



# Appendix B

## E-UTRA Band 4



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## 1. Effective (Isotropic) Radiated Power

### 1.1. Test Result

| BAND  | Bandwidth | Modulation | Channel | RB Configuration | Conducted Power(dBm) | EIRP (dBm) | limit (dBm) | Verdict |
|-------|-----------|------------|---------|------------------|----------------------|------------|-------------|---------|
| Band4 | 1.4MHz    | QPSK       | 19957   | 1RB#0            | 22.50                | 21.3       | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 19957   | 1RB#2            | 22.58                | 21.38      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 19957   | 1RB#5            | 22.29                | 21.09      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 19957   | 3RB#0            | 22.47                | 21.27      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 19957   | 3RB#1            | 22.40                | 21.2       | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 19957   | 3RB#3            | 22.35                | 21.15      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 19957   | 6RB#0            | 21.40                | 20.2       | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 20175   | 1RB#0            | 22.32                | 21.12      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 20175   | 1RB#2            | 22.29                | 21.09      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 20175   | 1RB#5            | 22.27                | 21.07      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 20175   | 3RB#0            | 22.32                | 21.12      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 20175   | 3RB#1            | 22.46                | 21.26      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 20175   | 3RB#3            | 22.48                | 21.28      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 20175   | 6RB#0            | 21.42                | 20.22      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 20393   | 1RB#0            | 21.94                | 20.74      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 20393   | 1RB#2            | 22.02                | 20.82      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 20393   | 1RB#5            | 21.85                | 20.65      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 20393   | 3RB#0            | 22.07                | 20.87      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 20393   | 3RB#1            | 21.98                | 20.78      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 20393   | 3RB#3            | 21.98                | 20.78      | 30.00       | PASS    |
| Band4 | 1.4MHz    | QPSK       | 20393   | 6RB#0            | 21.18                | 19.98      | 30.00       | PASS    |
| Band4 | 1.4MHz    | 16QAM      | 19957   | 1RB#0            | 21.04                | 19.84      | 30.00       | PASS    |
| Band4 | 1.4MHz    | 16QAM      | 19957   | 1RB#2            | 21.26                | 20.06      | 30.00       | PASS    |
| Band4 | 1.4MHz    | 16QAM      | 19957   | 1RB#5            | 21.01                | 19.81      | 30.00       | PASS    |
| Band4 | 1.4MHz    | 16QAM      | 19957   | 3RB#0            | 21.51                | 20.31      | 30.00       | PASS    |
| Band4 | 1.4MHz    | 16QAM      | 19957   | 3RB#1            | 21.55                | 20.35      | 30.00       | PASS    |
| Band4 | 1.4MHz    | 16QAM      | 19957   | 3RB#3            | 21.53                | 20.33      | 30.00       | PASS    |
| Band4 | 1.4MHz    | 16QAM      | 19957   | 6RB#0            | 20.46                | 19.26      | 30.00       | PASS    |
| Band4 | 1.4MHz    | 16QAM      | 20175   | 1RB#0            | 21.09                | 19.89      | 30.00       | PASS    |
| Band4 | 1.4MHz    | 16QAM      | 20175   | 1RB#2            | 21.06                | 19.86      | 30.00       | PASS    |
| Band4 | 1.4MHz    | 16QAM      | 20175   | 1RB#5            | 20.87                | 19.67      | 30.00       | PASS    |
| Band4 | 1.4MHz    | 16QAM      | 20175   | 3RB#0            | 21.46                | 20.26      | 30.00       | PASS    |



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|       |        |       |       |        |       |       |       |      |
|-------|--------|-------|-------|--------|-------|-------|-------|------|
| Band4 | 1.4MHz | 16QAM | 20175 | 3RB#1  | 21.46 | 20.26 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20175 | 3RB#3  | 21.70 | 20.5  | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20175 | 6RB#0  | 20.43 | 19.23 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20393 | 1RB#0  | 20.41 | 19.21 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20393 | 1RB#2  | 20.54 | 19.34 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20393 | 1RB#5  | 20.51 | 19.31 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20393 | 3RB#0  | 20.99 | 19.79 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20393 | 3RB#1  | 21.00 | 19.8  | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20393 | 3RB#3  | 21.43 | 20.23 | 30.00 | PASS |
| Band4 | 1.4MHz | 16QAM | 20393 | 6RB#0  | 20.09 | 18.89 | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 19965 | 1RB#0  | 22.26 | 21.06 | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 19965 | 1RB#8  | 21.95 | 20.75 | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 19965 | 1RB#14 | 21.90 | 20.7  | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 19965 | 8RB#0  | 21.32 | 20.12 | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 19965 | 8RB#4  | 21.07 | 19.87 | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 19965 | 8RB#7  | 21.00 | 19.8  | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 19965 | 15RB#0 | 21.19 | 19.99 | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 20175 | 1RB#0  | 22.15 | 20.95 | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 20175 | 1RB#8  | 21.94 | 20.74 | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 20175 | 1RB#14 | 22.13 | 20.93 | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 20175 | 8RB#0  | 21.00 | 19.8  | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 20175 | 8RB#4  | 21.20 | 20    | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 20175 | 8RB#7  | 21.23 | 20.03 | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 20175 | 15RB#0 | 21.09 | 19.89 | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 20385 | 1RB#0  | 21.76 | 20.56 | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 20385 | 1RB#8  | 21.51 | 20.31 | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 20385 | 1RB#14 | 21.70 | 20.5  | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 20385 | 8RB#0  | 20.96 | 19.76 | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 20385 | 8RB#4  | 20.76 | 19.56 | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 20385 | 8RB#7  | 20.68 | 19.48 | 30.00 | PASS |
| Band4 | 3MHz   | QPSK  | 20385 | 15RB#0 | 20.81 | 19.61 | 30.00 | PASS |
| Band4 | 3MHz   | 16QAM | 19965 | 1RB#0  | 20.77 | 19.57 | 30.00 | PASS |
| Band4 | 3MHz   | 16QAM | 19965 | 1RB#8  | 20.72 | 19.52 | 30.00 | PASS |
| Band4 | 3MHz   | 16QAM | 19965 | 1RB#14 | 20.75 | 19.55 | 30.00 | PASS |
| Band4 | 3MHz   | 16QAM | 19965 | 8RB#0  | 20.56 | 19.36 | 30.00 | PASS |
| Band4 | 3MHz   | 16QAM | 19965 | 8RB#4  | 20.06 | 18.86 | 30.00 | PASS |
| Band4 | 3MHz   | 16QAM | 19965 | 8RB#7  | 20.37 | 19.17 | 30.00 | PASS |
| Band4 | 3MHz   | 16QAM | 19965 | 15RB#0 | 20.19 | 18.99 | 30.00 | PASS |



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|       |      |       |       |         |       |       |       |      |
|-------|------|-------|-------|---------|-------|-------|-------|------|
| Band4 | 3MHz | 16QAM | 20175 | 1RB#0   | 20.86 | 19.66 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20175 | 1RB#8   | 20.71 | 19.51 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20175 | 1RB#14  | 20.59 | 19.39 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20175 | 8RB#0   | 20.02 | 18.82 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20175 | 8RB#4   | 19.95 | 18.75 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20175 | 8RB#7   | 20.06 | 18.86 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20175 | 15RB#0  | 20.14 | 18.94 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20385 | 1RB#0   | 20.36 | 19.16 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20385 | 1RB#8   | 20.59 | 19.39 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20385 | 1RB#14  | 20.60 | 19.4  | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20385 | 8RB#0   | 19.76 | 18.56 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20385 | 8RB#4   | 19.78 | 18.58 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20385 | 8RB#7   | 19.85 | 18.65 | 30.00 | PASS |
| Band4 | 3MHz | 16QAM | 20385 | 15RB#0  | 19.91 | 18.71 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 19975 | 1RB#0   | 22.00 | 20.8  | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 19975 | 1RB#12  | 21.72 | 20.52 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 19975 | 1RB#24  | 21.77 | 20.57 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 19975 | 12RB#0  | 21.16 | 19.96 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 19975 | 12RB#6  | 20.83 | 19.63 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 19975 | 12RB#13 | 20.88 | 19.68 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 19975 | 25RB#0  | 21.00 | 19.8  | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 20175 | 1RB#0   | 21.87 | 20.67 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 20175 | 1RB#12  | 22.18 | 20.98 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 20175 | 1RB#24  | 22.17 | 20.97 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 20175 | 12RB#0  | 20.94 | 19.74 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 20175 | 12RB#6  | 21.24 | 20.04 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 20175 | 12RB#13 | 21.21 | 20.01 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 20175 | 25RB#0  | 20.98 | 19.78 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 20375 | 1RB#0   | 21.99 | 20.79 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 20375 | 1RB#12  | 21.56 | 20.36 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 20375 | 1RB#24  | 21.96 | 20.76 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 20375 | 12RB#0  | 20.94 | 19.74 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 20375 | 12RB#6  | 20.67 | 19.47 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 20375 | 12RB#13 | 20.87 | 19.67 | 30.00 | PASS |
| Band4 | 5MHz | QPSK  | 20375 | 25RB#0  | 20.82 | 19.62 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 19975 | 1RB#0   | 20.73 | 19.53 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 19975 | 1RB#12  | 20.97 | 19.77 | 30.00 | PASS |
| Band4 | 5MHz | 16QAM | 19975 | 1RB#24  | 20.69 | 19.49 | 30.00 | PASS |



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|       |       |       |       |         |       |       |       |      |
|-------|-------|-------|-------|---------|-------|-------|-------|------|
| Band4 | 5MHz  | 16QAM | 19975 | 12RB#0  | 19.98 | 18.78 | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 19975 | 12RB#6  | 20.07 | 18.87 | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 19975 | 12RB#13 | 19.81 | 18.61 | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 19975 | 25RB#0  | 20.17 | 18.97 | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 20175 | 1RB#0   | 20.77 | 19.57 | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 20175 | 1RB#12  | 21.06 | 19.86 | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 20175 | 1RB#24  | 20.65 | 19.45 | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 20175 | 12RB#0  | 20.14 | 18.94 | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 20175 | 12RB#6  | 20.05 | 18.85 | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 20175 | 12RB#13 | 20.09 | 18.89 | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 20175 | 25RB#0  | 20.13 | 18.93 | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 20375 | 1RB#0   | 20.39 | 19.19 | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 20375 | 1RB#12  | 20.81 | 19.61 | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 20375 | 1RB#24  | 20.66 | 19.46 | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 20375 | 12RB#0  | 19.89 | 18.69 | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 20375 | 12RB#6  | 19.79 | 18.59 | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 20375 | 12RB#13 | 19.80 | 18.6  | 30.00 | PASS |
| Band4 | 5MHz  | 16QAM | 20375 | 25RB#0  | 19.90 | 18.7  | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20000 | 1RB#0   | 22.00 | 20.8  | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20000 | 1RB#24  | 21.90 | 20.7  | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20000 | 1RB#49  | 21.78 | 20.58 | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20000 | 25RB#0  | 21.03 | 19.83 | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20000 | 25RB#12 | 20.87 | 19.67 | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20000 | 25RB#25 | 20.87 | 19.67 | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20000 | 50RB#0  | 21.07 | 19.87 | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20175 | 1RB#0   | 21.78 | 20.58 | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20175 | 1RB#24  | 22.48 | 21.28 | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20175 | 1RB#49  | 22.10 | 20.9  | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20175 | 25RB#0  | 20.88 | 19.68 | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20175 | 25RB#12 | 21.25 | 20.05 | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20175 | 25RB#25 | 21.03 | 19.83 | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20175 | 50RB#0  | 20.88 | 19.68 | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20350 | 1RB#0   | 22.12 | 20.92 | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20350 | 1RB#24  | 21.66 | 20.46 | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20350 | 1RB#49  | 21.33 | 20.13 | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20350 | 25RB#0  | 21.20 | 20    | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20350 | 25RB#12 | 20.61 | 19.41 | 30.00 | PASS |
| Band4 | 10MHz | QPSK  | 20350 | 25RB#25 | 20.55 | 19.35 | 30.00 | PASS |



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|       |       |       |       |         |       |       |       |      |
|-------|-------|-------|-------|---------|-------|-------|-------|------|
| Band4 | 10MHz | QPSK  | 20350 | 50RB#0  | 20.93 | 19.73 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20000 | 1RB#0   | 20.83 | 19.63 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20000 | 1RB#24  | 20.85 | 19.65 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20000 | 1RB#49  | 20.43 | 19.23 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20000 | 25RB#0  | 20.10 | 18.9  | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20000 | 25RB#12 | 20.06 | 18.86 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20000 | 25RB#25 | 20.13 | 18.93 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20000 | 50RB#0  | 20.16 | 18.96 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20175 | 1RB#0   | 20.61 | 19.41 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20175 | 1RB#24  | 20.74 | 19.54 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20175 | 1RB#49  | 20.54 | 19.34 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20175 | 25RB#0  | 20.17 | 18.97 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20175 | 25RB#12 | 20.11 | 18.91 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20175 | 25RB#25 | 19.96 | 18.76 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20175 | 50RB#0  | 20.15 | 18.95 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20350 | 1RB#0   | 20.60 | 19.4  | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20350 | 1RB#24  | 20.53 | 19.33 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20350 | 1RB#49  | 20.57 | 19.37 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20350 | 25RB#0  | 19.90 | 18.7  | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20350 | 25RB#12 | 19.86 | 18.66 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20350 | 25RB#25 | 19.74 | 18.54 | 30.00 | PASS |
| Band4 | 10MHz | 16QAM | 20350 | 50RB#0  | 19.91 | 18.71 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20025 | 1RB#0   | 21.95 | 20.75 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20025 | 1RB#38  | 21.52 | 20.32 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20025 | 1RB#74  | 21.93 | 20.73 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20025 | 36RB#0  | 20.86 | 19.66 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20025 | 36RB#18 | 20.81 | 19.61 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20025 | 36RB#39 | 20.87 | 19.67 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20025 | 75RB#0  | 20.93 | 19.73 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20175 | 1RB#0   | 21.59 | 20.39 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20175 | 1RB#38  | 22.35 | 21.15 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20175 | 1RB#74  | 21.86 | 20.66 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20175 | 36RB#0  | 20.75 | 19.55 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20175 | 36RB#18 | 21.17 | 19.97 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20175 | 36RB#39 | 20.98 | 19.78 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20175 | 75RB#0  | 20.83 | 19.63 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20325 | 1RB#0   | 22.12 | 20.92 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20325 | 1RB#38  | 21.38 | 20.18 | 30.00 | PASS |



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|       |       |       |       |         |       |       |       |      |
|-------|-------|-------|-------|---------|-------|-------|-------|------|
| Band4 | 15MHz | QPSK  | 20325 | 1RB#74  | 21.15 | 19.95 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20325 | 36RB#0  | 21.17 | 19.97 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20325 | 36RB#18 | 20.54 | 19.34 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20325 | 36RB#39 | 20.64 | 19.44 | 30.00 | PASS |
| Band4 | 15MHz | QPSK  | 20325 | 75RB#0  | 20.95 | 19.75 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20025 | 1RB#0   | 20.72 | 19.52 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20025 | 1RB#38  | 20.65 | 19.45 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20025 | 1RB#74  | 20.63 | 19.43 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20025 | 36RB#0  | 19.96 | 18.76 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20025 | 36RB#18 | 19.90 | 18.7  | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20025 | 36RB#39 | 19.96 | 18.76 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20025 | 75RB#0  | 20.00 | 18.8  | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20175 | 1RB#0   | 20.47 | 19.27 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20175 | 1RB#38  | 20.41 | 19.21 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20175 | 1RB#74  | 20.51 | 19.31 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20175 | 36RB#0  | 20.12 | 18.92 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20175 | 36RB#18 | 19.98 | 18.78 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20175 | 36RB#39 | 19.94 | 18.74 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20175 | 75RB#0  | 19.91 | 18.71 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20325 | 1RB#0   | 20.64 | 19.44 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20325 | 1RB#38  | 20.50 | 19.3  | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20325 | 1RB#74  | 20.48 | 19.28 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20325 | 36RB#0  | 19.77 | 18.57 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20325 | 36RB#18 | 19.94 | 18.74 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20325 | 36RB#39 | 19.78 | 18.58 | 30.00 | PASS |
| Band4 | 15MHz | 16QAM | 20325 | 75RB#0  | 19.85 | 18.65 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20050 | 1RB#0   | 21.89 | 20.69 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20050 | 1RB#49  | 21.66 | 20.46 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20050 | 1RB#99  | 22.33 | 21.13 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20050 | 50RB#0  | 20.65 | 19.45 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20050 | 50RB#25 | 20.93 | 19.73 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20050 | 50RB#50 | 21.02 | 19.82 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20050 | 100RB#0 | 20.79 | 19.59 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20175 | 1RB#0   | 21.37 | 20.17 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20175 | 1RB#49  | 22.96 | 21.76 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20175 | 1RB#99  | 21.74 | 20.54 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20175 | 50RB#0  | 20.82 | 19.62 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20175 | 50RB#25 | 21.48 | 20.28 | 30.00 | PASS |



