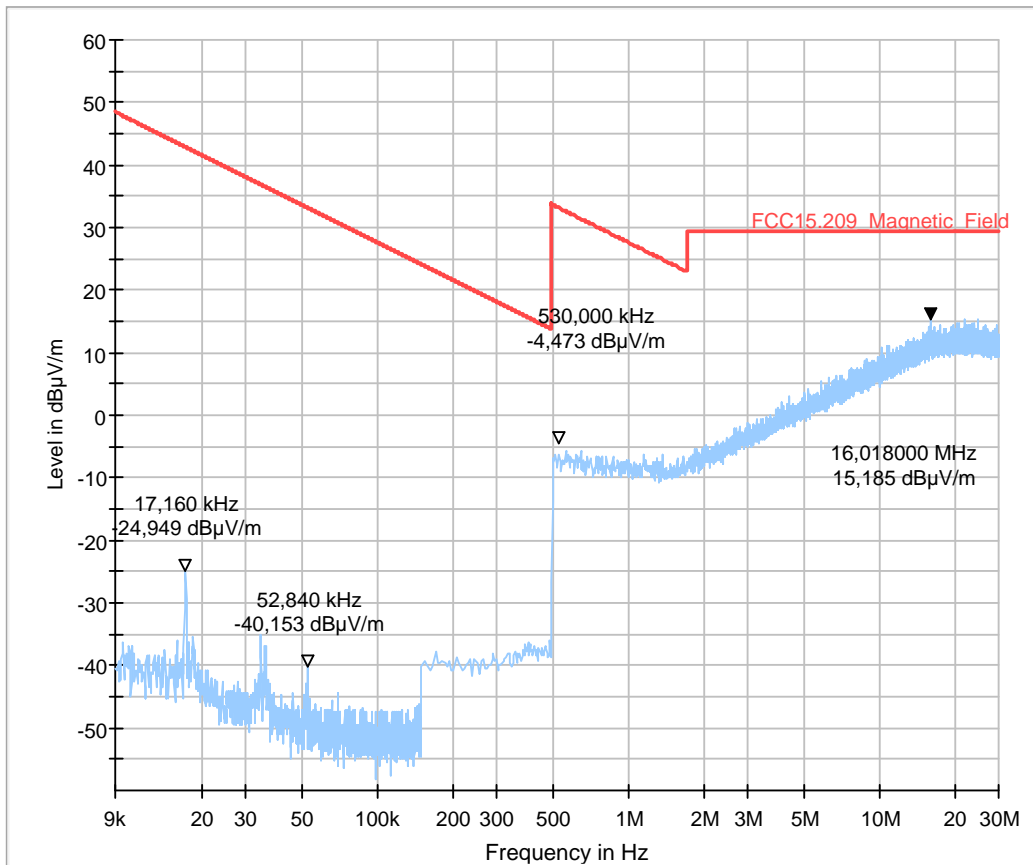


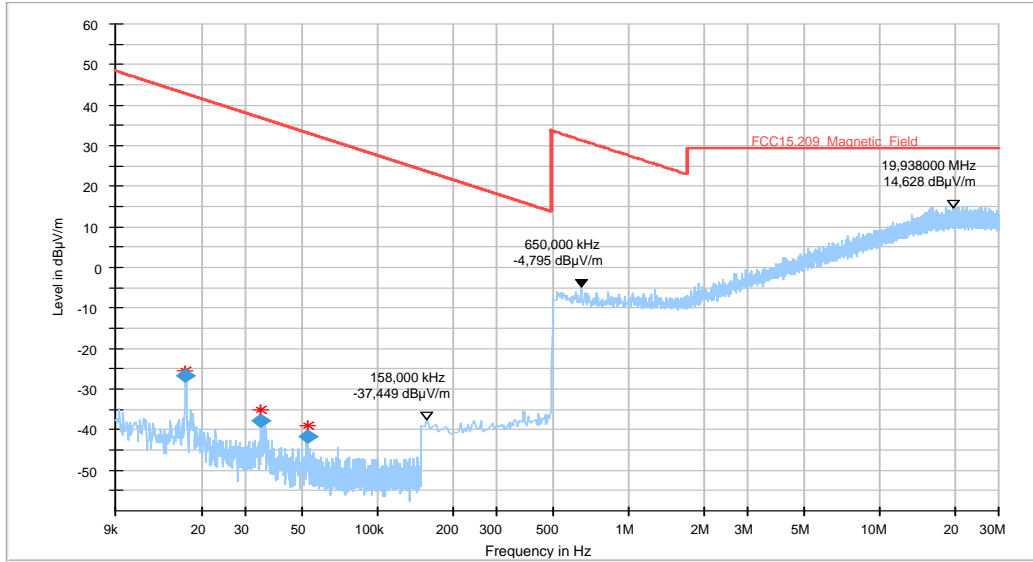
Diagram No. 2.50b_RSE_R_Ch20425_BW_5

| | |
|--------------------------|---|
| Test description: | Date: 10.04.2017 Page 1 of 2 |
| Test site and distance: | Magnetic Field Strength Measurement related to 30/300 m distance |
| Version of Testsoftware: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Distance correction: | EMC32 V9.25.0 |
| Technical Data: | used accord. table, pls. see test report |
| Rec. antenna (pre-scan): | Please see page 2 for detailed data of measurement setup |
| Used filter: | height 1.00 m, parallel and 90° to EUT polarisation |
| Test specification: | bypass |
| | FCC 15.205 § 15.209; RSS-Gen: Issue 4 |
| Operator: | Klv |
| Operating conditions: | LTE Band5 Ch:20425, BW:5MHz, RB: 1 High, QPSK |
| Power during tests: | 12V DC |
| Comment 1: | EUT standing |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



Final_Result

| Frequency (MHz) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 0.017160 | -26.57 | 42.91 | 69.47 | 1000.0 | 0.200 | 100.0 | V | 34.0 | -58.7 |
| 0.034360 | -37.90 | 36.88 | 74.77 | 1000.0 | 0.200 | 100.0 | V | 297.0 | -59.5 |
| 0.052760 | -41.65 | 33.15 | 74.81 | 1000.0 | 0.200 | 100.0 | V | 16.0 | -59.7 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Comment |
|-----------------|-----------------------|
| 0.017160 | 00:25:31 - 11.04.2017 |
| 0.034360 | 00:18:36 - 11.04.2017 |
| 0.052760 | 00:14:01 - 11.04.2017 |

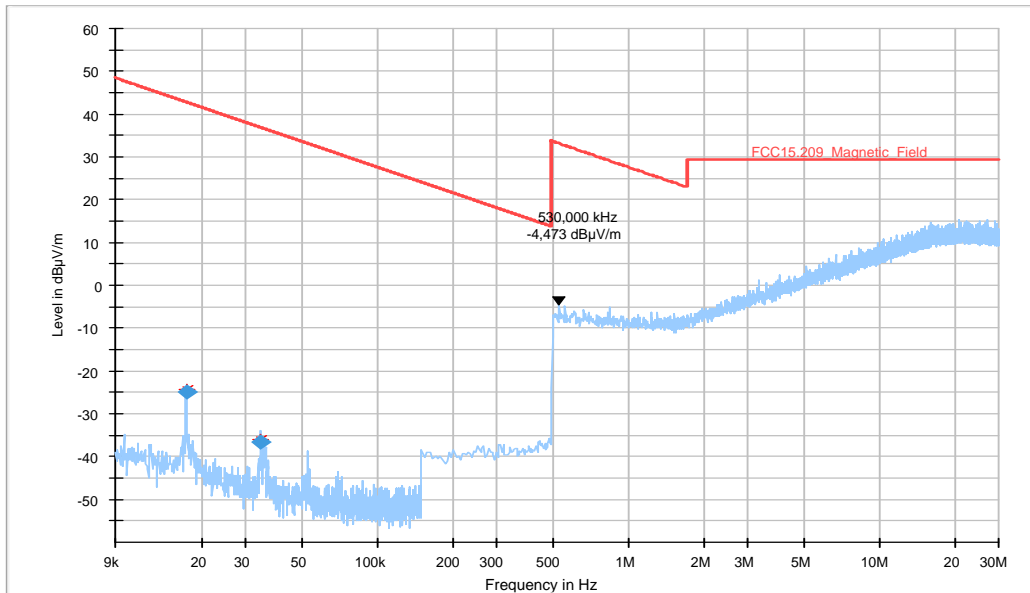
Diagram No. 2.51a_RSE_R_Ch20525_BW_5

| | |
|--------------------------|---|
| Date: | 11.04.2017 Page 1 of 2 |
| Test description: | Magnetic Field Strength Measurement related to 30/300 m distance |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Version of Testsoftware: | EMC32 V9.25.0 |
| Distance correction: | used accord. table, pls. see test report |
| Technical Data: | Please see page 2 for detailed data of measurement setup |
| Rec. antenna (pre-scan): | height 1.00 m, parallel and 90° to EUT polarisation |
| Used filter: | bypass |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 |
| | |
| Operator: | Mah |
| Operating conditions: | LTE Band5 Ch:20525, BW:5MHz, RB: 1 Low, QPSK |
| Power during tests: | 12V DC |
| Comment 1: | EUT laying |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



Final Result

| Frequency (MHz) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 0.017240 | -24.88 | 42.87 | 67.74 | 1000.0 | 0.200 | 100.0 | V | 237.0 | -58.7 |
| 0.034440 | -36.61 | 36.86 | 73.46 | 1000.0 | 0.200 | 100.0 | V | 59.0 | -59.5 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Comment |
|-----------------|-----------------------|
| 0.017240 | 08:32:48 - 11.04.2017 |
| 0.034440 | 08:38:57 - 11.04.2017 |

Diagram No. 2.51b_RSE_R_Ch20525_BW_5

Date: 11.04.2017 Page 1 of 2

Test description: Magnetic Field Strength Measurement related to 30/300 m distance
 Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
 Version of Testsoftware: EMC32 V9.25.0
 Distance correction: used accord. table, pls. see test report
 Technical Data: Please see page 2 for detailed data of measurement setup
 Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation
 Used filter: bypass
 Test specification: FCC 15.205 § 15.209; RSS-Gen: Issue 4

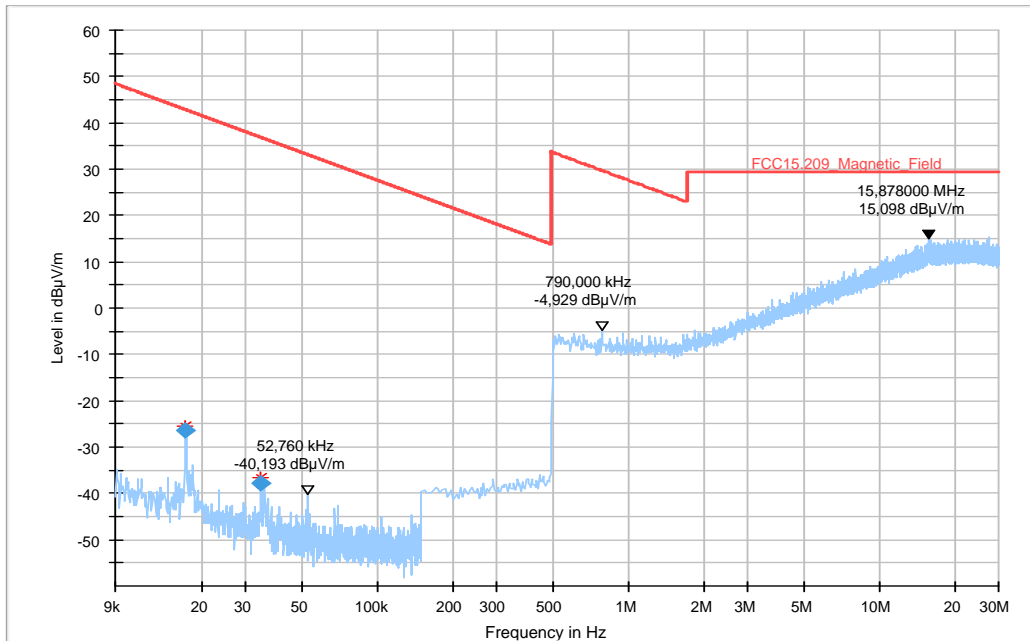
Operator: Klv
 Operating conditions: LTE Band5 Ch:20525, BW:5MHz, RB: 1 Low, QPSK
 Power during tests: 12V DC
 Comment 1: EUT standing

EUT Information

Manufacturer: peiker acoustic GmbH & Co. KG
 EUT: V1231-0

 HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



Final Result

| Frequency (MHz) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 0.017160 | -26.46 | 42.91 | 69.36 | 1000.0 | 0.200 | 100.0 | V | 54.0 | -58.7 |
| 0.034360 | -37.80 | 36.88 | 74.67 | 1000.0 | 0.200 | 100.0 | V | 165.0 | -59.5 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Comment |
|-----------------|-----------------------|
| 0.017160 | 01:04:40 - 11.04.2017 |
| 0.034360 | 00:58:45 - 11.04.2017 |

Diagram No. 2.52a_RSE_R_Ch20643_BW_1_4

| | | |
|--------------------------|---|-------------|
| Date: | 11.04.2017 | Page 1 of 2 |
| Test description: | Magnetic Field Strength Measurement related to 30/300 m distance | |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance | |
| Version of Testsoftware: | EMC32 V9.25.0 | |
| Distance correction: | used accord. table, pls. see test report | |
| Technical Data: | Please see page 2 for detailed data of measurement setup | |
| Rec. antenna (pre-scan): | height 1.00 m, parallel and 90° to EUT polarisation | |
| Used filter: | bypass | |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 | |
| Operator: | Klv | |
| Operating conditions: | LTE Band5 Ch:20643, BW:1.4MHz, RB: 1 High, QPSK | |
| Power during tests: | 12V DC | |
| Comment 1: | EUT laying | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum

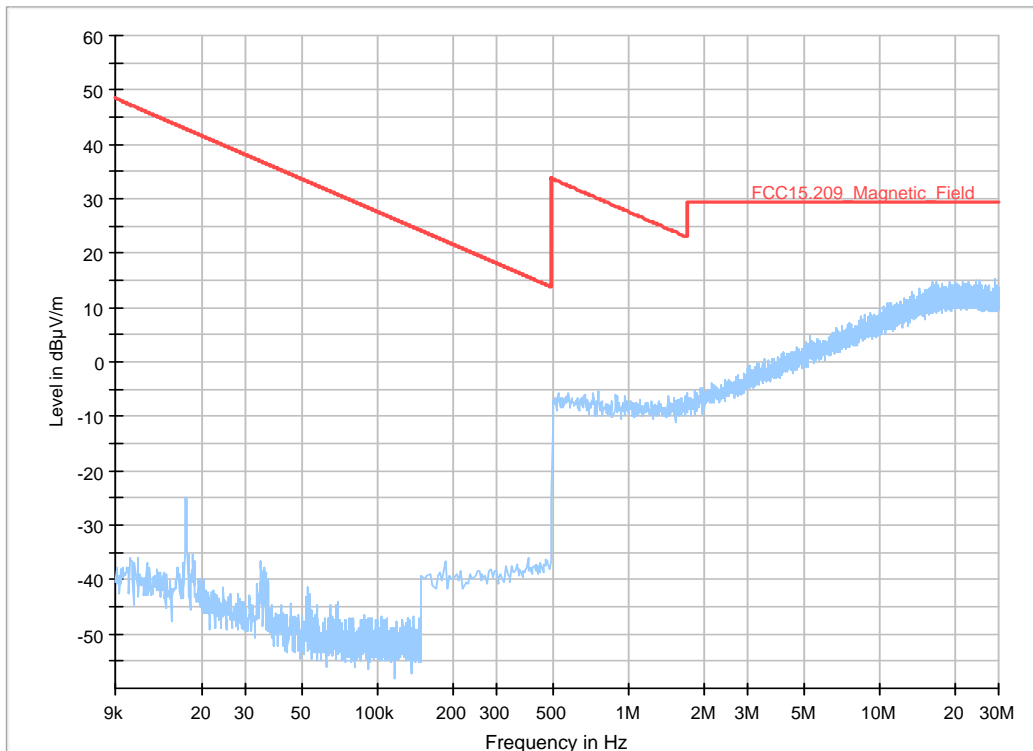
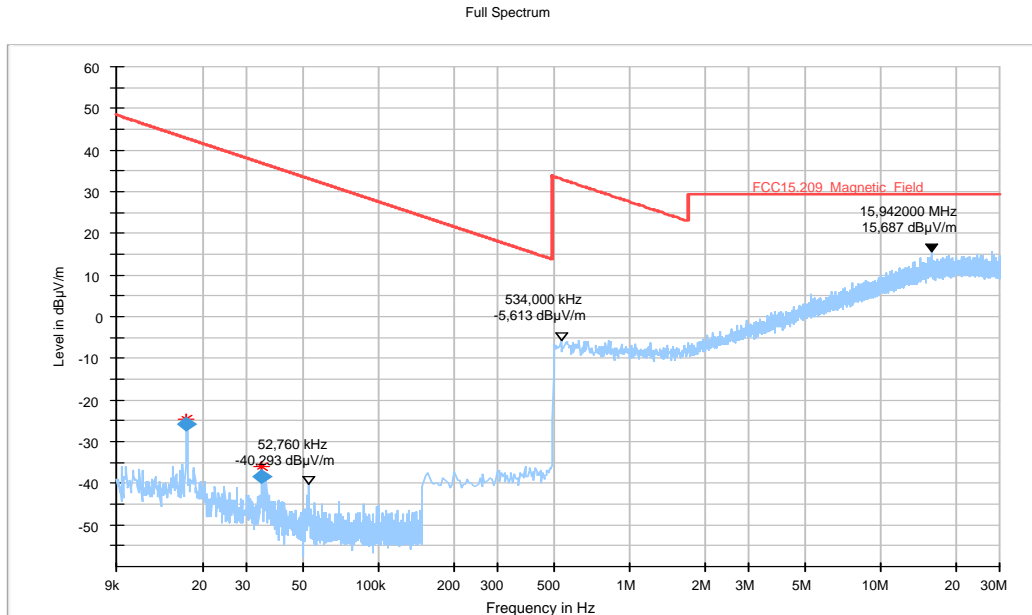


Diagram No. 2.52b_RSE_R_Ch20643_BW_1_4

| | |
|--------------------------|---|
| Date: | 11.04.2017 Page 1 of 2 |
| Test description: | Magnetic Field Strength Measurement related to 30/300 m distance |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Version of Testsoftware: | EMC32 V9.25.0 |
| Distance correction: | used accord. table, pls. see test report |
| Technical Data: | Please see page 2 for detailed data of measurement setup |
| Rec. antenna (pre-scan): | height 1.00 m, parallel and 90° to EUT polarisation |
| Used filter: | bypass |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 |
| Operator: | Klv |
| Operating conditions: | LTE Band5 Ch:20643, BW:1.4MHz, RB: 1 High, QPSK |
| Power during tests: | 12V DC |
| Comment 1: | EUT standing |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |



Final Result

| Frequency (MHz) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 0.017160 | -25.71 | 42.91 | 68.61 | 1000.0 | 0.200 | 100.0 | V | 107.0 | -58.7 |
| 0.034280 | -38.49 | 36.90 | 75.38 | 1000.0 | 0.200 | 100.0 | V | 156.0 | -59.5 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Comment |
|-----------------|-----------------------|
| 0.017160 | 01:42:33 - 11.04.2017 |
| 0.034280 | 01:46:35 - 11.04.2017 |

1.9.2. Emissions above 30MHz (LTE Band 5)

8.50a_RSE_R_Ch20425_BW_5_Standing

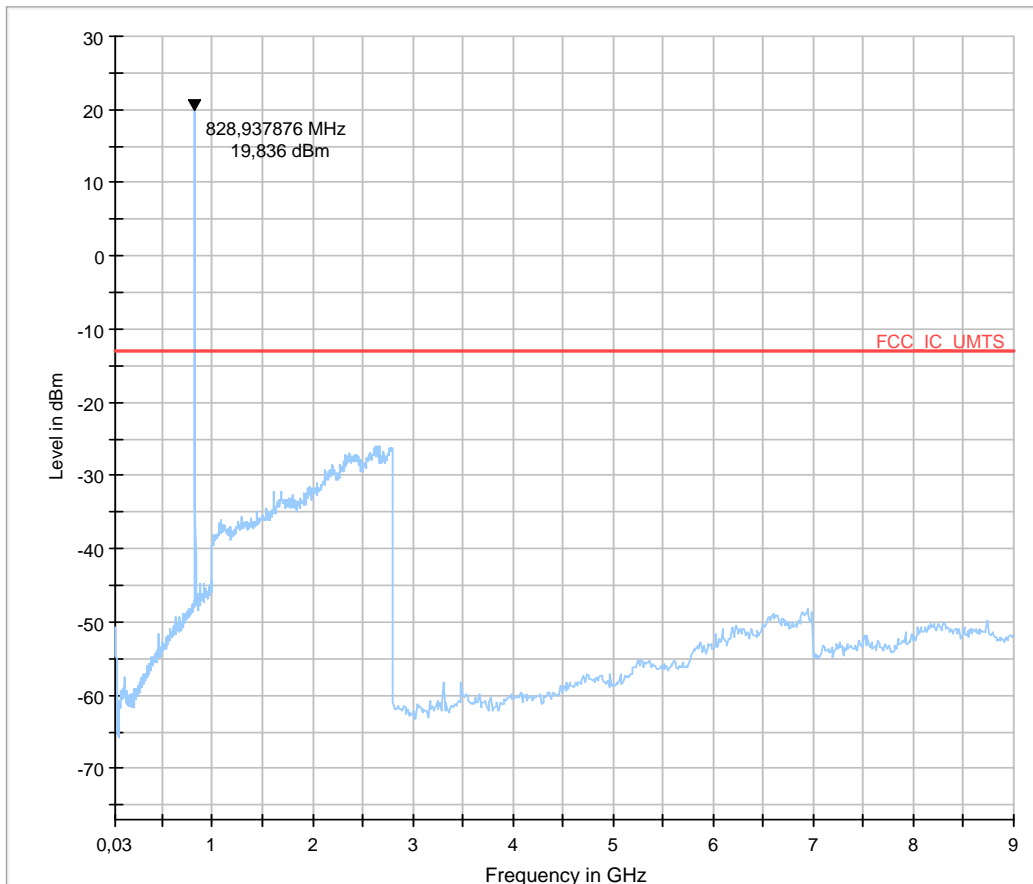
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 5 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20425/ BW:5 / RB:1 / Position:standing |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RLS |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



8.50b_RSE_R_Ch20425_BW_5_Laying

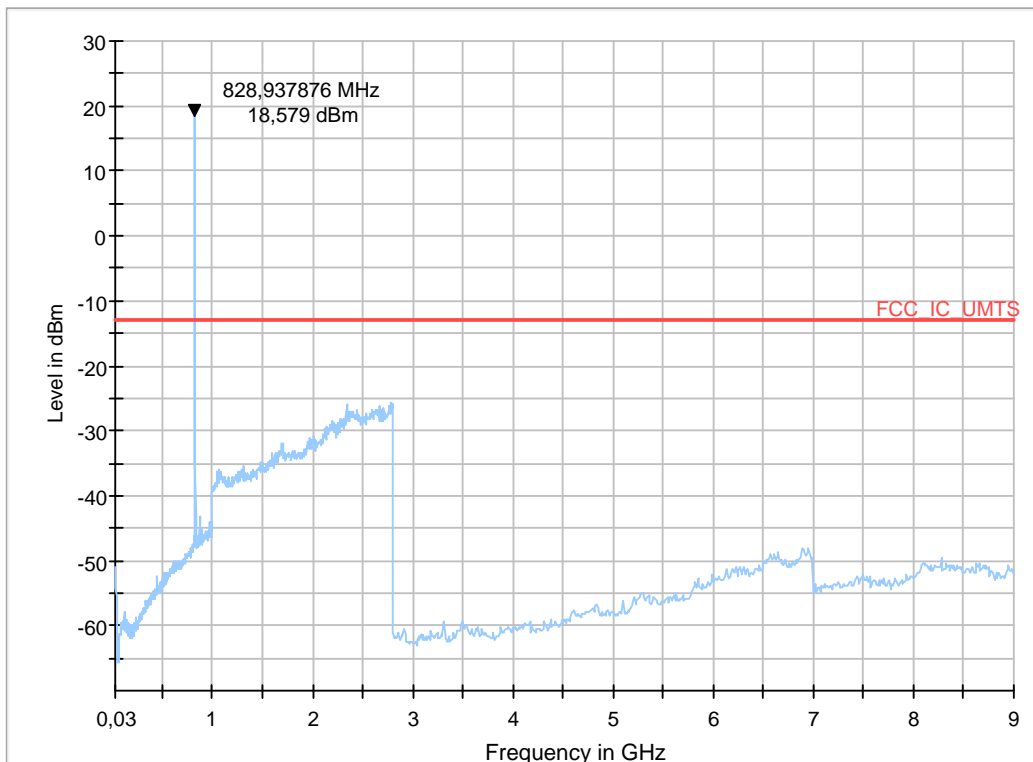
Common Information

| | |
|---------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 5 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20425/BW:5/RB:1 high/QPSK |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



8.51a_RSE_R_Ch20525_BW5_Standing

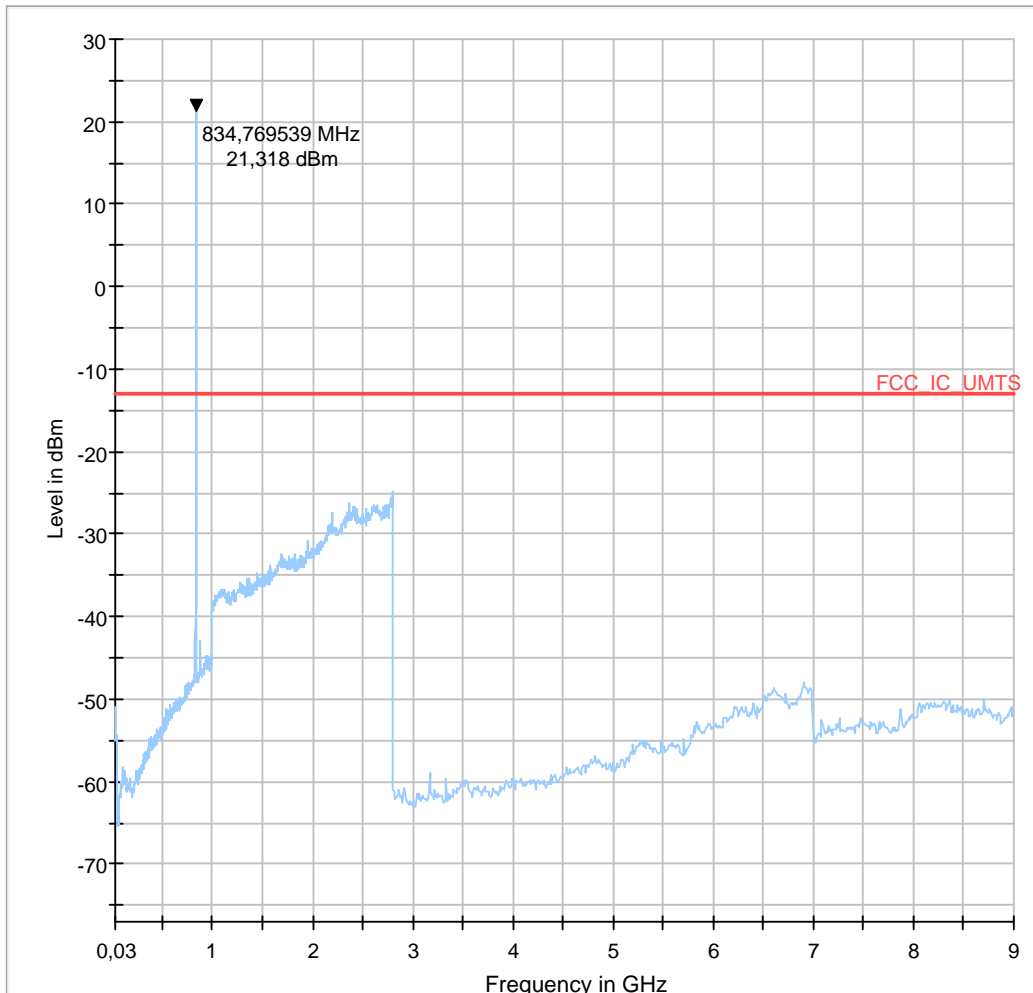
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 5 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20525/ BW:5 / RB:1 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RIs |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



8.51b_RSE_R_Ch20525_BW5_Laying

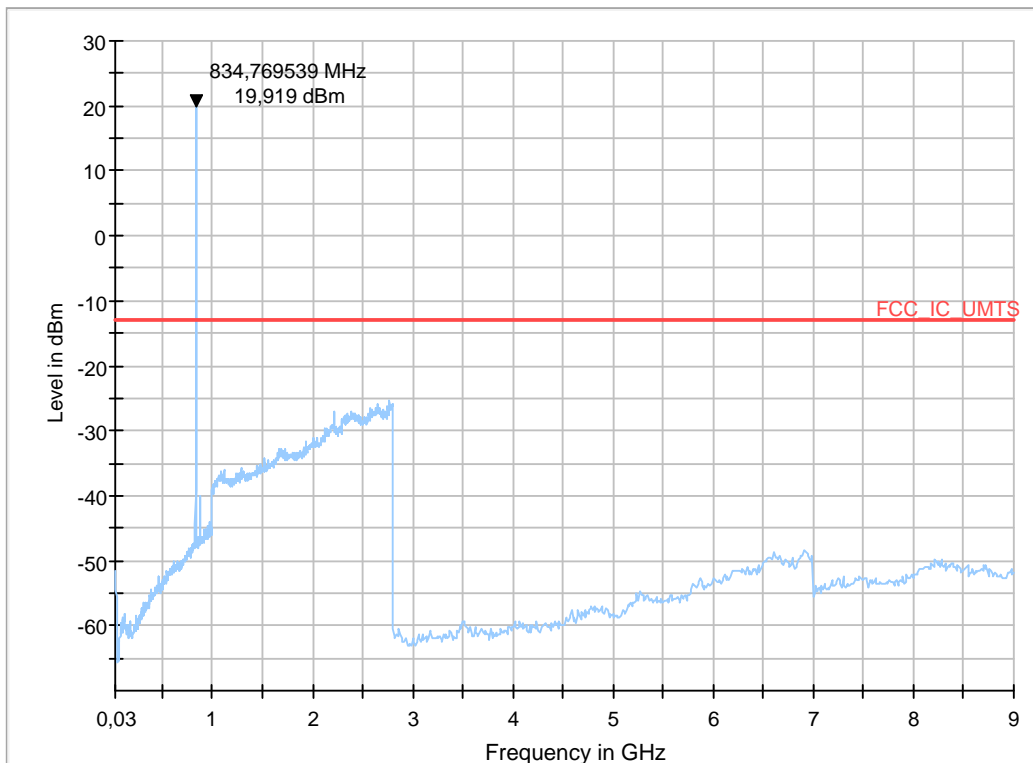
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 5 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20525/BW:5/RB:1 low/QPSK |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



8.52a_RSE_R_Ch20643_BW1_4_Standing

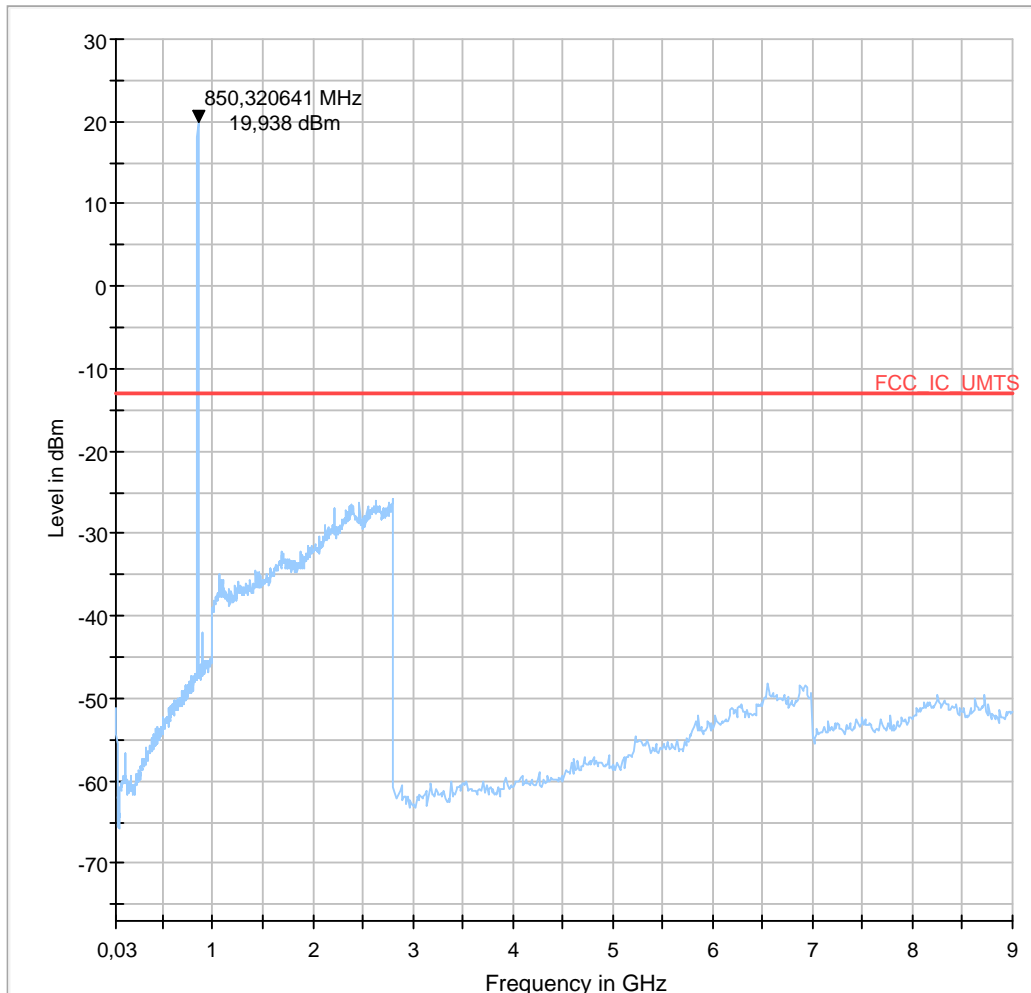
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 5 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20643/ BW:1,4 / RB:1 / Position:standing |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RIs |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



8.52b_RSE_R_Ch20643_BW1_4_Laying

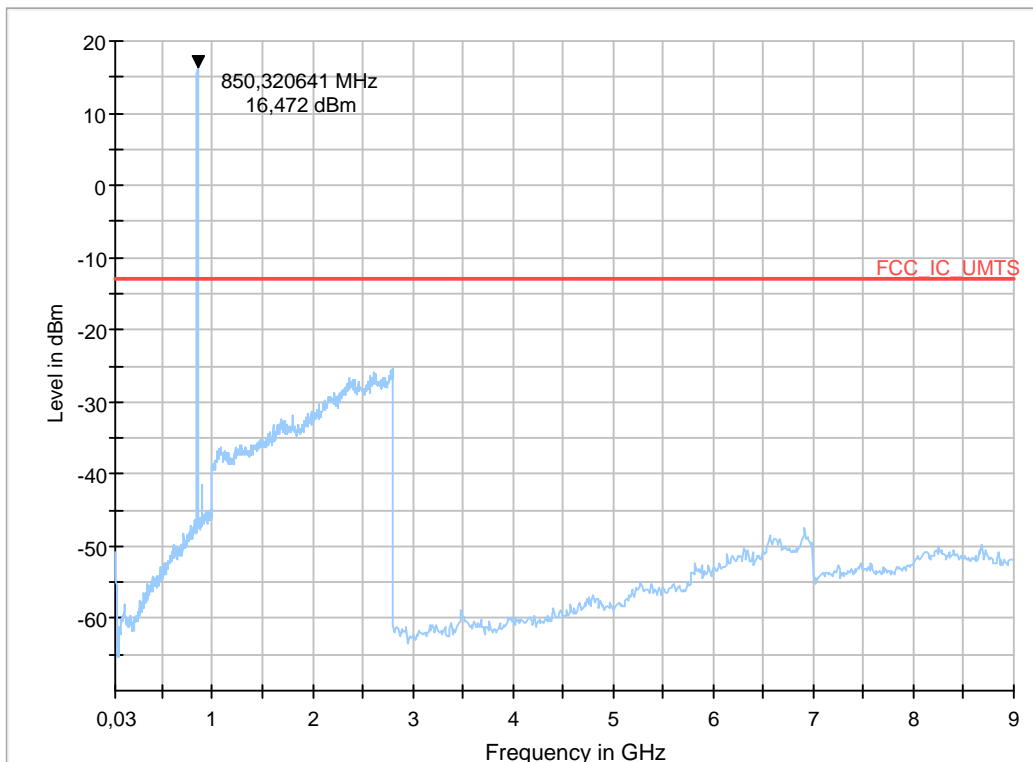
Common Information

| | |
|---------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 5 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20643/BW:1,4/RB:1 high/QPSK |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.10. Spurious emissions radiated (LTE Band 12)

1.10.1. Magnetic field strength radiated (LTE Band 12)

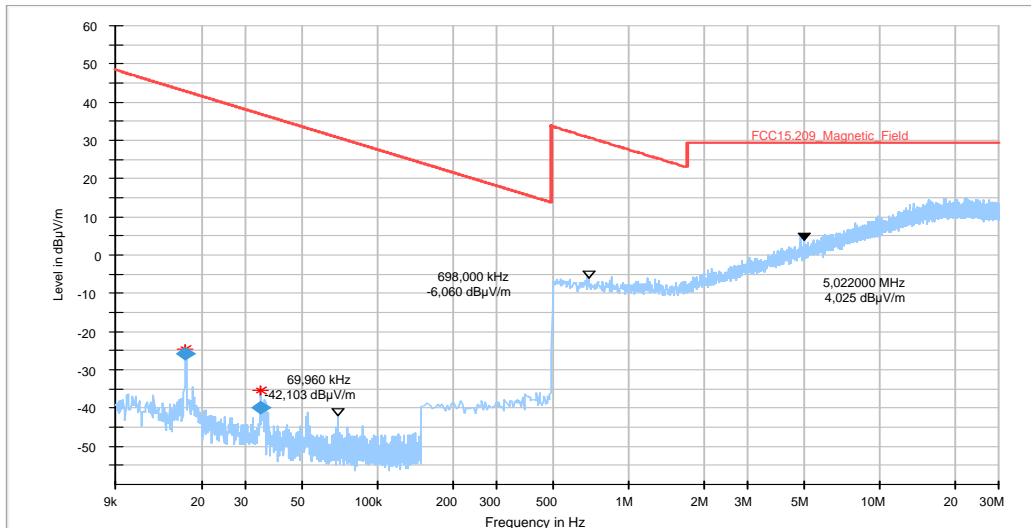
Diagram No. 2.53a_RSE_R_Ch23035_BW_5

| | | |
|--------------------------|---|-------------|
| Date: | 11.04.2017 | Page 1 of 2 |
| Test description: | Magnetic Field Strength Measurement related to 30/300 m distance | |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance | |
| Version of Testsoftware: | EMC32 V9.25.0 | |
| Distance correction: | used accord. table, pls. see test report | |
| Technical Data: | Please see page 2 for detailed data of measurement setup | |
| Rec. antenna (pre-scan): | height 1.00 m, parallel and 90° to EUT polarisation | |
| Used filter: | bypass | |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 | |
| Operator: | Klv | |
| Operating conditions: | LTE Band12 Ch:23035, BW:5MHz, RB: 1 High, QPSK | |
| Power during tests: | 12V DC | |
| Comment 1: | EUT laying | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



Final Result

| Frequency (MHz) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 0.017160 | -25.87 | 42.91 | 68.77 | 1000.0 | 0.200 | 100.0 | V | 160.0 | -58.7 |
| 0.034360 | -39.86 | 36.88 | 76.73 | 1000.0 | 0.200 | 100.0 | V | 137.0 | -59.5 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Comment |
|-----------------|-----------------------|
| 0.017160 | 06:31:11 - 11.04.2017 |
| 0.034360 | 06:36:15 - 11.04.2017 |

Diagram No. 2.53b_RSE_R_Ch23035_BW_5

Date: 11.04.2017 Page 1 of 2
 Test description: Magnetic Field Strength Measurement related to 30/300 m distance
 Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
 Version of Testsoftware: EMC32 V9.25.0
 Distance correction: used accord. table, pls. see test report
 Technical Data: Please see page 2 for detailed data of measurement setup
 Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation
 Used filter: bypass
 Test specification: FCC 15.205 § 15.209; RSS-Gen: Issue 4

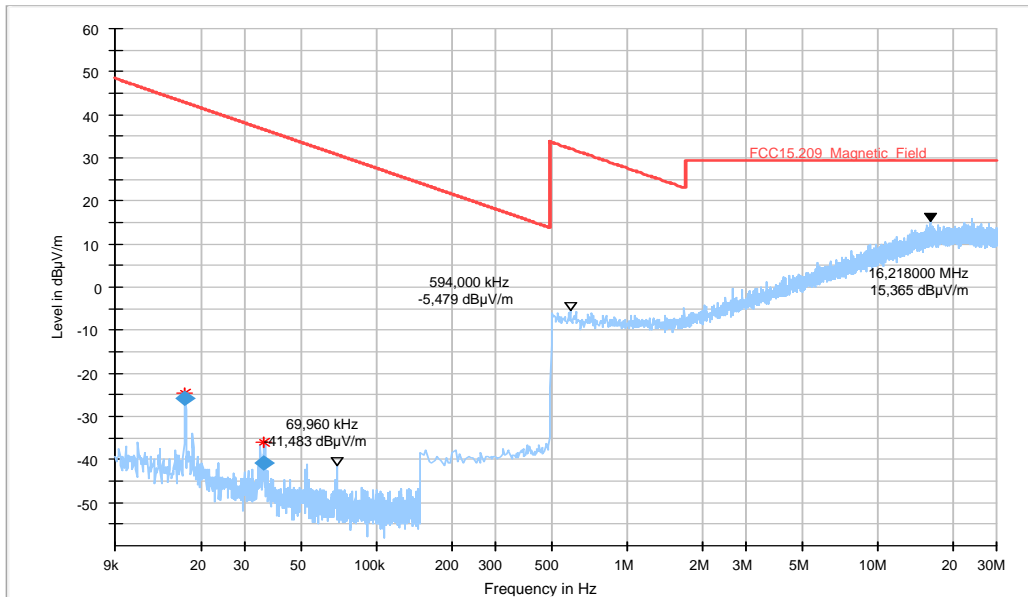
Operator: Klv
 Operating conditions: LTE Band12 Ch:23035, BW:5MHz, RB: 1 High, QPSK
 Power during tests: 12V DC
 Comment 1: EUT standing

EUT Information

Manufacturer: peiker acoustic GmbH & Co. KG
 EUT: V1231-0

HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



Final Result

| Frequency (MHz) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 0.017160 | -25.76 | 42.91 | 68.66 | 1000.0 | 0.200 | 100.0 | V | 313.0 | -58.7 |
| 0.035640 | -40.79 | 36.56 | 77.35 | 1000.0 | 0.200 | 100.0 | V | 214.0 | -59.5 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Comment |
|-----------------|-----------------------|
| 0.017160 | 02:27:51 - 11.04.2017 |
| 0.035640 | 02:23:15 - 11.04.2017 |

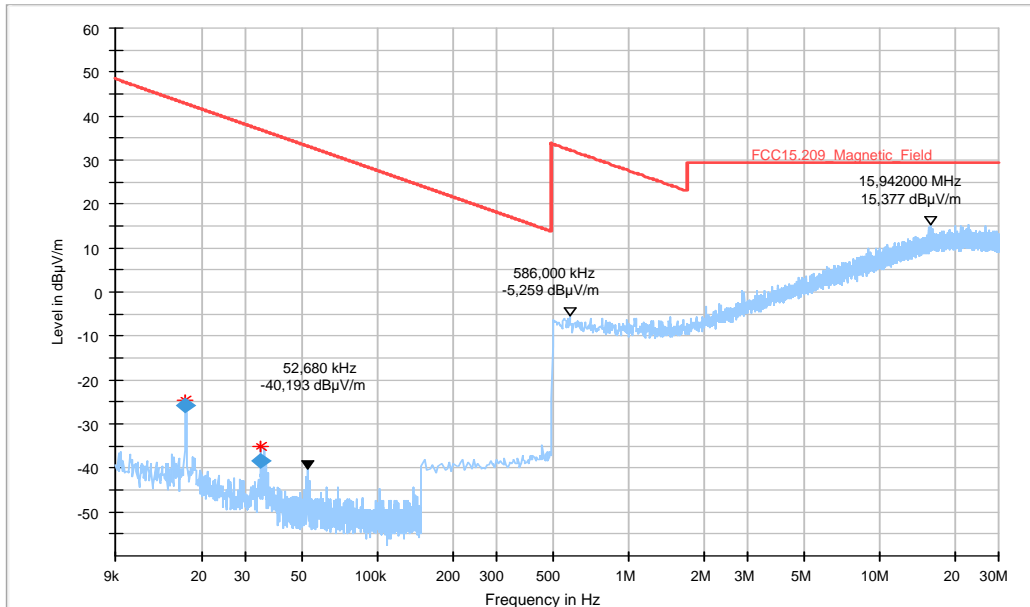
Diagram No. 2.54a_RSE_R_Ch23095_BW_10

| | |
|--------------------------|---|
| Test description: | Date: 11.04.2017 Page 1 of 2 |
| Test site and distance: | Magnetic Field Strength Measurement related to 30/300 m distance |
| Version of Testsoftware: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Distance correction: | EMC32 V9.25.0 |
| Technical Data: | used accord. table, pls. see test report |
| Rec. antenna (pre-scan): | Please see page 2 for detailed data of measurement setup |
| Used filter: | height 1.00 m, parallel and 90° to EUT polarisation |
| Test specification: | bypass |
| | FCC 15.205 § 15.209; RSS-Gen: Issue 4 |
| Operator: | Klv |
| Operating conditions: | LTE Band12 Ch:23095, BW:10MHz, RB: 1 Low, QPSK |
| Power during tests: | 12V DC |
| Comment 1: | EUT laying |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



Final Result

| Frequency (MHz) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 0.017160 | -25.81 | 42.91 | 68.71 | 1000.0 | 0.200 | 100.0 | V | 35.0 | -58.7 |
| 0.034440 | -38.44 | 36.86 | 75.29 | 1000.0 | 0.200 | 100.0 | V | 150.0 | -59.5 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Comment |
|-----------------|-----------------------|
| 0.017160 | 05:50:07 - 11.04.2017 |

| | |
|----------|-----------------------|
| 0.034440 | 05:55:11 - 11.04.2017 |
|----------|-----------------------|

Diagram No. 2.54b_RSE_R_Ch23095_BW_10

Date: 11.04.2017 Page 1 of 2
 Test description: Magnetic Field Strength Measurement related to 30/300 m distance
 Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
 Version of Testsoftware: EMC32 V9.25.0
 Distance correction: used accord. table, pls. see test report
 Technical Data: Please see page 2 for detailed data of measurement setup
 Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation
 Used filter: bypass
 Test specification: FCC 15.205 § 15.209; RSS-Gen: Issue 4

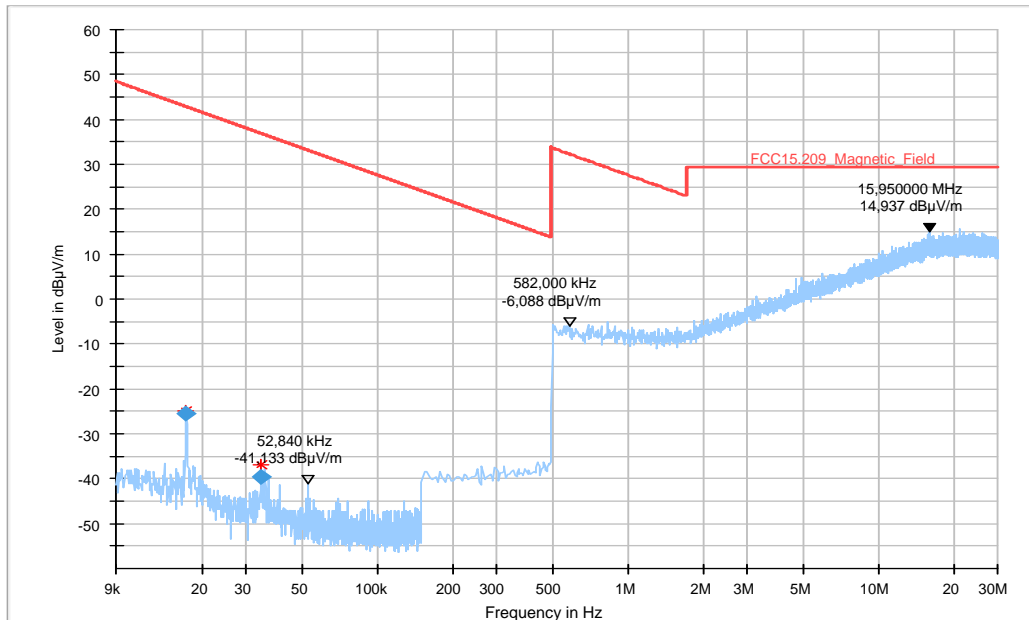
Operator: Klv
 Operating conditions: LTE Band12 Ch:23095, BW:10MHz, RB: 1 Low, QPSK
 Power during tests: 12V DC
 Comment 1: EUT standing

EUT Information

Manufacturer: peiker acoustic GmbH & Co. KG
 EUT: V1231-0

HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



Final Result

| Frequency (MHz) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 0.017160 | -25.51 | 42.91 | 68.41 | 1000.0 | 0.200 | 100.0 | V | 173.0 | -58.7 |
| 0.034280 | -39.51 | 36.90 | 76.40 | 1000.0 | 0.200 | 100.0 | V | 175.0 | -59.5 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Comment |
|-----------------|-----------------------|
| 0.017160 | 03:06:09 - 11.04.2017 |
| 0.034280 | 03:01:12 - 11.04.2017 |

Diagram No. 2.55a_RSE_R_Ch23173_BW_1_4

Date: 11.04.2017 Page 1 of 2
 Test description: Magnetic Field Strength Measurement related to 30/300 m distance
 Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
 Version of Testsoftware: EMC32 V9.25.0
 Distance correction: used accord. table, pls. see test report
 Technical Data: Please see page 2 for detailed data of measurement setup
 Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation
 Used filter: bypass
 Test specification: FCC 15.205 § 15.209; RSS-Gen: Issue 4

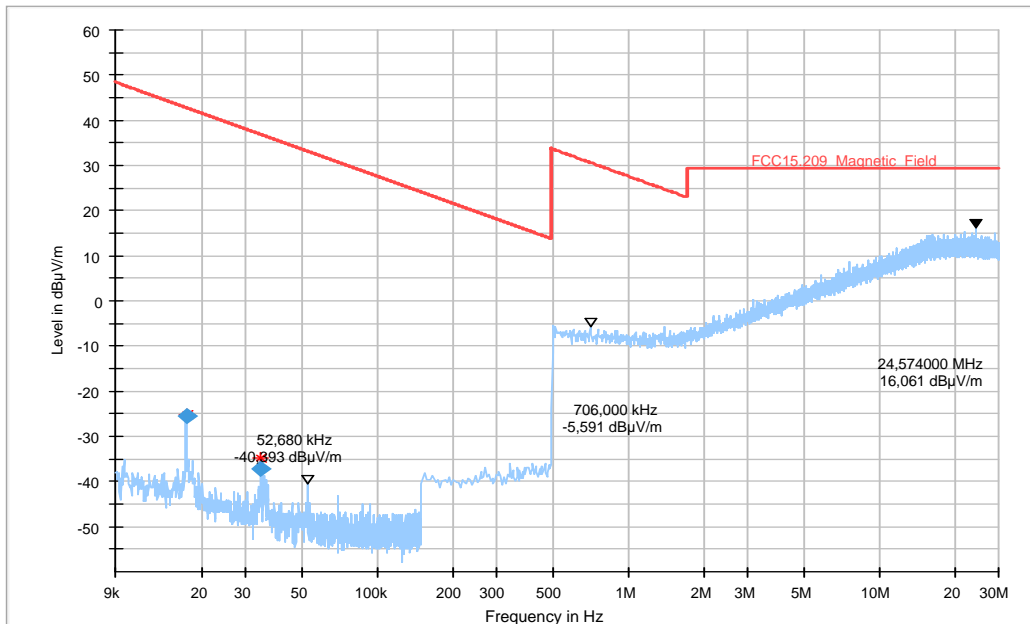
Operator: Klv
 Operating conditions: LTE Band12 Ch:23173, BW:1.4MHz, RB: 1 Low, QPSK
 Power during tests: 12V DC
 Comment 1: EUT laying

EUT Information

Manufacturer: peiker acoustic GmbH & Co. KG
 EUT: V1231-0

HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



Final_Result

| Frequency (MHz) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 0.017240 | -25.37 | 42.87 | 68.23 | 1000.0 | 0.200 | 100.0 | V | -8.0 | -58.7 |
| 0.034440 | -37.35 | 36.86 | 74.20 | 1000.0 | 0.200 | 100.0 | V | 34.0 | -59.5 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Comment |
|-----------------|---------|
| | |

| | |
|----------|-----------------------|
| 0.017240 | 05:09:10 - 11.04.2017 |
| 0.034440 | 05:15:31 - 11.04.2017 |

Diagram No. 2.55b_RSE_R_Ch23173_BW_1_4

Date: 11.04.2017 Page 1 of 2

Test description: Magnetic Field Strength Measurement related to 30/300 m distance
 Test site and distance: Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance
 Version of Testsoftware: EMC32 V9.25.0
 Distance correction: used accord. table, pls. see test report
 Technical Data: Please see page 2 for detailed data of measurement setup
 Rec. antenna (pre-scan): height 1.00 m, parallel and 90° to EUT polarisation
 Used filter: bypass
 Test specification: FCC 15.205 § 15.209; RSS-Gen: Issue 4

Operator: Klv
 Operating conditions: LTE Band12 Ch:23173, BW:1.4MHz, RB: 1 Low, QPSK
 Power during tests: 12V DC
 Comment 1: EUT standing

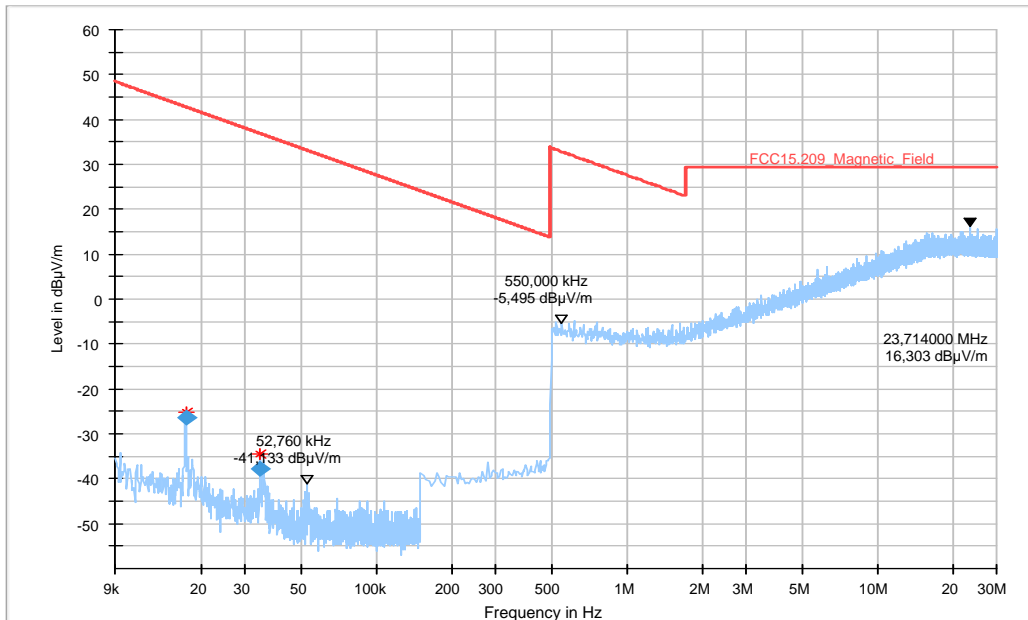
EUT Information

Manufacturer: peiker acoustic GmbH & Co. KG
 EUT: V1231-0

 HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables

Power Supply: 12VDC
 Comments: -

Full Spectrum



Final Result

| Frequency (MHz) | RMS (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|--------------|----------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 0.017240 | -26.36 | 42.87 | 69.22 | 1000.0 | 0.200 | 100.0 | V | 253.0 | -58.7 |
| 0.034360 | -37.90 | 36.88 | 74.77 | 1000.0 | 0.200 | 100.0 | V | 143.0 | -59.5 |

(continuation of the "Final_Result" table from column 16 ...)

| Frequency (MHz) | Comment |
|------------------------|-----------------------|
| 0.017240 | 03:46:09 - 11.04.2017 |
| 0.034360 | 03:41:35 - 11.04.2017 |

1.10.2. Emissions above 30MHz (LTE Band 12)

8.53_RSE_R_Ch23035_BW5_Laying

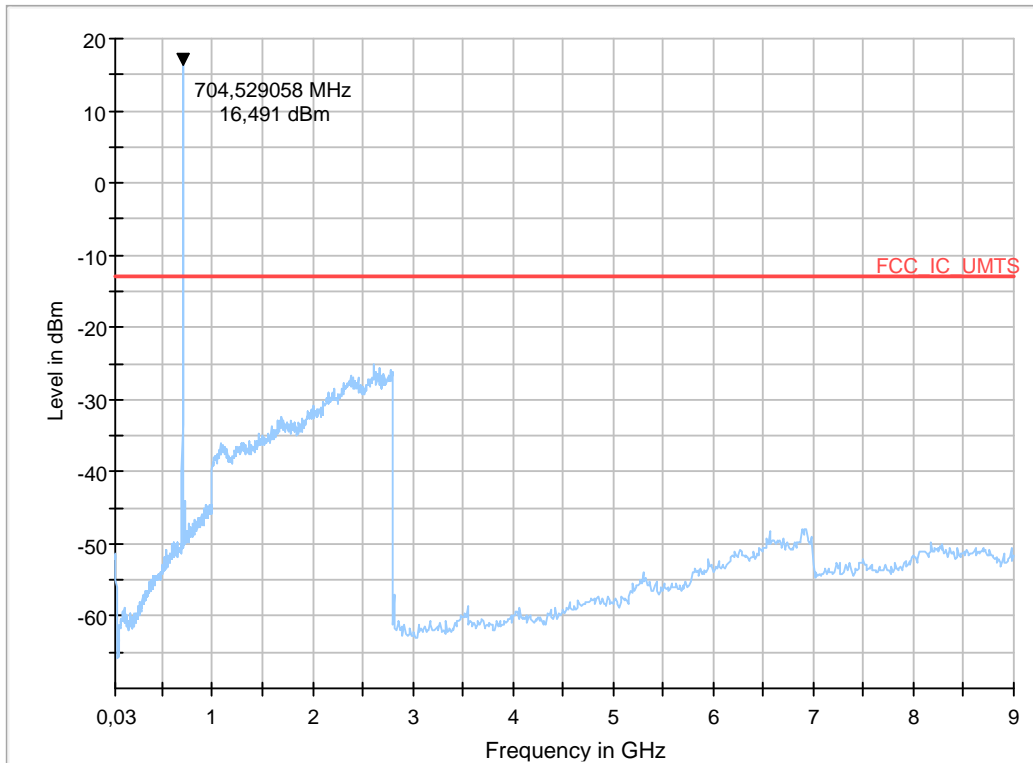
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 12 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 23035/BW:5RB:1 high/QPSK |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | Klv |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



8.53_RSE_R_Ch23035_BW5_Standing

Common Information

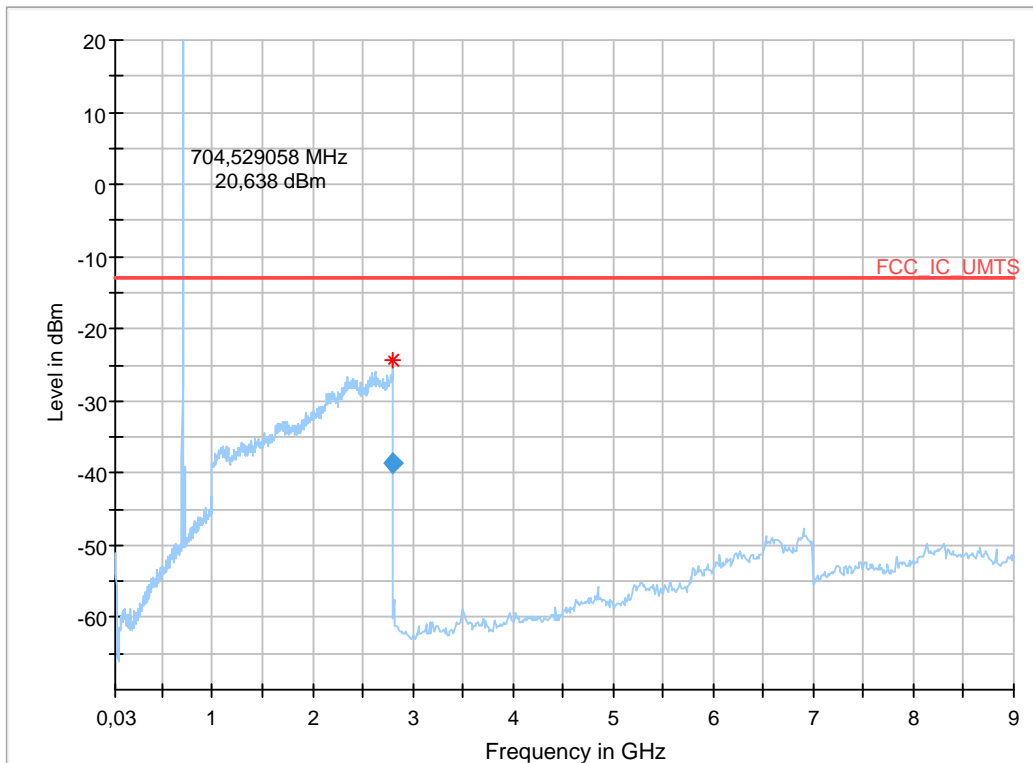
Test Description: Radiated Spurious Emissions LTE Band 12
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 22
 Operating Mode: UE allocated channel 23035/BW:5RB:1 high/QPSK
 Environmental Conditions: Humidity: 49%rH; Temperature: 21°C
 Operator: Klv
 Comment: EUT - standing position

EUT Information

Manufacturer: peiker acoustic GmbH & Co. KG
 EUT: V1231-0

 HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



Final Result

| Frequency (MHz) | RMS (dBm) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|-----------|-------------|-------------|-----------------|-----------------|-----|---------------|-----------------|------------|
| 2797.429910 | -38.71 | -13.00 | 25.71 | 1000.0 | 100.000 | H | 53.0 | 0.0 | -57.1 |

8.54_RSE_R_Ch23095_BW10_Laying

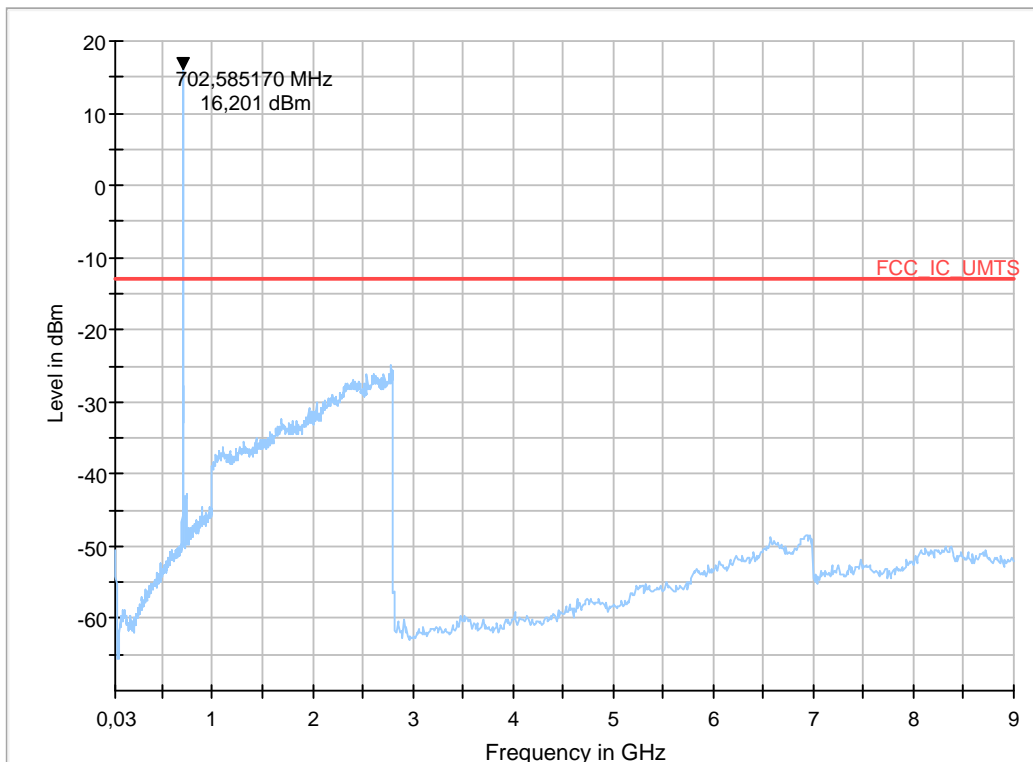
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 12 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 23095/BW:10RB:1 low/QPSK |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | Klv |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



8.54_RSE_R_Ch23095_BW10_Standing

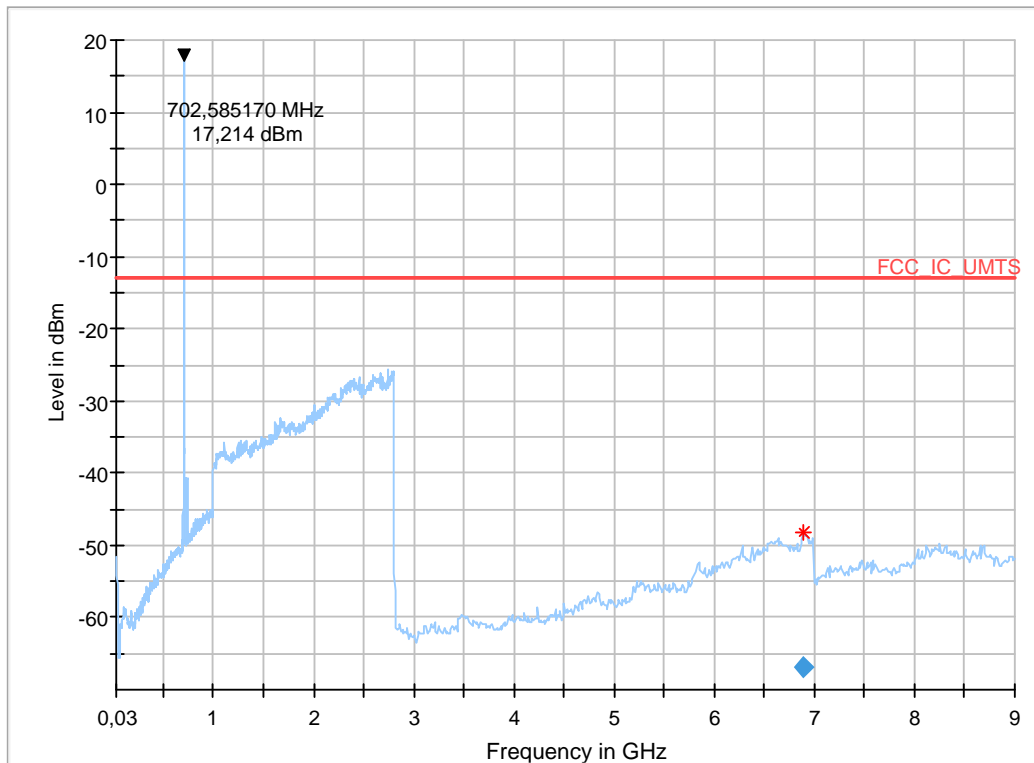
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 12 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 23095/BW:10RB:1 low/QPSK |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | Klv |
| Comment: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



8.54_RSE_R_Ch23095_BW10_Laying

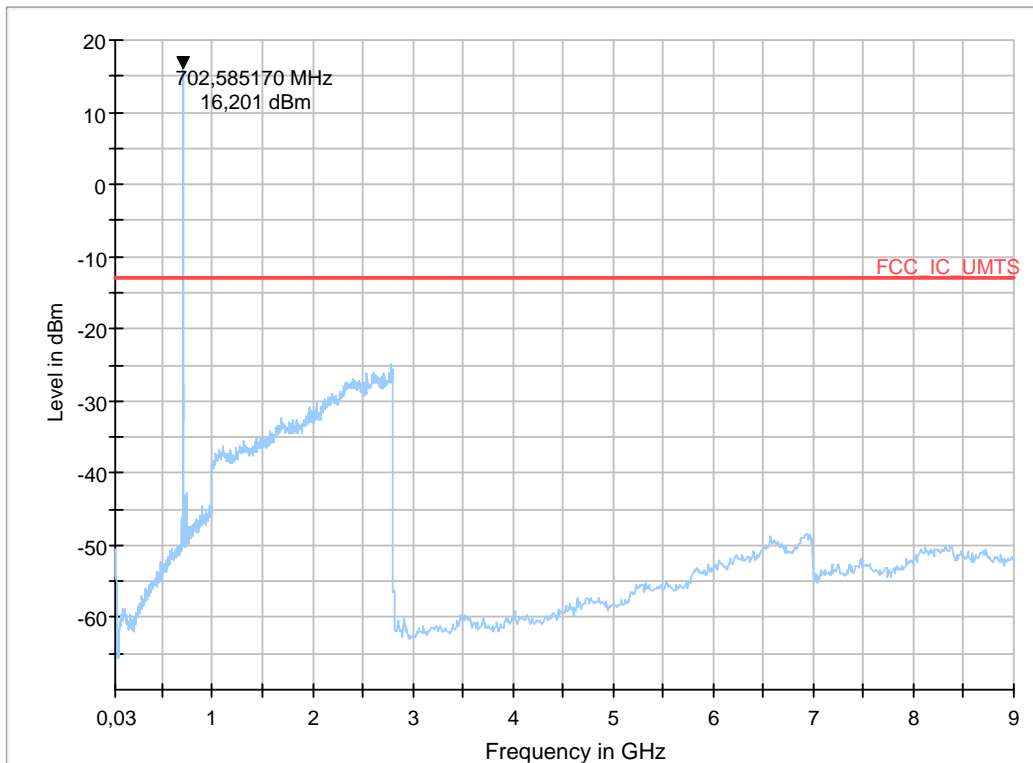
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 12 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 23095/BW:10RB:1 low/QPSK |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | Klv |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



8.56a_Ch23173_BW_1_4MHz_1RB_low_QPSK_Laying

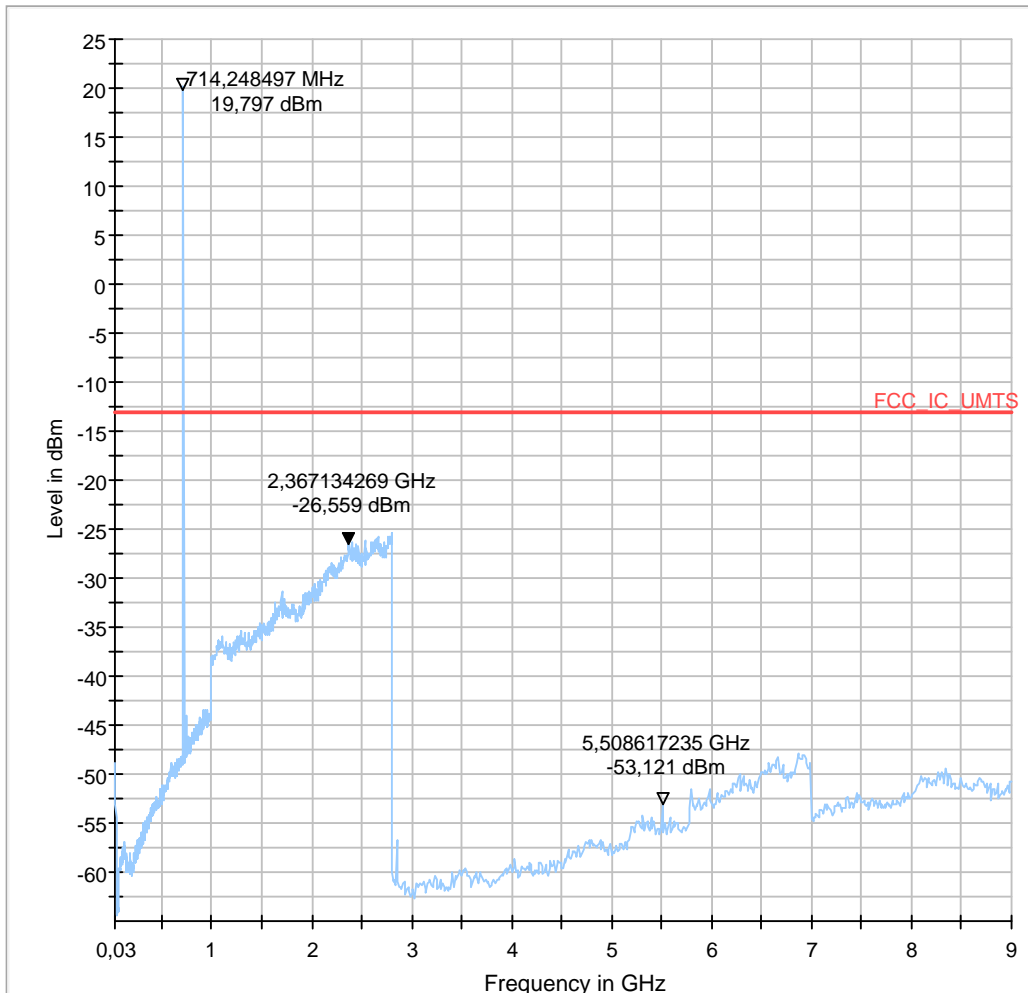
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 12 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917 / RSS-130 |
| Operating Mode: | UE allocated channel 23173 |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 20.2°C |
| Operator: | Lor |
| Remark: | EUT laying |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



8.56b_Ch23173_BW_1_4MHz_1RB_low_QPSK_standing

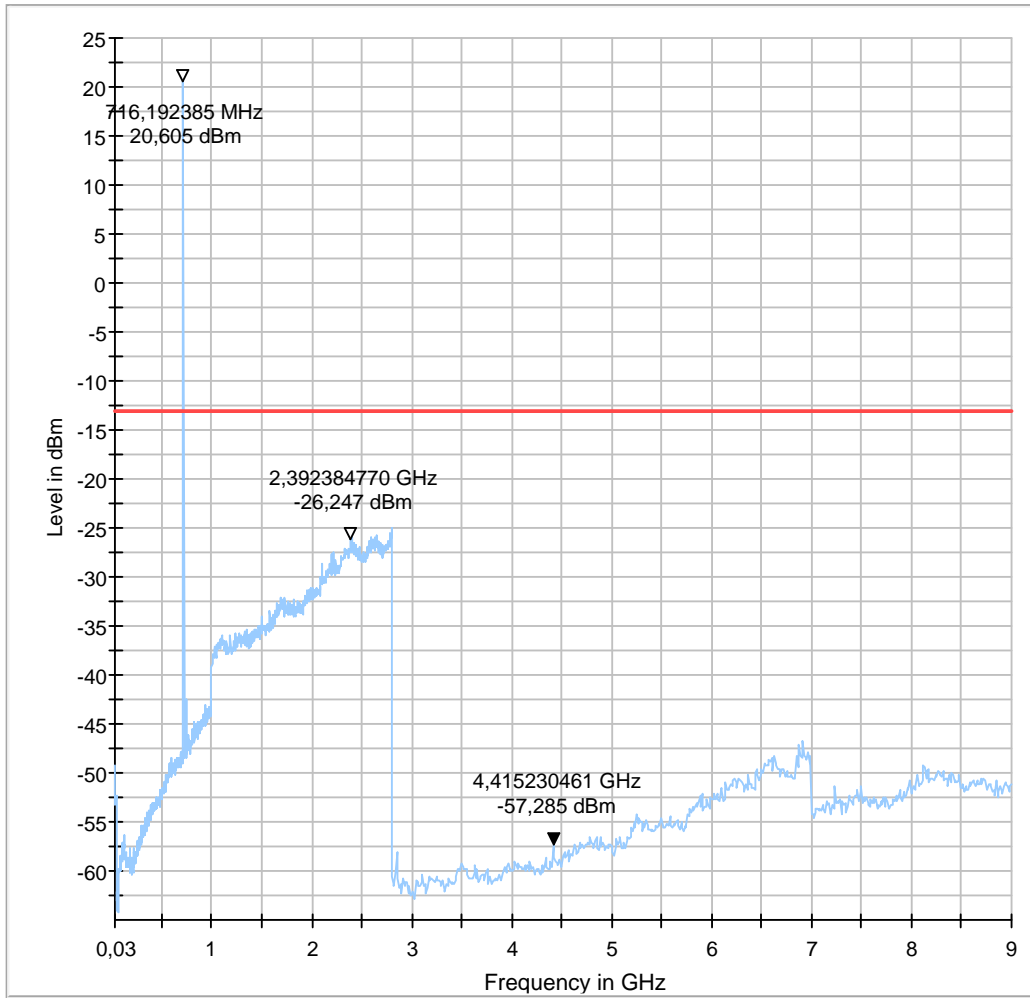
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 12 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917 / RSS-130 |
| Operating Mode: | UE allocated channel 23173/ QPSK / 1RB Low/ BW=1.4MHz |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 20.2°C |
| Operator: | Lor EUTstanding |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.11. Spurious emissions radiated (LTE Band 7)

1.11.1. Magnetic field strength radiated (LTE Band 7)

Diagram No. 2.56a_RSE_R_Ch20850_BW_20_Laying

| | | |
|--------------------------|---|-------------|
| Date: | 04.05.2017 | Page 1 of 2 |
| Test description: | Magnetic Field Strength Measurement related to 30/300 m distance | |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance | |
| Version of Testsoftware: | EMC32 V9.25.0 | |
| Distance correction: | used accord. table, pls. see test report | |
| Technical Data: | Please see page 2 for detailed data of measurement setup | |
| Rec. antenna (pre-scan): | height 1.00 m, parallel and 90° to EUT polarisation | |
| Used filter: | bypass | |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 | |
| Operator: | MBe | |
| Operating conditions: | LTE Band7 Ch:20850, BW:20MHz, RB: 1 high, QPSK | |
| Power during tests: | 12V DC | |
| Comment 1: | EUT laying | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum

