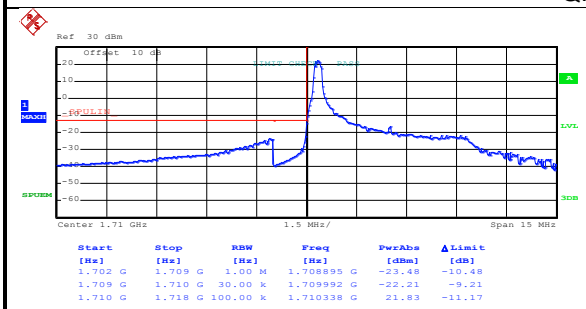
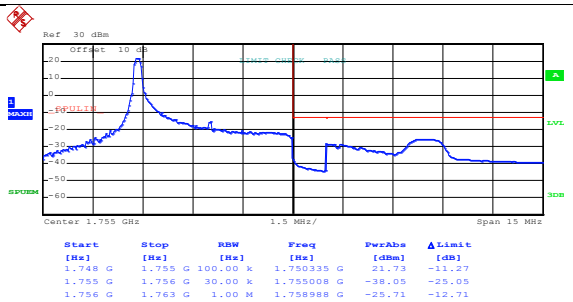
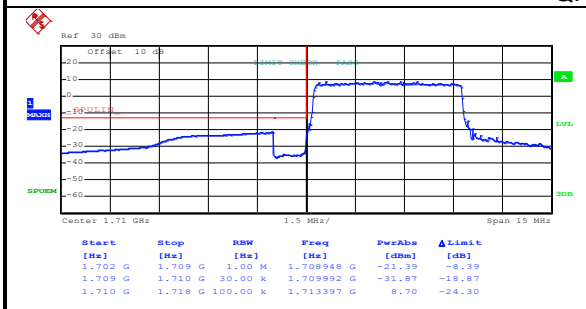
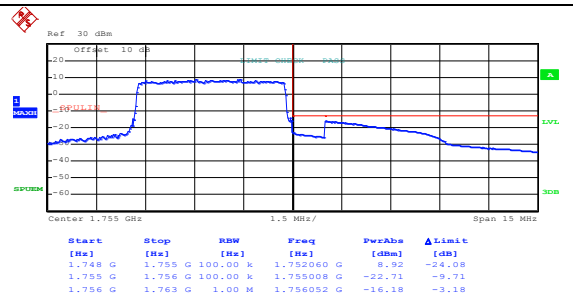
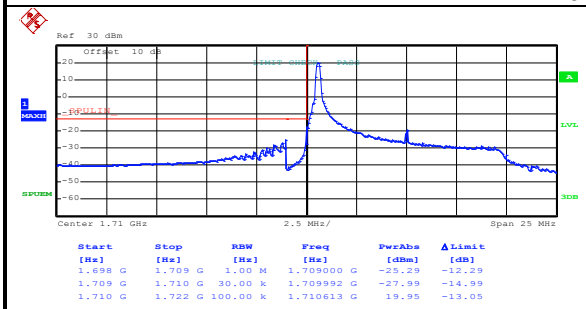
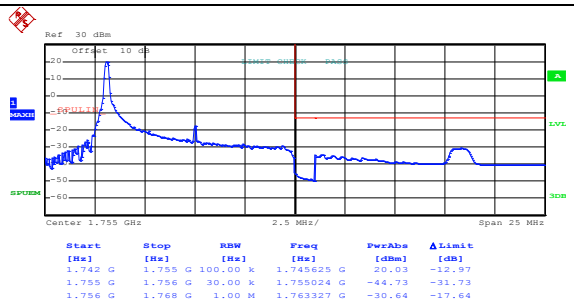
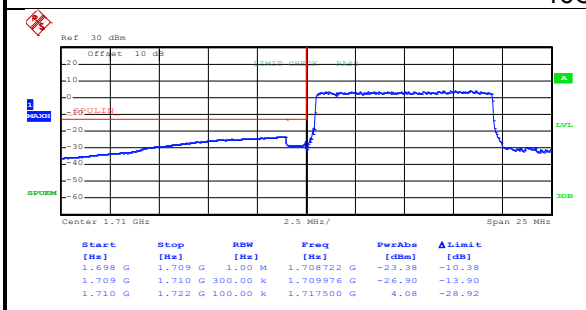
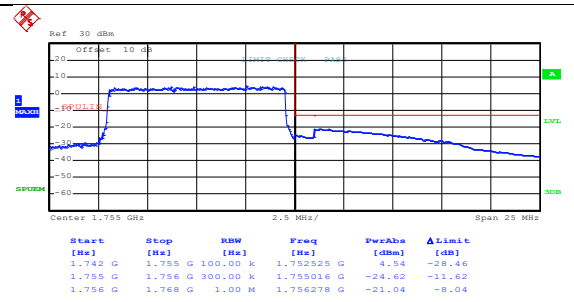
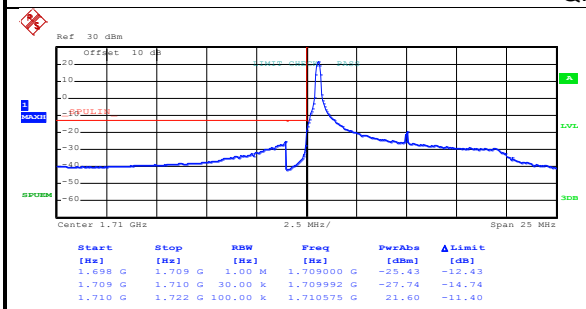
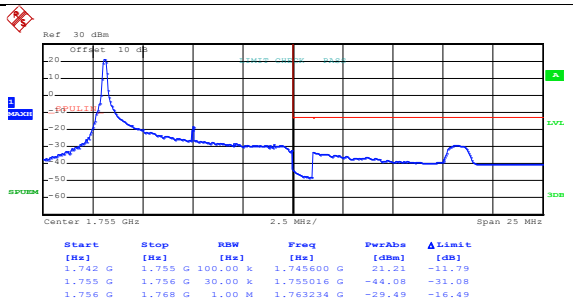
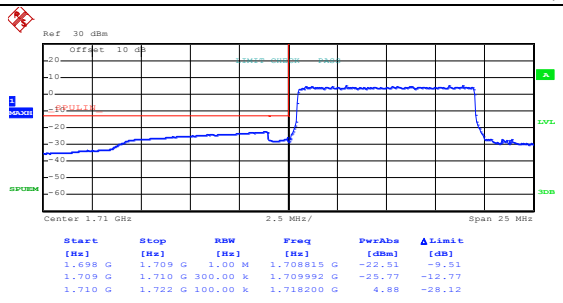
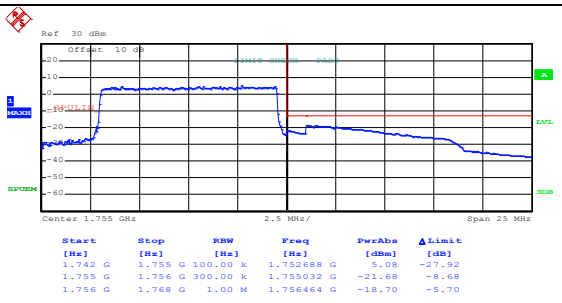
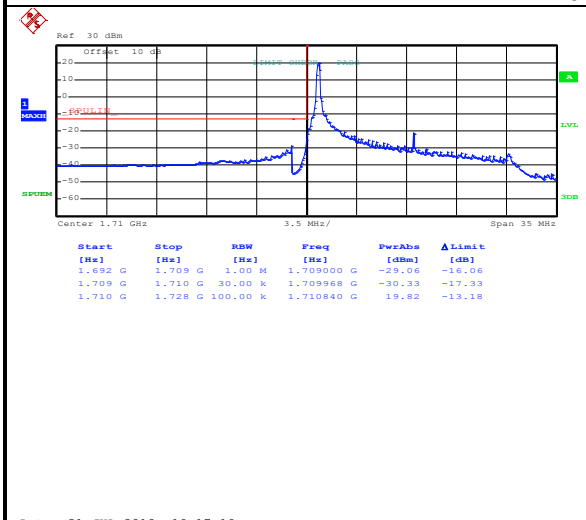
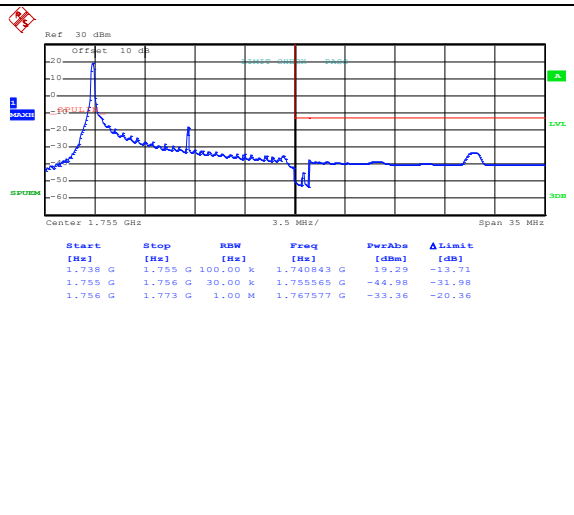
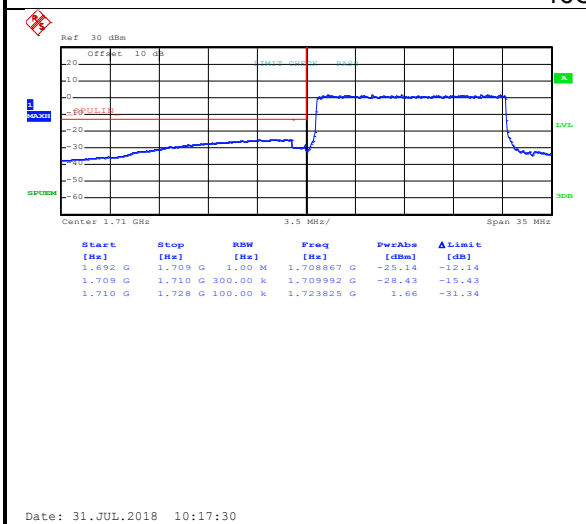
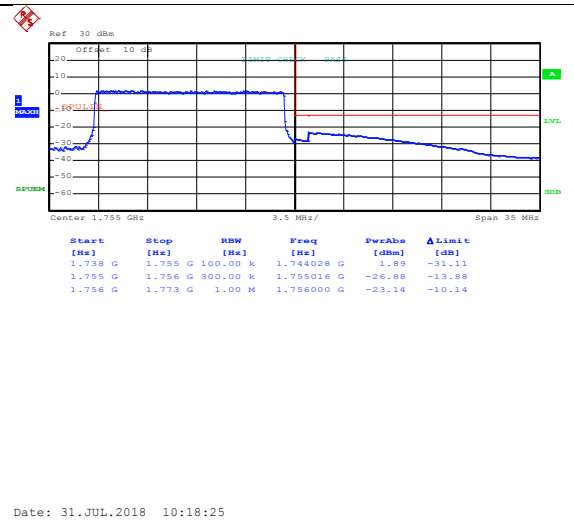
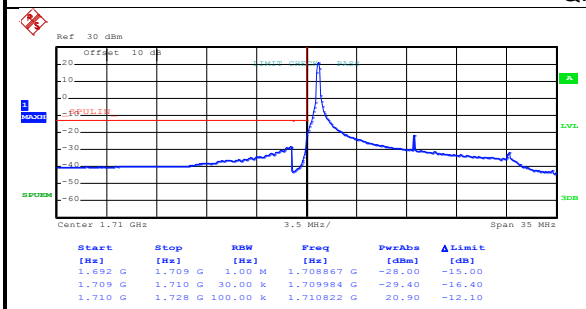
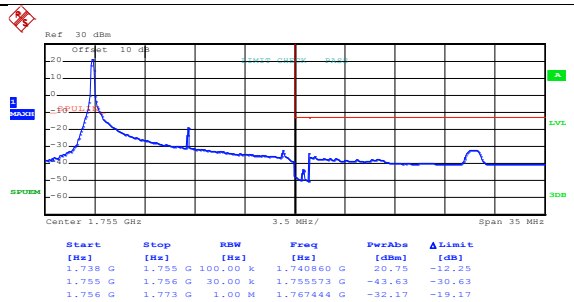
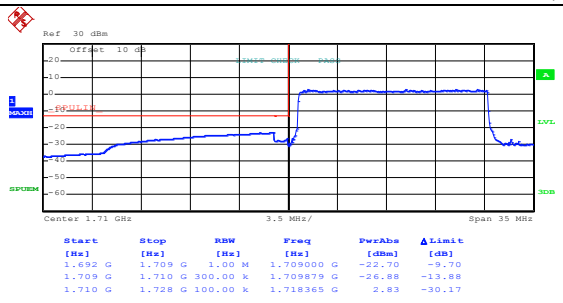
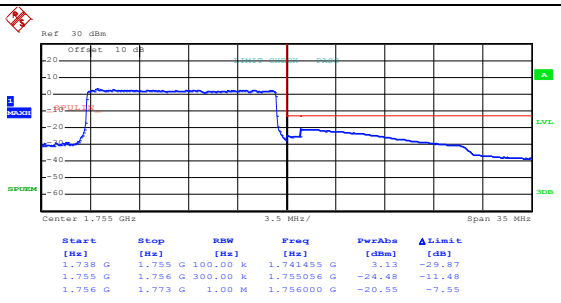
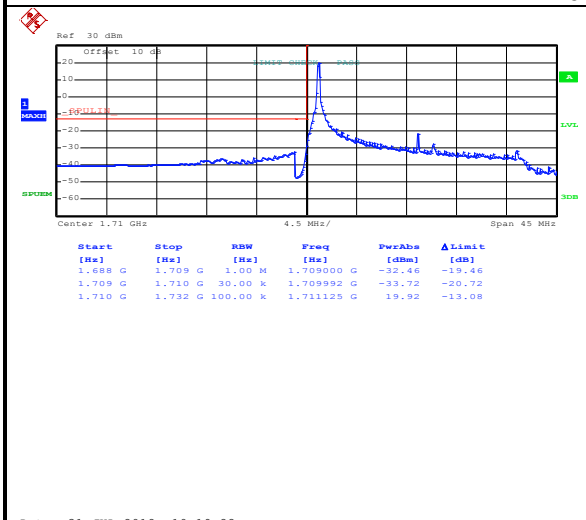
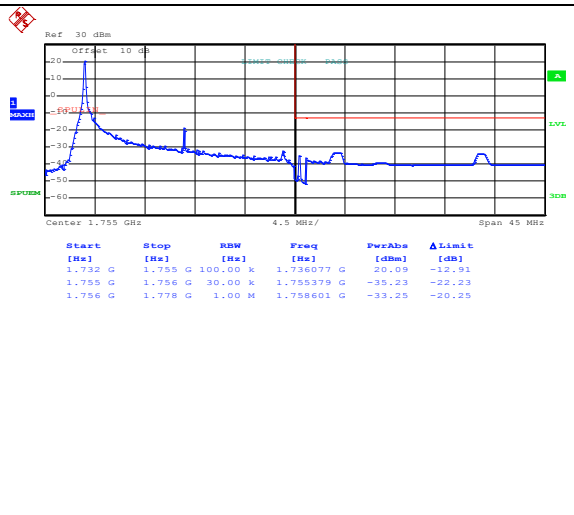
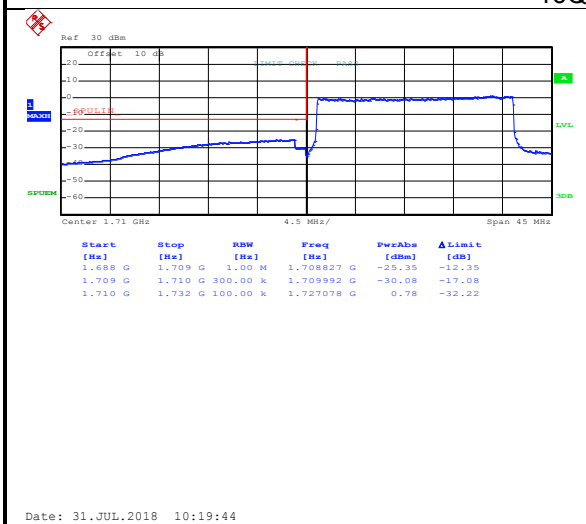
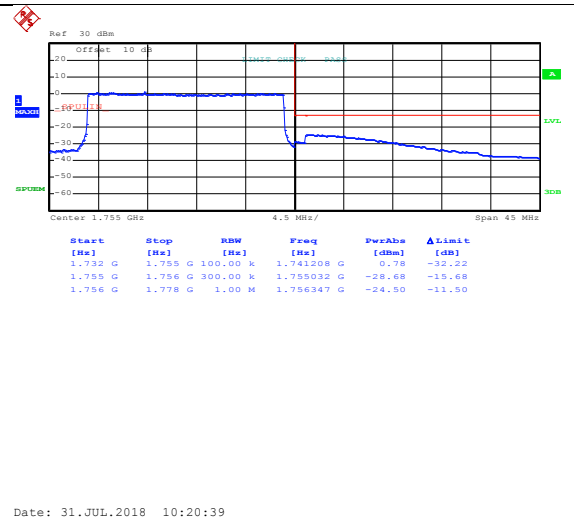
LTE Band 4, BW: 5MHz	
QPSK & RB Size 1	
 Date: 31.JUL.2018 10:09:59	 Date: 31.JUL.2018 10:10:50
Lowest channel	Highest channel
QPSK & RB Size 25	
 Date: 31.JUL.2018 10:10:18	 Date: 31.JUL.2018 10:11:16
Lowest channel	Highest channel