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|       |       |       |       |         |       |       |       |      |
|-------|-------|-------|-------|---------|-------|-------|-------|------|
| Band4 | 20MHz | QPSK  | 20175 | 50RB#50 | 21.01 | 19.81 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20175 | 100RB#0 | 20.70 | 19.5  | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20300 | 1RB#0   | 22.03 | 20.83 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20300 | 1RB#49  | 21.60 | 20.4  | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20300 | 1RB#99  | 20.70 | 19.5  | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20300 | 50RB#0  | 21.27 | 20.07 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20300 | 50RB#25 | 20.54 | 19.34 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20300 | 50RB#50 | 20.21 | 19.01 | 30.00 | PASS |
| Band4 | 20MHz | QPSK  | 20300 | 100RB#0 | 20.97 | 19.77 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 1RB#0   | 20.65 | 19.45 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 1RB#49  | 20.61 | 19.41 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 1RB#99  | 20.58 | 19.38 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 50RB#0  | 19.85 | 18.65 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 50RB#25 | 19.99 | 18.79 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 50RB#50 | 19.89 | 18.69 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | 19.77 | 18.57 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 1RB#0   | 20.56 | 19.36 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 1RB#49  | 20.70 | 19.5  | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 1RB#99  | 20.44 | 19.24 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 50RB#0  | 19.90 | 18.7  | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 50RB#25 | 20.07 | 18.87 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 50RB#50 | 19.97 | 18.77 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | 19.96 | 18.76 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 1RB#0   | 20.58 | 19.38 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 1RB#49  | 20.50 | 19.3  | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 1RB#99  | 20.43 | 19.23 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 50RB#0  | 19.95 | 18.75 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 50RB#25 | 19.73 | 18.53 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 50RB#50 | 19.83 | 18.63 | 30.00 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | 19.95 | 18.75 | 30.00 | PASS |

Remark:

a: For getting the EIRP (Efficient Isotropic Radiated Power), the following formula should be taken to calculate it,

ERP [dBm] = Conducted Power [dBm] + Gain [dBi]

EIRP [dBm] = Conducted Power [dBm] + Gain [dBi]



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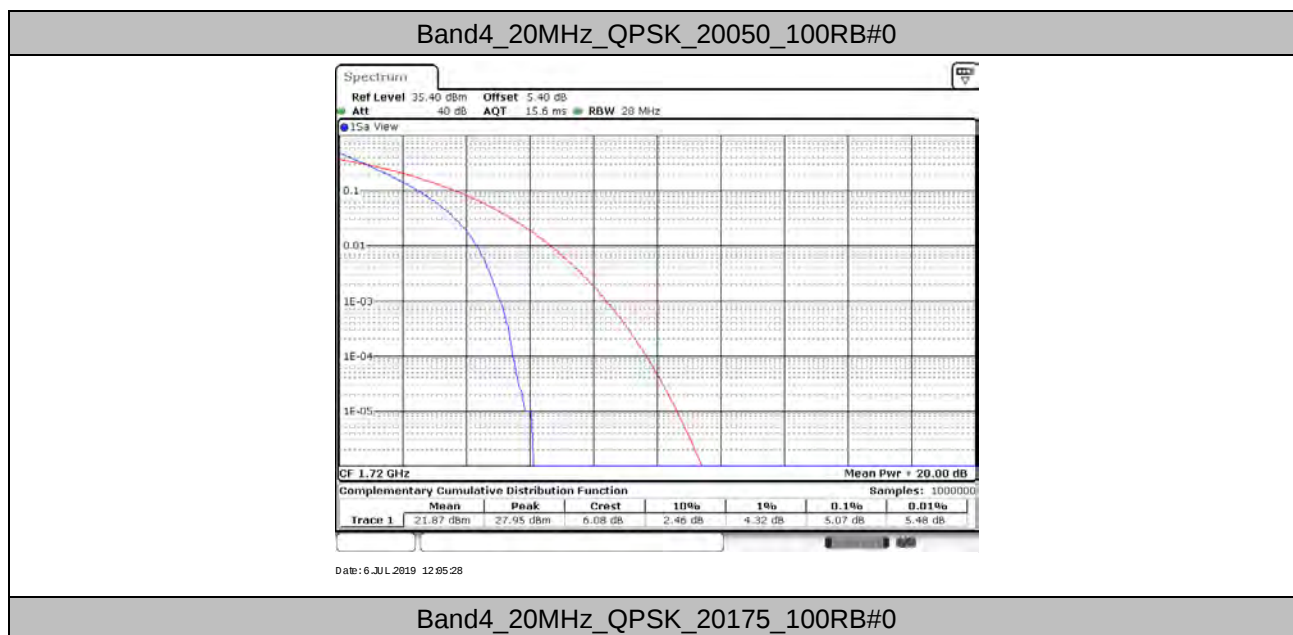


## 2. Peak-to-Average Ratio(CCDF)

### 2.1. Test Result

| BAND  | Bandwidth | Modulation | Channel | RB Configuration | Result(dB) | Limit(dB) | Verdict |
|-------|-----------|------------|---------|------------------|------------|-----------|---------|
| Band4 | 20MHz     | QPSK       | 20050   | 100RB#0          | 5.07       | 13        | PASS    |
| Band4 | 20MHz     | QPSK       | 20175   | 100RB#0          | 5.10       | 13        | PASS    |
| Band4 | 20MHz     | QPSK       | 20300   | 100RB#0          | 4.87       | 13        | PASS    |
| Band4 | 20MHz     | 16QAM      | 20050   | 100RB#0          | 5.88       | 13        | PASS    |
| Band4 | 20MHz     | 16QAM      | 20175   | 100RB#0          | 5.94       | 13        | PASS    |
| Band4 | 20MHz     | 16QAM      | 20300   | 100RB#0          | 5.77       | 13        | PASS    |

### 2.2. Test Plots





Band4\_20MHz\_QPSK\_20300\_100RB#0



Band4\_20MHz\_16QAM\_20050\_100RB#0



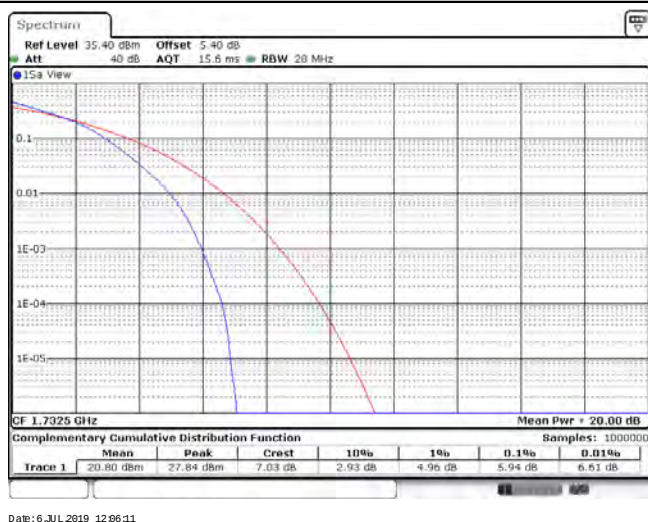
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Band4\_20MHz\_16QAM\_20175\_100RB#0



Band4\_20MHz\_16QAM\_20300\_100RB#0





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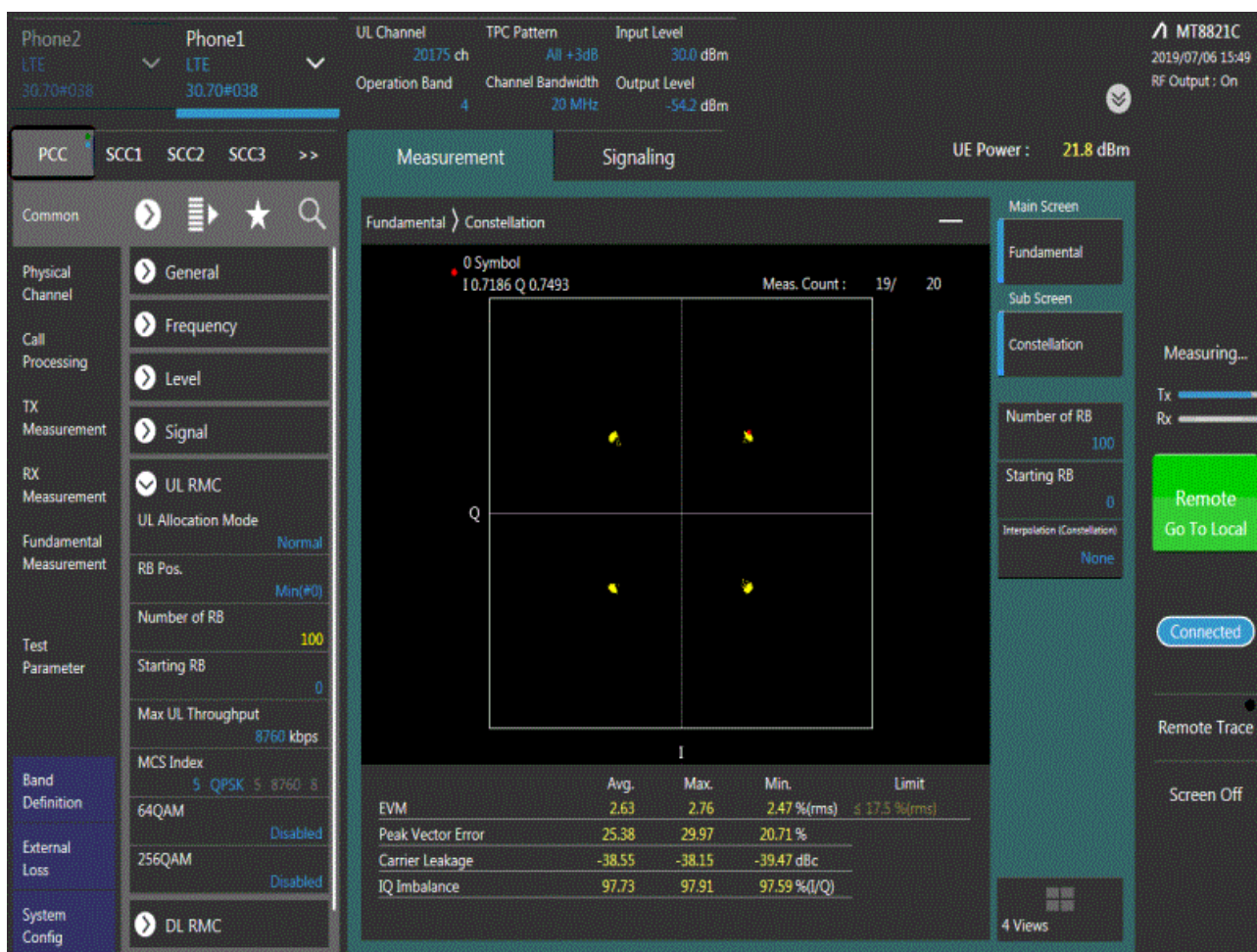


### 3. Modulation Characteristics

#### 3.1. Test BAND = LTE Band 4

#### 3.2. Test Mode = LTE /TM1 20MHz

##### 3.2.1. Test Channel = MCH



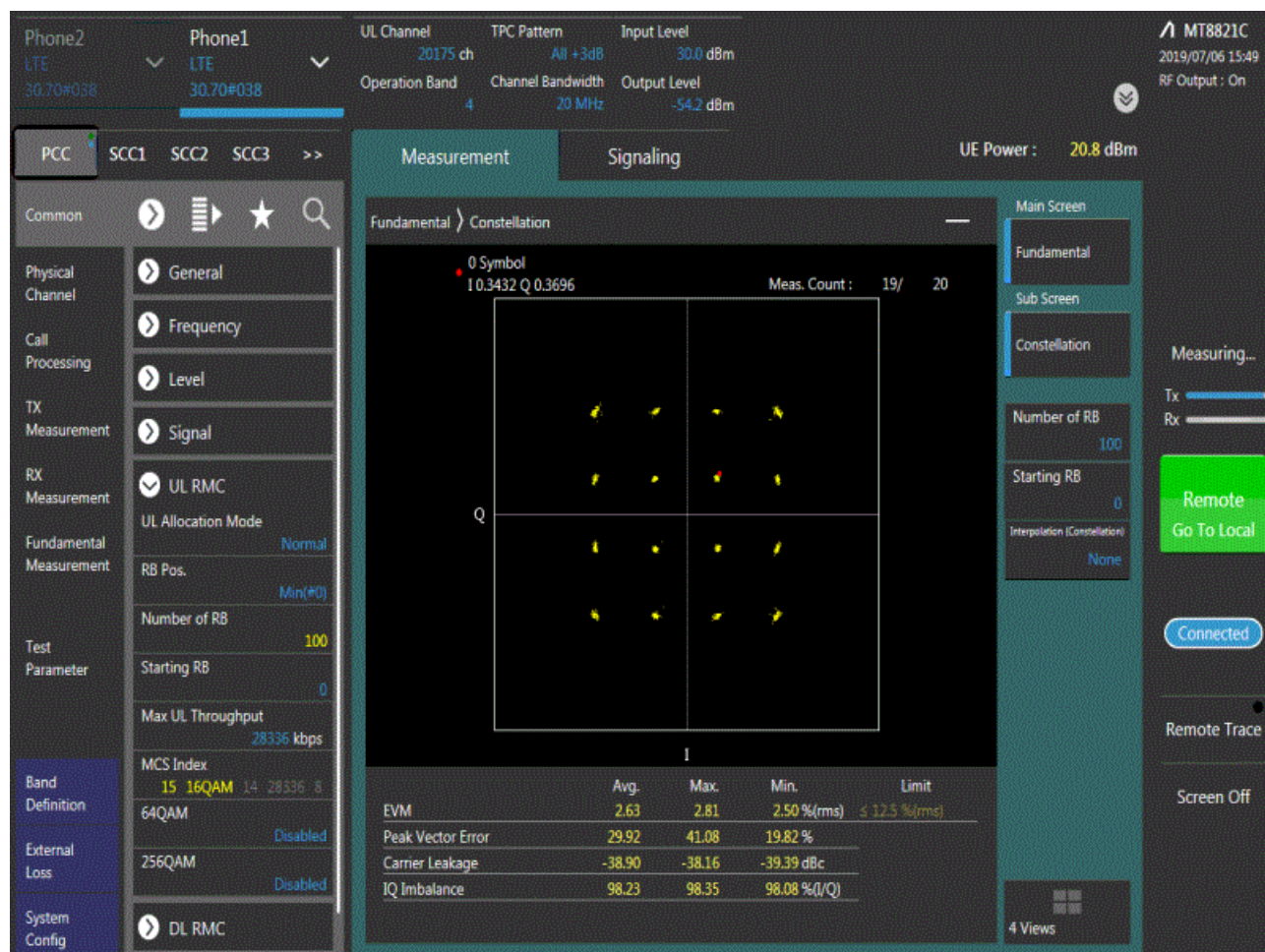
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### 3.3. Test Mode = LTE /TM2 20MHz

### 3.3.1. Test Channel = MCH



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## 4. 26dB Bandwidth and Occupied Bandwidth

### 4.1. Test Result

| BAND  | Bandwidth | Modulation | Channel | RB Configuration | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
|-------|-----------|------------|---------|------------------|--------------------------|----------------------|---------|
| Band4 | 1.4MHz    | QPSK       | 19957   | 6RB#0            | 1.094                    | 1.311                | PASS    |
| Band4 | 1.4MHz    | QPSK       | 20175   | 6RB#0            | 1.097                    | 1.293                | PASS    |
| Band4 | 1.4MHz    | QPSK       | 20393   | 6RB#0            | 1.091                    | 1.296                | PASS    |
| Band4 | 1.4MHz    | 16QAM      | 19957   | 6RB#0            | 1.091                    | 1.284                | PASS    |
| Band4 | 1.4MHz    | 16QAM      | 20175   | 6RB#0            | 1.091                    | 1.299                | PASS    |
| Band4 | 1.4MHz    | 16QAM      | 20393   | 6RB#0            | 1.091                    | 1.284                | PASS    |
| Band4 | 3MHz      | QPSK       | 19965   | 15RB#0           | 2.697                    | 3.000                | PASS    |
| Band4 | 3MHz      | QPSK       | 20175   | 15RB#0           | 2.697                    | 2.988                | PASS    |
| Band4 | 3MHz      | QPSK       | 20385   | 15RB#0           | 2.703                    | 2.994                | PASS    |
| Band4 | 3MHz      | 16QAM      | 19965   | 15RB#0           | 2.685                    | 2.976                | PASS    |
| Band4 | 3MHz      | 16QAM      | 20175   | 15RB#0           | 2.685                    | 2.964                | PASS    |
| Band4 | 3MHz      | 16QAM      | 20385   | 15RB#0           | 2.685                    | 2.976                | PASS    |
| Band4 | 5MHz      | QPSK       | 19975   | 25RB#0           | 4.476                    | 4.930                | PASS    |
| Band4 | 5MHz      | QPSK       | 20175   | 25RB#0           | 4.466                    | 4.940                | PASS    |
| Band4 | 5MHz      | QPSK       | 20375   | 25RB#0           | 4.466                    | 4.900                | PASS    |
| Band4 | 5MHz      | 16QAM      | 19975   | 25RB#0           | 4.496                    | 4.950                | PASS    |
| Band4 | 5MHz      | 16QAM      | 20175   | 25RB#0           | 4.496                    | 4.980                | PASS    |
| Band4 | 5MHz      | 16QAM      | 20375   | 25RB#0           | 4.496                    | 4.970                | PASS    |
| Band4 | 10MHz     | QPSK       | 20000   | 50RB#0           | 8.931                    | 9.720                | PASS    |
| Band4 | 10MHz     | QPSK       | 20175   | 50RB#0           | 8.911                    | 9.720                | PASS    |
| Band4 | 10MHz     | QPSK       | 20350   | 50RB#0           | 8.911                    | 9.700                | PASS    |
| Band4 | 10MHz     | 16QAM      | 20000   | 50RB#0           | 8.911                    | 9.700                | PASS    |
| Band4 | 10MHz     | 16QAM      | 20175   | 50RB#0           | 8.911                    | 9.740                | PASS    |
| Band4 | 10MHz     | 16QAM      | 20350   | 50RB#0           | 8.911                    | 9.760                | PASS    |
| Band4 | 15MHz     | QPSK       | 20025   | 75RB#0           | 13.457                   | 14.700               | PASS    |
| Band4 | 15MHz     | QPSK       | 20175   | 75RB#0           | 13.457                   | 14.730               | PASS    |
| Band4 | 15MHz     | QPSK       | 20325   | 75RB#0           | 13.397                   | 14.760               | PASS    |
| Band4 | 15MHz     | 16QAM      | 20025   | 75RB#0           | 13.427                   | 14.700               | PASS    |
| Band4 | 15MHz     | 16QAM      | 20175   | 75RB#0           | 13.427                   | 14.700               | PASS    |
| Band4 | 15MHz     | 16QAM      | 20325   | 75RB#0           | 13.397                   | 14.760               | PASS    |
| Band4 | 20MHz     | QPSK       | 20050   | 100RB#0          | 17.822                   | 19.480               | PASS    |