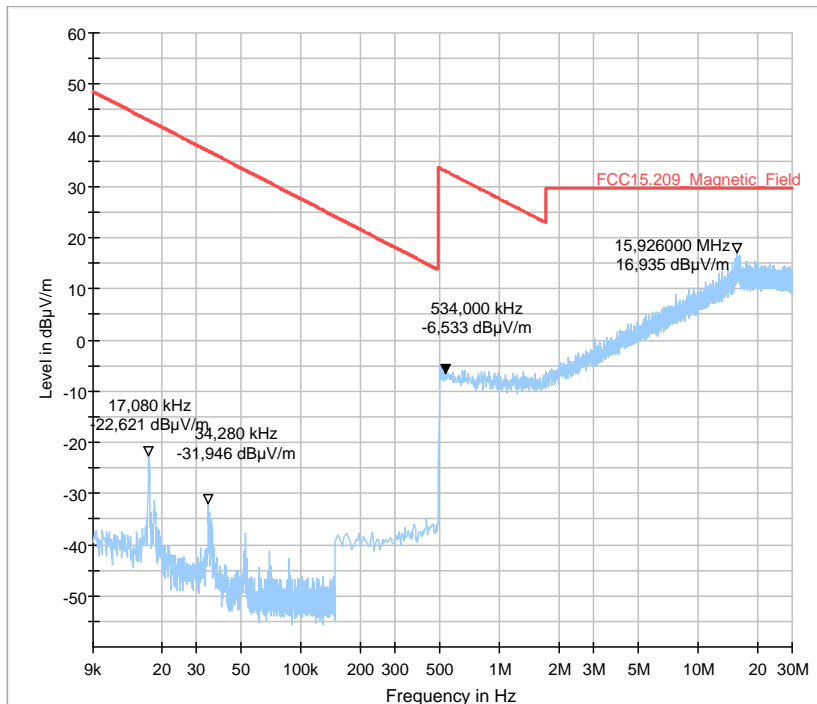


Diagram No. 2.56b_RSE_R_Ch20850_BW_20_Standing

| | |
|--------------------------|---|
| Test description: | Date: 04.05.2017 Page 1 of 1 |
| Test site and distance: | Magnetic Field Strength Measurement related to 30/300 m distance |
| Version of Testsoftware: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Distance correction: | EMC32 V9.25.0 |
| Technical Data: | used accord. table, pls. see test report |
| Rec. antenna (pre-scan): | Please see page 2 for detailed data of measurement setup |
| Used filter: | height 1.00 m, parallel and 90° to EUT polarisation |
| Test specification: | bypass |
| Operator: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 |
| Operating conditions: | Mah |
| Power during tests: | LTE Band7 Ch:20850, BW:20MHz, RB: 1 high, QPSK |
| Comment 1: | 12V DC |
| | EUT standing |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum

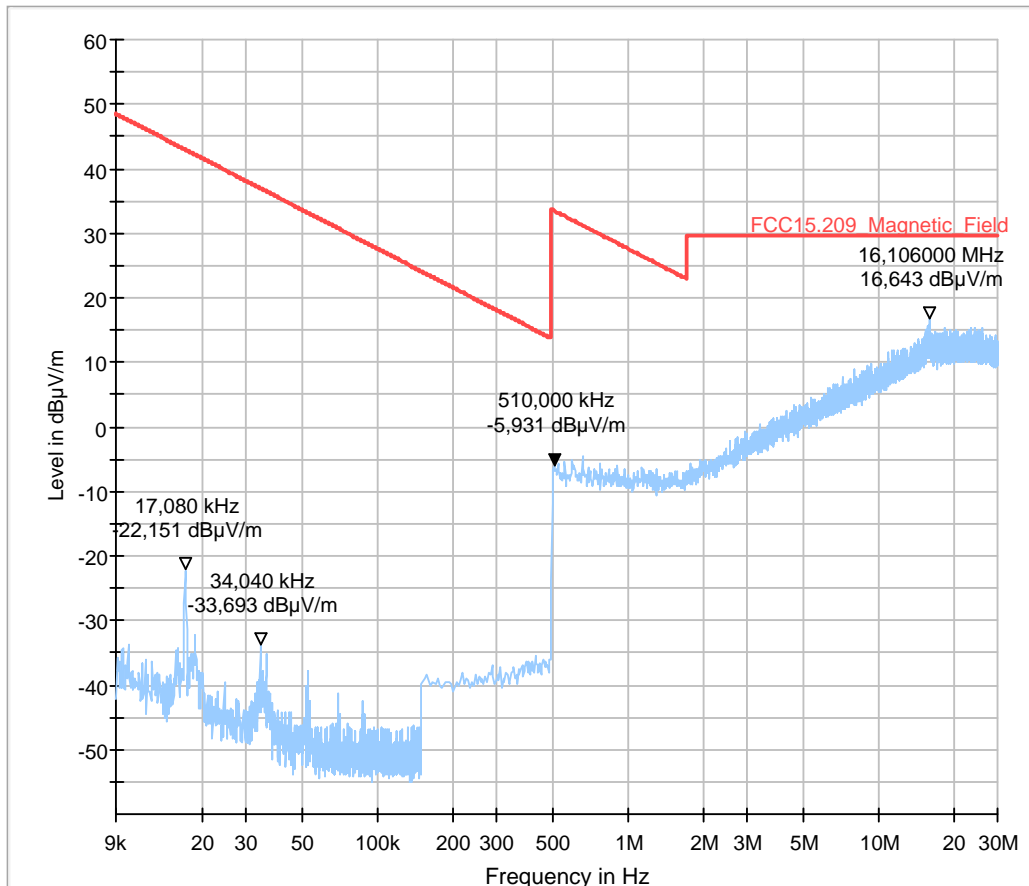


Diagram No. 2.57a_RSE_R_Ch21100_BW_20_Laying

| | | |
|--------------------------|---|-------------|
| Date: | 04.05.2017 | Page 1 of 1 |
| Test description: | Magnetic Field Strength Measurement related to 30/300 m distance | |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance | |
| Version of Testsoftware: | EMC32 V9.25.0 | |
| Distance correction: | used accord. table, pls. see test report | |
| Technical Data: | Please see page 2 for detailed data of measurement setup | |
| Rec. antenna (pre-scan): | height 1.00 m, parallel and 90° to EUT polarisation | |
| Used filter: | bypass | |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 | |
| Operator: | MBe | |
| Operating conditions: | LTE Band7 Ch:21100, BW:20MHz, RB: 1 low, QPSK | |
| Power during tests: | 12V DC | |
| Comment 1: | EUT laying | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum

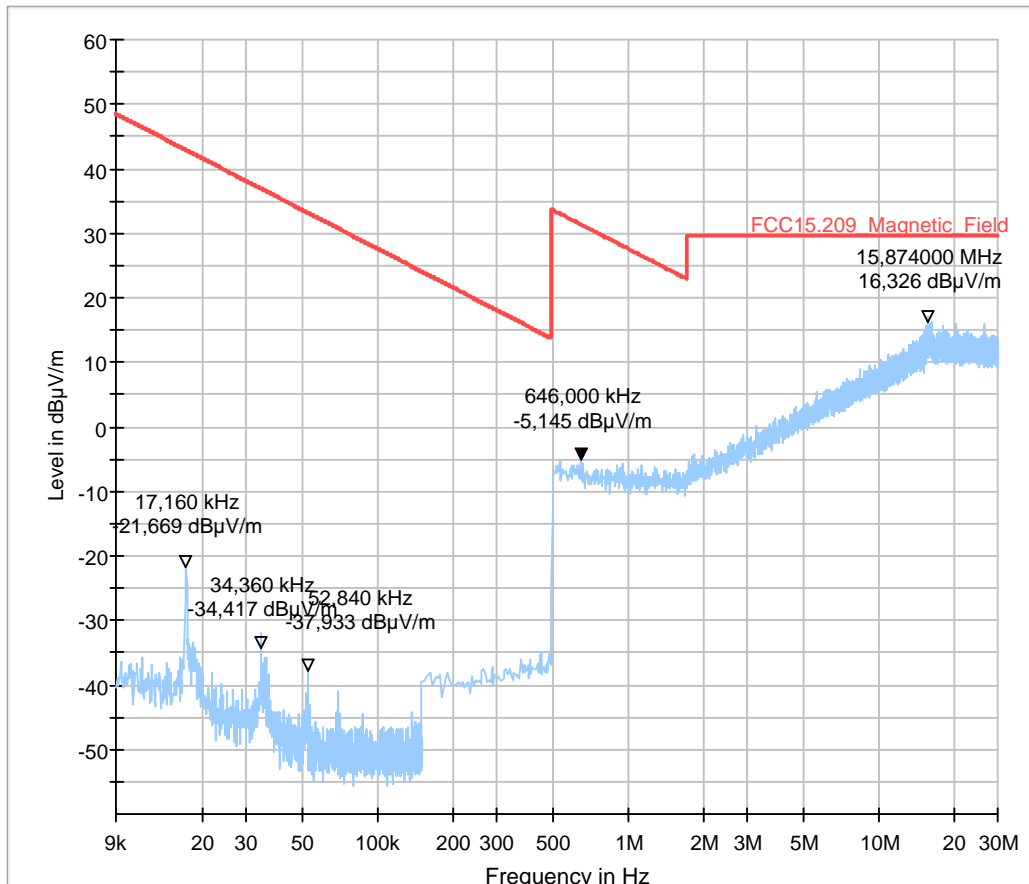


Diagram No. 2.57b_RSE_R_Ch21100_BW_20_Standing

| | | |
|--------------------------|---|-------------|
| Date: | 04.05.2017 | Page 1 of 1 |
| Test description: | Magnetic Field Strength Measurement related to 30/300 m distance | |
| Test site and distance: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance | |
| Version of Testsoftware: | EMC32 V9.25.0 | |
| Distance correction: | used accord. table, pls. see test report | |
| Technical Data: | Please see page 2 for detailed data of measurement setup | |
| Rec. antenna (pre-scan): | height 1.00 m, parallel and 90° to EUT polarisation | |
| Used filter: | bypass | |
| Test specification: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 | |
| Operator: | MBe | |
| Operating conditions: | LTE Band7 Ch:21100, BW:20MHz, RB: 1 low, QPSK | |
| Power during tests: | 12V DC | |
| Comment 1: | EUT standing | |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum

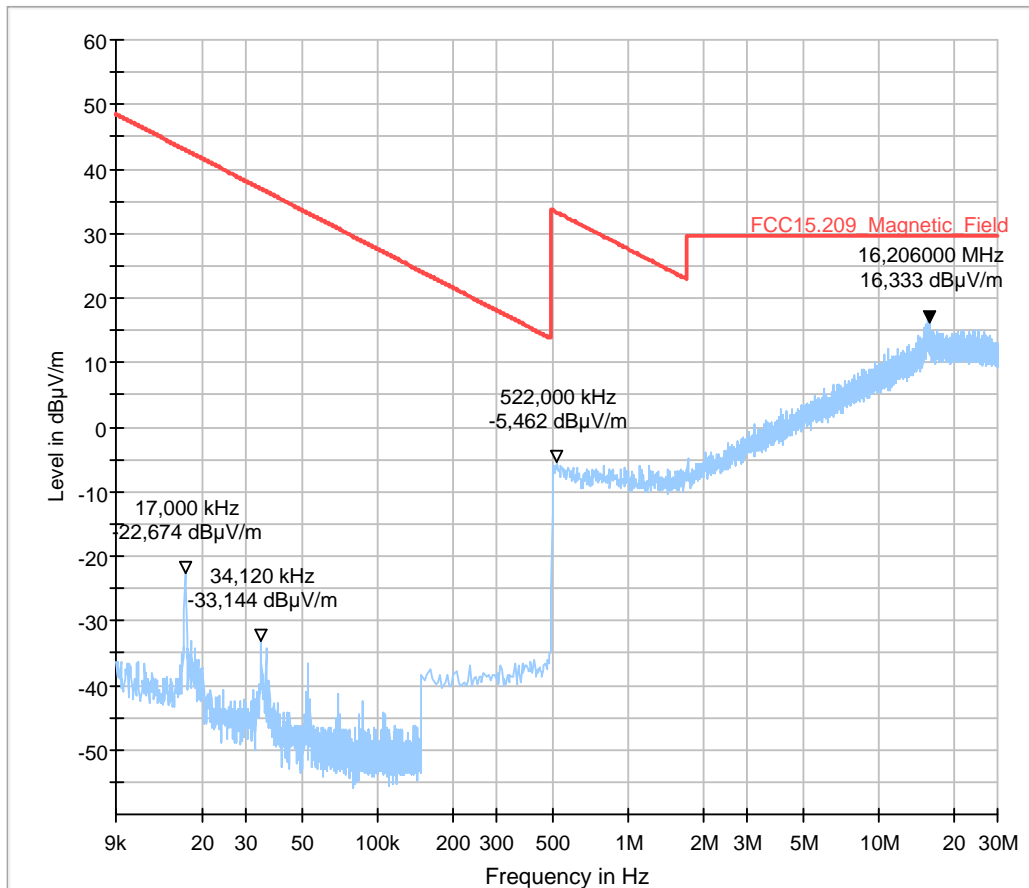


Diagram No. 2.58a_RSE_R_Ch21300_BW_20_Laying

| | |
|--------------------------|---|
| Test description: | Date: 04.05.2017 Page 1 of 1 |
| Test site and distance: | Magnetic Field Strength Measurement related to 30/300 m distance |
| Version of Testsoftware: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Distance correction: | EMC32 V9.25.0 |
| Technical Data: | used accord. table, pls. see test report |
| Rec. antenna (pre-scan): | Please see page 2 for detailed data of measurement setup |
| Used filter: | height 1.00 m, parallel and 90° to EUT polarisation |
| Test specification: | bypass |
| Operator: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 |
| Operating conditions: | MBe |
| Power during tests: | LTE Band7 Ch:21300, BW:20MHz, RB: 1 low, QPSK |
| Comment 1: | 12V DC |
| | EUT laying |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum

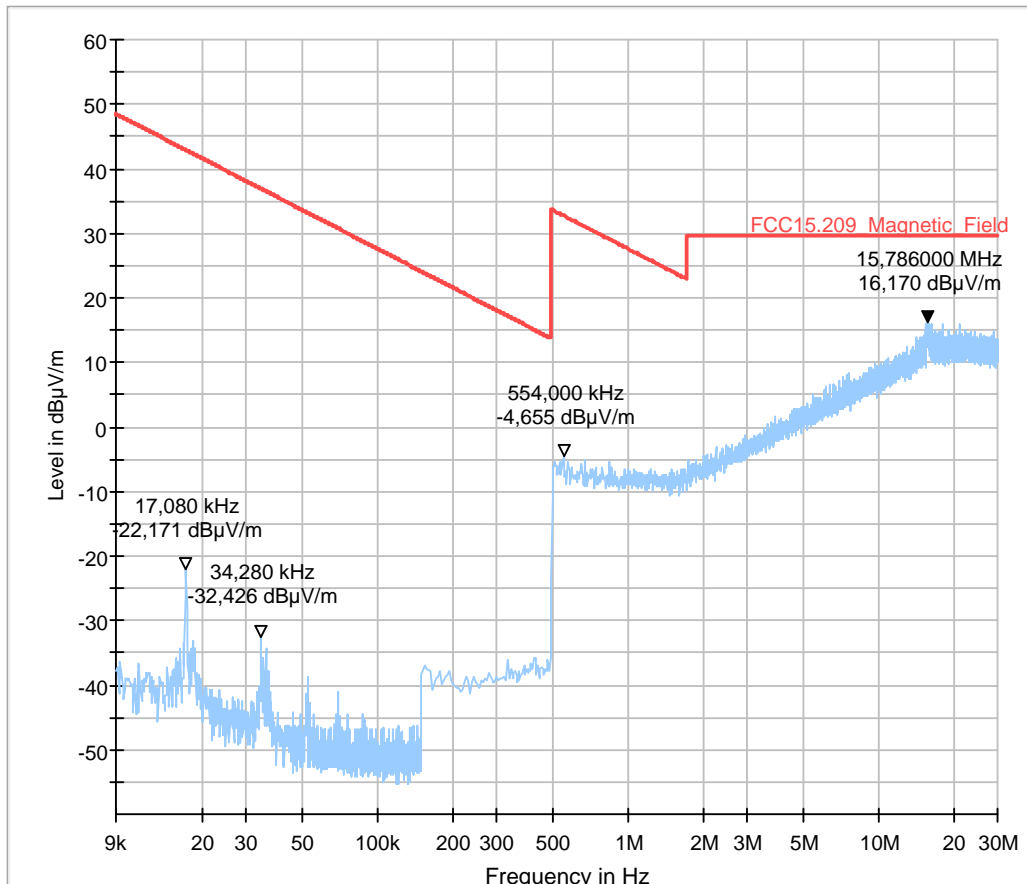


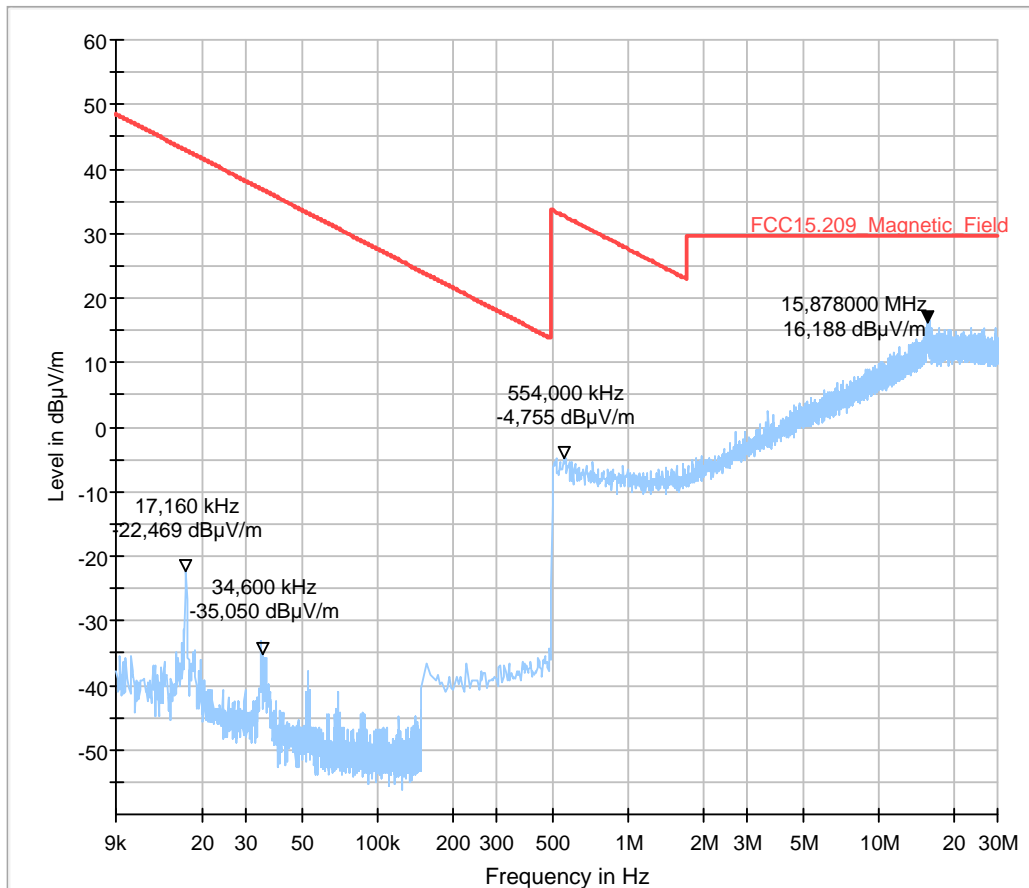
Diagram No. 2.58b_RSE_R_Ch21300_BW_20_Standing

| | |
|--------------------------|---|
| Test description: | Date: 04.05.2017 Page 1 of 1 |
| Test site and distance: | Magnetic Field Strength Measurement related to 30/300 m distance |
| Version of Testsoftware: | Ref.-Nr. 441 Semi Anechoic Room (SAR) with 3 m measurement distance |
| Distance correction: | EMC32 V9.25.0 |
| Technical Data: | used accord. table, pls. see test report |
| Rec. antenna (pre-scan): | Please see page 2 for detailed data of measurement setup |
| Used filter: | height 1.00 m, parallel and 90° to EUT polarisation |
| Test specification: | bypass |
| Operator: | FCC 15.205 § 15.209; RSS-Gen: Issue 4 |
| Operating conditions: | MBe |
| Power during tests: | LTE Band7 Ch:21300, BW:20MHz, RB: 1 low, QPSK |
| Comment 1: | 12V DC |
| | EUT standing |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.11.2. Emissions above 30MHz (LTE Band 7)

8.53a_RSE_R_Ch20850_BW_20_30-2.8MHz_standing

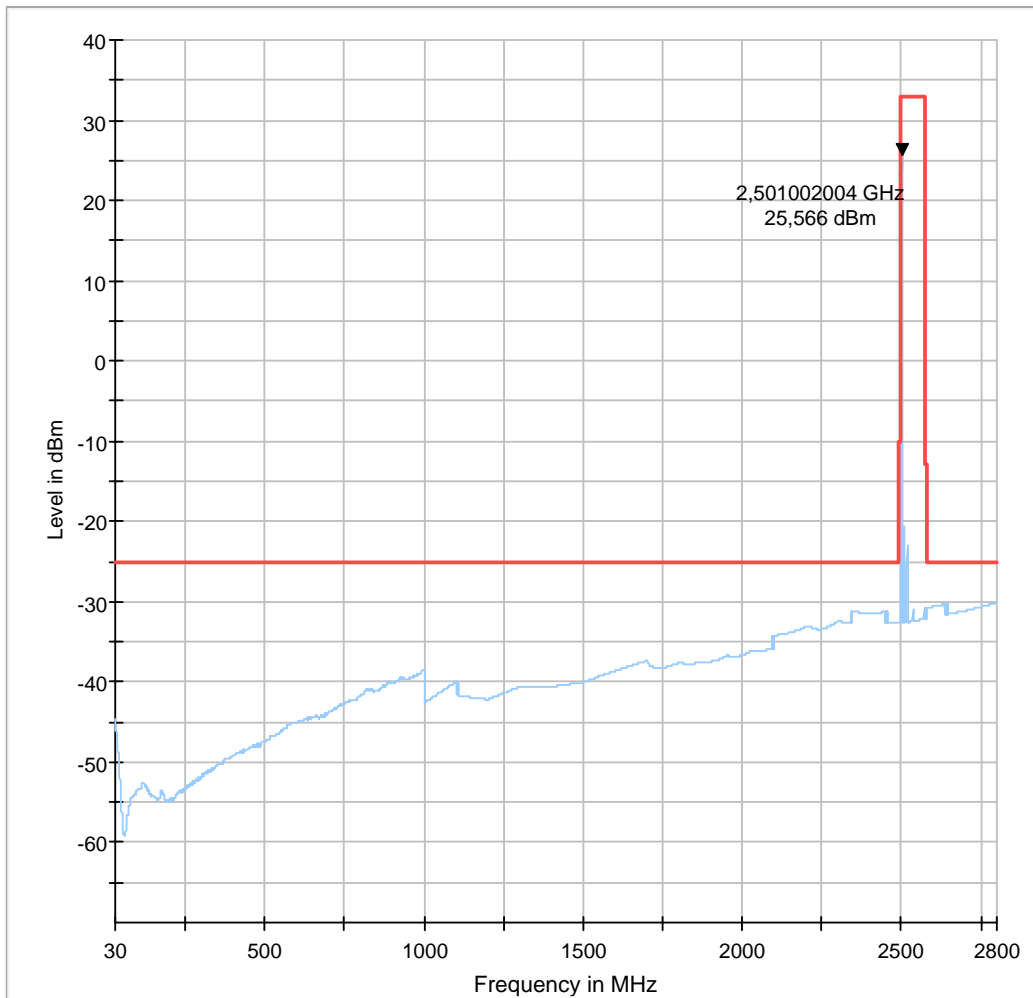
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 7 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27.53(l)(4) Mobile stations limits |
| Operating Mode: | UE allocated channel 20850/ BW:20 / RB:1 / Position:low |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RIs |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256),Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



8.54b_RSE_R_Ch20850_BW_10_MHz_30-2.8GHz_laying

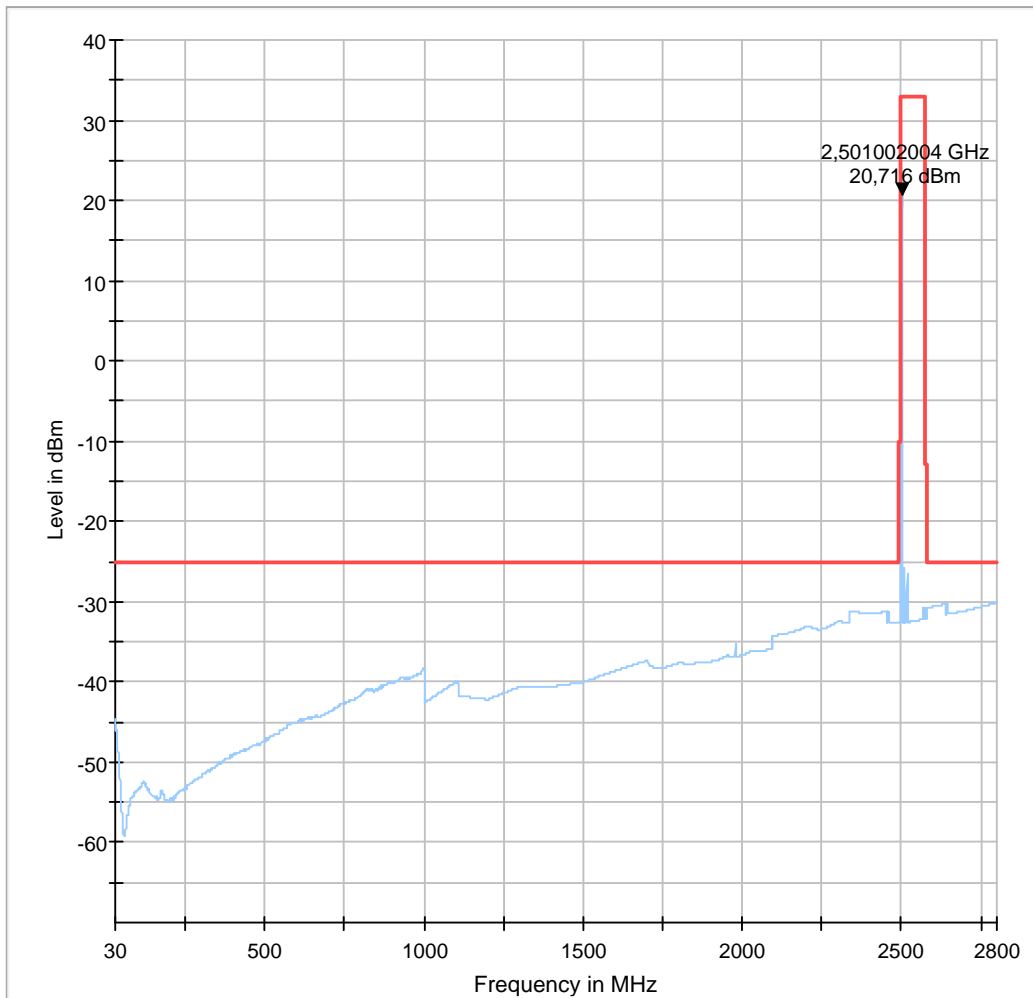
Common Information

| | |
|---------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 7 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27.53(l)(4) Mobile stations limits |
| Operating Mode: | UE allocated channel 20850/ BW: 20/ RB:1 / Position: Low |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | HEI |
| Remarks: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



8.54bb_RSE_R_Ch20850_BW_10_MHz_2.8-20GHz_laying

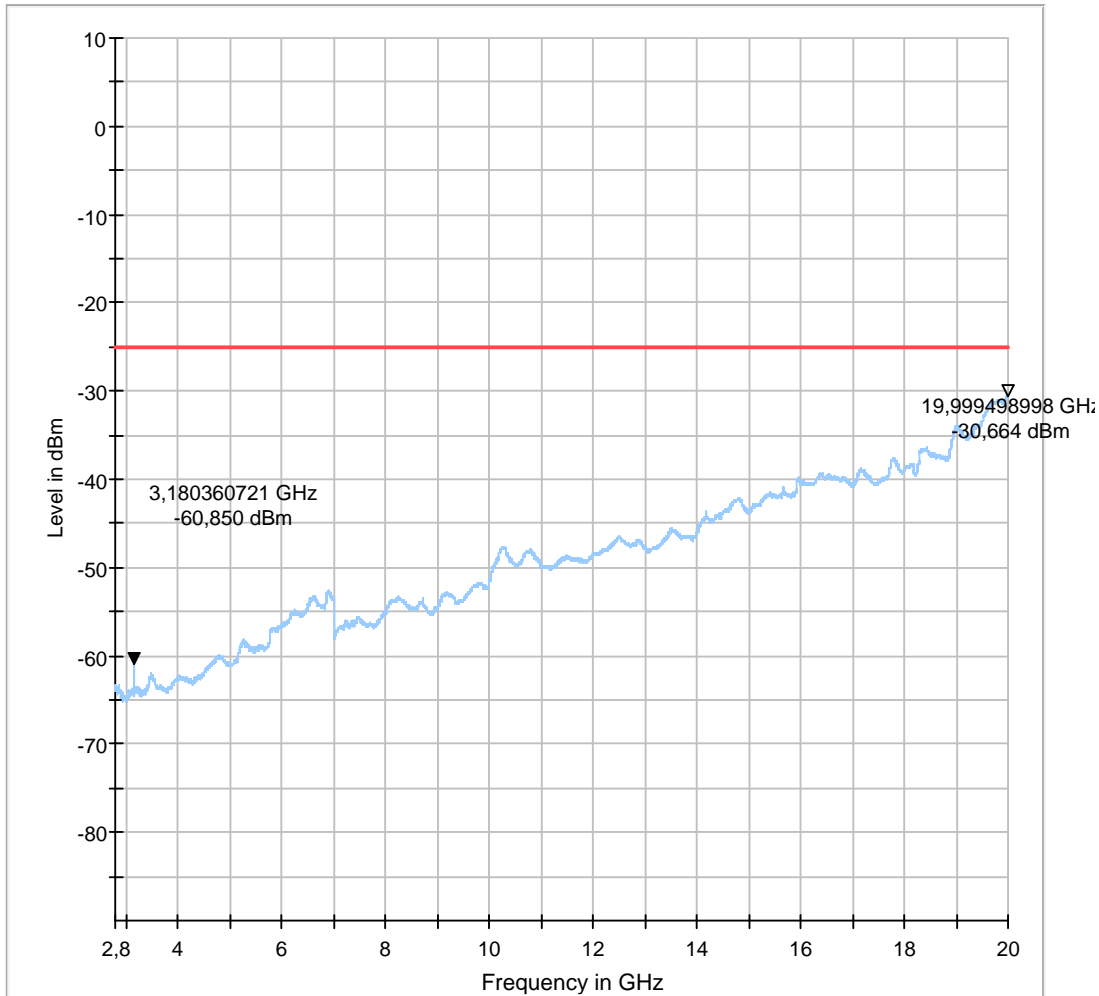
Common Information

| | |
|---------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 7 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27.53(l)(4) Mobile stations limits |
| Operating Mode: | UE allocated channel 20850/ BW: 20/ RB:1 / Position: Low |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | HEI |
| Remarks: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



8.53aa_RSE_R_Ch20850_BW_20_2.8-20MHz_standing

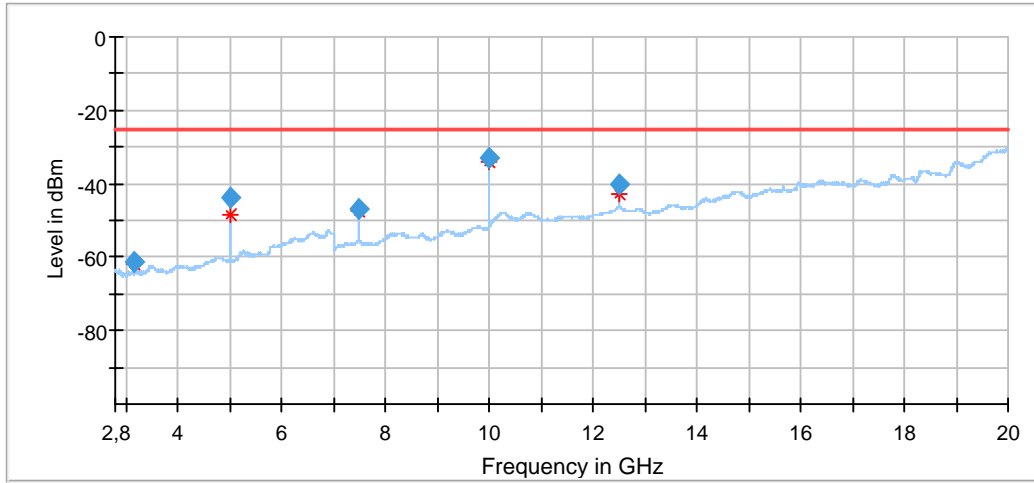
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 7 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27.53(l)(4) Mobile stations limits |
| Operating Mode: | UE allocated channel 20850/ BW:20 / RB:1 / Position:low |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RIs |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



Final Result

| Frequency (MHz) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) | Comment |
|-----------------|-------------|-------------|-----------------|-------------|-----|---------------|------------|-----------------------|
| 3180.070140 | - | 36.16 | 1000.0 | 155.0 | H | 307.0 | -95.5 | 22:16:07 - 21.04.2017 |
| 5002.112722 | - | 19.02 | 1000.0 | 155.0 | H | 58.0 | -91.2 | 22:13:55 - 21.04.2017 |
| 7503.247577 | - | 21.83 | 1000.0 | 155.0 | H | 314.0 | -83.3 | 22:17:46 - 21.04.2017 |
| 10004.418697 | 25.00 | 8.04 | 1000.0 | 155.0 | H | 307.0 | -80.7 | 22:19:24 - 21.04.2017 |
| 12505.280561 | 25.00 | 15.12 | 1000.0 | 155.0 | H | 313.0 | -75.3 | 22:21:04 - 21.04.2017 |

8.54a_RSE_R_Ch21100_BW_10_30-2.8MHz_standing

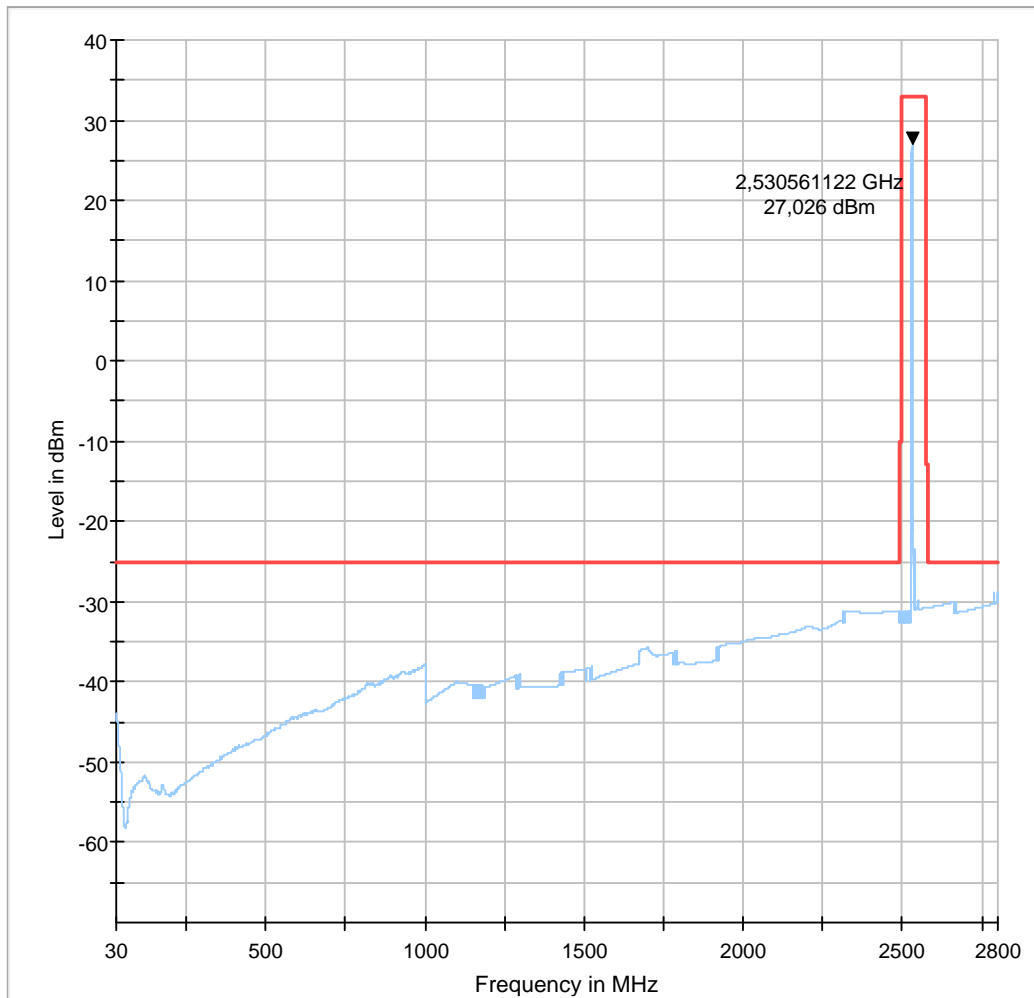
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 7 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27.53(l)(4) Mobile stations limits |
| Operating Mode: | UE allocated channel 21100/ BW:10 / RB:1 / Position:low |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RIs |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



8.54aa_RSE_R_Ch21100_BW_10_MHz_2.8-20MHz_standing

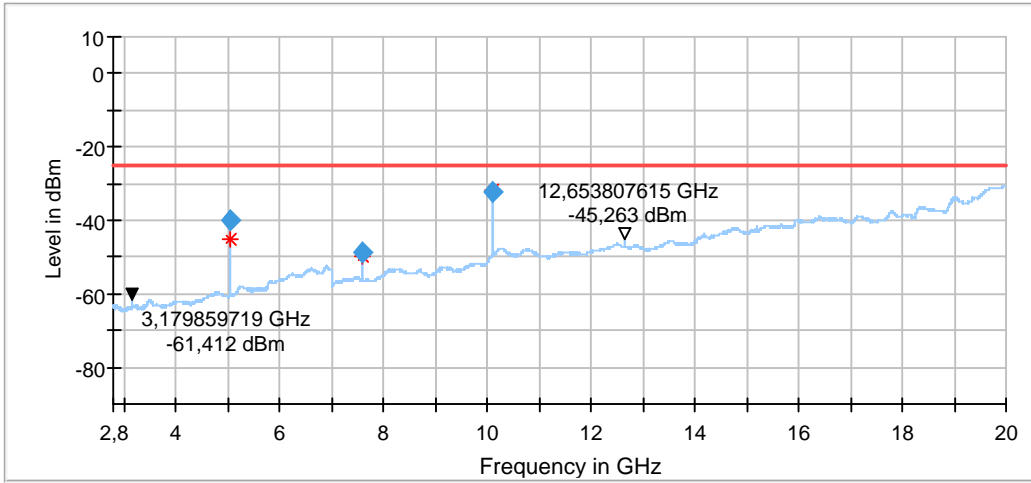
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 7 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27.53(l)(4) Mobile stations limits |
| Operating Mode: | UE allocated channel 21100/ BW:10 / RB:1 / Position:low |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RIs |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



Final Result

| Frequency (MHz) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) | Comment |
|-----------------|-------------|-------------|-----------------|-------------|-----|---------------|------------|-----------------------|
| 5061.212425 | - | 15.24 | 1000.0 | 155.0 | H | 57.0 | -91.1 | 09:00:20 - 24.04.2017 |
| 7591.773547 | - | 23.98 | 1000.0 | 155.0 | H | 37.0 | -83.7 | 08:58:38 - 24.04.2017 |
| 10122.214429 | 25.00 | 7.10 | 1000.0 | 155.0 | H | 307.0 | -78.9 | 09:02:29 - 24.04.2017 |

8.54b_RSE_R_Ch21100_BW_10_MHz_30-2.8GHz_laying

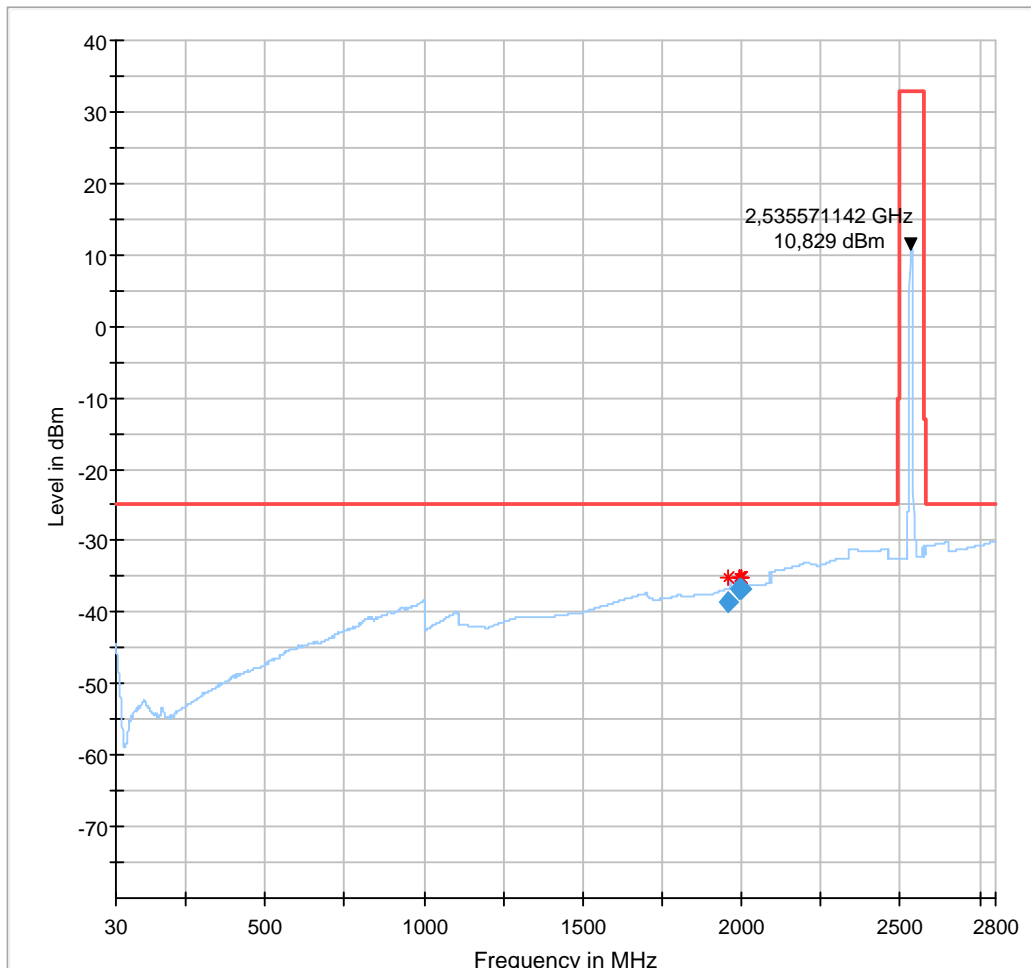
Common Information

| | |
|---------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 7 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27.53(l)(4) Mobile stations limits |
| Operating Mode: | UE allocated channel 21100/ BW:10 / RB:1 / Position: Low |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | HEI |
| Remarks: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



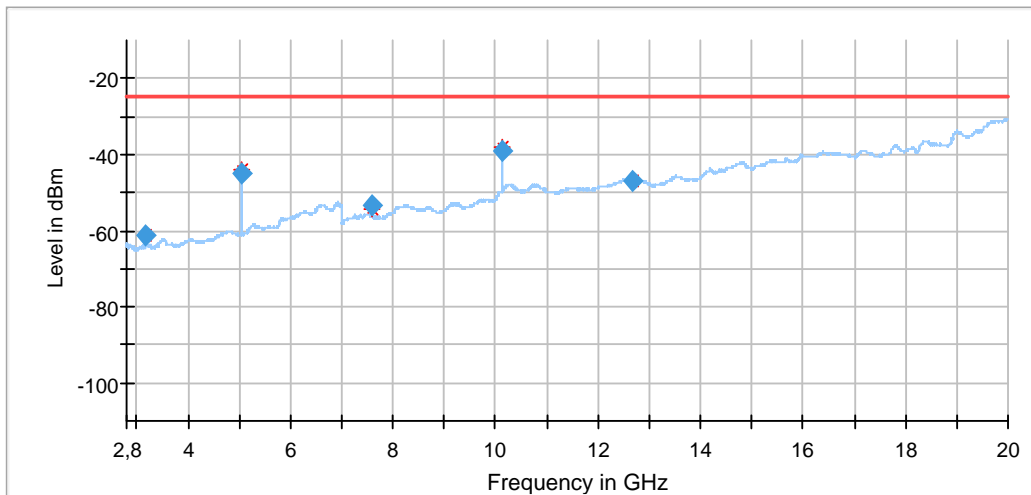
8.54bb_RSE_R_Ch21100_BW_10_MHz_2.8-20GHz_laying

Common Information

| | |
|--------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 7 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site | Fully Anechoic Room (FAR) |
| Test Standart | FCC Part 27.53(l)(4) Mobile stations limits |
| Operating mode | UE allocated channel 21100/ BW:10 / RB:1 / Position: Low |
| Environmental conditions | Humidity: 35%rH; Temperature: 20°C |
| Test SW Version | EMC32 V9.26.0 |
| Operator | MBe |
| Remarks | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |



Final Result

| Frequency (MHz) | RMS (dBm) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|-----------|-------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 3180.010020 | -61.22 | -25.00 | 36.22 | 1000.0 | 1000.000 | 155.0 | V | -8.0 | -95.5 |
| 5061.212425 | -45.15 | -25.00 | 20.15 | 1000.0 | 1000.000 | 155.0 | V | 217.0 | -91.1 |
| 7591.693387 | -53.19 | -25.00 | 28.19 | 1000.0 | 1000.000 | 155.0 | V | -9.0 | -83.7 |
| 10122.334669 | -39.02 | -25.00 | 14.02 | 1000.0 | 1000.000 | 155.0 | V | 275.0 | -78.9 |
| 12653.176352 | -46.84 | -25.00 | 21.84 | 1000.0 | 1000.000 | 155.0 | V | 276.0 | -76.3 |

Final Result

| Frequency (MHz) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) | Comment |
|-----------------|-------------|-------------|-----------------|-------------|-----|---------------|------------|-----------------------|
| 1954.979960 | - | 13.65 | 1000.0 | 155.0 | H | 103.0 | -62.1 | 13:59:52 - 24.04.2017 |
| 1993.957916 | - | 11.71 | 1000.0 | 155.0 | V | 211.0 | -62.1 | 14:05:13 - 24.04.2017 |
| 1995.460922 | - | 11.68 | 1000.0 | 155.0 | V | 76.0 | -62.1 | 14:03:38 - 24.04.2017 |
| 2000.000000 | - | 11.62 | 1000.0 | 155.0 | V | 256.0 | -62.0 | 14:06:41 - 24.04.2017 |

8.55a_RSE_R_Ch21400_BW_10_MHz_30-2.8GHz_Standing

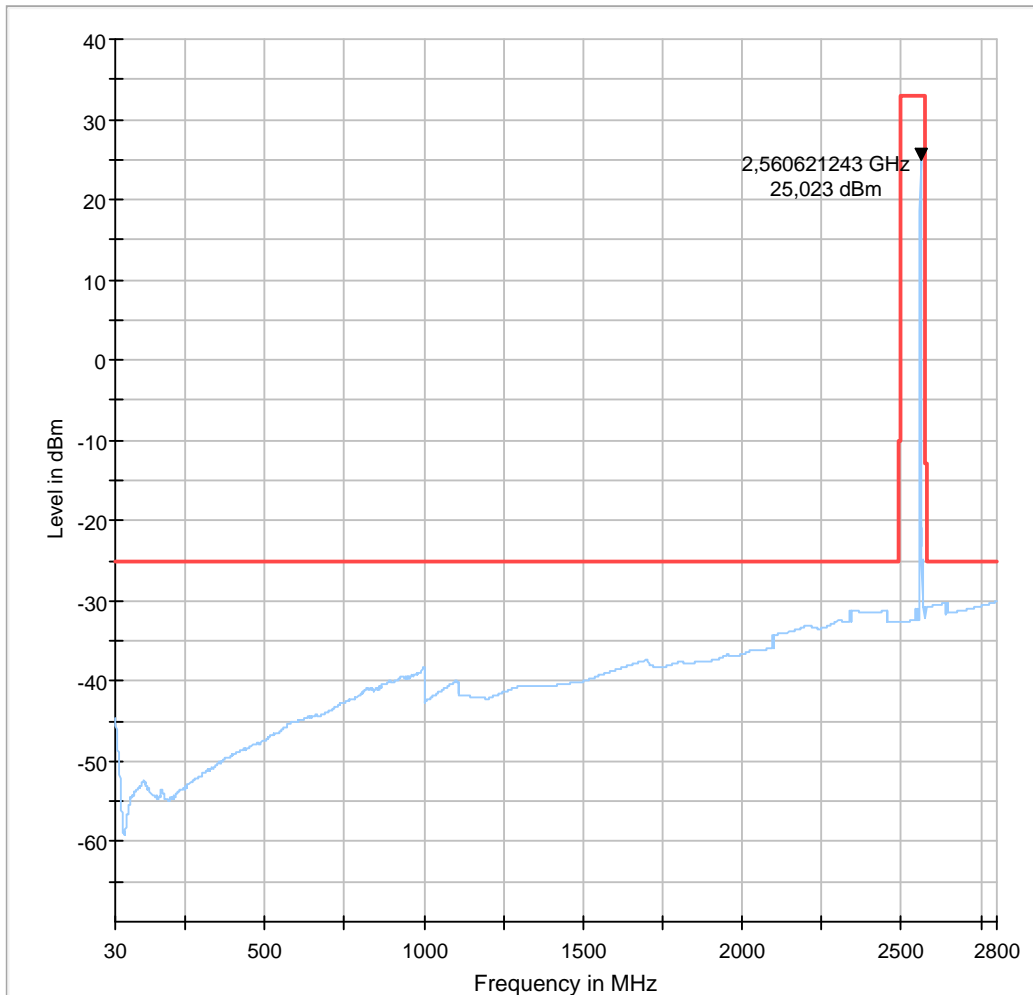
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 7 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27.53(l)(4) Mobile stations limits |
| Operating Mode: | UE allocated channel xxx/ BW: / RB: / Position: |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RIs |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



8.55aa_RSE_R_Ch21400_BW_10_MHz_2.8-20MHz_standing

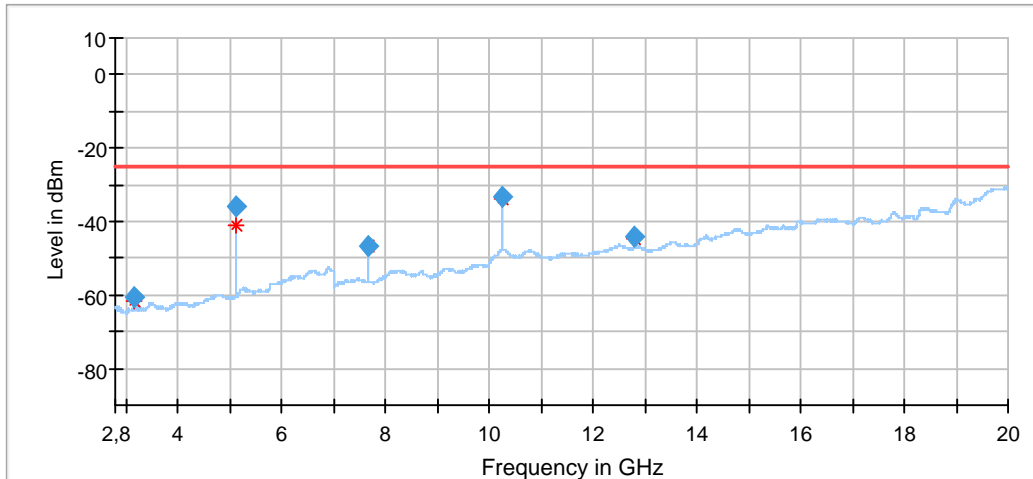
Common Information

| | |
|---------------------------|---|
| Test Description: | Radiated Spurious Emissions LTE Band 7 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27.53(l)(4) Mobile stations limits |
| Operating Mode: | UE allocated channel 21400/ BW:10 / RB:1 / Position:low |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | Rls |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



Final Result

| Frequency (MHz) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) | Comment |
|-----------------|-------------|-------------|-----------------|-------------|-----|---------------|------------|-----------------------|
| 3179.889779 | - | 35.80 | 1000.0 | 155.0 | H | 307.0 | -95.5 | 10:09:10 - 24.04.2017 |
| 5121.092184 | - | 11.12 | 1000.0 | 155.0 | H | 61.0 | -90.7 | 10:05:20 - 24.04.2017 |
| 7681.953907 | - | 21.93 | 1000.0 | 155.0 | H | 37.0 | -84.3 | 10:06:58 - 24.04.2017 |
| 10242.329549 | 25.00 | 8.54 | 1000.0 | 155.0 | H | 313.0 | -77.9 | 10:10:45 - 24.04.2017 |
| 12802.935871 | 25.00 | 19.26 | 1000.0 | 155.0 | H | 313.0 | -76.7 | 10:12:19 - 24.04.2017 |

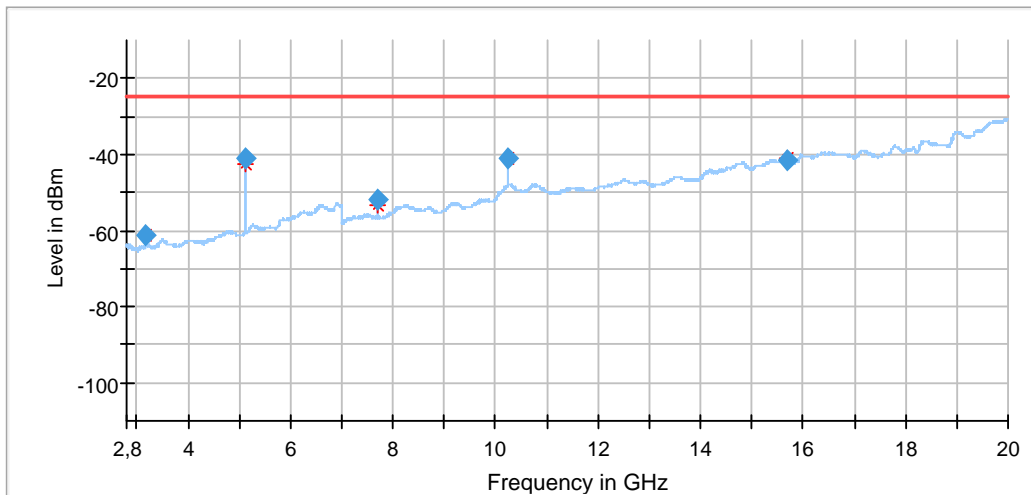
8.55b_RSE_R_Ch21400_BW_10_MHz_2.8-20GHz_laying

Common Information

| | |
|--------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 7 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site | Fully Anechoic Room (FAR) |
| Test Standart | FCC Part 27.53(l)(4) Mobile stations limits |
| Operating mode | UE allocated channel 21400/ BW:10 / RB:1 / Position: Low |
| Environmental conditions | Humidity: 35%rH; Temperature: 20°C |
| Test SW Version | EMC32 V9.26.0 |
| Operator | MBe |
| Remarks | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |



Final Result

| Frequency (MHz) | RMS (dBm) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|-----------|-------------|-------------|-----------------|-----------------|-------------|-----|---------------|------------|
| 3179.889779 | -61.29 | -25.00 | 36.29 | 1000.0 | 1000.000 | 155.0 | V | -8.0 | -95.5 |
| 5121.132265 | -40.97 | -25.00 | 15.97 | 1000.0 | 1000.000 | 155.0 | V | 217.0 | -90.7 |
| 7681.893787 | -51.65 | -25.00 | 26.65 | 1000.0 | 1000.000 | 155.0 | V | 298.0 | -84.3 |
| 10242.284429 | -41.22 | -25.00 | 16.22 | 1000.0 | 1000.000 | 155.0 | V | 268.0 | -77.9 |
| 15678.086172 | -41.76 | -25.00 | 16.76 | 1000.0 | 1000.000 | 155.0 | H | -15.0 | -71.6 |

1.12. Radiated emissions – band-edge (LTE Band 2) with signal bandwidth of 1.4MHz

1.12.1. Low band-edge, Channel 18700, QPSK, 1RB on low position

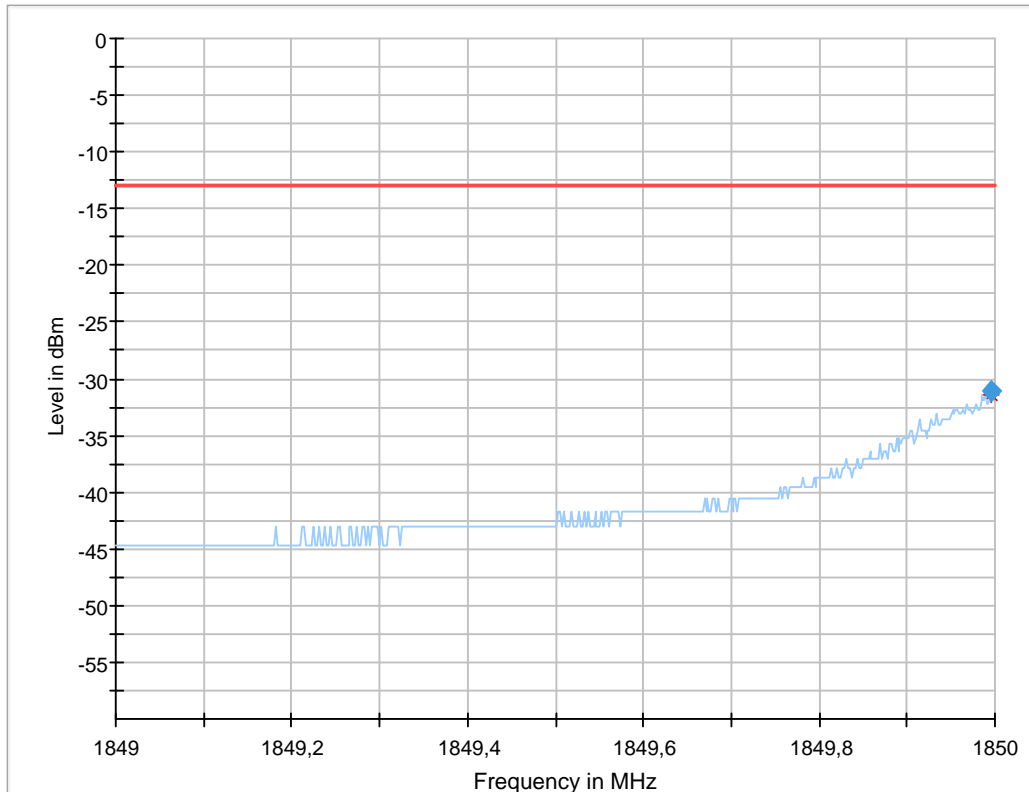
9.40a_BE_R_Ch18700_1RB_BW20_QPSK_Laying

Common Information

| | |
|---------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | UE allocated channel 18700 |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |



Final Result

| Frequency (MHz) | RMS (dBm) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|-----------|-------------|-------------|-----------------|-----------------|-----|---------------|-----------------|------------|
| 1849.995992 | -31.08 | -13.00 | 18.08 | 1000.0 | 200.000 | V | 204.0 | 0.0 | -63.1 |

9.40b_BE_R_Ch18700_1RB_BW20_QPSK_Standing

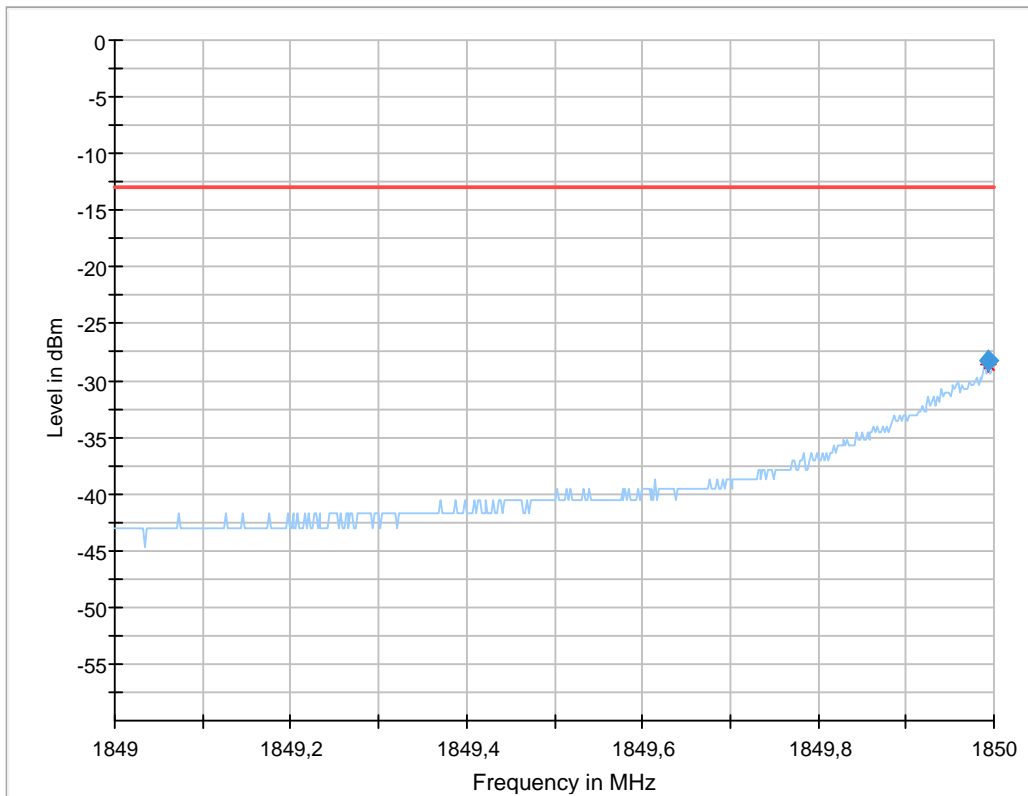
Common Information

Test Description: Radiated Band Edge Compliance LTE B2
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 24
 Operation mode: LTE Band 2 TX ch 18700 1RB BW20 QPSK
 Environmental Conditions: Humidity: 51%rH; Temperature: 20°C
 Operator: SLo
 Comment: EUT - standing position

EUT Information

Manufacturer: peiker acustic GmbH & Co. KG
 EUT: V1231-0

 HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -



Final Result

| Frequency (MHz) | RMS (dBm) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|-----------|-------------|-------------|-----------------|-----------------|-----|---------------|-----------------|------------|
| 1849.993988 | -28.31 | -13.00 | 15.31 | 1000.0 | 200.000 | V | 342.0 | 90.0 | -63.1 |

1.12.2. Low band-edge, Channel 18700, 16QAM, 1RB on low position

9.40a_BE_R_Ch18700_1RB_BW20_QAM_Laying

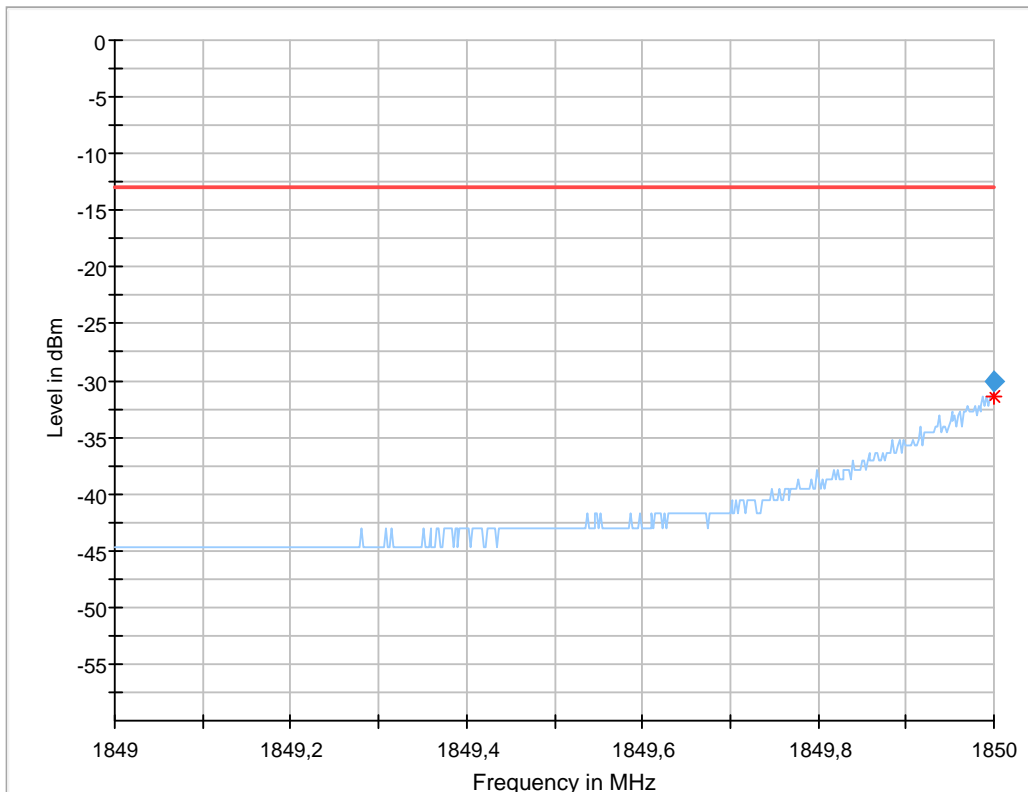
Common Information

Test Description: Radiated Spurious Emissions LTE Band 2
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 24
 Operating Mode: UE allocated channel 18700
 Environmental Conditions: Humidity: 49%rH; Temperature: 21°C
 Operator: SLo
 Comment: EUT - laying position

EUT Information

Manufacturer: peiker acustic GmbH & Co. KG
 EUT: V1231-0

 HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -



Final Result

| Frequency (MHz) | RMS (dBm) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|-----------|-------------|-------------|-----------------|-----------------|-----|---------------|-----------------|------------|
| 1850.000000 | -30.05 | -13.00 | 17.05 | 1000.0 | 200.000 | V | 200.0 | 0.0 | -63.1 |

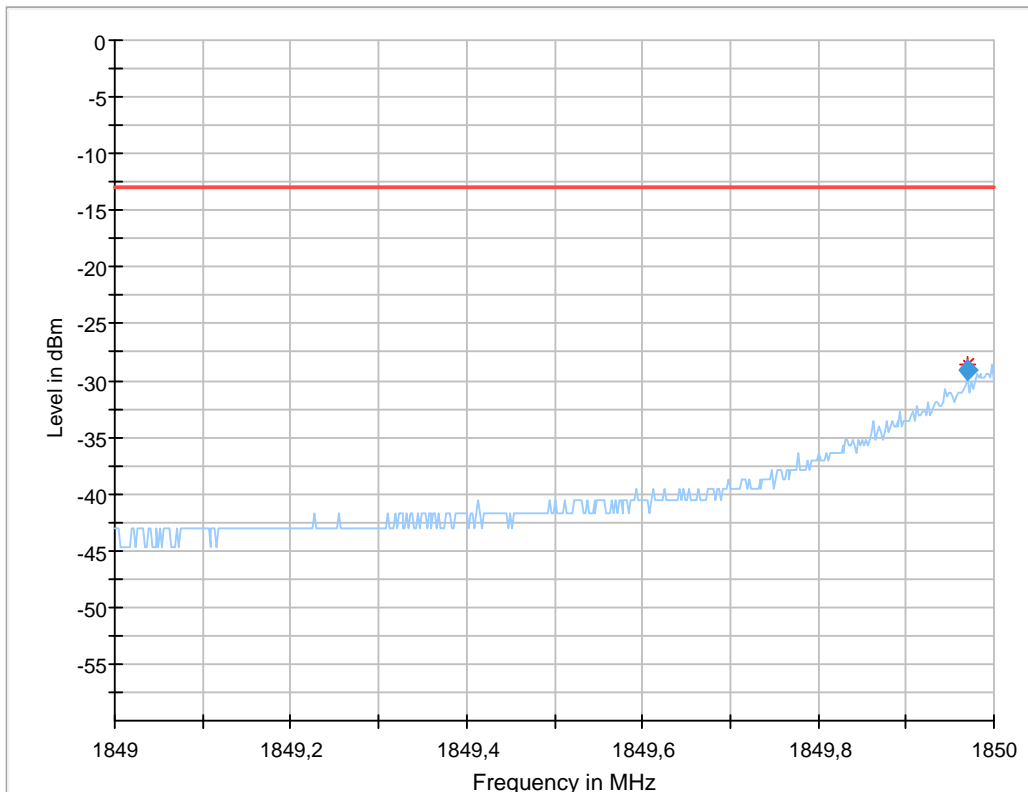
9.40b_BE_R_Ch18700_1RB_BW20_QAM_Standing

Common Information

| | |
|---------------------------|--------------------------------------|
| Test Description: | Radiated Band Edge Compliance LTE B2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operation mode: | LTE Band 2 TX ch 18700 1RB BW20 QAM |
| Environmental Conditions: | Humidity: 51%rH; Temperature: 20°C |
| Operator: | SLo |
| Comment: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |



Final Result

| Frequency (MHz) | RMS (dBm) | Limit (dBm) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Pol | Azimuth (deg) | Elevation (deg) | Corr. (dB) |
|-----------------|-----------|-------------|-------------|-----------------|-----------------|-----|---------------|-----------------|------------|
| 1849.969940 | -29.14 | -13.00 | 16.14 | 1000.0 | 200.000 | V | 341.0 | 0.0 | -63.1 |

1.12.3. Low band-edge, Channel 18700, QPSK, 100RBs

9.41a_BE_R_Ch18700_100RB_BW20_QPSK_Laying

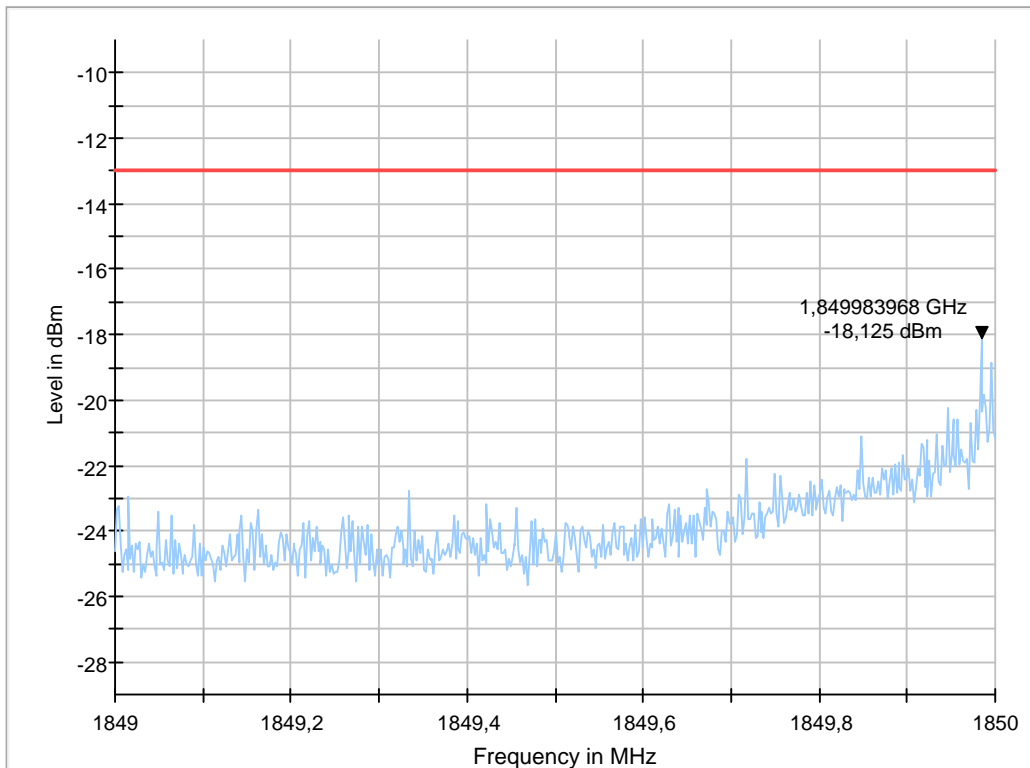
Common Information

| | |
|---------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | UE allocated channel 18700 |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.41a_BE_R_Ch18700_100RB_BW20_QPSK_Standing

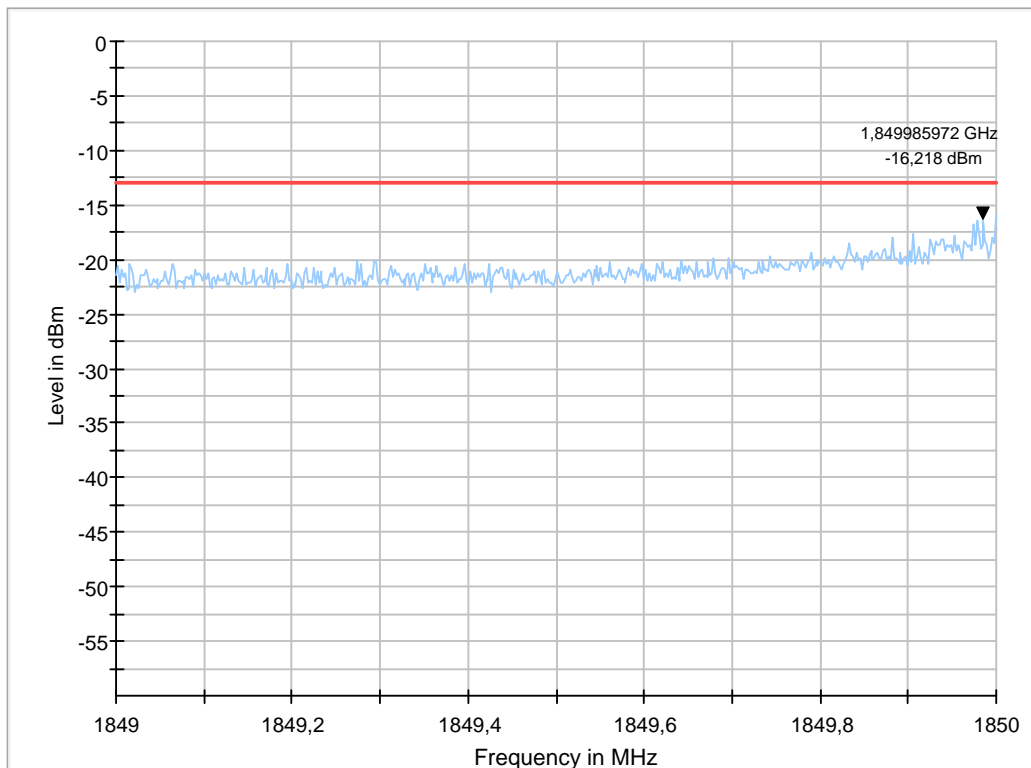
Common Information

| | |
|---------------------------|--|
| Test Description: | Radiated Band Edge Compliance LTE B2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | LTE Band 2 TX ch 18700 100RB BW20 QPSK |
| Environmental Conditions: | Humidity: 51%rH; Temperature: 20°C |
| Operator: | SLo |
| Comment: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.12.4. Low band-edge, Channel 18700, 16-QAM, 100RBs

9.41b_BE_R_Ch18700_100RB_BW20_QAM_Laying

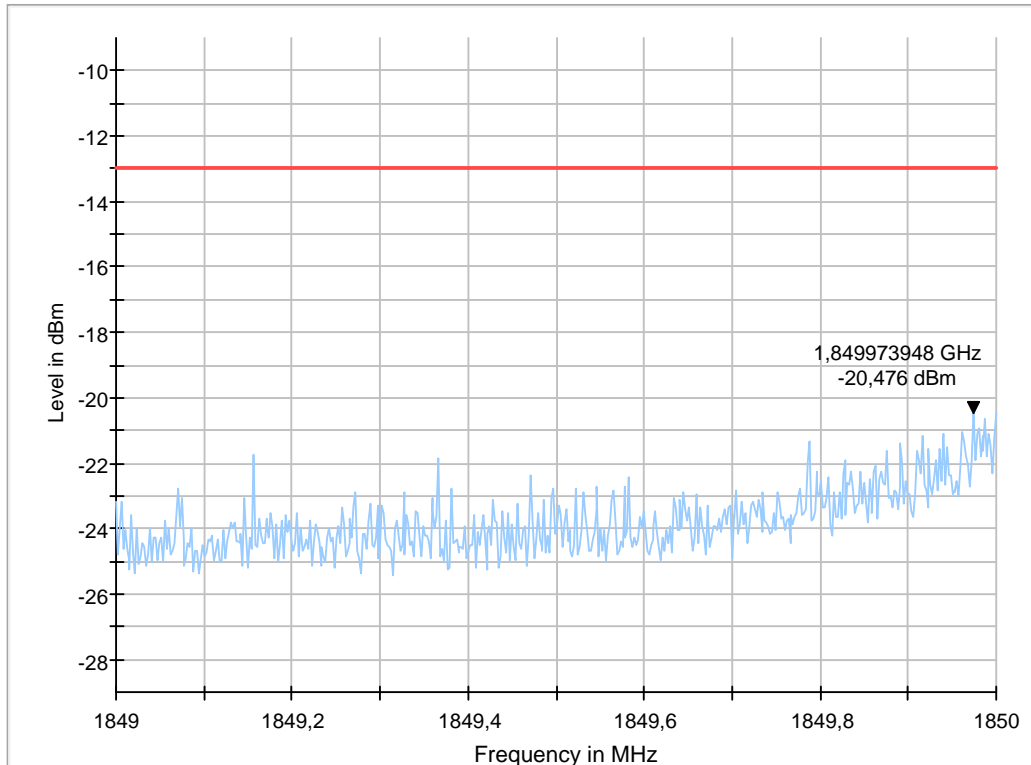
Common Information

| | |
|---------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | UE allocated channel 18700 |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.41b_BE_R_Ch18700_100RB_BW20_QAM_Standing

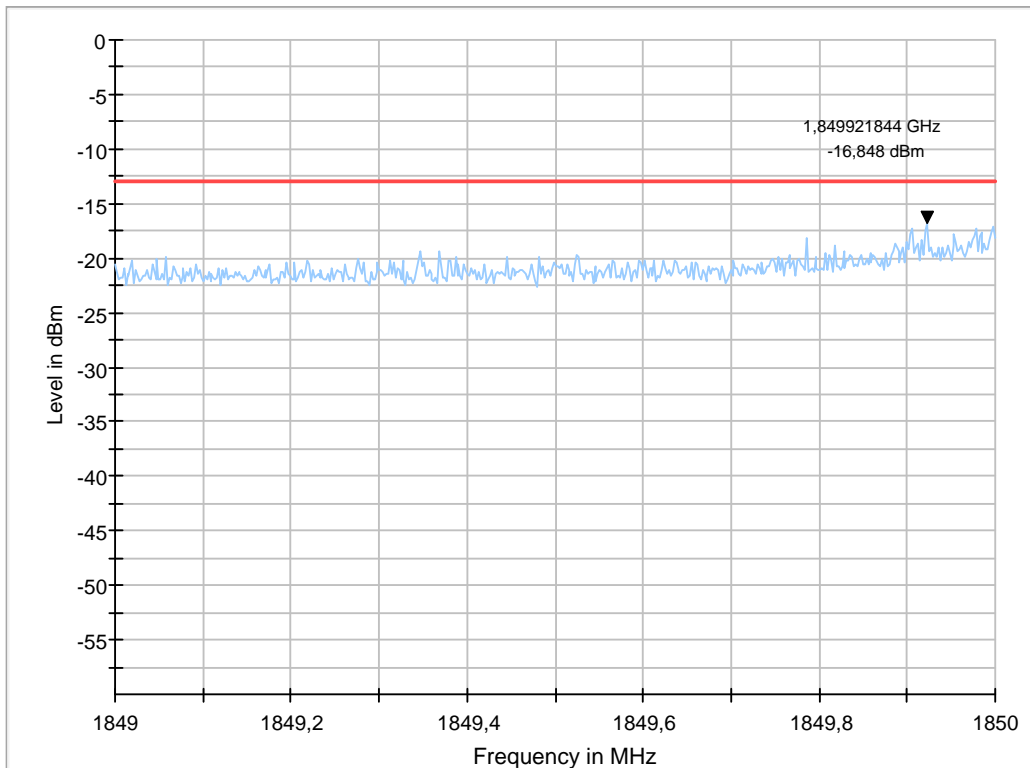
Common Information

| | |
|---------------------------|---------------------------------------|
| Test Description: | Radiated Band Edge Compliance LTE B2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | LTE Band 2 TX ch 18700 100RB BW20 QAM |
| Environmental Conditions: | Humidity: 51%rH; Temperature: 20°C |
| Operator: | SLo |
| Comment: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.12.5. High band-edge, Channel 19150, QPSK, 1RB on high position