LTE Band 4, BW: 10MHz	
16QAM & RB Size 1	
 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 1.698 G / 1.709 G / 1.00 M / 1.709000 G / -25.29 / -12.29 1.709 G / 1.710 G / 30.00 k / 1.709992 G / -27.99 / -14.99 1.710 G / 1.722 G / 100.00 k / 1.710613 G / 19.95 / -13.05 Date: 31.JUL.2018 10:12:13	 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 1.742 G / 1.755 G / 100.00 k / 1.745625 G / 20.03 / -12.97 1.755 G / 1.756 G / 30.00 k / 1.755024 G / -44.73 / -31.73 1.756 G / 1.768 G / 1.00 M / 1.763327 G / -30.64 / -17.64 Date: 31.JUL.2018 10:15:57
Lowest channel	Highest channel
16QAM & RB Size 50	
 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 1.698 G / 1.709 G / 1.00 M / 1.708722 G / -23.38 / -10.38 1.709 G / 1.710 G / 300.00 k / 1.709976 G / -26.90 / -13.90 1.710 G / 1.722 G / 100.00 k / 1.717500 G / 4.08 / -28.92 Date: 31.JUL.2018 10:15:18	 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 1.742 G / 1.755 G / 100.00 k / 1.752525 G / 4.54 / -28.46 1.755 G / 1.756 G / 300.00 k / 1.755016 G / -24.62 / -11.62 1.756 G / 1.768 G / 1.00 M / 1.756278 G / -21.04 / -8.04 Date: 31.JUL.2018 10:16:18
Lowest channel	Highest channel