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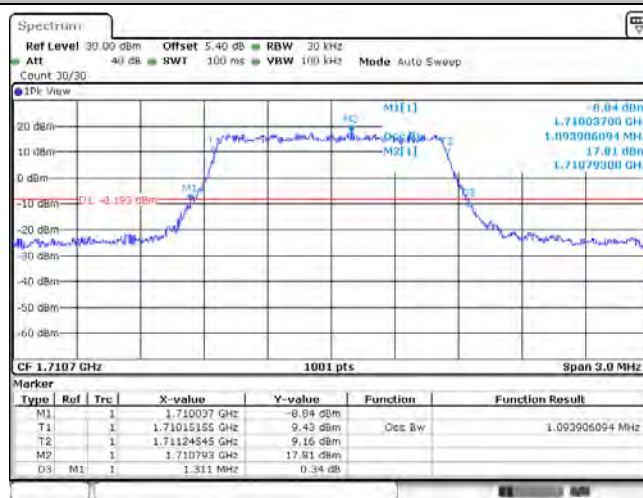
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|       |       |       |       |         |        |        |      |
|-------|-------|-------|-------|---------|--------|--------|------|
| Band4 | 20MHz | QPSK  | 20175 | 100RB#0 | 17.862 | 19.440 | PASS |
| Band4 | 20MHz | QPSK  | 20300 | 100RB#0 | 17.782 | 19.320 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | 17.862 | 19.360 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | 17.822 | 19.480 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | 17.822 | 19.320 | PASS |

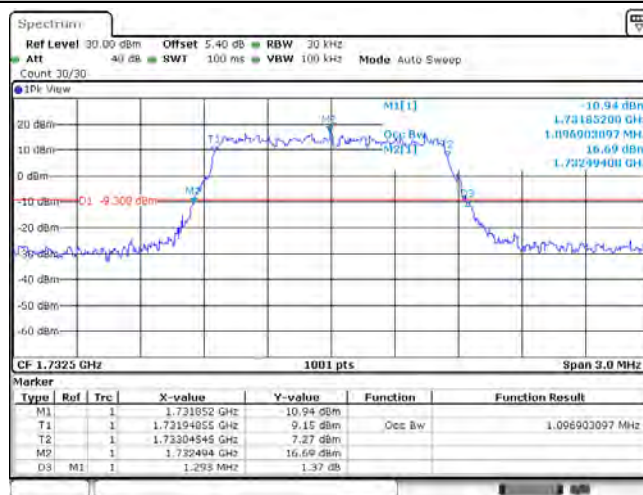
## 4.2. Test Plots

Band4\_1.4MHz\_QPSK\_19957\_6RB#0



Date: 6 JUL 2019 11:31:36

Band4\_1.4MHz\_QPSK\_20175\_6RB#0



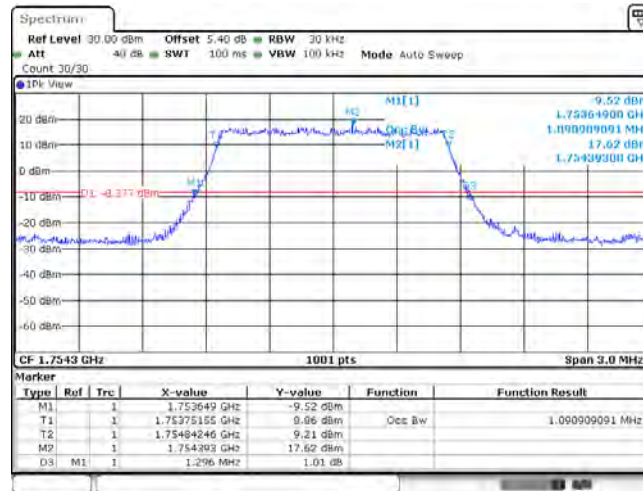
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Band4\_1.4MHz\_QPSK\_20393\_6RB#0



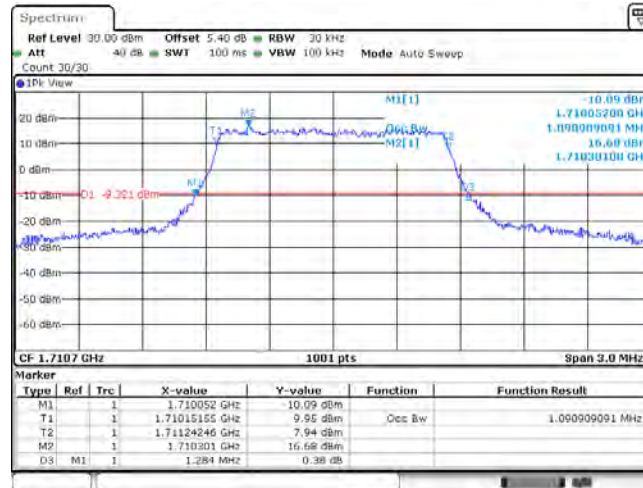
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Date: 6 JUL 2019 11:32:40

## Band4\_1.4MHz\_16QAM\_19957\_6RB#0



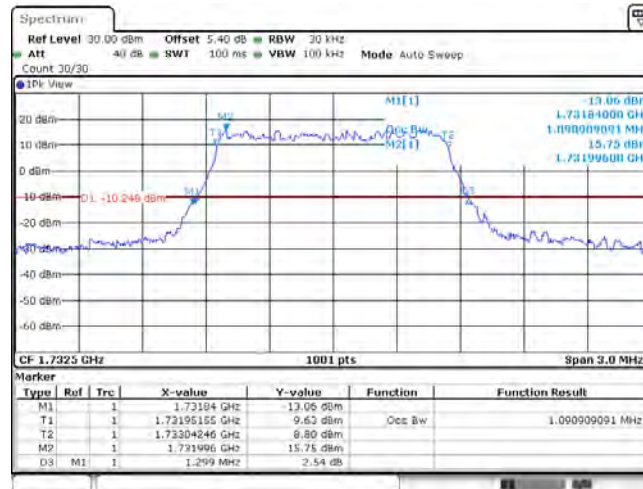
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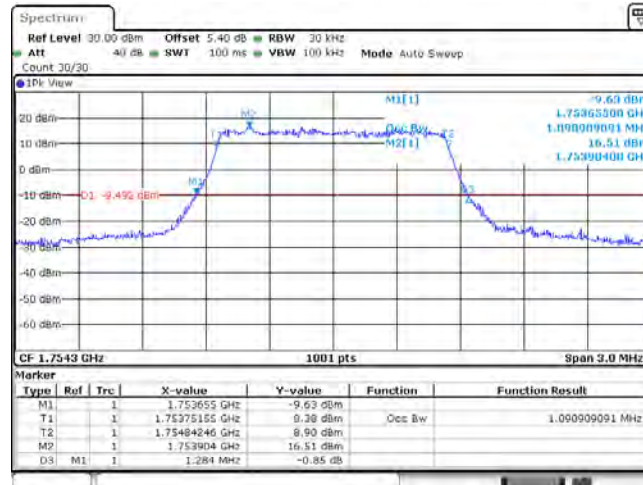
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## Band4\_1.4MHz\_16QAM\_20393\_6RB#0



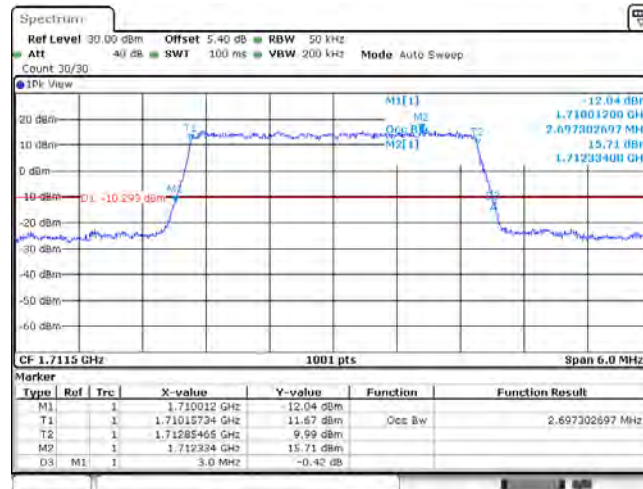
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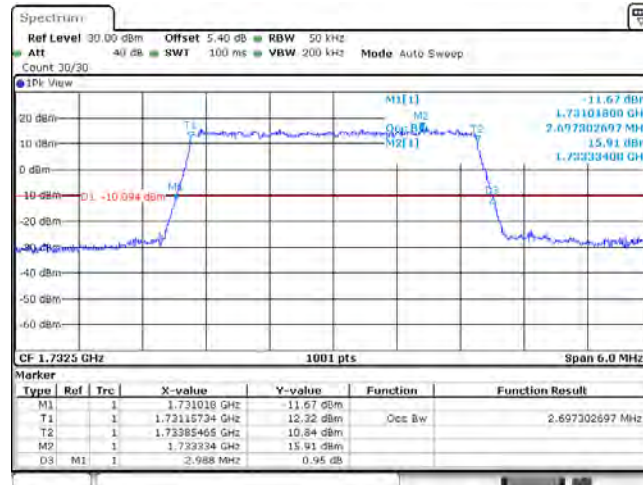
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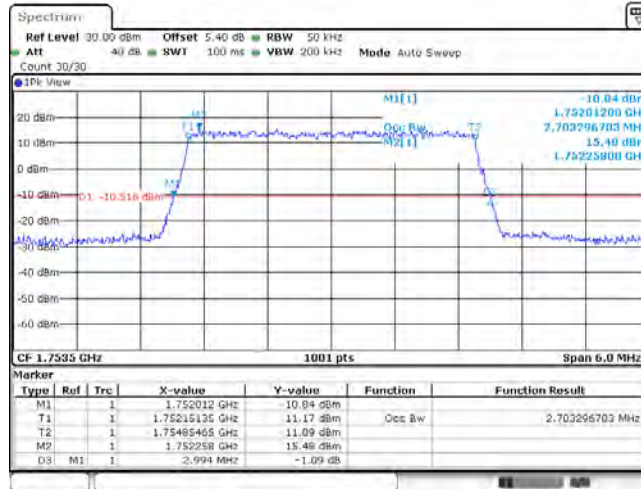
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Date: 6 JUL 2019 11:33:48

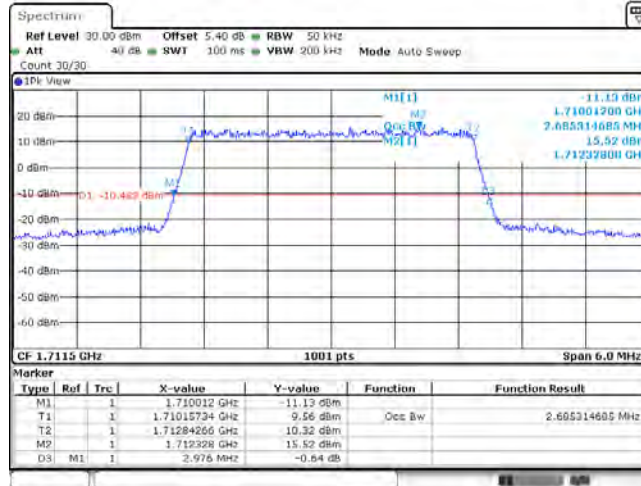
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Date: 6 JUL 2019 11:34:29

## Band4\_3MHz\_16QAM\_19965\_15RB#0



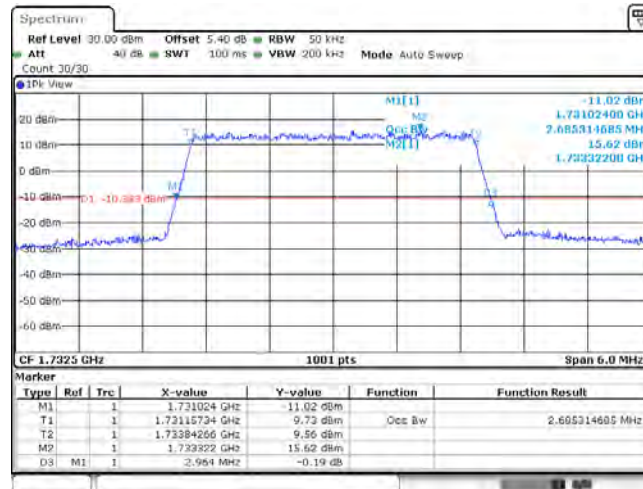
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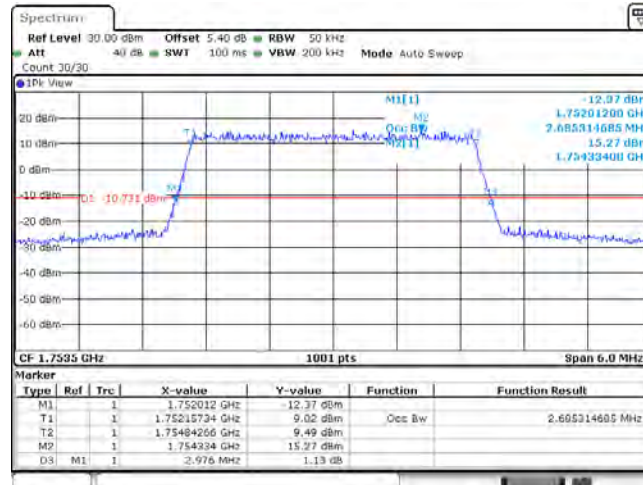
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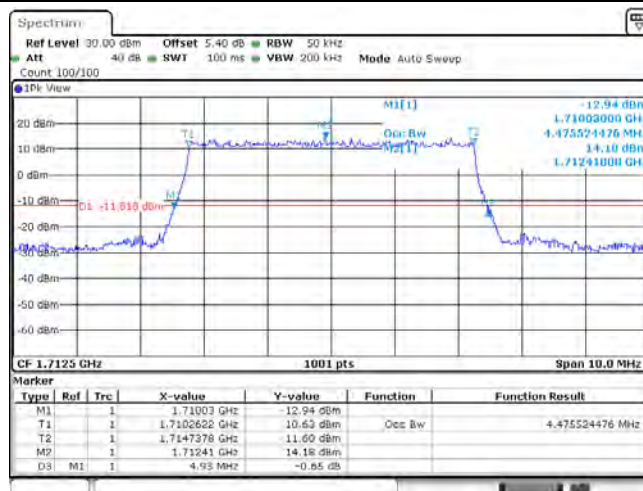
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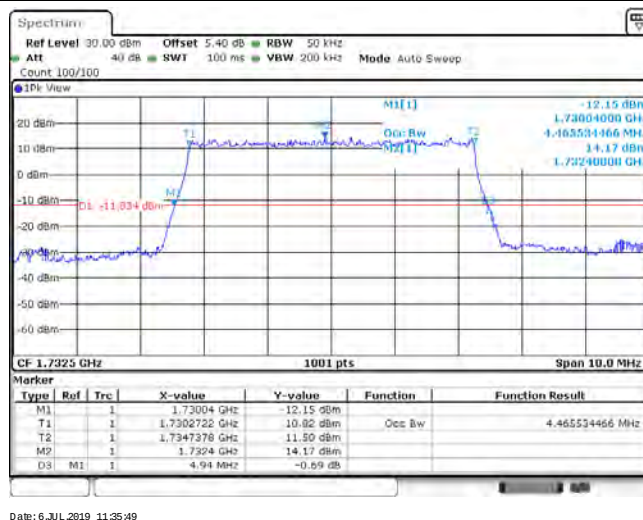


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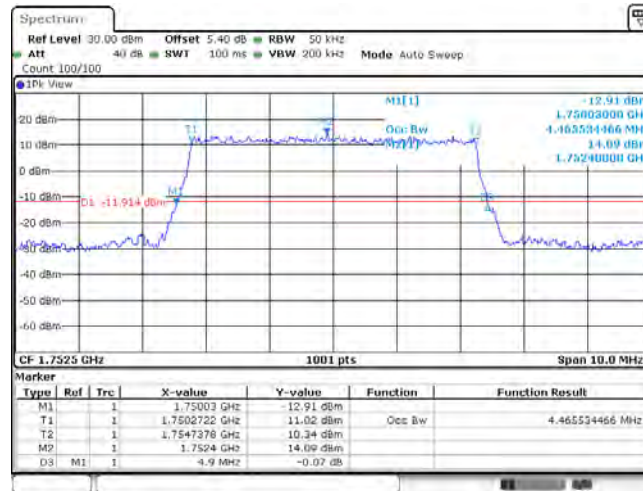
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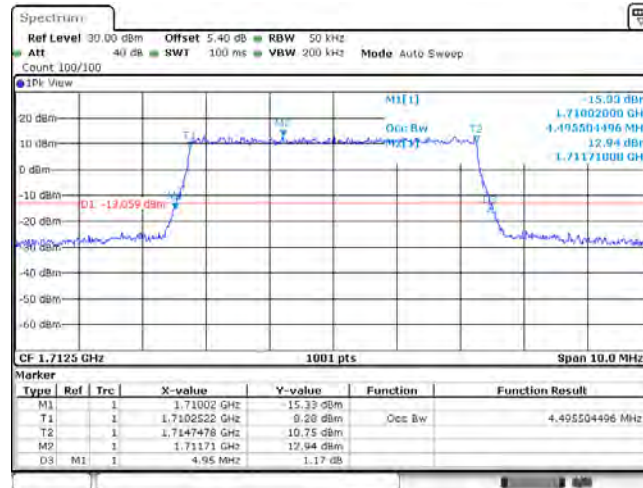