9.42a_BE_R_Ch19150_1RB_BW20_QPSK_Laying

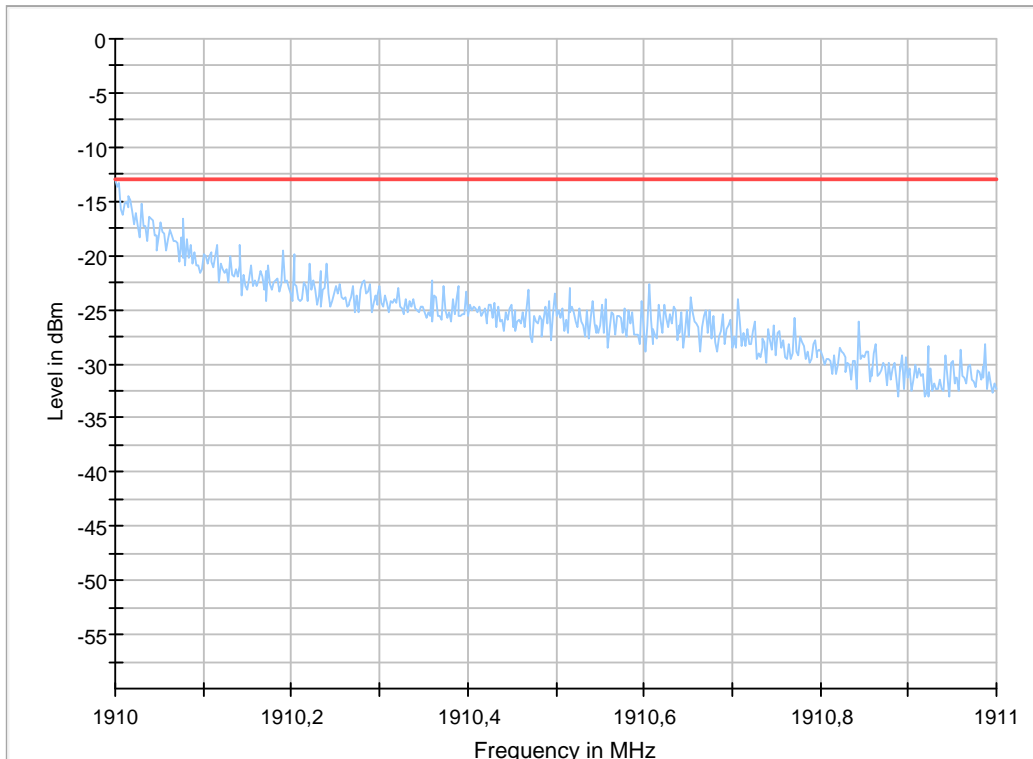
Common Information

| | |
|---------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | UE allocated channel 19150 |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.42a_BE_R_Ch19150_1RB_BW20_QPSK_Standing

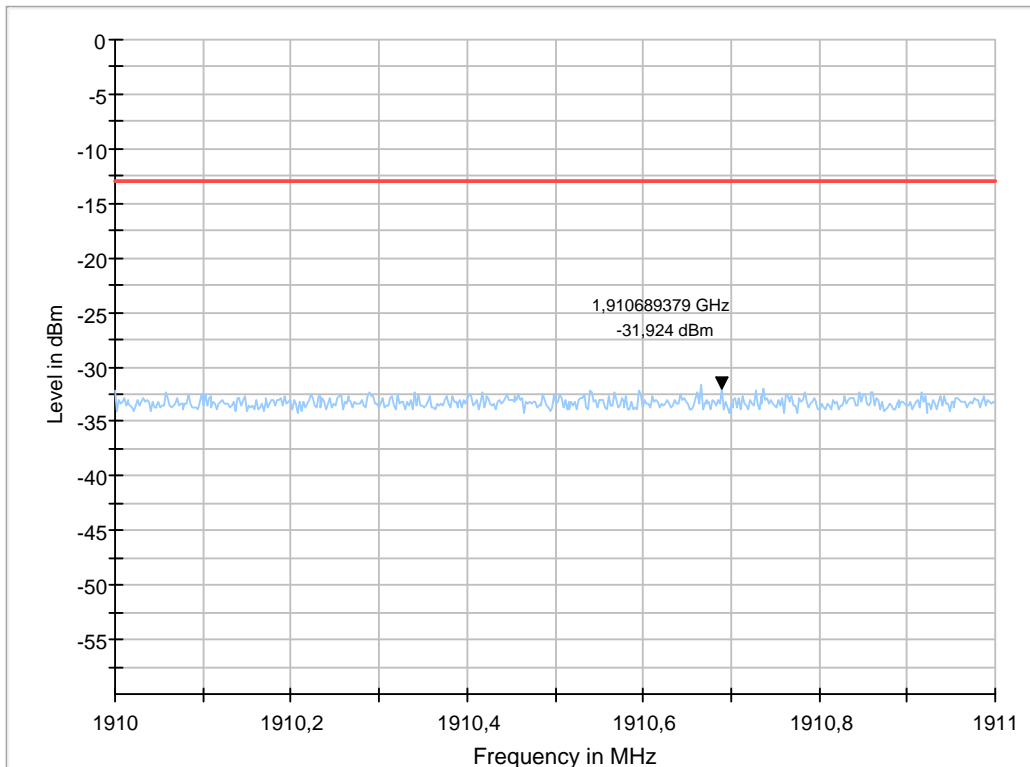
Common Information

| | |
|---------------------------|--------------------------------------|
| Test Description: | Radiated Band Edge Compliance LTE B2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | LTE Band 2 TX ch 19150 1RB BW10 QPSK |
| Environmental Conditions: | Humidity: 51%rH; Temperature: 20°C |
| Operator: | SLo |
| Comment: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.12.6. High band-edge, Channel 19150, 16-QAM, 1RB on high position

9.42b_BE_R_Ch19150_1RB_BW20_QAM_Laying

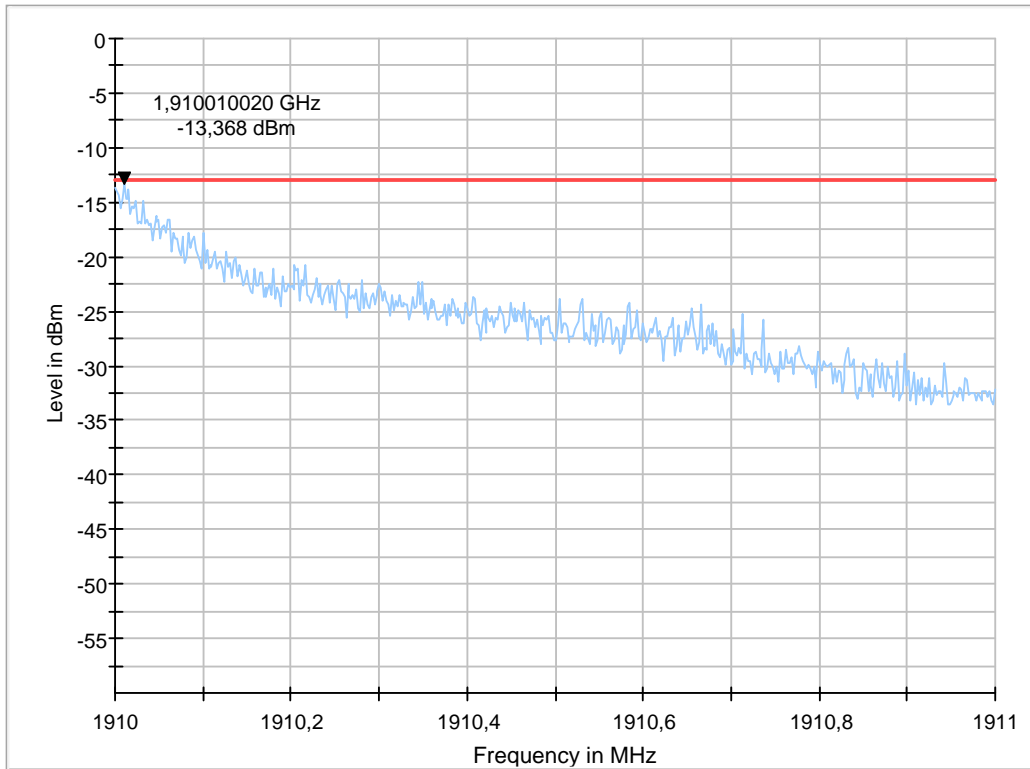
Common Information

| | |
|---------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | UE allocated channel 19150 |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256),Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.42b_BE_R_Ch19150_1RB_BW20_QAM_Standing

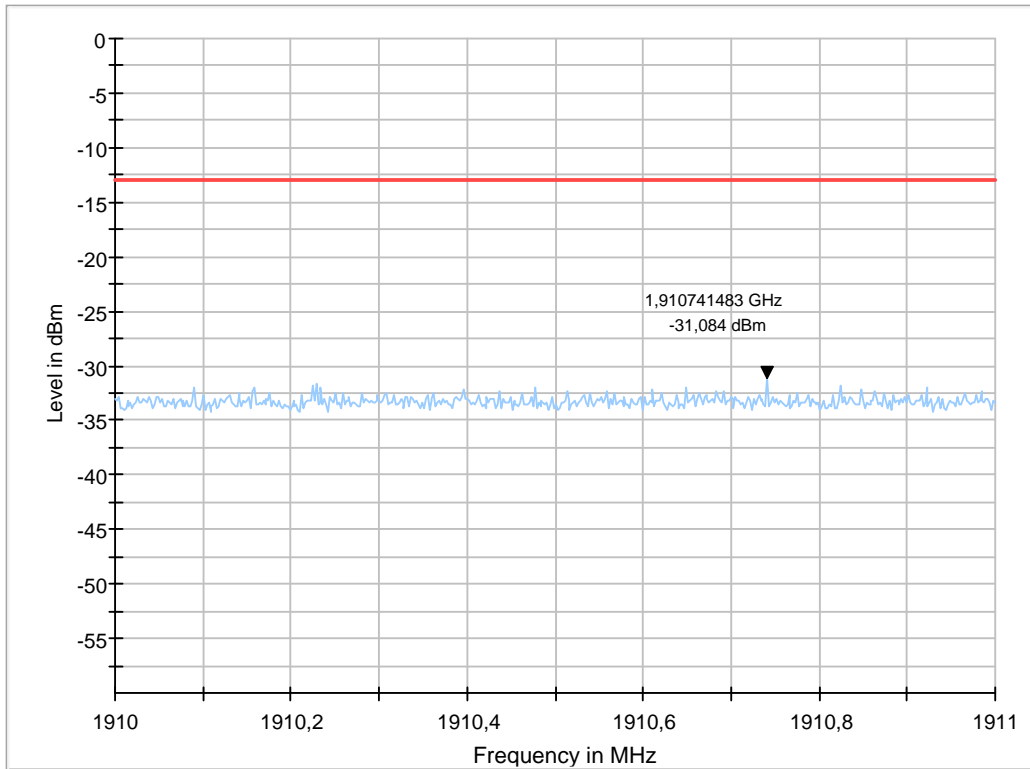
Common Information

| | |
|---------------------------|--------------------------------------|
| Test Description: | Radiated Band Edge Compliance LTE B2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | LTE Band 2 TX ch 19150 1RB BW10 QAM |
| Environmental Conditions: | Humidity: 51%rH; Temperature: 20°C |
| Operator: | SLo |
| Comment: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.12.7. High band-edge, Channel 19150, QPSK, 100RBs

9.43a_BE_R_Ch19150_100RB_BW20_QPSK_Laying

Common Information

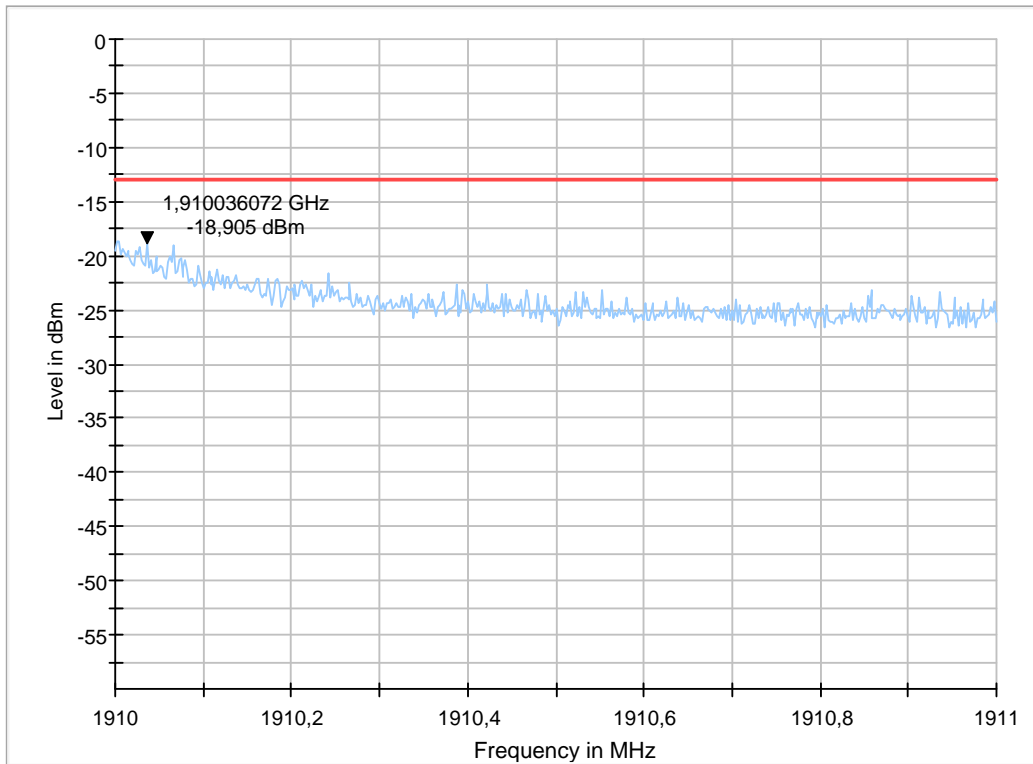
| | |
|---------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | UE allocated channel 19150 |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |

Comments: -

Full Spectrum



9.43a_BE_R_Ch19150_100RB_BW20_QPSK_Standing

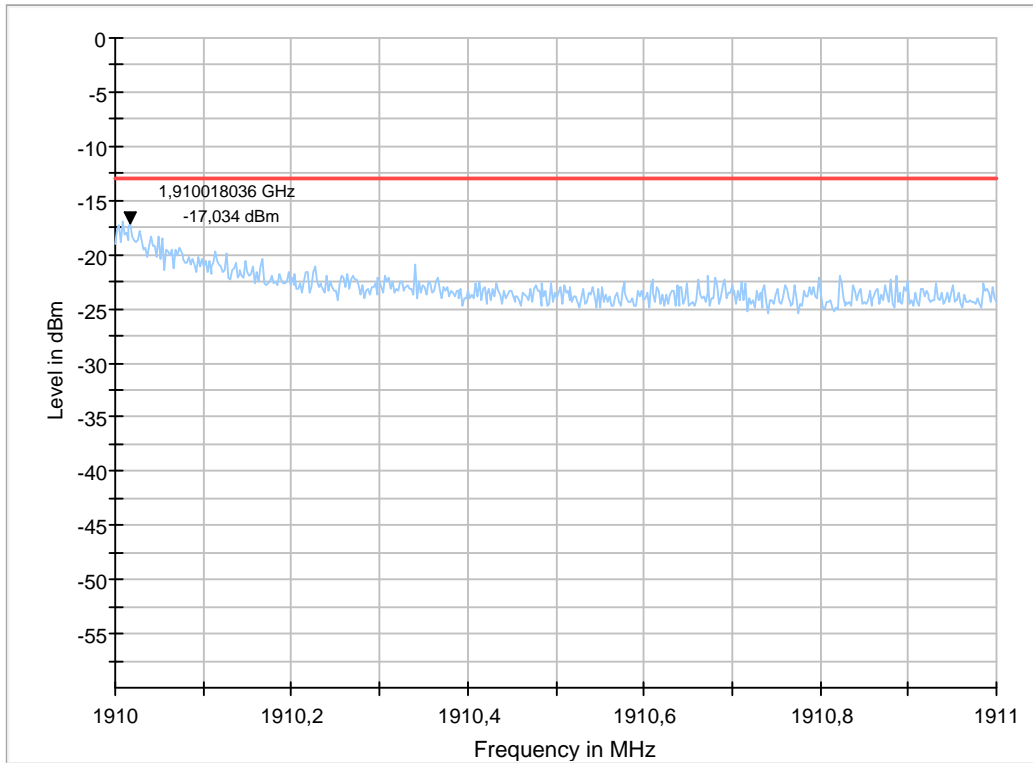
Common Information

| | |
|---------------------------|---------------------------------------|
| Test Description: | Radiated Band Edge Compliance LTE B2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | LTE Band 2 TX ch 19150 50RB BW10 QPSK |
| Environmental Conditions: | Humidity: 51%rH; Temperature: 20°C |
| Operator: | SLo |
| Comment: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.12.8. High band-edge, Channel 19150, 16-QAM, 100RBs

9.43b_BE_R_Ch19150_100RB_BW20_QAM_Laying

Common Information

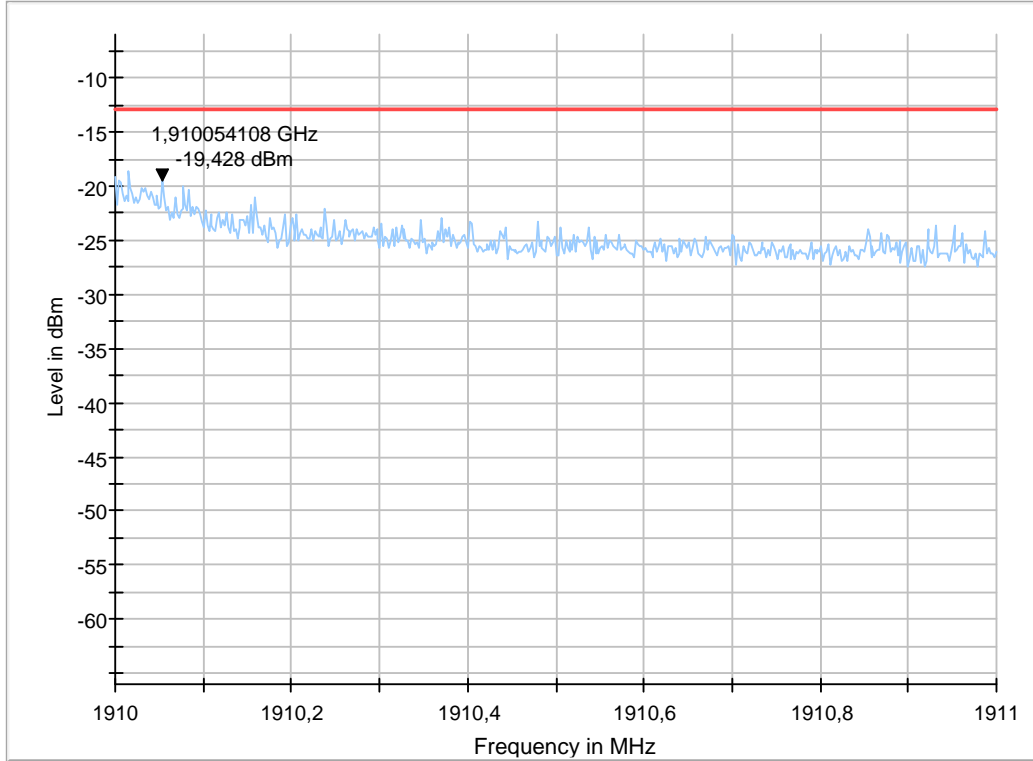
| | |
|---------------------------|--|
| Test Description: | Radiated Spurious Emissions LTE Band 2 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | UE allocated channel 19150 |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|----------------|------------------------------|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |

Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



9.43b_BE_R_Ch19150_50RB_BW10_QAM_Standing

Common Information

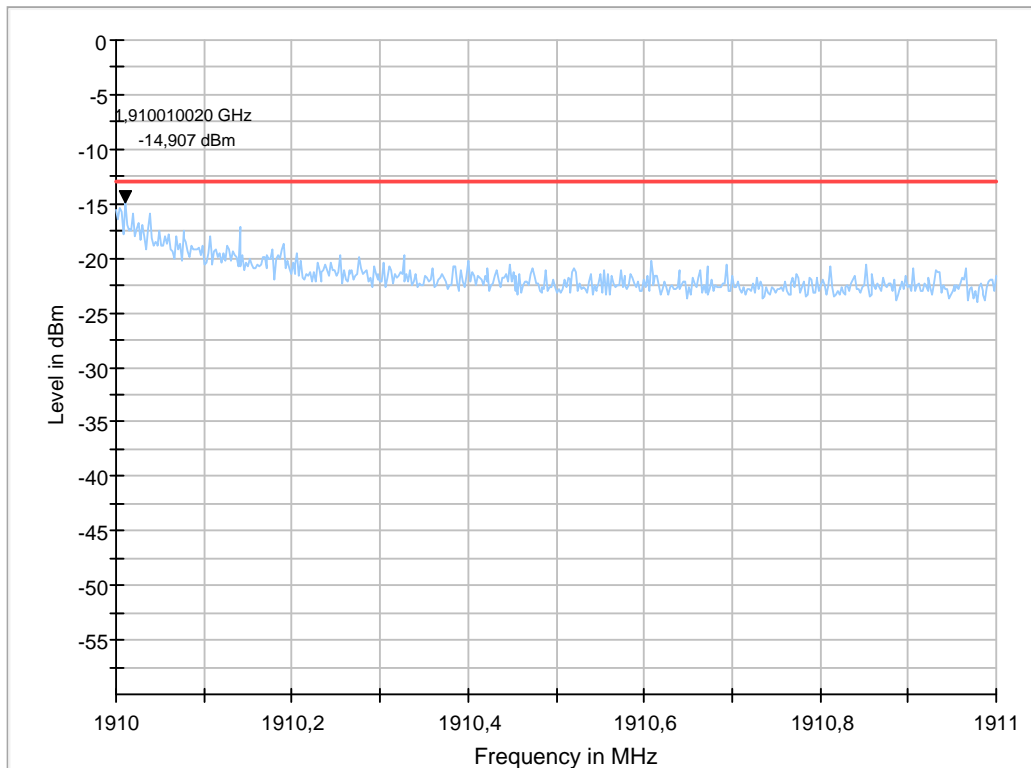
| | |
|---------------------------|--------------------------------------|
| Test Description: | Radiated Band Edge Compliance LTE B4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 24 |
| Operating Mode: | LTE Band 2 TX ch 19150 50RB BW10 QAM |
| Environmental Conditions: | Humidity: 51%rH; Temperature: 20°C |
| Operator: | SLo |
| Comment: | EUT - standing position |

EUT Information

| | |
|----------------|------------------------------|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |

Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna
LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply: 12VDC
Comments: -

Full Spectrum



1.13. Radiated emissions – band-edge (LTE Band 4) with signal bandwidth of 1.4MHz

1.13.1. Low Band-Edge, channel 20050, QPSK, 1RB on low position

9.48a_BE_R_Ch20050_1RB_BW20_QPSK_Standing

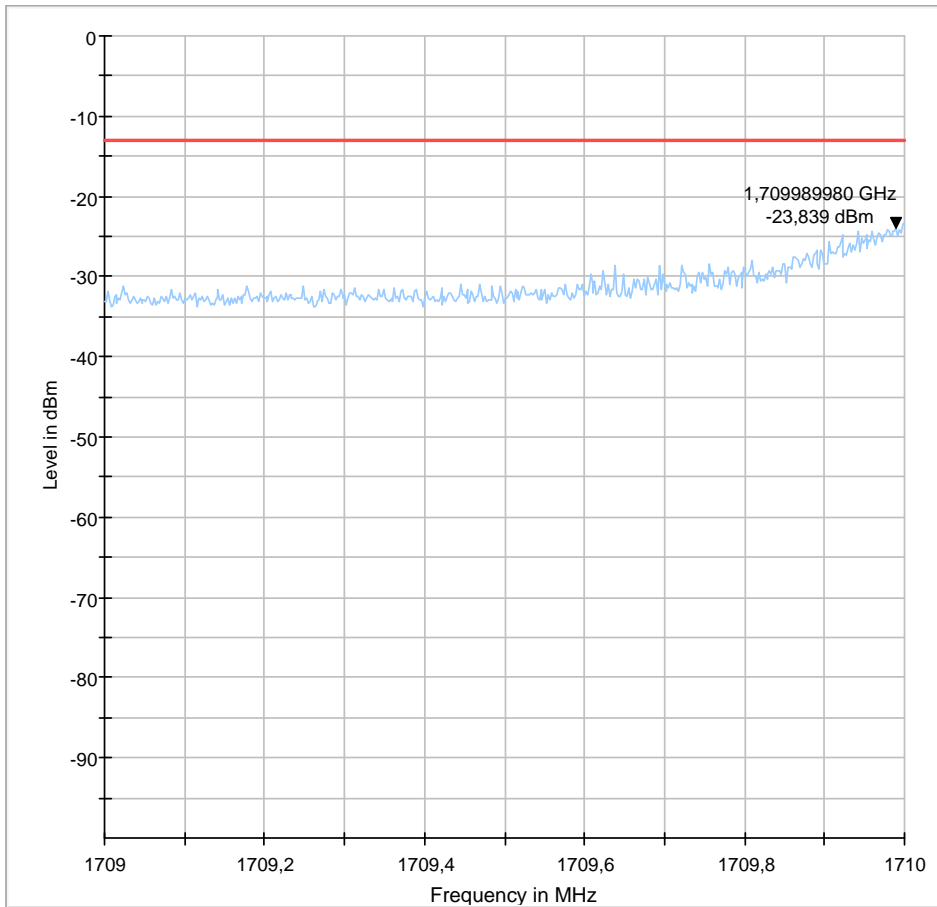
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band 4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27 |
| Operating Mode: | UE allocated channel 20050 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RIs |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256),Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.48a_BE_R_Ch20050_1RB_BW20_QPSK_Laying

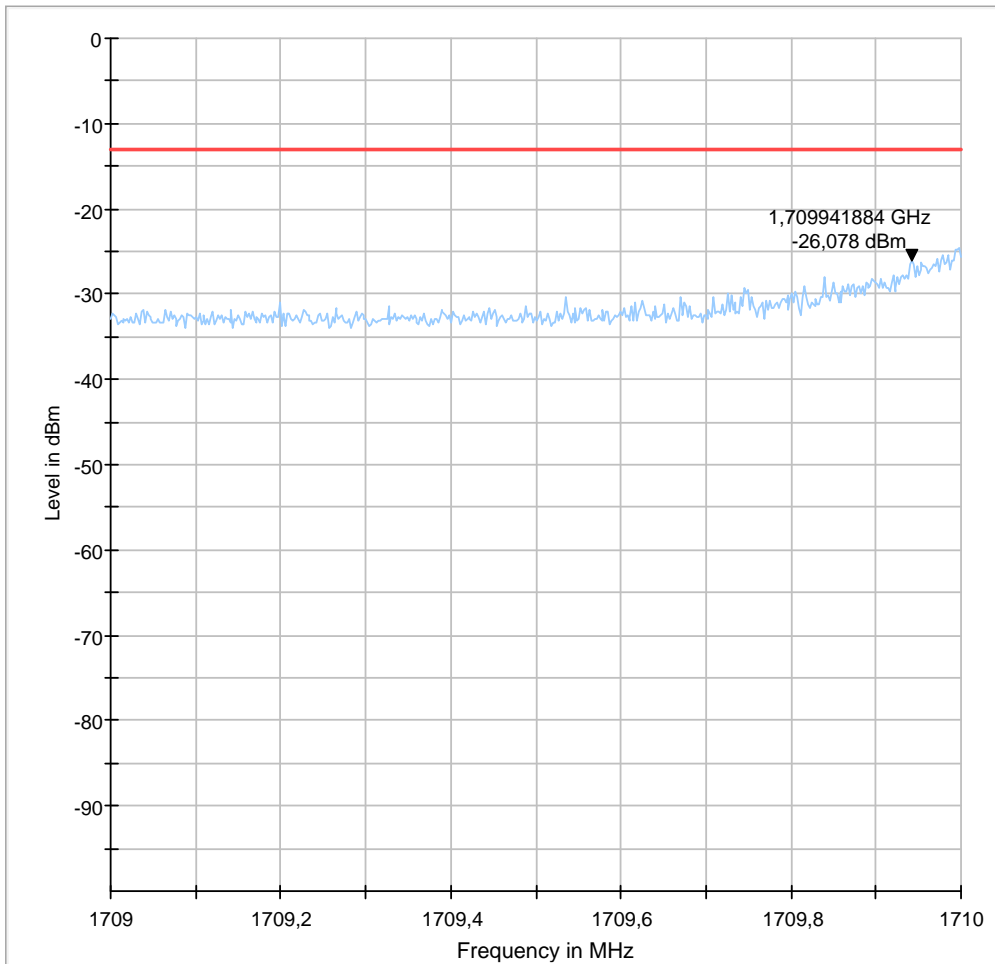
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band 4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27 |
| Operating Mode: | UE allocated channel 20050 |
| Environmental Conditions: | Humidity: 51%rH; Temperature: 20°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.13.2. Low Band-Edge, channel 20050, 16-QAM, 1RB on low position

9.48b_BE_R_Ch20050_1RB_BW20_QAM_Standing

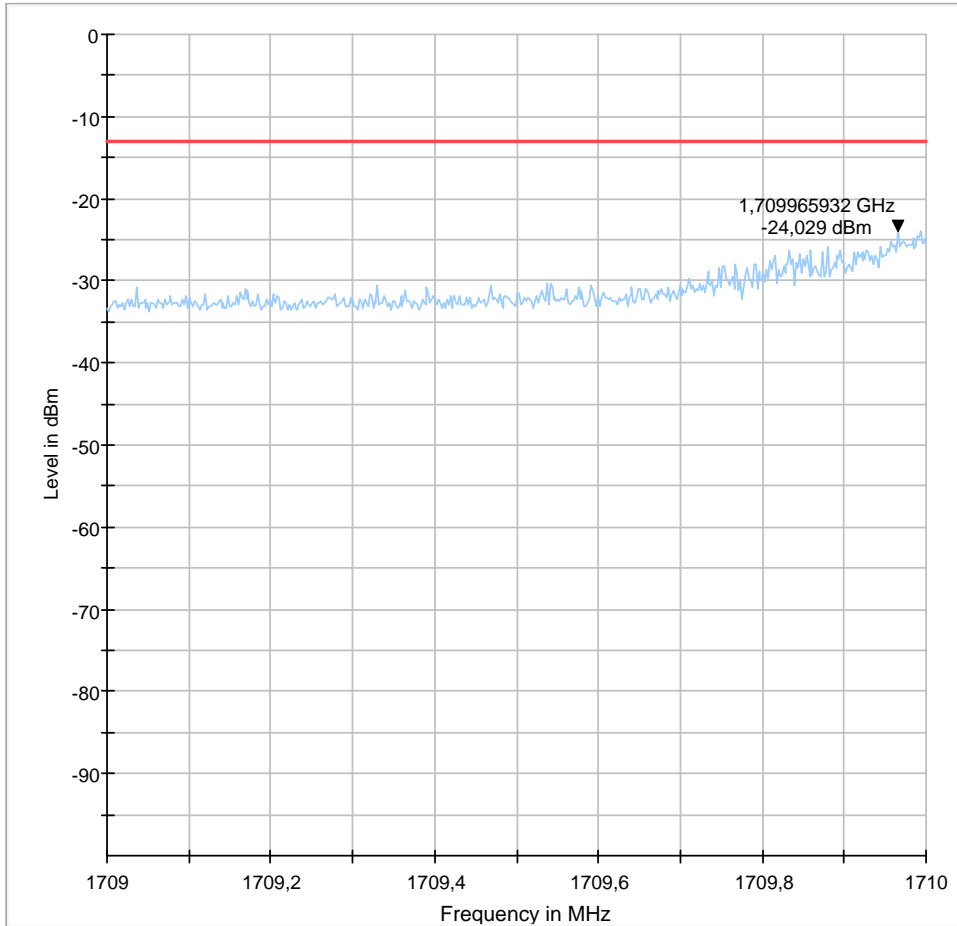
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band 4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27 |
| Operating Mode: | UE allocated channel 20050 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RI |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.48b_BE_R_Ch20050_1RB_BW20_QAM_Laying

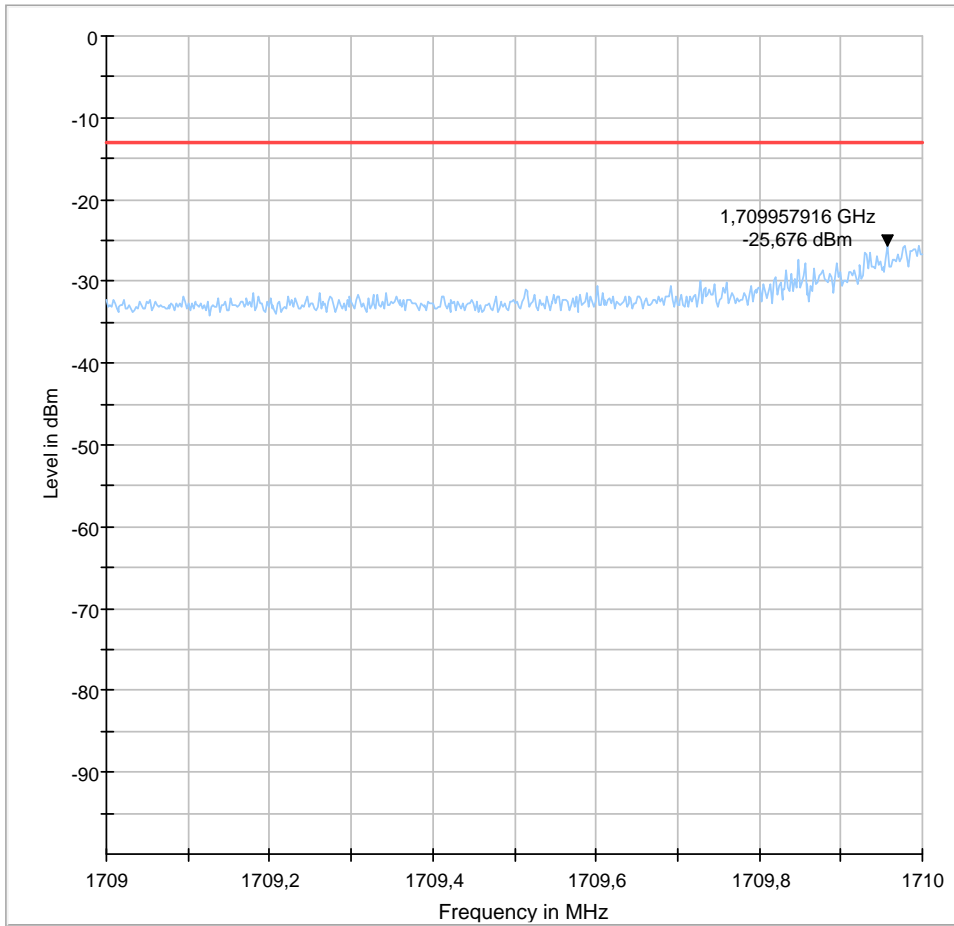
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band 4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27 |
| Operating Mode: | UE allocated channel 20050 |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.13.3. Low Band-Edge, channel 20050, QPSK, 100RBs

9.49a_BE_R_Ch20050_100RB_BW20_QPSK_Standing

Common Information

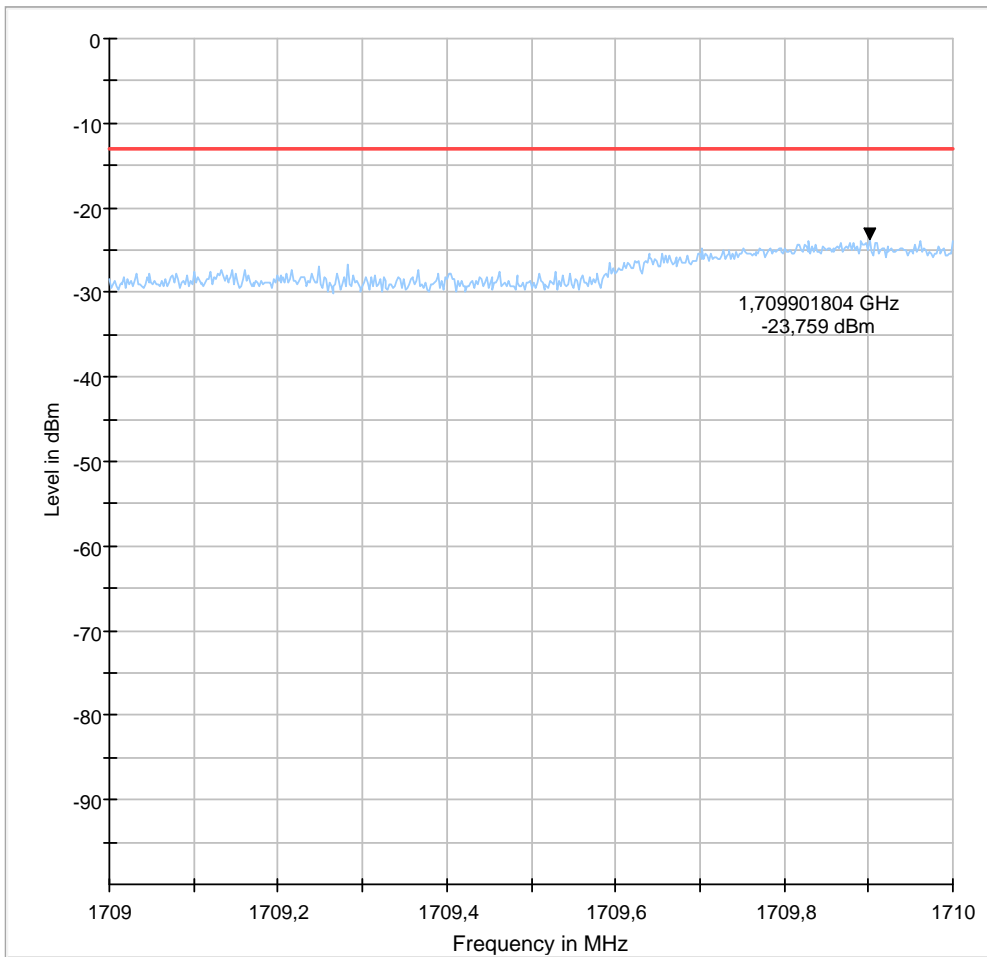
| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band 4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27 |
| Operating Mode: | UE allocated channel 20050 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RIs |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |

Comments: -

Full Spectrum



9.49a_BE_R_Ch20050_100RB_BW20_QPSK_Laying

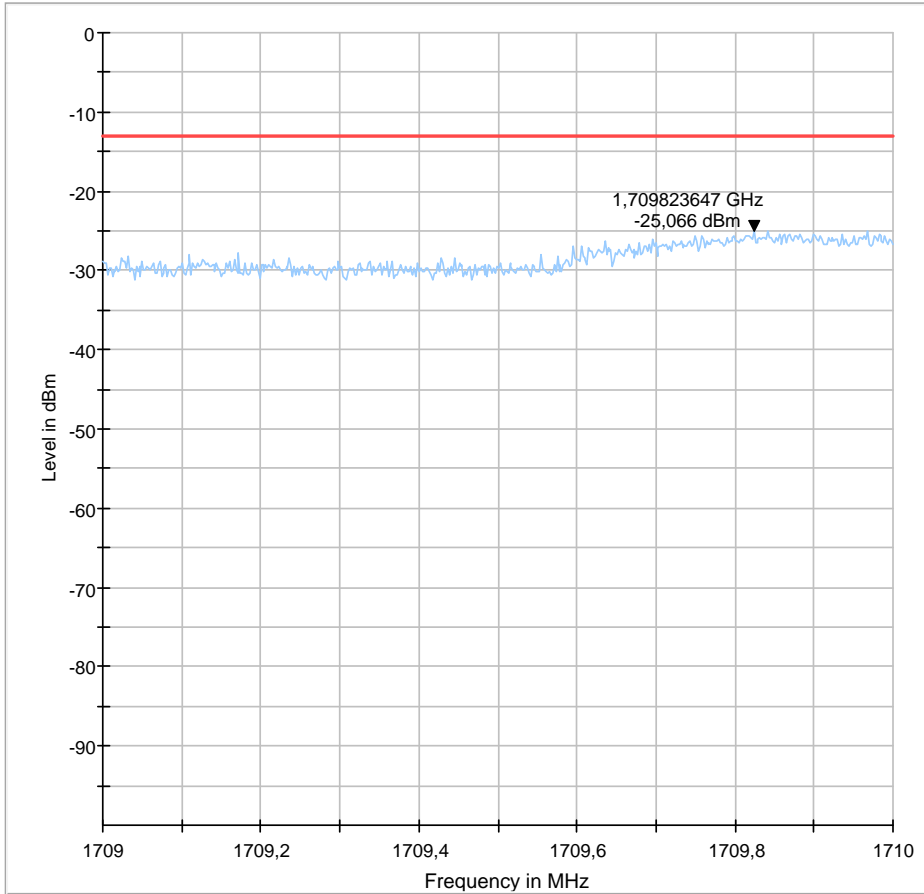
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band 4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27 |
| Operating Mode: | UE allocated channel 20050 |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.13.4. Low Band-Edge, channel 20050, 16-QAM, 100RBs

9.49b_BE_R_Ch20050_100RB_BW20_QAM_Standing

Common Information

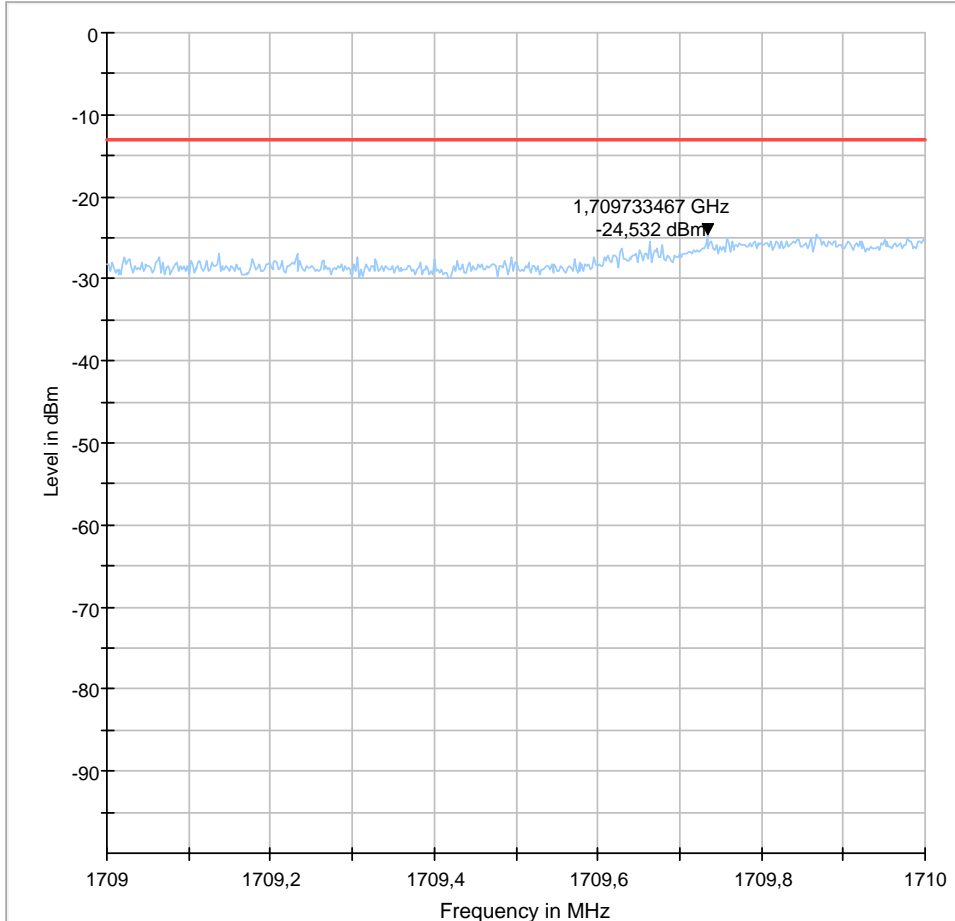
| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band 4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27 |
| Operating Mode: | UE allocated channel 20050 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RIs |
| Remarks: | EUT - standing position |

EUT Information

| | |
|----------------|------------------------------|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |

Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna
 LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



9.49b_BE_R_Ch20050_100RB_BW20_QAM_Laying

Common Information

Test Description: Band-Edge - Radiated Spurious Emissions LTE Band 4
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 27
 Operating Mode: UE allocated channel 20050
 Environmental Conditions: Humidity: 49%rH; Temperature: 21°C
 Operator: SLo
 Comment: EUT - laying position

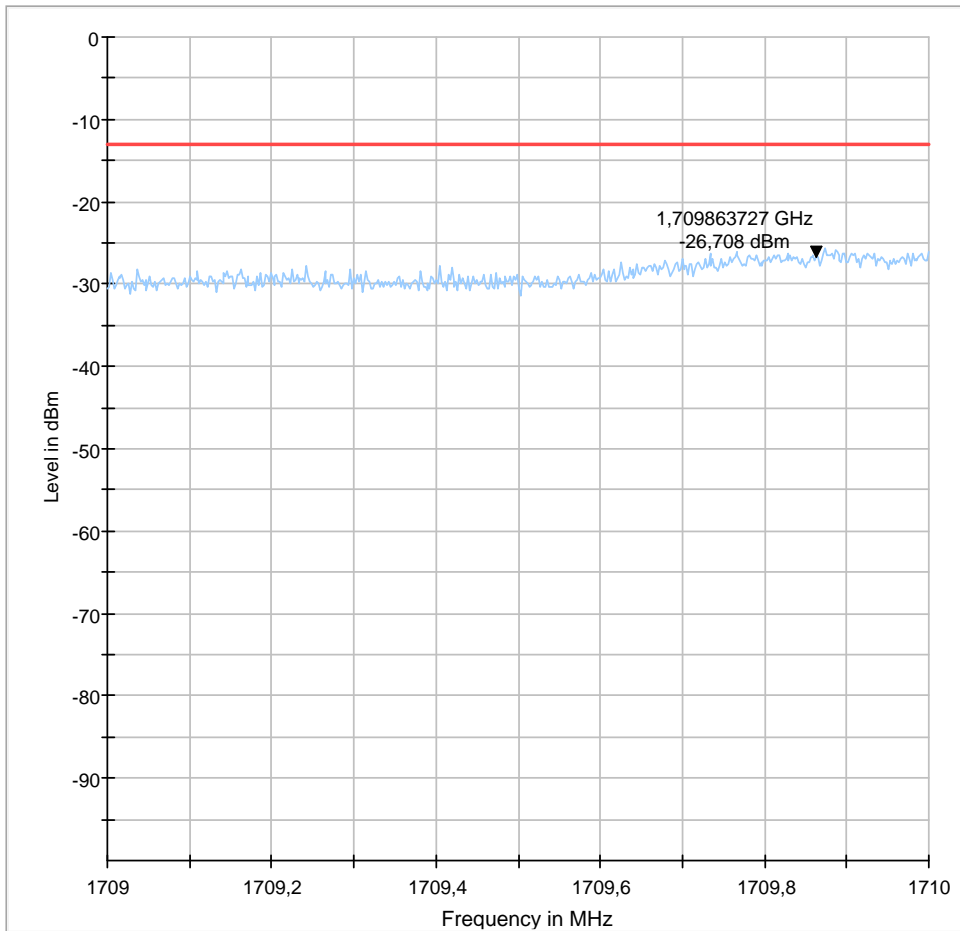
EUT Information

Manufacturer: peiker acustic GmbH & Co. KG
 EUT: V1231-0

 HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna
 LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables

Power Supply: 12VDC
 Comments: -

Full Spectrum



1.13.5. High Band-Edge, channel 20350, QPSK, 1RB on high position

9.41a_BE_R_Ch20350_1RB_BW_10_QPSK_Standing

Common Information

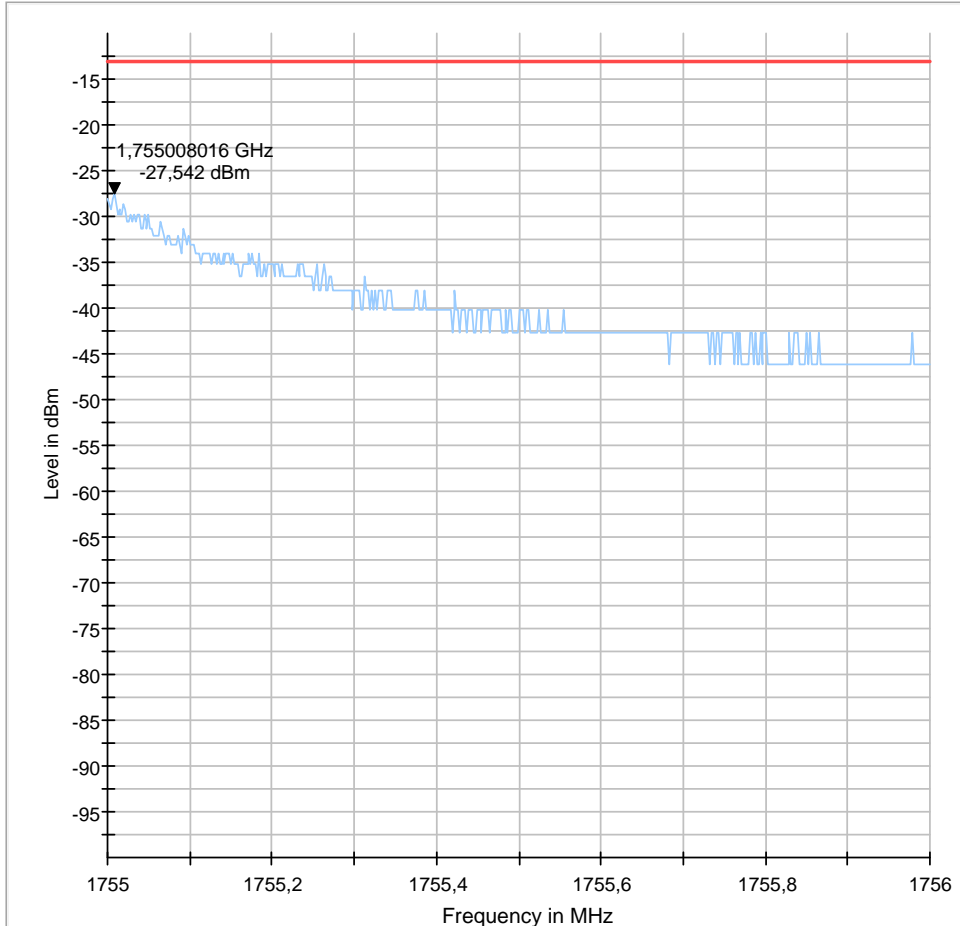
| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band 4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27 |
| Operating Mode: | UE allocated channel 20350 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RIs |
| Remarks: | EUT - standing position |

EUT Information

| | |
|----------------|------------------------------|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |

Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna
 LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



9.41a_BE_R_Ch20350_1RB_BW_10_QPSK_Laying

Common Information

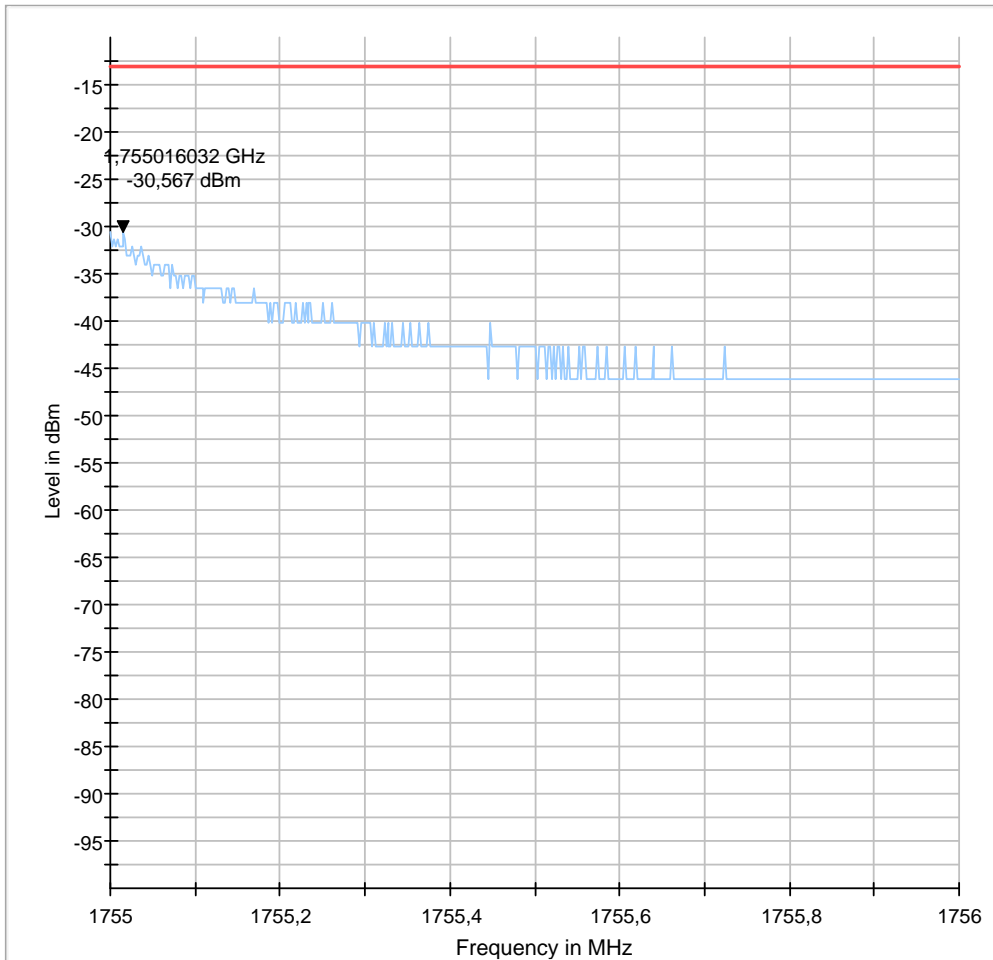
| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band 4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27 |
| Operating Mode: | UE allocated channel 20350 |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|-----------------------|---|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |

Power Supply: 12VDC
 Comments: -

Full Spectrum



1.13.6. High Band-Edge, channel 20350, 16-QAM, 1RB on high position

9.41b_BE_R_Ch20350_1RB_BW_10_QAM_Standing

Common Information

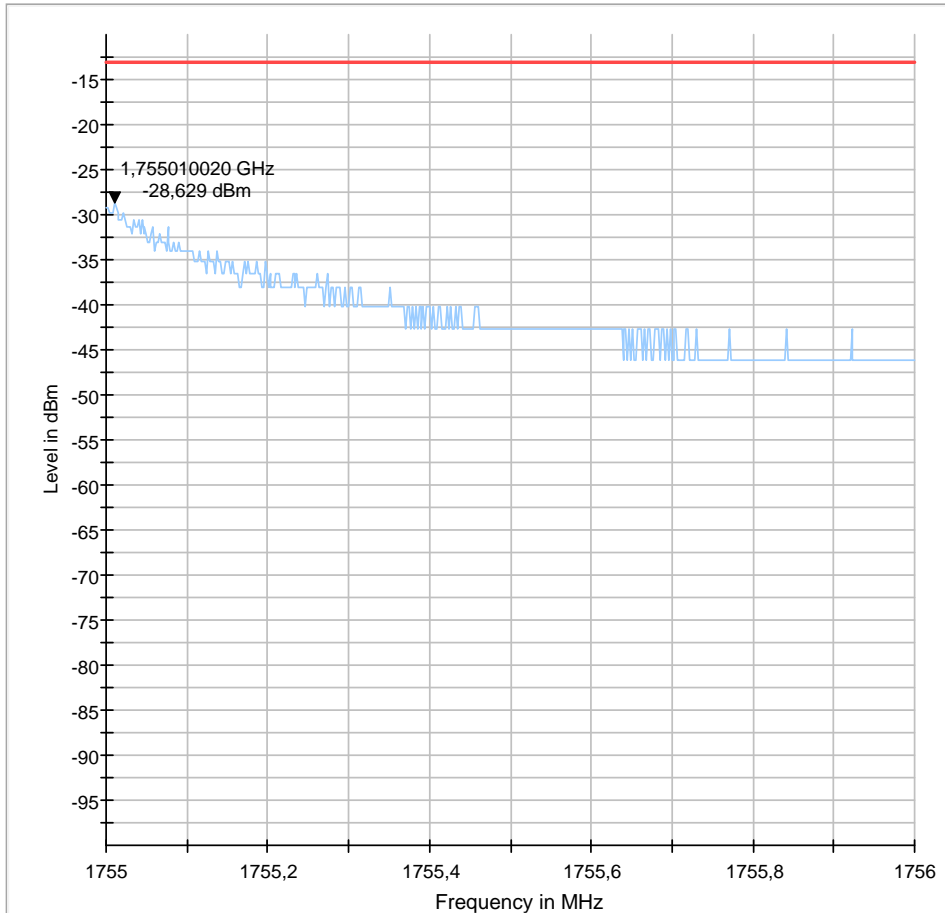
| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band 4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27 |
| Operating Mode: | UE allocated channel 20350 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RIs |
| Remarks: | EUT - standing position |

EUT Information

| | |
|---------------|-------------------------------|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |

Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



9.41b_BE_R_Ch20350_1RB_BW_10_QAM_Laying

Common Information

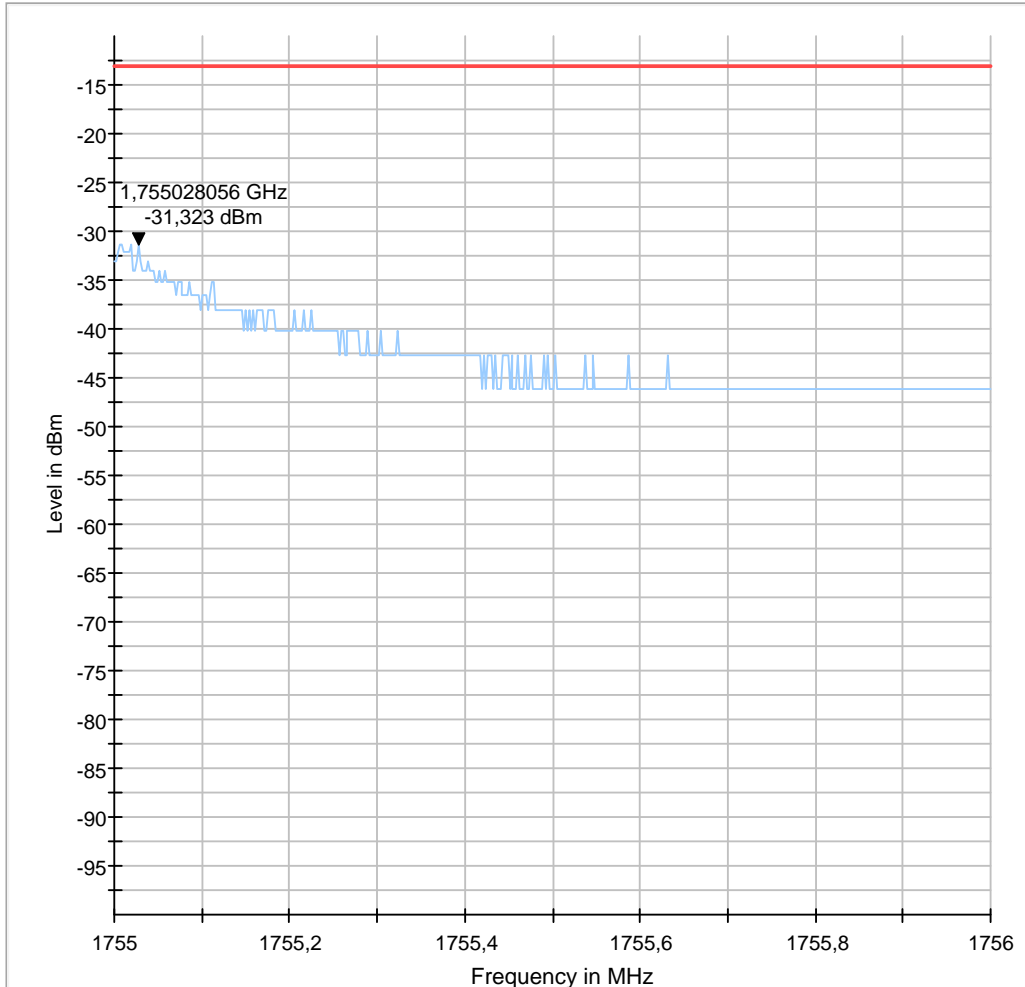
| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band 4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27 |
| Operating Mode: | UE allocated channel 20350 |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|----------------|------------------------------|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |

Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



1.13.7. High Band-Edge, channel 20350, QPSK, 50RBs

9.42a_BE_R_Ch20350_50RB_BW_10_QPSK_Standing

Common Information

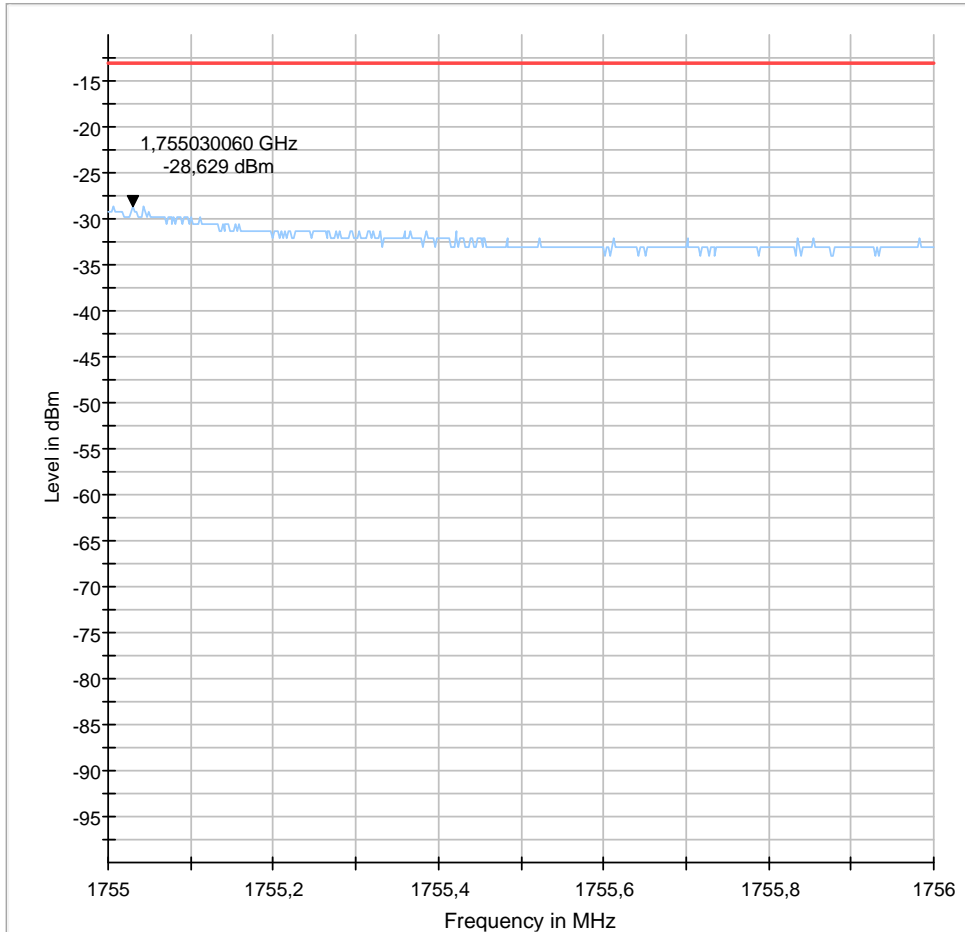
| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band 4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27 |
| Operating Mode: | UE allocated channel 20350 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RI5 |
| Remarks: | EUT - standing position |

EUT Information

| | |
|---------------|-------------------------------|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |

| | |
|-----------------------|--|
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.42a_BE_R_Ch20350_50RB_BW_10_QPSK_Laying

Common Information

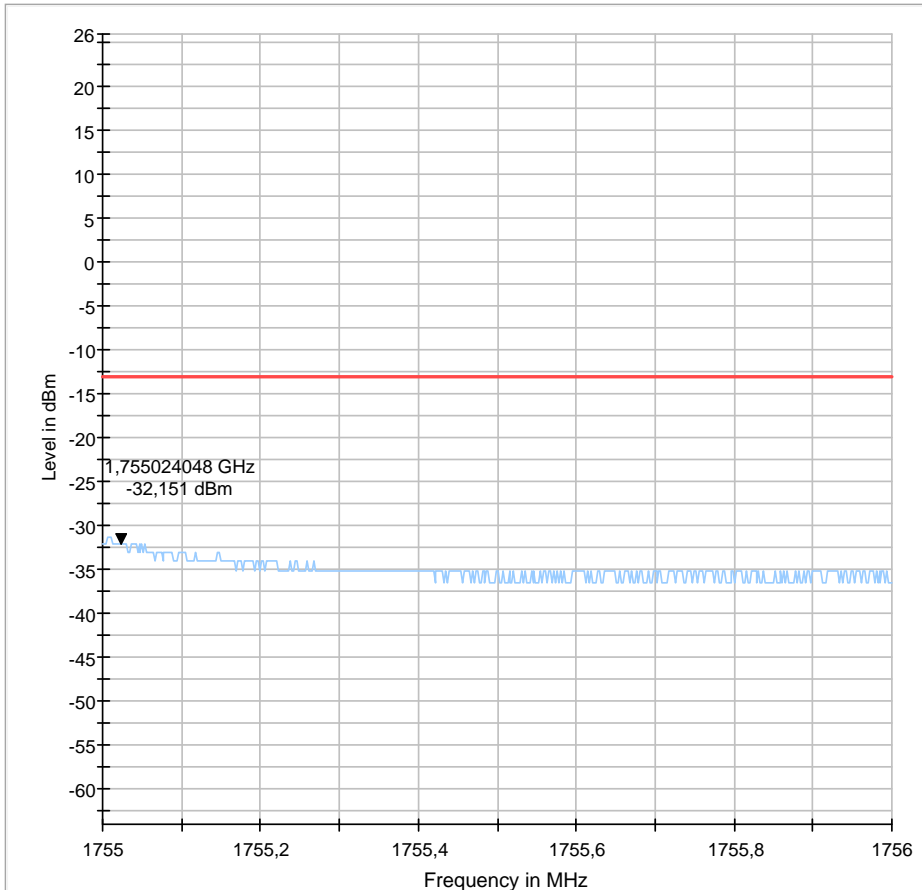
| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band 4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27 |
| Operating Mode: | UE allocated channel 20350 |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|---------------|-------------------------------|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |

Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



1.13.8. High Band-Edge, channel 20350, 16-QAM, 50RBs

9.42b_BE_R_Ch20350_50RB_BW_10_QAM_Standing

Common Information

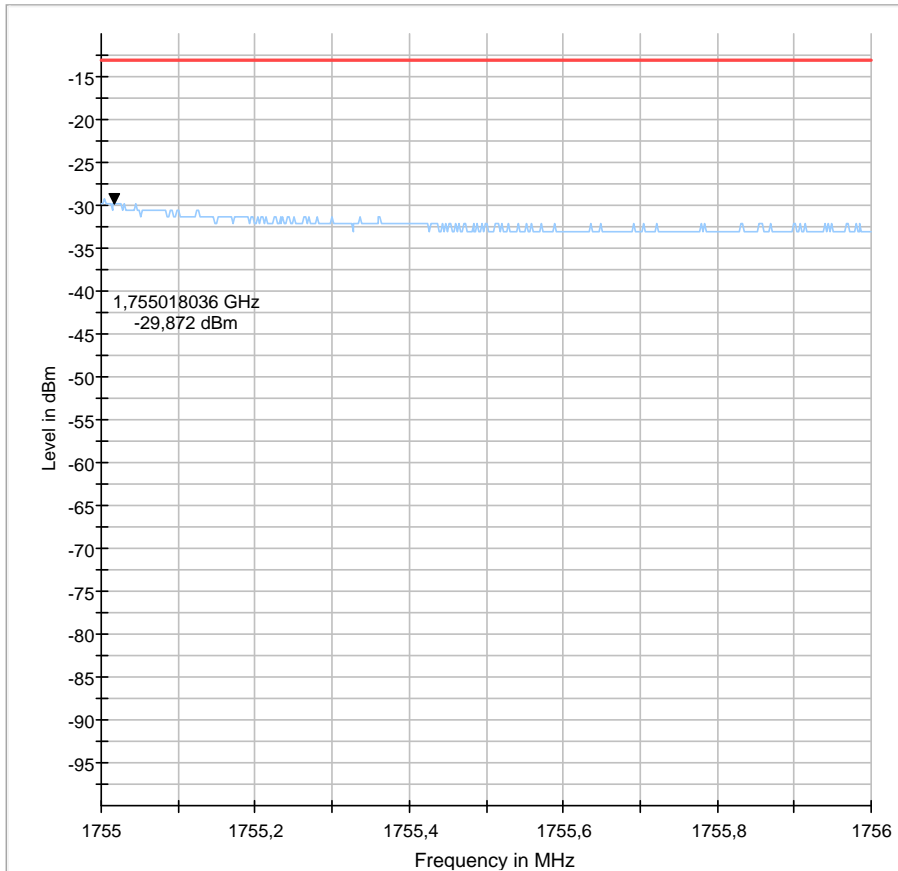
| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band 4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27 |
| Operating Mode: | UE allocated channel 20350 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RIs |
| Remarks: | EUT - standing position |

EUT Information

| | |
|---------------|------------------------------|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |

HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



9.42b_BE_R_Ch20350_50RB_BW_10_QAM_Laying

Common Information

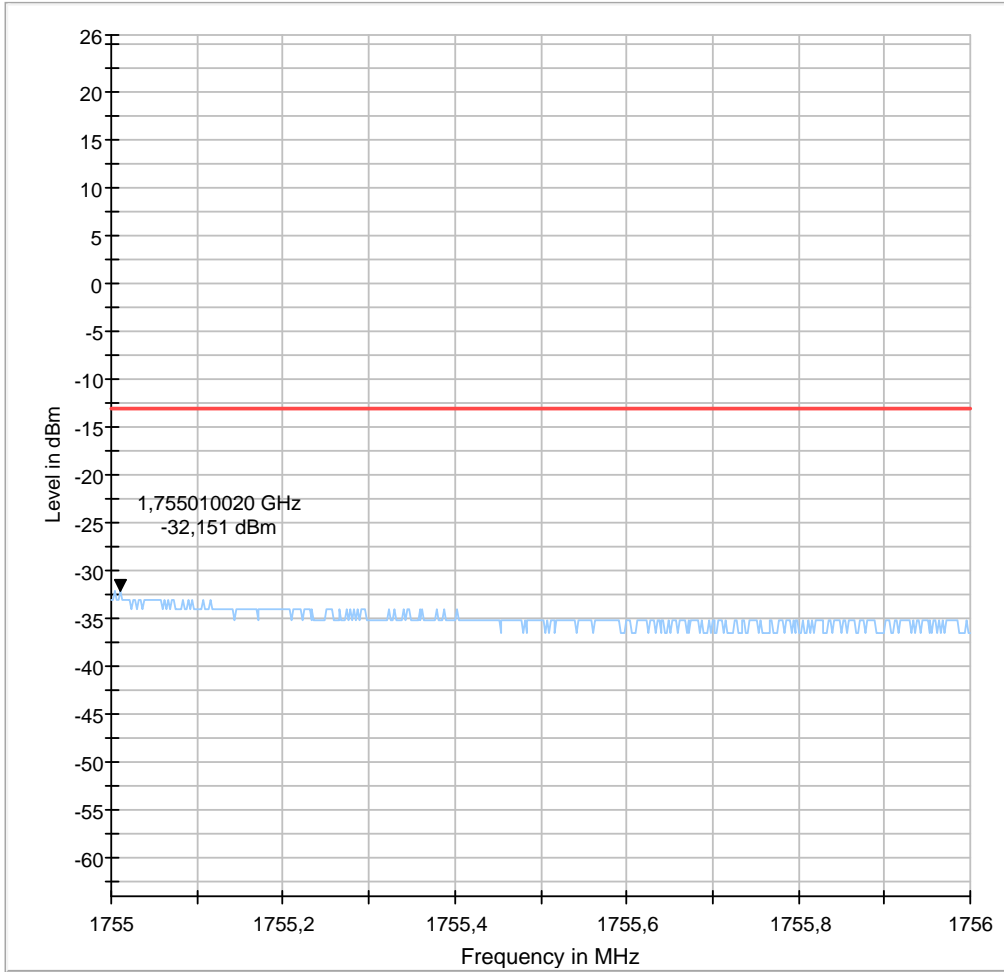
| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band 4 |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 27 |
| Operating Mode: | UE allocated channel 20350 |
| Environmental Conditions: | Humidity: 49%rH; Temperature: 21°C |
| Operator: | SLo |
| Comment: | EUT - laying position |

EUT Information

| | |
|---------------|-------------------------------|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |

Serial number: 004402580040446
Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
Power Supply: 12VDC
Comments: -

Full Spectrum



1.14. Radiated emissions – band-edge (LTE Band 5)

1.14.1. Low Band-Edge

1.14.2. Channel 20425, QPSK, 1RBs

9.508a_BE_R_Ch20425_1RB_BW5_QPSK_Laying

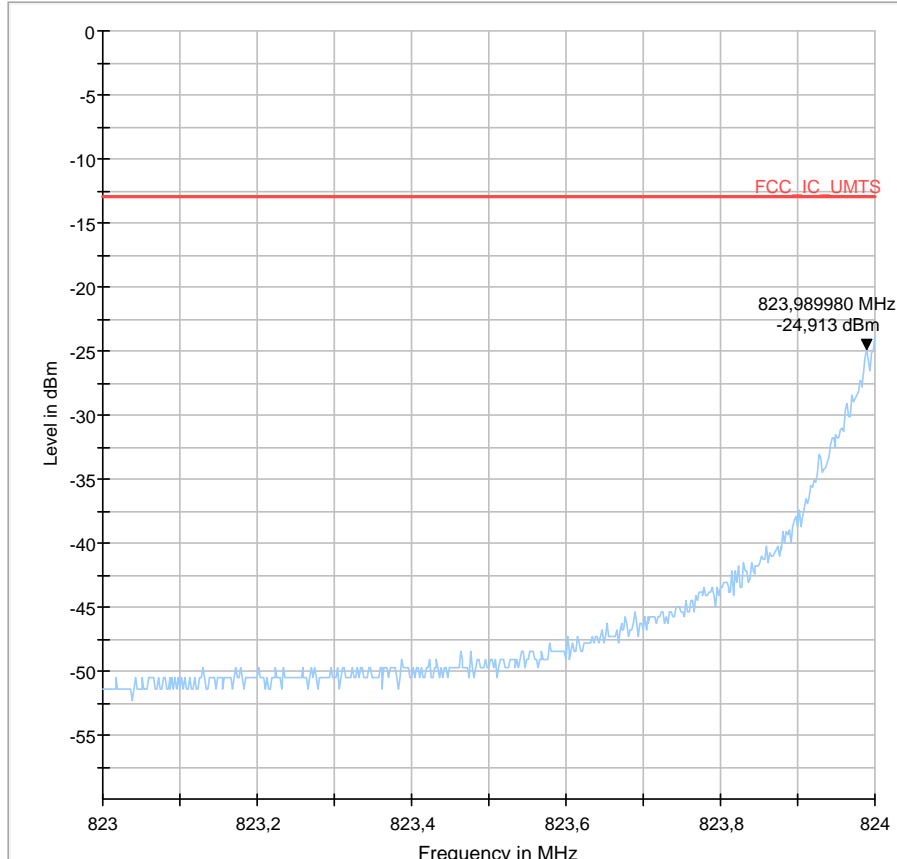
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20425 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | Klv |
| Remarks: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.508a_BE_R_Ch20425_1RB_BW5_QPSK_Standing

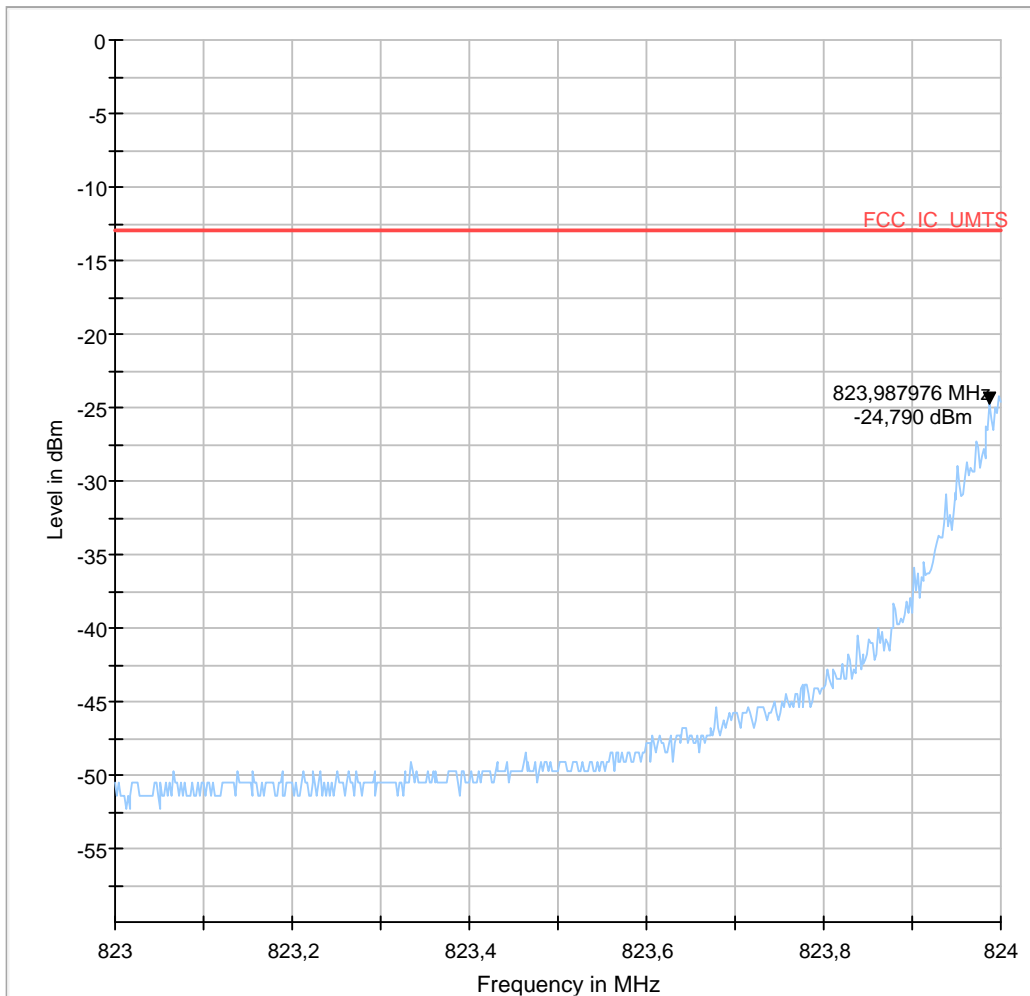
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20425 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RI's |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.14.3. Channel 20425, 16-QAM, 1RBs