LTE Band 4, BW: 10MHz	
QPSK & RB Size 1	
 Start [Hz] Stop [Hz] RBW [Hz] Freq [Hz] PwrAbs [dBm] ΔLimit [dB] 1.698 G 1.709 G 1.00 M 1.709000 G -25.43 -12.43 1.709 G 1.710 G 30.00 k 1.709992 G -27.74 -14.74 1.710 G 1.722 G 100.00 k 1.710575 G 21.60 -11.40 Date: 31.JUL.2018 10:12:05	 Start [Hz] Stop [Hz] RBW [Hz] Freq [Hz] PwrAbs [dBm] ΔLimit [dB] 1.742 G 1.755 G 100.00 k 1.745600 G 21.21 -11.79 1.755 G 1.756 G 30.00 k 1.755016 G -44.08 -31.08 1.756 G 1.768 G 1.00 M 1.763234 G -29.49 -16.49 Date: 31.JUL.2018 10:15:50
Lowest channel	Highest channel
QPSK & RB Size 50	
 Start [Hz] Stop [Hz] RBW [Hz] Freq [Hz] PwrAbs [dBm] ΔLimit [dB] 1.698 G 1.709 G 1.00 M 1.708815 G -22.51 -9.51 1.709 G 1.710 G 300.00 k 1.709992 G -25.77 -12.77 1.710 G 1.722 G 100.00 k 1.718200 G 4.88 -28.12 Date: 31.JUL.2018 10:15:10	 Start [Hz] Stop [Hz] RBW [Hz] Freq [Hz] PwrAbs [dBm] ΔLimit [dB] 1.742 G 1.755 G 100.00 k 1.752688 G 5.08 -27.92 1.755 G 1.756 G 300.00 k 1.755032 G -21.68 -8.68 1.756 G 1.768 G 1.00 M 1.756464 G -18.70 -5.70 Date: 31.JUL.2018 10:16:12
Lowest channel	Highest channel

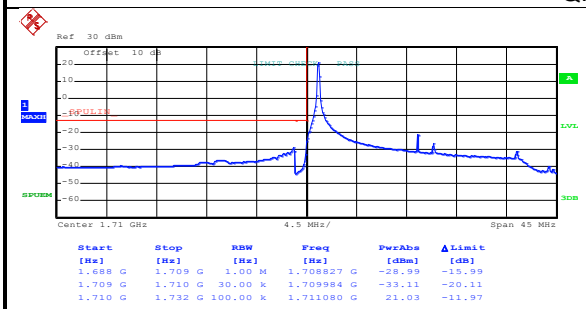
LTE Band 4, BW: 15MHz	
16QAM & RB Size 1	
	
Lowest channel	Highest channel
16QAM & RB Size 75	
	
Lowest channel	Highest channel

LTE Band 4, BW: 15MHz	
QPSK & RB Size 1	
 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 1.692 G / 1.709 G / 1.00 M / 1.708867 G / -28.00 / -15.00 1.709 G / 1.710 G / 30.00 k / 1.709984 G / -29.40 / -16.40 1.710 G / 1.728 G / 100.00 k / 1.710822 G / 20.90 / -12.10 Date: 31.JUL.2018 10:16:59	 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 1.738 G / 1.755 G / 100.00 k / 1.740860 G / 20.75 / -12.25 1.755 G / 1.756 G / 30.00 k / 1.755573 G / -43.63 / -30.63 1.756 G / 1.773 G / 1.00 M / 1.767444 G / -32.17 / -19.17 Date: 31.JUL.2018 10:17:50
Lowest channel	Highest channel
QPSK & RB Size 75	
 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 1.692 G / 1.709 G / 1.00 M / 1.709000 G / -22.70 / -9.70 1.709 G / 1.710 G / 300.00 k / 1.709879 G / -26.88 / -13.88 1.710 G / 1.728 G / 100.00 k / 1.718365 G / 2.83 / -30.17 Date: 31.JUL.2018 10:17:24	 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 1.738 G / 1.755 G / 100.00 k / 1.741455 G / 3.13 / -29.87 1.755 G / 1.756 G / 300.00 k / 1.755056 G / -24.48 / -11.48 1.756 G / 1.773 G / 1.00 M / 1.756000 G / -20.55 / -7.55 Date: 31.JUL.2018 10:18:17
Lowest channel	Highest channel