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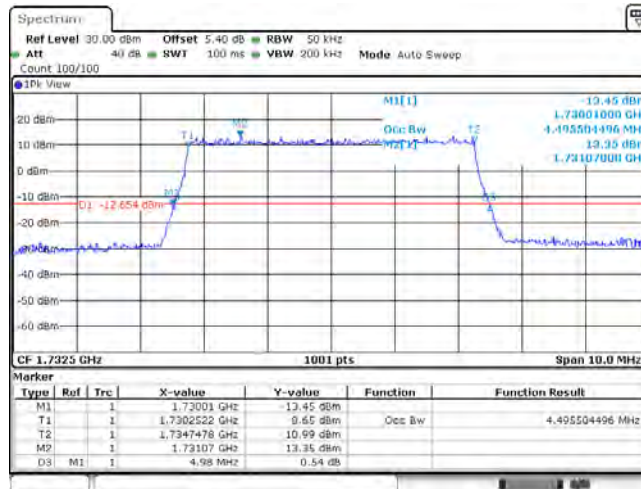
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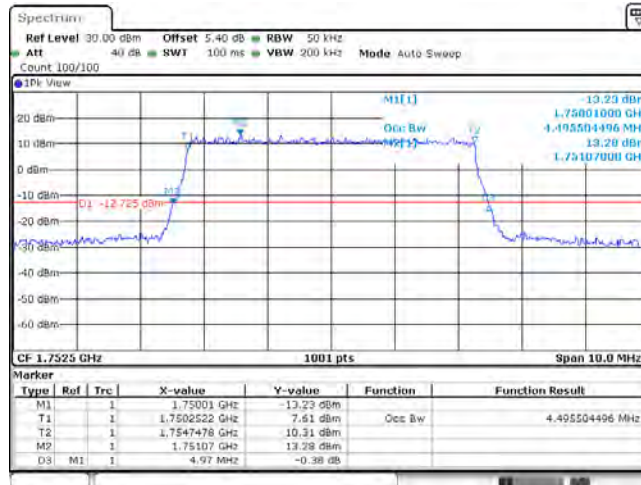
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Date: 6 JUL 2019 11:36:12

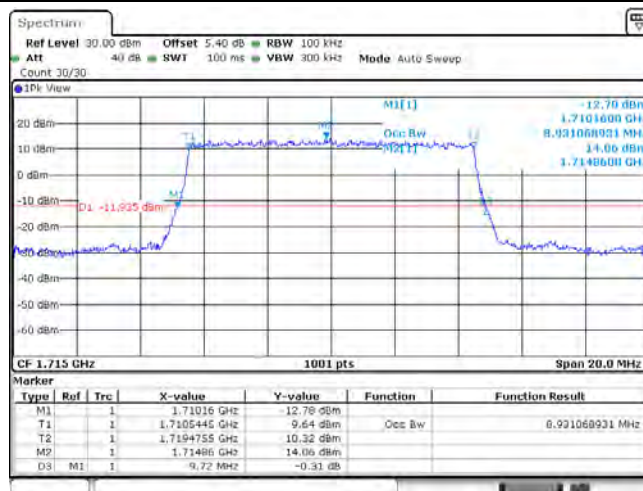
## Band4\_5MHz\_16QAM\_20375\_25RB#0



Date: 6 JUL 2019 11:36:58

## Band4\_10MHz\_QPSK\_20000\_50RB#0





Date: 6 JUL 2019 11:37:18

## Band4\_10MHz\_QPSK\_20175\_50RB#0



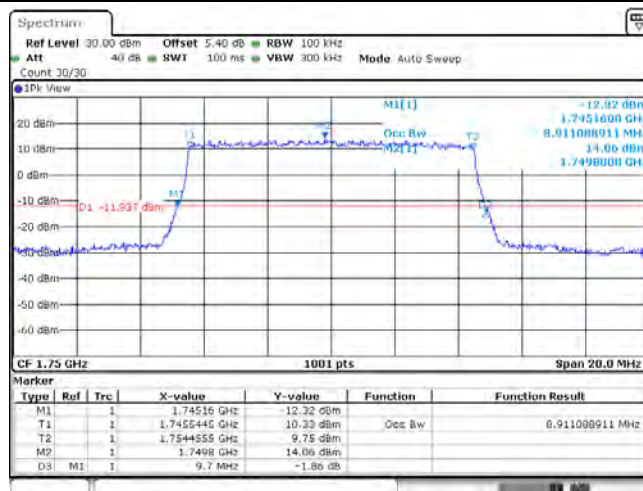
Date: 6 JUL 2019 11:37:58

## Band4\_10MHz\_QPSK\_20350\_50RB#0



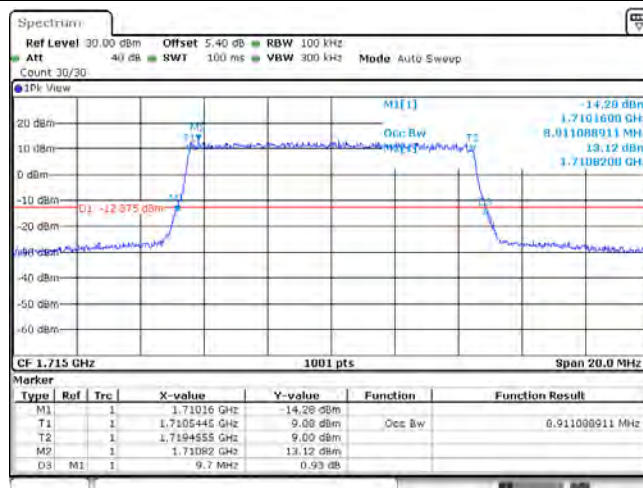
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Date: 6 JUL 2019 11:38:22

## Band4\_10MHz\_16QAM\_20000\_50RB#0



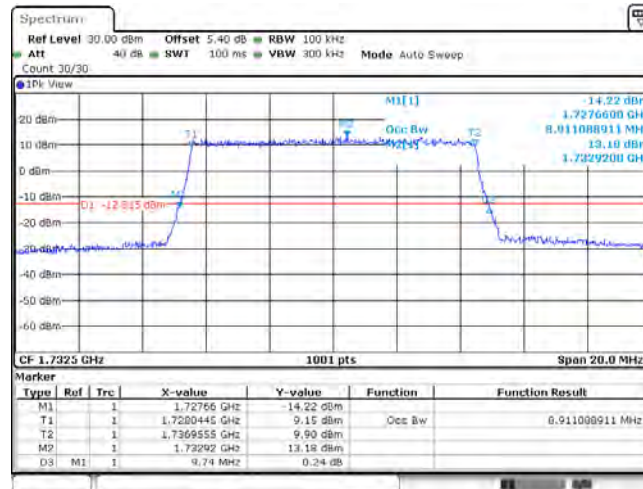
Date: 6 JUL 2019 11:37:34

## Band4\_10MHz\_16QAM\_20175\_50RB#0



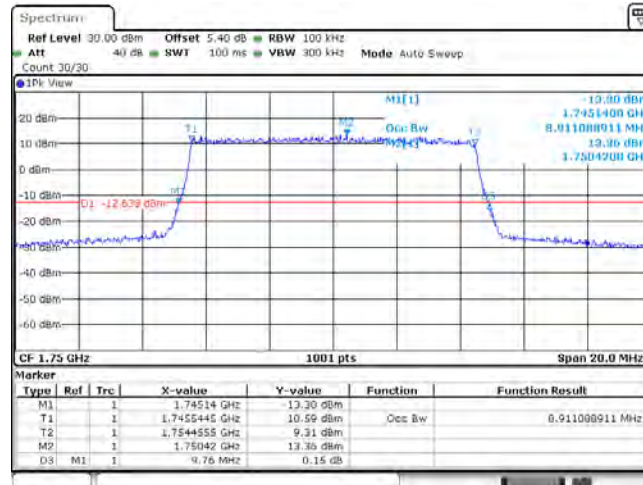
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Date: 6 JUL 2019 11:38:06

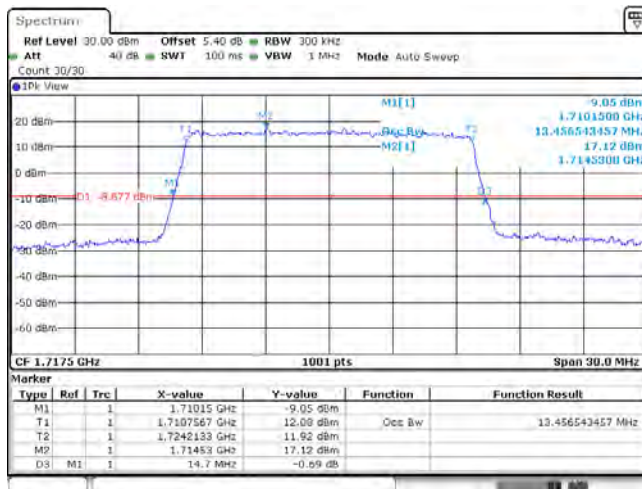
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Date: 6 JUL 2019 11:38:38

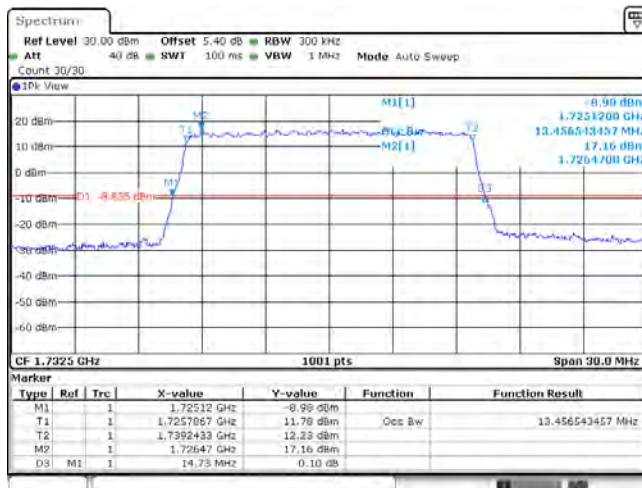
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Date: 6 JUL 2019 11:38:58

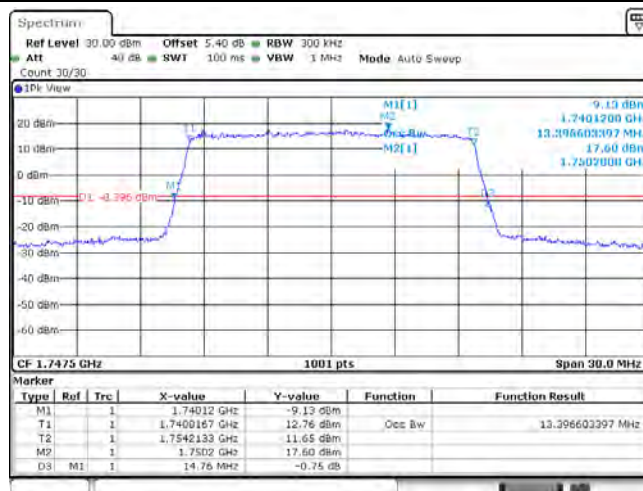
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Date: 6 JUL 2019 11:39:30

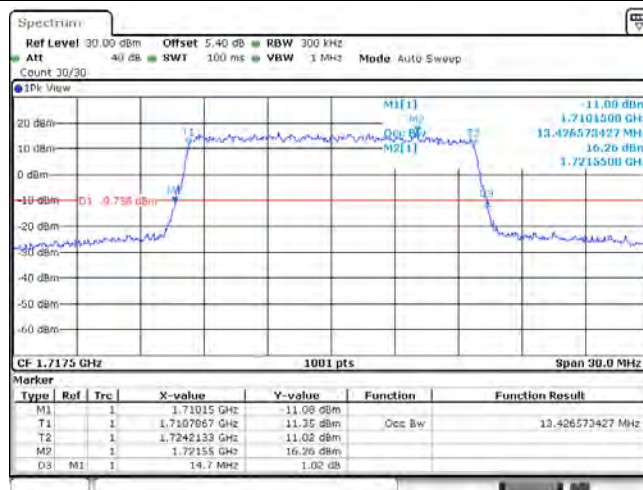
## Band4\_15MHz\_QPSK\_20325\_75RB#0





Date: 6 JUL 2019 11:48:02

## Band4\_15MHz\_16QAM\_20025\_75RB#0



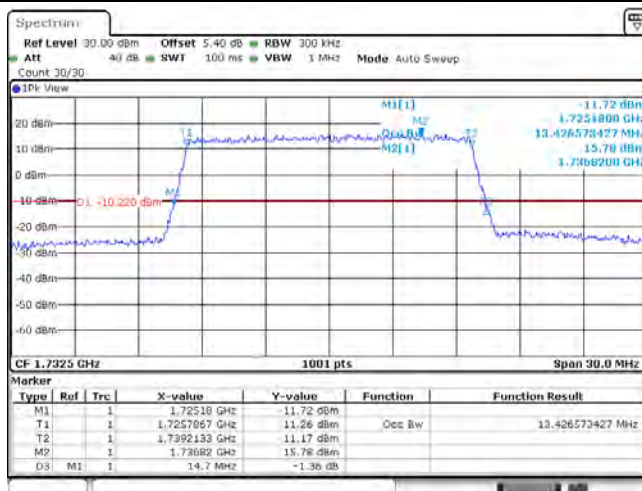
Date: 6 JUL 2019 11:39:14

## Band4\_15MHz\_16QAM\_20175\_75RB#0



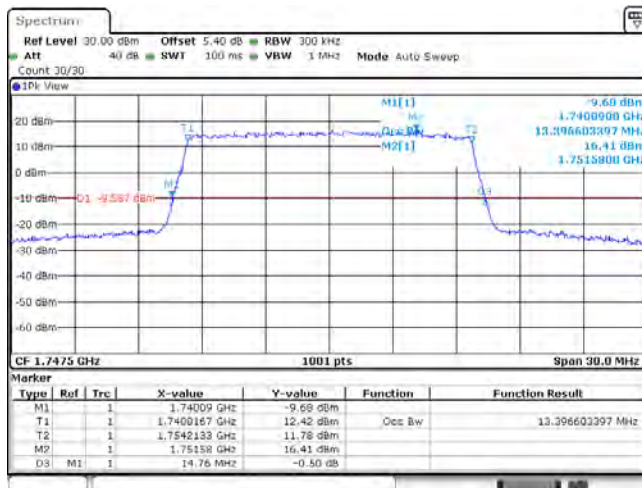
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Date: 6 JUL 2019 11:39:46

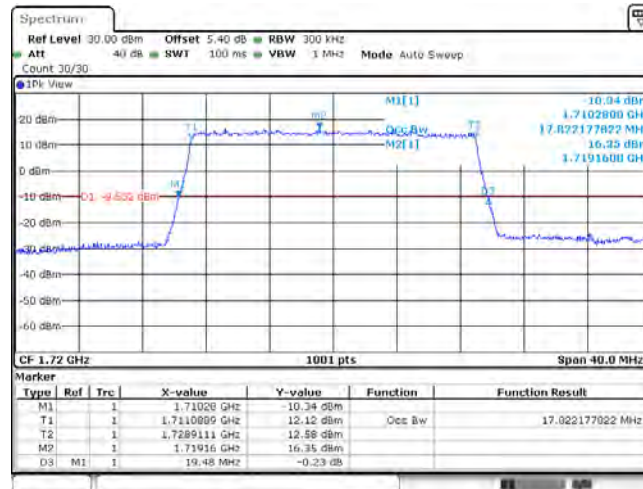
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Date: 6 JUL 2019 11:40:18

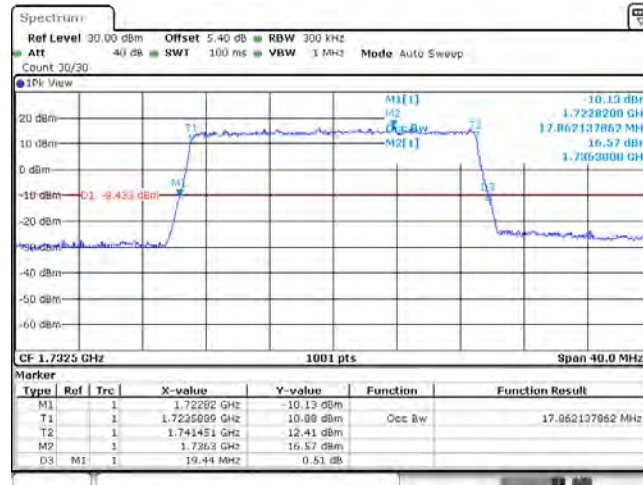
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Date: 6 JUL 2019 11:48:38

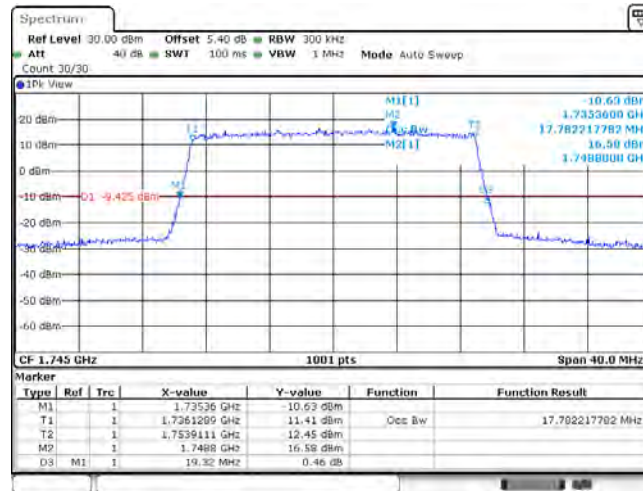
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Date: 6 JUL 2019 11:41:18