9.508b_BE_R_Ch20425_1RB_BW5_QAM_Laying

Common Information

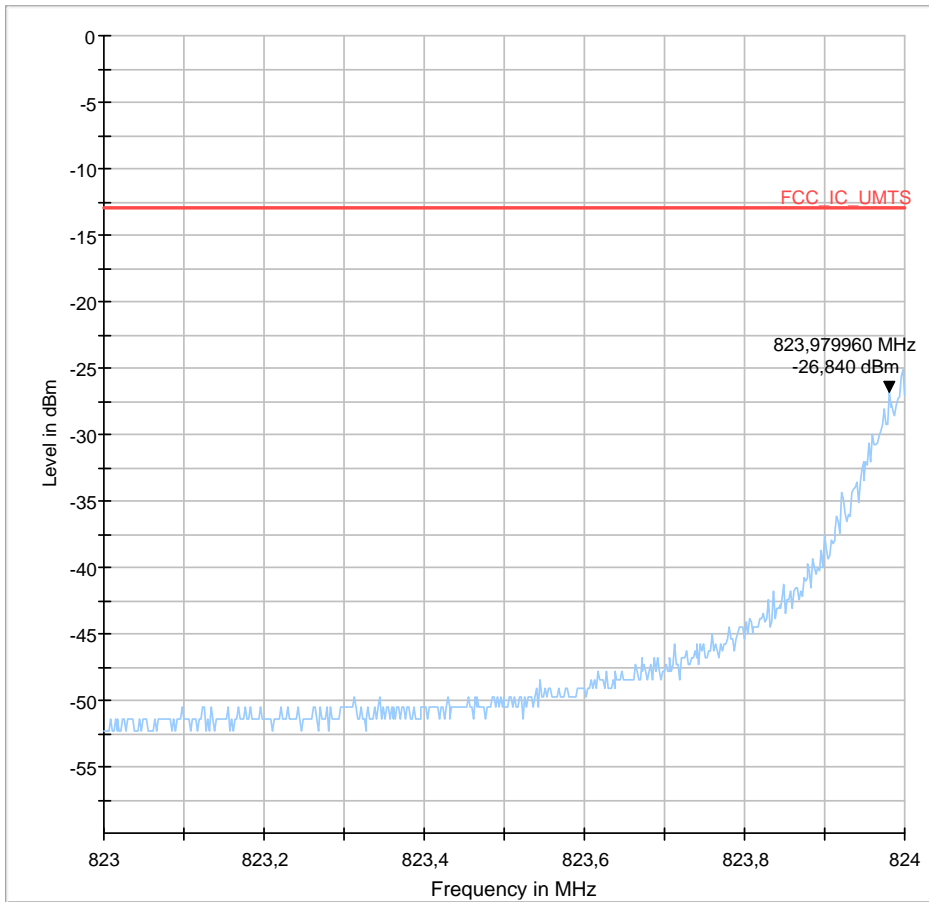
| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20425 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | Klv |
| Remarks: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |

Power Supply: 12VDC
 Comments: -

Full Spectrum



9.508b_BE_R_Ch20425_1RB_BW5_QAM_Standing

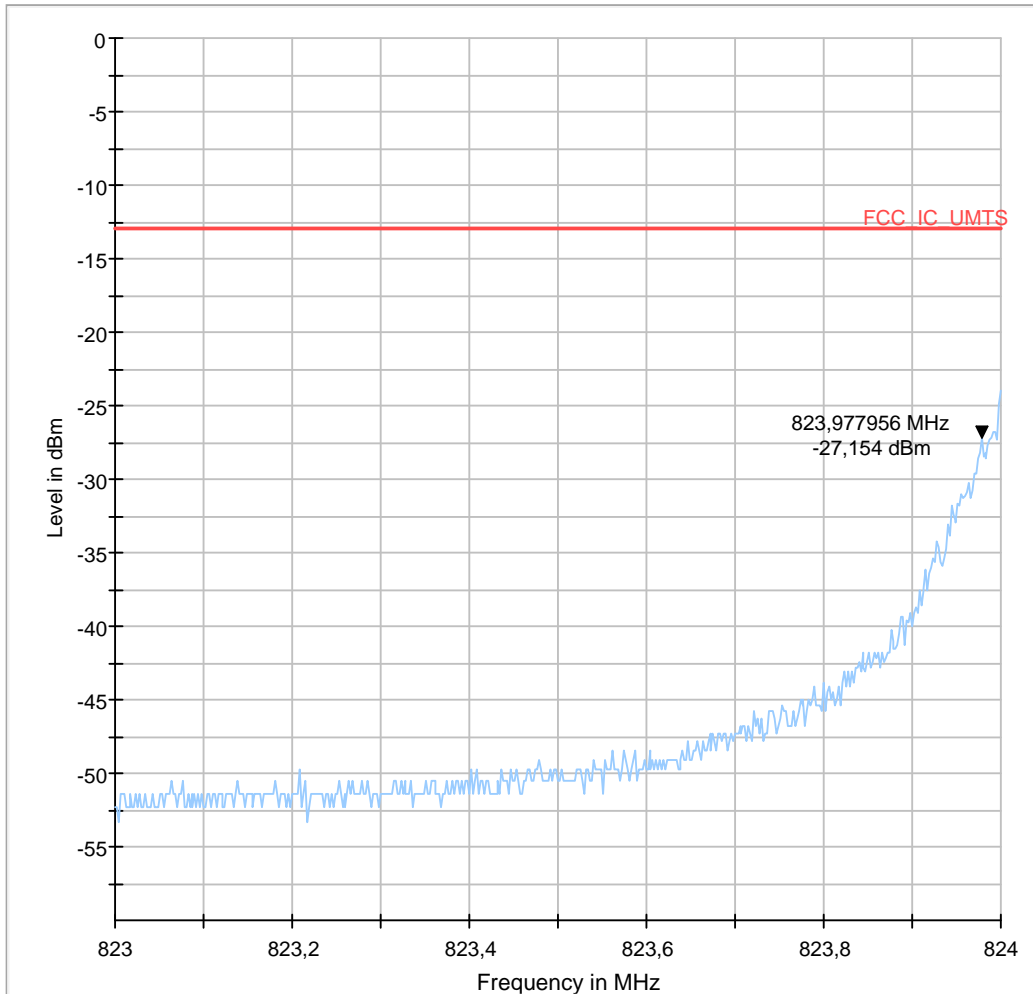
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20425 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RIs |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.14.4. Channel 20425, QPSK, 25RBs

9.510a_BE_R_Ch20425_25RB_BW5_QPSK_Laying

Common Information

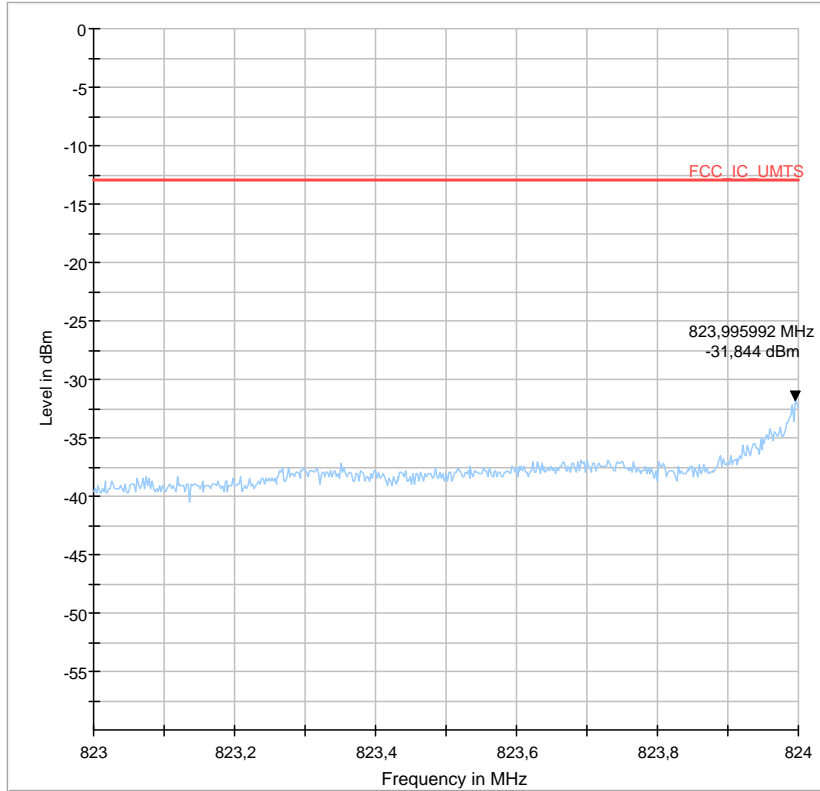
| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20425 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | Klv |
| Remarks: | EUT - laying position |

EUT Information

| | |
|----------------|------------------------------|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |

Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



9.510a_BE_R_Ch20425_25RB_BW5_QPSK_Standing

Common Information

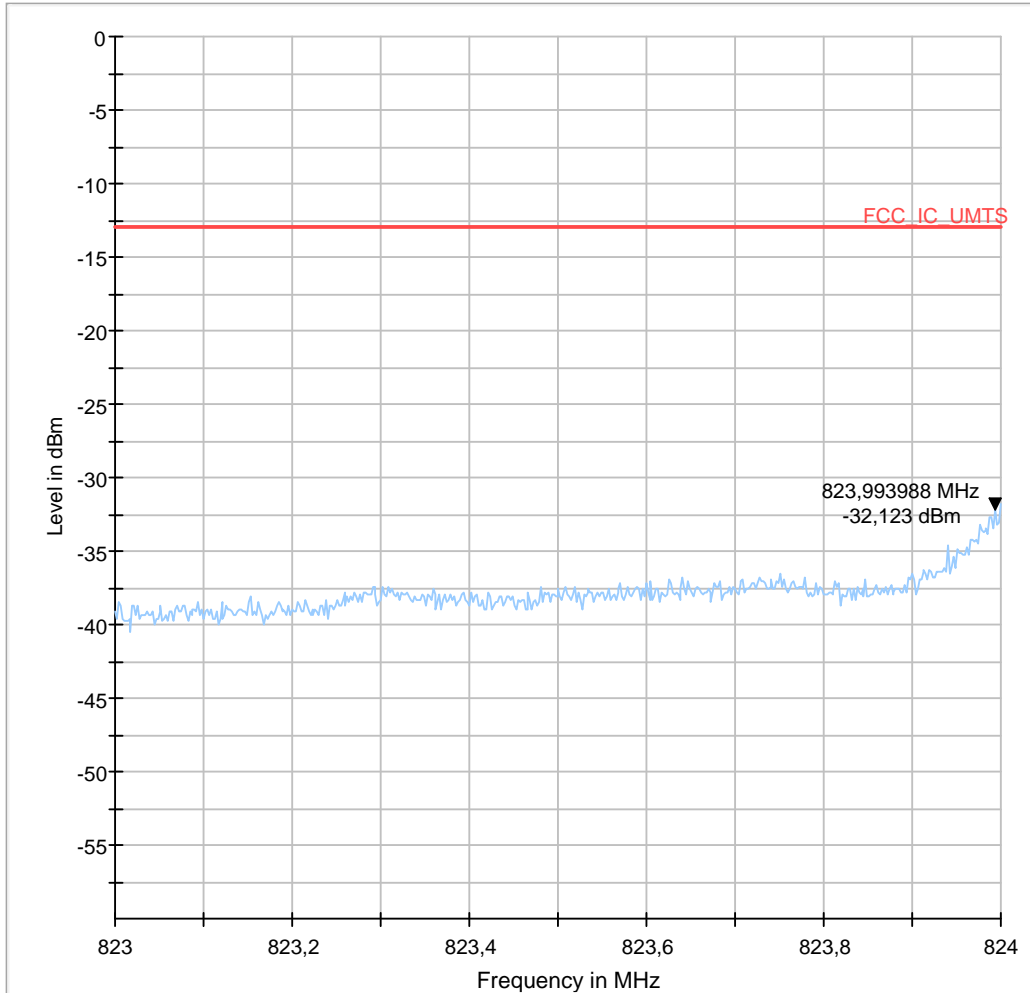
| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20425 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RI |
| Remarks: | EUT - standing position |

EUT Information

| | |
|----------------|------------------------------|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |

Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



1.14.5. Channel 20425, 16-QAM, 25RBs

9.510b_BE_R_Ch20425_25RB_BW5_QAM_Laying

Common Information

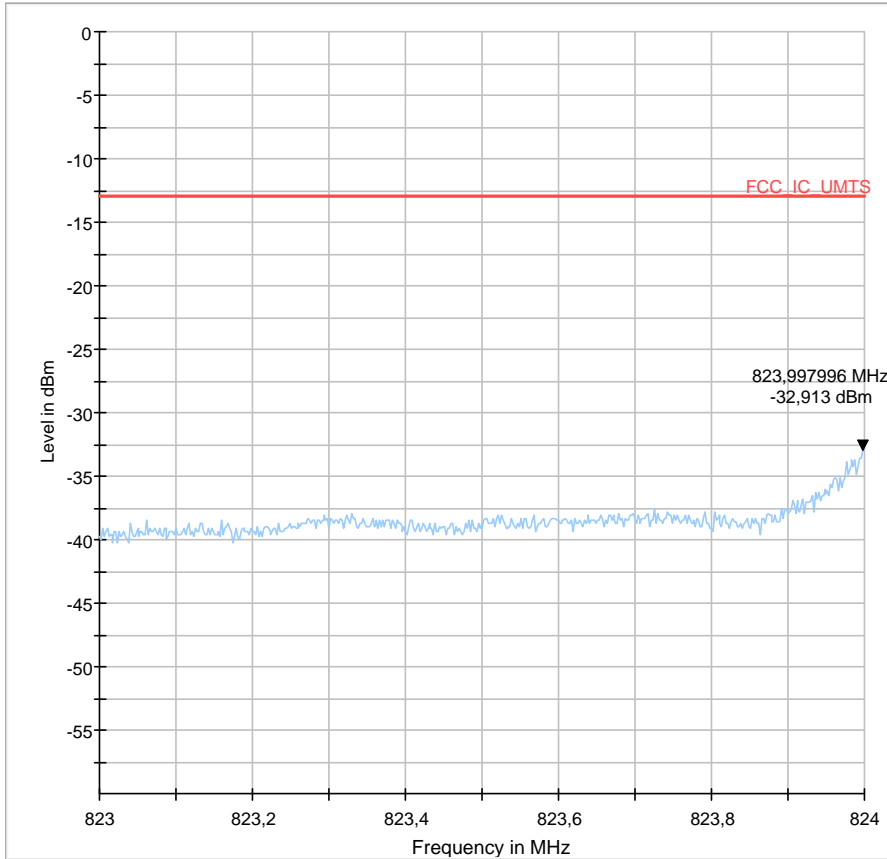
| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20425 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | Klv |
| Remarks: | EUT - laying position |

EUT Information

| | |
|---------------|-------------------------------|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |

| | |
|-----------------------|--|
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.510b_BE_R_Ch20425_25RB_BW5_QAM_Standing

Common Information

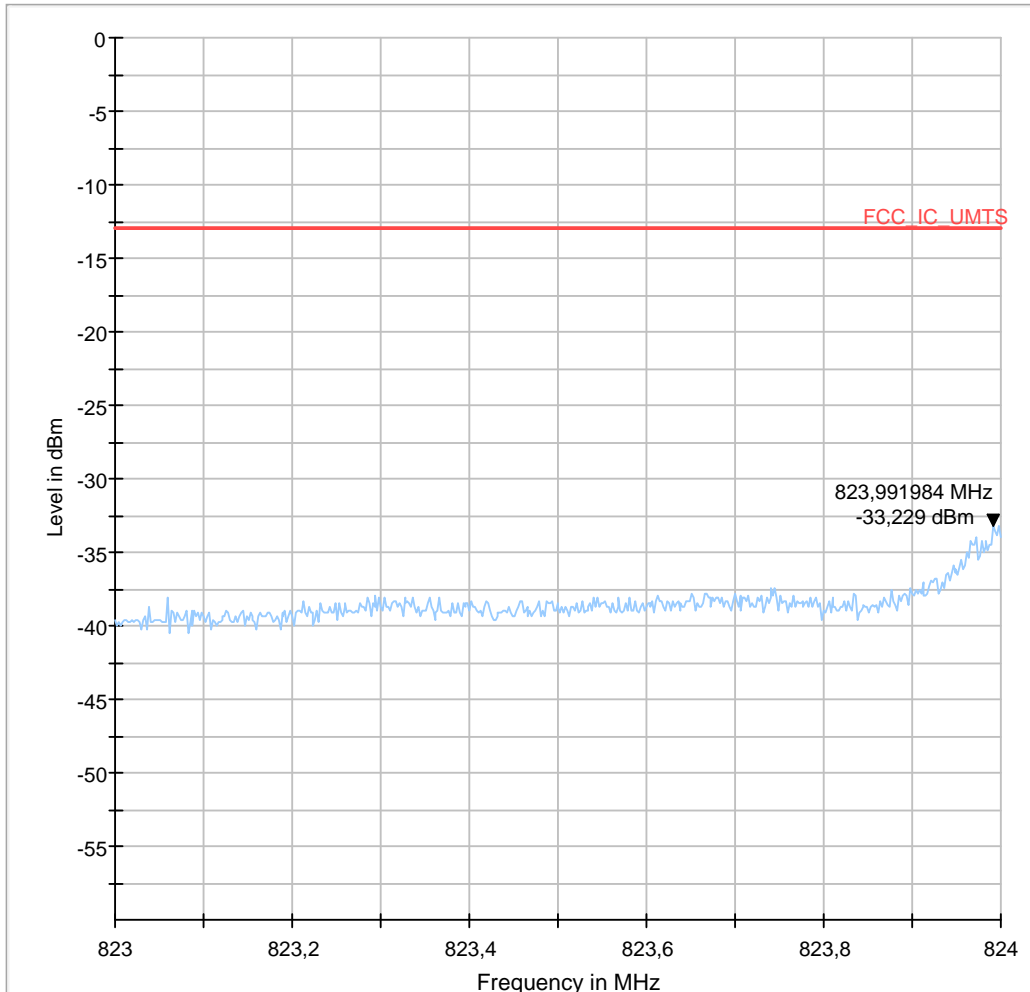
| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20425 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RI |
| Remarks: | EUT - standing position |

EUT Information

| | |
|---------------|-------------------------------|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |

| | |
|-----------------------|--|
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.14.6. High Band-Edge

1.14.7. Channel 20643, QPSK, 1RBs

9.502a_BE_R_Ch20643_1RB_BW_1_4_QPSK_Laying

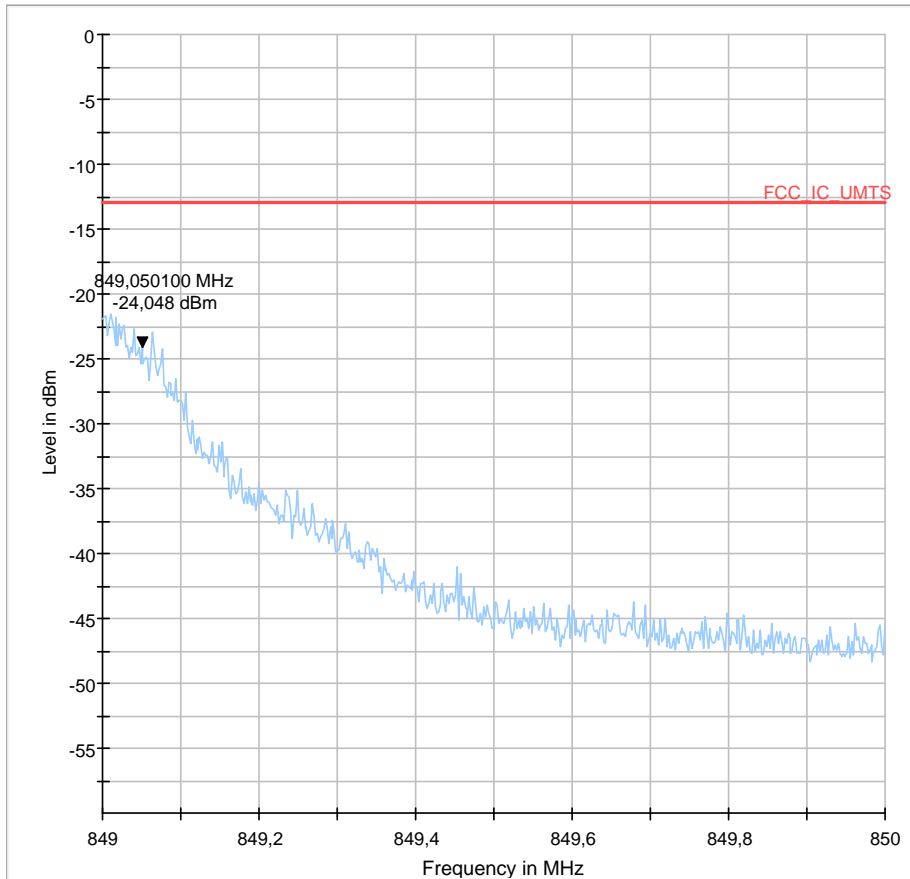
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20643 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | Klv |
| Remarks: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.502a_BE_R_Ch20643_1RB_BW_1_4_QPSK_Standing

Common Information

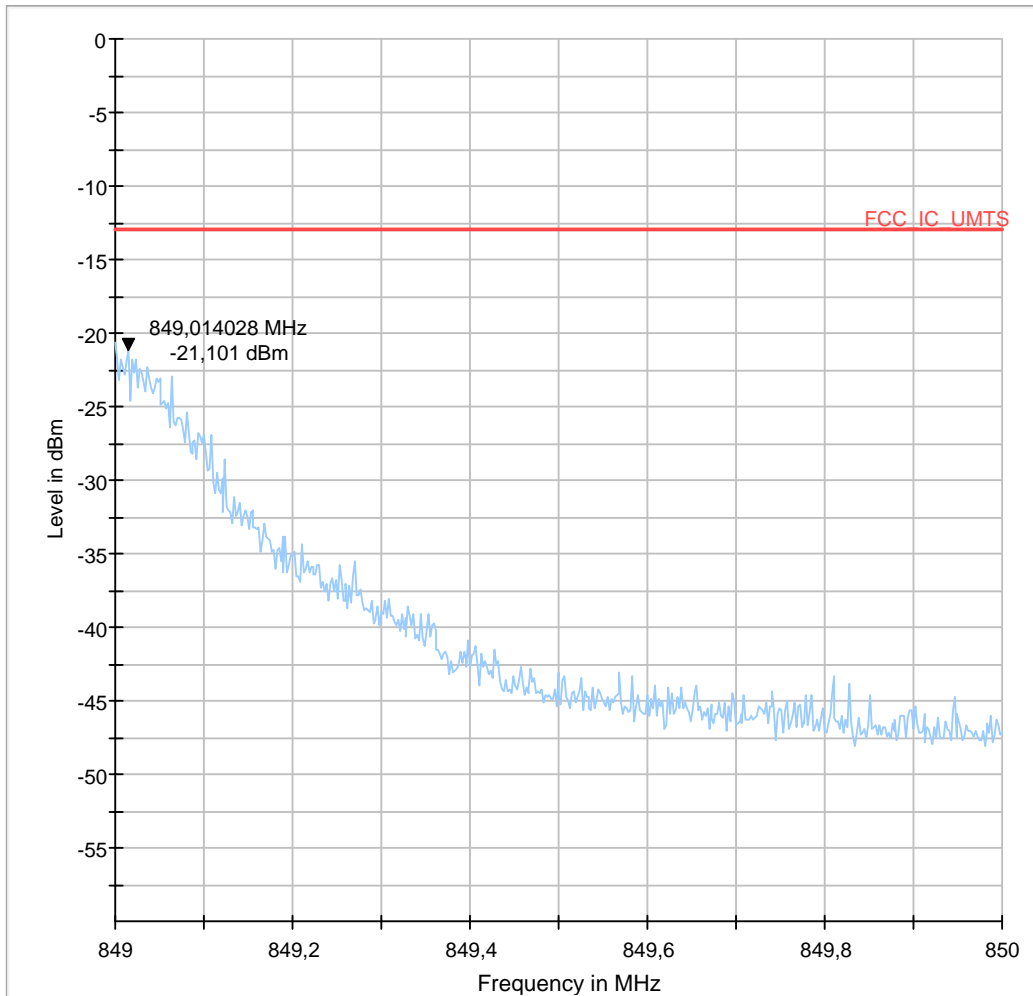
| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20643 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RI |
| Remarks: | EUT - standing position |

EUT Information

| | |
|---------------|------------------------------|
| Manufacturer: | peiker acustic GmbH & Co. KG |
|---------------|------------------------------|

| | |
|-----------------------|--|
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.14.8. Channel 20643, 16-QAM, 1RBs

9.502b_BE_R_Ch20643_1RB_BW_1_4_QAM_Laying

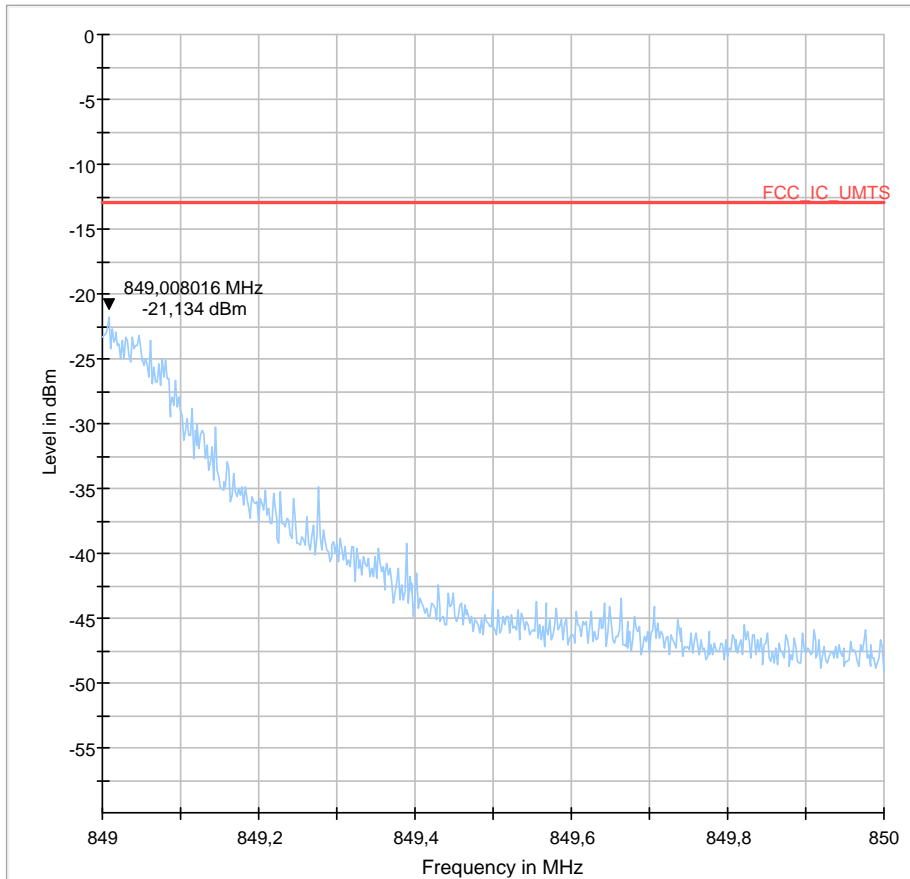
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20643 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | Klv |
| Remarks: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.502b_BE_R_Ch20643_1RB_BW_1_4_QAM_Standing

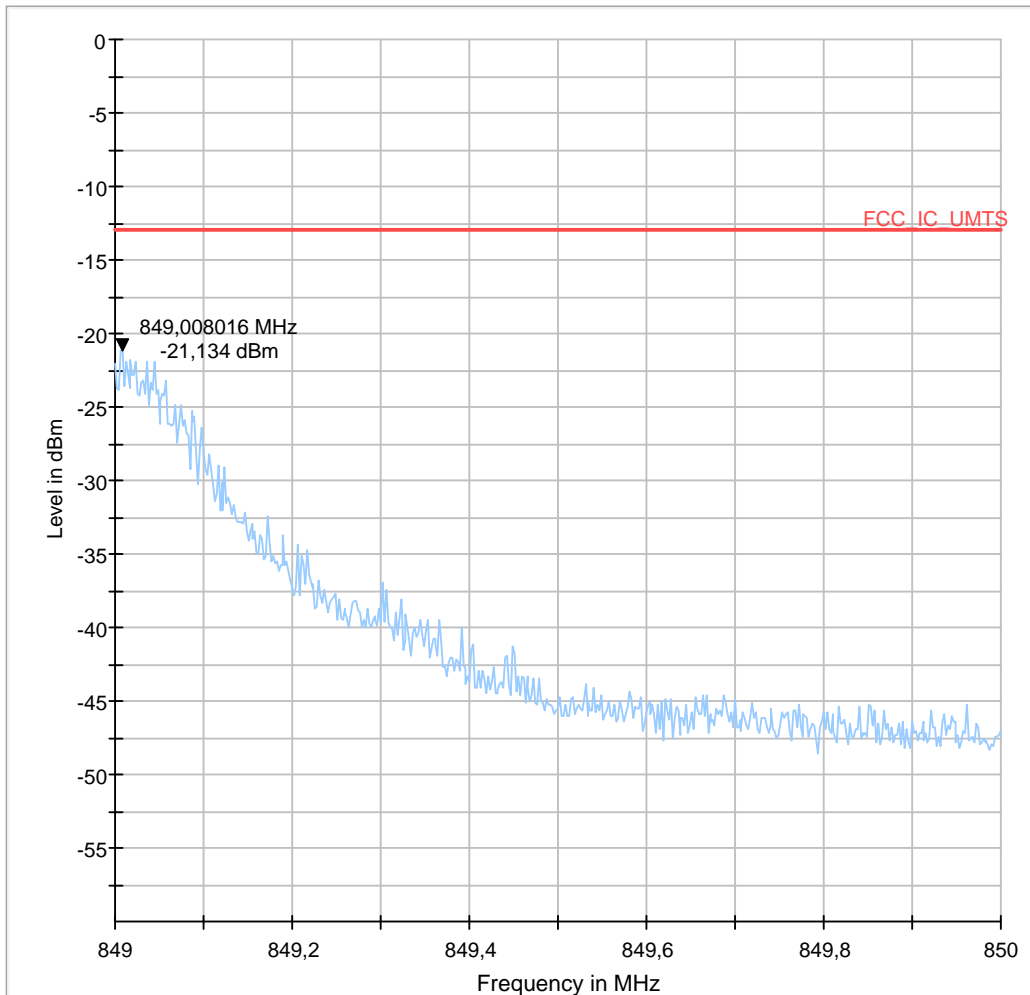
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20643 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RI |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.14.9. Channel 20643, QPSK, 6RBs

9.503a_BE_R_Ch20643_6RB_1_4_QPSK_Laying

Common Information

| | |
|---------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20643 |

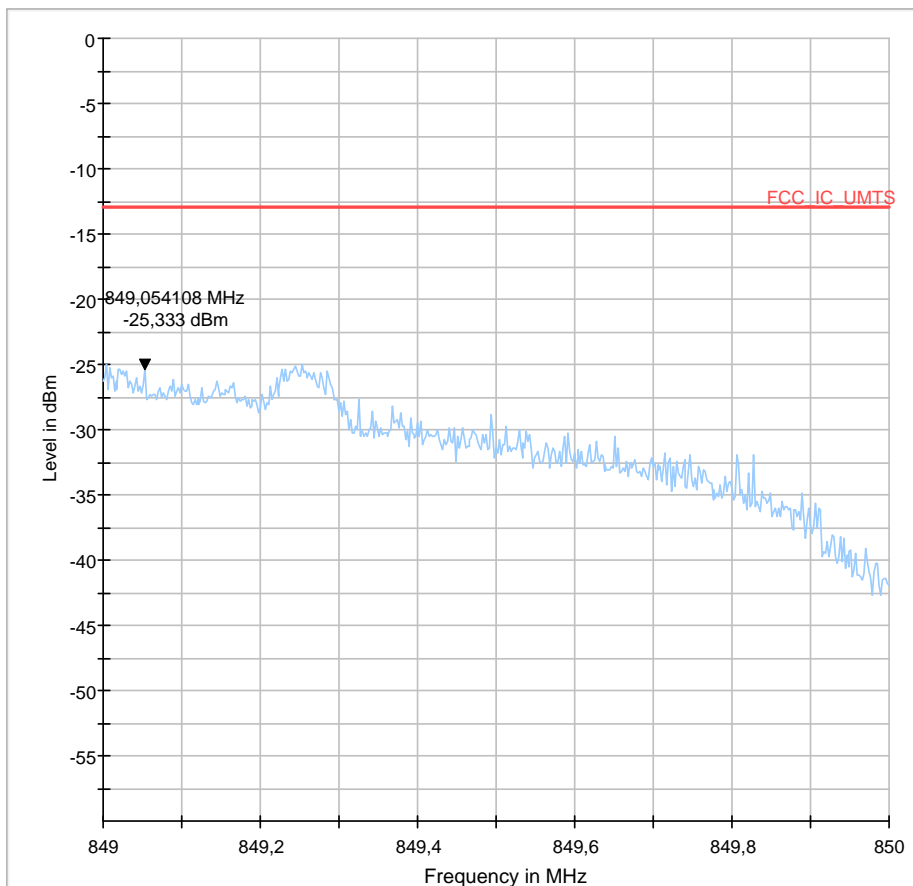
Environmental Conditions: Humidity: 35%rH; Temperature: 20°C
 Operator: Kliv
 Remarks: EUT - laying position

EUT Information

Manufacturer: peiker acoustic GmbH & Co. KG
 EUT: V1231-0

 HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



9.503a_BE_R_Ch20643_6RB_1_4_QPSK_Standing

Common Information

Test Description: Band-Edge - Radiated Spurious Emissions LTE Band V
 Test Site Location: CETECOM GmbH Essen
 Test Site: Fully Anechoic Room (FAR)
 Test Standard: FCC Part 22
 Operating Mode: UE allocated channel 20643
 Environmental Conditions: Humidity: 35%rH; Temperature: 20°C

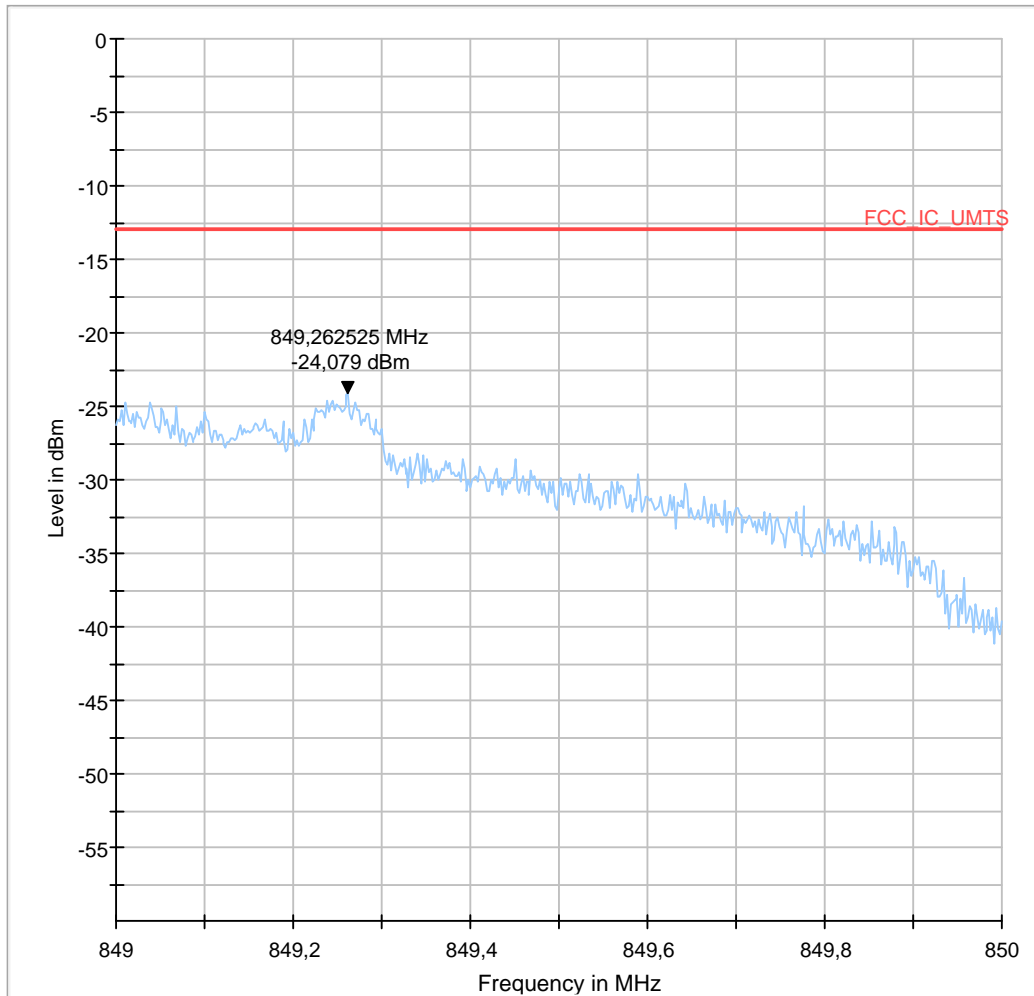
Operator: RIs
 Remarks: EUT - standing position

EUT Information

Manufacturer: peiker acustic GmbH & Co. KG
 EUT: V1231-0

 HW version: V1231-0_Ver.1
 SW version: MPSS.TH.2.0.2-00256
 Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



1.14.10. Channel 20643, 16-QAM, 6RBs

9.503b_BE_R_Ch20643_6RB_BW_1_4_QAM_Laying

Common Information

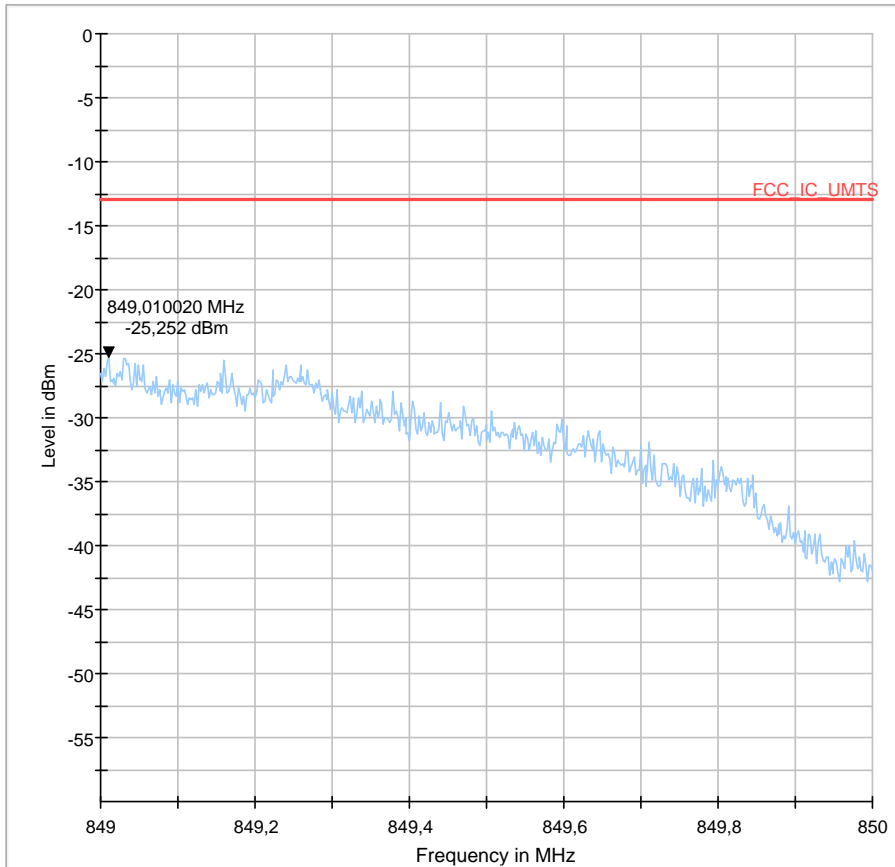
Test Description: Band-Edge - Radiated Spurious Emissions LTE Band V
 Test Site Location: CETECOM GmbH Essen

| | |
|---------------------------|------------------------------------|
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20643 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | Klv |
| Remarks: | EUT - laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.503b_BE_R_Ch20643_6RB_BW_1_4_QAM_Standing

Common Information

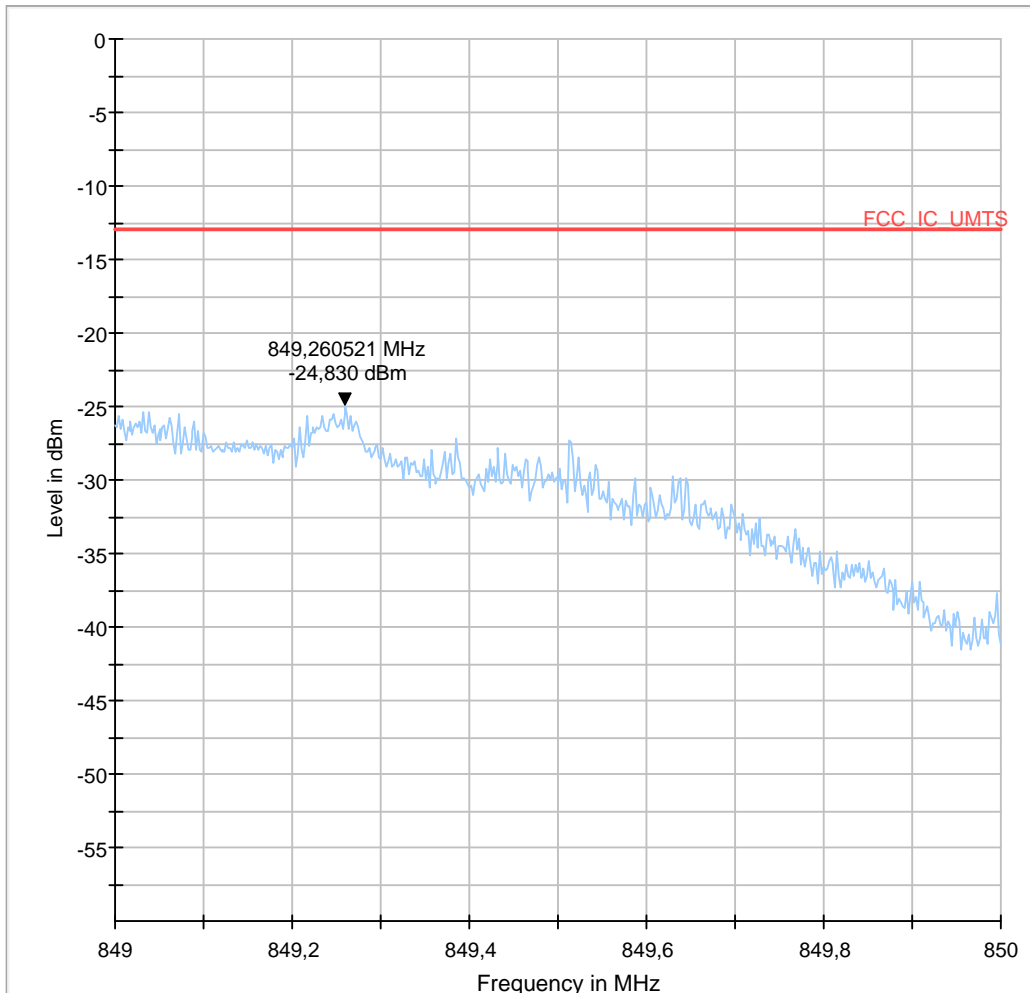
| | |
|---------------------|--|
| Test Description: | Band-Edge - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |

| | |
|---------------------------|------------------------------------|
| Test Standard: | FCC Part 22 |
| Operating Mode: | UE allocated channel 20643 |
| Environmental Conditions: | Humidity: 35%rH; Temperature: 20°C |
| Operator: | RIs |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.15. Radiated emissions – band-edge (LTE Band 12)

1.15.1. Low Band-Edge

1.15.2. Channel 23035, 16-QAM, 1RBs

9.55a_BE_R_Ch_23035_1RB_BW_5_QAM

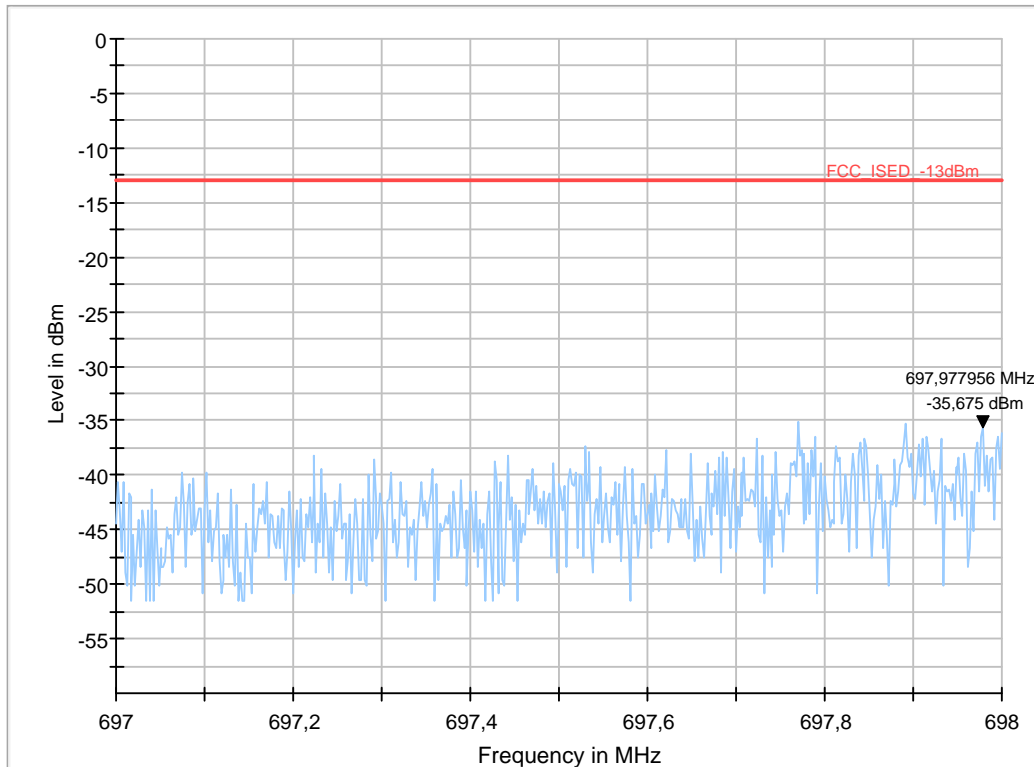
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge low - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917(a) |
| Operating Mode: | UE allocated channel xxx |
| Environmental Conditions: | Humidity: 46%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | Mah |
| Remarks: | EUT - Laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.55a_BE_R_Ch_23035_1RB_BW_5_QAM

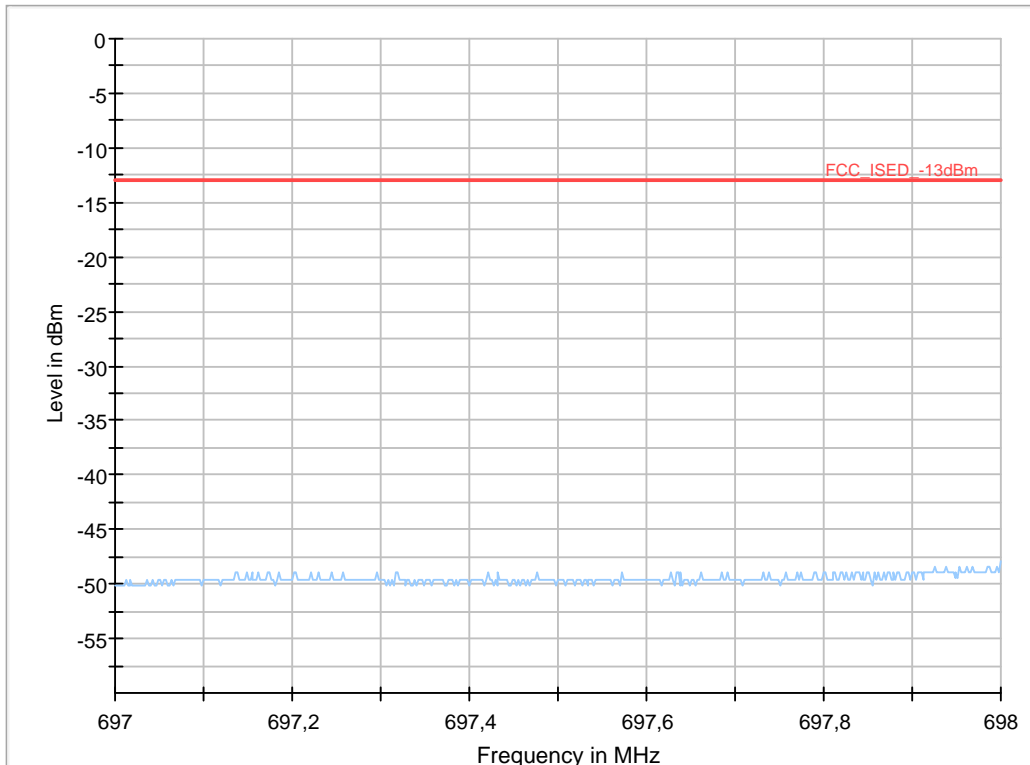
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge low - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917(a) |
| Operating Mode: | UE allocated channel xxx |
| Environmental Conditions: | Humidity: 46%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | Mah |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.15.3. Channel 23035, QPSK, 1RBs

9.55b_BE_R_Ch_23035_1RB_BW_5_QPSK

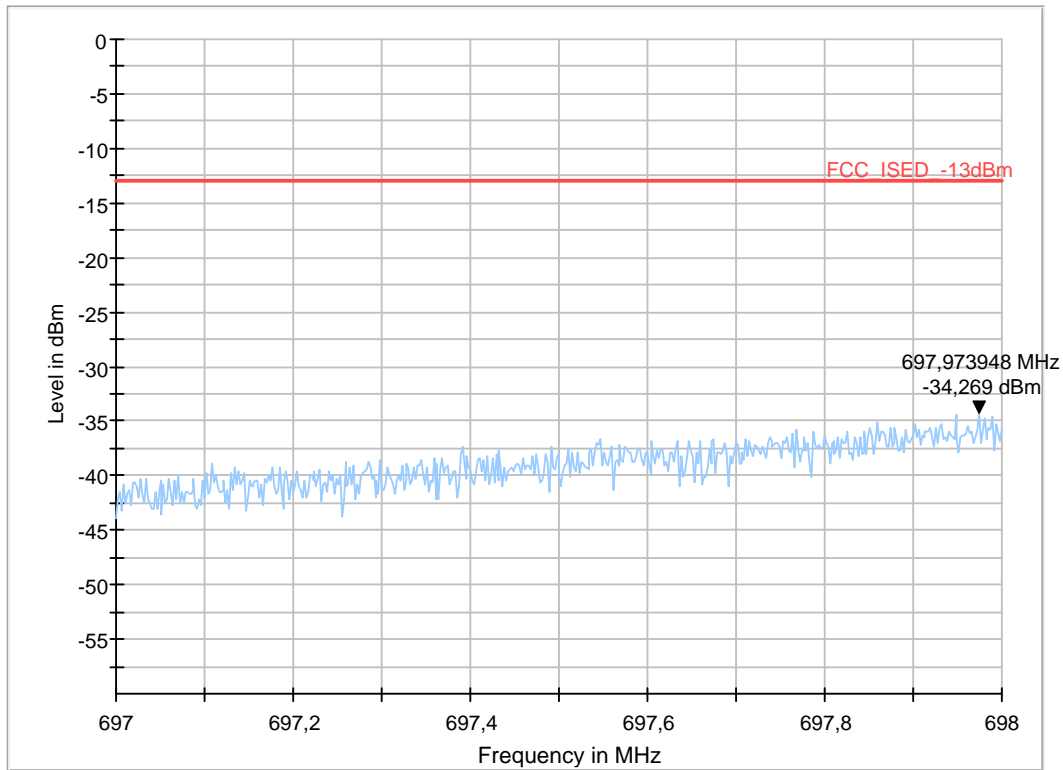
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge low - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917(a) |
| Operating Mode: | UE allocated channel xxx |
| Environmental Conditions: | Humidity: 46%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | Mah |
| Remarks: | EUT - Laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.55b_BE_R_Ch_23035_1RB_BW_5_QPSK

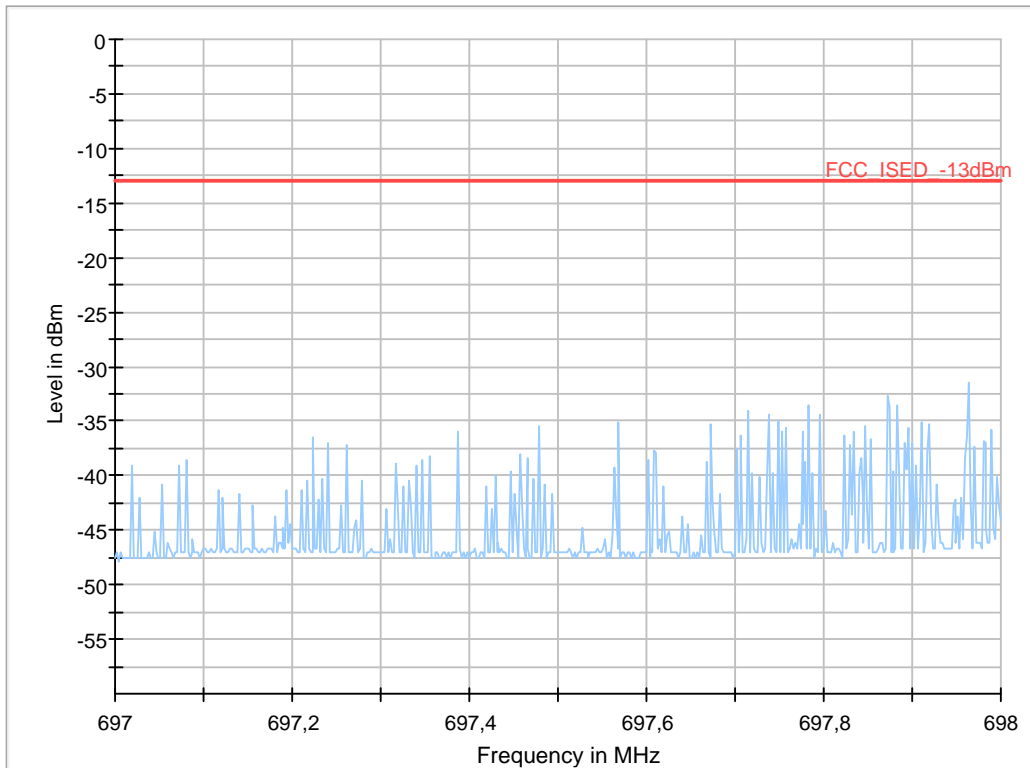
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge low - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917(a) |
| Operating Mode: | UE allocated channel xxx |
| Environmental Conditions: | Humidity: 46%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | Mah |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.15.4. Channel 23035, 16-QAM, 25RBs

9.56a_BE_R_Ch_23035_25RB_BW_5_QAM

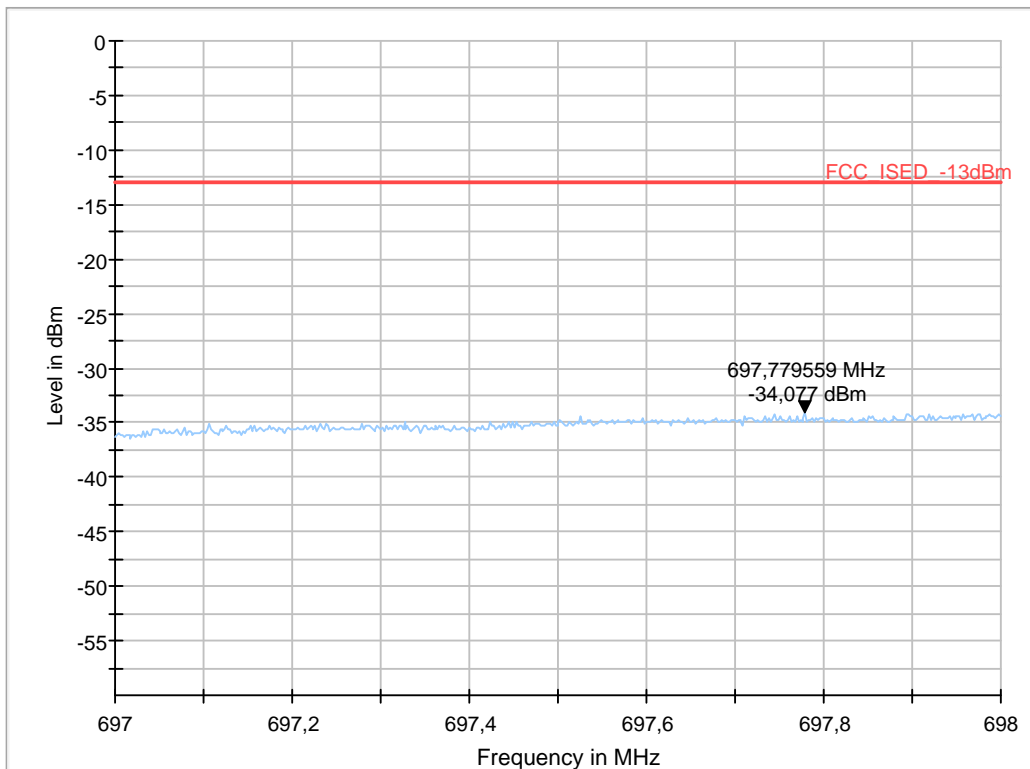
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge low - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917(a) |
| Operating Mode: | UE allocated channel xxx |
| Environmental Conditions: | Humidity: 46%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | Mah |
| Remarks: | EUT - Laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.56a_BE_R_Ch_23035_25RB_BW_5_QAM

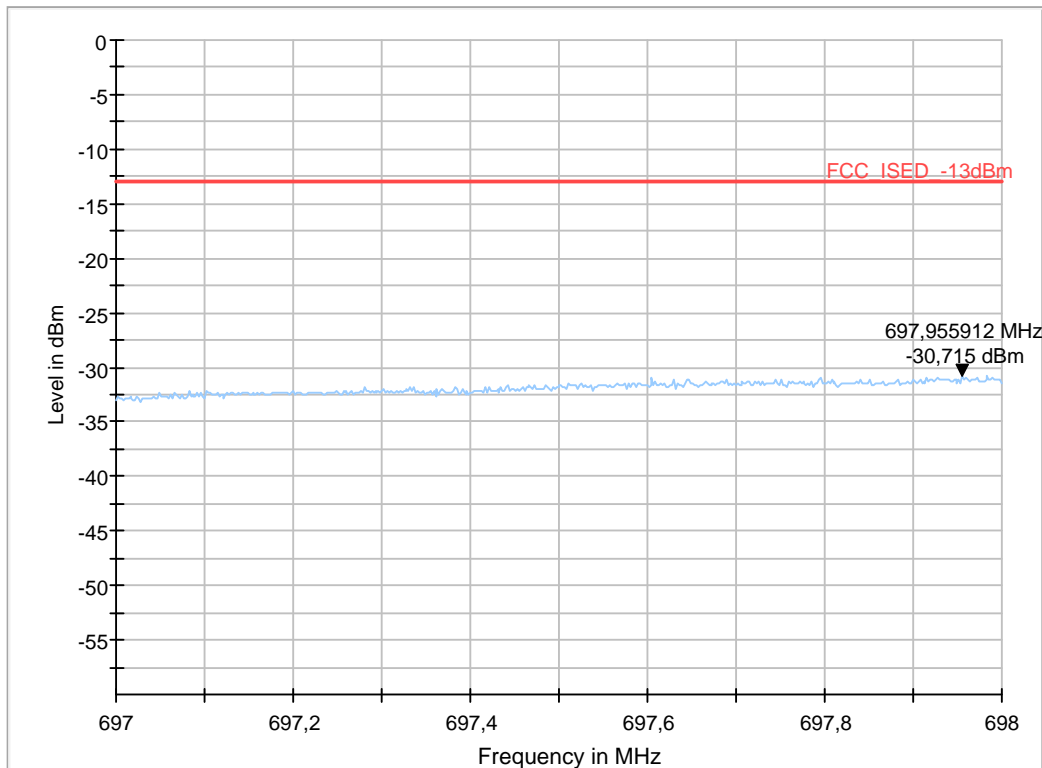
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge low - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917(a) |
| Operating Mode: | UE allocated channel xxx |
| Environmental Conditions: | Humidity: 46%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | Mah |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.15.5. Channel 23035, QPSK, 25RBs

9.56b_BE_R_Ch_23035_25RB_BW_5_QPSK

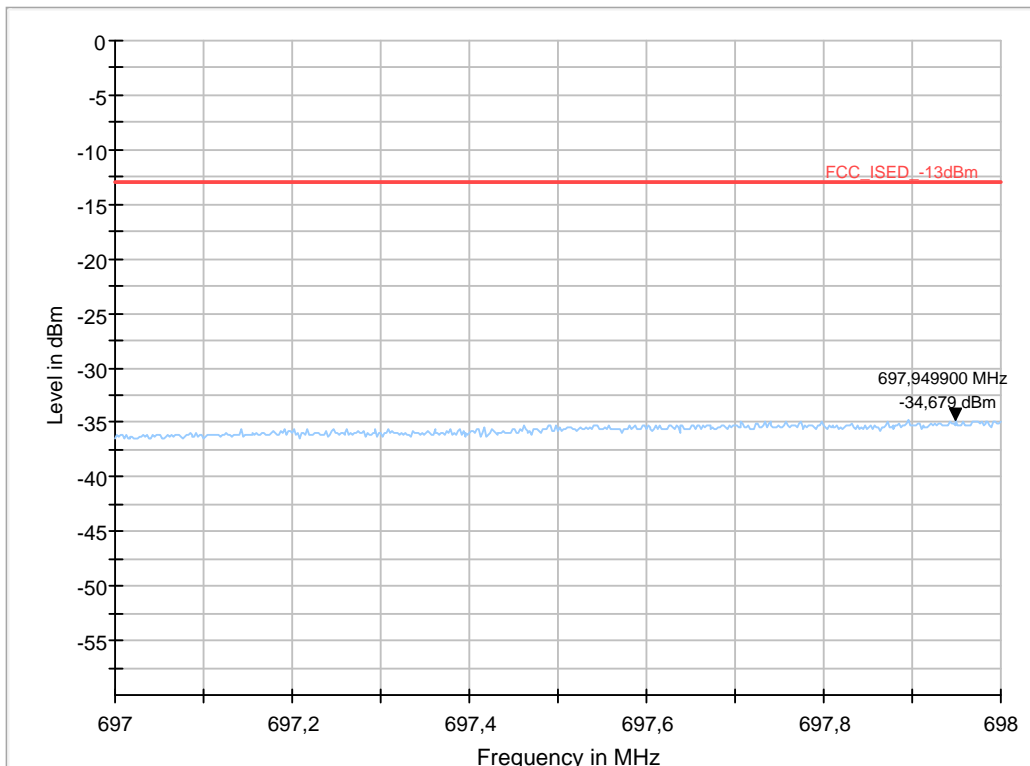
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge low - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917(a) |
| Operating Mode: | UE allocated channel xxx |
| Environmental Conditions: | Humidity: 46%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | Mah |
| Remarks: | EUT - Laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.56b_BE_R_Ch_23035_25RB_BW_5_QAM

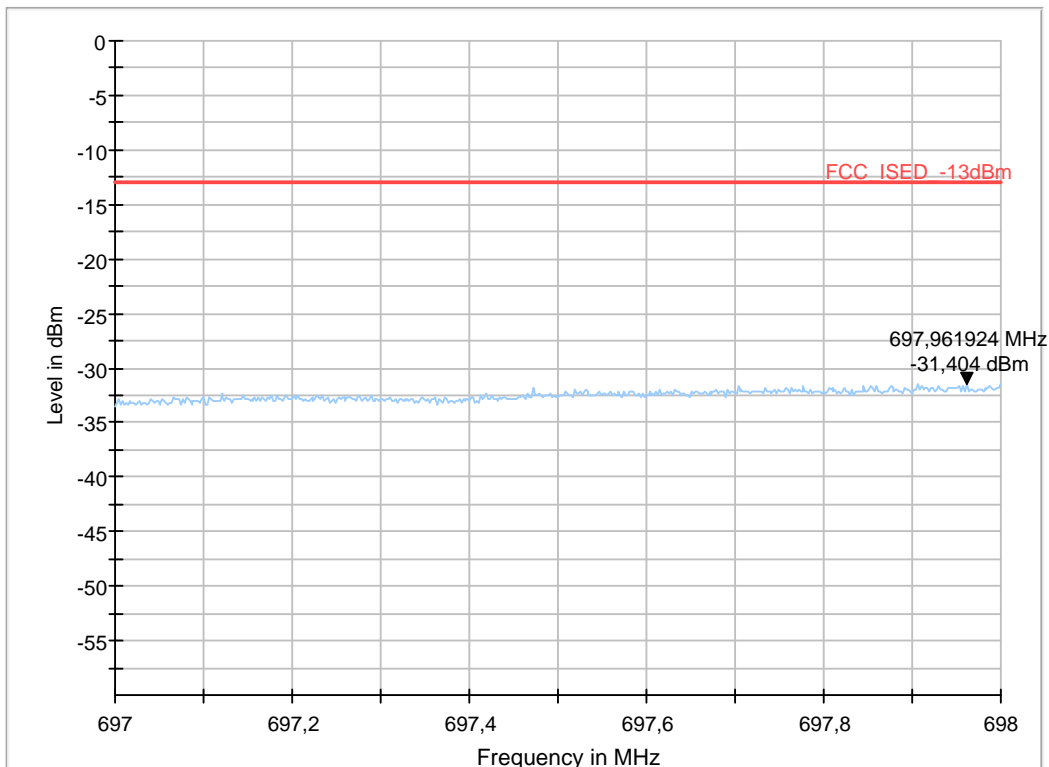
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge low - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917(a) |
| Operating Mode: | UE allocated channel xxx |
| Environmental Conditions: | Humidity: 46%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.15.6. High Band-Edge

1.15.7. Channel 23173, 16-QAM, 1RBs

9.57a_BE_R_Ch_23173_1RB_BW_1_4_QAM

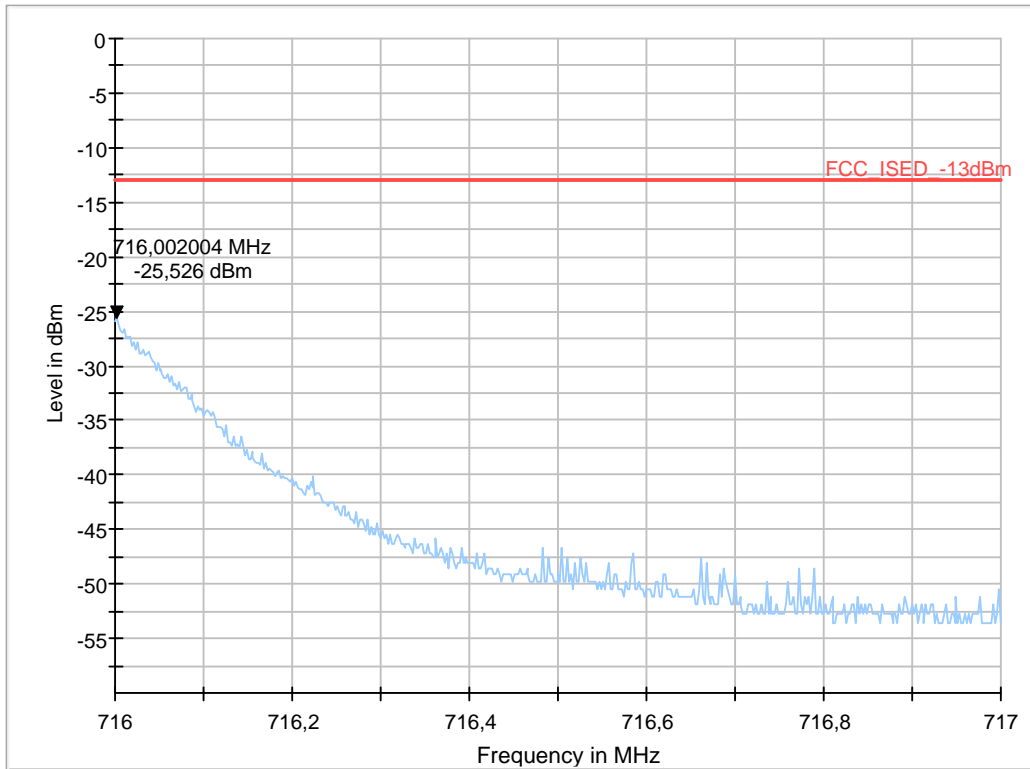
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge low - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917(a) |
| Operating Mode: | UE allocated channel xxx |
| Environmental Conditions: | Humidity: 46%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | Mah |
| Remarks: | EUT - Laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.57a_BE_R_Ch_23173_1RB_BW_1_4_QAM

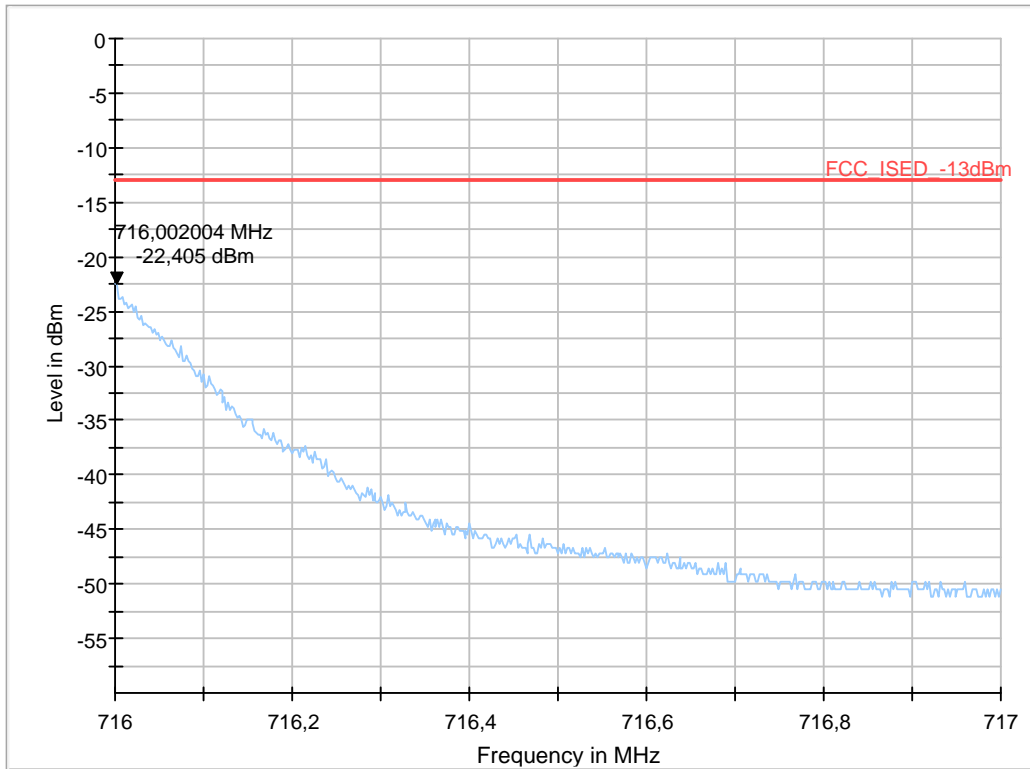
Common Information

| | |
|---------------------------|--|
| Test Description: | Band-Edge low - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917(a) |
| Operating Mode: | UE allocated channel xxx |
| Environmental Conditions: | Humidity: 46%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | Mah |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.15.8. Channel 23173, QPSK, 1RBs

9.57b_BE_R_Ch_23173_1RB_BW_1_4_QPSK

Common Information

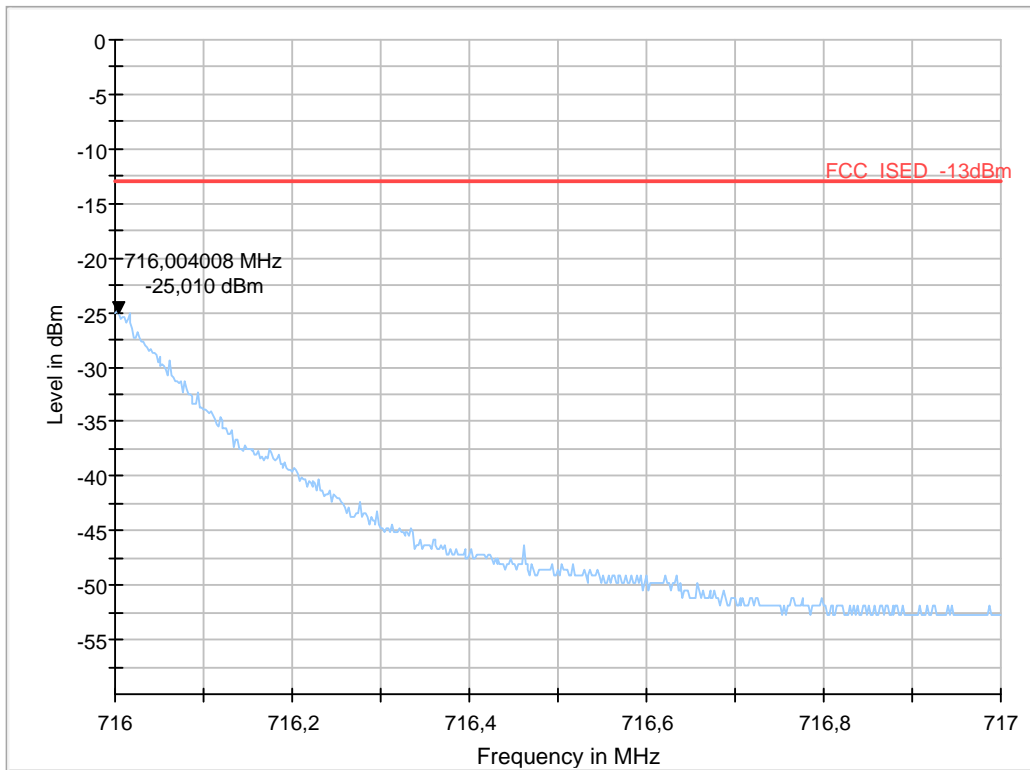
| | |
|---------------------------|--|
| Test Description: | Band-Edge low - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917(a) |
| Operating Mode: | UE allocated channel xxx |
| Environmental Conditions: | Humidity: 46%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | Mah |
| Remarks: | EUT - Laying position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |

Comments: -

Full Spectrum



9.57b_BE_R_Ch_23173_1RB_BW_1_4_QPSK

Common Information

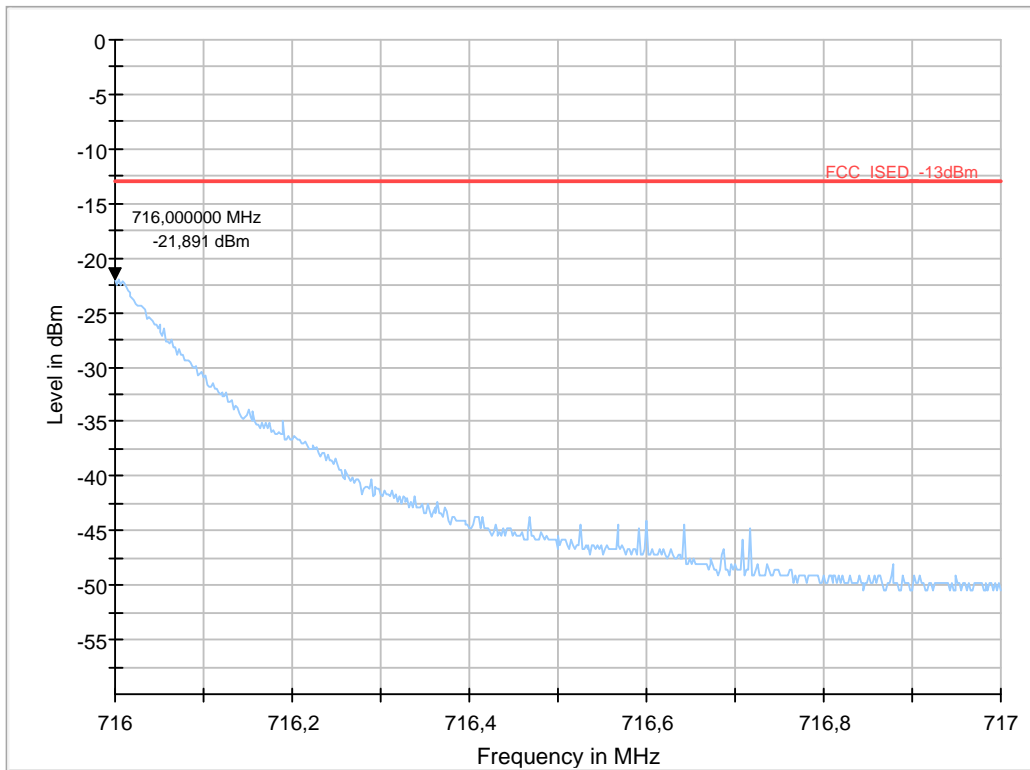
| | |
|---------------------------|--|
| Test Description: | Band-Edge low - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917(a) |
| Operating Mode: | UE allocated channel xxx |
| Environmental Conditions: | Humidity: 46%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | Mah |
| Remarks: | EUT - standing position |

EUT Information

| | |
|-----------------------|--|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |

Comments: -

Full Spectrum



1.15.9. Channel 23173, 16-QAM, 6RBs

9.58a_BE_R_Ch_23173_6RB_BW_1_4_QAM

Common Information

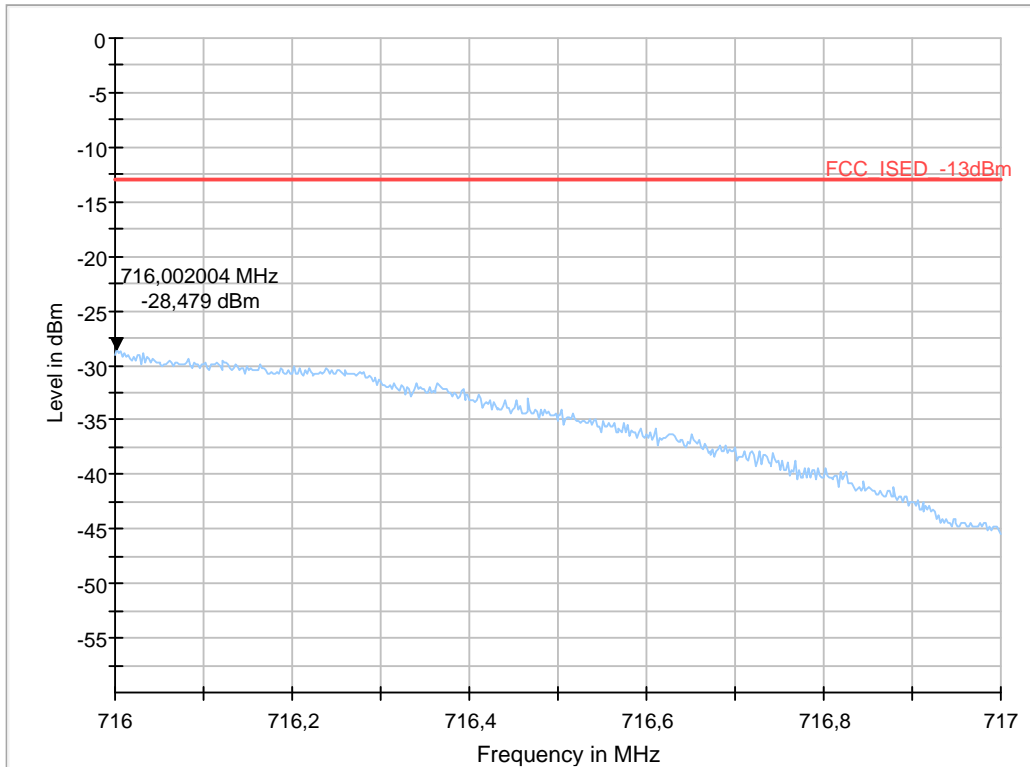
| | |
|---------------------------|--|
| Test Description: | Band-Edge low - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917(a) |
| Operating Mode: | UE allocated channel xxx |
| Environmental Conditions: | Humidity: 46%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | Mah |
| Remarks: | EUT - Laying position |