LTE Band 4, BW: 20MHz	
16QAM & RB Size 1	
 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 1.688 G / 1.709 G / 1.00 M / 1.709000 G / -32.46 / -19.46 1.709 G / 1.710 G / 30.00 k / 1.709992 G / -33.72 / -20.72 1.710 G / 1.732 G / 100.00 k / 1.711125 G / 19.92 / -13.08 Date: 31.JUL.2018 10:19:22	 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 1.732 G / 1.755 G / 100.00 k / 1.736077 G / 20.09 / -12.91 1.755 G / 1.756 G / 30.00 k / 1.755379 G / -35.23 / -22.23 1.756 G / 1.778 G / 1.00 M / 1.758601 G / -33.25 / -20.25 Date: 31.JUL.2018 10:20:18
Lowest channel	Highest channel
16QAM & RB Size 100	
 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 1.688 G / 1.709 G / 1.00 M / 1.708827 G / -25.35 / -12.35 1.709 G / 1.710 G / 300.00 k / 1.709992 G / -30.08 / -17.08 1.710 G / 1.732 G / 100.00 k / 1.727078 G / 0.78 / -32.22 Date: 31.JUL.2018 10:19:44	 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 1.732 G / 1.755 G / 100.00 k / 1.741208 G / 0.78 / -32.22 1.755 G / 1.756 G / 300.00 k / 1.755032 G / -28.68 / -15.68 1.756 G / 1.778 G / 1.00 M / 1.756347 G / -24.50 / -11.50 Date: 31.JUL.2018 10:20:39
Lowest channel	Highest channel

LTE Band 4, BW: 20MHz

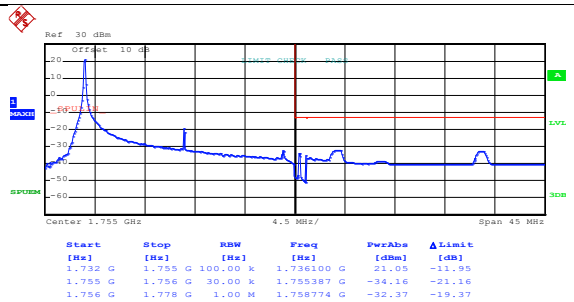
QPSK & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.688 G	1.709 G	1.00 M	1.708827 G	-28.99	-15.99
1.709 G	1.710 G	30.00 k	1.709984 G	-33.11	-20.11
1.710 G	1.732 G	100.00 k	1.711080 G	21.03	-11.97

Date: 31.JUL.2018 10:19:15

Lowest channel

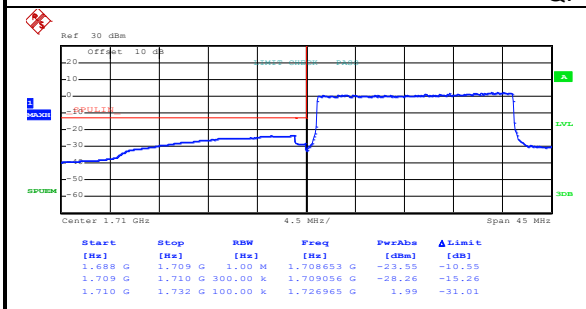


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.732 G	1.755 G	100.00 k	1.736100 G	21.05	-11.95
1.755 G	1.756 G	30.00 k	1.755387 G	-34.16	-21.16
1.756 G	1.778 G	1.00 M	1.758774 G	-32.37	-19.37

Date: 31.JUL.2018 10:20:10

Highest channel

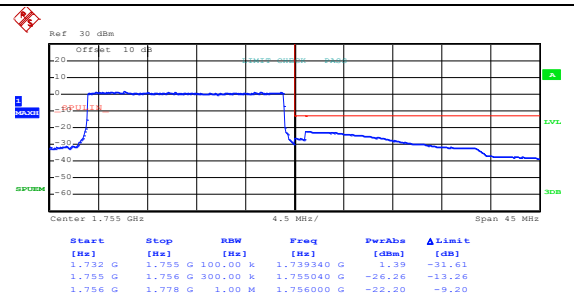
QPSK & RB Size 100



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.688 G	1.709 G	1.00 M	1.708653 G	-23.55	-10.55
1.709 G	1.710 G	300.00 k	1.709056 G	-28.26	-15.26
1.710 G	1.732 G	100.00 k	1.726965 G	1.99	-31.01

Date: 31.JUL.2018 10:19:38

Lowest channel

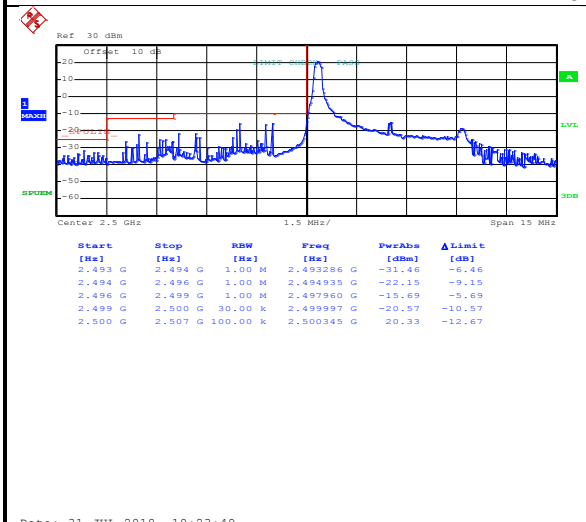
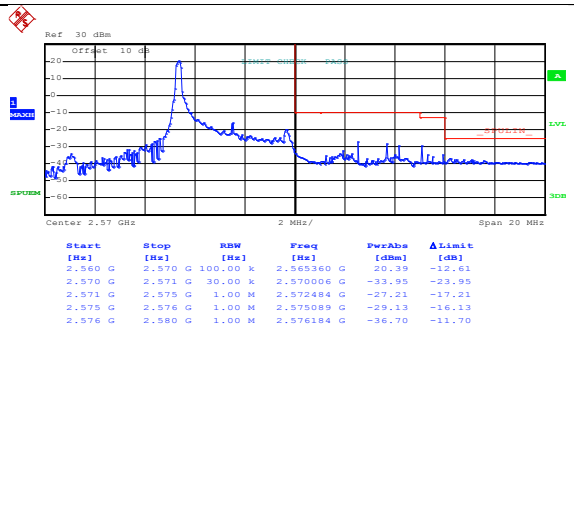
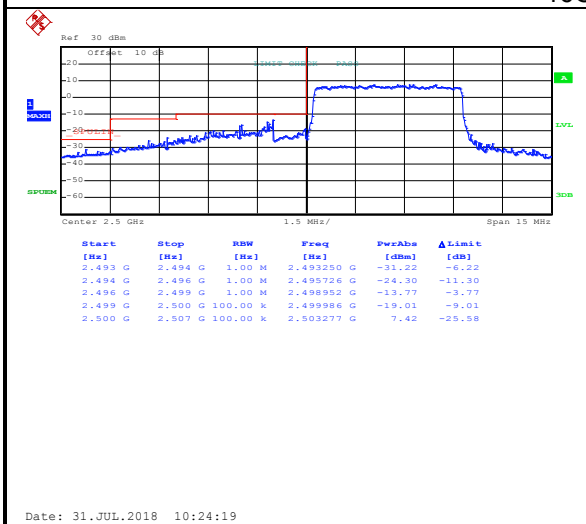
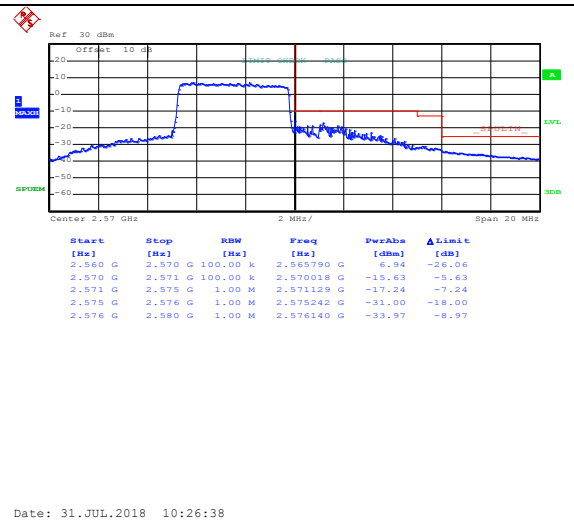