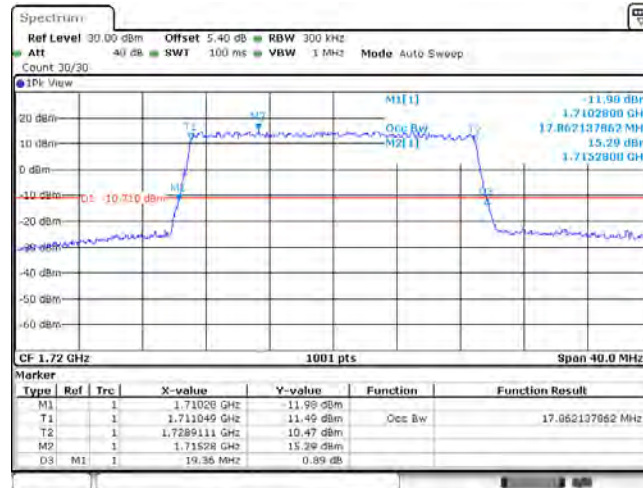
## Band4\_20MHz\_QPSK\_20300\_100RB#0





Date: 6 JUL 2019 11:41:42

## Band4\_20MHz\_16QAM\_20050\_100RB#0



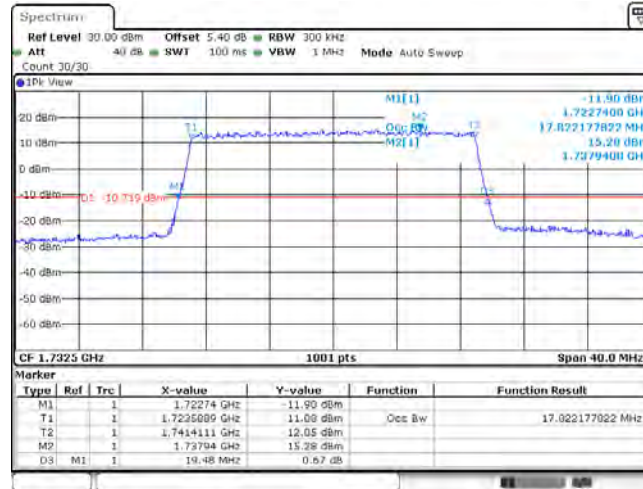
Date: 6 JUL 2019 11:40:54

## Band4\_20MHz\_16QAM\_20175\_100RB#0



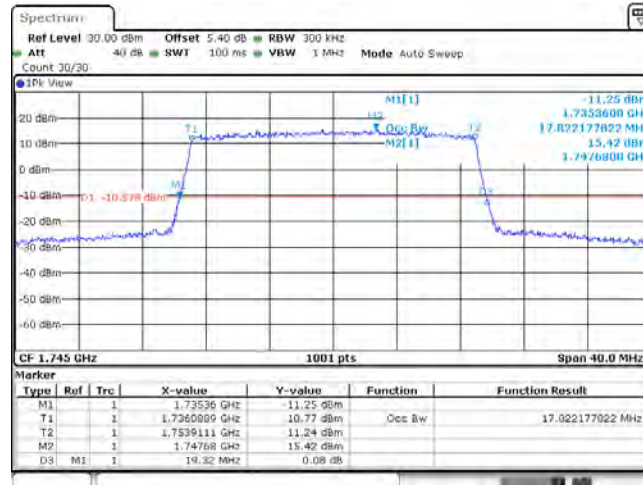
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## Band4\_20MHz\_16QAM\_20300\_100RB#0



Date: 6 JUL 2019 11:41:58



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## 5. Band Edge Compliance

### 5.1. Test Plots

Band4\_1.4MHz\_QPSK\_19957\_1RB#0



Band4\_1.4MHz\_QPSK\_19957\_6RB#0

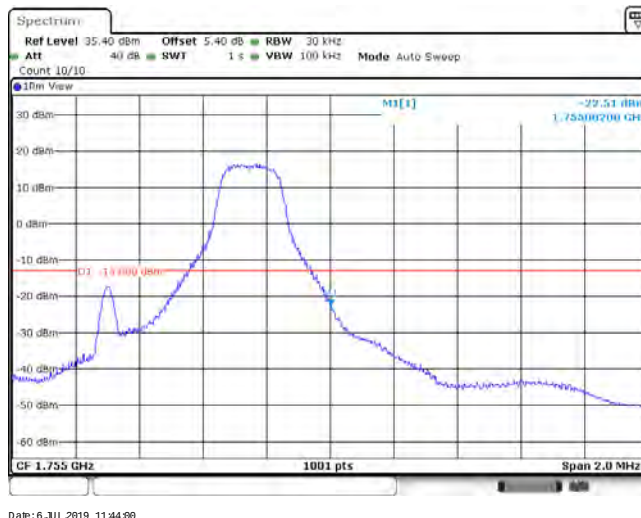


Band4\_1.4MHz\_QPSK\_20393\_1RB#5

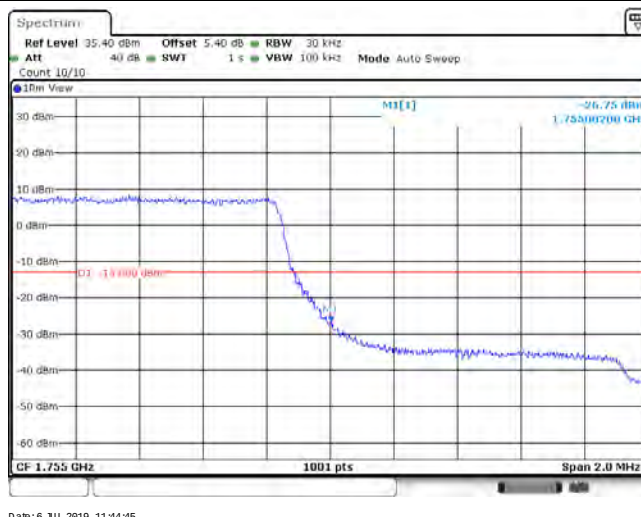


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Band4\_1.4MHz\_QPSK\_20393\_6RB#0

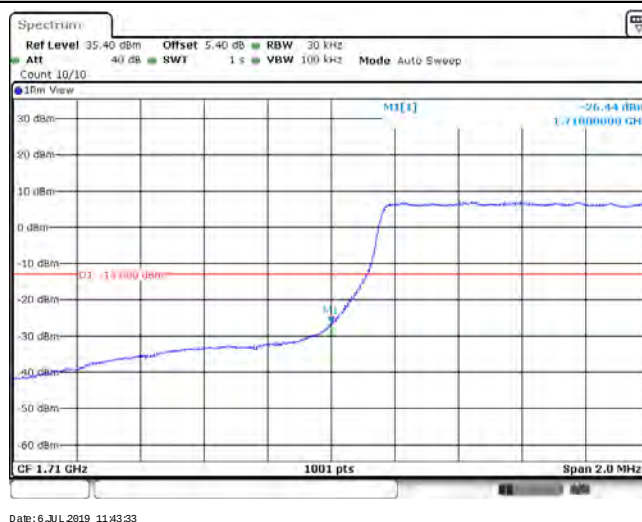


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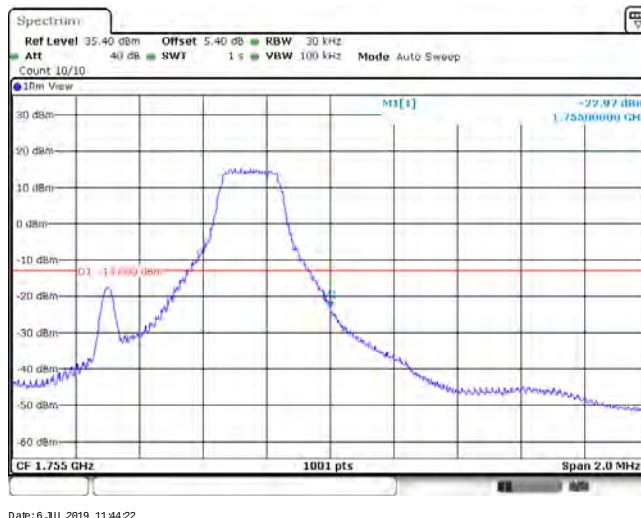


Band4\_1.4MHz\_16QAM\_19957\_6RB#0



Band4\_1.4MHz\_16QAM\_20393\_1RB#5



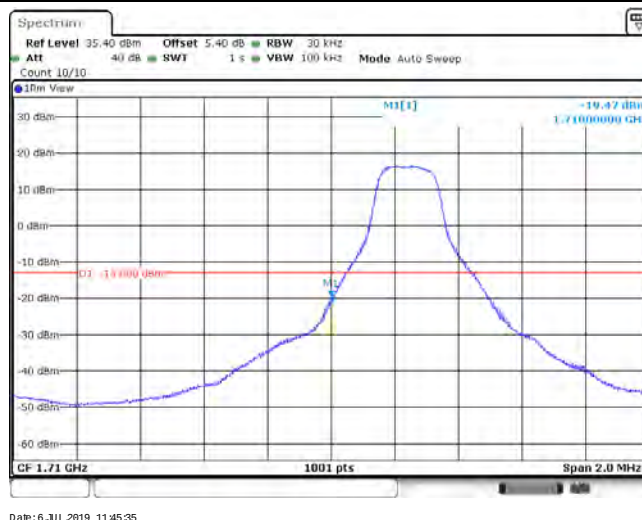


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Band4\_3MHz\_QPSK\_19965\_1RB#0



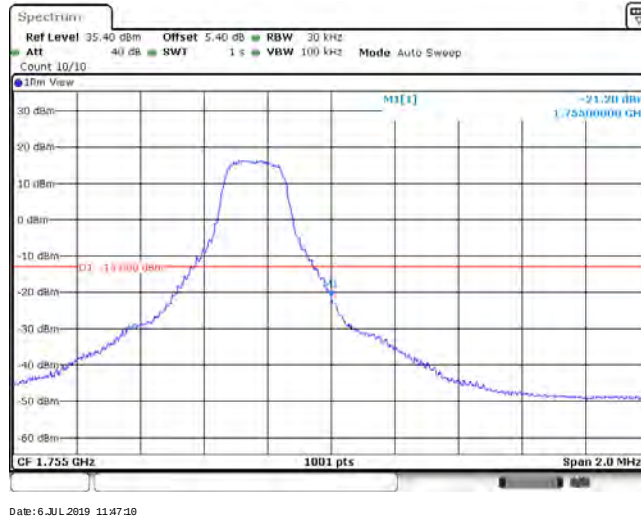


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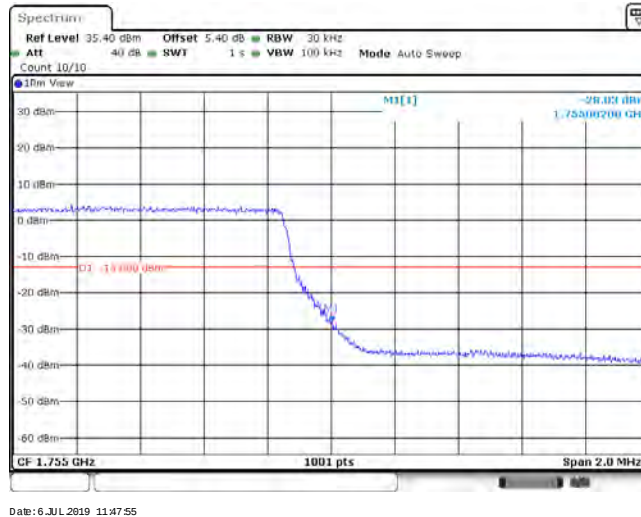


Band4\_3MHz\_QPSK\_20385\_1RB#14





Band4\_3MHz\_QPSK\_20385\_15RB#0

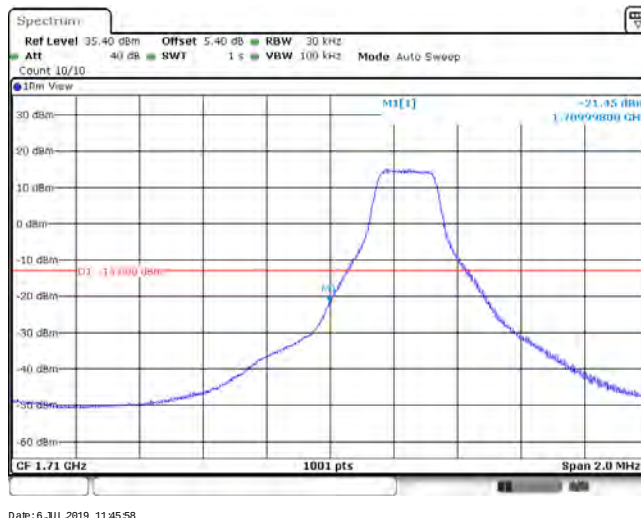


Band4\_3MHz\_16QAM\_19965\_1RB#0

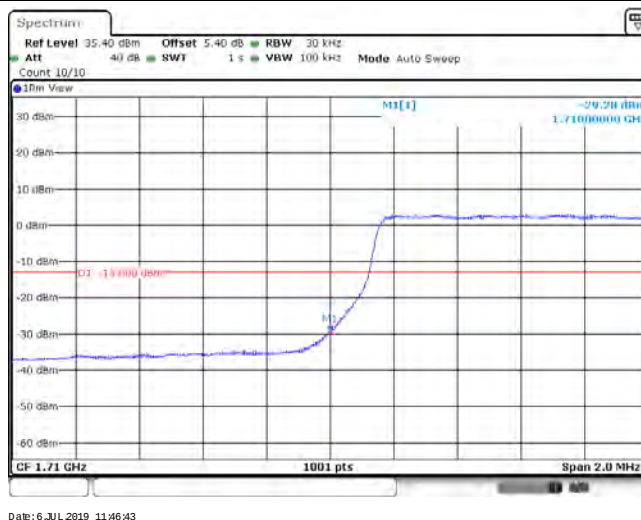


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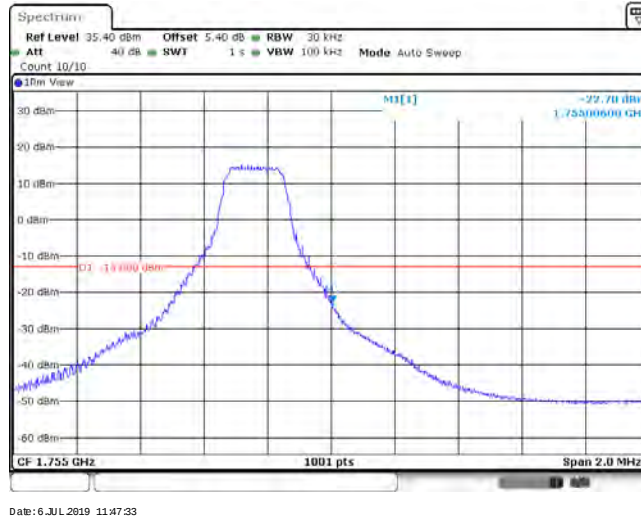


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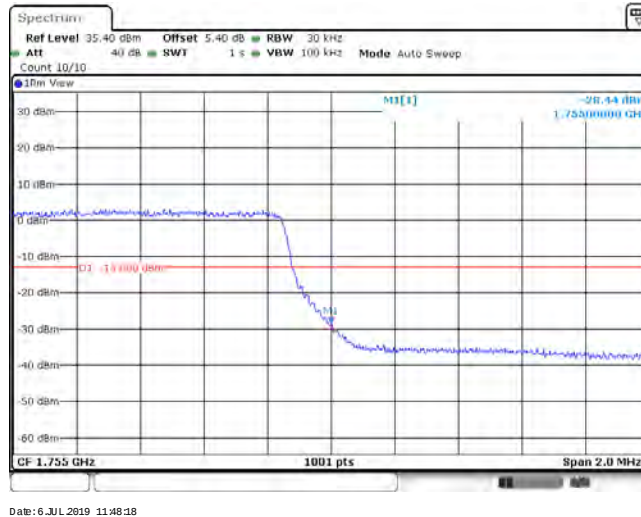


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Band4\_3MHz\_16QAM\_20385\_15RB#0