EUT Information

| | |
|---------------|------------------------------|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |

Serial number: 004402580040446
 Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



9.58a_BE_R_Ch_23173_6RB_BW_1_4_QAM

Common Information

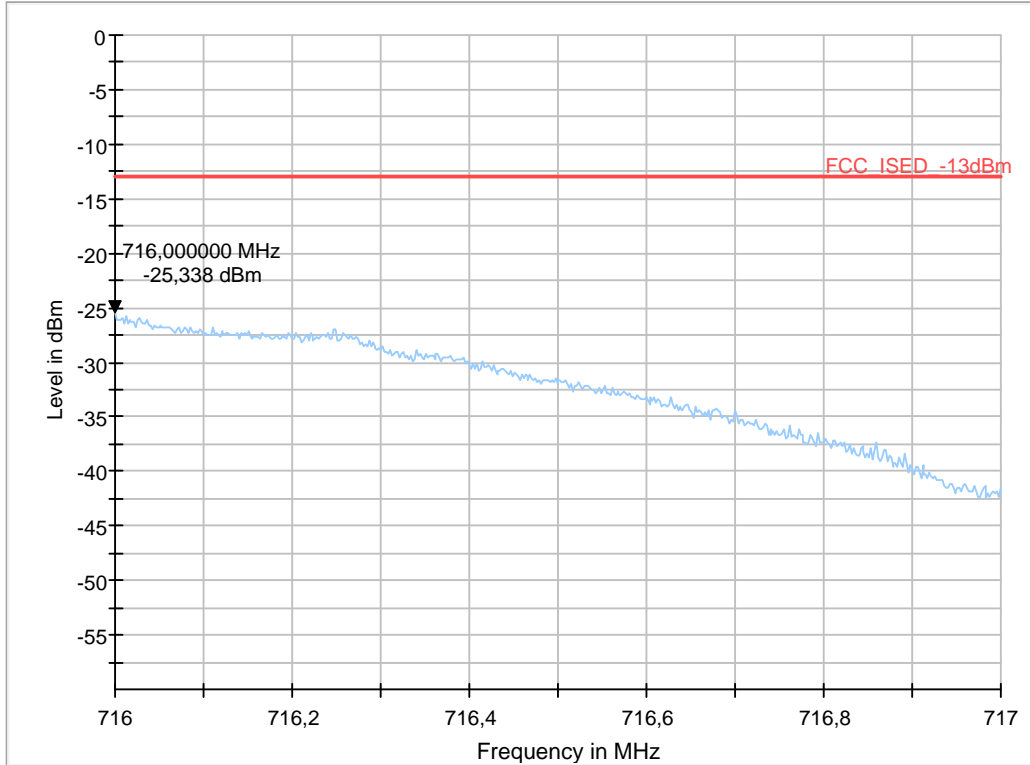
| | |
|---------------------------|--|
| Test Description: | Band-Edge low - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917(a) |
| Operating Mode: | UE allocated channel xxx |
| Environmental Conditions: | Humidity: 46%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | Mah |
| Remarks: | EUT - standing position |

EUT Information

| | |
|----------------|-------------------------------|
| Manufacturer: | peiker acoustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |

Connected Interfaces: Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables
 Power Supply: 12VDC
 Comments: -

Full Spectrum



1.15.10. Channel 23173, QPSK, 6RBs

9.58b_BE_R_Ch_23173_6RB_BW_1_4_QPSK

Common Information

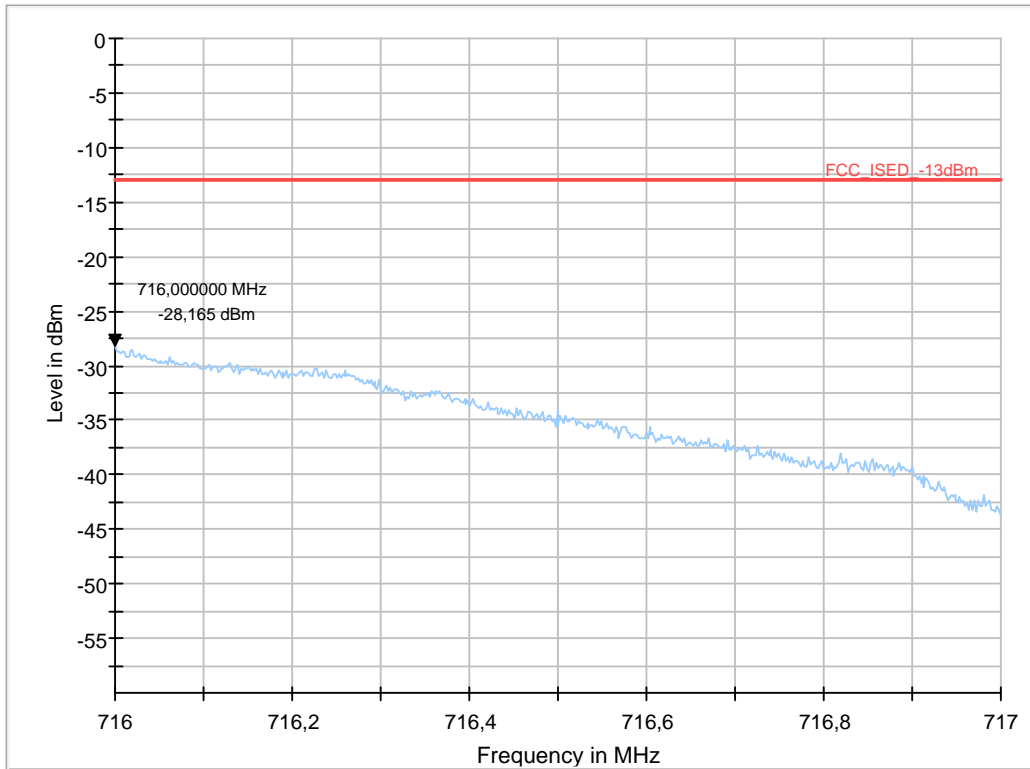
| | |
|---------------------------|--|
| Test Description: | Band-Edge low - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917(a) |
| Operating Mode: | UE allocated channel xxx |
| Environmental Conditions: | Humidity: 46%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | Mah |
| Remarks: | EUT - Laying position |

EUT Information

Manufacturer: peiker acustic GmbH & Co. KG

| | |
|-----------------------|--|
| EUT: | V1231-0 |
| ----- | ----- |
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



9.58b_BE_R_Ch_23173_6RB_BW_1_4_QPSK

Common Information

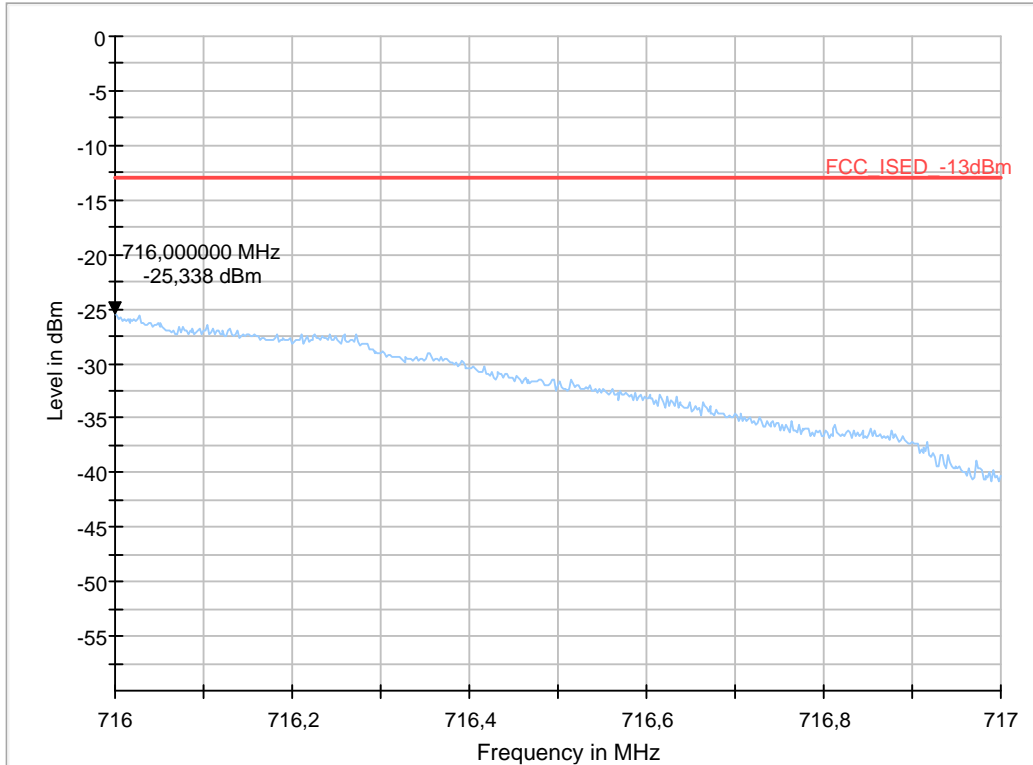
| | |
|---------------------------|--|
| Test Description: | Band-Edge low - Radiated Spurious Emissions LTE Band V |
| Test Site Location: | CETECOM GmbH Essen |
| Test Site: | Fully Anechoic Room (FAR) |
| Test Standard: | FCC Part 22.917(a) |
| Operating Mode: | UE allocated channel xxx |
| Environmental Conditions: | Humidity: 46%rH; Temperature: 20°C |
| Test SW Version: | EMC32 V9.26.0 |
| Operator: | Mah |
| Remarks: | EUT - standing position |

EUT Information

| | |
|---------------|------------------------------|
| Manufacturer: | peiker acustic GmbH & Co. KG |
| EUT: | V1231-0 |
| ----- | ----- |

| | |
|-----------------------|--|
| HW version: | V1231-0_Ver.1 |
| SW version: | MPSS.TH.2.0.2-00256 |
| Serial number: | 004402580040446 |
| Connected Interfaces: | Multiband antenna LTE + GNSS (9396828-02, S/N: 50110256), Multiband antenna LTE (9396827-02, S/N 50110255) microphone, loudspeaker, cables |
| Power Supply: | 12VDC |
| Comments: | - |

Full Spectrum



1.16. Radiated emissions – band-edge (LTE Band 7)

1.16.1. Low Band-Edge

1.16.1.1. Channel 20825, QPSK, 75RBs

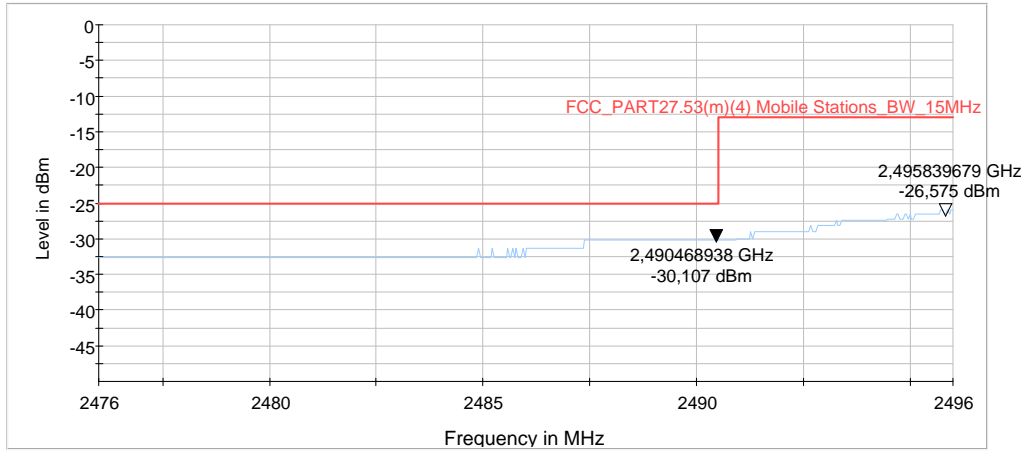


Diagram 9.706a_Ch20825_BW_15_QPSK_75RB_laying

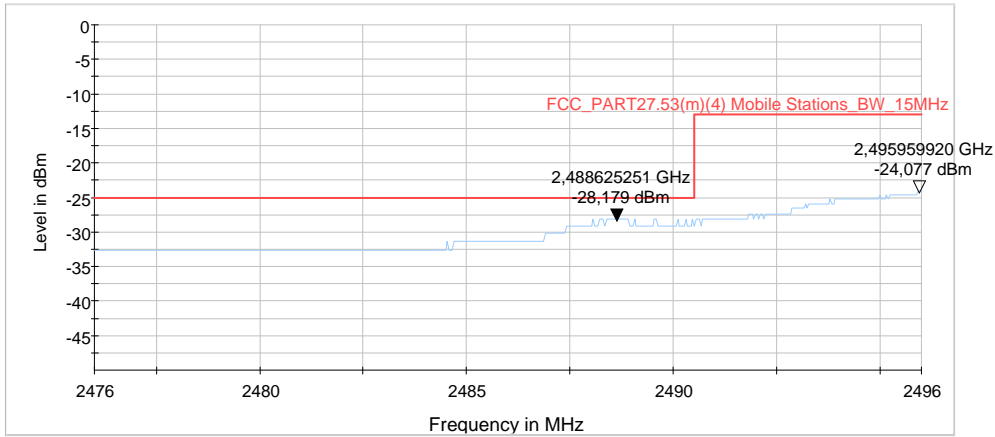


Diagram 9.706a_Ch20825_BW_15_QPSK_75RBs_standing

1.16.1.2. Channel 20825, 16-QAM, 15RBs

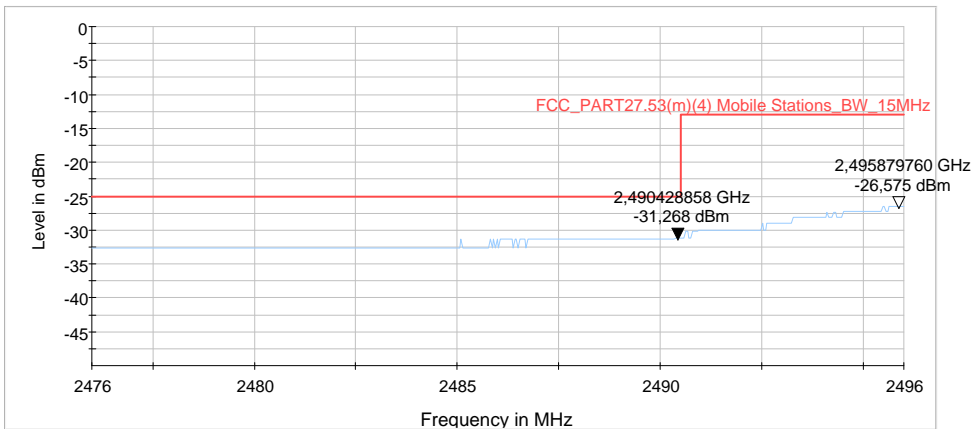


Diagram 9.706b_Ch20825_BW_15_16QAM_75RB_laying

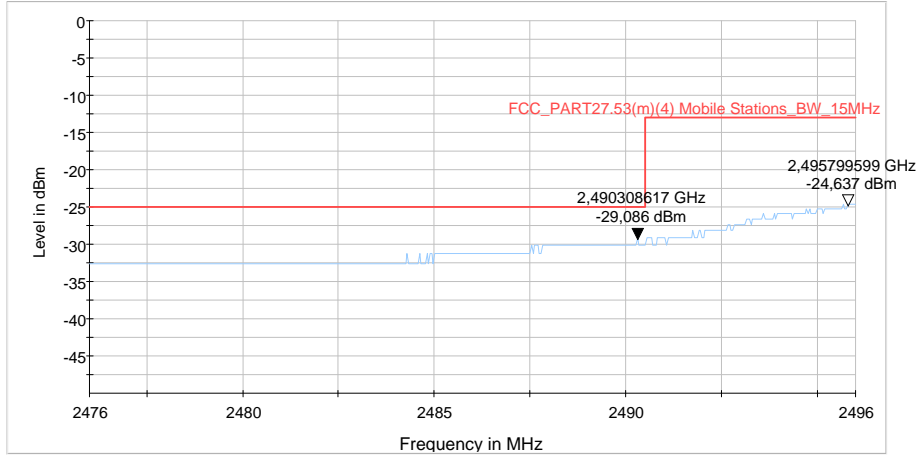


Diagram 9.706b_Ch20825_BW_15_16QAM_75RBs_standing

1.16.1.3. Channel 20850, QPSK, 100RBs

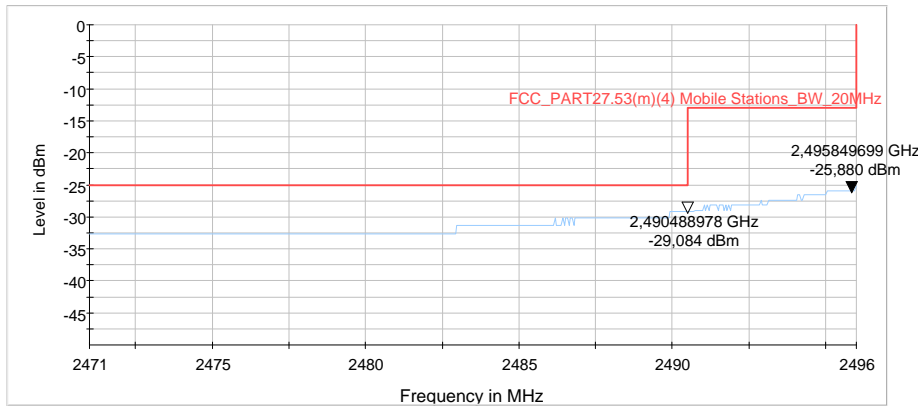


Diagram 9.707a_Ch20850_BW_20_QPSK_100RB_Laying

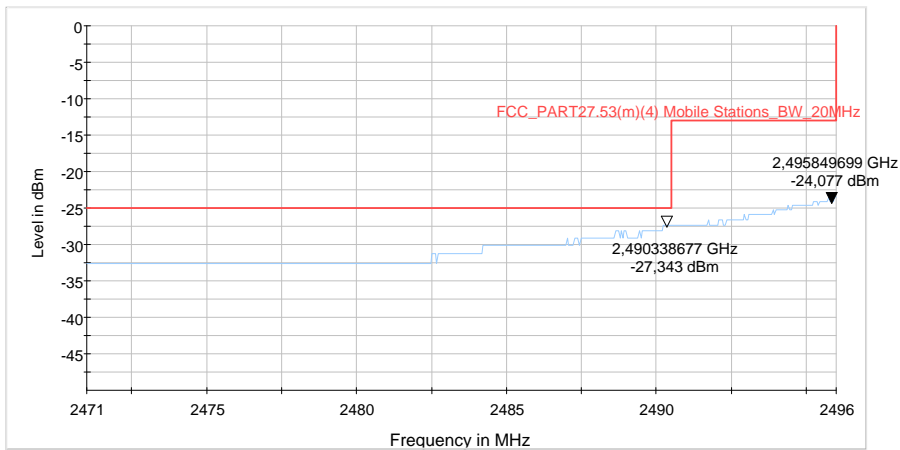


Diagram 9.707a_Ch20850_BW_20_QPSK_100RB_Standing

1.16.1.4. Channel 20850, 16-QAM, 100RBs

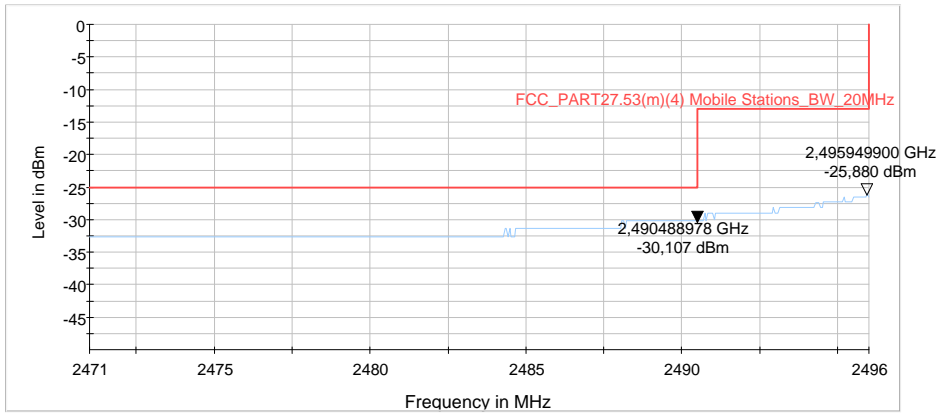


Diagram 9.707b_Ch20850_BW_20_16QAM_100RB_Laying

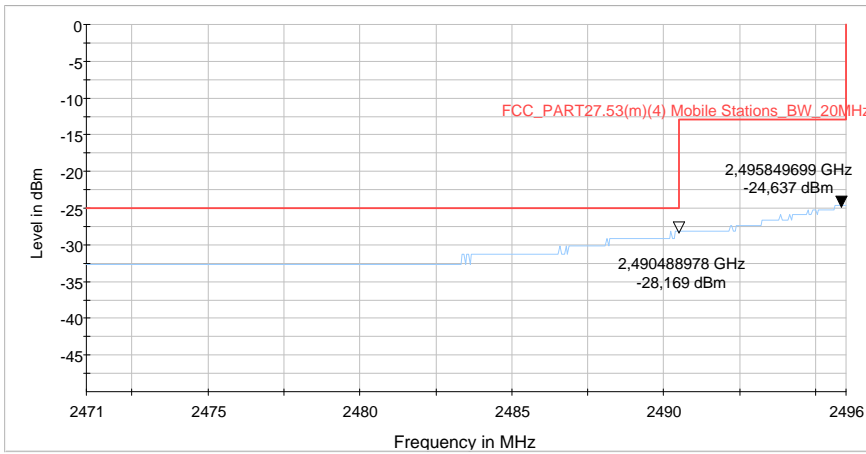


Diagram 9.707b_Ch20850_BW_20_16QAM_100RB_Standing

1.16.1.5. Channel 20825, 16-QAM, 1RBs

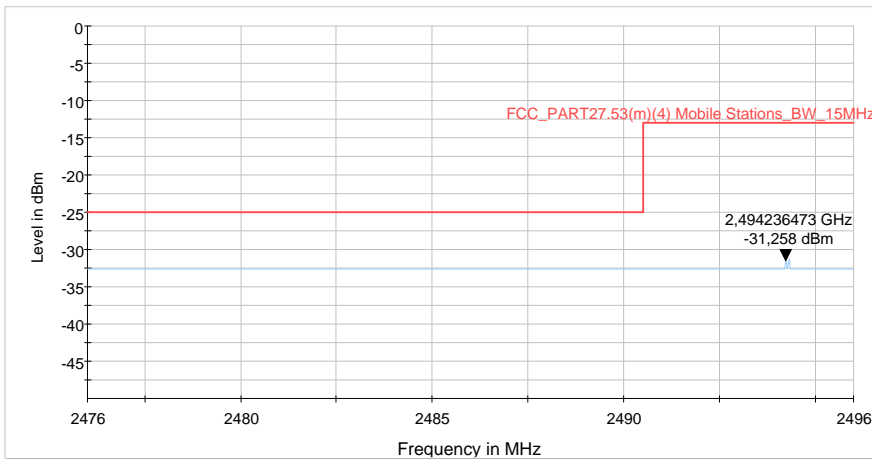


Diagram 9.707b_Ch20825_BW_15_16QAM_1RB_low_standing

1.16.2. High Band-Edge

1.16.2.1. Channel 21375, QPSK, 1RBs

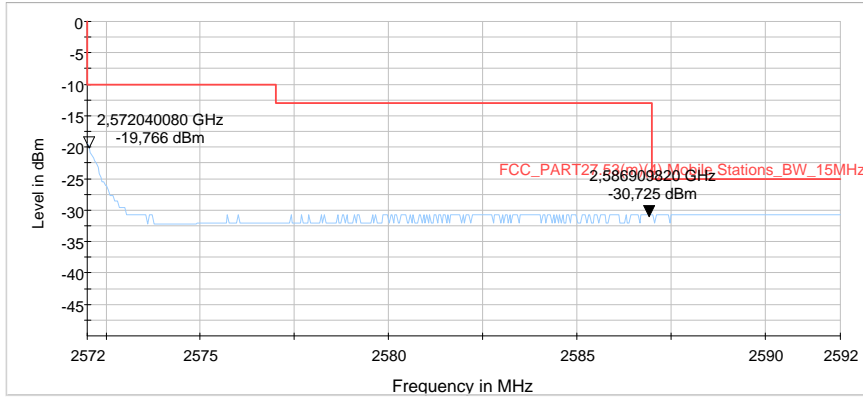


Diagram 9.714a_Ch21375_BW_15_1RB_high_QPSK_laying

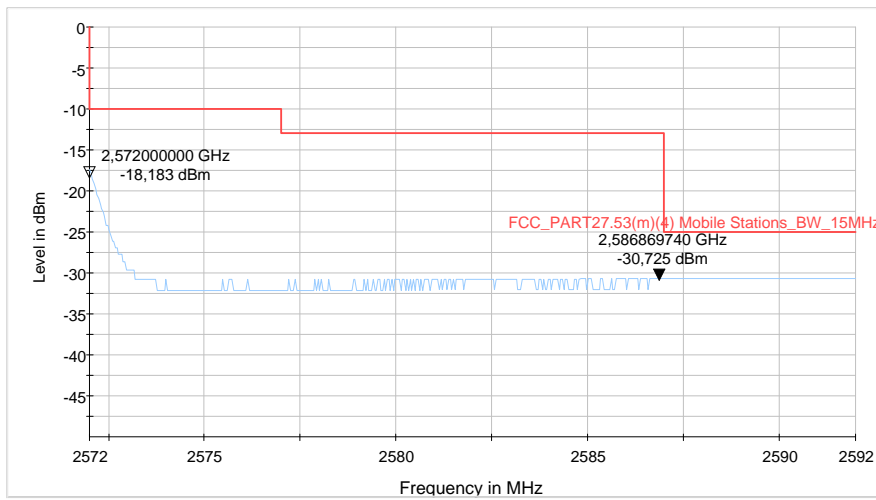


Diagram 9.714a_Ch21375_BW_15_1RB_high_QPSK_standing

1.16.2.2. Channel 21375, 16-QAM, 1RBs

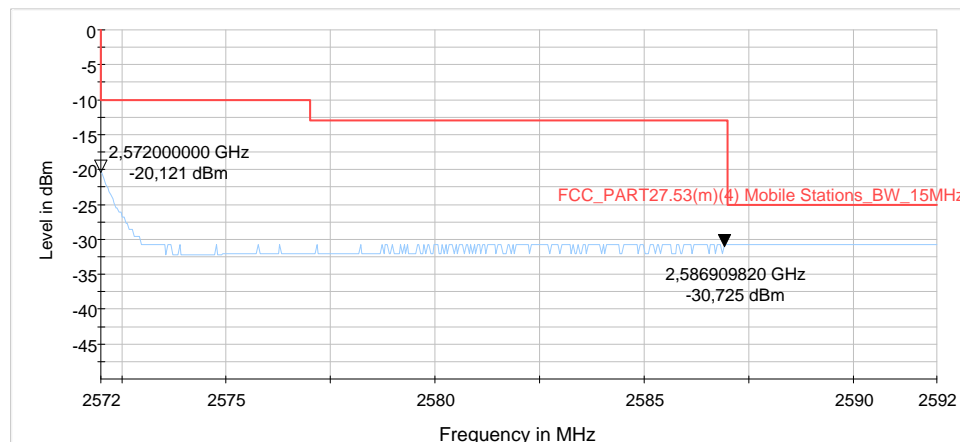


Diagram 9.714b_Ch21375_BW_15_1RB_high_16QAM_laying

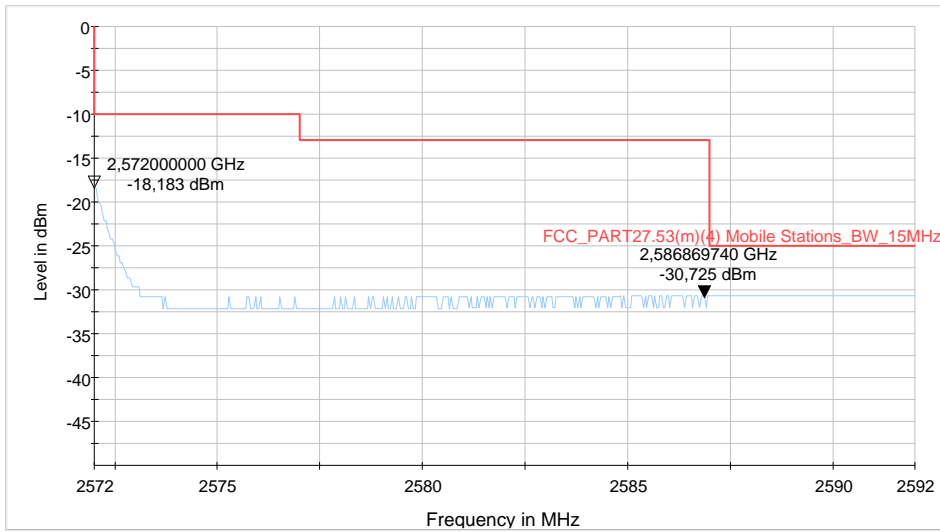


Diagram 9.714b_Ch21375_BW_15_1RB_high_16QAM_standing

1.16.2.3. Channel 21375, QPSK, 75RBs

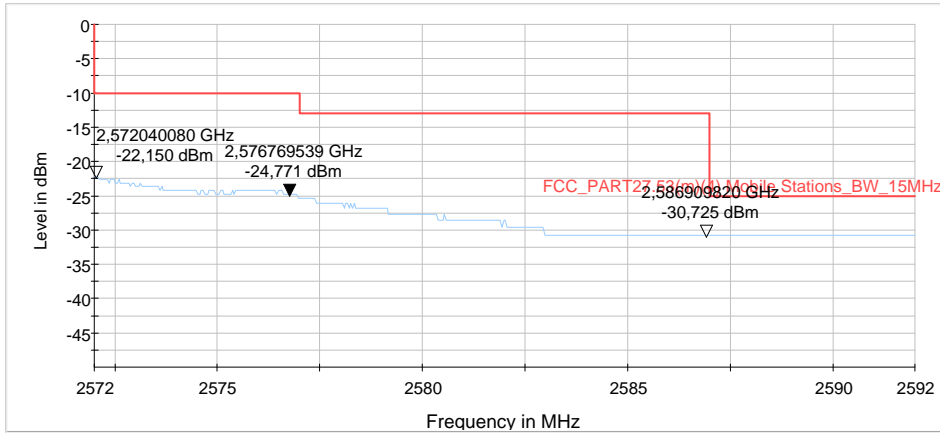


Diagram 9.715a_Ch21375_BW_15_75RB_QPSK_laying

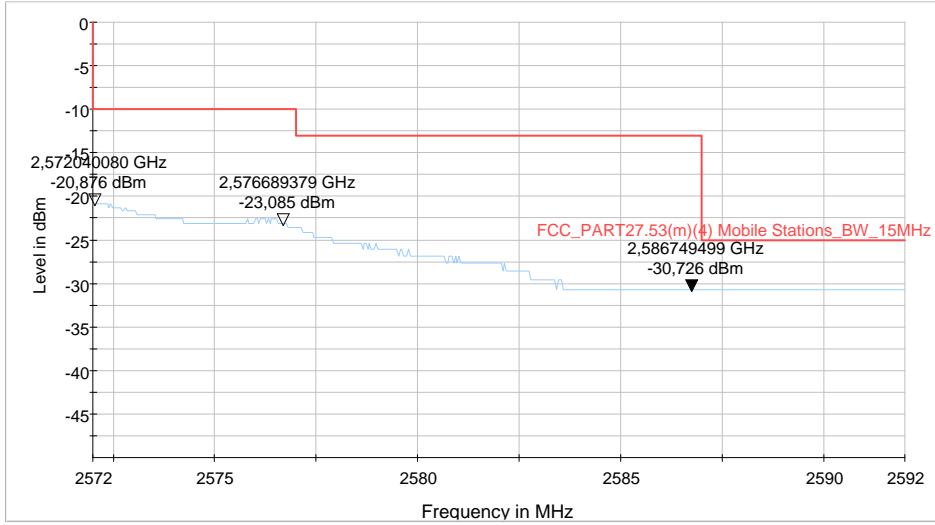


Diagram 9.715a_Ch21375_BW_15_75RB_QPSK_standing

1.16.2.4. Channel 21375, 16-QAM, 75RBs

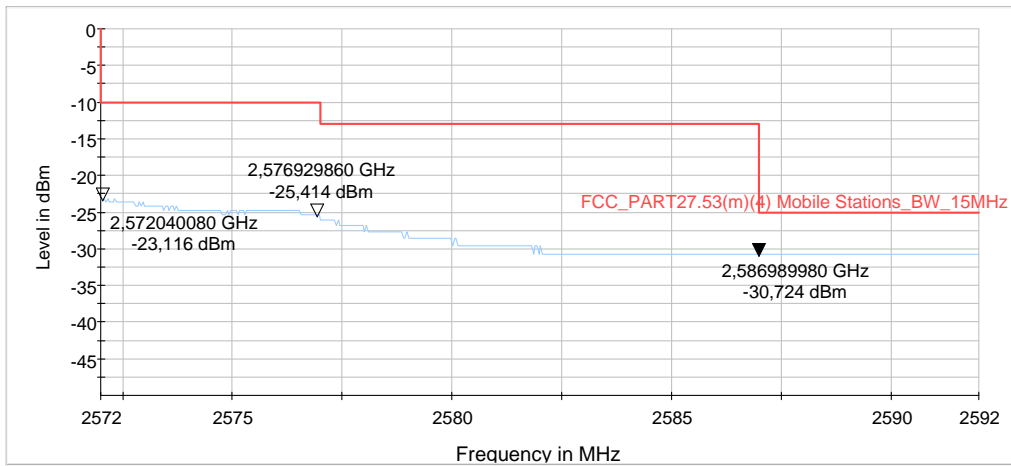


Diagram 9.715b_Ch21375_BW_15_75RB_16QAM_laying

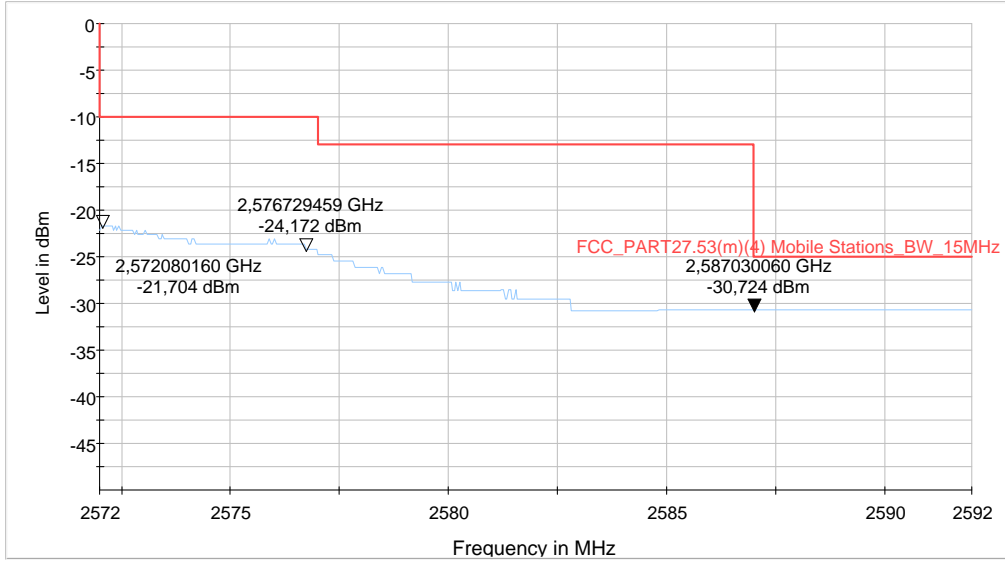
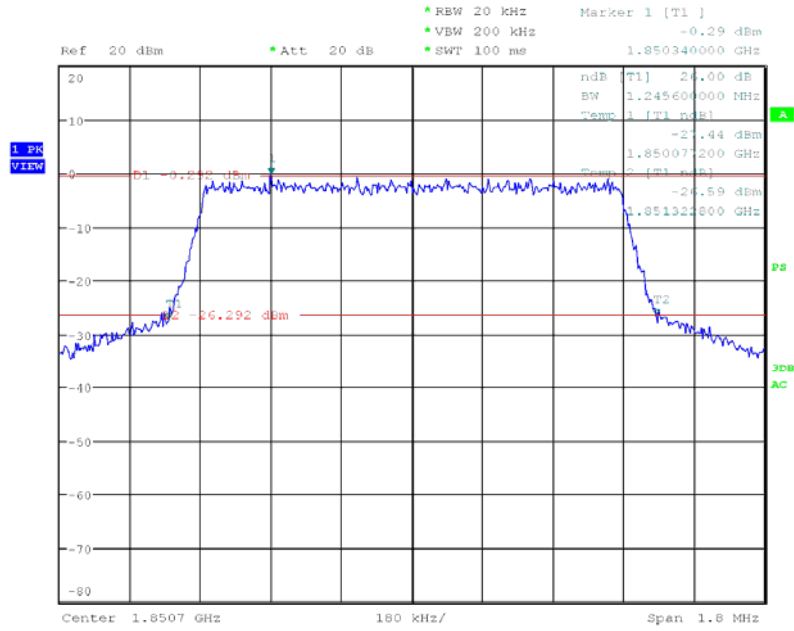