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.732 G	1.755 G	100.00 k	1.739340 G	1.39	-31.61
1.755 G	1.756 G	300.00 k	1.755040 G	-26.26	-13.26
1.756 G	1.778 G	1.00 M	1.756000 G	-22.20	-9.20

Date: 31.JUL.2018 10:20:33

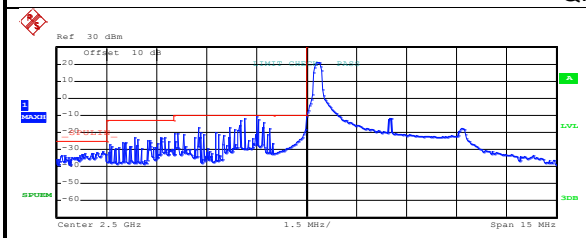
Highest channel

LTE Band 7 part:

LTE Band 7, BW: 5MHz	
16QAM & RB Size 1	
	
Lowest channel	Highest channel
16QAM & RB Size 25	
	
Lowest channel	Highest channel

LTE Band 7, BW: 5MHz

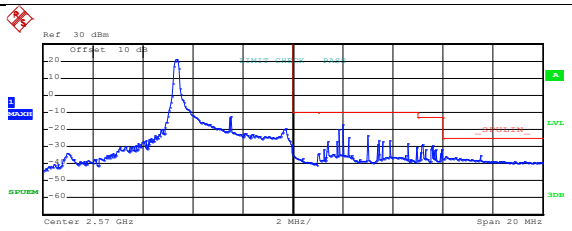
QPSK & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.493 G	2.494 G	1.00 M	2.493855 G	-30.96	-5.96
2.494 G	2.496 G	1.00 M	2.495613 G	-22.67	-9.67
2.496 G	2.499 G	1.00 M	2.498468 G	-10.84	-0.84
2.499 G	2.500 G	30.00 k	2.499997 G	-18.06	-8.06
2.500 G	2.507 G	100.00 k	2.500338 G	21.15	-11.85

Date: 31.JUL.2018 10:23:38

Lowest channel

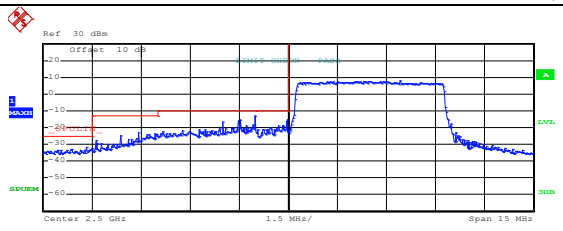


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.560 G	2.570 G	100.00 k	2.565360 G	21.15	-11.85
2.570 G	2.571 G	30.00 k	2.570007 G	-34.99	-24.99
2.571 G	2.575 G	1.00 M	2.571968 G	-17.28	-7.28
2.575 G	2.576 G	1.00 M	2.575202 G	-28.67	-15.67
2.576 G	2.580 G	1.00 M	2.577532 G	-35.14	-10.14

Date: 31.JUL.2018 10:26:03

Highest channel

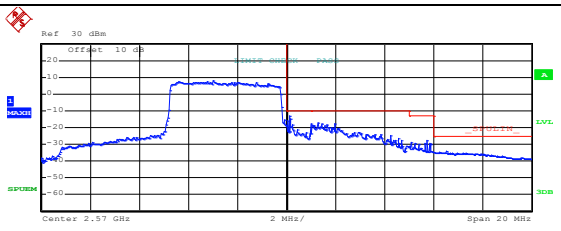
QPSK & RB Size 25



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.493 G	2.494 G	1.00 M	2.493794 G	-31.41	-6.41
2.494 G	2.496 G	1.00 M	2.495387 G	-22.95	-9.95
2.496 G	2.499 G	1.00 M	2.498976 G	-12.88	-2.88
2.499 G	2.500 G	100.00 k	2.499927 G	-16.48	-6.48
2.500 G	2.507 G	100.00 k	2.503405 G	8.05	-24.95

Date: 31.JUL.2018 10:24:07

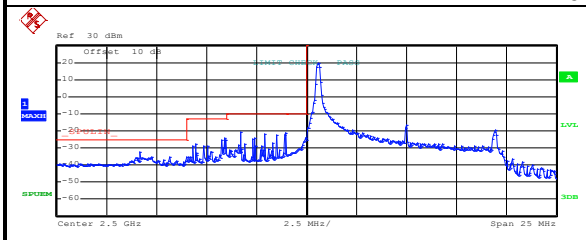
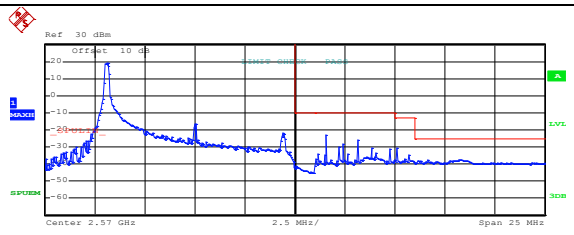
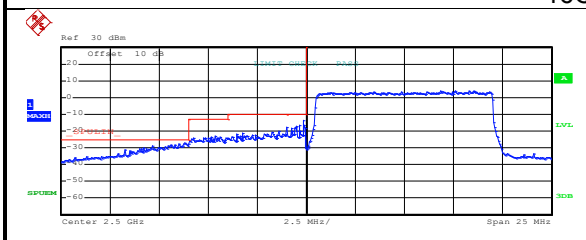
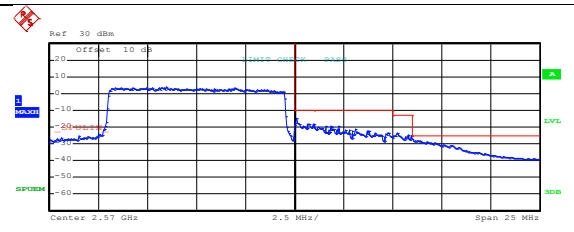
Lowest channel

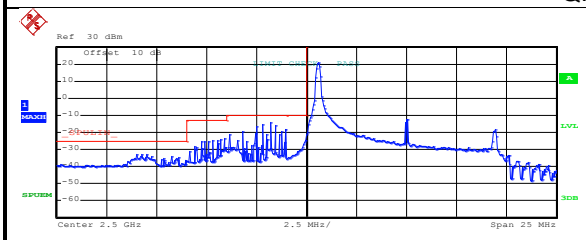
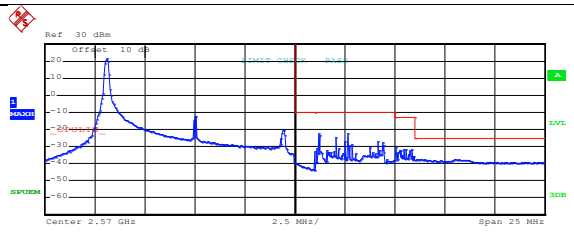
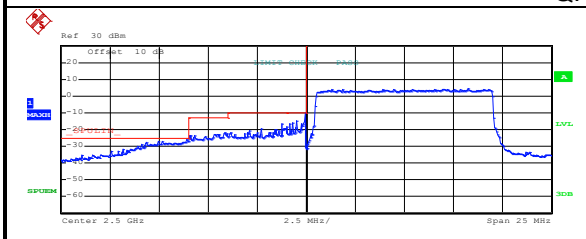
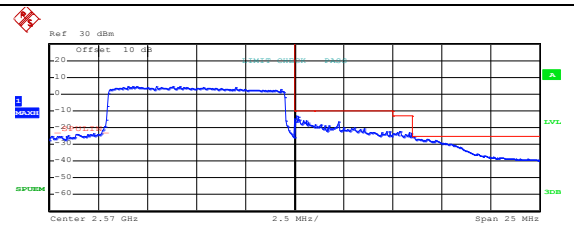