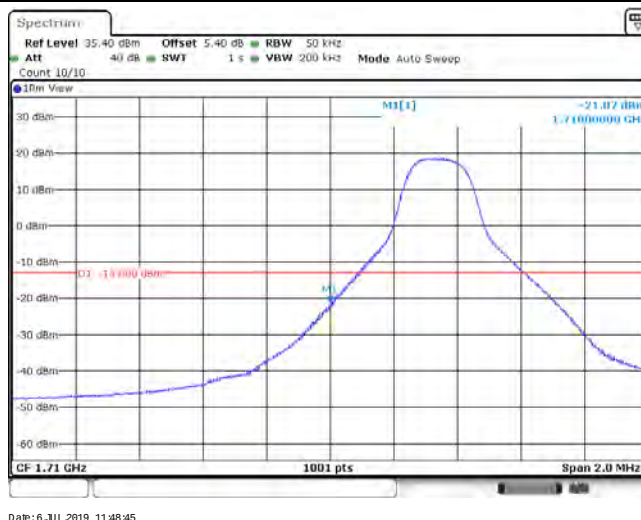


Band4\_5MHz\_QPSK\_19975\_1RB#0

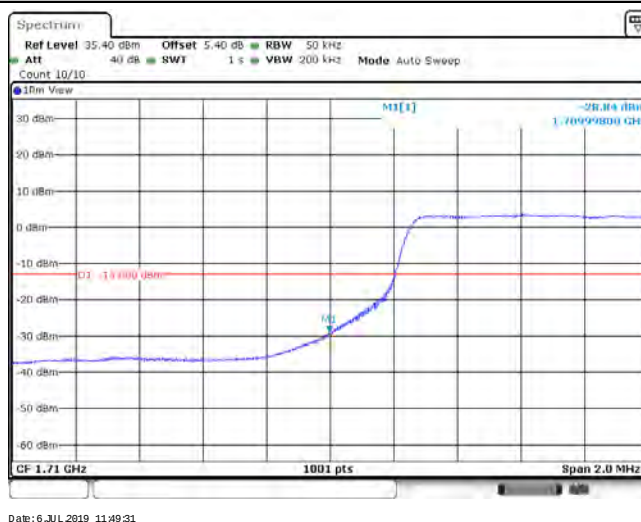


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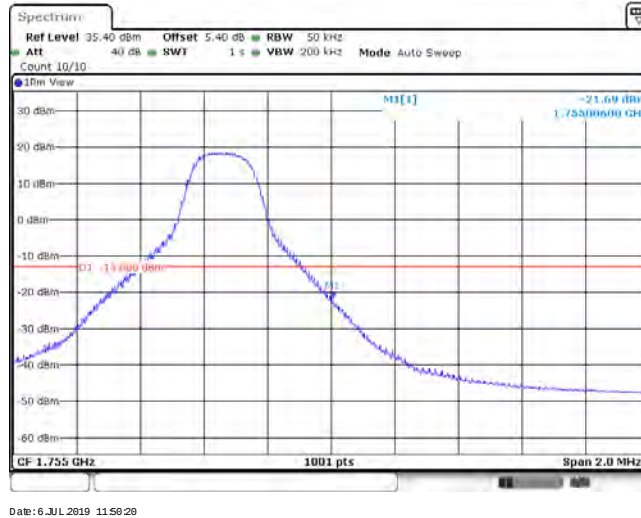


Band4\_5MHz\_QPSK\_19975\_25RB#0

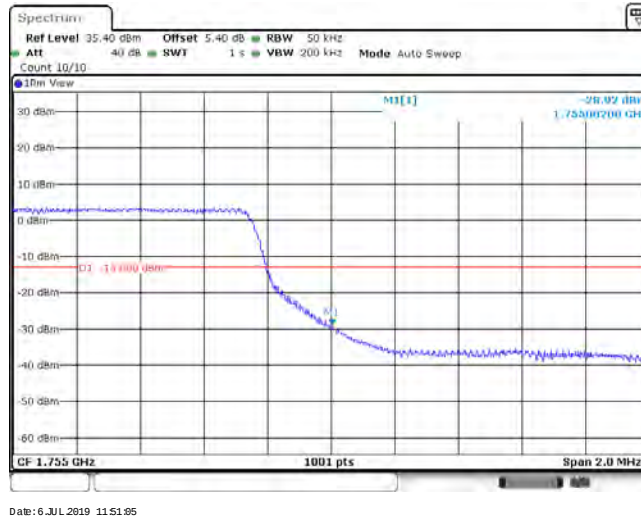


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Band4\_5MHz\_QPSK\_20375\_25RB#0

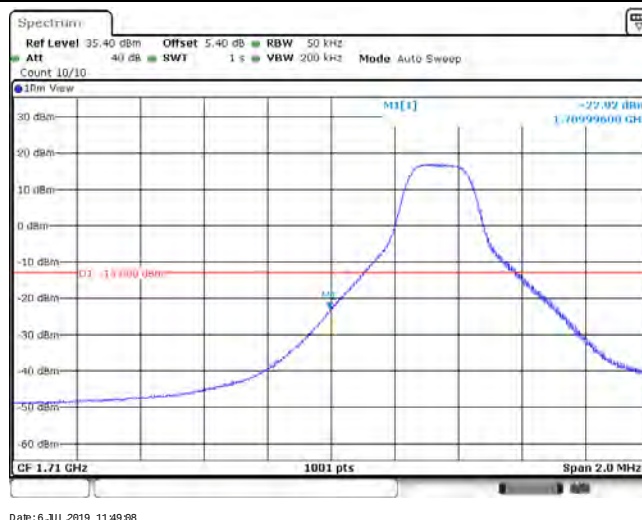


Band4\_5MHz\_16QAM\_19975\_1RB#0

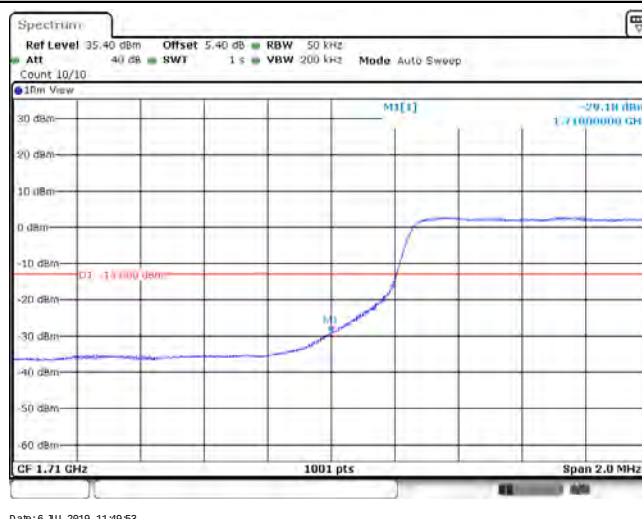


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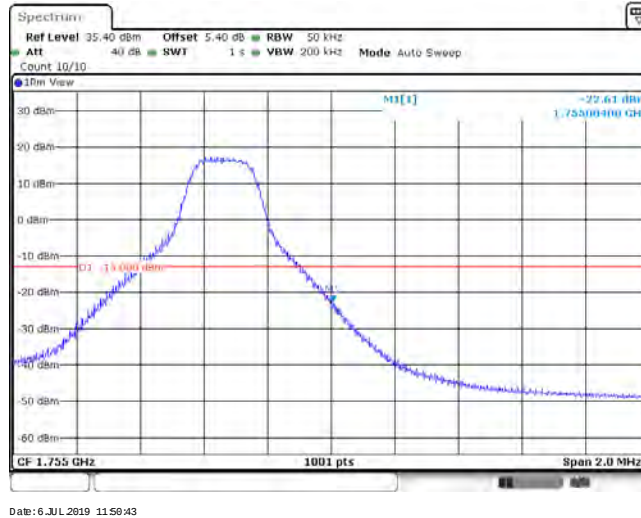


Band4\_5MHz\_16QAM\_19975\_25RB#0

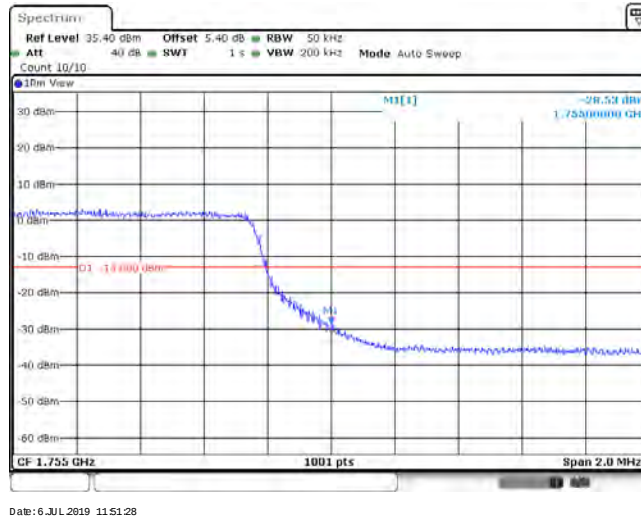


Band4\_5MHz\_16QAM\_20375\_1RB#24





Band4\_5MHz\_16QAM\_20375\_25RB#0



Band4\_10MHz\_QPSK\_20000\_1RB#0

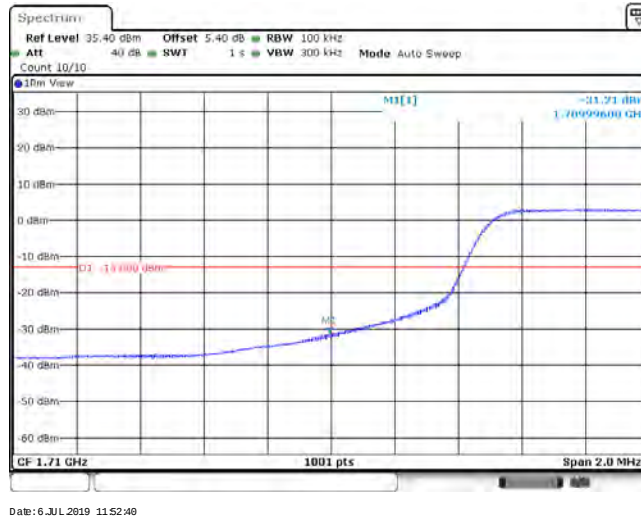


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Band4\_10MHz\_QPSK\_20000\_50RB#0

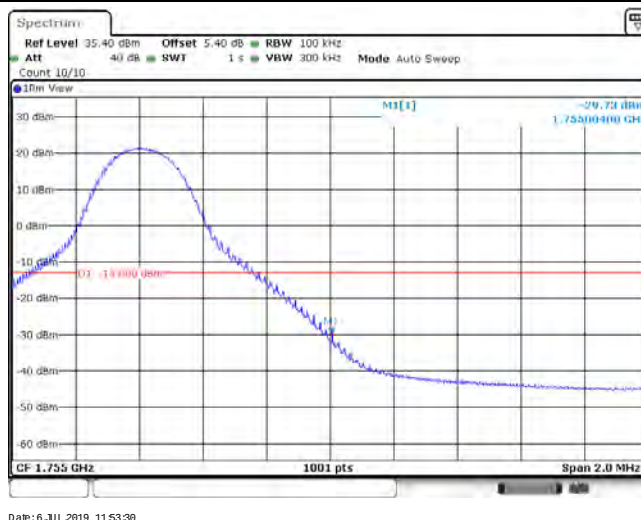


Band4\_10MHz\_QPSK\_20350\_1RB#49

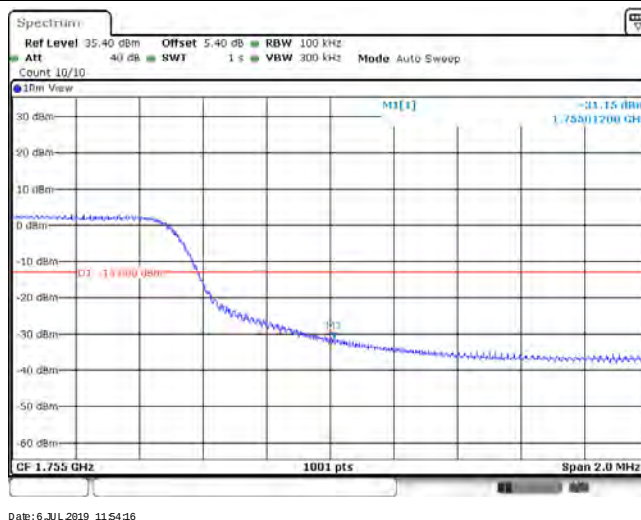


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Band4\_10MHz\_QPSK\_20350\_50RB#0

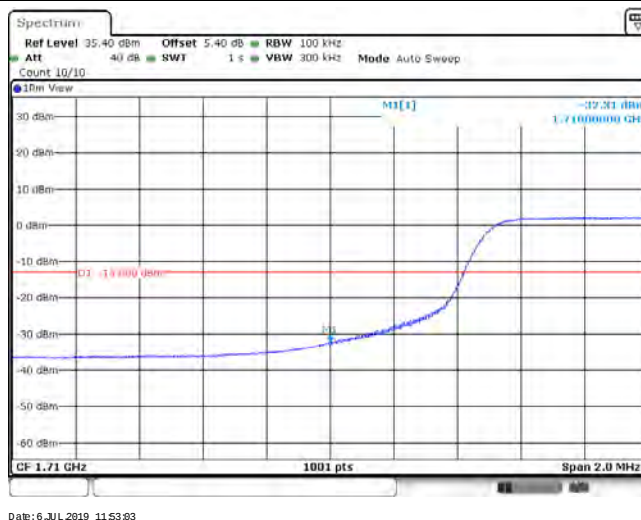


Band4\_10MHz\_16QAM\_20000\_1RB#0



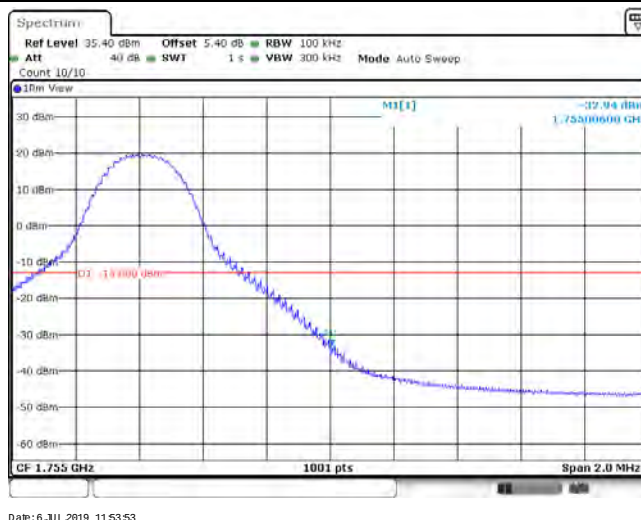


Band4\_10MHz\_16QAM\_20000\_50RB#0

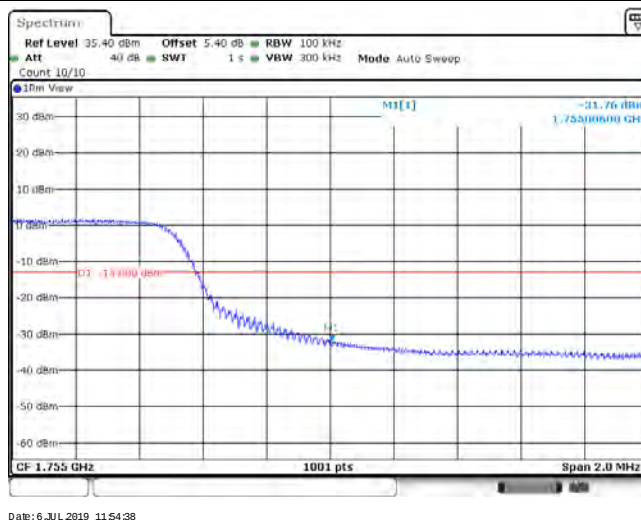


Band4\_10MHz\_16QAM\_20350\_1RB#49





Band4\_10MHz\_16QAM\_20350\_50RB#0



Band4\_15MHz\_QPSK\_20025\_1RB#0





Date: 6 JUL 2019 11:55:05

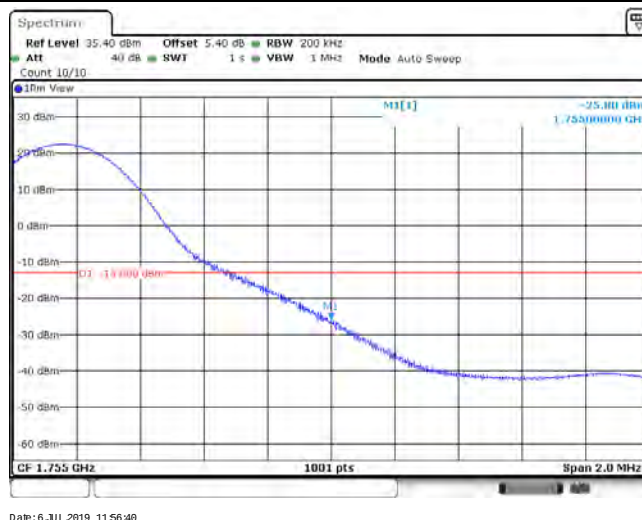
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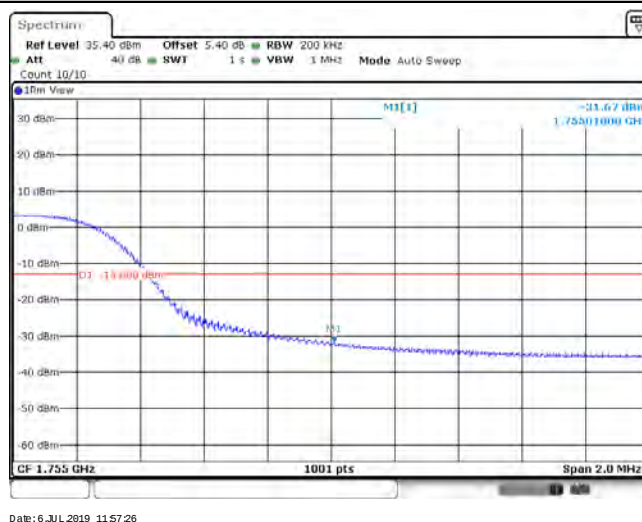
Date: 6 JUL 2019 11:55:51