Diagram 9.715b_Ch21375_BW_15_75RB_16QAM_standing

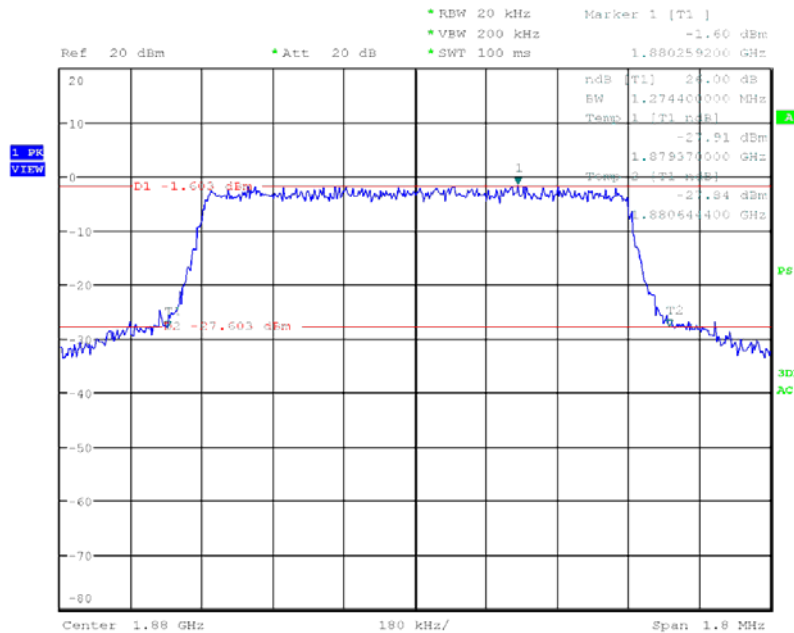
1.17. 26dBc Emission bandwidth

1.17.1. LTE Band 2 1.17.1.1. BW = 1.4MHz QPSK-Modulation



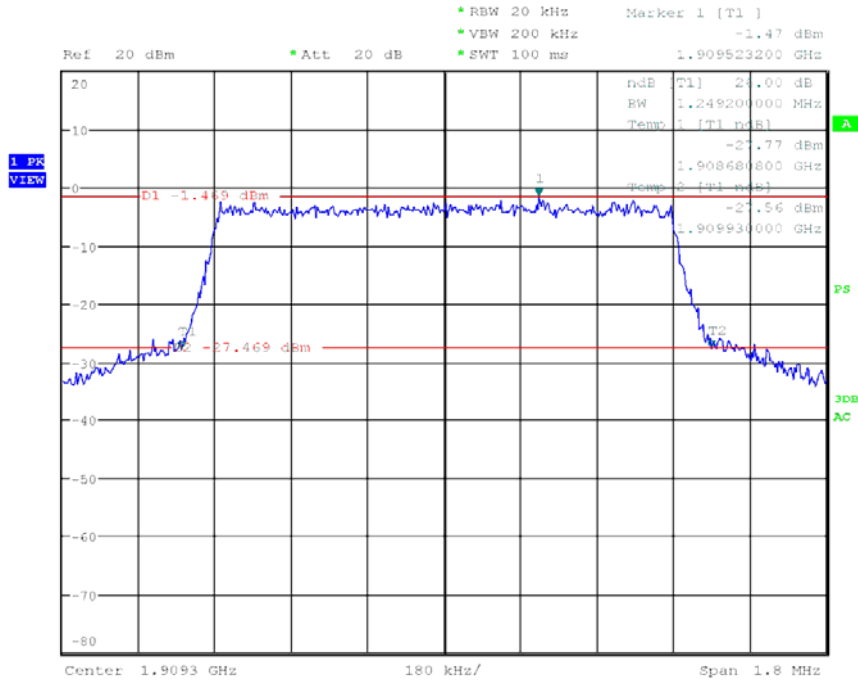
Date: 13.JAN.2017 12:05:27

Diagram 34_200_26 dB



Date: 13.JAN.2017 12:19:52

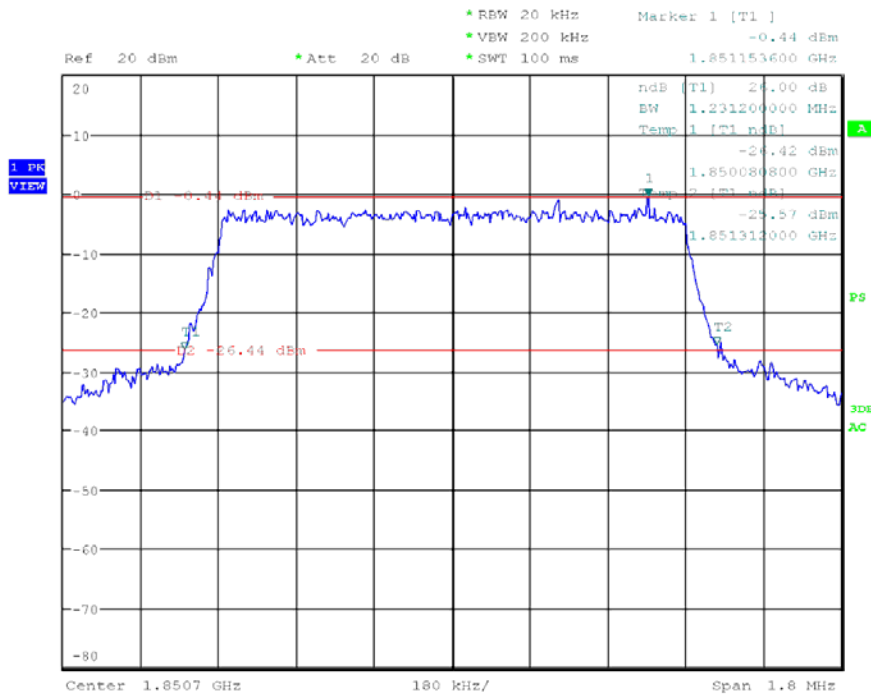
Diagram 34_201_26 dB



Date: 13.JAN.2017 12:22:43

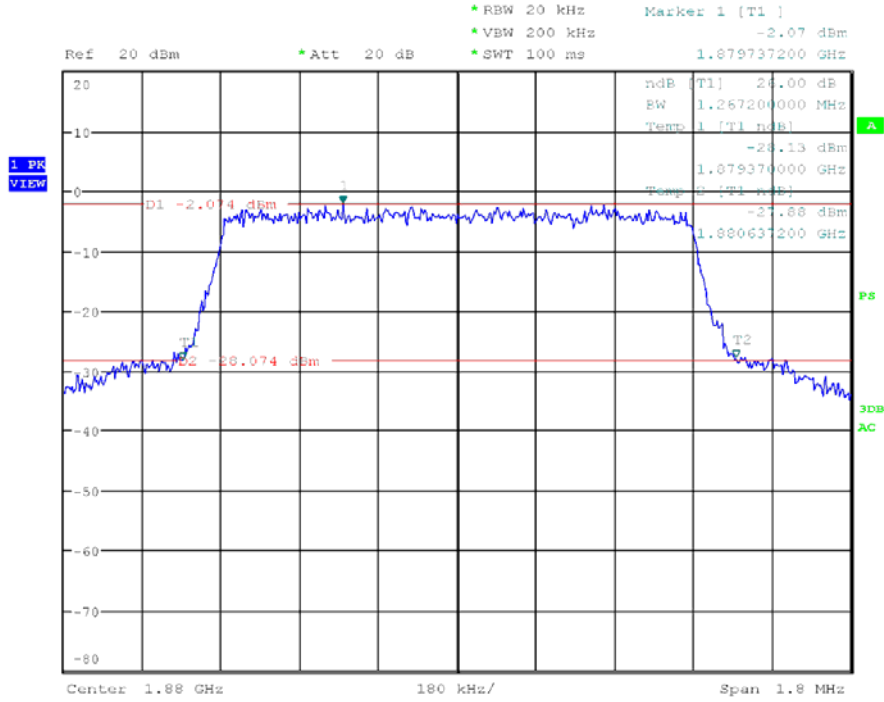
Diagram 34_202_26 dB

16-QAM-Modulation



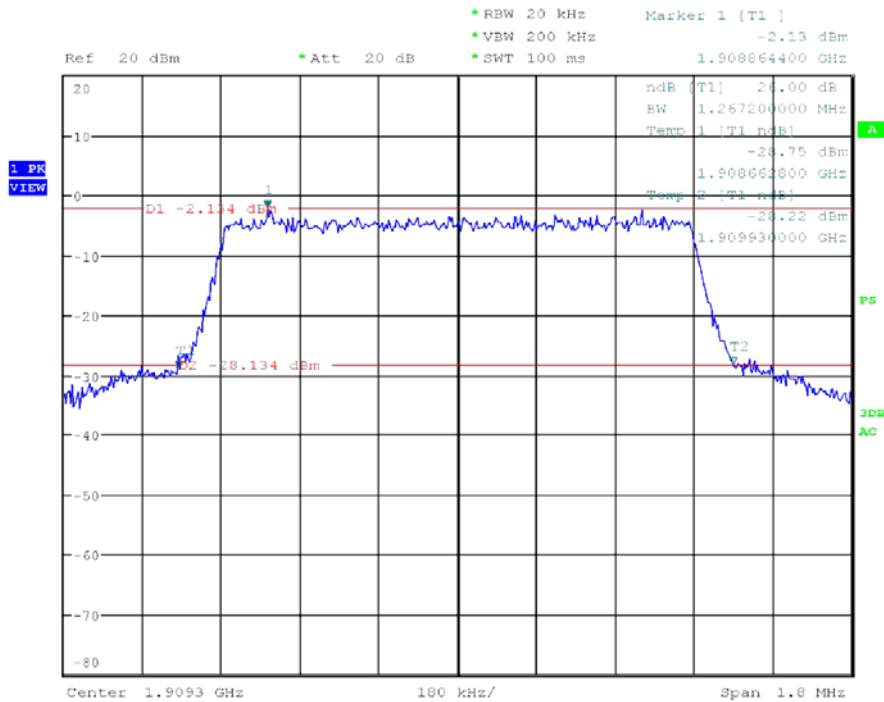
Date: 13.JAN.2017 13:18:37

Diagram 34_2018_26 dB



Date: 13.JAN.2017 13:19:29

Diagram 34_219_26 dB

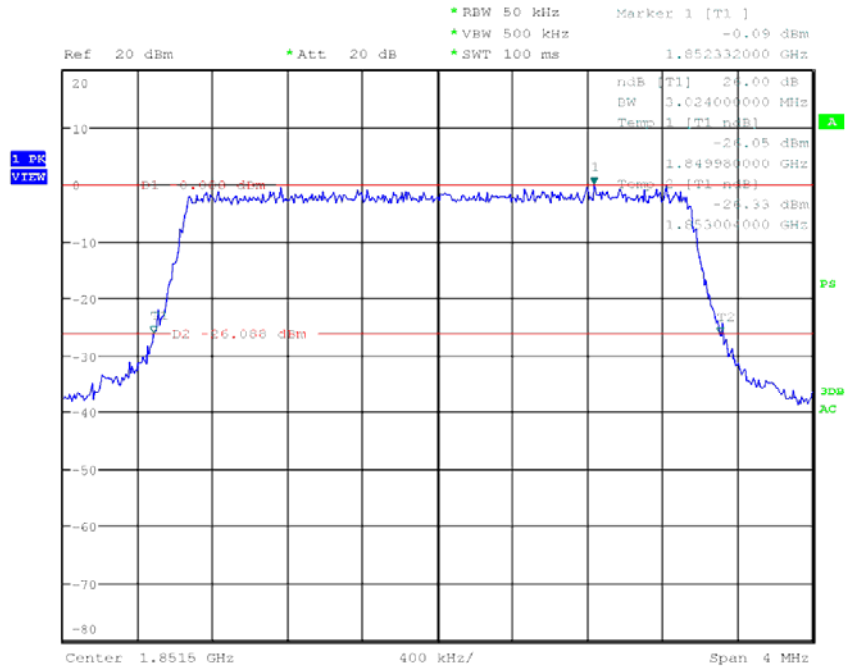


Date: 13.JAN.2017 13:20:26

Diagram 34_220_26 dB

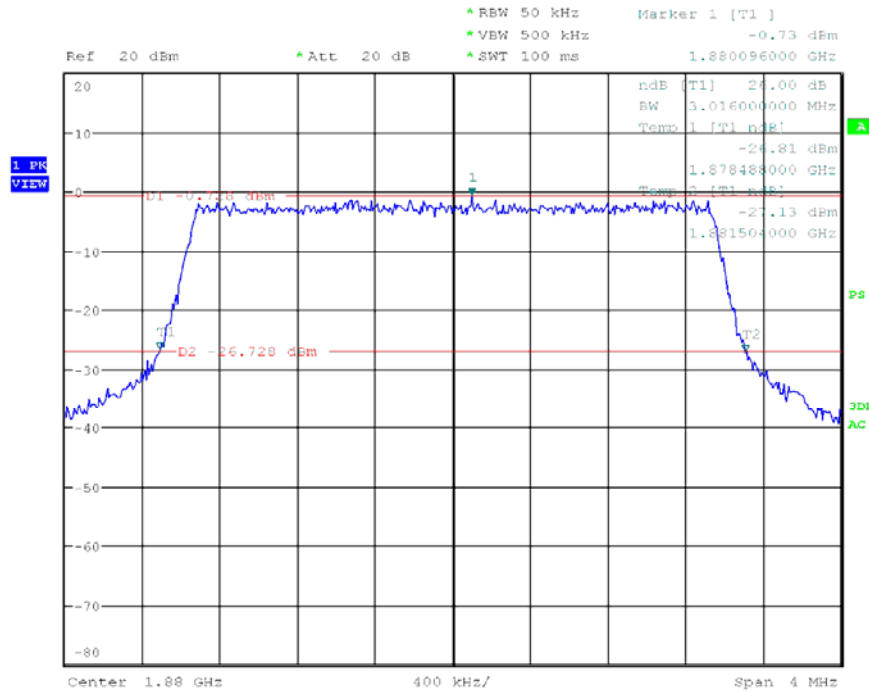
1.17.1.2. BW = 3MHz

QPSK-Modulation



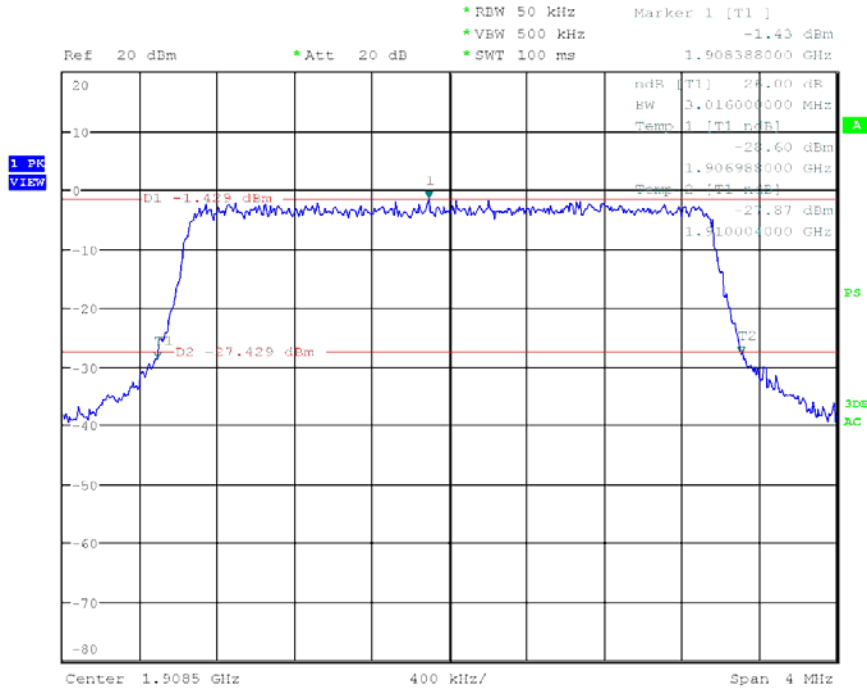
Date: 13.JAN.2017 12:27:14

Diagram 34_203_26 dB



Date: 13.JAN.2017 12:28:44

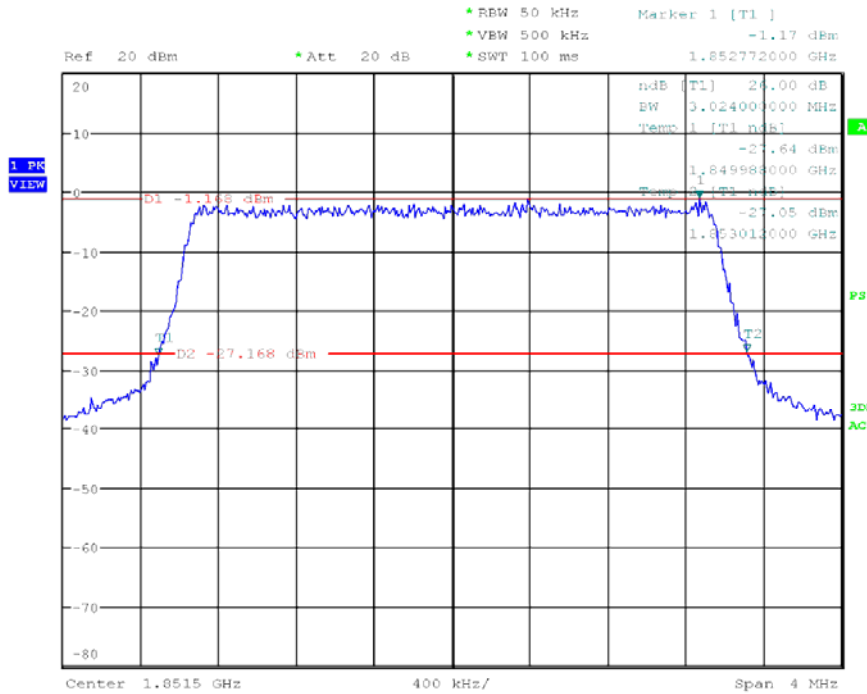
Diagram 34_204_26 dB



Date: 13.JAN.2017 12:29:23

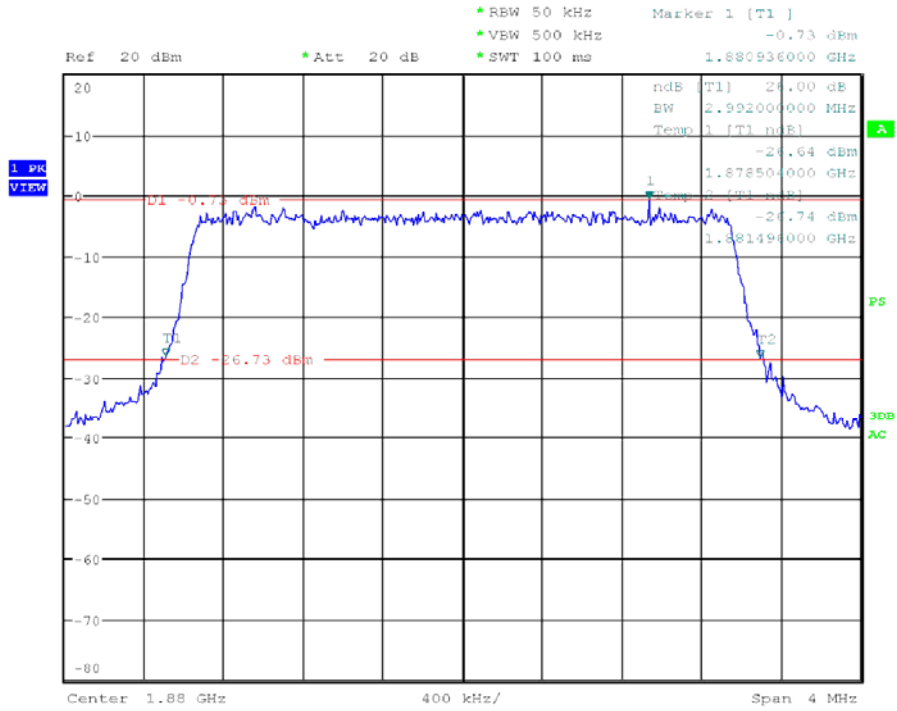
Diagram 34_205_26 dB

16-QAM-Modulation



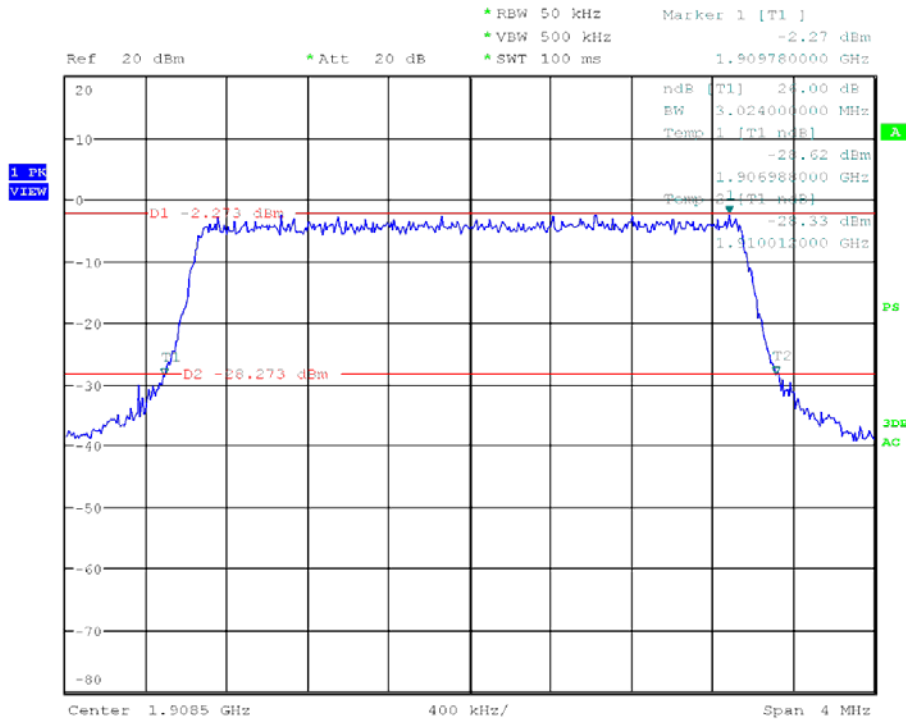
Date: 13.JAN.2017 13:22:39

Diagram 34_221_26 dB



Date: 13.JAN.2017 13:23:32

Diagram 34_222_26 dB

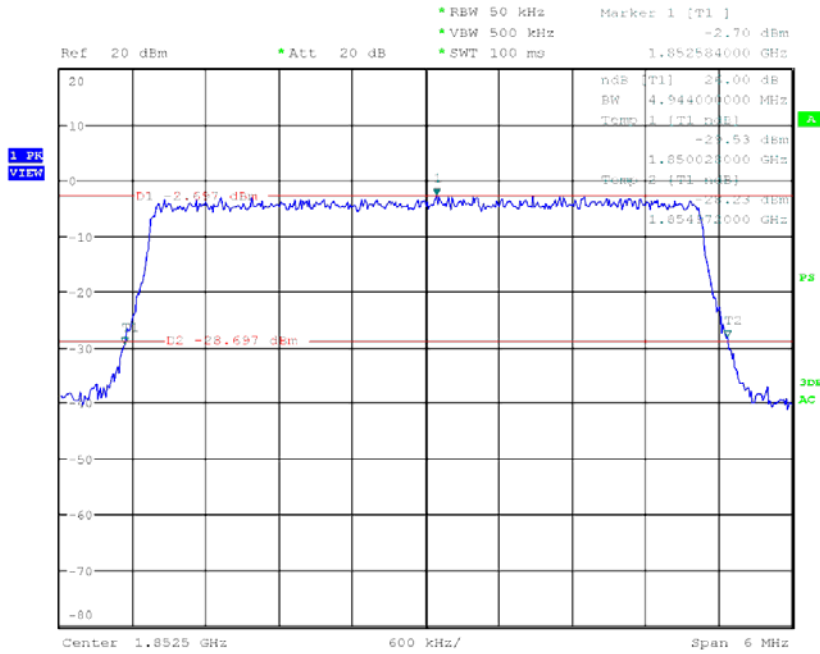


Date: 13.JAN.2017 13:24:01

Diagram 34_223_26 dB

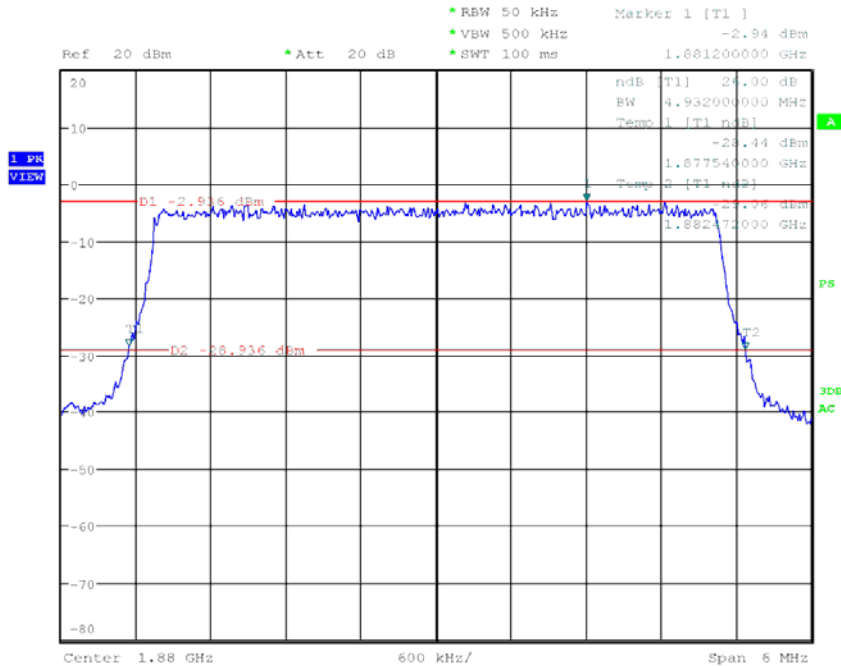
1.17.1.3. BW = 5MHz

QPSK-Modulation



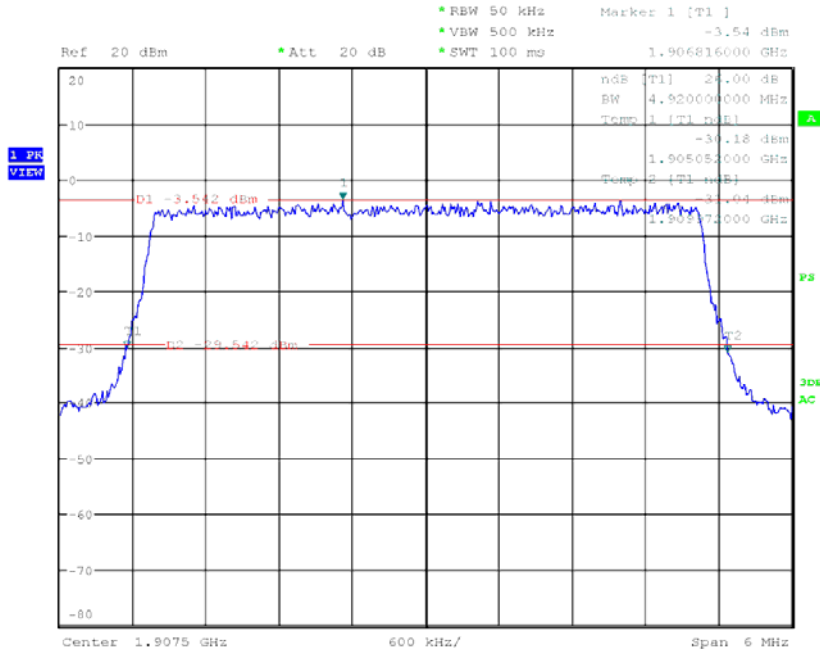
Date: 13.JAN.2017 12:31:43

Diagram 34_206_26 dB



Date: 13.JAN.2017 12:34:51

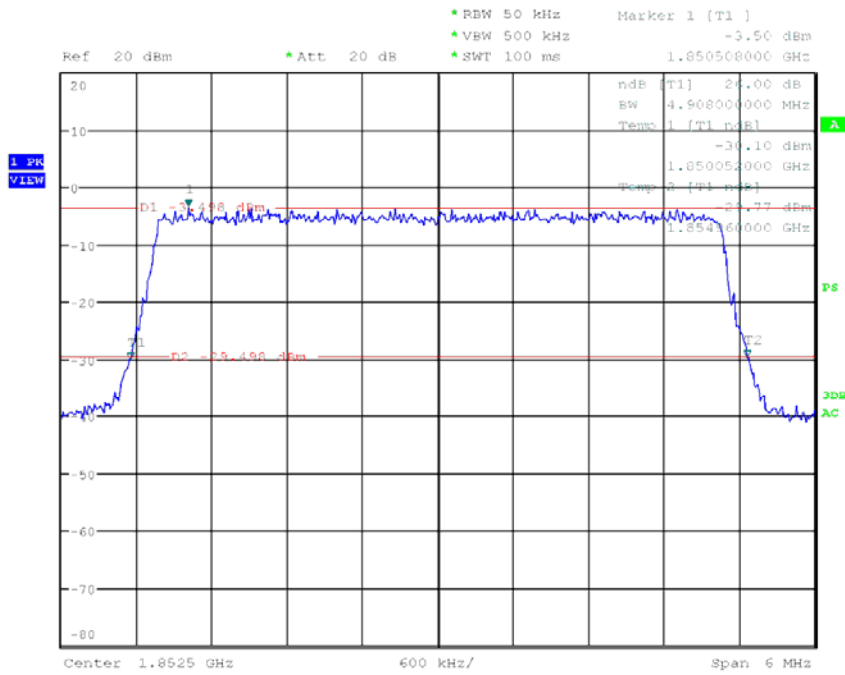
Diagram 34_207_26 dB



Date: 13.JAN.2017 12:36:13

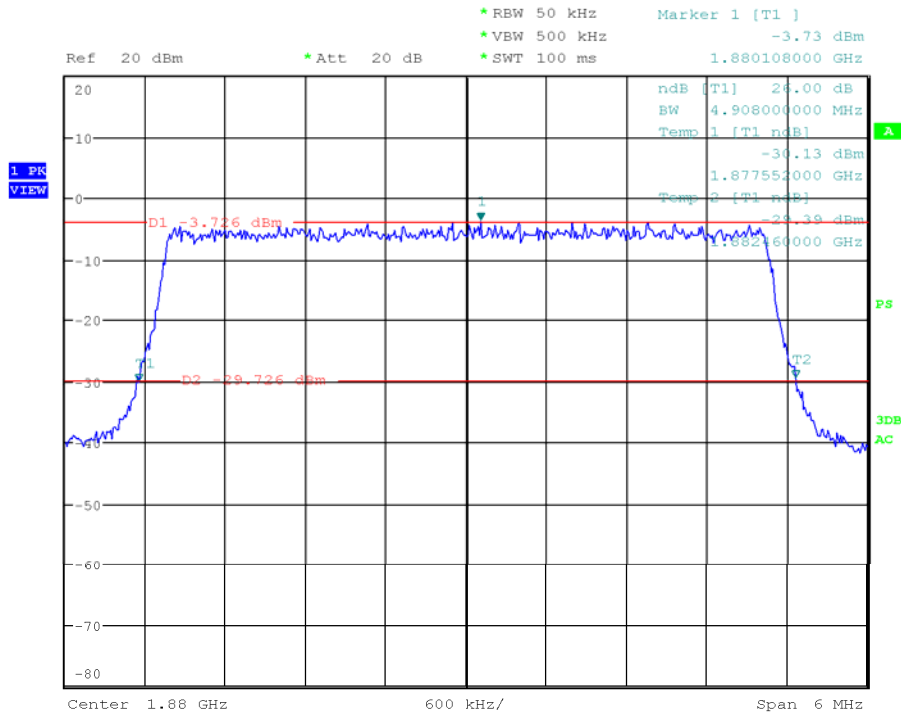
Diagram 34_208_26 dB

16-QAM-Modulation



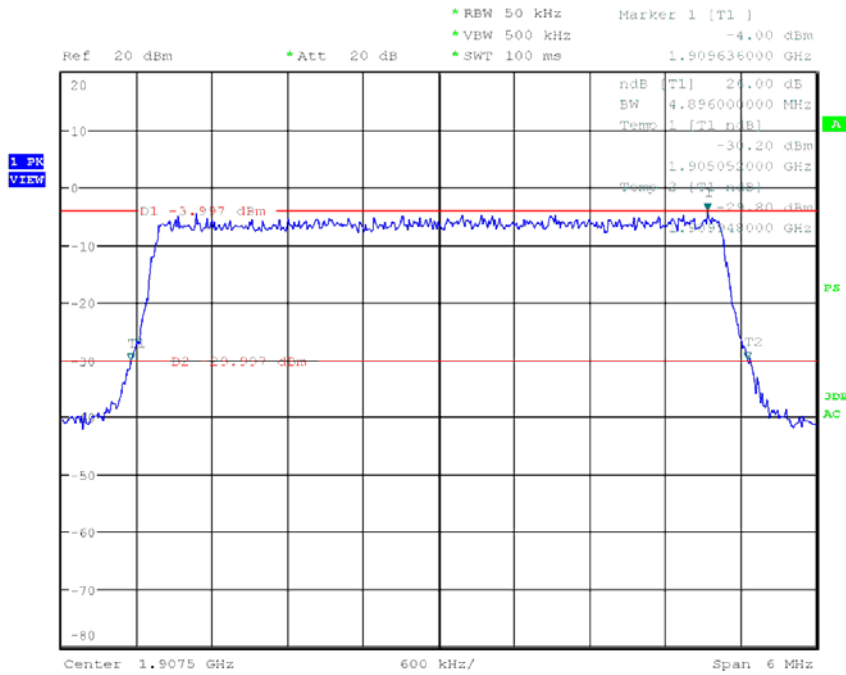
Date: 13.JAN.2017 13:25:22

Diagram 34_224_26 dB



Date: 13.JAN.2017 13:26:15

Diagram 34_225_26 dB

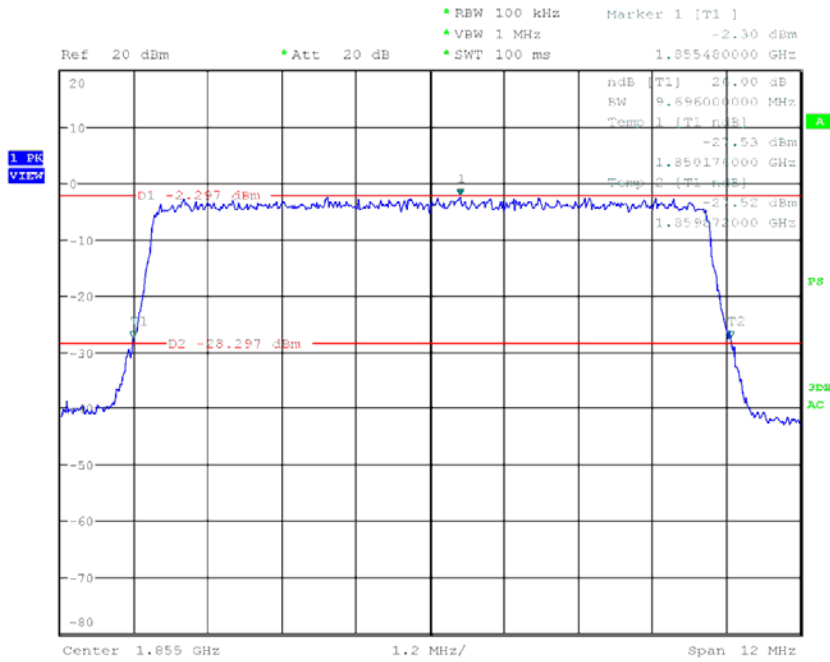


Date: 13.JAN.2017 13:26:59

Diagram 34_226_26 dB

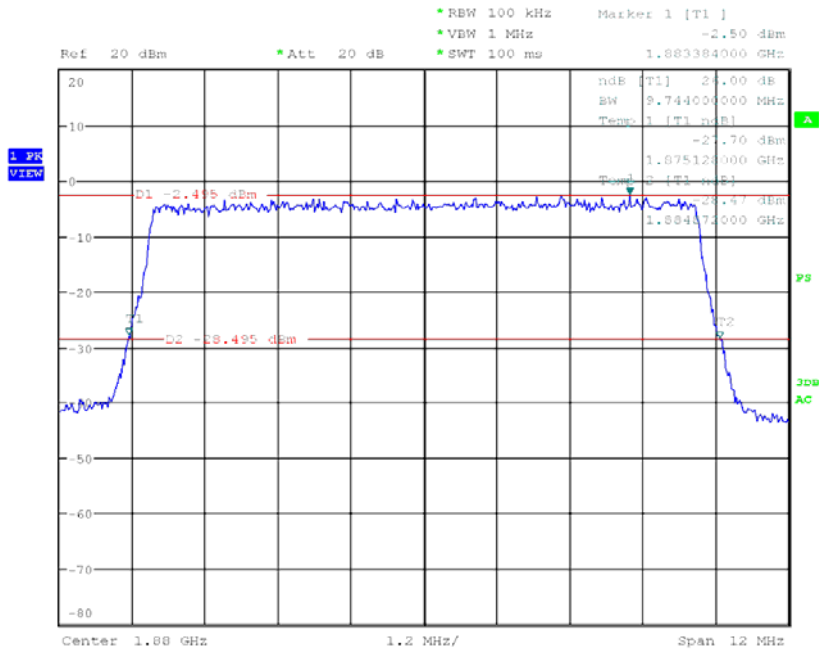
1.17.1.4. BW = 10MHz

QPSK-Modulation



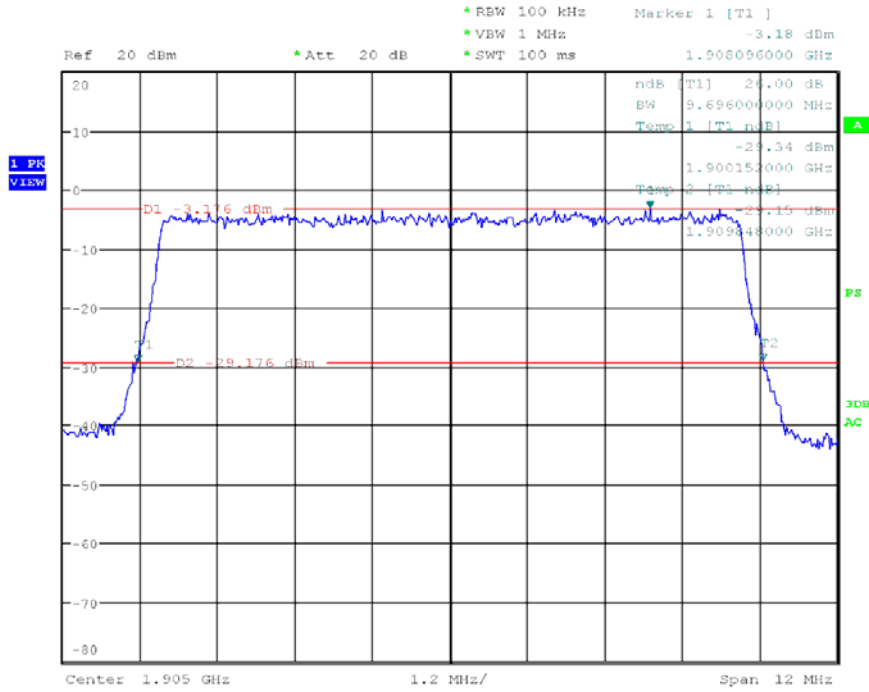
Date: 13.JAN.2017 12:41:03

Diagram 34_209_26 dB



Date: 13.JAN.2017 12:41:52

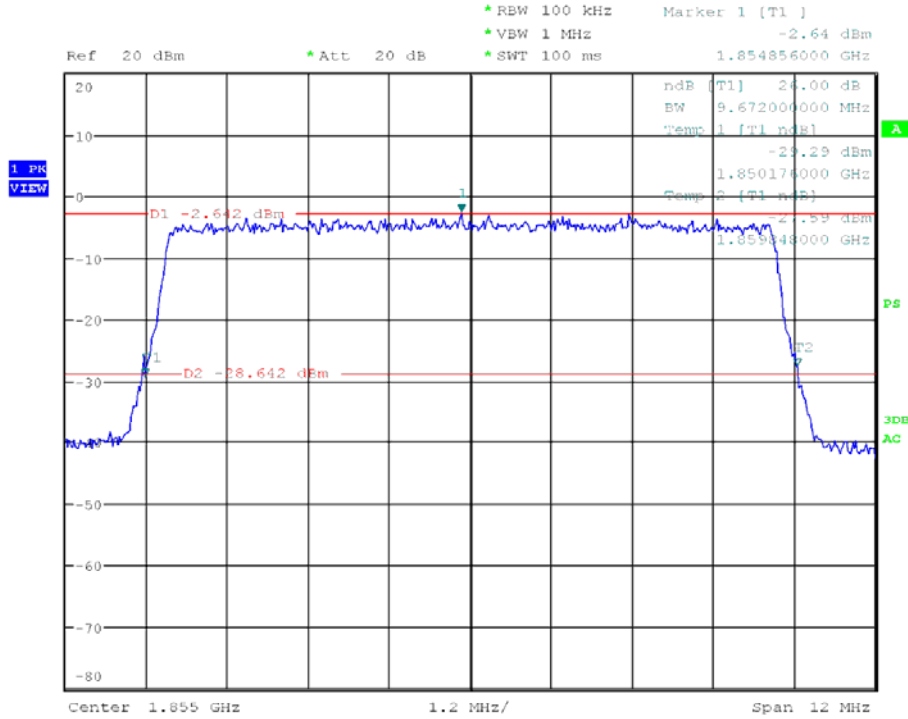
Diagram 34_210_26 dB



Date: 13.JAN.2017 12:42:45

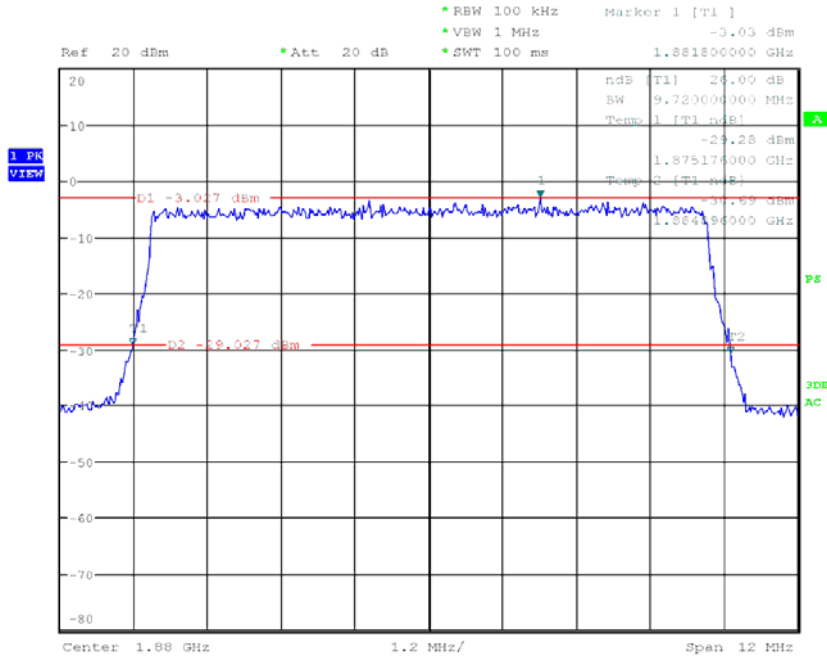
Diagram 34_211_26 dB

16-QAM-Modulation



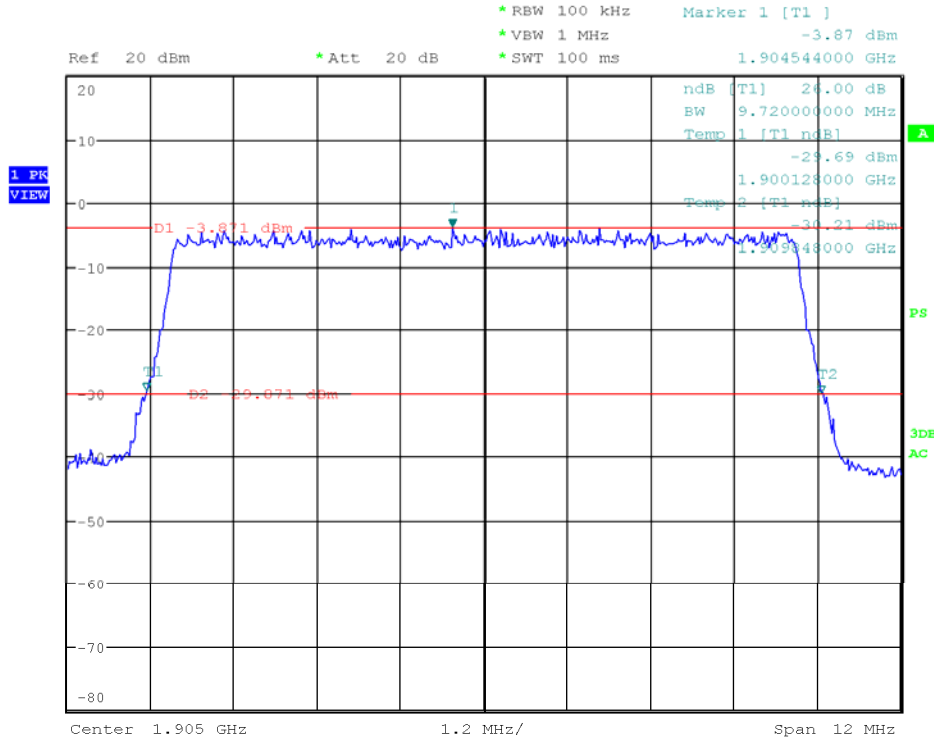
Date: 13.JAN.2017 13:27:58

Diagram 34_227_26 dB



Date: 13.JAN.2017 13:28:50

Diagram 34_228_26 dB

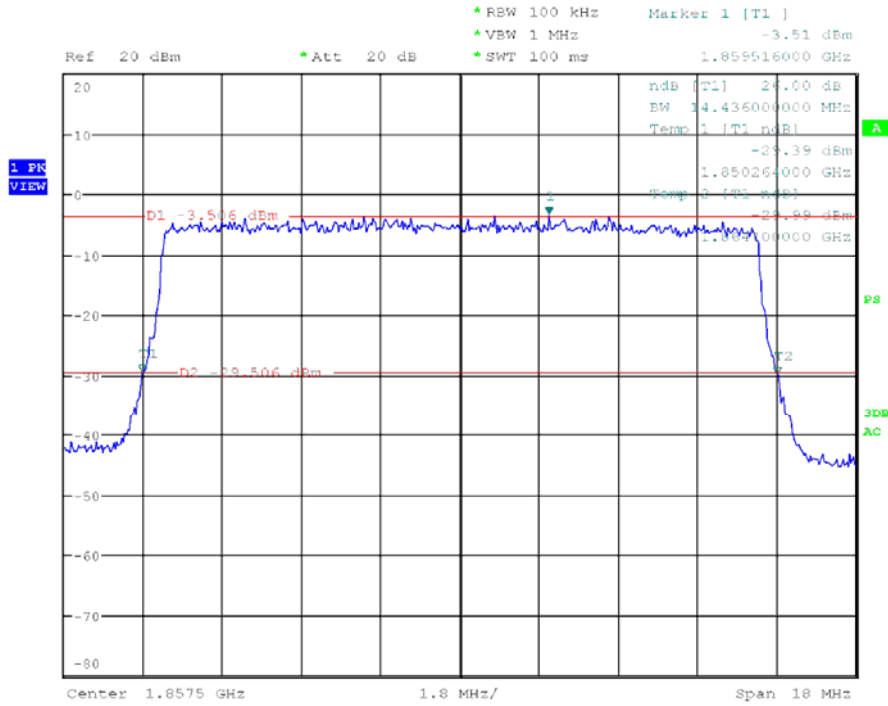


Date: 13.JAN.2017 13:29:55

Diagram 34_229_26 dB

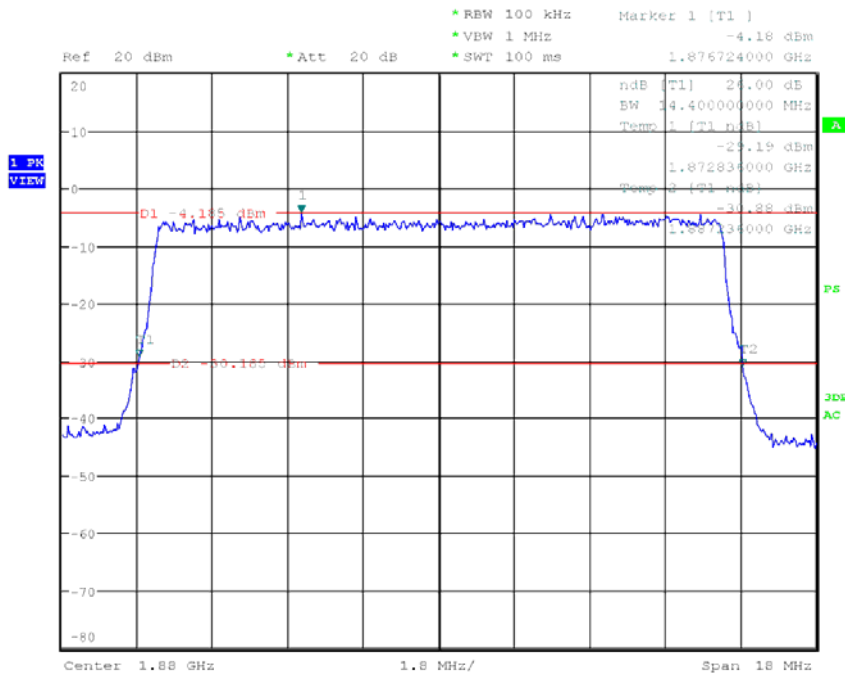
1.17.1.5. BW = 15MHz

QPSK-Modulation



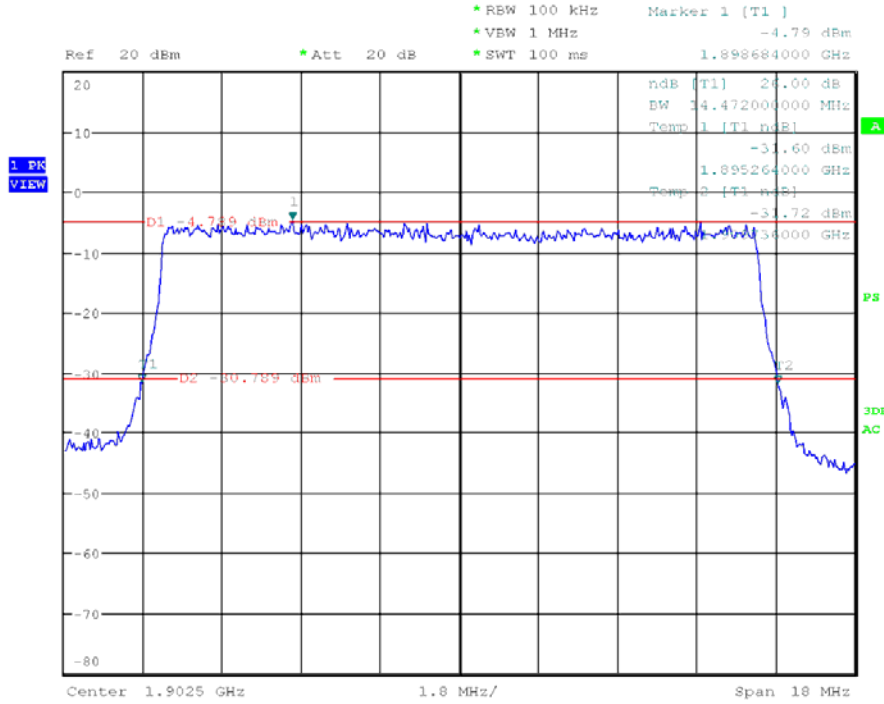
Date: 13.JAN.2017 12:44:11

Diagram 34_212_26 dB



Date: 13.JAN.2017 12:45:11

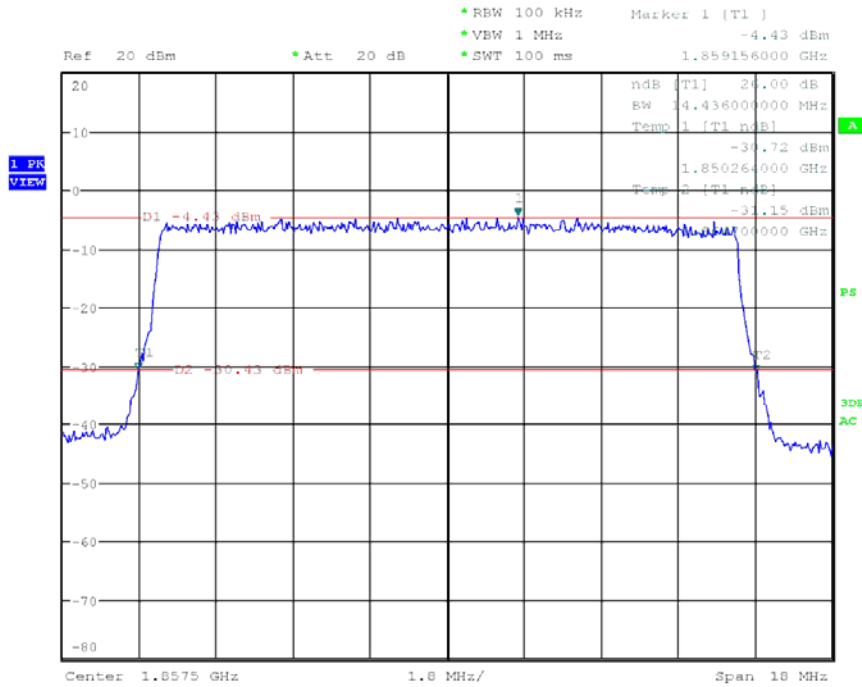
Diagram 34_213_26 dB



Date: 13.JAN.2017 12:46:23

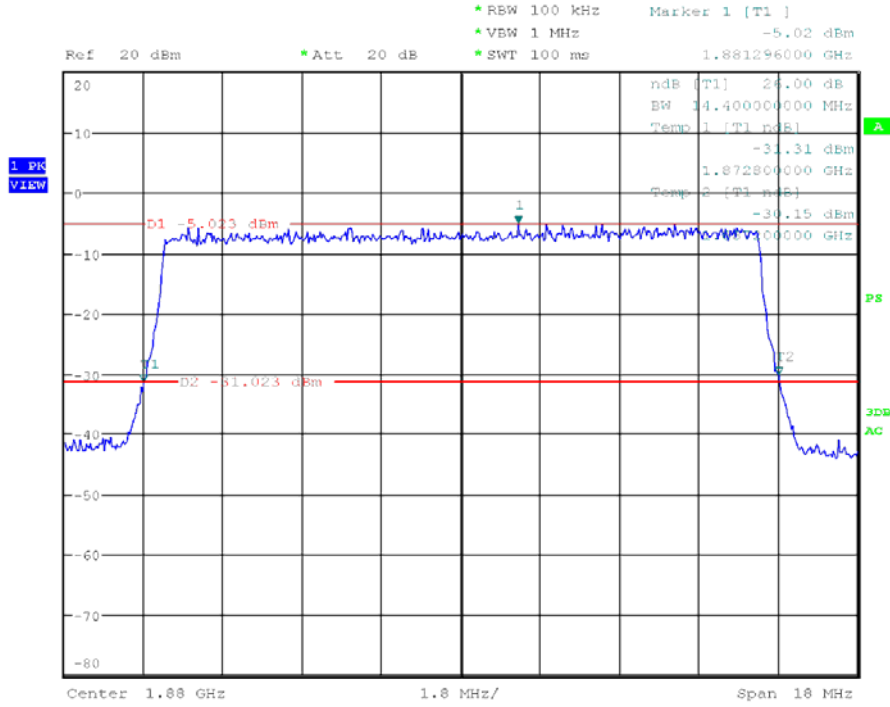
Diagram 34_214_26 dB

16-QAM-Modulation



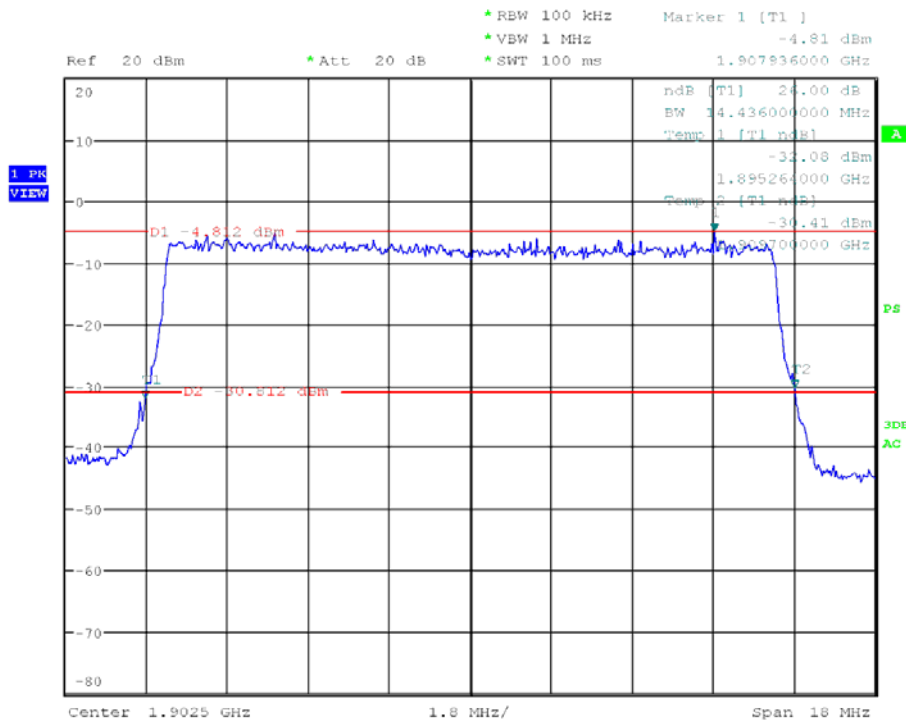
Date: 13.JAN.2017 13:31:30

Diagram 34_230_26 dB



Date: 13.JAN.2017 13:32:10

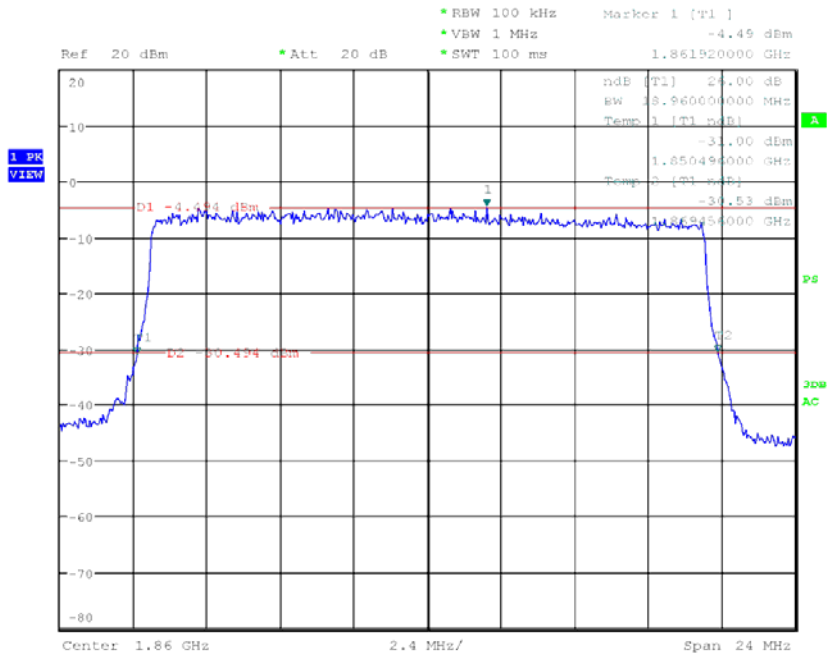
Diagram 34_231_26 dB



Date: 13.JAN.2017 13:32:50

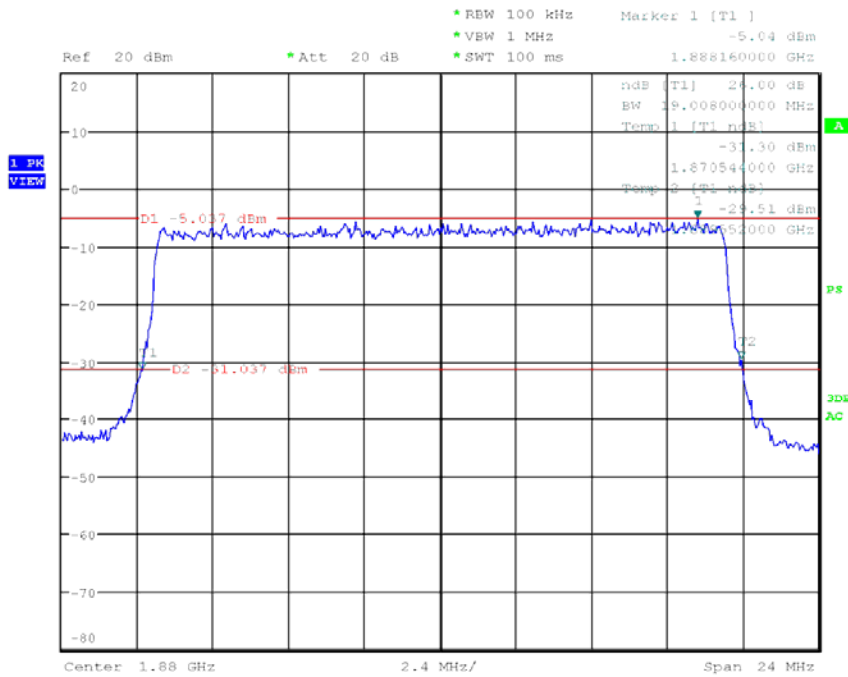
Diagram 34_232_26 dB
 1.17.1.6. BW = 20MHz

QPSK-Modulation



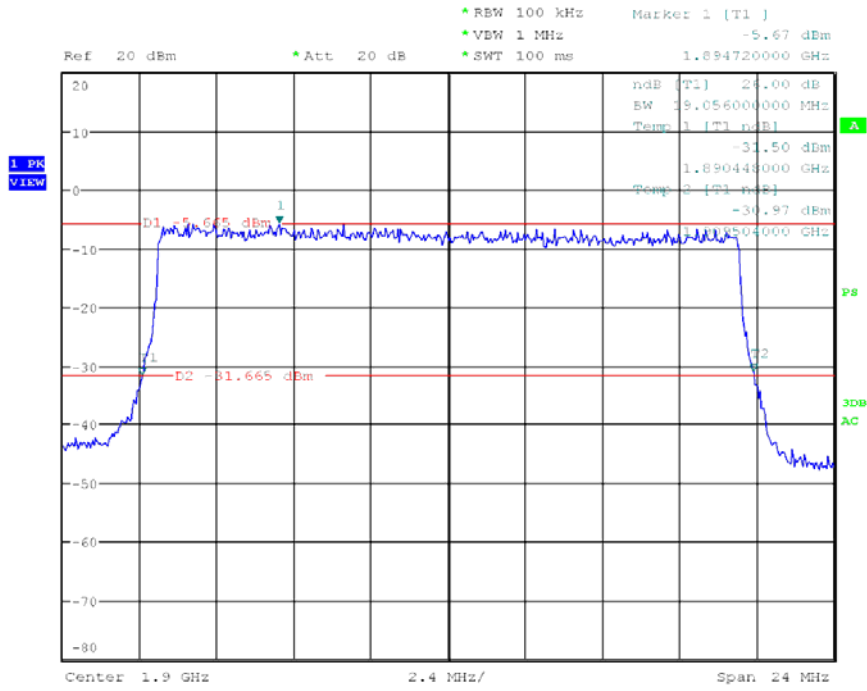
Date: 13.JAN.2017 12:48:26

Diagram 34_215_26 dB



Date: 13.JAN.2017 13:06:36

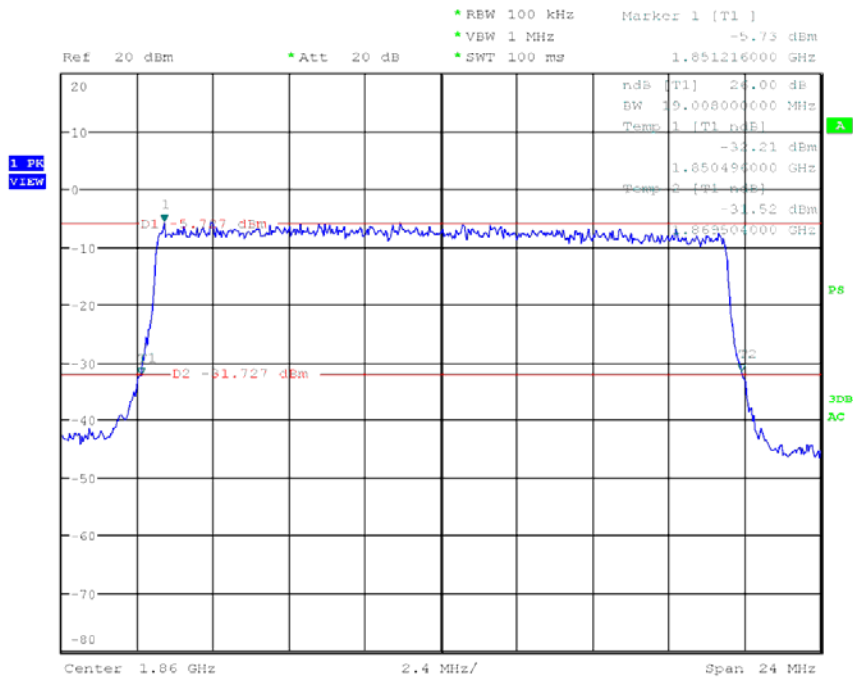
Diagram 34_216_26 dB



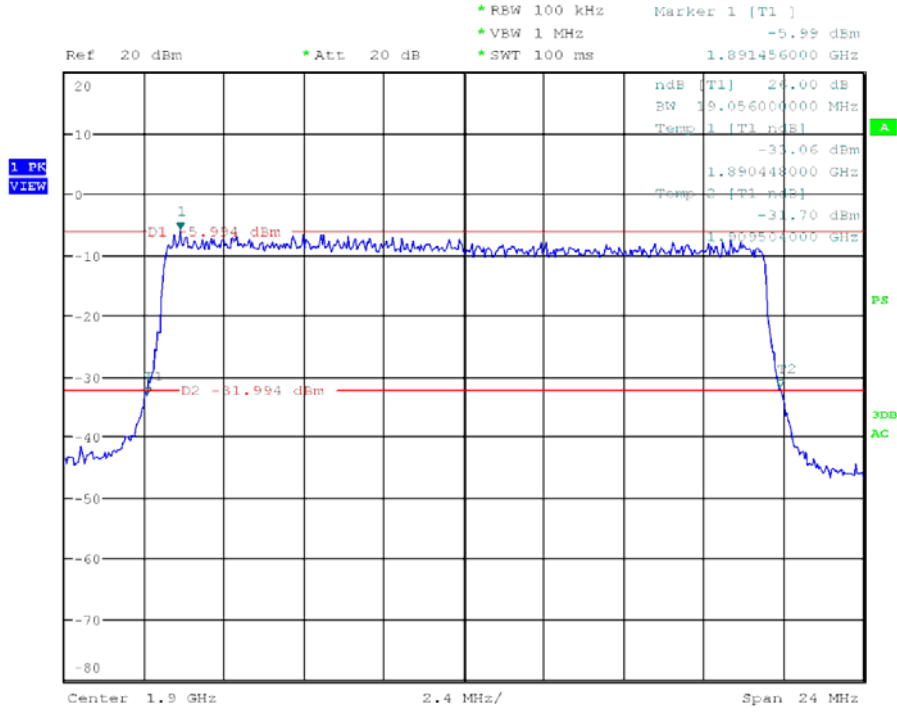
Date: 13.JAN.2017 13:09:27

Diagram 34_217_26 dB

16-QAM-Modulation



Date: 13.JAN.2017 13:34:17

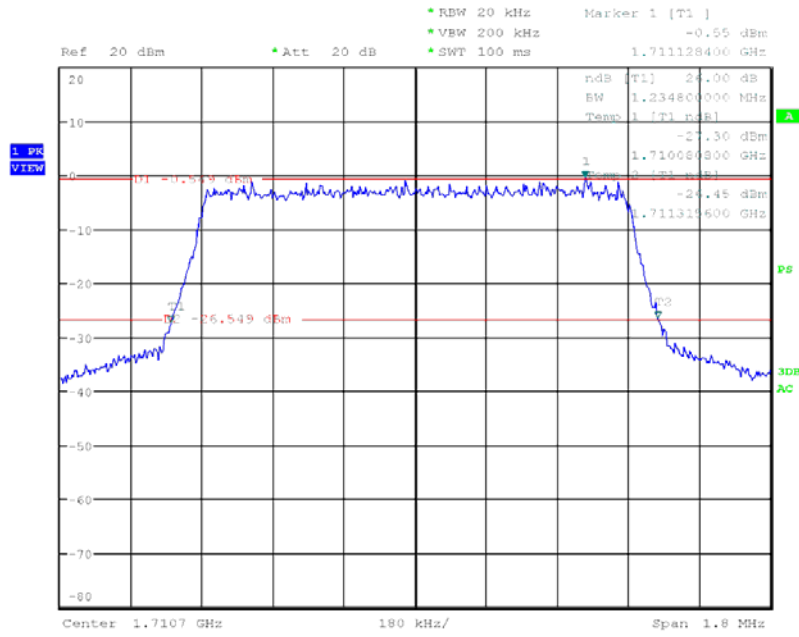


Date: 13.JAN.2017 13:36:16

Diagram 34_235_26 dB

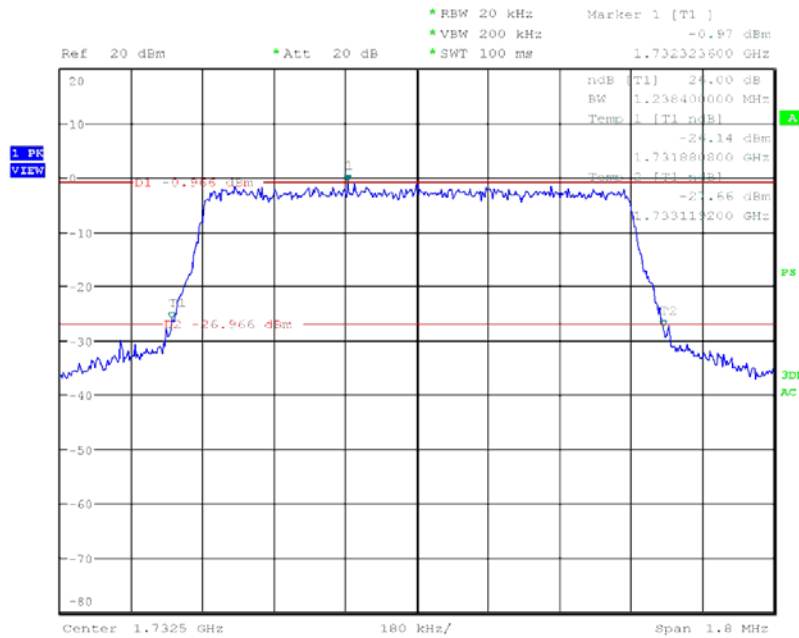
1.17.2. LTE Band 4
1.17.2.1. BW = 1.4MHz