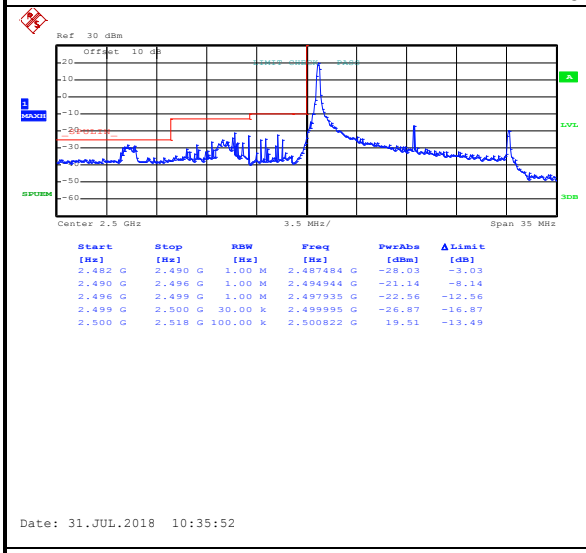
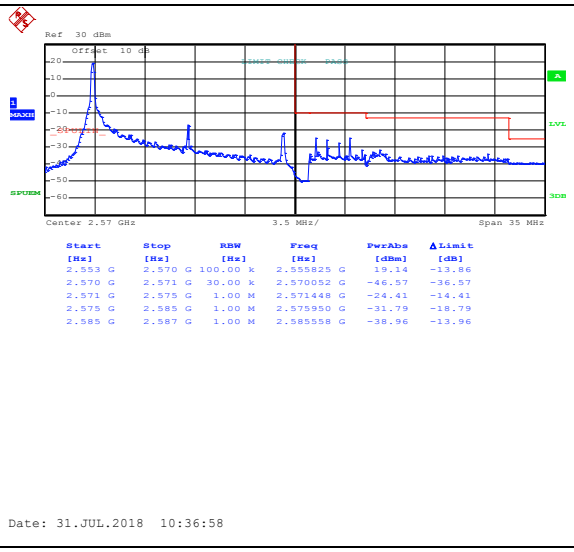
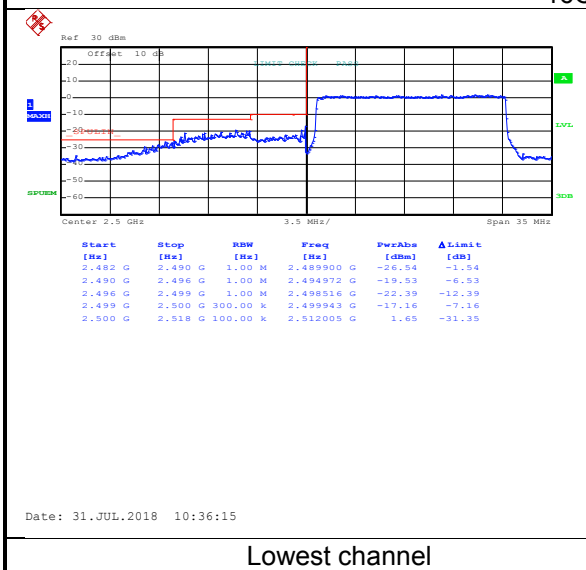
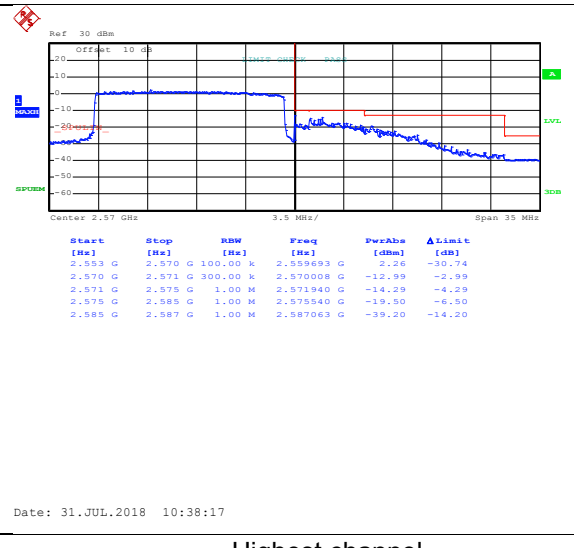
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.560 G	2.570 G	100.00 k	2.566980 G	7.78	-25.22
2.570 G	2.571 G	100.00 k	2.570104 G	-12.71	-2.71
2.571 G	2.575 G	1.00 M	2.571258 G	-17.28	-7.28
2.575 G	2.576 G	1.00 M	2.575702 G	-27.44	-14.44
2.576 G	2.580 G	1.00 M	2.576508 G	-34.32	-9.32

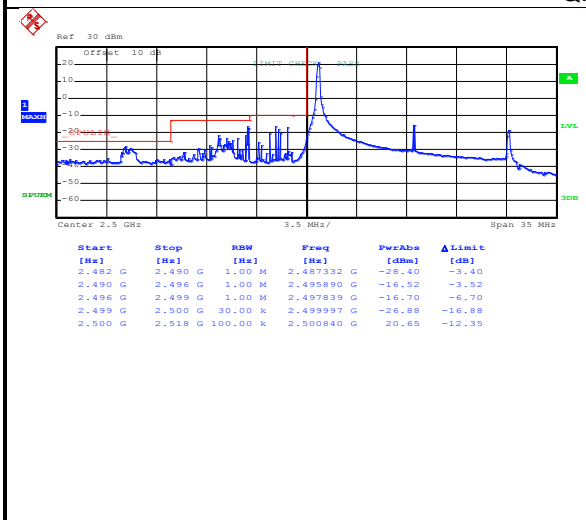
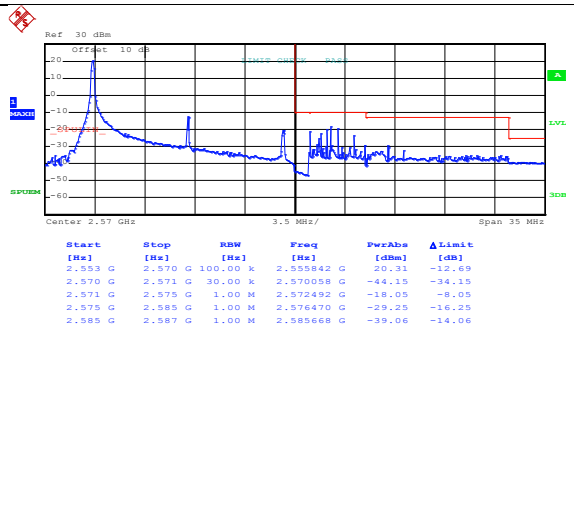
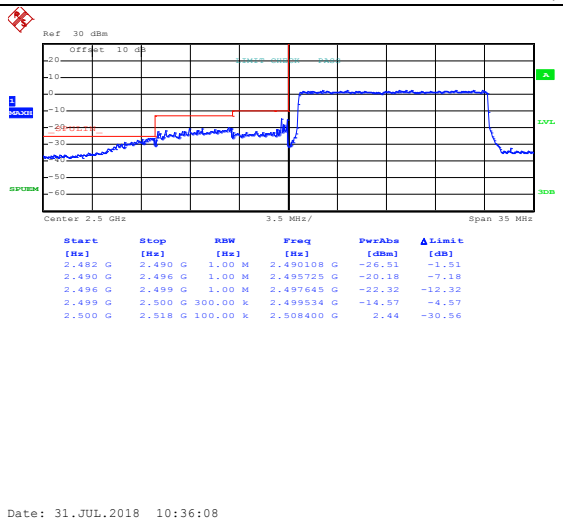
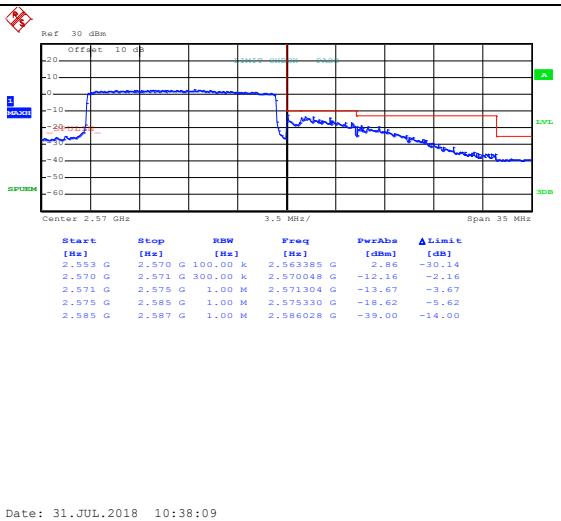
Date: 31.JUL.2018 10:26:32