Band4\_15MHz\_QPSK\_20325\_1RB#74





Band4\_15MHz\_QPSK\_20325\_75RB#0



Band4\_15MHz\_16QAM\_20025\_1RB#0





Date: 6 JUL 2019 11:55:28

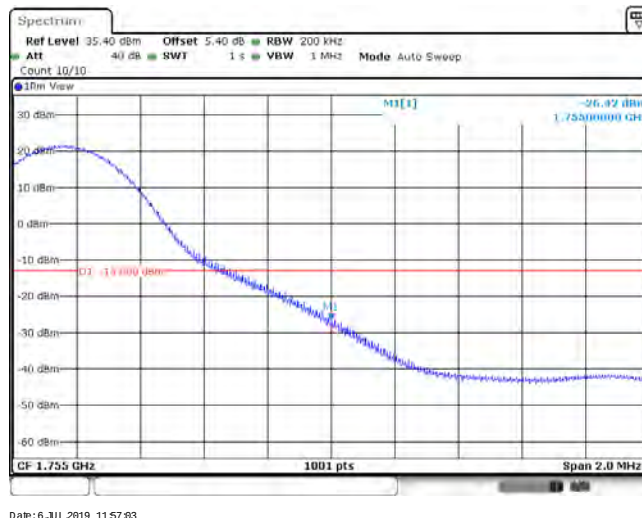
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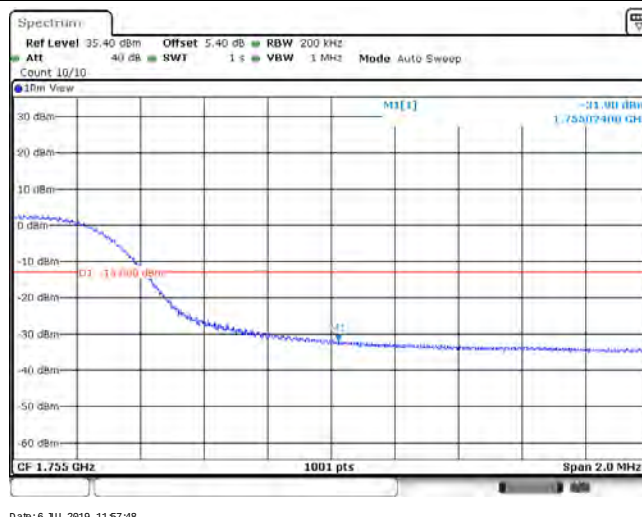
Date: 6 JUL 2019 11:56:14

Band4\_15MHz\_16QAM\_20325\_1RB#74



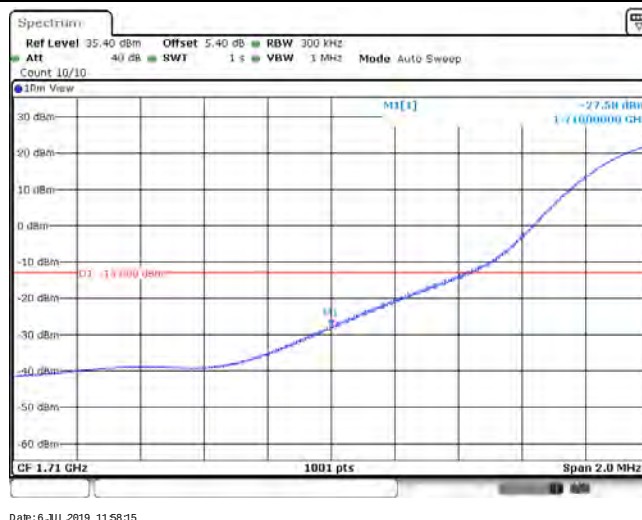


Band4\_15MHz\_16QAM\_20325\_75RB#0



Band4\_20MHz\_QPSK\_20050\_1RB#0





Date: 6 JUL 2019 11:58:15

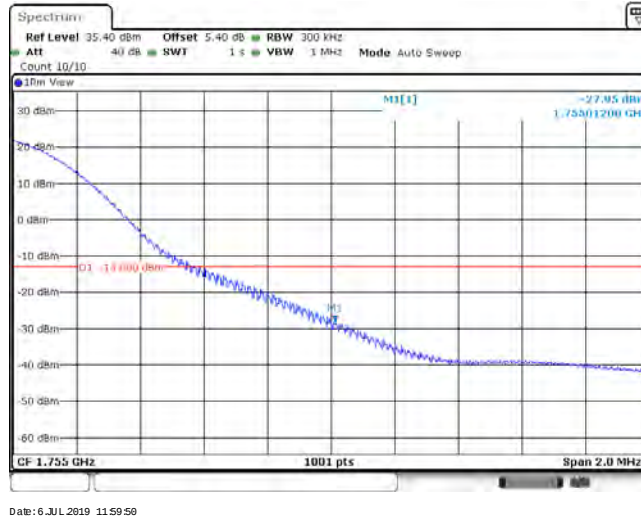
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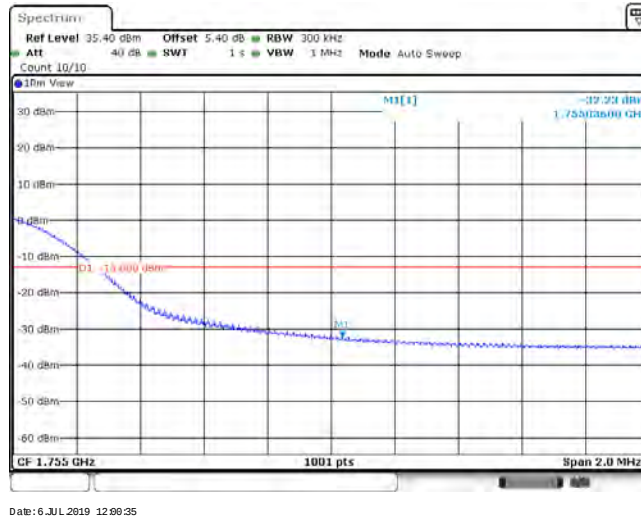
Date: 6 JUL 2019 11:59:01

Band4\_20MHz\_QPSK\_20300\_1RB#99





Band4\_20MHz\_QPSK\_20300\_100RB#0

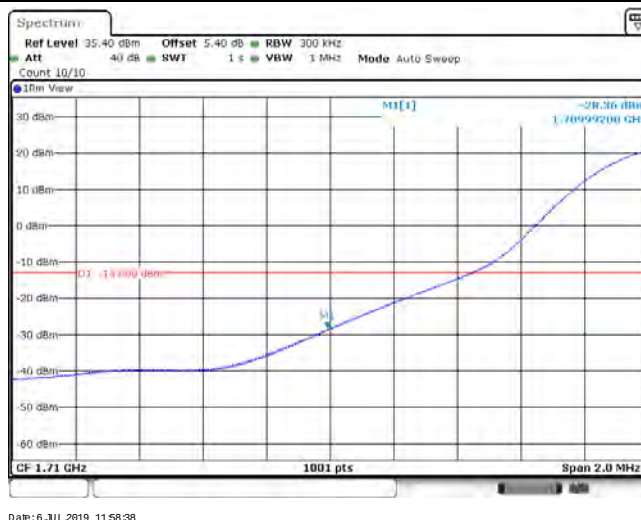


Band4\_20MHz\_16QAM\_20050\_1RB#0

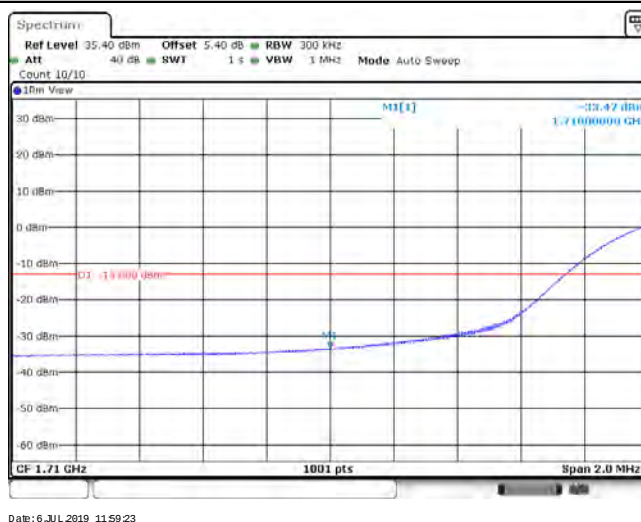


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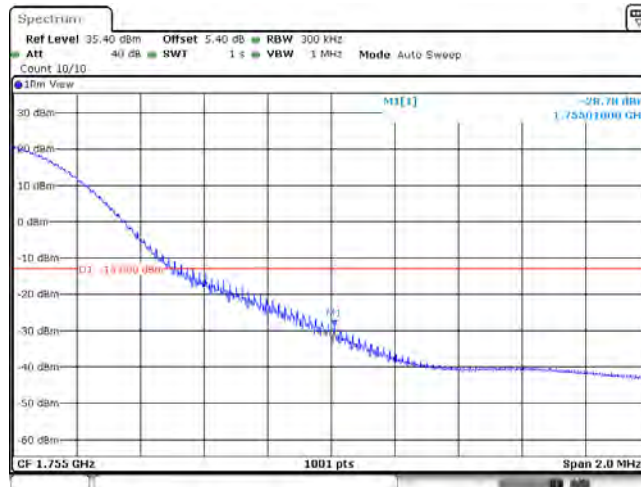


Band4\_20MHz\_16QAM\_20050\_100RB#0



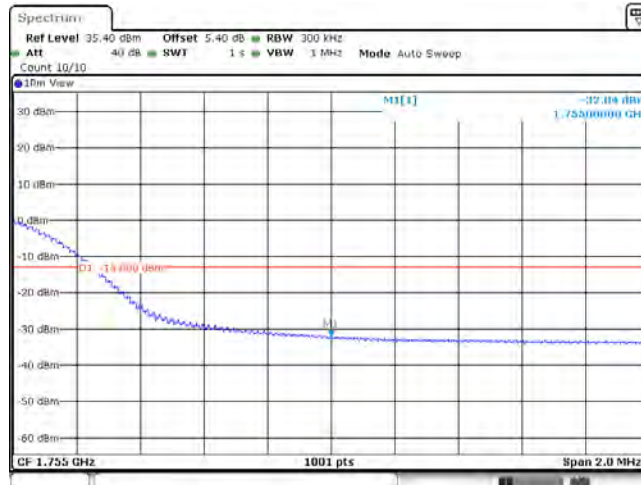
Band4\_20MHz\_16QAM\_20300\_1RB#99





Date: 6 JUL 2019 12:09:13

Band4\_20MHz\_16QAM\_20300\_100RB#0



Date: 6 JUL 2019 12:09:58



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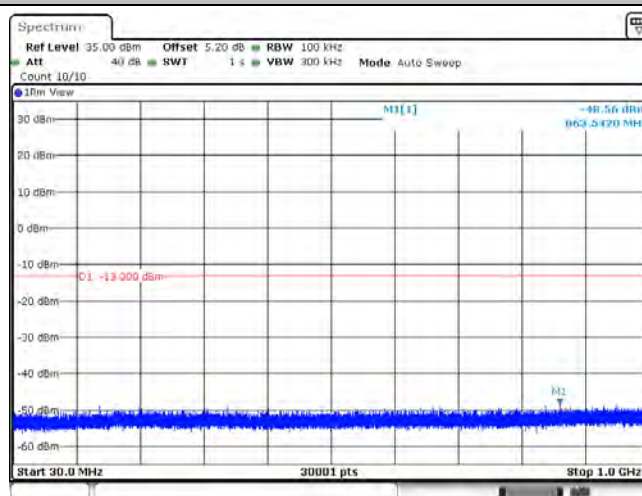
## 6. Spurious Emission at Antenna Terminal

Remark1: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of  $< RBW/2$  so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points =  $k * (\text{Span} / RBW)$ " with  $k$  between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

Remark2: only the worst case data displayed in this report.

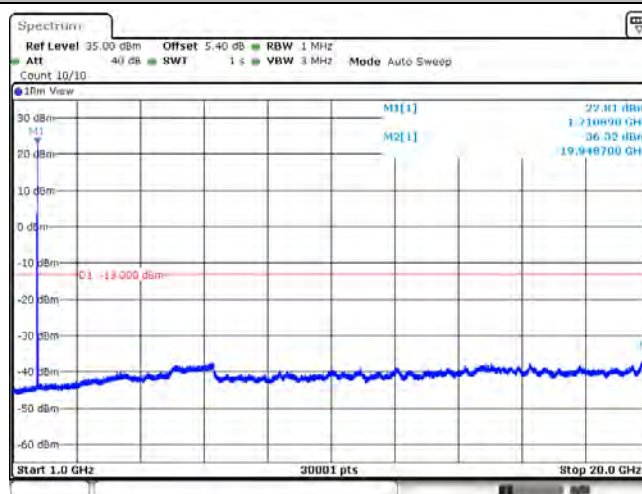
### 6.1. Test Plots

Band4\_20MHz\_QPSK\_20050\_1RB#0



Date: 6 JUL 2019 12:01:24

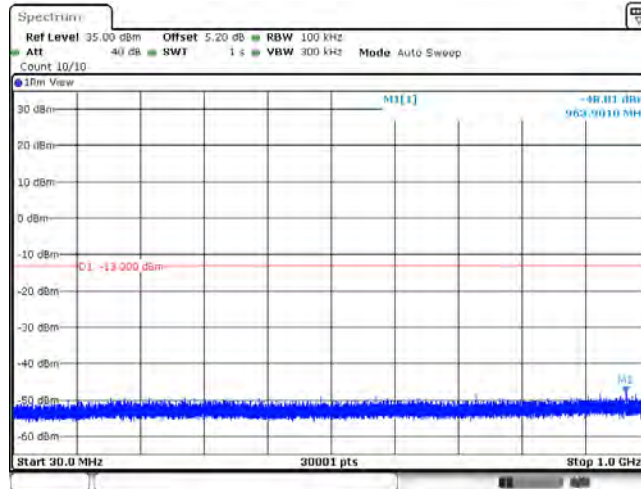
Band4\_20MHz\_QPSK\_20050\_1RB#0



Date: 6 JUL 2019 12:01:43

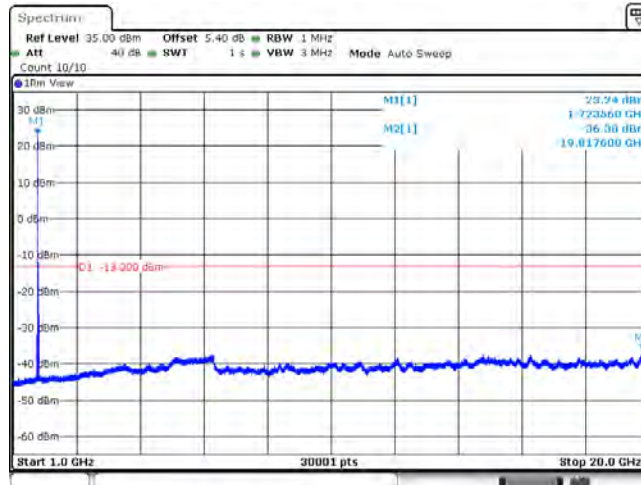
Band4\_20MHz\_QPSK\_20175\_1RB#0





Date: 6 JUL 2019 12:02:47

Band4\_20MHz\_QPSK\_20175\_1RB#0



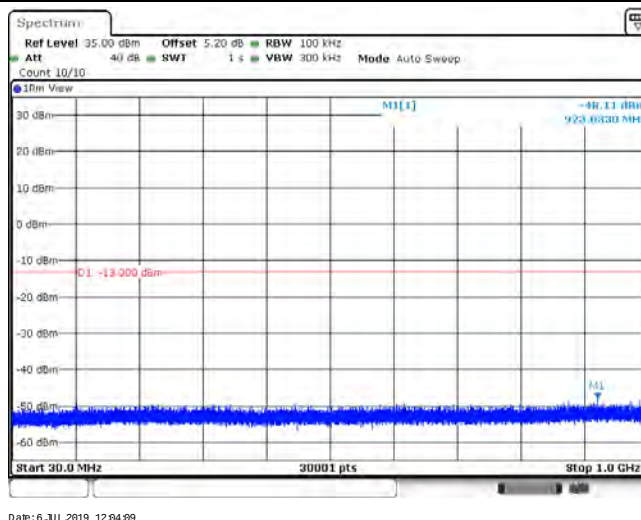
Date: 6 JUL 2019 12:03:06

Band4\_20MHz\_QPSK\_20300\_1RB#0

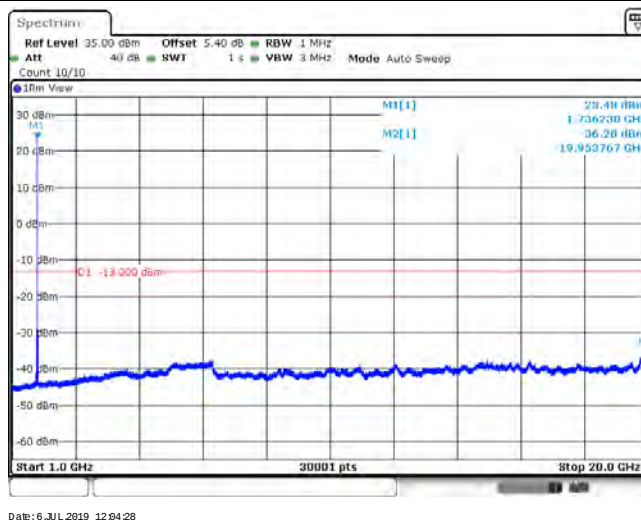


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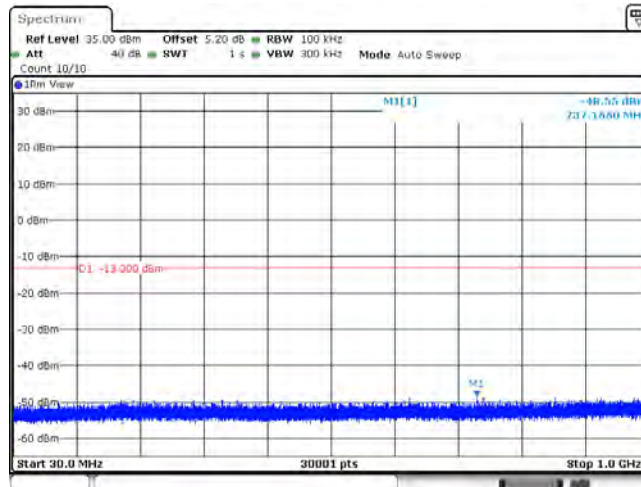