QPSK-Modulation



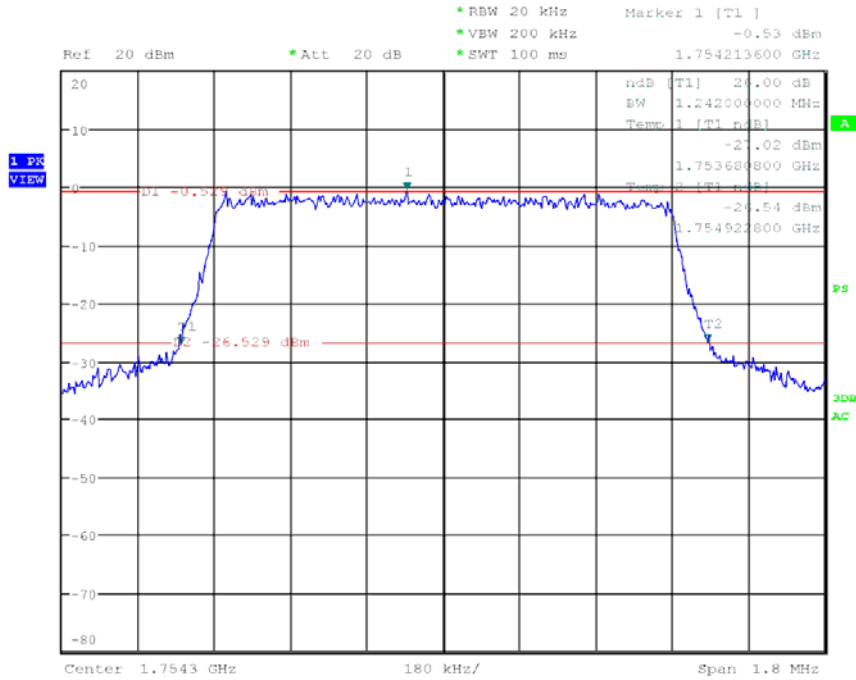
Date: 13.JAN.2017 14:14:19

Diagram 34.401_26 dB



Date: 13.JAN.2017 14:15:07

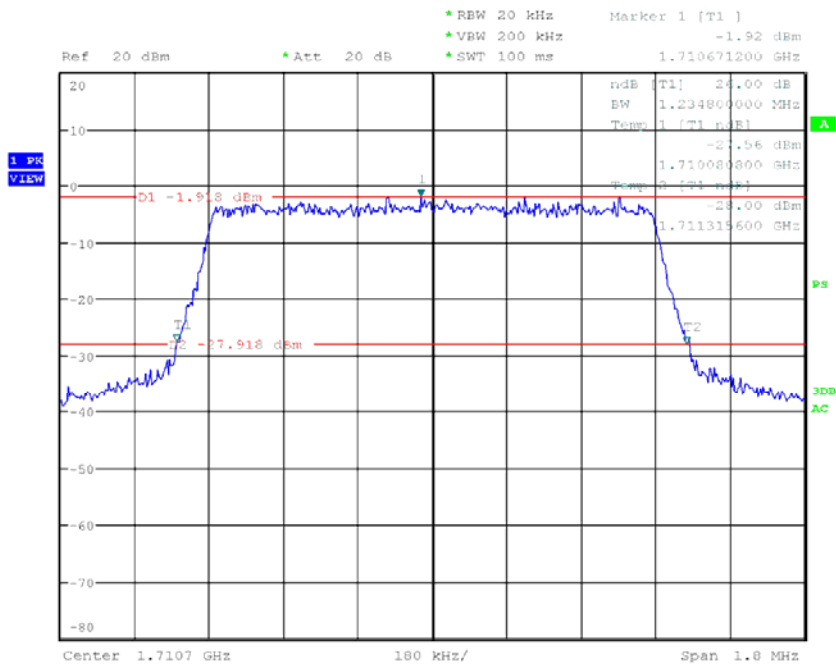
Diagram 34.402_26 dB



Date: 13.JAN.2017 14:15:59

Diagram 34.403_26 dB

16-QAM-Modulation

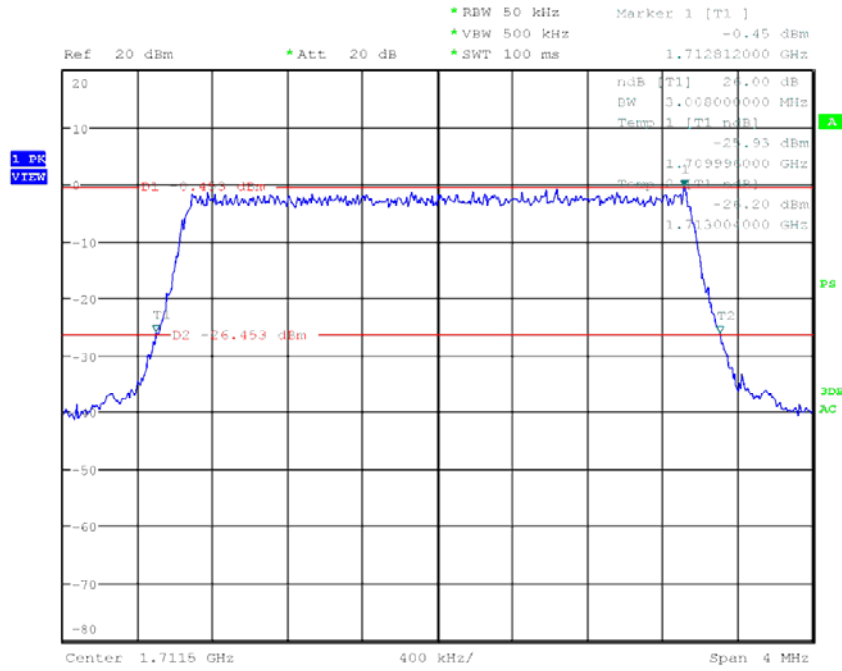


Date: 13.JAN.2017 14:32:59

Diagram 34.419_26 dB

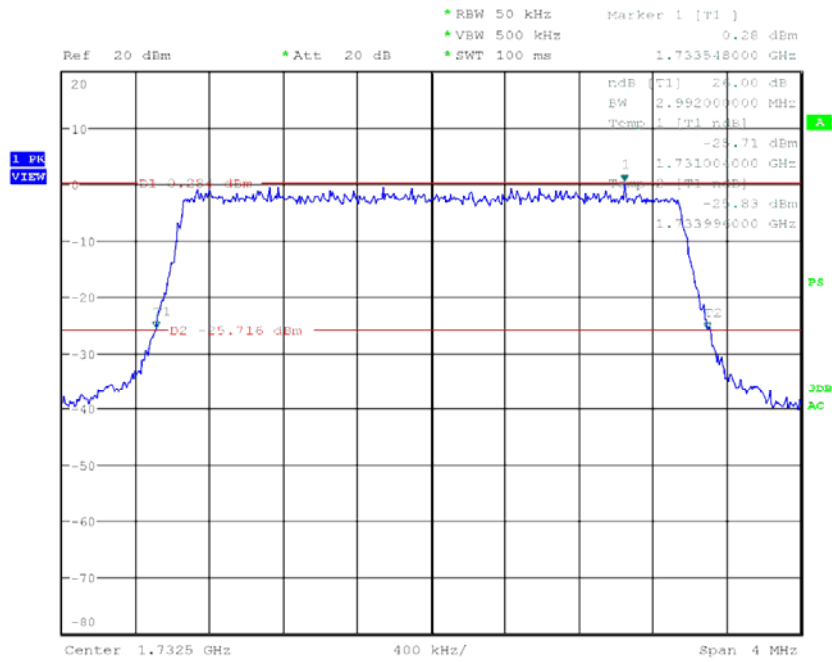
1.17.2.2. BW = 3MHz

QPSK-Modulation



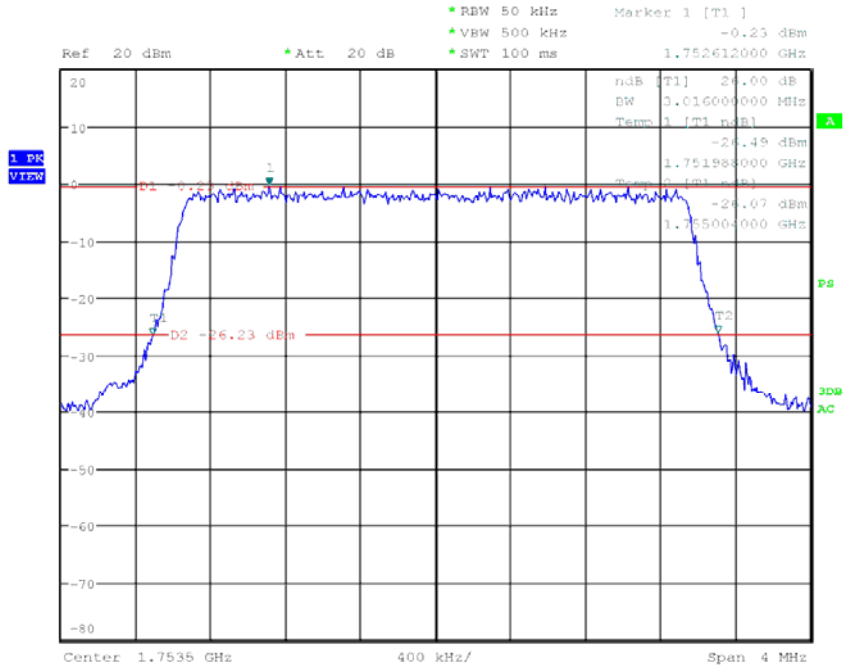
Date: 13.JAN.2017 14:17:10

Diagram 34.404_26 dB



Date: 13.JAN.2017 14:18:52

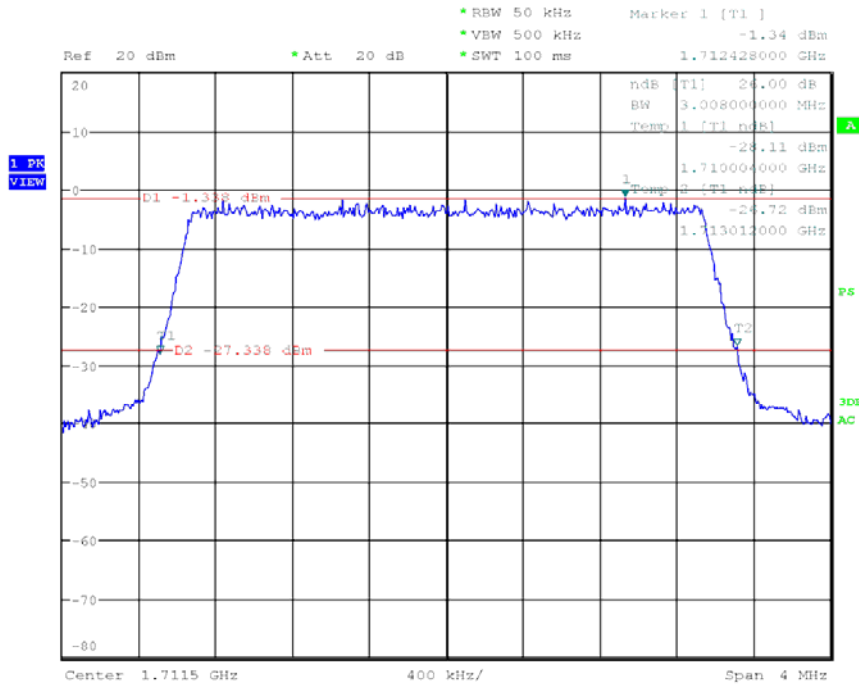
Diagram 34.405_26 dB



Date: 13.JAN.2017 14:19:46

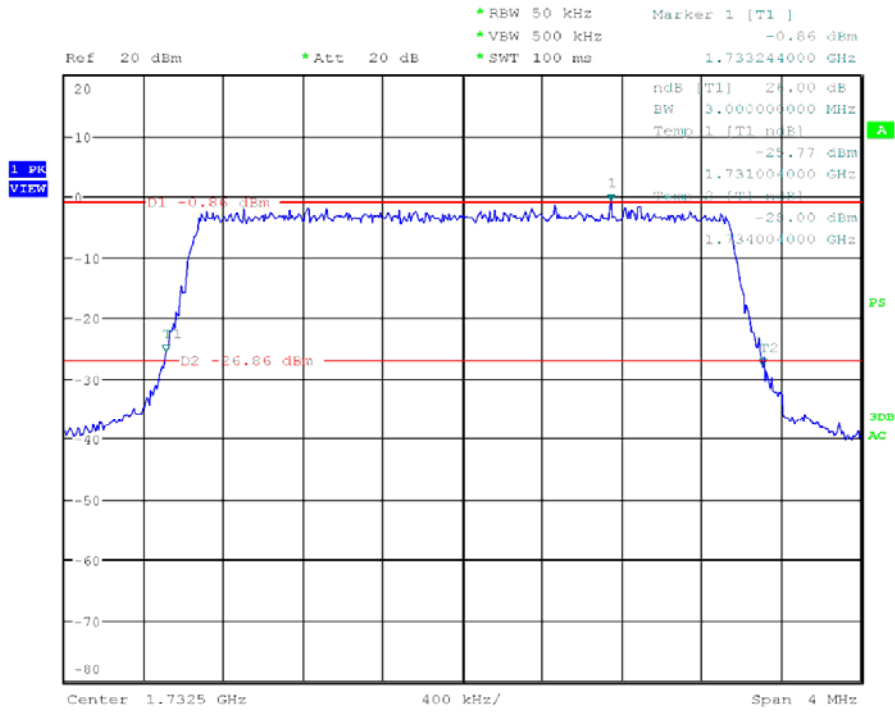
Diagram 34.406_26 dB

16-QAM-Modulation



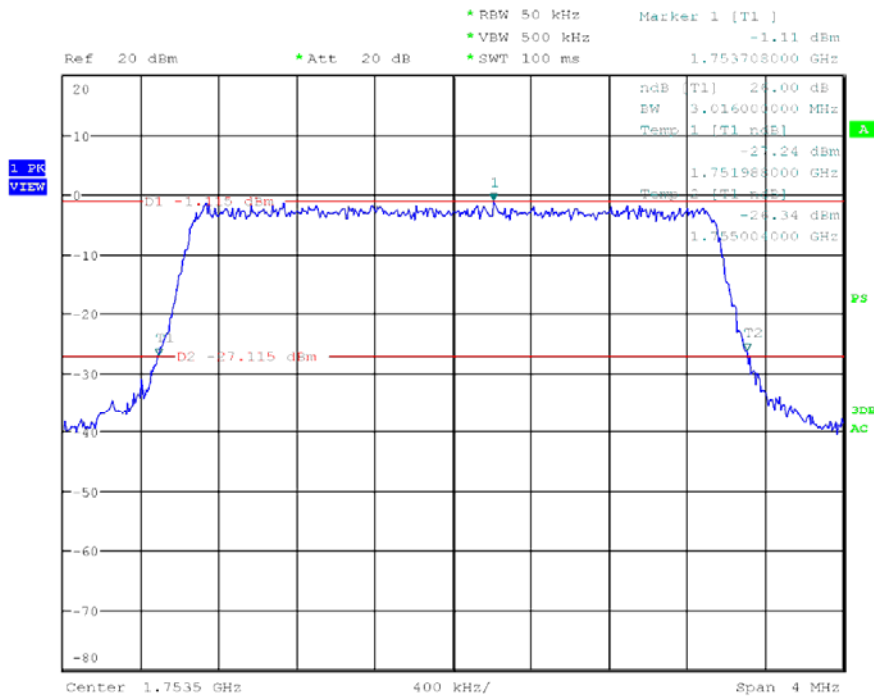
Date: 13.JAN.2017 14:35:10

Diagram 34.422_26 dB



Date: 13.JAN.2017 14:35:55

Diagram 34.423_26 dB

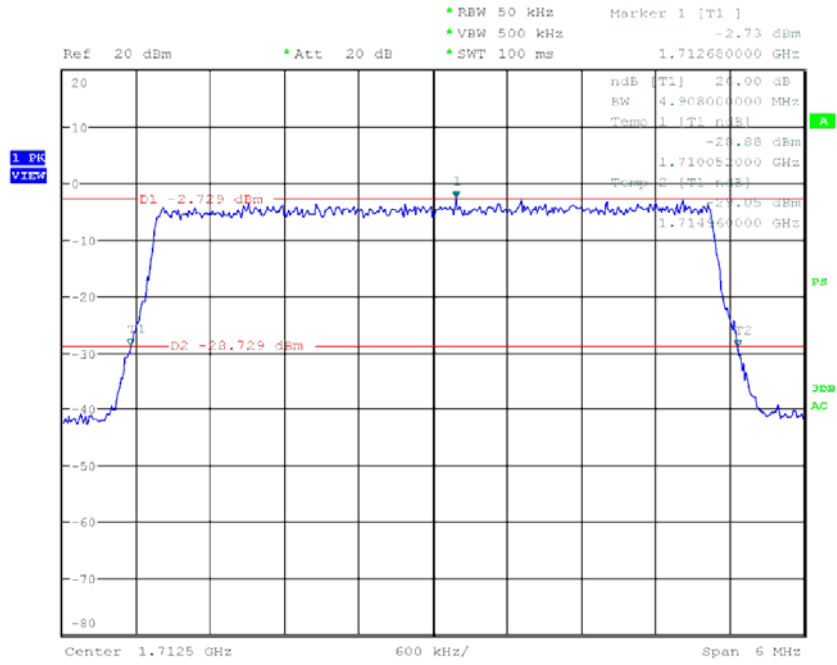


Date: 13.JAN.2017 14:36:23

Diagram 34.424_26 dB

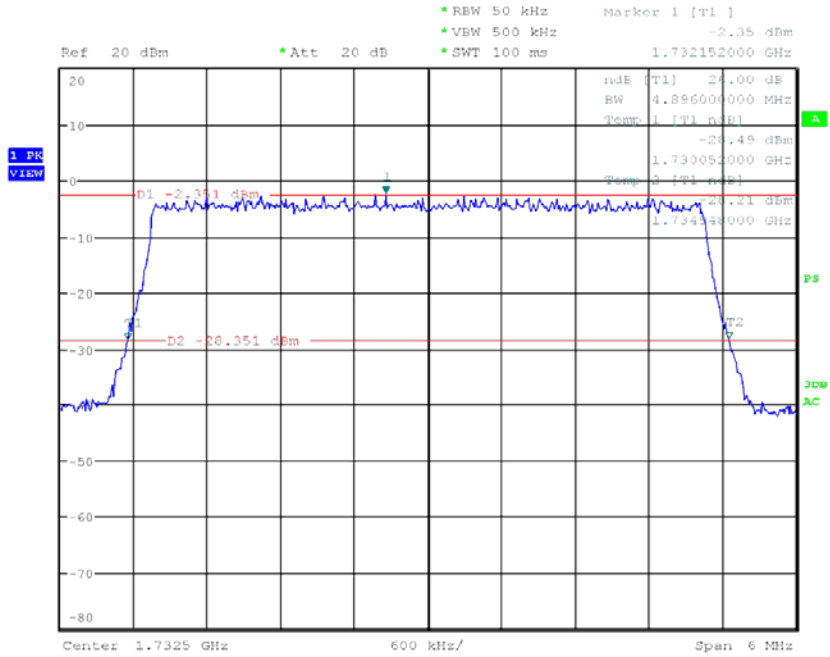
1.17.2.3. BW = 5MHz

QPSK-Modulation



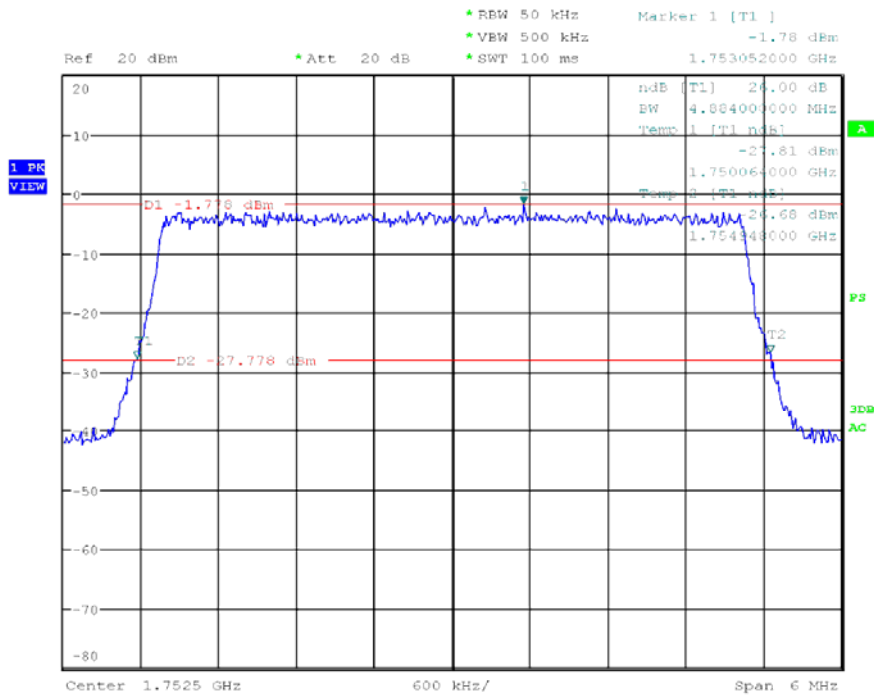
Date: 13.JAN.2017 14:21:01

Diagram 34.407_26 dB



Date: 13.JAN.2017 14:21:41

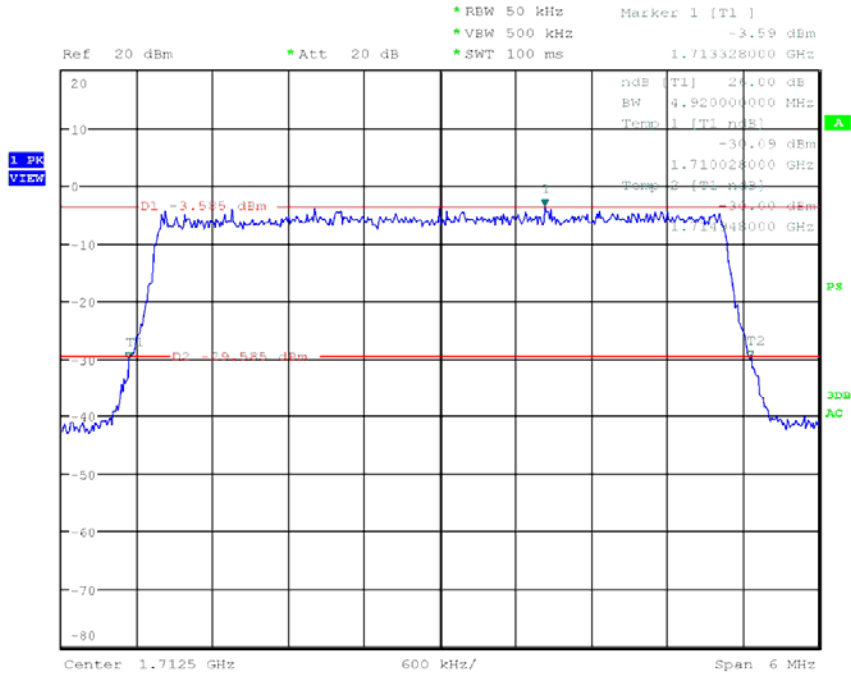
Diagram 34.408_26 dB



Date: 13.JAN.2017 14:22:32

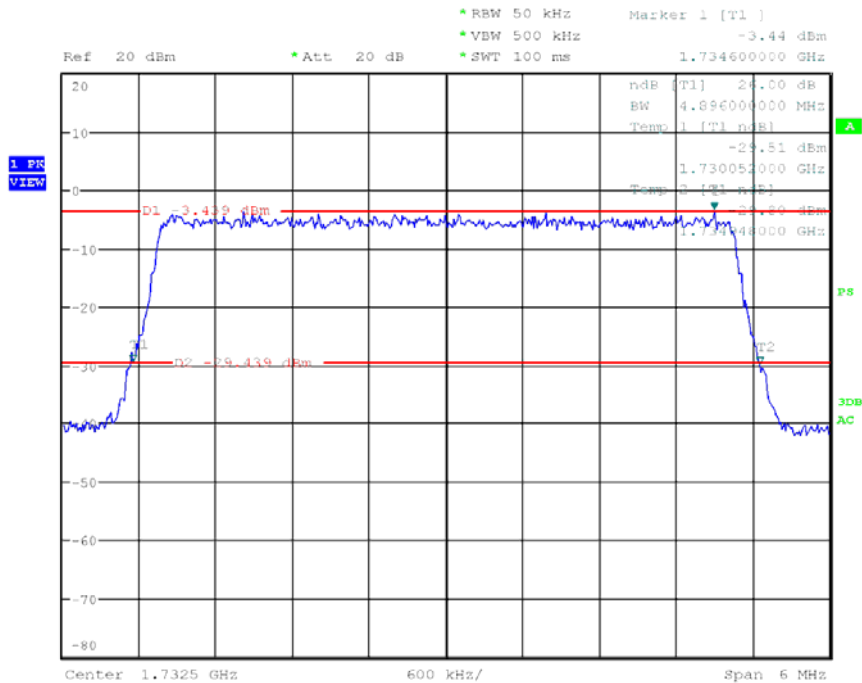
Diagram 34.409_26 dB

16-QAM-Modulation



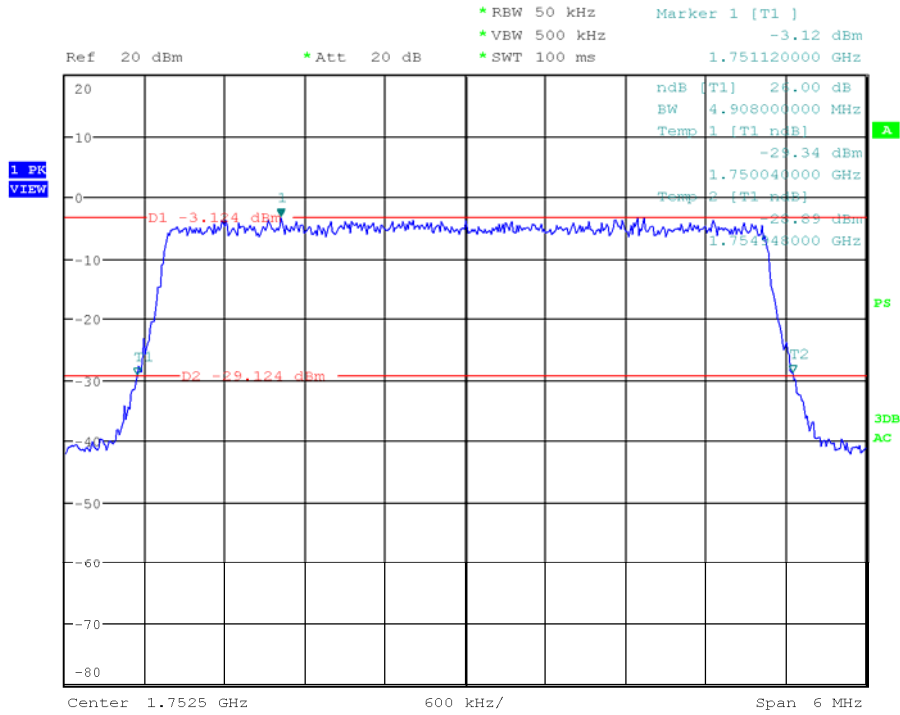
Date: 13.JAN.2017 14:37:58

Diagram 34.425_26 dB



Date: 13.JAN.2017 14:38:48

Diagram 34.426_26 dB

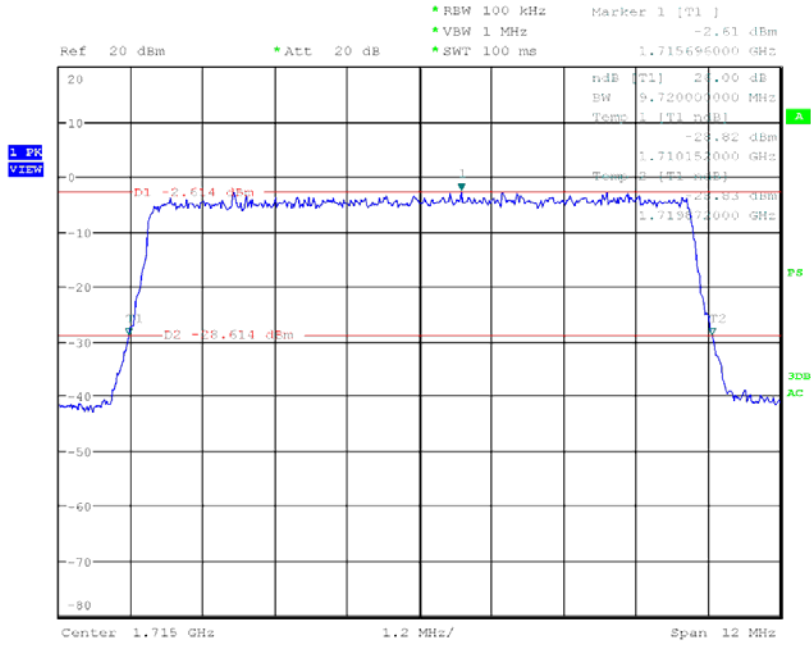


Date: 13.JAN.2017 14:39:37

Diagram 34.427_26 dB

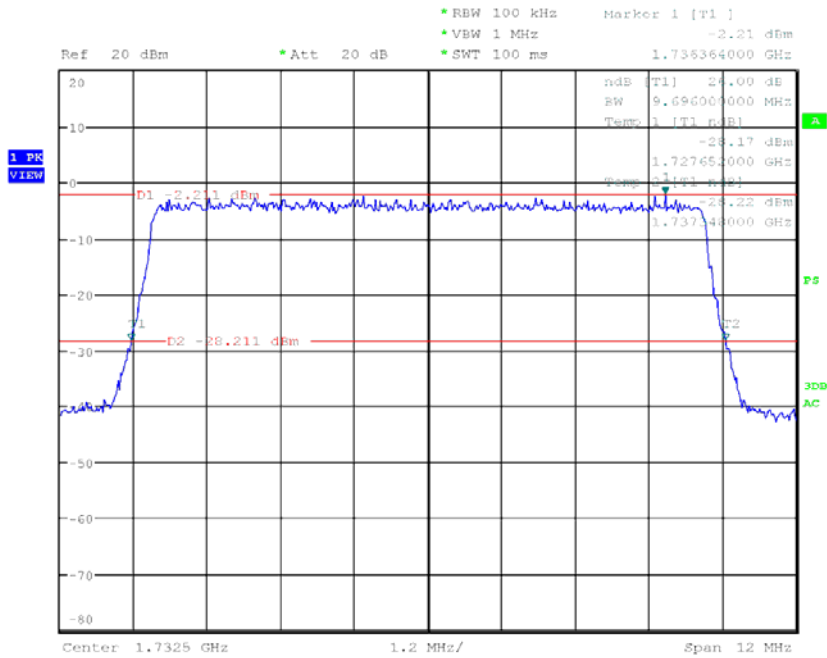
1.17.2.4. BW = 10MHz

QPSK-Modulation



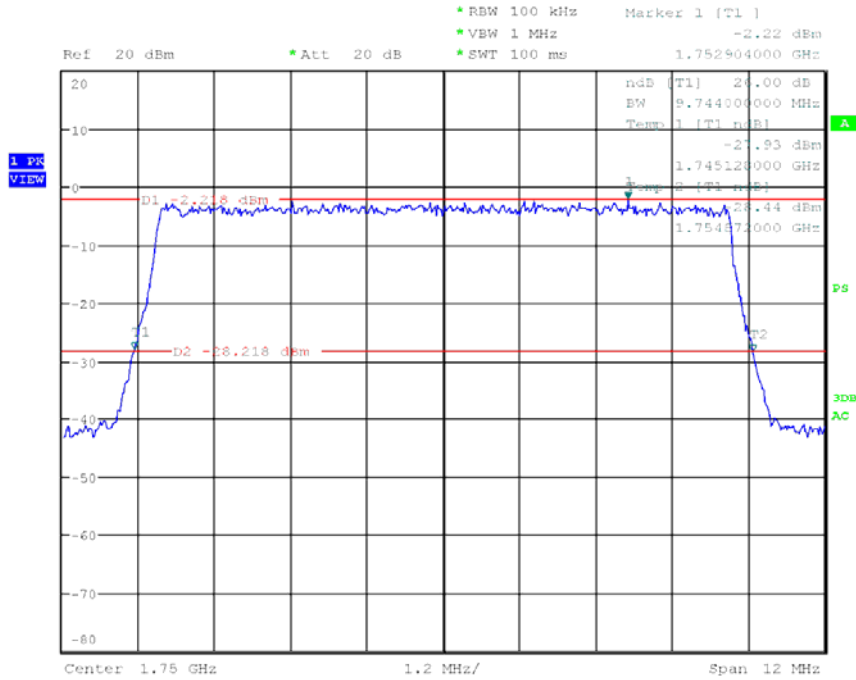
Date: 13.JAN.2017 14:23:37

Diagram 34.410_26 dB



Date: 13.JAN.2017 14:24:18

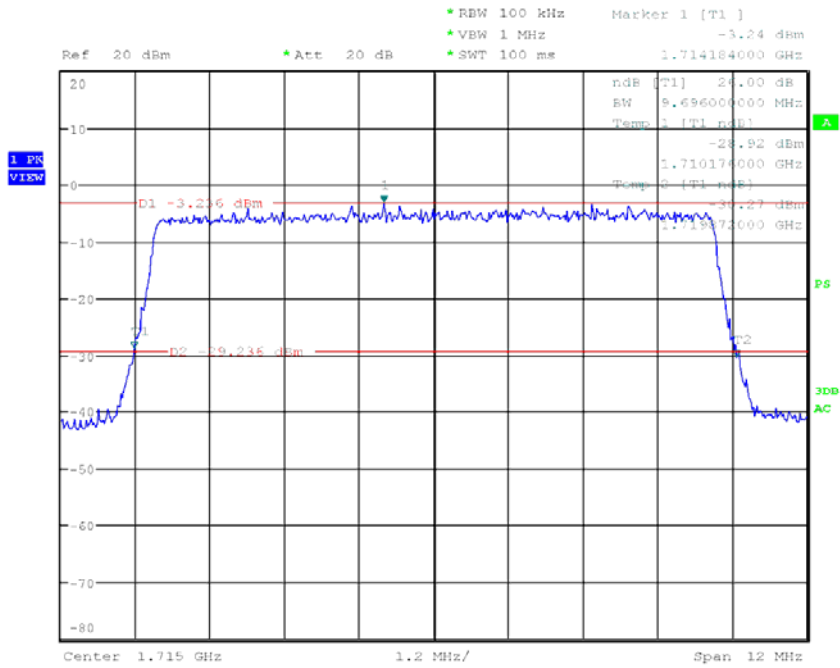
Diagram 34.411_26 dB



Date: 13.JAN.2017 14:25:05

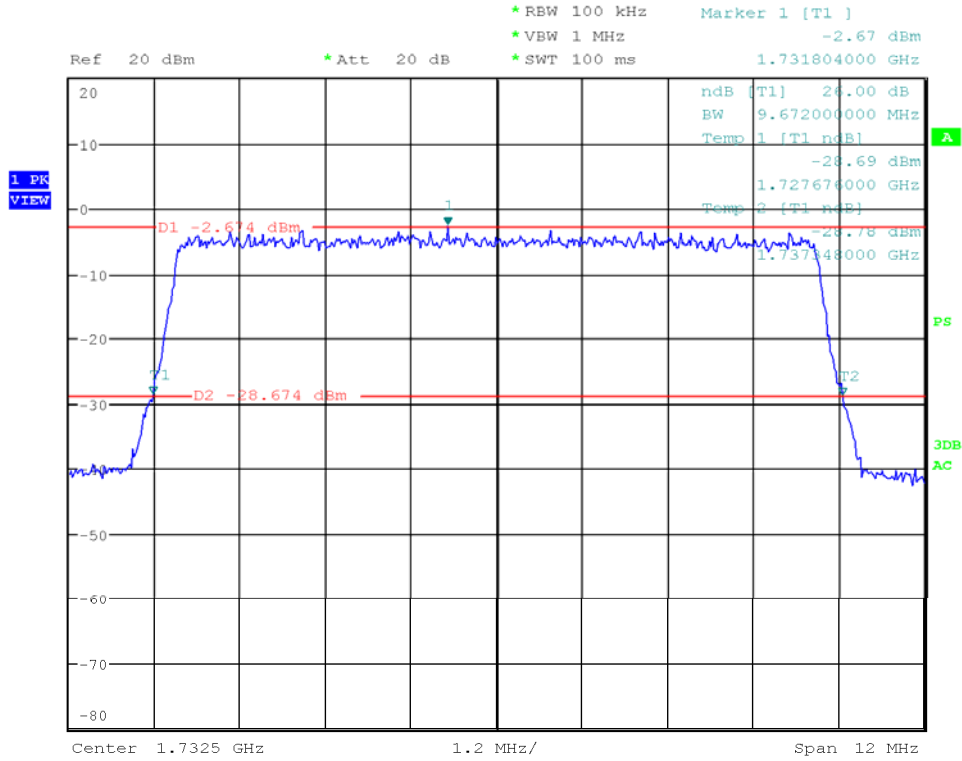
Diagram 34.412_26 dB

16-QAM-Modulation



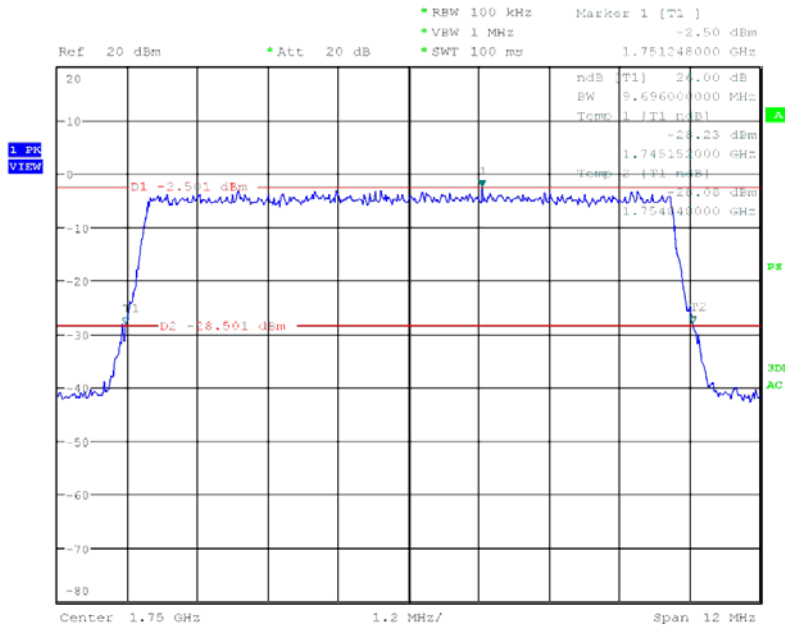
Date: 13.JAN.2017 14:40:57

Diagram 34.428_26 dB



Date: 13.JAN.2017 14:41:40

Diagram 34.429_26 dB

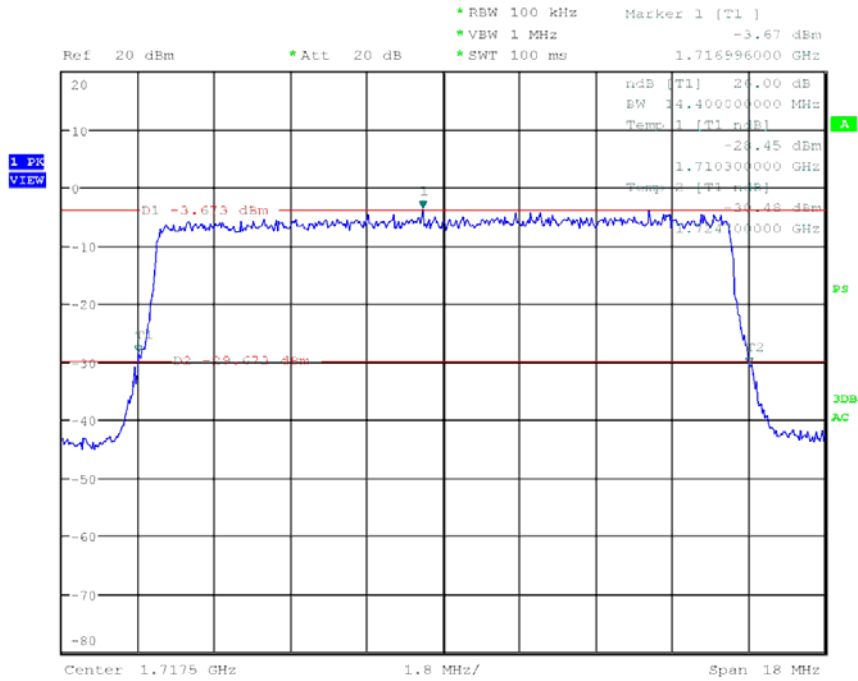


Date: 13.JAN.2017 14:42:28

Diagram 34.430_26 dB

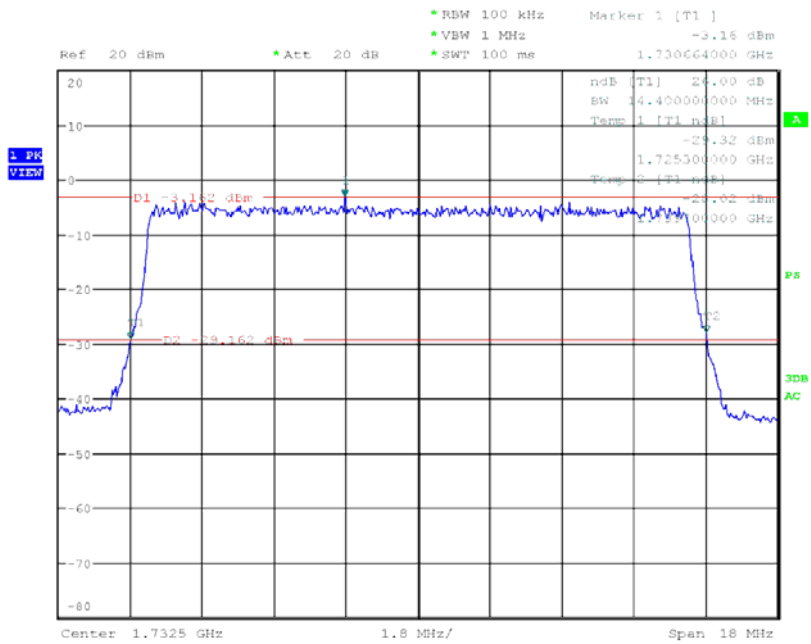
1.17.2.5. BW = 15MHz

QPSK-Modulation



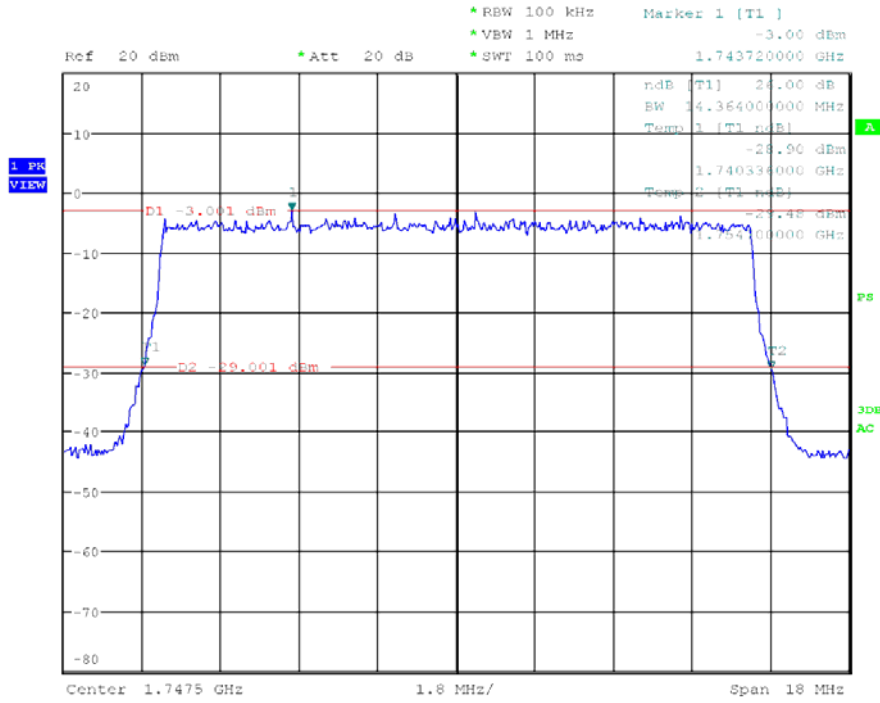
Date: 13.JAN.2017 14:27:15

Diagram 34.413_26 dB



Date: 13.JAN.2017 14:27:56

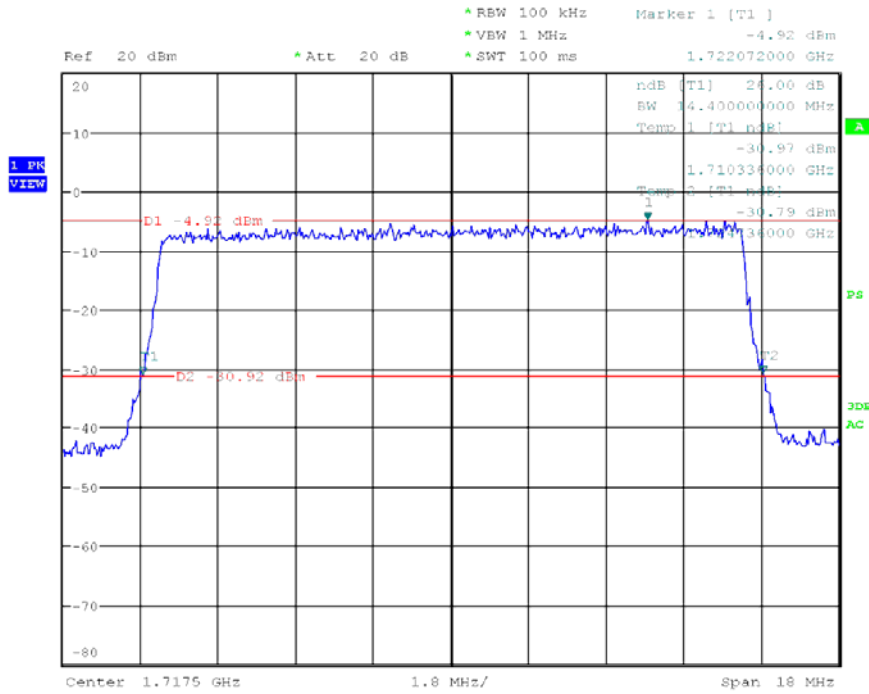
Diagram 34.414_26 dB



Date: 13.JAN.2017 14:28:42

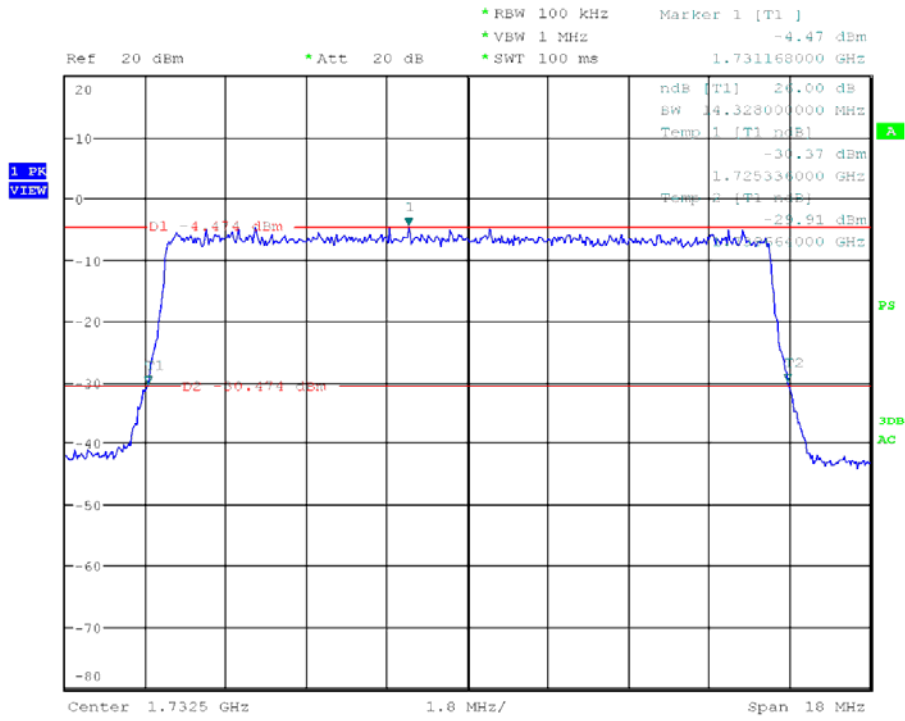
Diagram 34.415_26 dB

16-QAM-Modulation



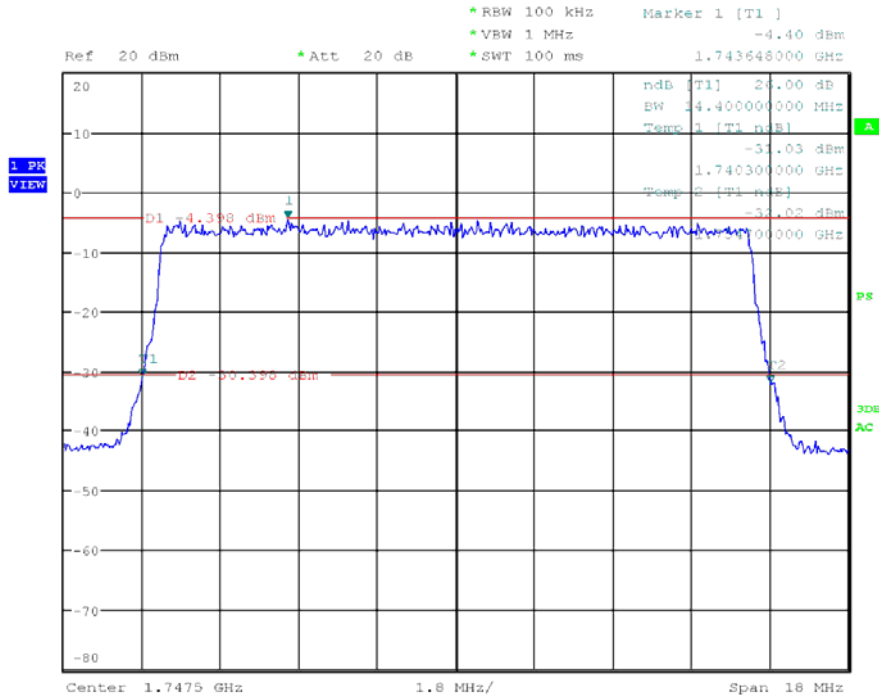
Date: 13.JAN.2017 14:43:50

Diagram 34.431_26 dB



Date: 13.JAN.2017 14:44:38

Diagram 34.432_26 dB

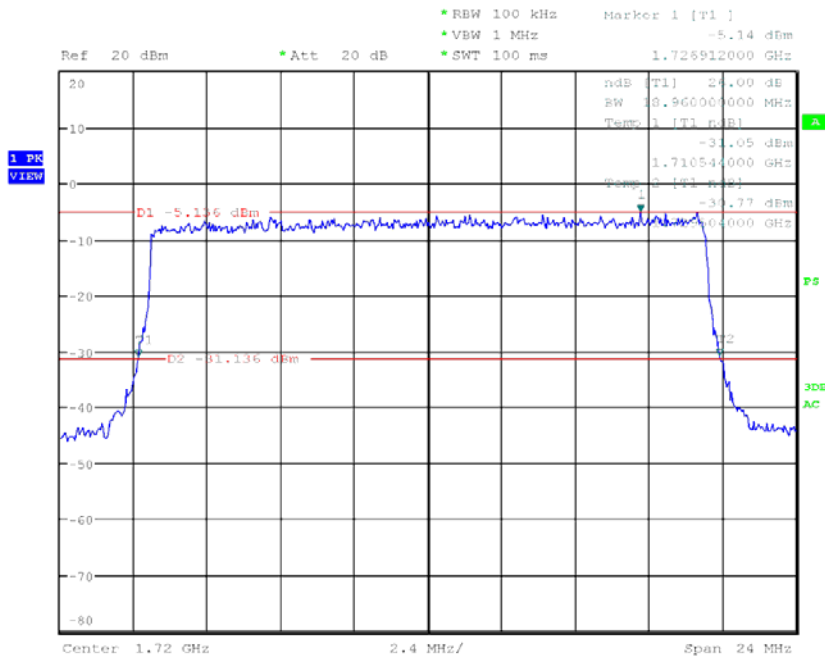


Date: 13.JAN.2017 14:45:16

Diagram 34.433_26 dB

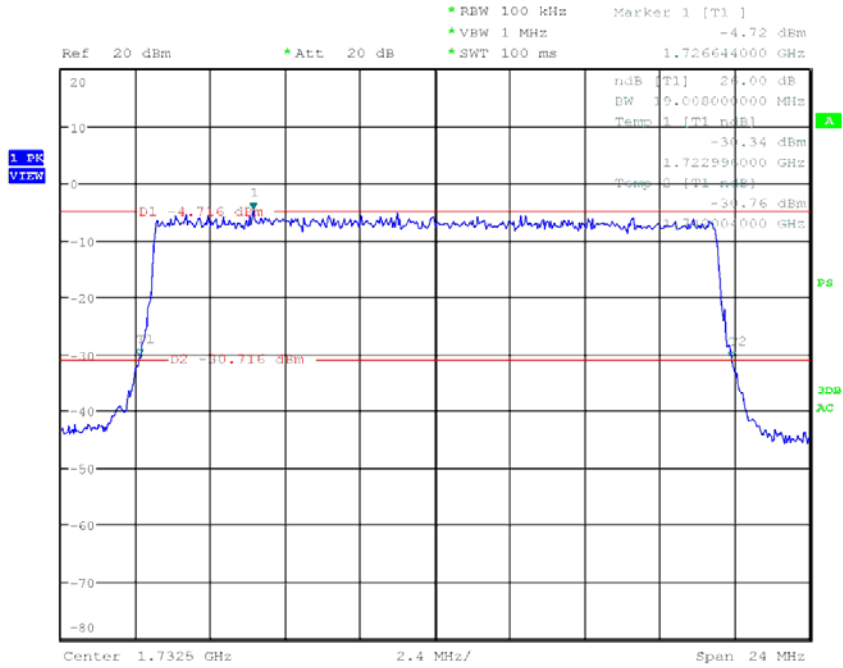
1.17.2.6. BW = 20MHz

QPSK-Modulation



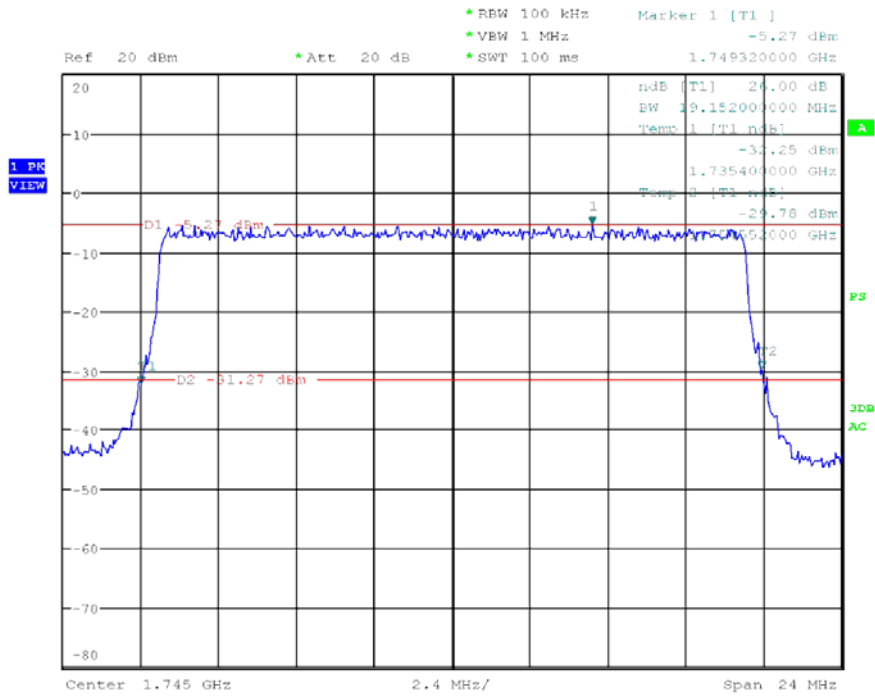
Date: 13.JAN.2017 14:30:17

Diagram 34.416_26 dB



Date: 13.JAN.2017 14:30:54

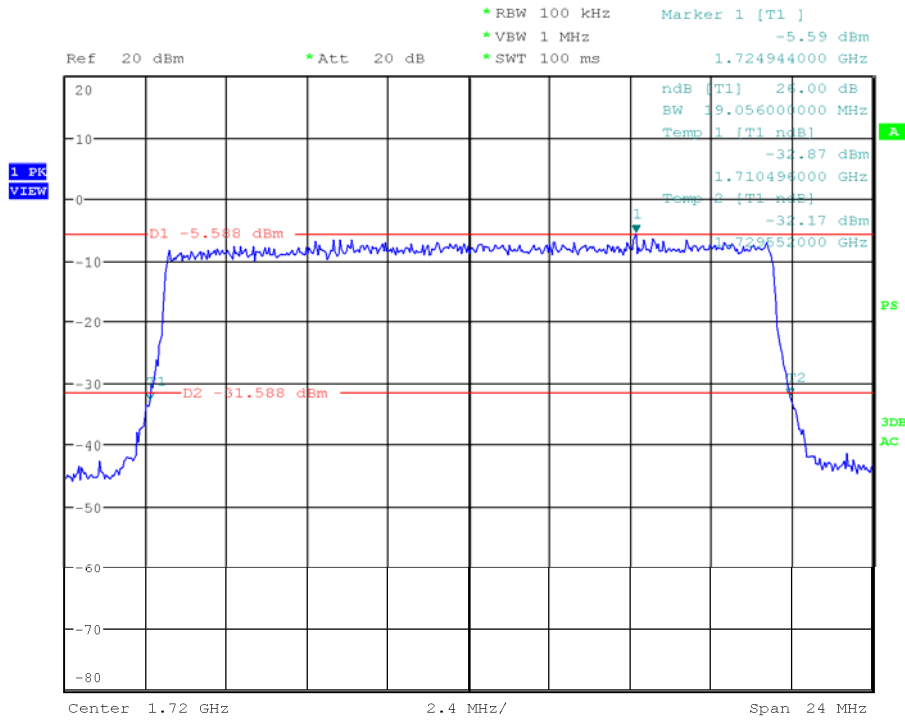
Diagram 34.417_26 dB



Date: 13.JAN.2017 14:31:40

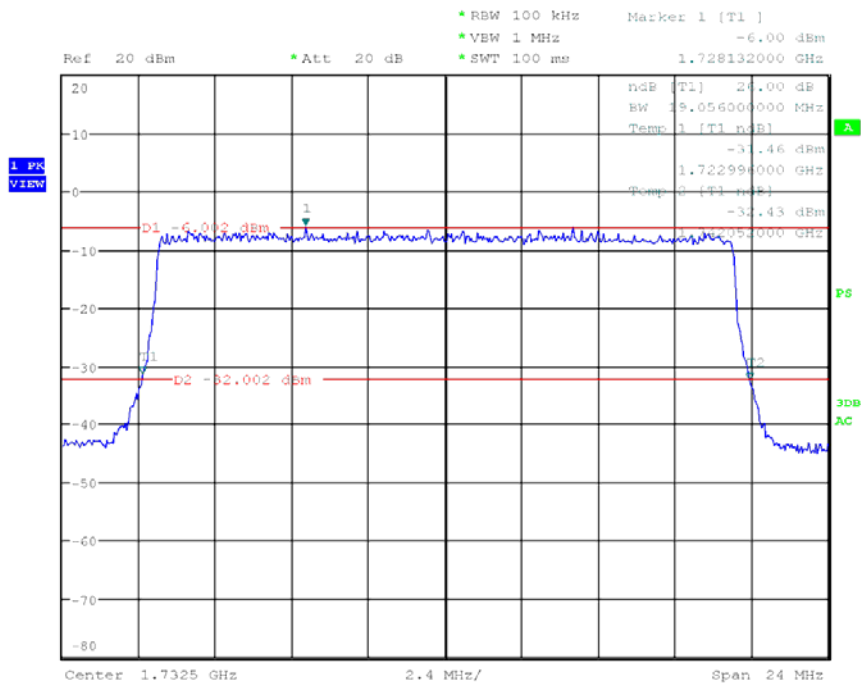
Diagram 34.418_26 dB

16-QAM-Modulation



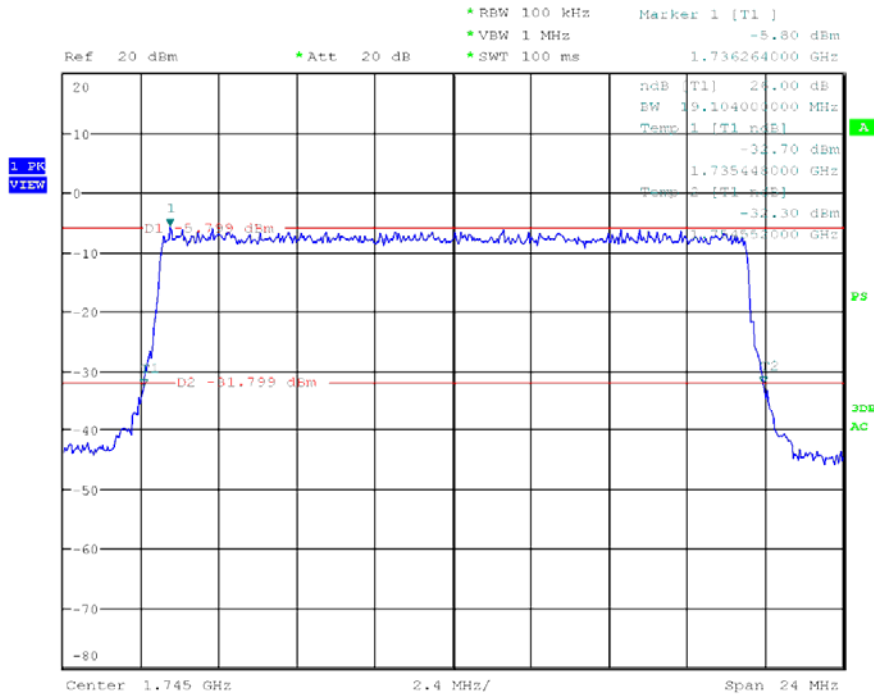
Date: 13.JAN.2017 14:46:55

Diagram 34.434_26 dB



Date: 13.JAN.2017 14:47:34

Diagram 34.435_26 dB

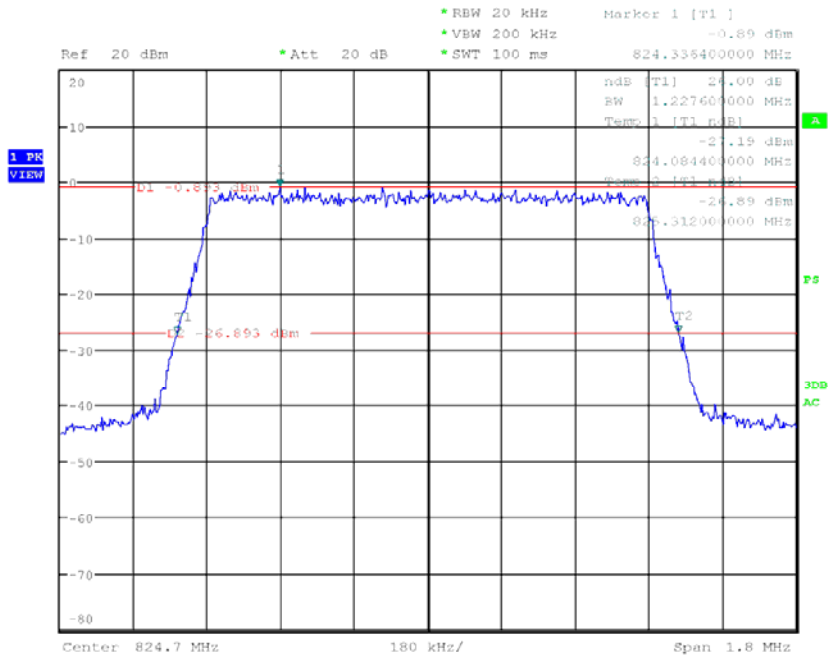


Date: 13.JAN.2017 14:48:11

Diagram 34.436_26 dB

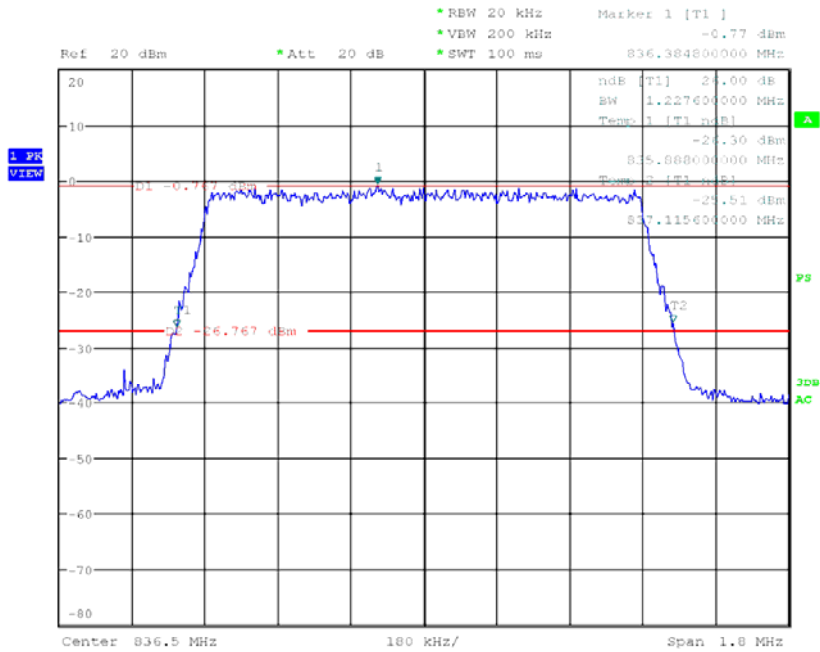
1.17.3. LTE Band 5
1.17.3.1. BW = 1.4MHz