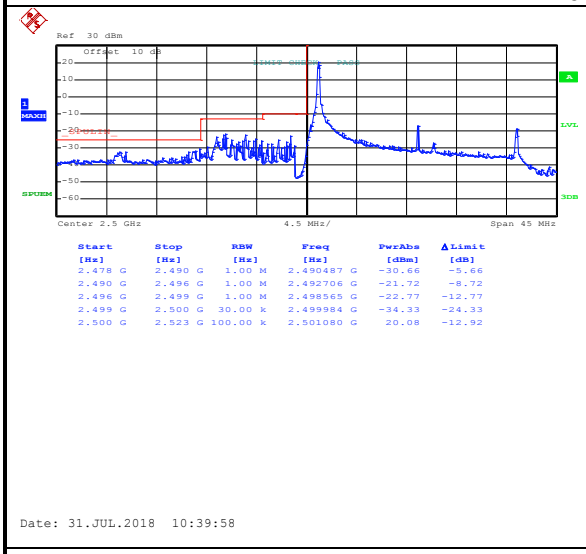
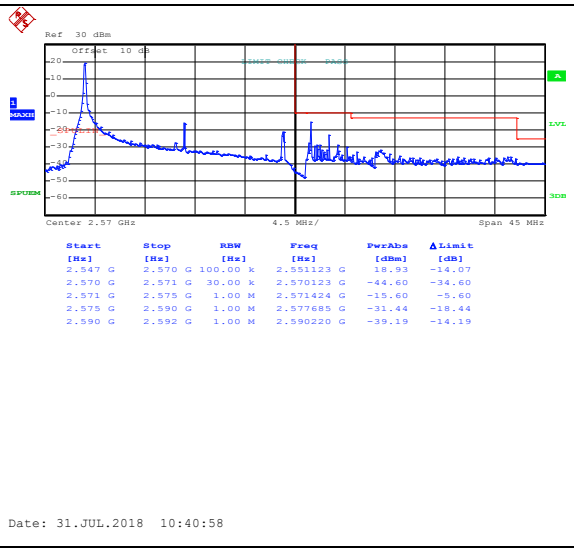
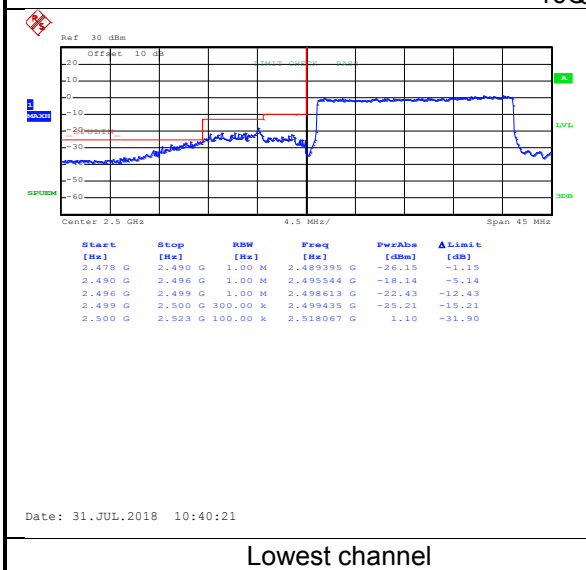
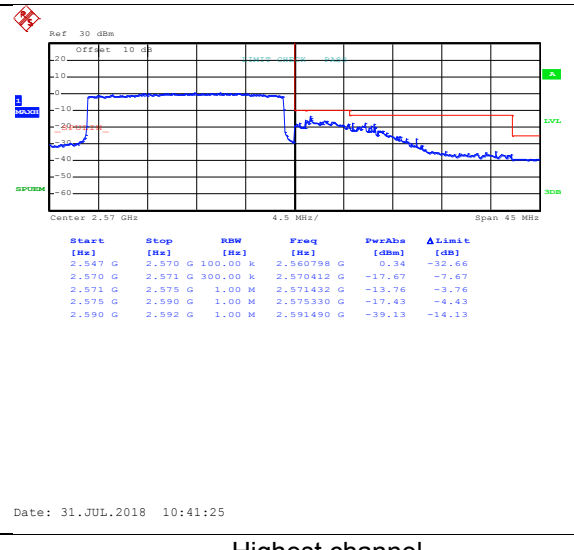
Highest channel