Band4\_20MHz\_QPSK\_20300\_1RB#0



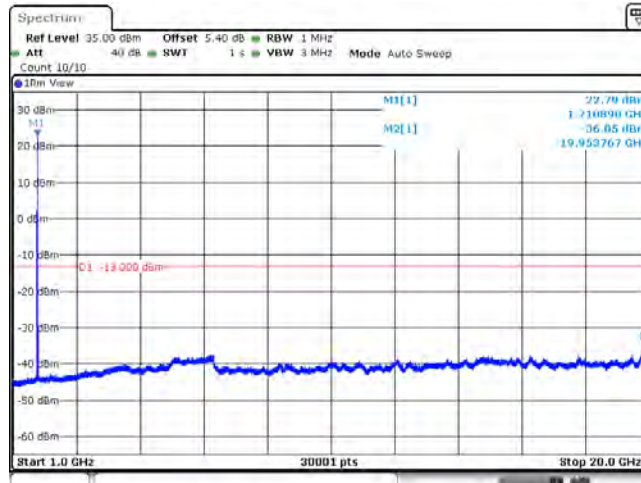
Band4\_20MHz\_16QAM\_20050\_1RB#0





Date: 6 JUL 2019 12:02:05

Band4\_20MHz\_16QAM\_20050\_1RB#0



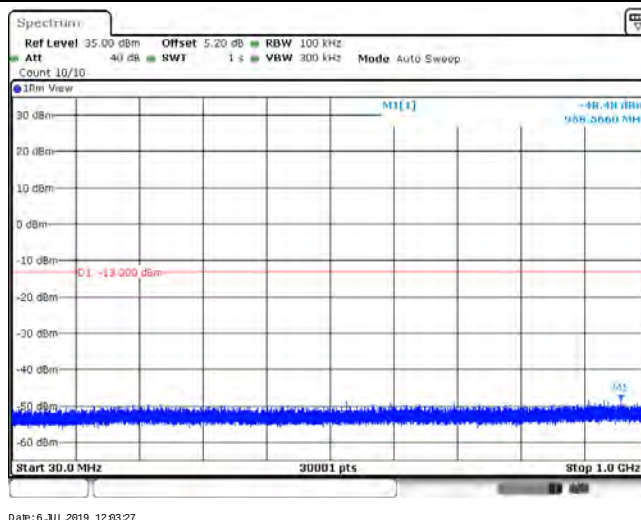
Date: 6 JUL 2019 12:02:24

Band4\_20MHz\_16QAM\_20175\_1RB#0

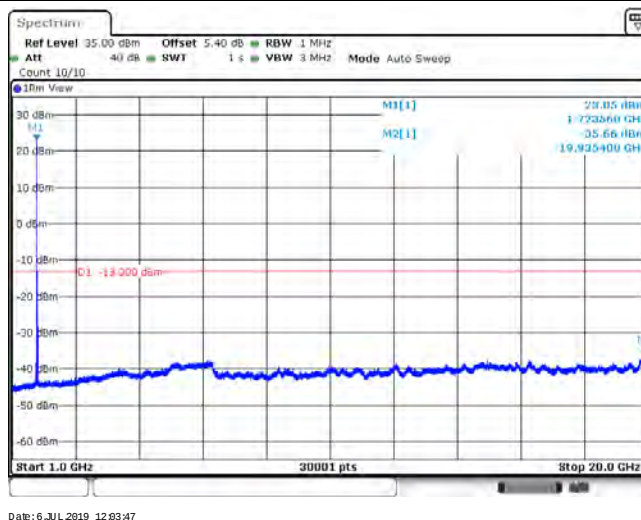


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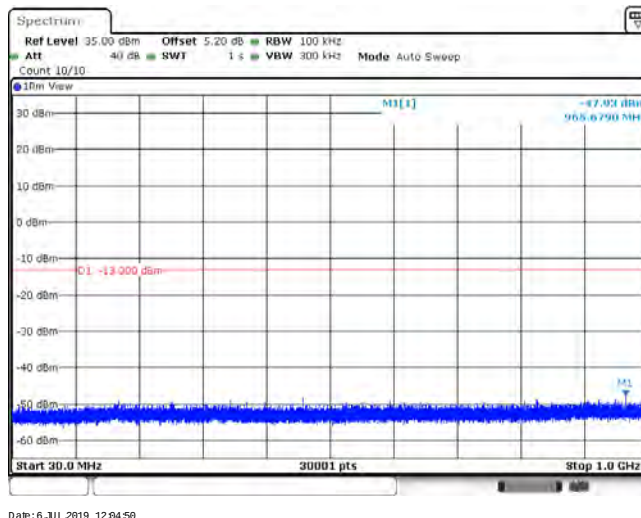


Band4\_20MHz\_16QAM\_20175\_1RB#0

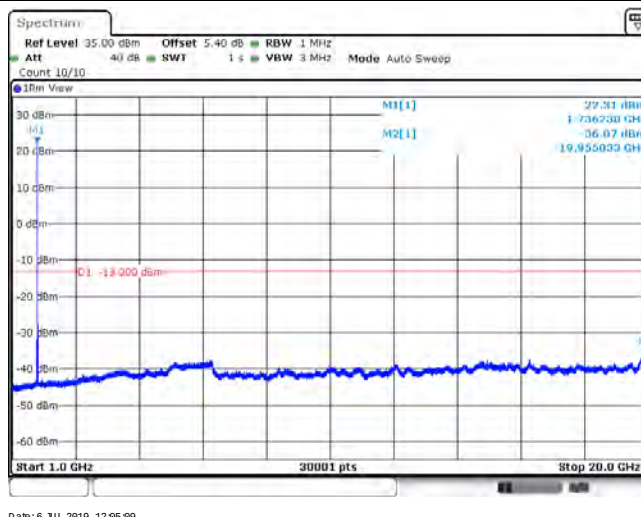


Band4\_20MHz\_16QAM\_20300\_1RB#0





Band4\_20MHz\_16QAM\_20300\_1RB#0





## 7. Field Strength of Spurious Radiation

### 7.1. Test BAND = LTE Band 4

#### 7.1.1. Test Mode = LTE/TM1 20MHz

##### 7.1.1.1. Test Channel = LCH

| Frequency (MHz) | Level (dBm) | Limit Line (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|------------------|-------------|--------------|
| 109.9320        | -65.28      | -13.00           | 52.28       | Vertical     |
| 596.4113        | -64.45      | -13.00           | 51.45       | Vertical     |
| 1276.8554       | -48.21      | -13.00           | 35.21       | Vertical     |
| 2699.5399       | -37.36      | -13.00           | 24.36       | Vertical     |
| 14691.3897      | -42.14      | -13.00           | 29.14       | Vertical     |
| 17995.9999      | -31.76      | -13.00           | 18.76       | Vertical     |
| 38.9244         | -64.92      | -13.00           | 51.92       | Horizontal   |
| 226.5318        | -69.09      | -13.00           | 56.09       | Horizontal   |
| 1200.0400       | -48.49      | -13.00           | 35.49       | Horizontal   |
| 2694.3389       | -36.33      | -13.00           | 23.33       | Horizontal   |
| 16435.9479      | -37.42      | -13.00           | 24.42       | Horizontal   |
| 17996.9999      | -36.21      | -13.00           | 23.21       | Horizontal   |

##### 7.1.1.2. Test Channel = MCH

| Frequency (MHz) | Level (dBm) | Limit Line (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|------------------|-------------|--------------|
| 108.7679        | -64.74      | -13.00           | 51.74       | Vertical     |
| 594.2287        | -64.91      | -13.00           | 51.91       | Vertical     |
| 1298.0596       | -48.00      | -13.00           | 35.00       | Vertical     |
| 2705.5411       | -37.45      | -13.00           | 24.45       | Vertical     |
| 14712.3904      | -41.40      | -13.00           | 28.40       | Vertical     |
| 17924.4975      | -33.70      | -13.00           | 20.70       | Vertical     |
| 45.2298         | -62.75      | -13.00           | 49.75       | Horizontal   |
| 244.6717        | -68.01      | -13.00           | 55.01       | Horizontal   |
| 1212.8426       | -48.47      | -13.00           | 35.47       | Horizontal   |
| 2699.9400       | -36.20      | -13.00           | 23.20       | Horizontal   |
| 8763.1921       | -50.49      | -13.00           | 37.49       | Horizontal   |
| 16399.4466      | -37.42      | -13.00           | 24.42       | Horizontal   |





### 7.1.1.3. Test Channel = HCH

| Frequency (MHz) | Level (dBm) | Limit Line (dBm) | Margin (dB) | Polarization |
|-----------------|-------------|------------------|-------------|--------------|
| 107.7979        | -64.89      | -13.00           | 51.89       | Vertical     |
| 641.2276        | -64.35      | -13.00           | 51.35       | Vertical     |
| 1219.2438       | -48.20      | -13.00           | 35.20       | Vertical     |
| 2703.1406       | -37.29      | -13.00           | 24.29       | Vertical     |
| 14697.3899      | -41.67      | -13.00           | 28.67       | Vertical     |
| 17991.9997      | -31.38      | -13.00           | 18.38       | Vertical     |
| 43.5807         | -64.46      | -13.00           | 51.46       | Horizontal   |
| 239.0455        | -68.43      | -13.00           | 55.43       | Horizontal   |
| 1176.0352       | -48.73      | -13.00           | 35.73       | Horizontal   |
| 2699.5399       | -36.17      | -13.00           | 23.17       | Horizontal   |
| 16391.9464      | -37.37      | -13.00           | 24.37       | Horizontal   |
| 17989.9997      | -36.42      | -13.00           | 23.42       | Horizontal   |

**Remark:**

The disturbance below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the worst case data had been displayed.

We have tested all modulation and all Bandwidth , but only the worst case data presented in this report.



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## 8. Frequency Stability

### 8.1. Frequency Vs Voltage

| Voltage |           |            |         |              |               |                  |                |                 |             |         |
|---------|-----------|------------|---------|--------------|---------------|------------------|----------------|-----------------|-------------|---------|
| BAND    | Bandwidth | Modulation | Channel | RB Configure | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| Band4   | 20MHz     | QPSK       | 20050   | 100RB#0      | VL            | NT               | 2.00           | 0.001163        | ±2.5        | PASS    |
| Band4   | 20MHz     | QPSK       | 20050   | 100RB#0      | VN            | NT               | 1.80           | 0.001047        | ±2.5        | PASS    |
| Band4   | 20MHz     | QPSK       | 20050   | 100RB#0      | VH            | NT               | -0.20          | -0.000116       | ±2.5        | PASS    |
| Band4   | 20MHz     | QPSK       | 20175   | 100RB#0      | VL            | NT               | -2.30          | -0.001328       | ±2.5        | PASS    |
| Band4   | 20MHz     | QPSK       | 20175   | 100RB#0      | VN            | NT               | 0.20           | 0.000115        | ±2.5        | PASS    |
| Band4   | 20MHz     | QPSK       | 20175   | 100RB#0      | VH            | NT               | 0.50           | 0.000289        | ±2.5        | PASS    |
| Band4   | 20MHz     | QPSK       | 20300   | 100RB#0      | VL            | NT               | -2.60          | -0.001490       | ±2.5        | PASS    |
| Band4   | 20MHz     | QPSK       | 20300   | 100RB#0      | VN            | NT               | -3.30          | -0.001891       | ±2.5        | PASS    |
| Band4   | 20MHz     | QPSK       | 20300   | 100RB#0      | VH            | NT               | -3.50          | -0.002006       | ±2.5        | PASS    |
| Band4   | 20MHz     | 16QAM      | 20050   | 100RB#0      | VL            | NT               | 1.10           | 0.000640        | ±2.5        | PASS    |
| Band4   | 20MHz     | 16QAM      | 20050   | 100RB#0      | VN            | NT               | 1.80           | 0.001047        | ±2.5        | PASS    |
| Band4   | 20MHz     | 16QAM      | 20050   | 100RB#0      | VH            | NT               | 1.90           | 0.001105        | ±2.5        | PASS    |
| Band4   | 20MHz     | 16QAM      | 20175   | 100RB#0      | VL            | NT               | 1.00           | 0.000577        | ±2.5        | PASS    |
| Band4   | 20MHz     | 16QAM      | 20175   | 100RB#0      | VN            | NT               | -0.50          | -0.000289       | ±2.5        | PASS    |
| Band4   | 20MHz     | 16QAM      | 20175   | 100RB#0      | VH            | NT               | 0.80           | 0.000462        | ±2.5        | PASS    |
| Band4   | 20MHz     | 16QAM      | 20300   | 100RB#0      | VL            | NT               | -2.70          | -0.001547       | ±2.5        | PASS    |
| Band4   | 20MHz     | 16QAM      | 20300   | 100RB#0      | VN            | NT               | -4.70          | -0.002693       | ±2.5        | PASS    |
| Band4   | 20MHz     | 16QAM      | 20300   | 100RB#0      | VH            | NT               | -3.20          | -0.001834       | ±2.5        | PASS    |

### 8.2. Frequency Vs Temperature

| Temperature |           |            |         |              |               |                  |                |                 |             |         |
|-------------|-----------|------------|---------|--------------|---------------|------------------|----------------|-----------------|-------------|---------|
| BAND        | Bandwidth | Modulation | Channel | RB Configure | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| Band4       | 20MHz     | QPSK       | 20050   | 100RB#0      | NV            | -30              | 2.40           | 0.001395        | ±2.5        | PASS    |
| Band4       | 20MHz     | QPSK       | 20050   | 100RB#0      | NV            | -20              | 0.60           | 0.000349        | ±2.5        | PASS    |
| Band4       | 20MHz     | QPSK       | 20050   | 100RB#0      | NV            | 0                | 1.70           | 0.000988        | ±2.5        | PASS    |
| Band4       | 20MHz     | QPSK       | 20050   | 100RB#0      | NV            | 10               | 0.20           | 0.000116        | ±2.5        | PASS    |
| Band4       | 20MHz     | QPSK       | 20050   | 100RB#0      | NV            | 20               | 0.40           | 0.000233        | ±2.5        | PASS    |
| Band4       | 20MHz     | QPSK       | 20050   | 100RB#0      | NV            | 30               | 1.90           | 0.001105        | ±2.5        | PASS    |



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|       |       |       |       |         |    |     |       |           |      |      |
|-------|-------|-------|-------|---------|----|-----|-------|-----------|------|------|
| Band4 | 20MHz | QPSK  | 20050 | 100RB#0 | NV | 40  | 0.60  | 0.000349  | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20050 | 100RB#0 | NV | 50  | 1.50  | 0.000872  | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20175 | 100RB#0 | NV | -30 | 0.80  | 0.000462  | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20175 | 100RB#0 | NV | -20 | -1.00 | -0.000577 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20175 | 100RB#0 | NV | 0   | 0.30  | 0.000173  | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20175 | 100RB#0 | NV | 10  | -0.60 | -0.000346 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20175 | 100RB#0 | NV | 20  | 0.10  | 0.000058  | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20175 | 100RB#0 | NV | 30  | 2.00  | 0.001154  | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20175 | 100RB#0 | NV | 40  | 0.90  | 0.000519  | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20175 | 100RB#0 | NV | 50  | -0.20 | -0.000115 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20300 | 100RB#0 | NV | -30 | -1.00 | -0.000573 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20300 | 100RB#0 | NV | -20 | -3.40 | -0.001948 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20300 | 100RB#0 | NV | 0   | -3.50 | -0.002006 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20300 | 100RB#0 | NV | 10  | -1.50 | -0.000860 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20300 | 100RB#0 | NV | 20  | -3.10 | -0.001777 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20300 | 100RB#0 | NV | 30  | -2.90 | -0.001662 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20300 | 100RB#0 | NV | 40  | -2.80 | -0.001605 | ±2.5 | PASS |
| Band4 | 20MHz | QPSK  | 20300 | 100RB#0 | NV | 50  | -3.10 | -0.001777 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | NV | -30 | 1.90  | 0.001105  | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | NV | -20 | 0.50  | 0.000291  | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | NV | 0   | 1.90  | 0.001105  | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | NV | 10  | 3.00  | 0.001744  | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | NV | 20  | 1.80  | 0.001047  | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | NV | 30  | 0.80  | 0.000465  | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | NV | 40  | 2.10  | 0.001221  | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20050 | 100RB#0 | NV | 50  | 1.70  | 0.000988  | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | NV | -30 | 0.20  | 0.000115  | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | NV | -20 | 2.00  | 0.001154  | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | NV | 0   | 1.70  | 0.000981  | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | NV | 10  | 0.00  | 0.000000  | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | NV | 20  | 0.40  | 0.000231  | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | NV | 30  | 0.10  | 0.000058  | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | NV | 40  | -2.30 | -0.001328 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20175 | 100RB#0 | NV | 50  | 1.10  | 0.000635  | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | NV | -30 | -1.30 | -0.000745 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | NV | -20 | -2.50 | -0.001433 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | NV | 0   | -3.50 | -0.002006 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | NV | 10  | -2.20 | -0.001261 | ±2.5 | PASS |



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|       |       |       |       |         |    |    |       |           |      |      |
|-------|-------|-------|-------|---------|----|----|-------|-----------|------|------|
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | NV | 20 | -1.10 | -0.000630 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | NV | 30 | -3.00 | -0.001719 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | NV | 40 | -2.30 | -0.001318 | ±2.5 | PASS |
| Band4 | 20MHz | 16QAM | 20300 | 100RB#0 | NV | 50 | -3.00 | -0.001719 | ±2.5 | PASS |

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