QPSK-Modulation



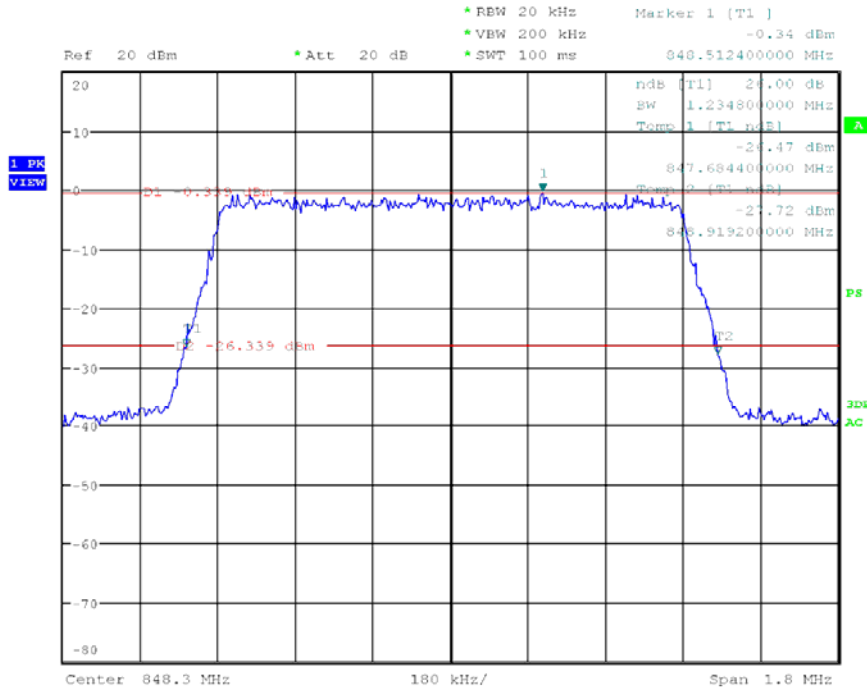
Date: 13.JAN.2017 14:57:21

Diagram 34.501_26 dB



Date: 13.JAN.2017 14:58:20

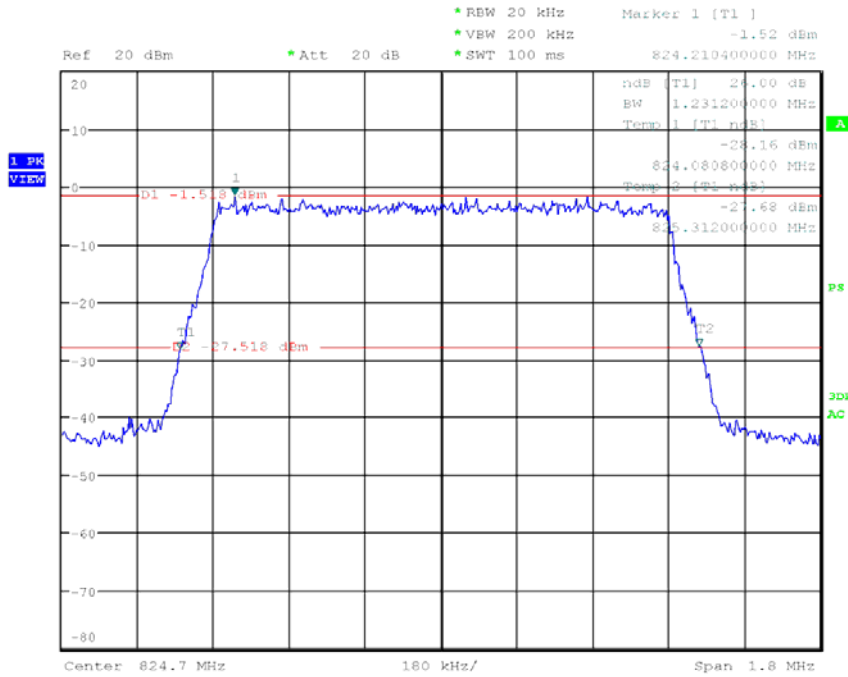
Diagram 34.502_26 dB



Date: 13.JAN.2017 14:58:49

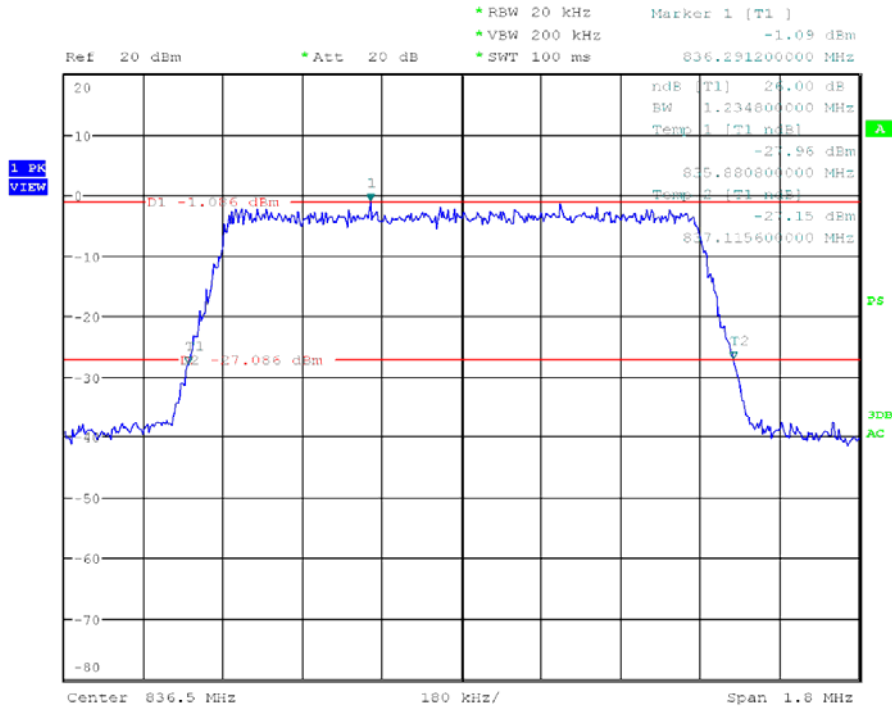
Diagram 34.503_26 dB

16-QAM-Modulation



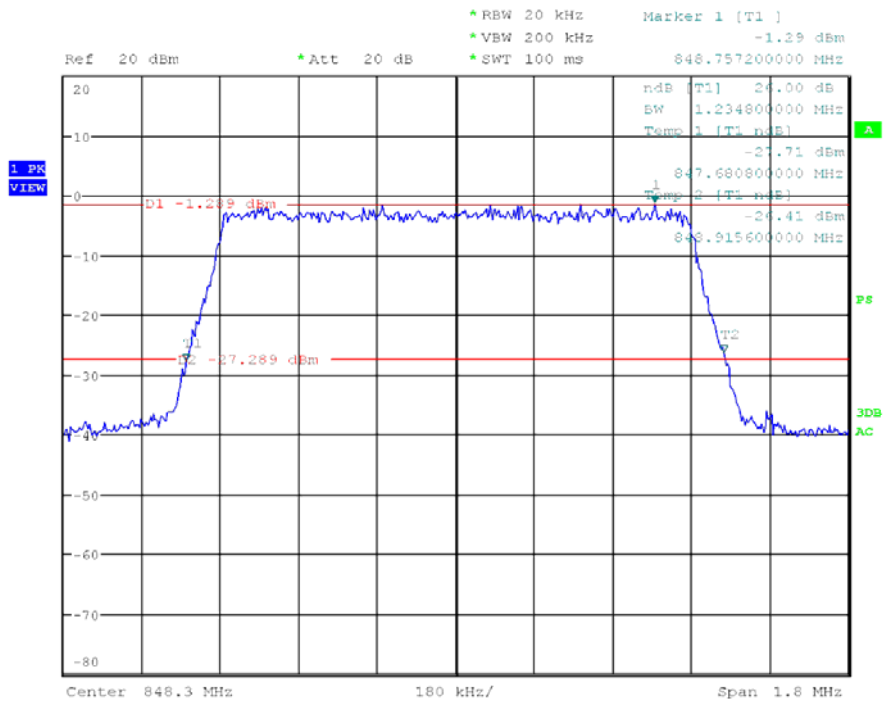
Date: 13.JAN.2017 15:20:45

Diagram 34.513_26 dB



Date: 13.JAN.2017 15:21:27

Diagram 34.514_26 dB

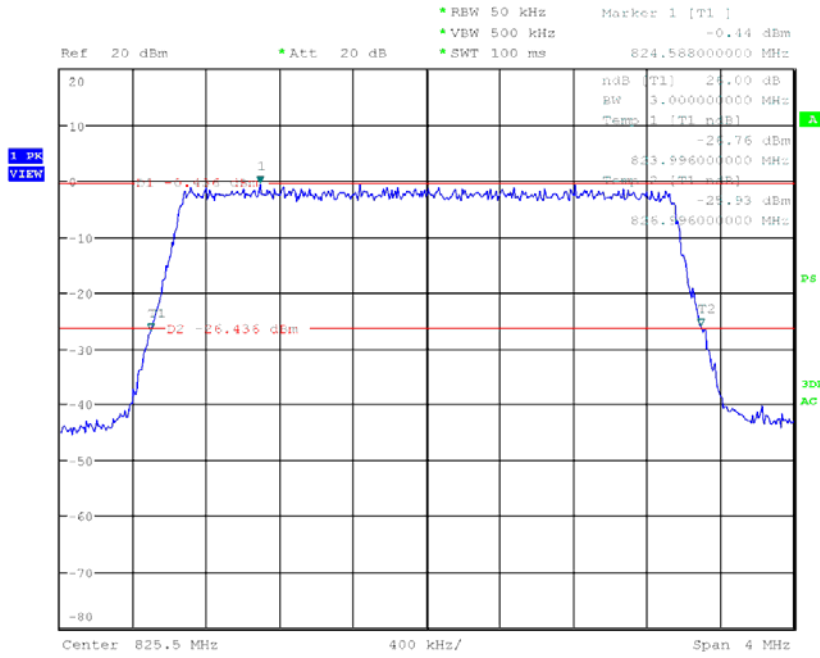


Date: 13.JAN.2017 15:22:09

Diagram 34.515_26 dB

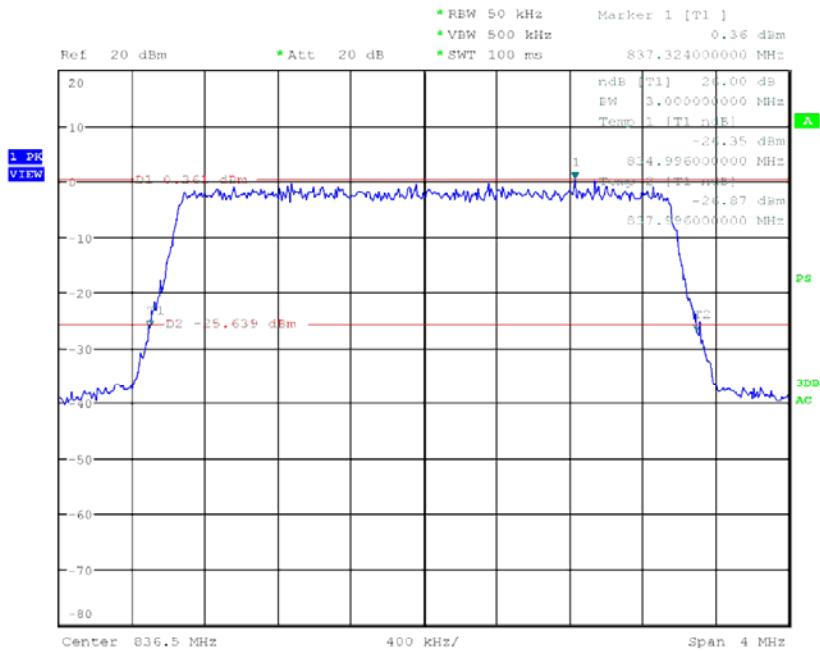
1.17.3.2. BW = 3MHz

QPSK-Modulation



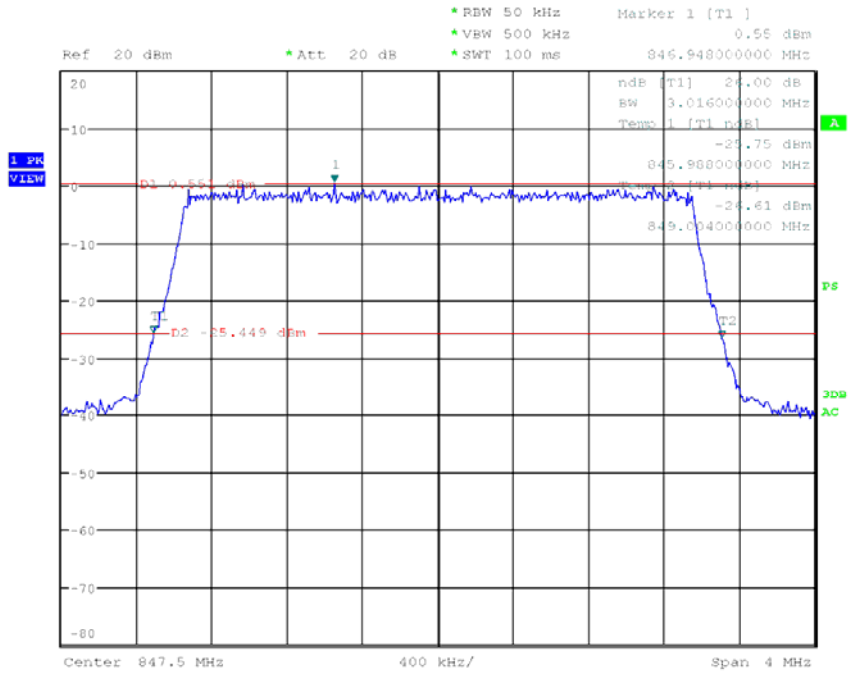
Date: 13.JAN.2017 15:00:13

Diagram 34.504_26 dB



Date: 13.JAN.2017 15:00:49

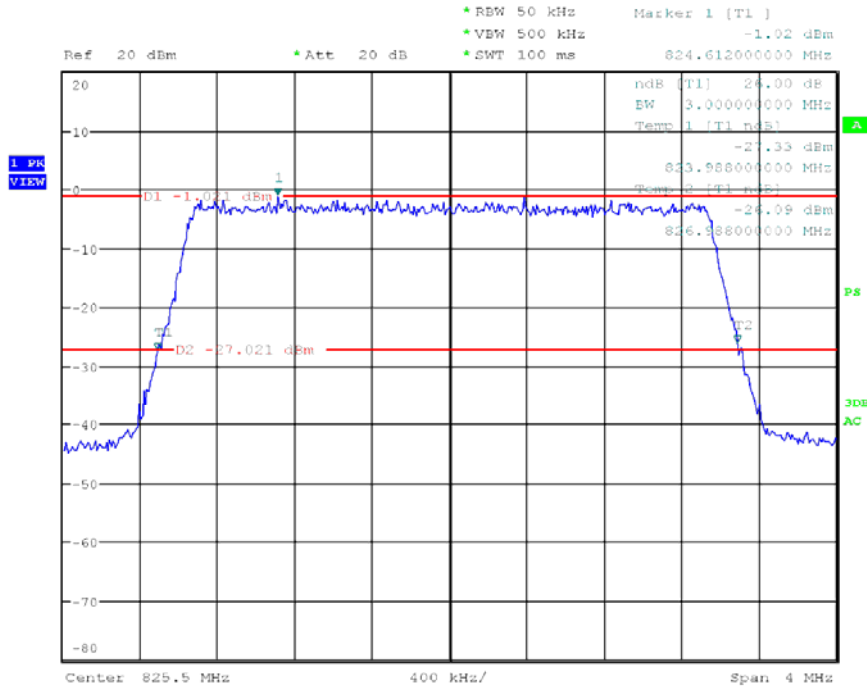
Diagram 34.505_26 dB



Date: 13.JAN.2017 15:01:45

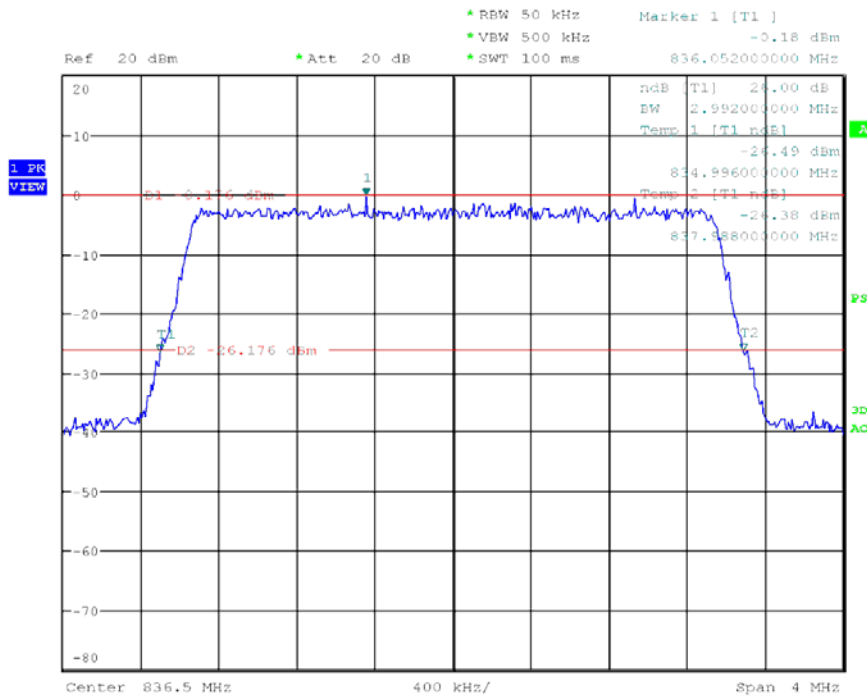
Diagram 34.506_26 dB

16-QAM-Modulation



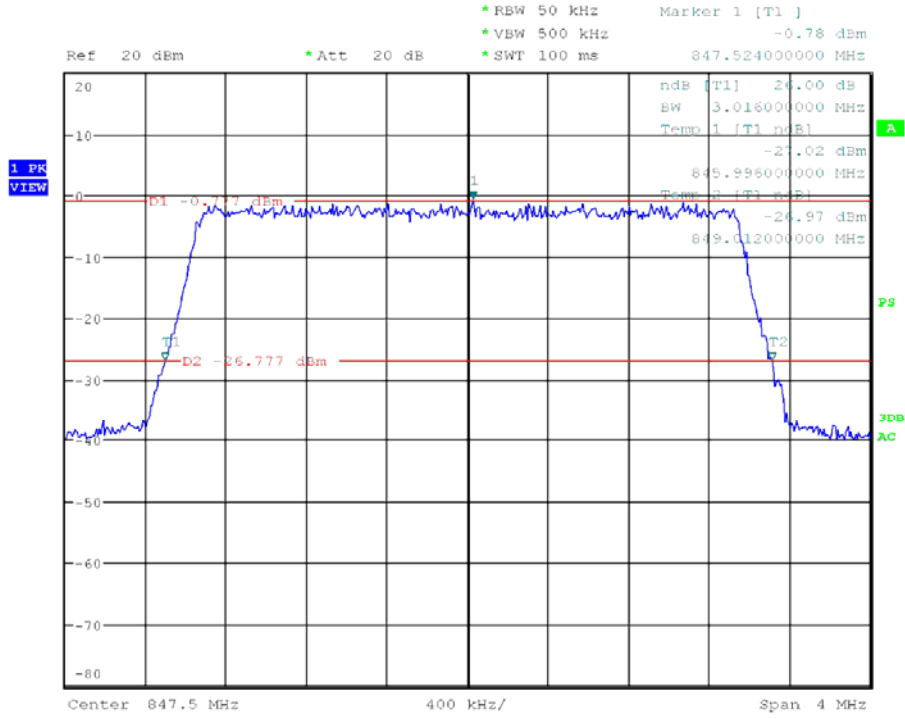
Date: 13.JAN.2017 15:25:17

Diagram 34.516_26 dB



Date: 13.JAN.2017 15:25:56

Diagram 34.517_26 dB

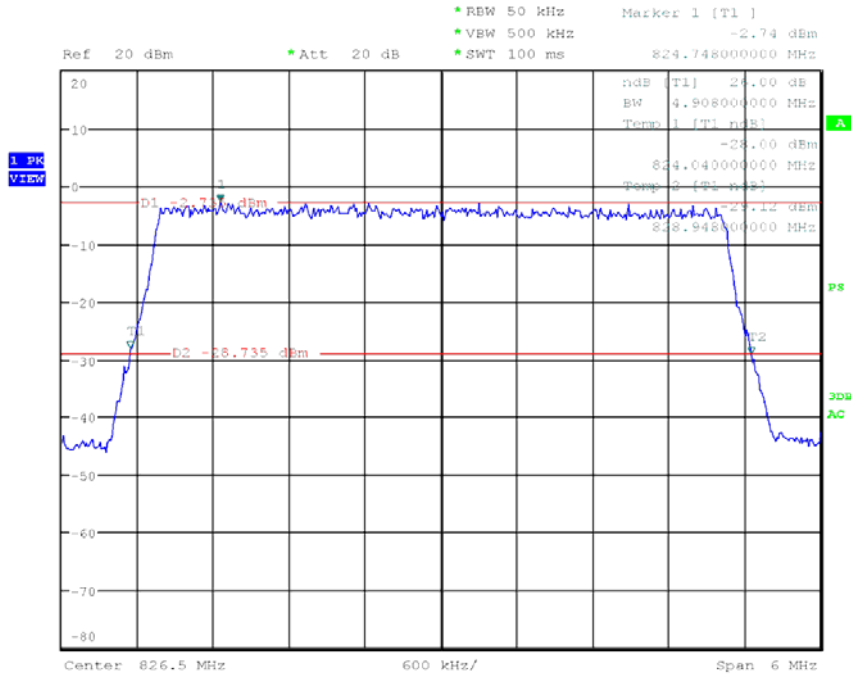


Date: 13.JAN.2017 15:29:07

Diagram 34.518_26 dB

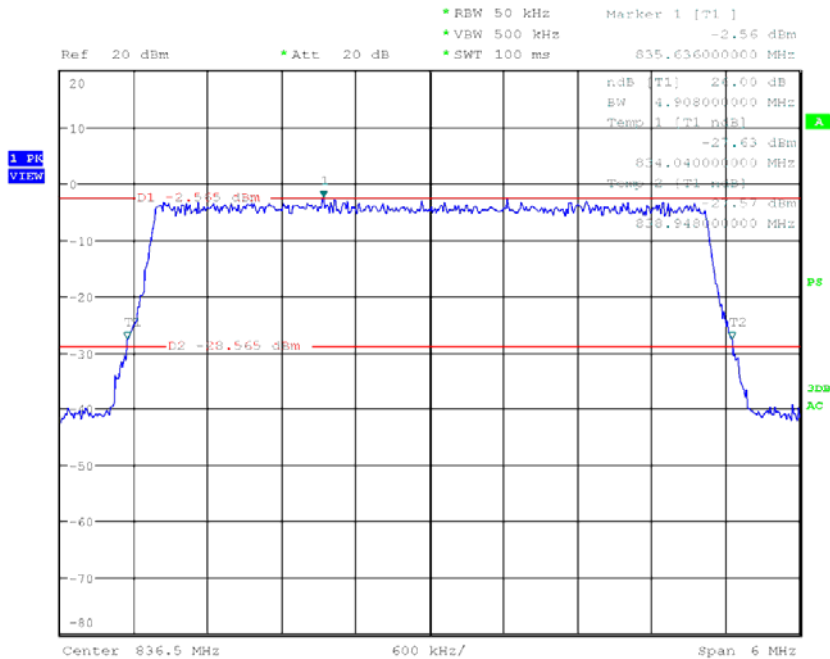
1.17.3.3. BW = 5MHz

QPSK-Modulation



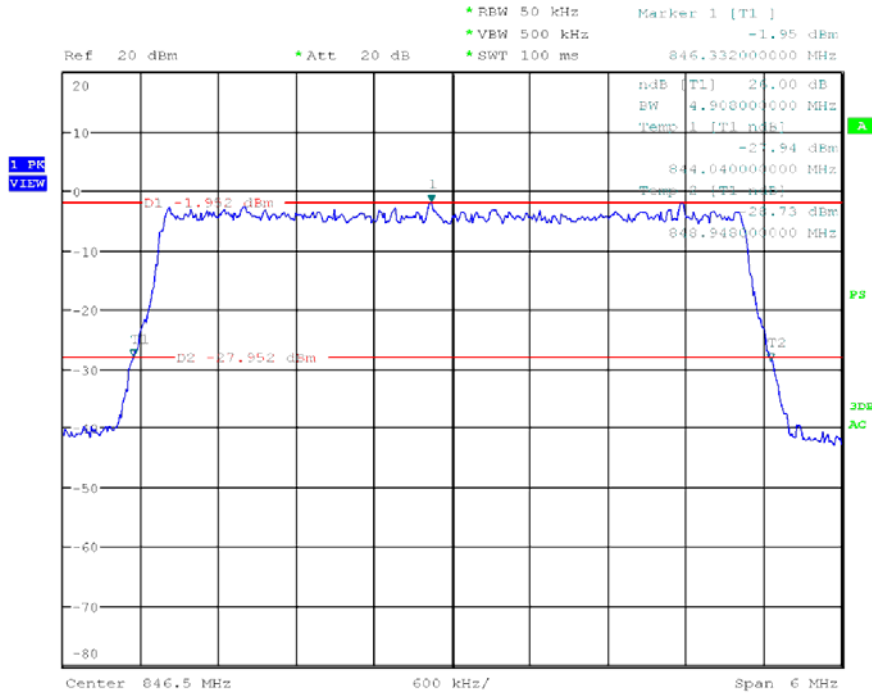
Date: 13.JAN.2017 15:03:09

Diagram 34.507_26 dB



Date: 13.JAN.2017 15:05:12

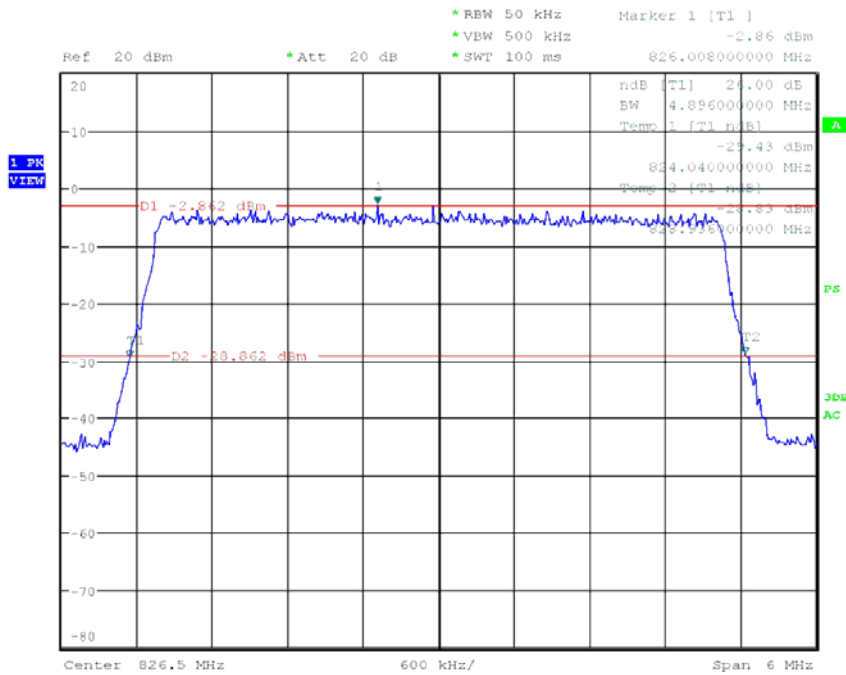
Diagram 34.508_26 dB



Date: 13.JAN.2017 15:06:15

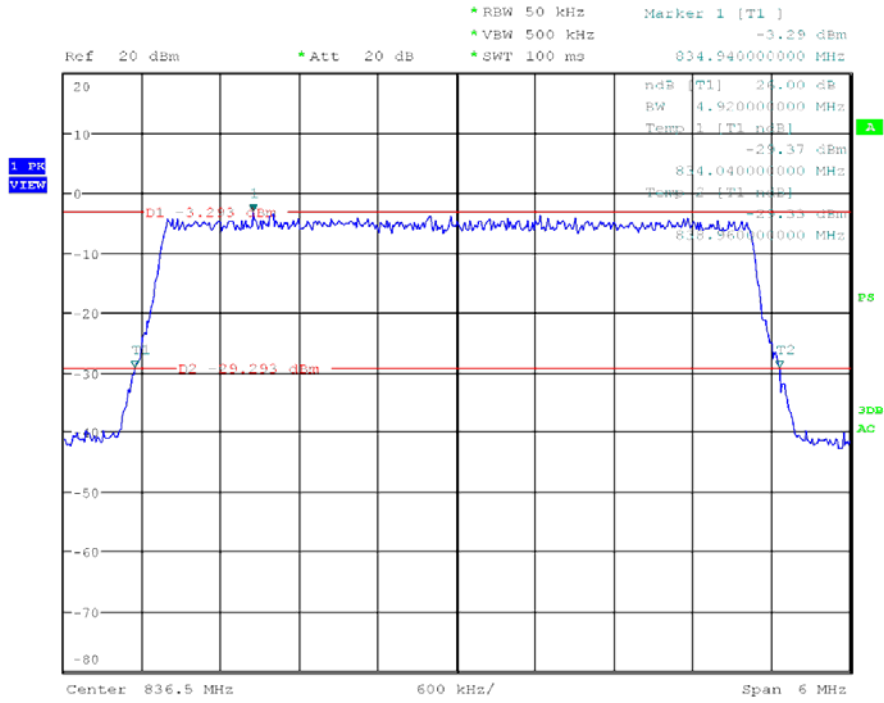
Diagram 34.509_26 dB

16-QAM-Modulation



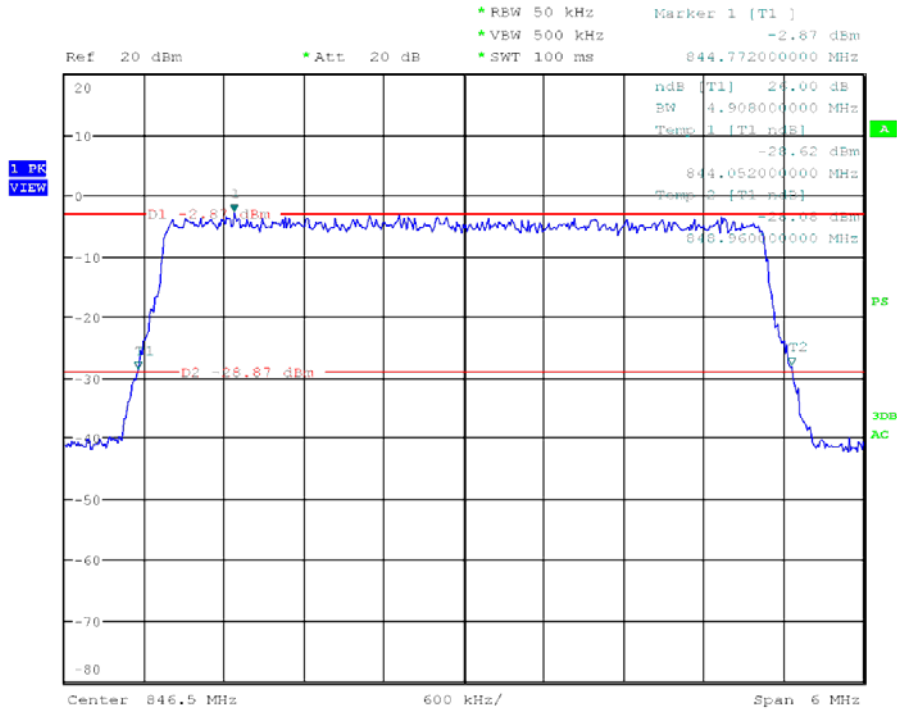
Date: 13.JAN.2017 15:27:59

Diagram 34.519_26 dB



Date: 13.JAN.2017 15:31:48

Diagram 34.520_26 dB

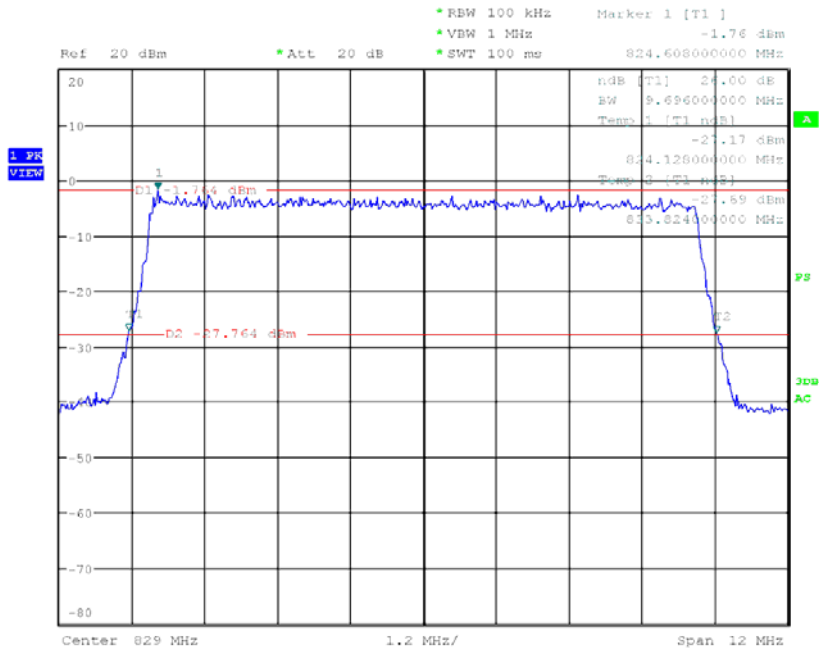


Date: 13.JAN.2017 15:33:01

Diagram 34.521_26 dB

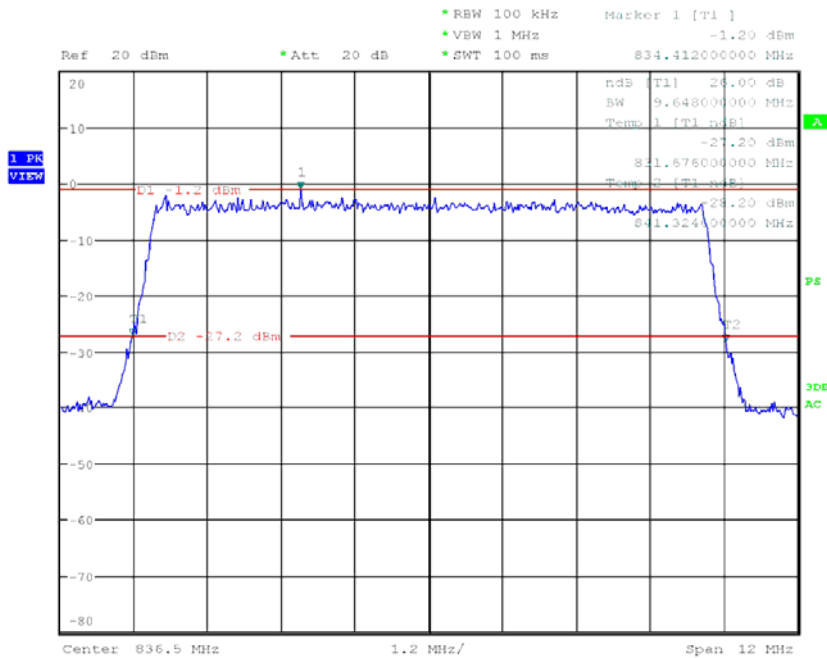
1.17.3.4. BW = 10MHz

QPSK-Modulation



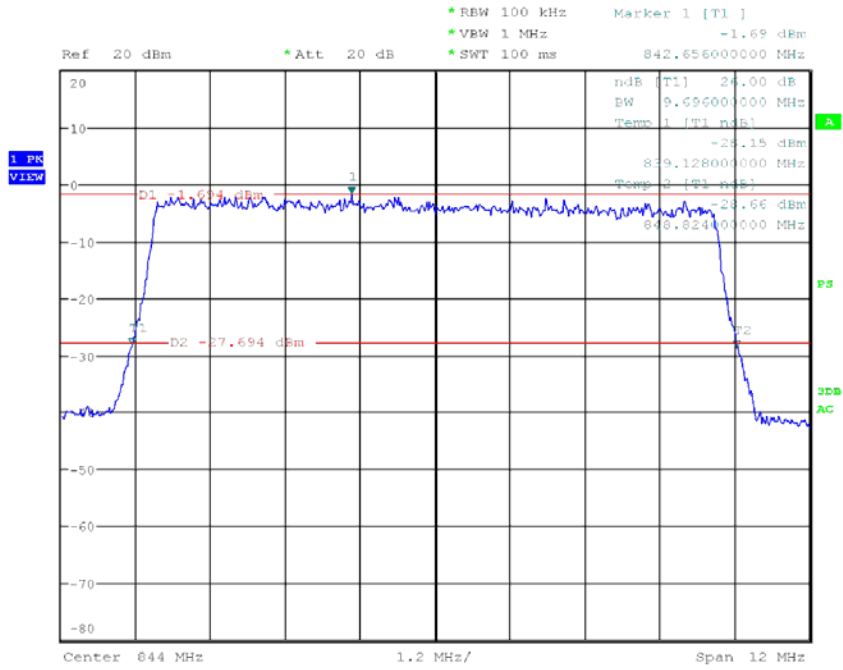
Date: 13.JAN.2017 15:07:21

Diagram 34.510_26 dB



Date: 13.JAN.2017 15:12:55

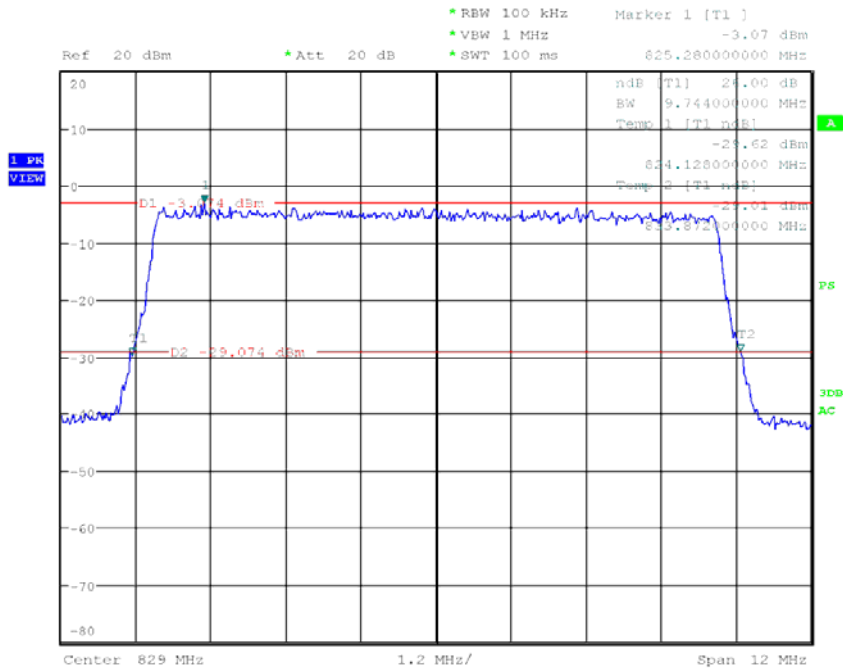
Diagram 34.511_26 dB



Date: 13.JAN.2017 15:13:35

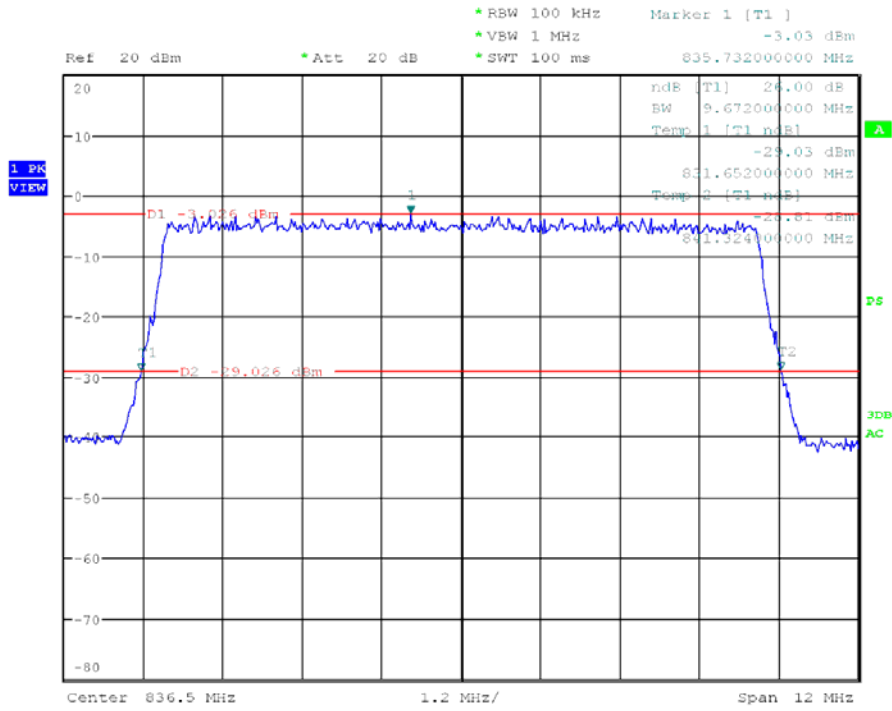
Diagram 34.512_26 dB

16-QAM-Modulation



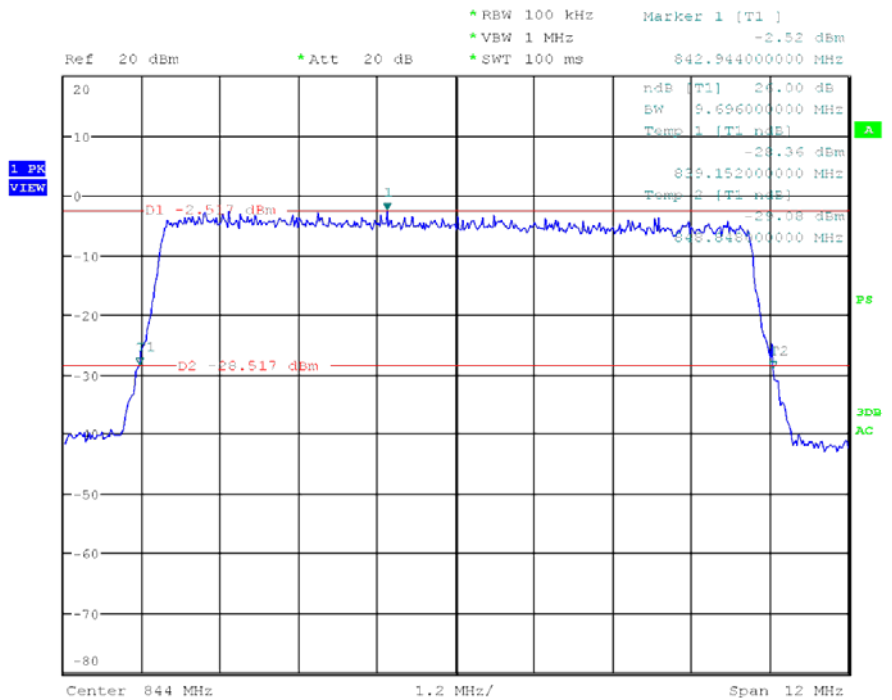
Date: 13.JAN.2017 15:39:08

Diagram 34.522_26 dB



Date: 13.JAN.2017 15:41:33

Diagram 34.523_26 dB



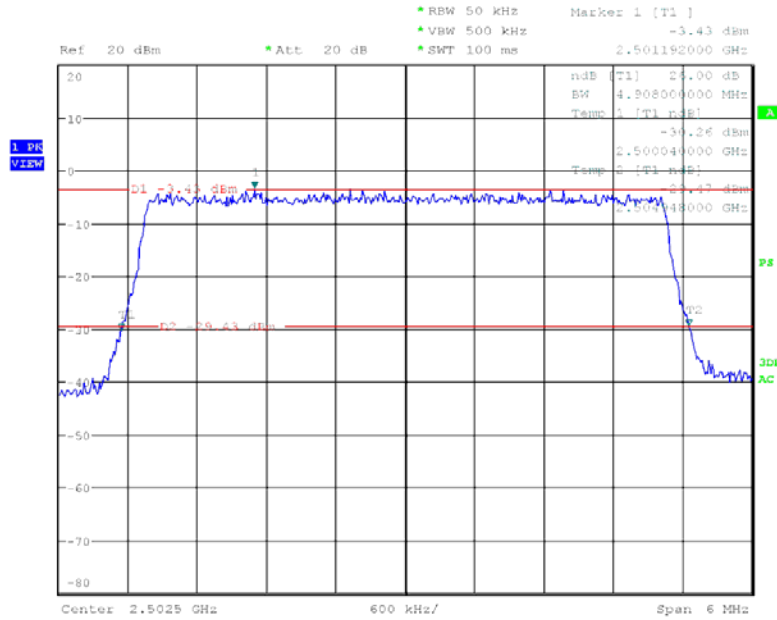
Date: 13.JAN.2017 15:42:21

Diagram 34.524_26 dB

1.17.4. LTE Band 7

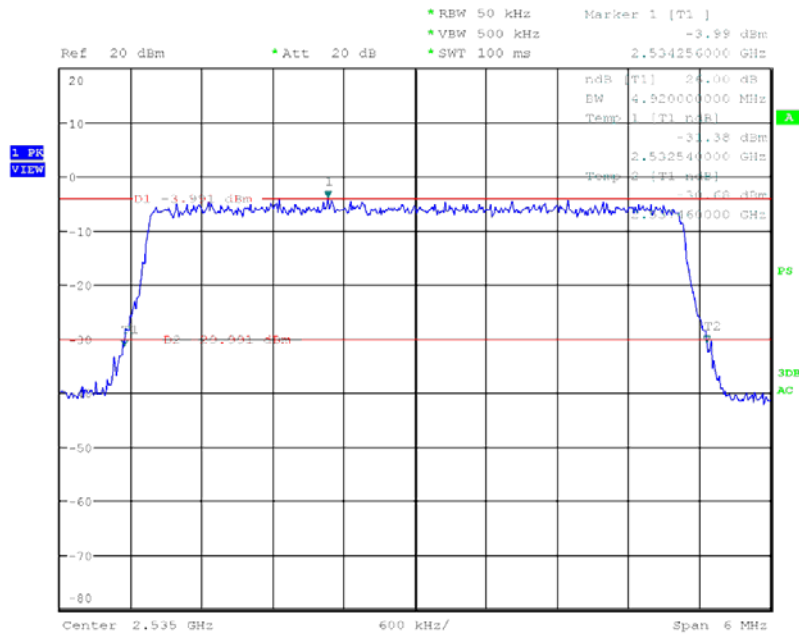
1.17.4.1. BW = 5MHz

QPSK-Modulation



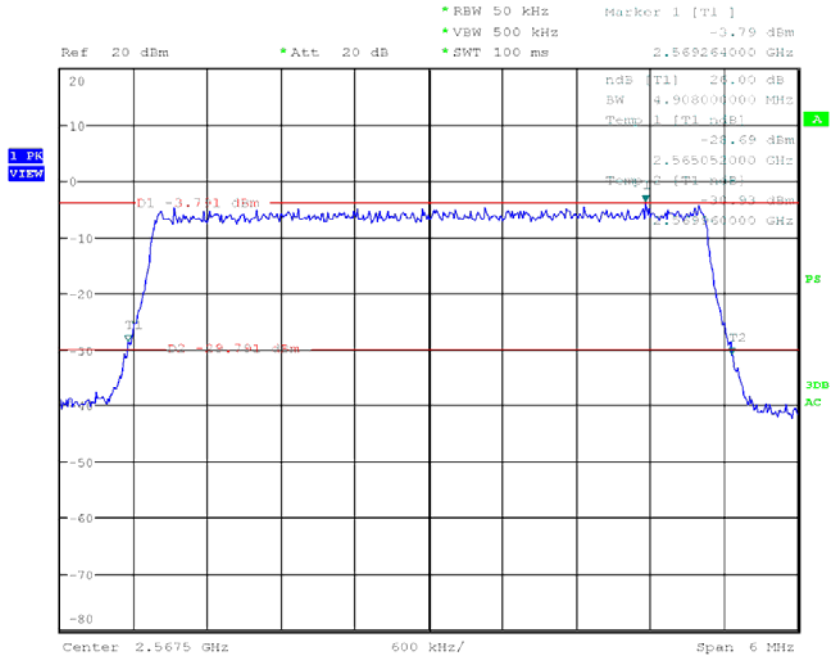
Date: 13.JAN.2017 15:53:26

Diagram 34.701_26 dB



Date: 13.JAN.2017 15:54:25

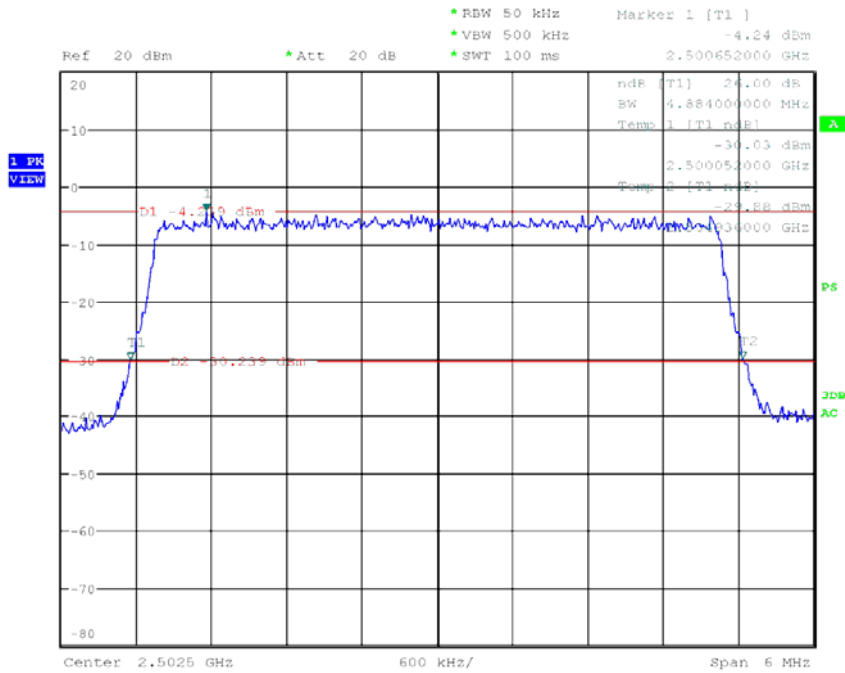
Diagram 34.702_26 dB



Date: 13.JAN.2017 15:55:03

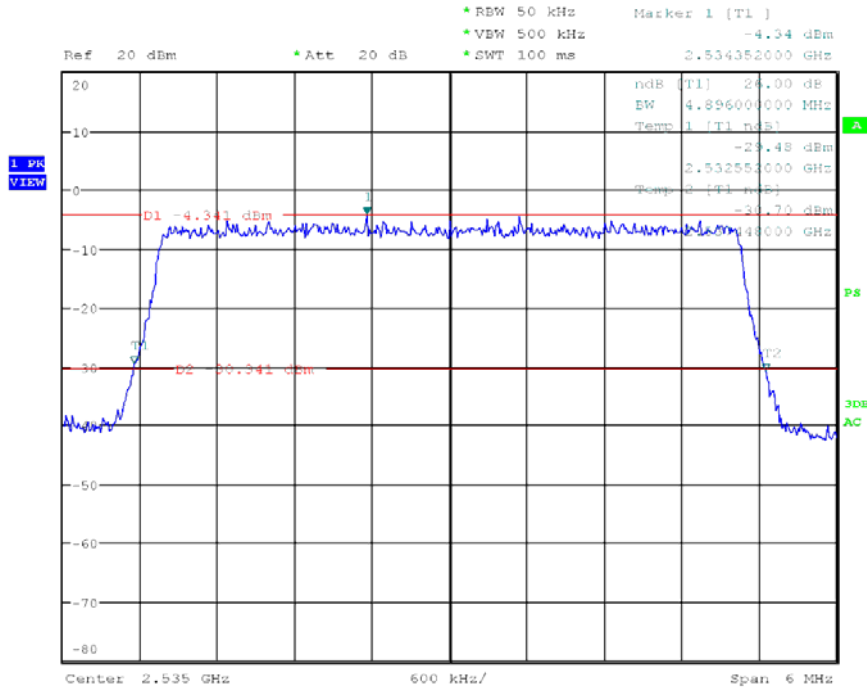
Diagram 34.703_26 dB

16-QAM-Modulation



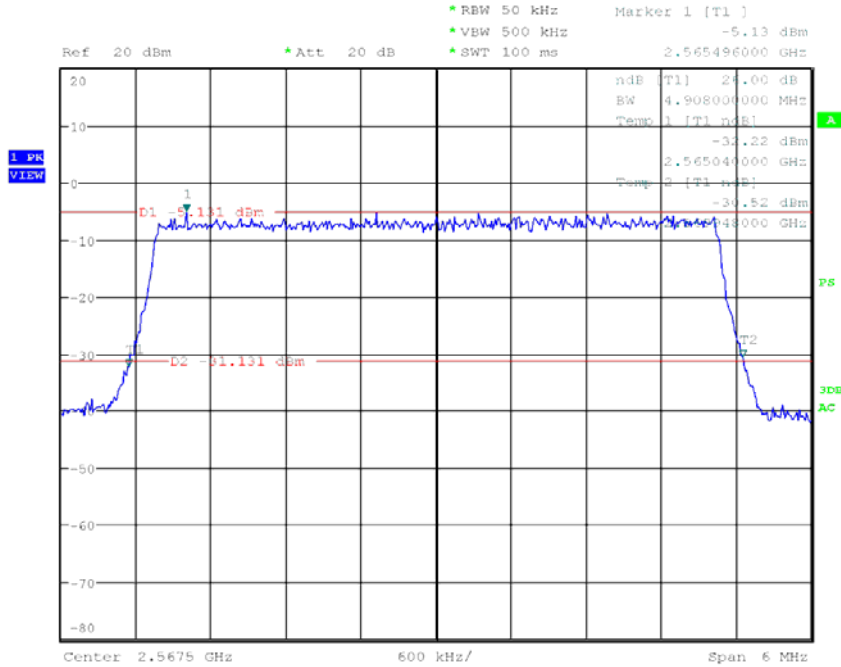
Date: 13.JAN.2017 16:14:01

Diagram 34.713_26 dB



Date: 13.JAN.2017 16:14:46

Diagram 34.714_26 dB

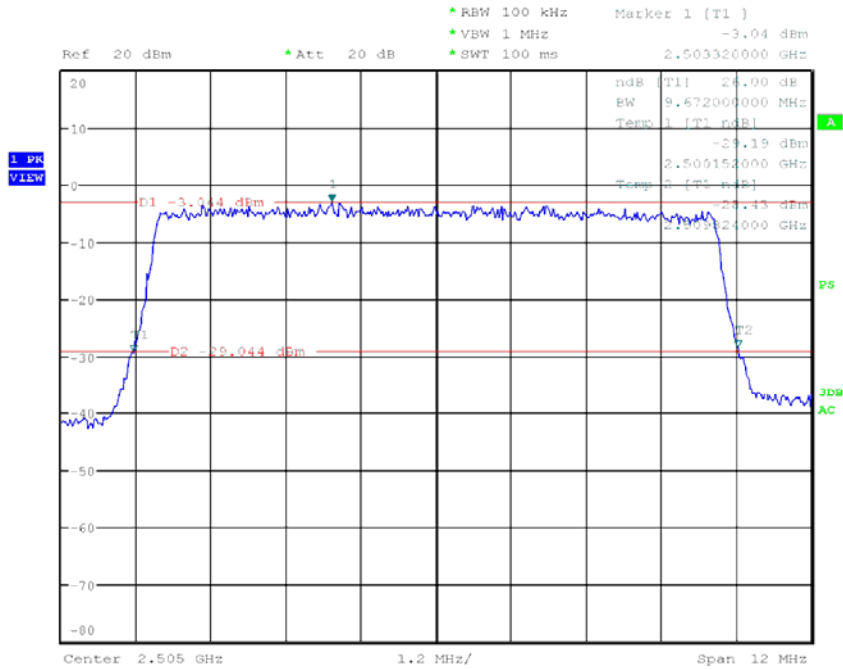


Date: 13.JAN.2017 16:15:41

Diagram 34.715_26 dB

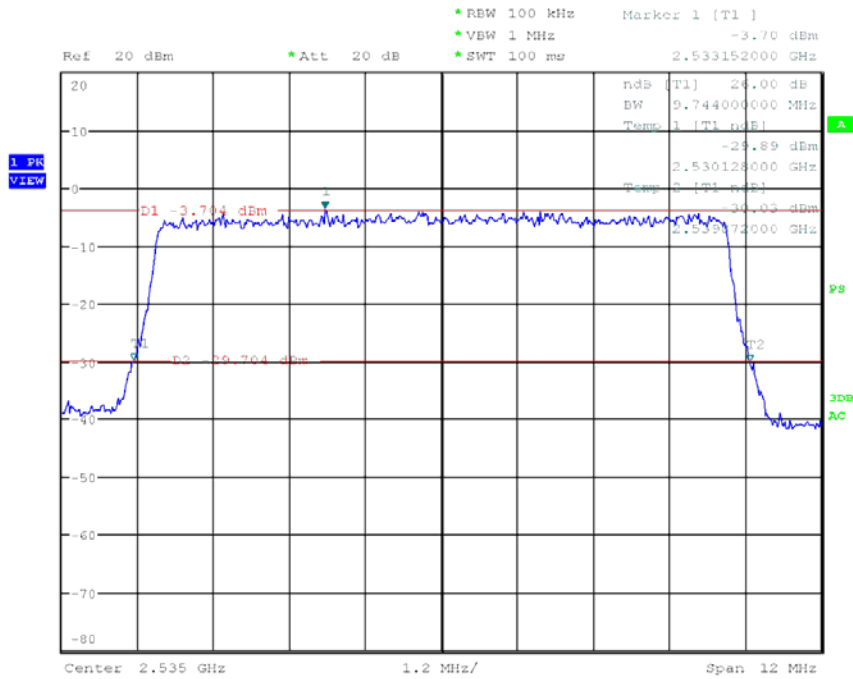
1.17.4.2. BW = 10MHz

QPSK-Modulation



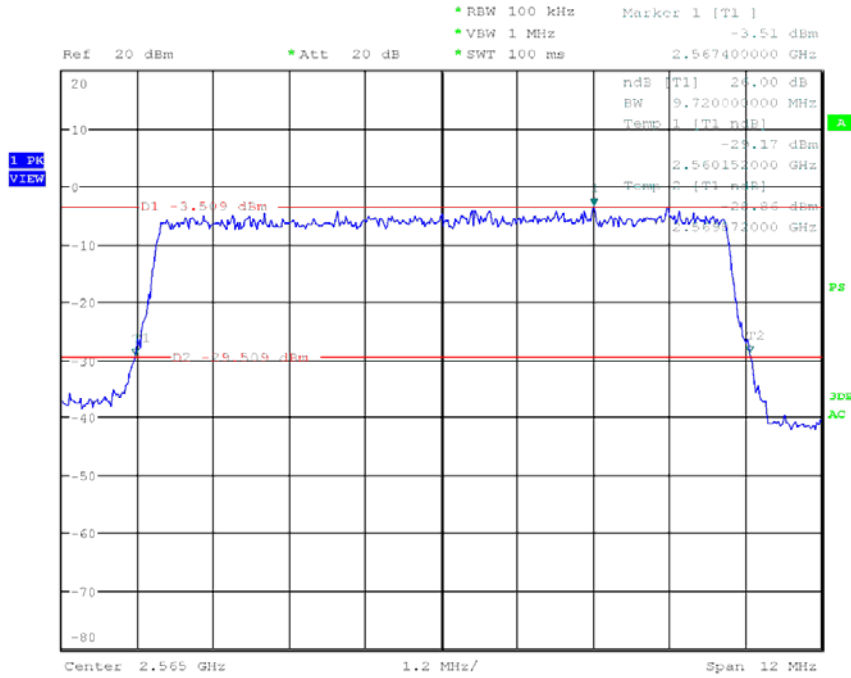
Date: 13.JAN.2017 15:56:25

Diagram 34.704_26 dB



Date: 13.JAN.2017 15:57:03

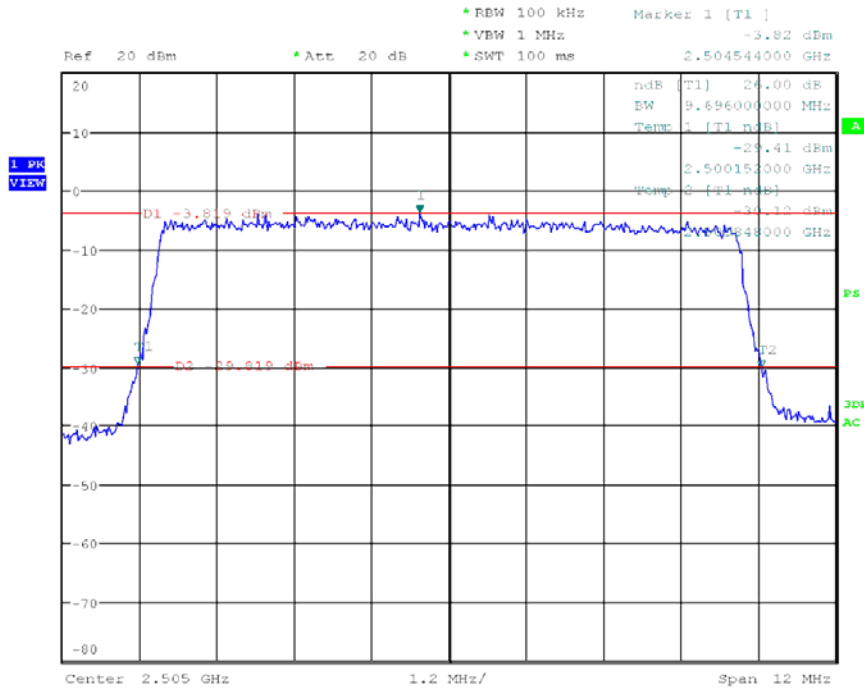
Diagram 34.705_26 dB



Date: 13.JAN.2017 15:57:40

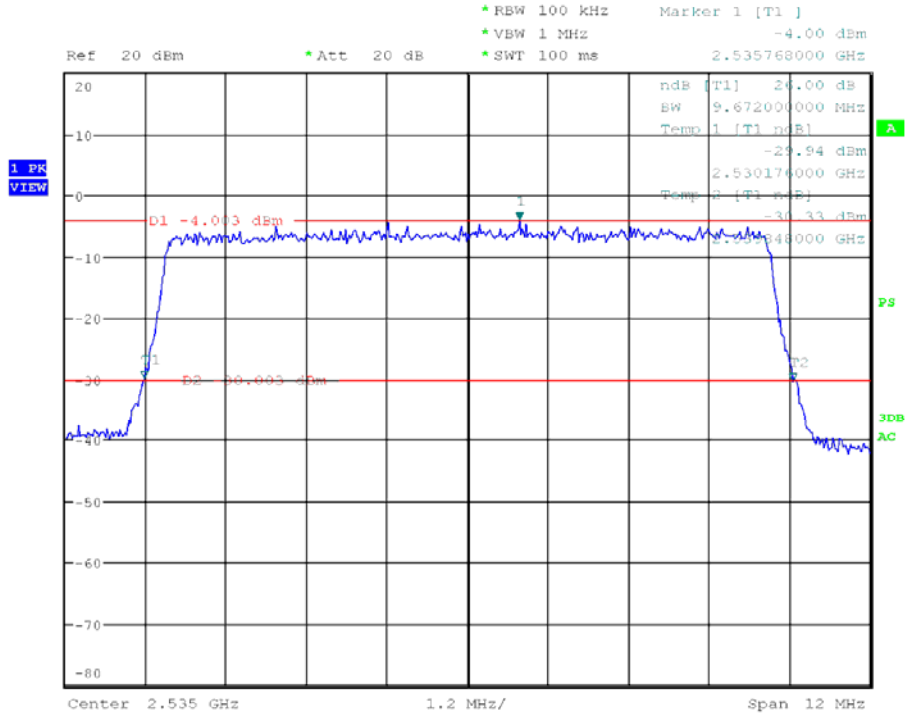
Diagram 34.706_26 dB

16-QAM-Modulation



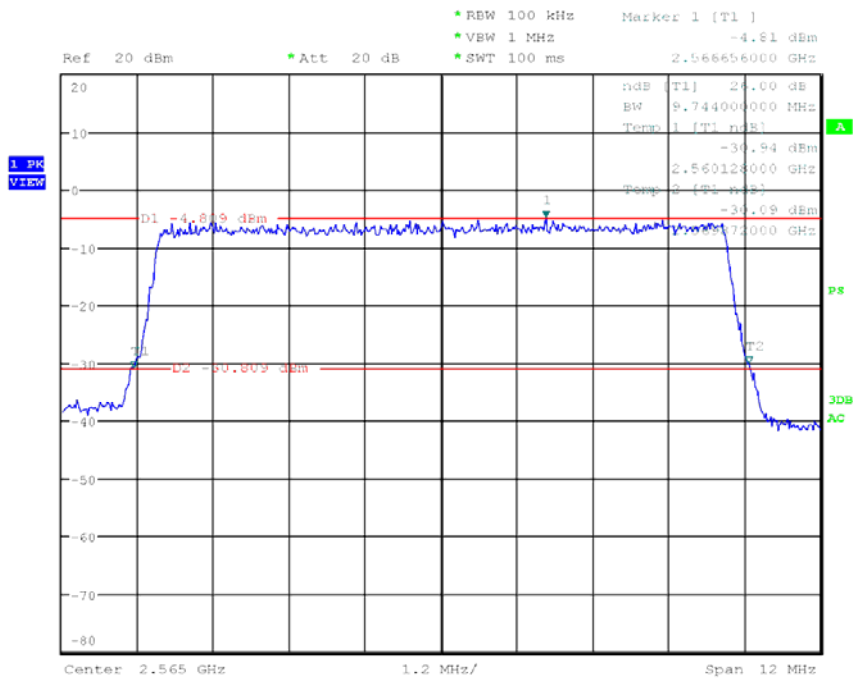
Date: 13.JAN.2017 16:16:33

Diagram 34.716_26 dB



Date: 13.JAN.2017 16:17:27

Diagram 34.717_26 dB

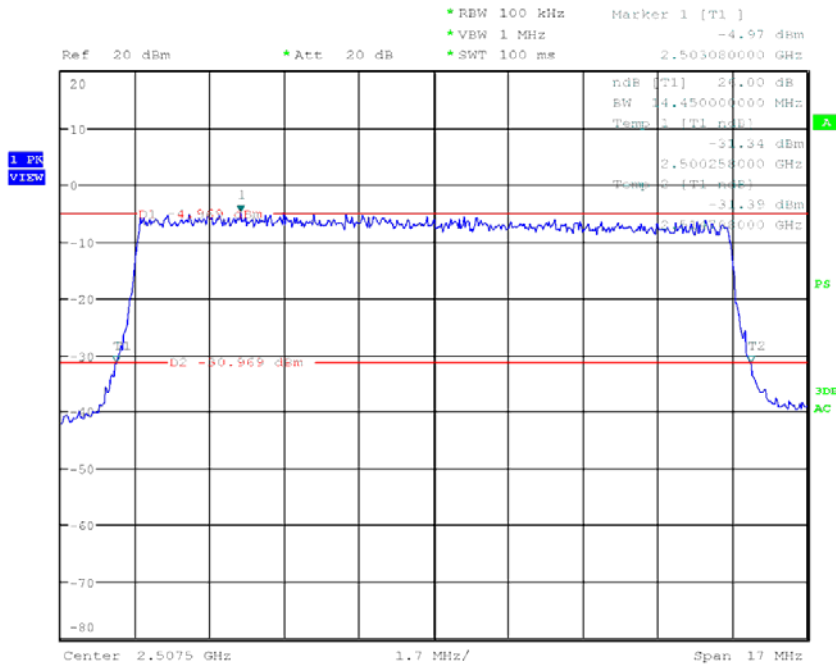


Date: 13.JAN.2017 16:18:04

Diagram 34.718_26 dB

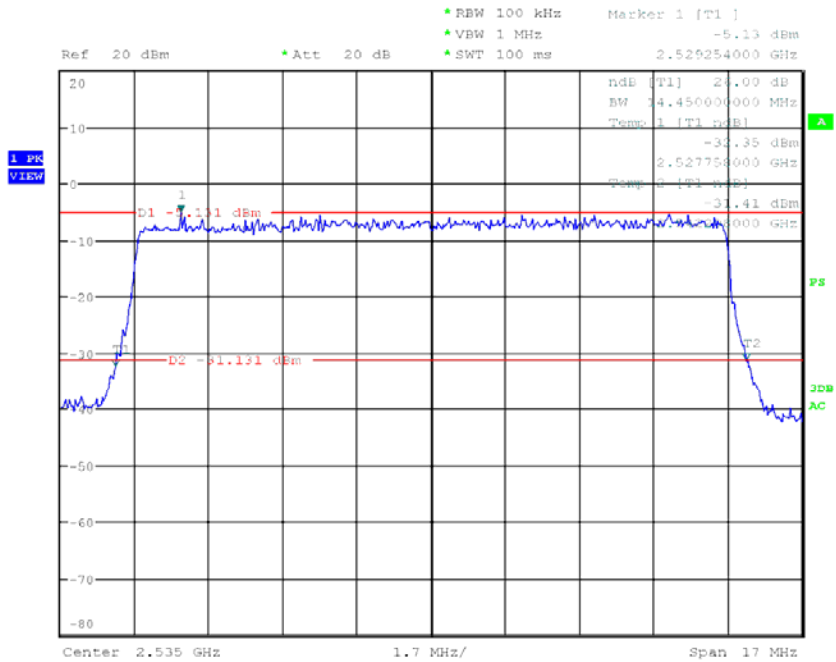
1.17.4.3. BW = 15MHz

QPSK-Modulation



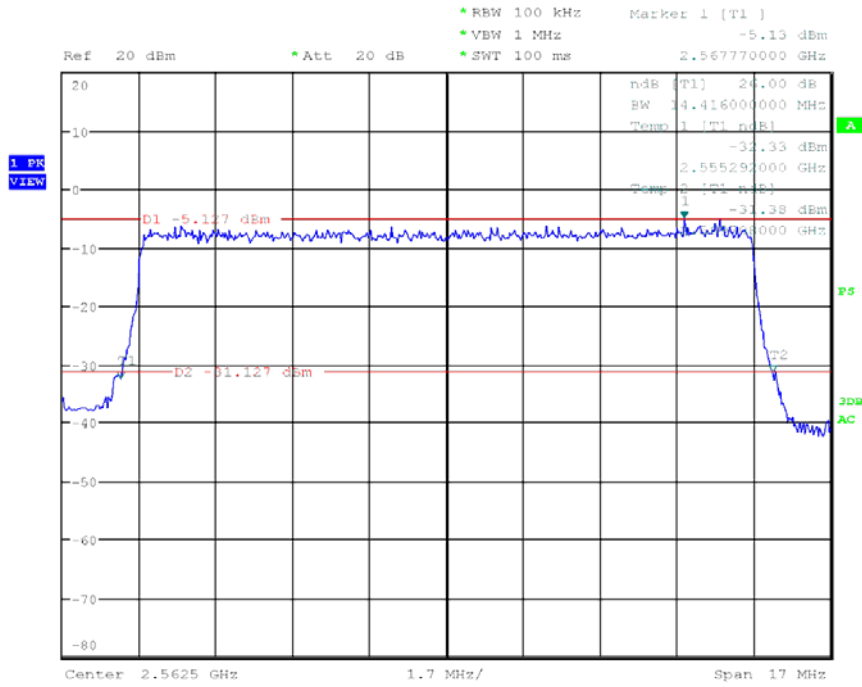
Date: 13.JAN.2017 16:02:04

Diagram 34.707_26 dB



Date: 13.JAN.2017 16:03:52

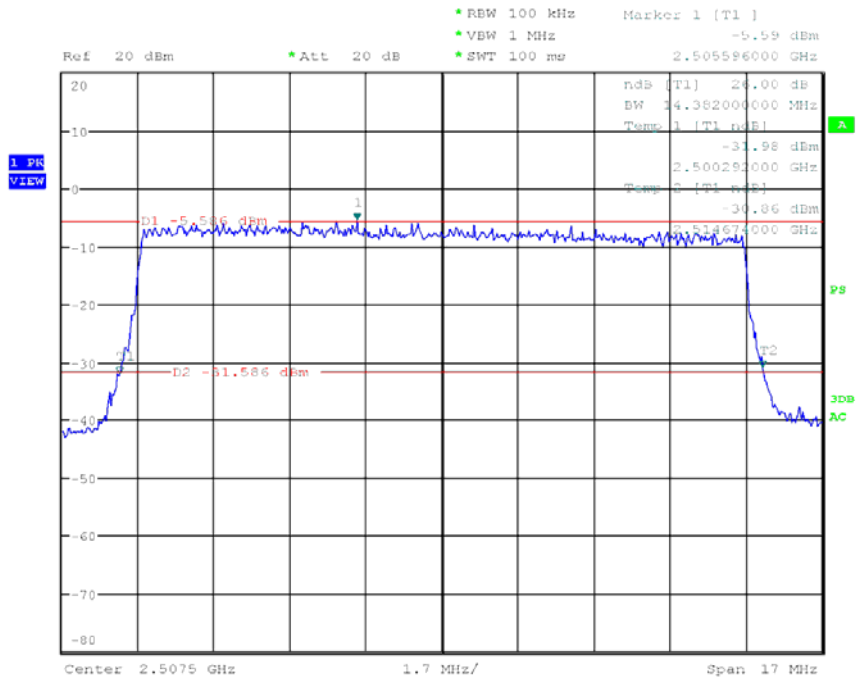
Diagram 34.708_26 dB



Date: 13.JAN.2017 16:04:25

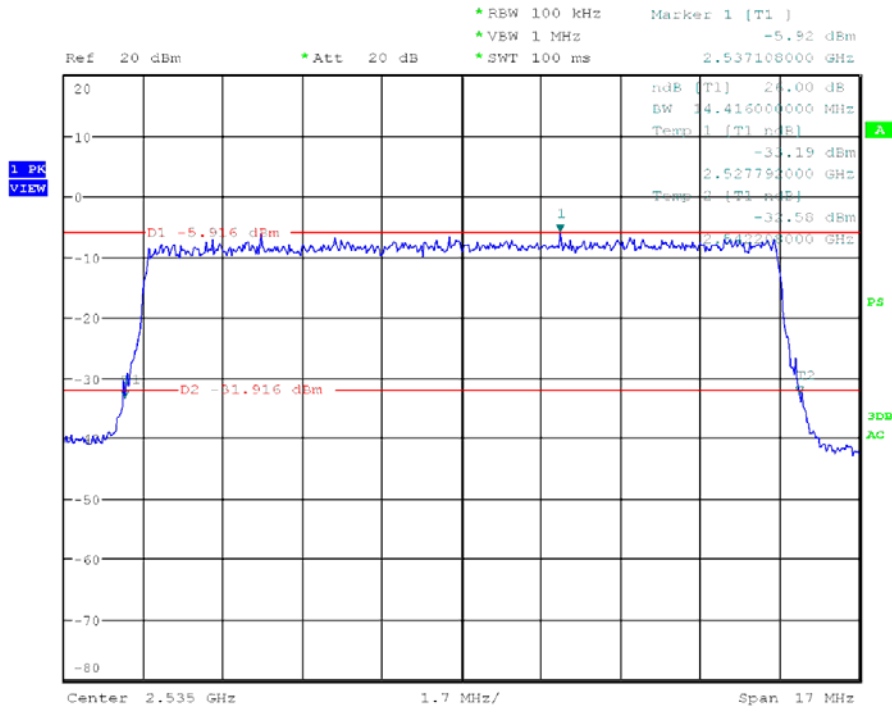
Diagram 34.709_26 dB

16-QAM-Modulation



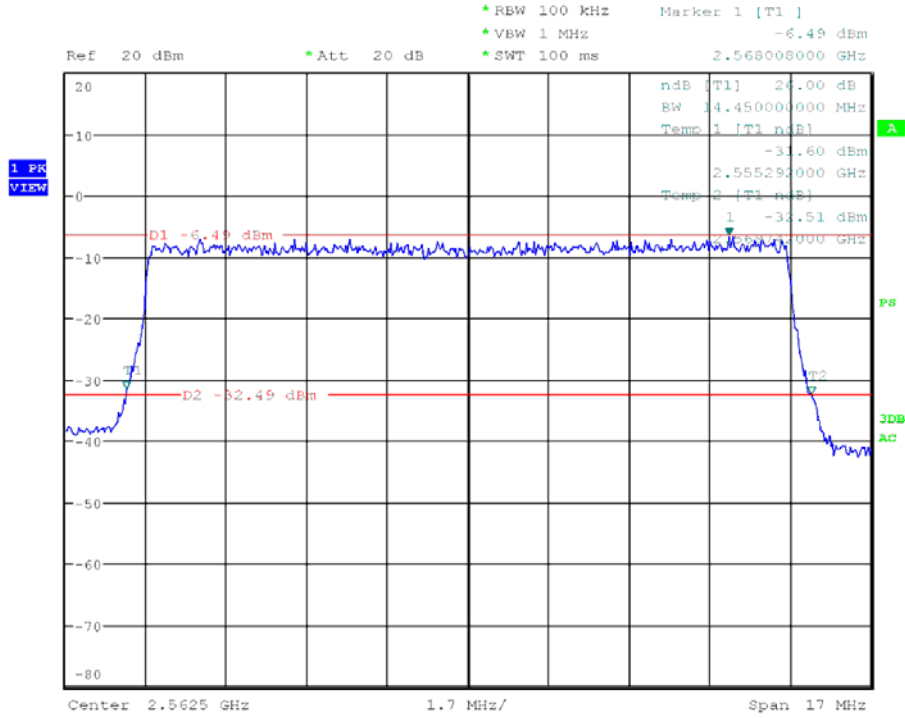
Date: 13.JAN.2017 16:19:10

Diagram 34.719_26 dB



Date: 13.JAN.2017 16:19:52

Diagram 34.720_26 dB

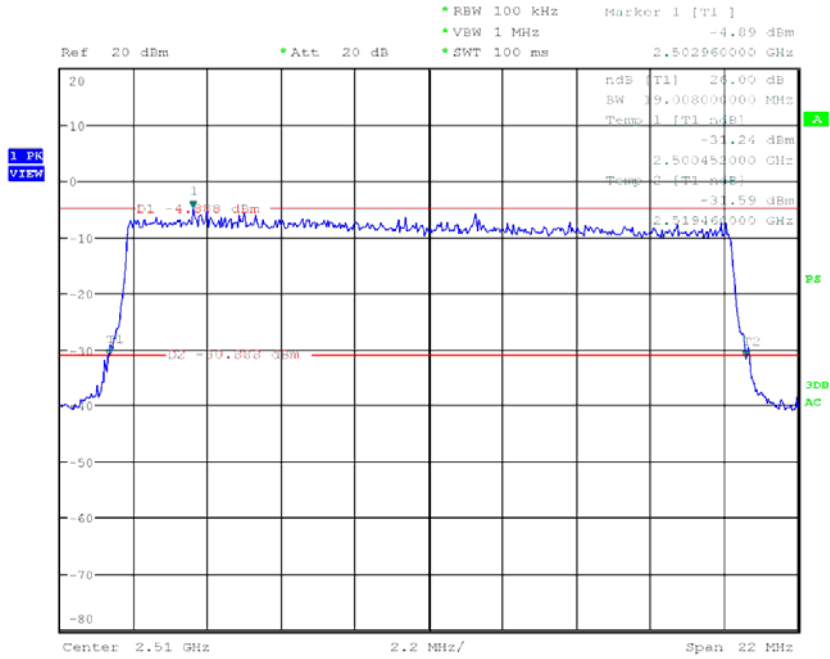


Date: 13.JAN.2017 16:20:41

Diagram 34.721_26 dB

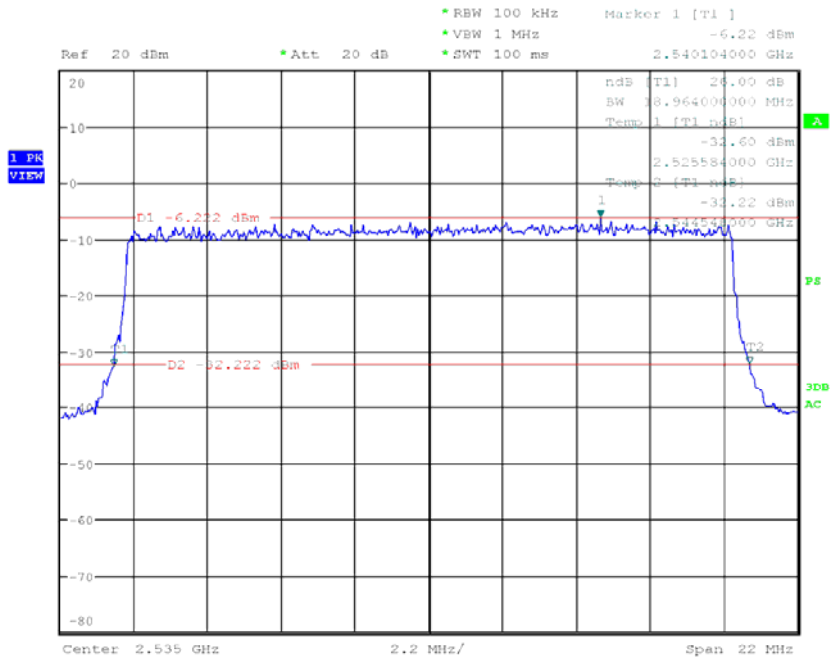
1.17.4.4. BW = 20MHz

QPSK-Modulation



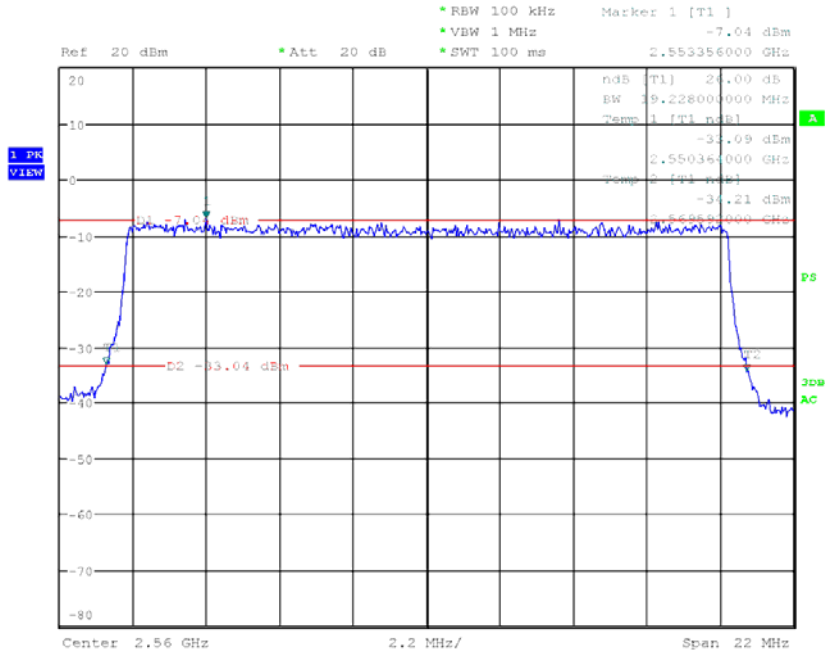
Date: 13.JAN.2017 16:10:44

Diagram 34.710_26 dB



Date: 13.JAN.2017 16:11:46

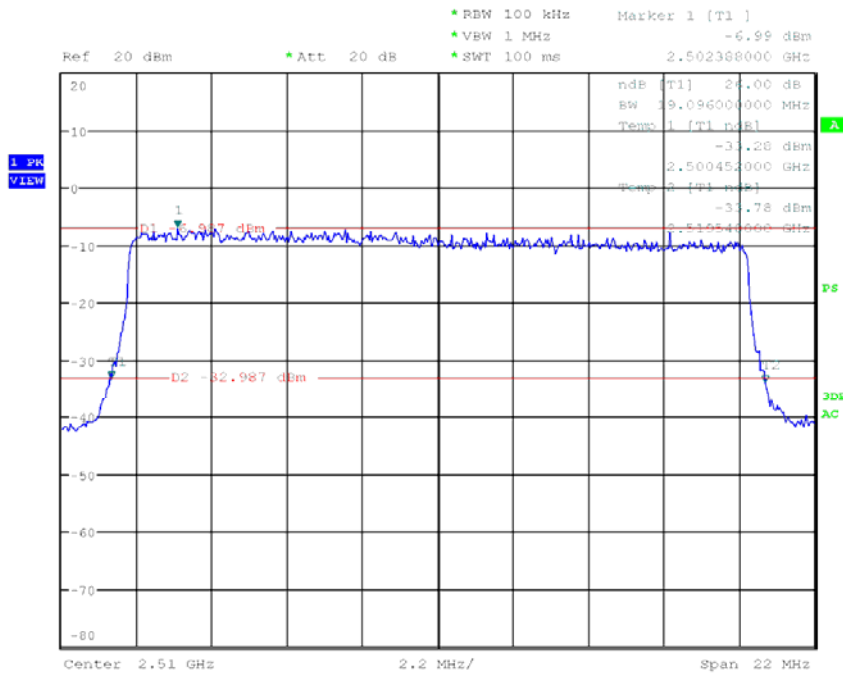
Diagram 34.711_26 dB



Date: 13.JAN.2017 16:12:27

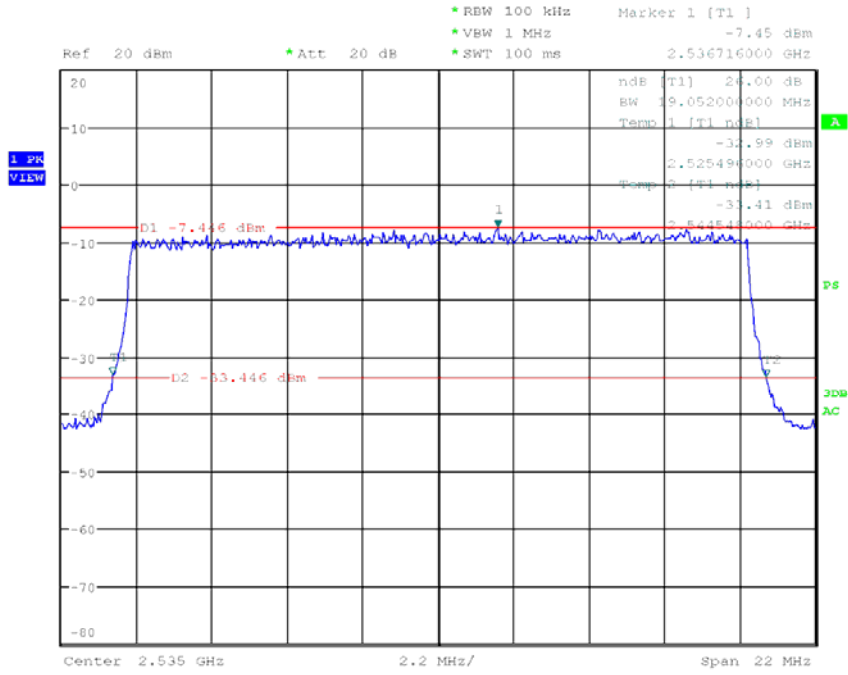
Diagram 34.712_26 dB

16-QAM-Modulation



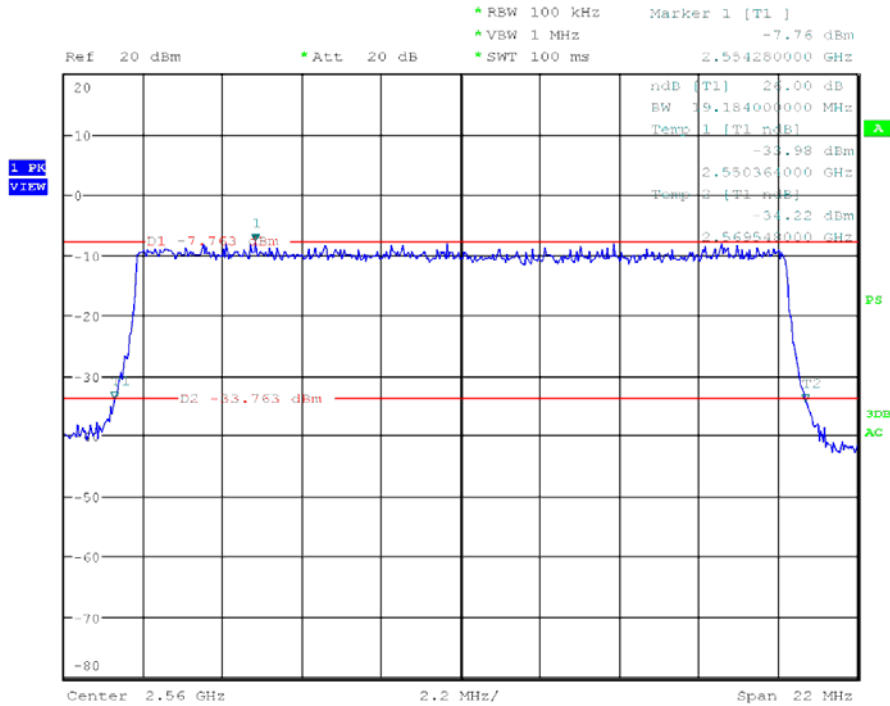
Date: 13.JAN.2017 16:21:45

Diagram 34.722_26 dB



Date: 13.JAN.2017 16:22:17

Diagram 34.723_26 dB



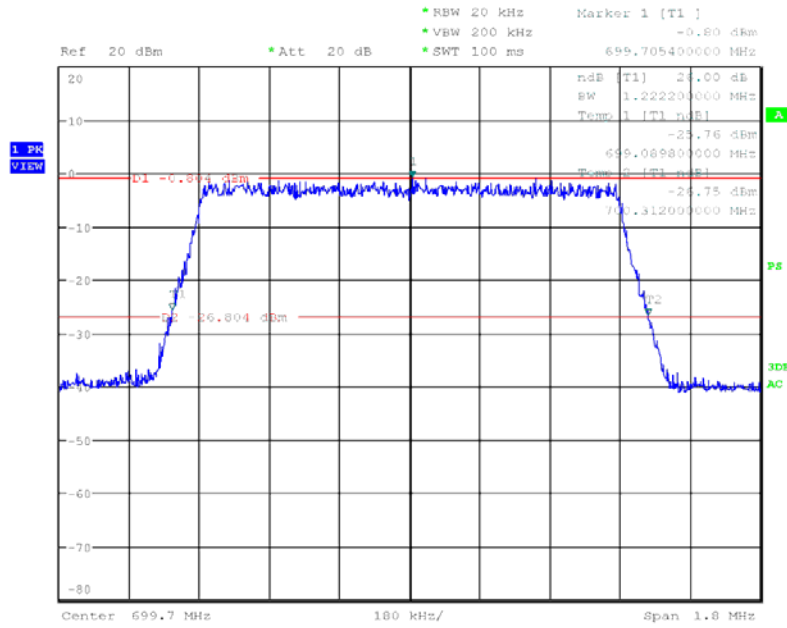
Date: 13.JAN.2017 16:22:56

Diagram 34.724_26 dB

1.17.5. LTE Band 12

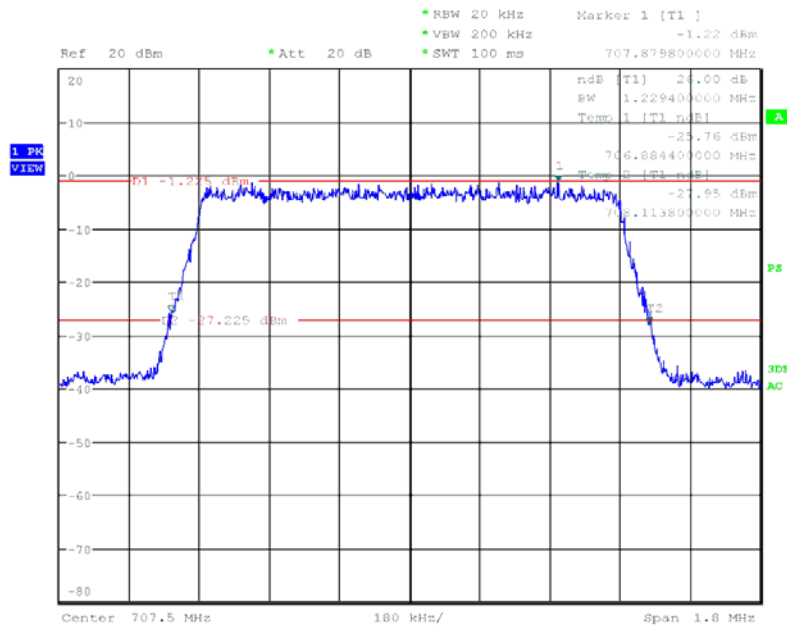
1.17.5.1. BW = 1.4MHz

QPSK-Modulation



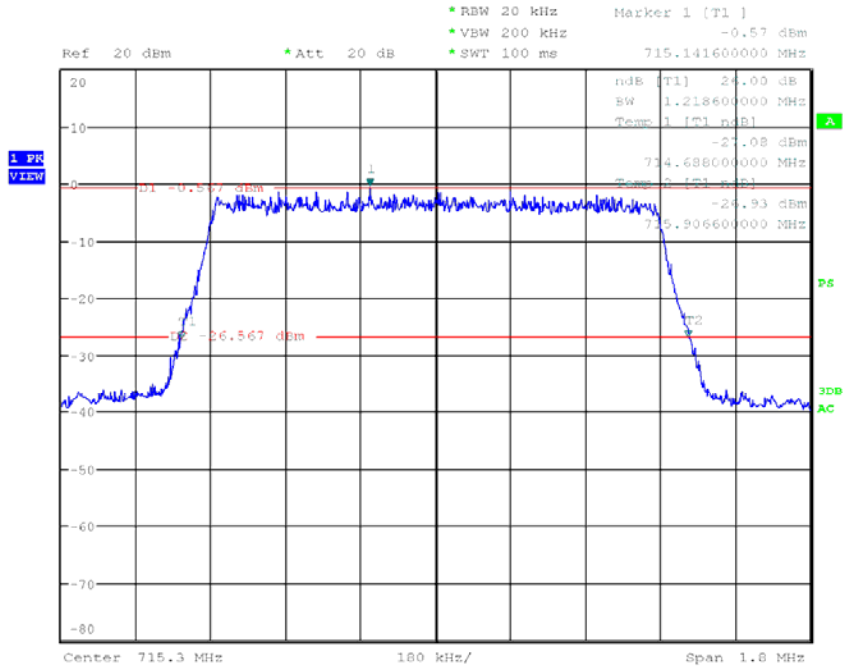
Date: 19.APR.2017 13:11:00

Diagram 34.121_26 dB



Date: 19.APR.2017 13:11:47

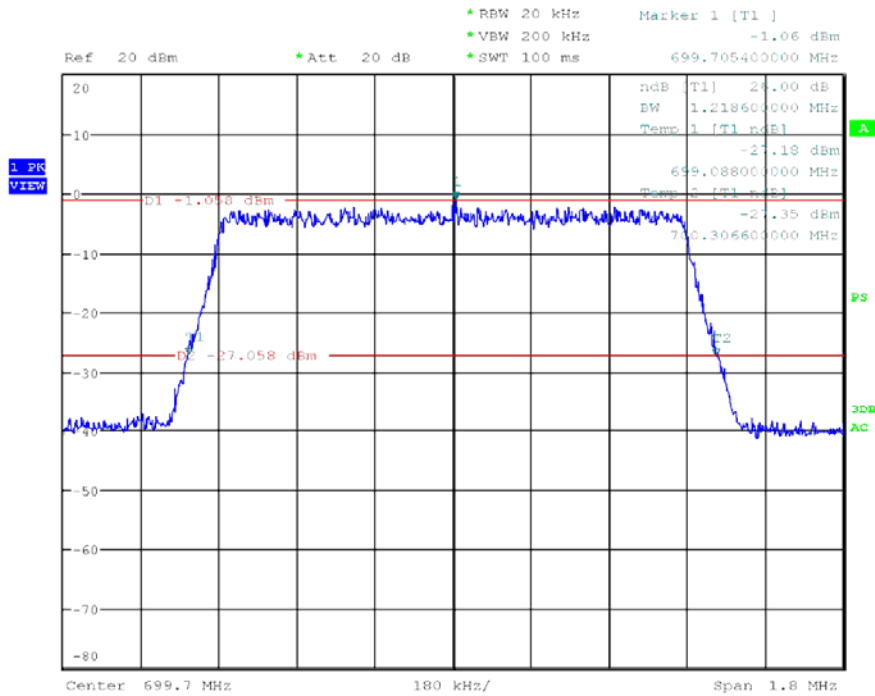
Diagram 34.122_26 dB



Date: 19.APR.2017 13:12:20

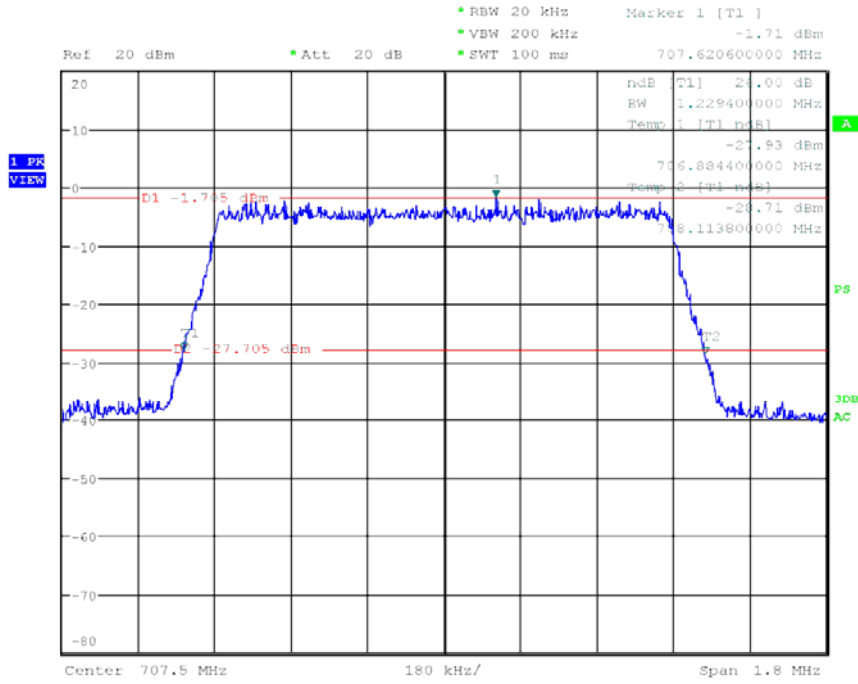
Diagram 34.123_26 dB

16-QAM-Modulation



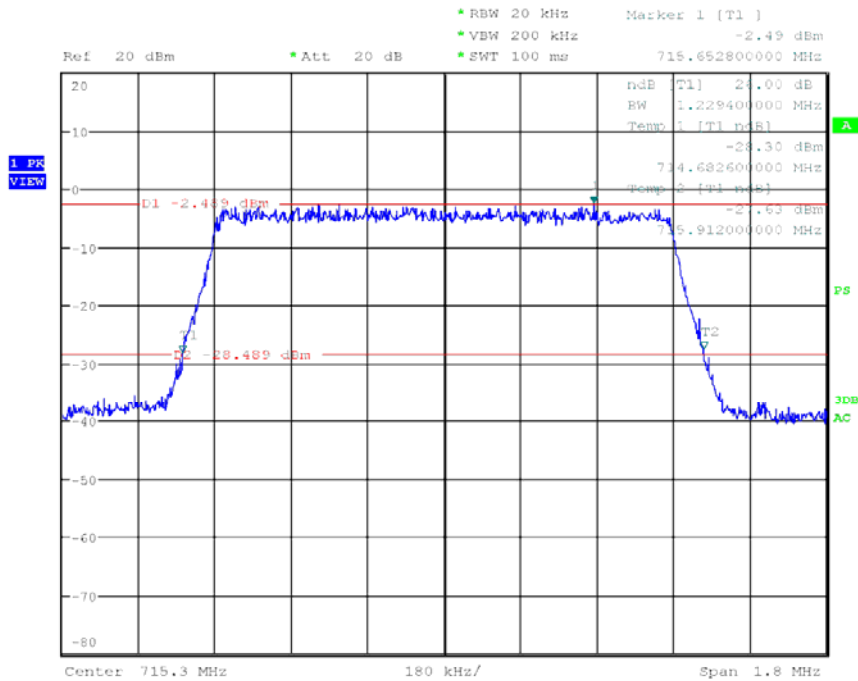
Date: 19.APR.2017 13:15:25

Diagram 34.127_26 dB



Date: 19.APR.2017 13:15:57

Diagram 34.128_26 dB

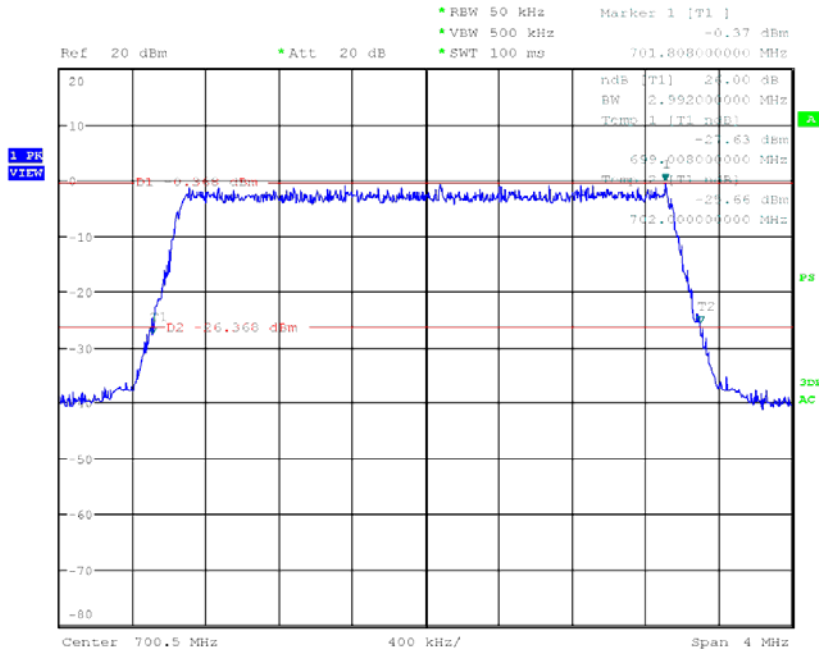


Date: 19.APR.2017 13:16:29

Diagram 34.129_26 dB

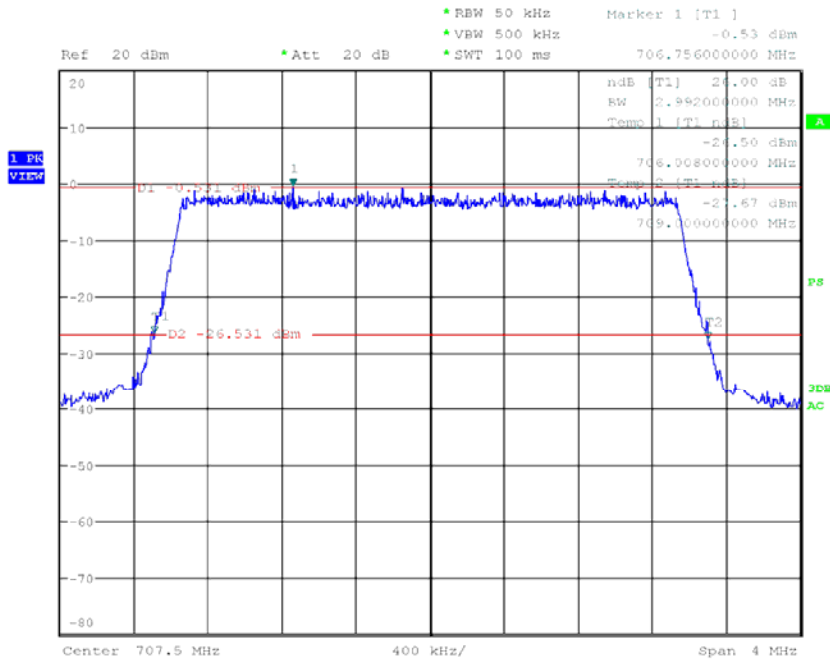
1.17.5.2. BW = 3MHz

QPSK-Modulation



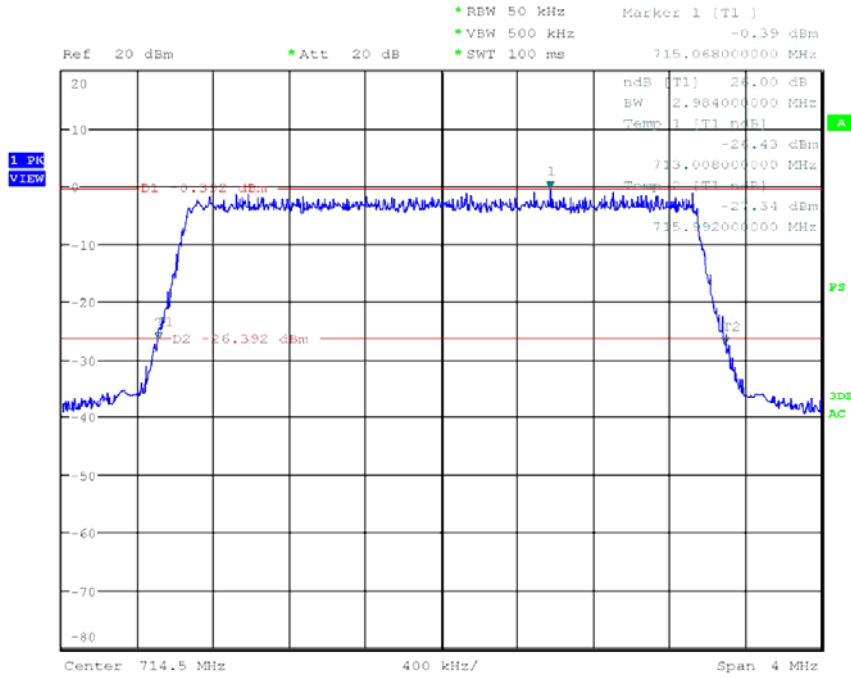
Date: 19.APR.2017 13:13:36

Diagram 34.124_26 dB



Date: 19.APR.2017 13:14:07

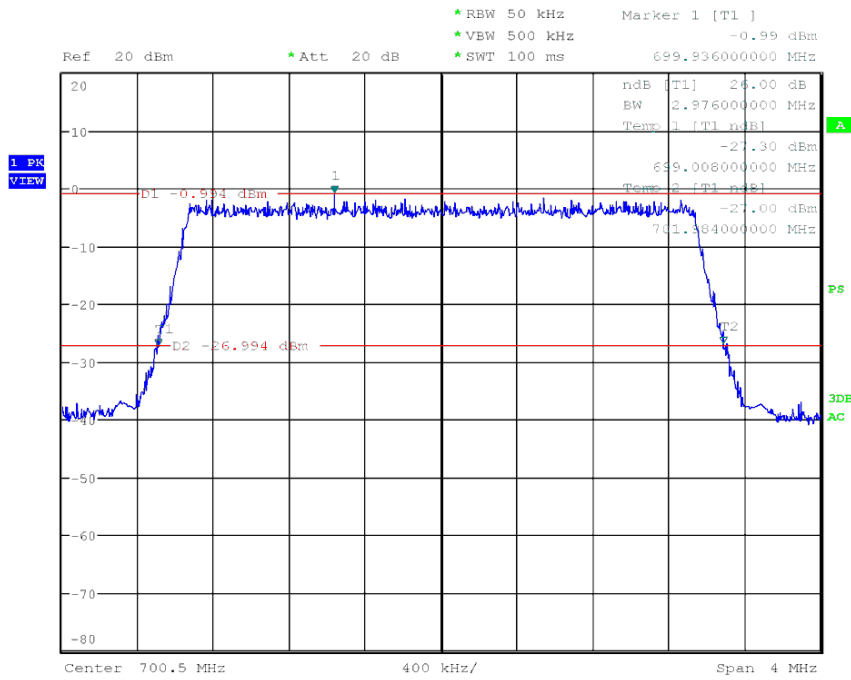
Diagram 34.125_26 dB



Date: 19.APR.2017 13:14:39

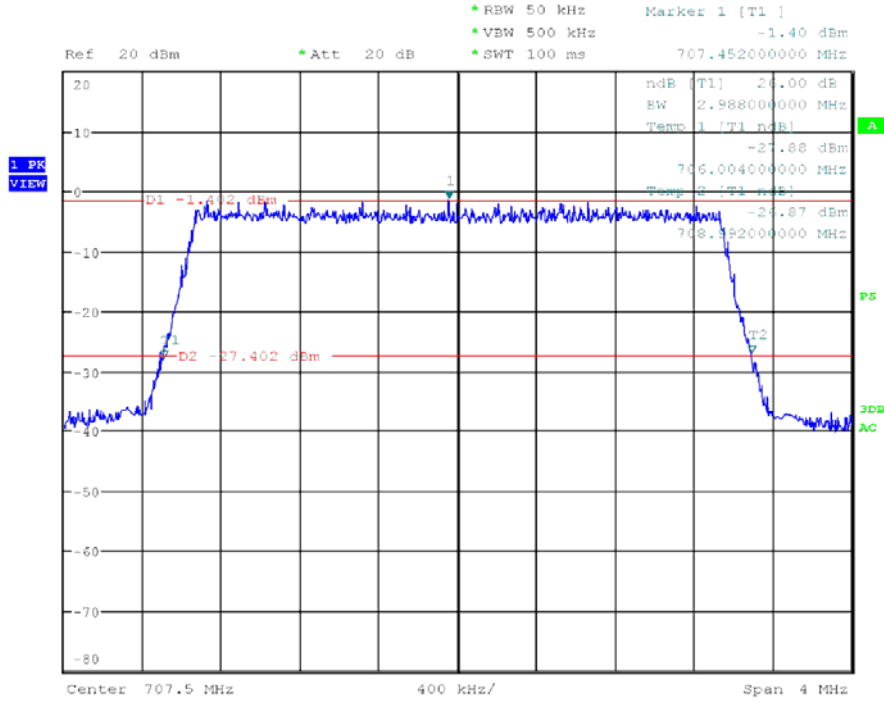
Diagram 34.126_26 dB

16-QAM-Modulation



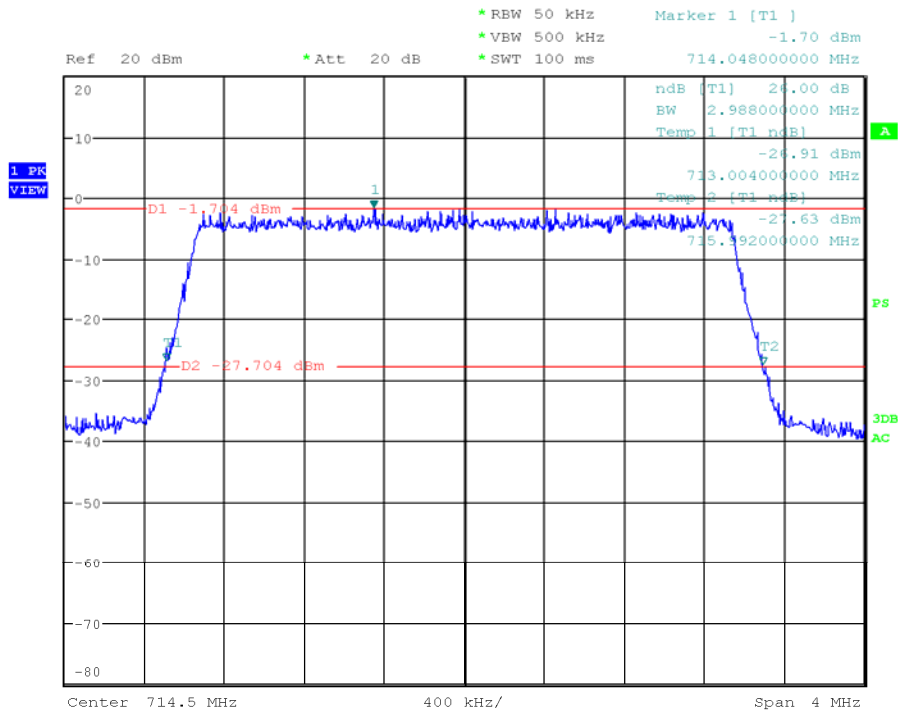
Date: 19.APR.2017 13:17:25

Diagram 34.130_26 dB



Date: 19.APR.2017 13:17:59

Diagram 34.131_26 dB

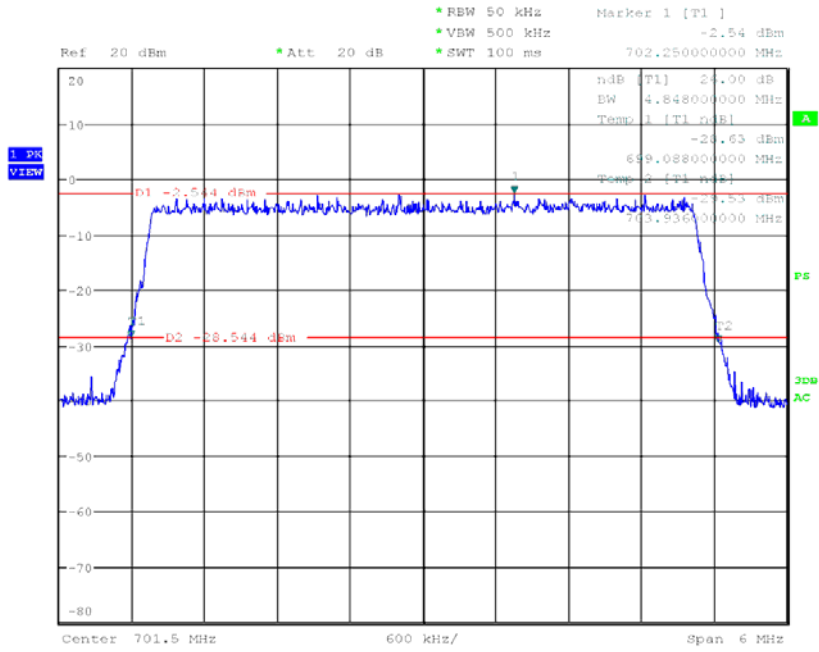


Date: 19.APR.2017 13:18:35

Diagram 34.132_26 dB

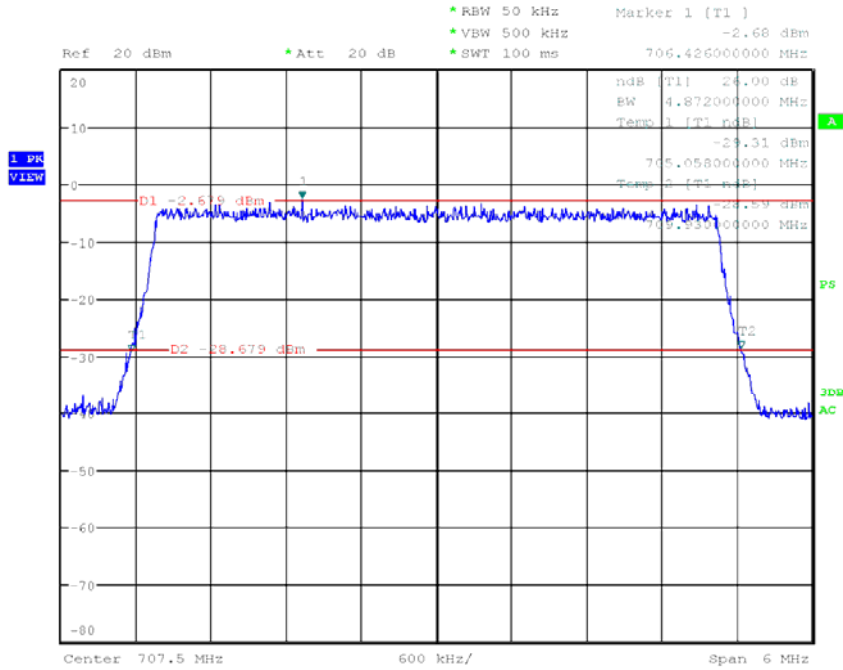
1.17.5.3. BW = 5MHz

QPSK-Modulation



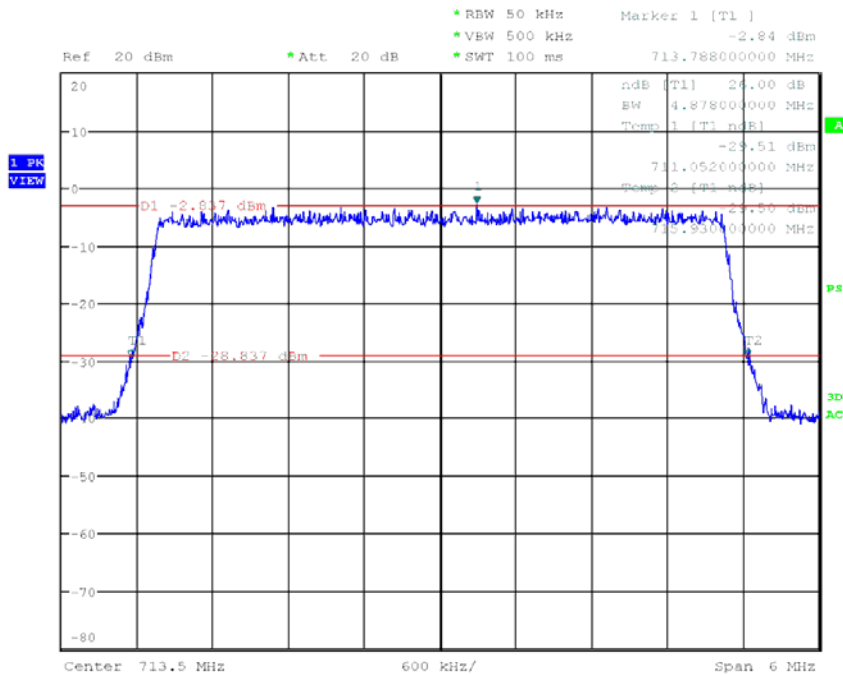
Date: 19.APR.2017 13:20:14

Diagram 34.133_26 dB



Date: 19.APR.2017 13:20:52

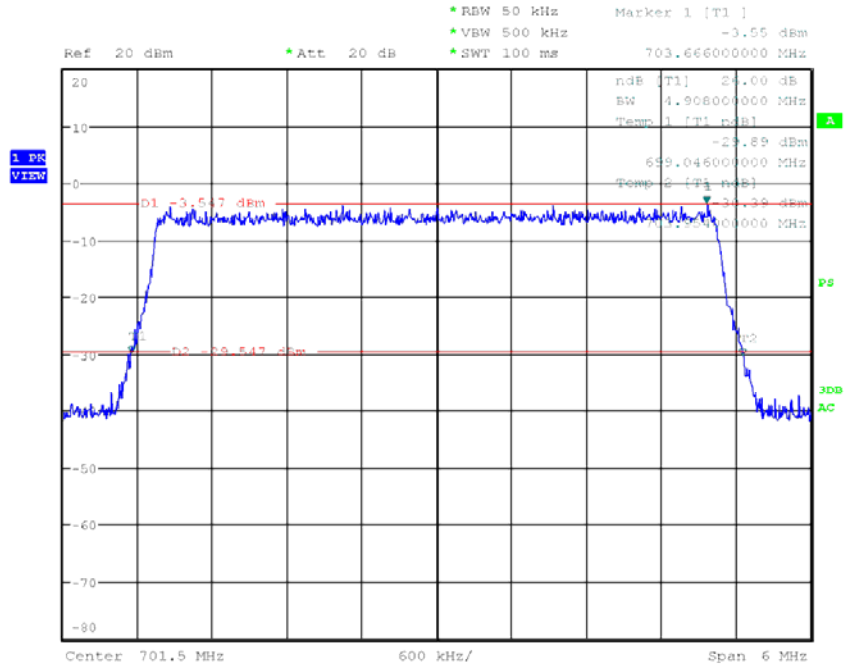
Diagram 34.134_26 dB



Date: 19.APR.2017 13:21:29

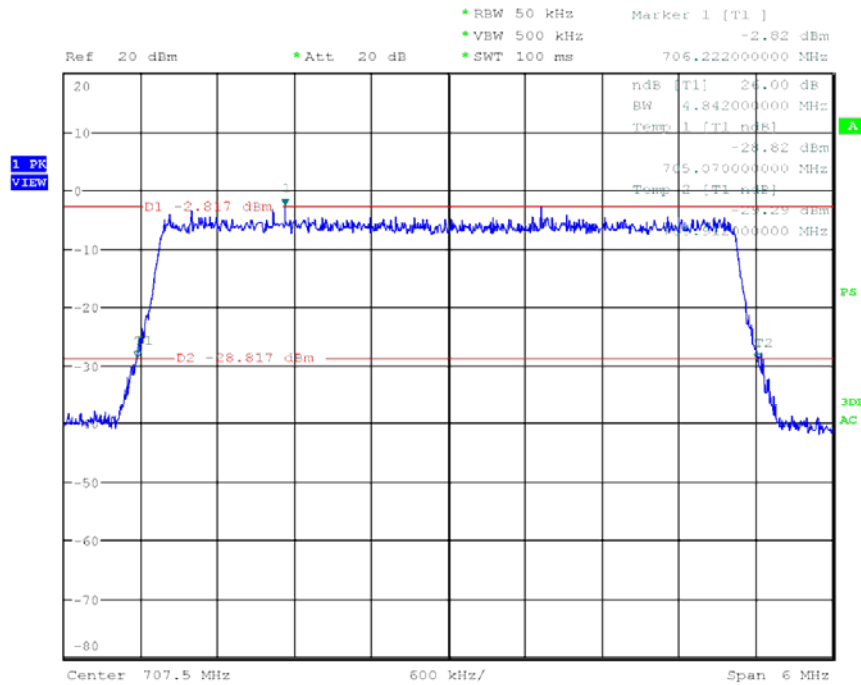
Diagram 34.135_26 dB

16-QAM-Modulation



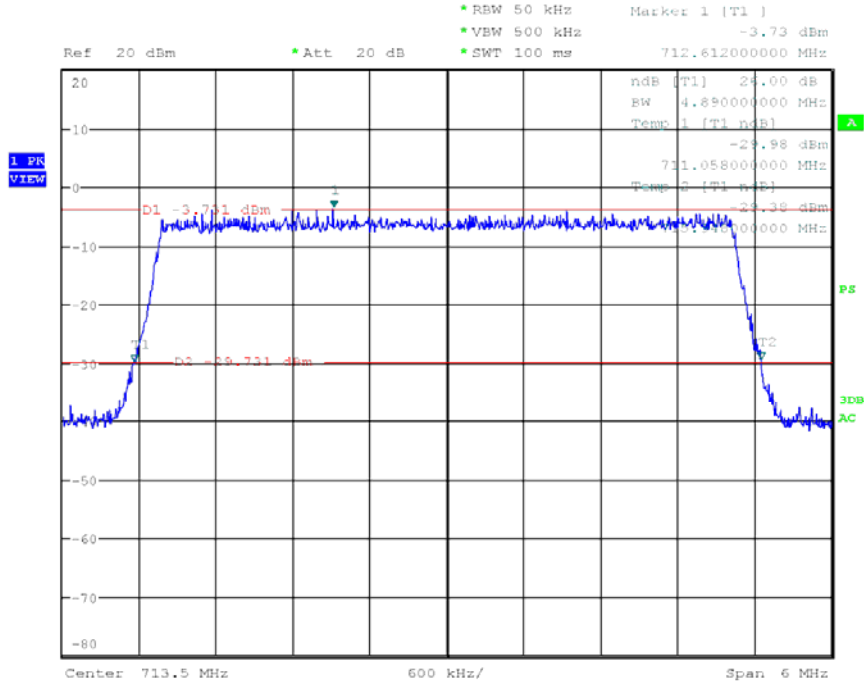
Date: 19.APR.2017 13:24:49

Diagram 34. 139_26 dB



Date: 19.APR.2017 13:25:34

Diagram 34. 140_26 dB

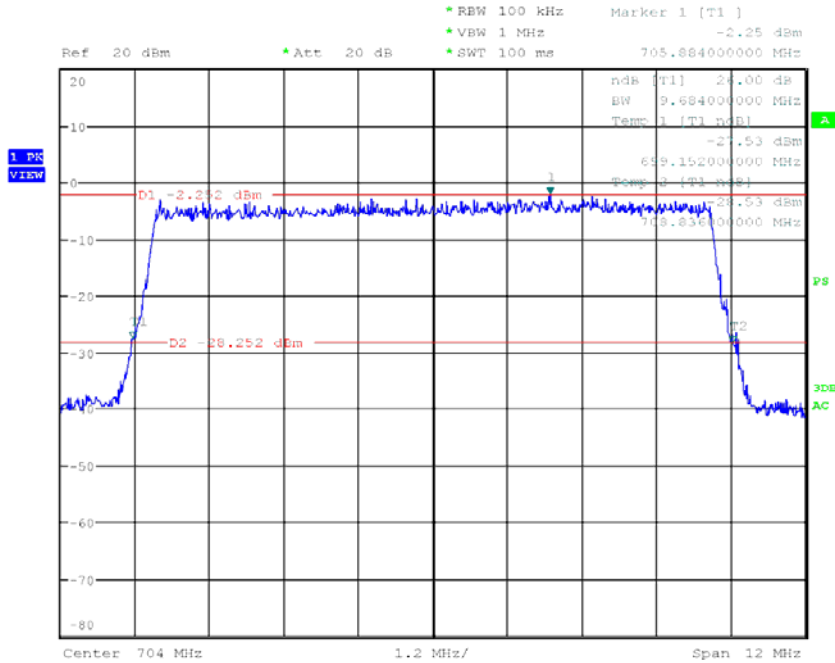


Date: 19.APR.2017 13:26:09

Diagram 34.141_26 dB

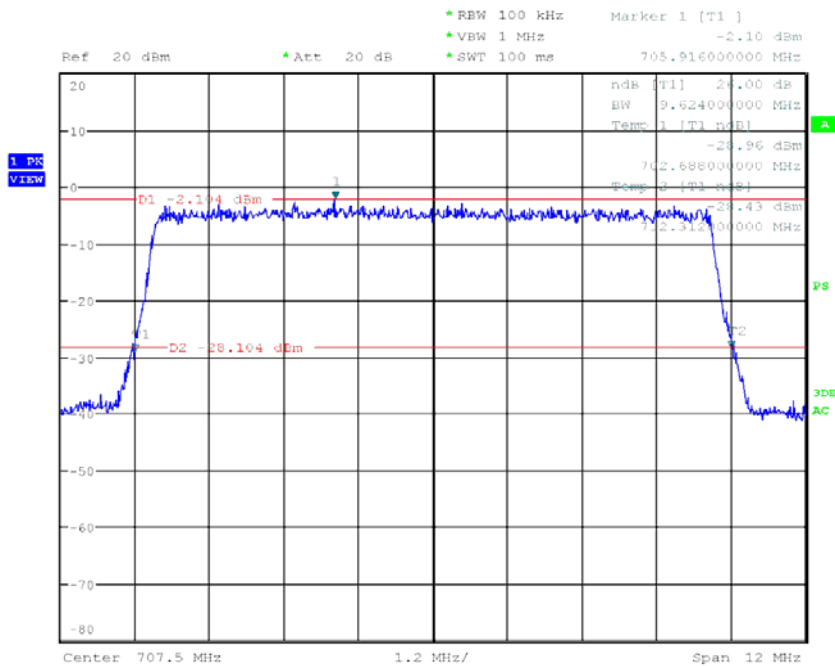
1.17.5.4. BW = 10MHz

QPSK-Modulation



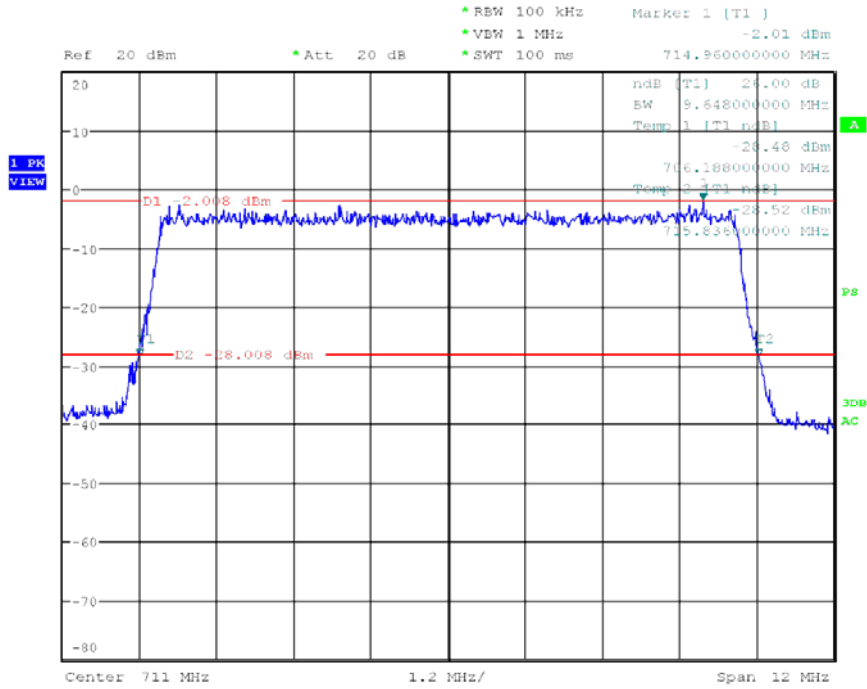
Date: 19.APR.2017 13:22:56

Diagram 34.136_26 dB



Date: 19.APR.2017 13:23:31

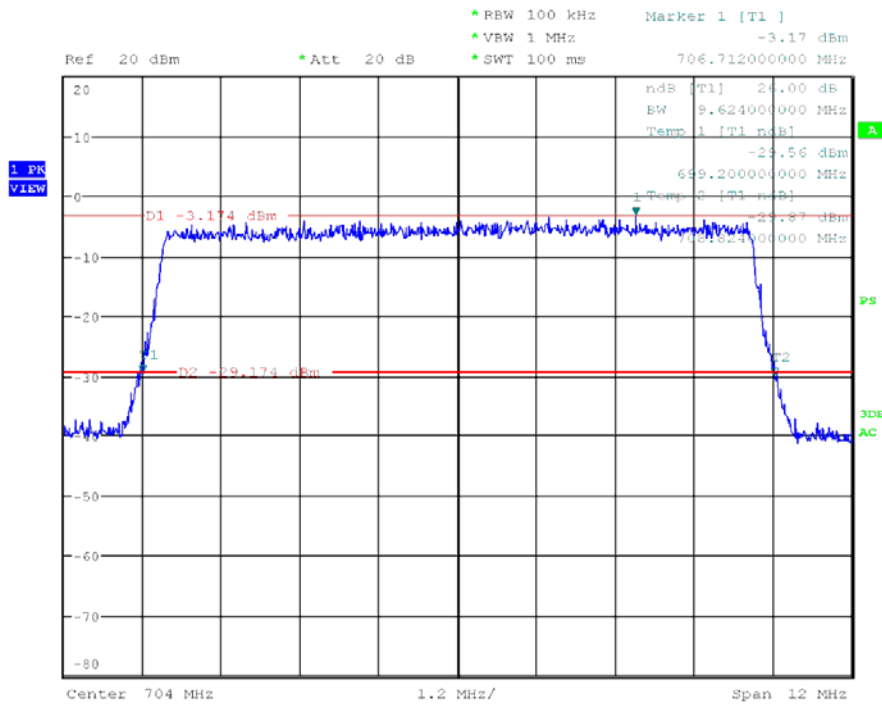
Diagram 34.137_26 dB



Date: 19.APR.2017 13:24:07

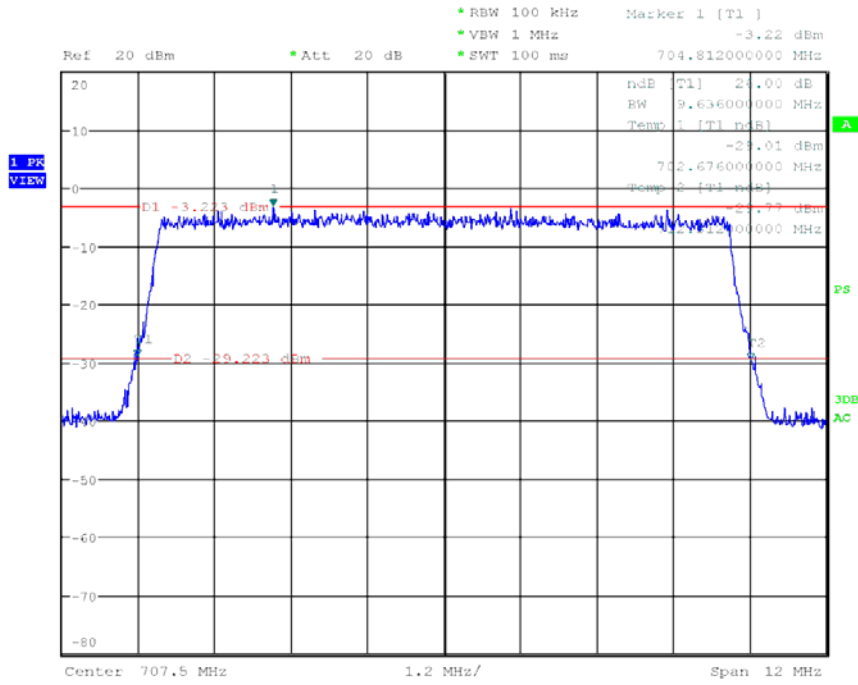
Diagram 34.138_26 dB

16-QAM-Modulation



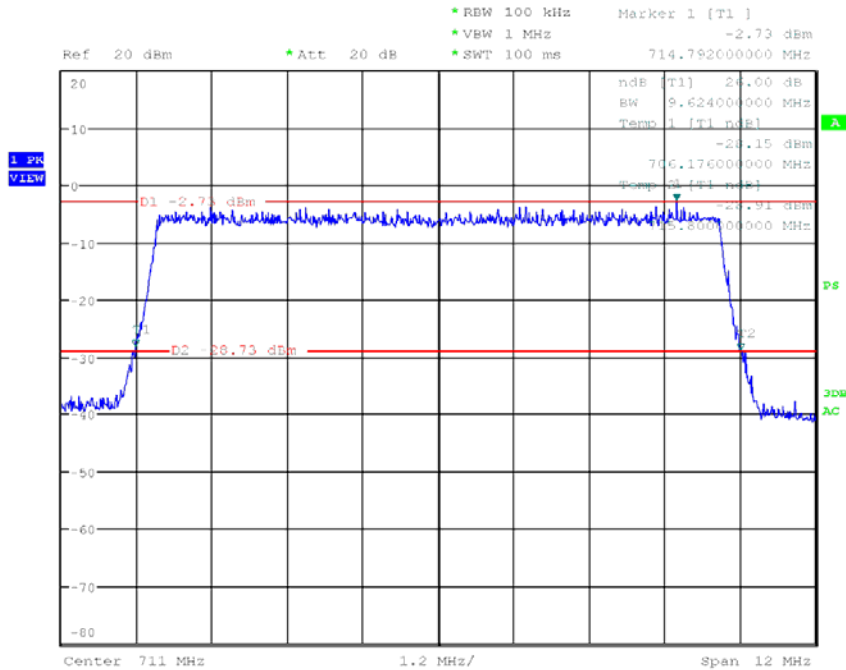
Date: 19.APR.2017 13:29:20

Diagram 34.142_26 dB



Date: 19.APR.2017 13:30:07

Diagram 34.143_26 dB

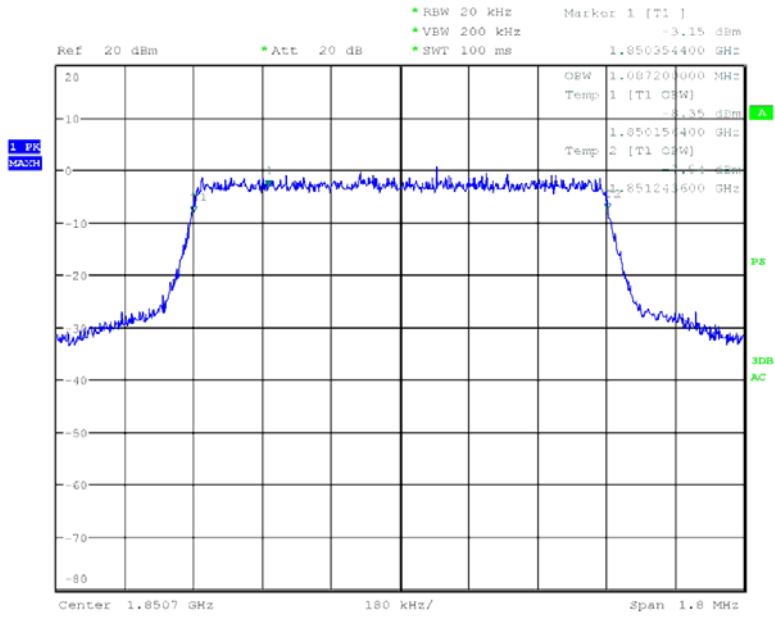


Date: 19.APR.2017 13:30:43

Diagram 34.144_26 dB

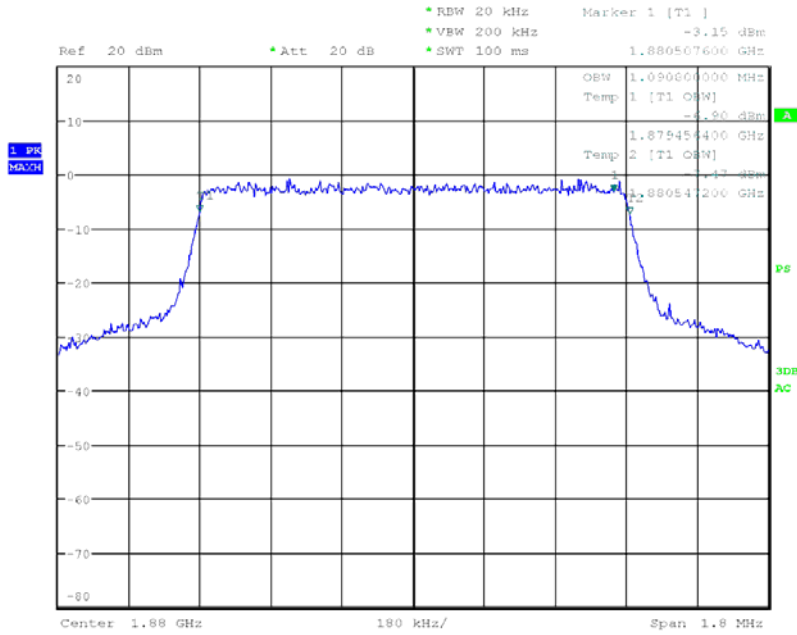
1.18. 99% occupied bandwidth

1.18.1. LTE Band 2 1.18.1.1. BW = 1.4MHz QPSK-Modulation



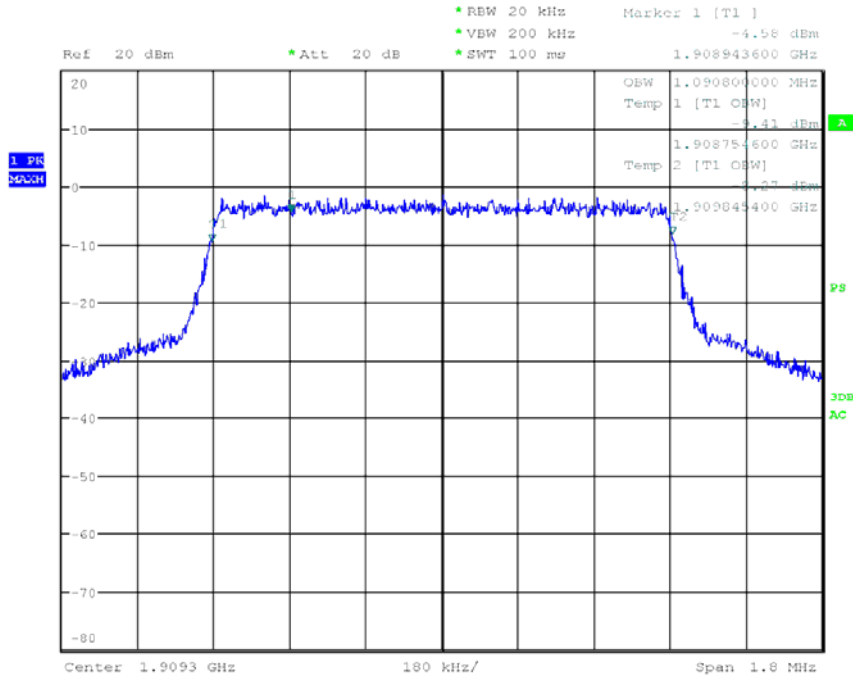
Date: 19.APR.2017 13:32:25

Diagram 35_200



Date: 13.JAN.2017 16:56:18

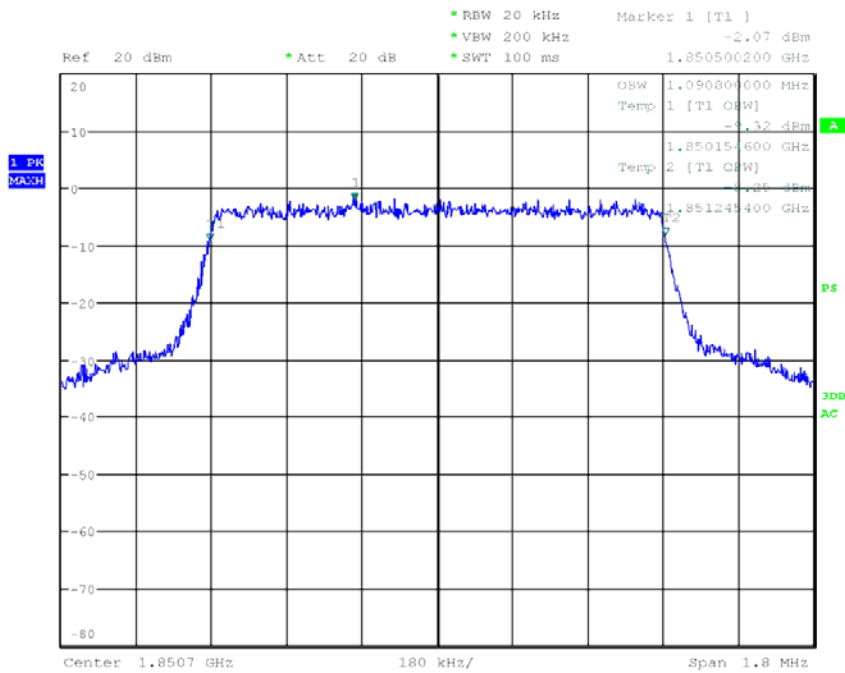
Diagram 35_201



Date: 19.APR.2017 13:33:20

Diagram 35_202

16-QAM-Modulation



Date: 19.APR.2017 13:50:17

Diagram 35_218