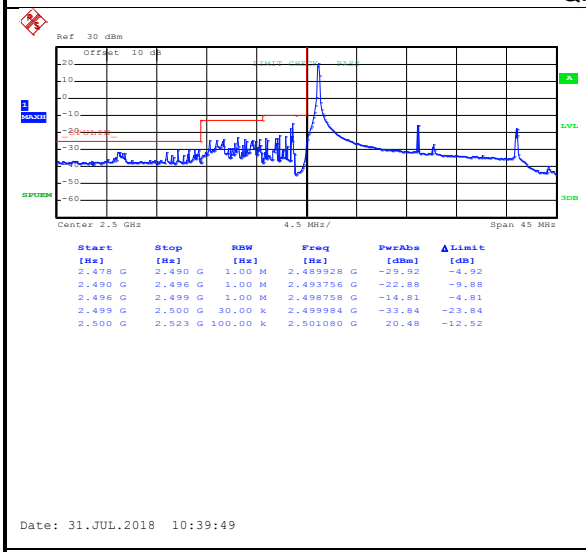
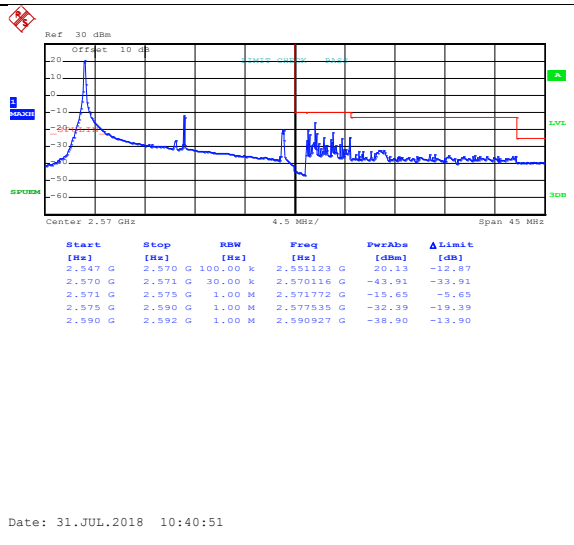
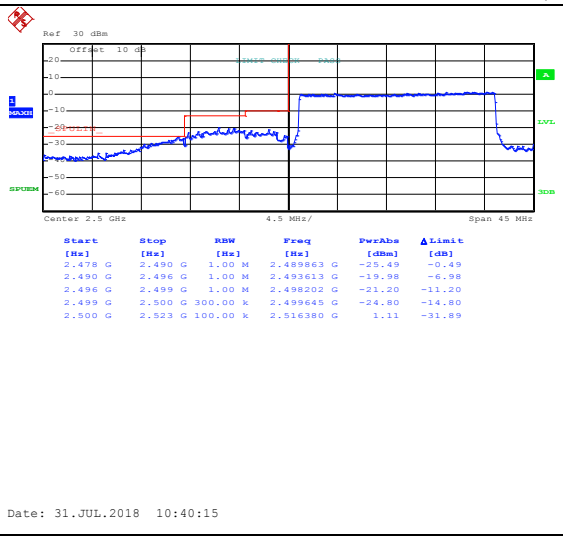
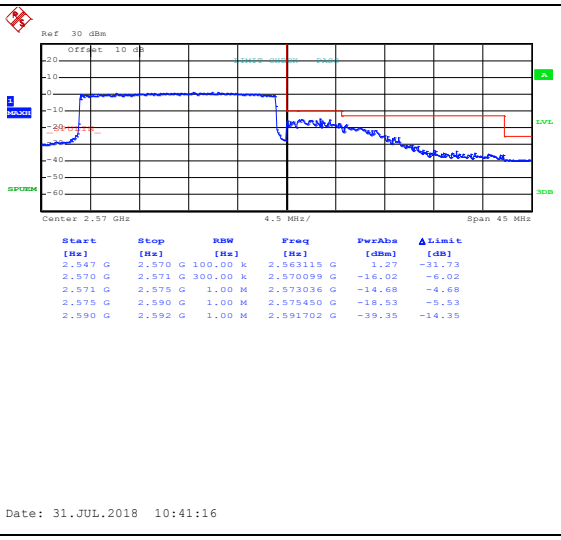
LTE Band 7, BW: 10MHz	
16QAM & RB Size 1	
 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 2.487 G / 2.494 G / 1.00 M / 2.491641 G / -32.36 / -7.36 2.494 G / 2.496 G / 1.00 M / 2.495887 G / -23.91 / -10.91 2.496 G / 2.499 G / 1.00 M / 2.496653 G / -20.72 / -10.72 2.499 G / 2.500 G / 30.00 k / 2.499965 G / -24.33 / -14.33 2.500 G / 2.513 G / 100.00 k / 2.500588 G / 19.49 / -13.51 Date: 31.JUL.2018 10:27:56	 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 2.558 G / 2.570 G / 100.00 k / 2.560613 G / 19.44 / -13.56 2.570 G / 2.571 G / 30.00 k / 2.570036 G / -41.18 / -31.18 2.571 G / 2.575 G / 1.00 M / 2.571516 G / -22.85 / -12.85 2.575 G / 2.576 G / 1.00 M / 2.575097 G / -30.80 / -17.80 2.576 G / 2.583 G / 1.00 M / 2.578320 G / -37.40 / -12.40 Date: 31.JUL.2018 10:29:18
Lowest channel	Highest channel
16QAM & RB Size 50	
 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 2.487 G / 2.494 G / 1.00 M / 2.493790 G / -26.97 / -1.97 2.494 G / 2.496 G / 1.00 M / 2.495323 G / -22.89 / -9.89 2.496 G / 2.499 G / 1.00 M / 2.498589 G / -19.76 / -9.76 2.499 G / 2.500 G / 300.00 k / 2.499850 G / -13.83 / -3.83 2.500 G / 2.513 G / 100.00 k / 2.508525 G / 4.11 / -28.89 Date: 31.JUL.2018 10:28:34	 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 2.558 G / 2.570 G / 100.00 k / 2.563450 G / 3.71 / -29.29 2.570 G / 2.571 G / 300.00 k / 2.570094 G / -14.69 / -4.69 2.571 G / 2.575 G / 1.00 M / 2.571000 G / -18.50 / -8.50 2.575 G / 2.576 G / 1.00 M / 2.575258 G / -23.38 / -10.38 2.576 G / 2.583 G / 1.00 M / 2.576020 G / -26.94 / -1.94 Date: 31.JUL.2018 10:30:01
Lowest channel	Highest channel

LTE Band 7, BW: 10MHz	
QPSK & RB Size 1	
 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 2.487 G / 2.494 G / 1.00 M / 2.491484 G / -32.88 / -7.88 2.494 G / 2.496 G / 1.00 M / 2.495887 G / -23.76 / -10.76 2.496 G / 2.499 G / 1.00 M / 2.498177 G / -14.21 / -4.21 2.499 G / 2.500 G / 30.00 k / 2.499987 G / -24.43 / -14.43 2.500 G / 2.513 G / 100.00 k / 2.500588 G / 20.85 / -12.15 Date: 31.JUL.2018 10:27:47	 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 2.558 G / 2.570 G / 100.00 k / 2.560588 G / 21.41 / -11.59 2.570 G / 2.571 G / 30.00 k / 2.570001 G / -39.95 / -29.95 2.571 G / 2.575 G / 1.00 M / 2.571161 G / -22.24 / -12.24 2.575 G / 2.576 G / 1.00 M / 2.575024 G / -30.35 / -17.35 2.576 G / 2.583 G / 1.00 M / 2.576071 G / -37.34 / -12.34 Date: 31.JUL.2018 10:29:09
Lowest channel	Highest channel
QPSK & RB Size 50	
 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 2.487 G / 2.494 G / 1.00 M / 2.493895 G / -25.57 / -0.57 2.494 G / 2.496 G / 1.00 M / 2.495823 G / -21.81 / -8.81 2.496 G / 2.499 G / 1.00 M / 2.498710 G / -16.41 / -6.41 2.499 G / 2.500 G / 300.00 k / 2.499967 G / -10.31 / -0.31 2.500 G / 2.513 G / 100.00 k / 2.508225 G / 4.43 / -28.57 Date: 31.JUL.2018 10:28:27	 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 2.558 G / 2.570 G / 100.00 k / 2.562925 G / 4.58 / -28.42 2.570 G / 2.571 G / 300.00 k / 2.570080 G / -12.85 / -2.85 2.571 G / 2.575 G / 1.00 M / 2.572194 G / -16.51 / -6.51 2.575 G / 2.576 G / 1.00 M / 2.575363 G / -22.31 / -9.31 2.576 G / 2.583 G / 1.00 M / 2.576033 G / -25.44 / -0.44 Date: 31.JUL.2018 10:29:54
Lowest channel	Highest channel

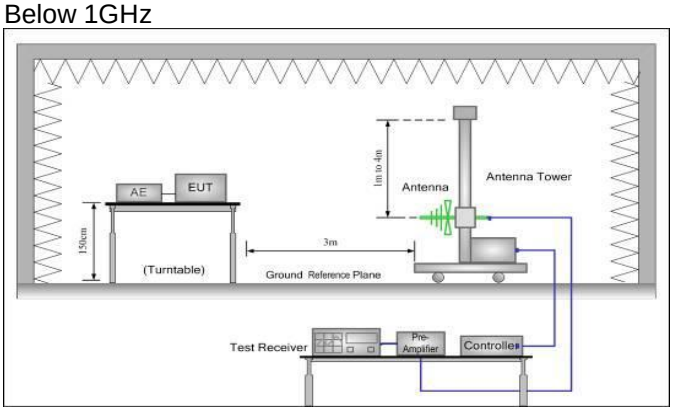
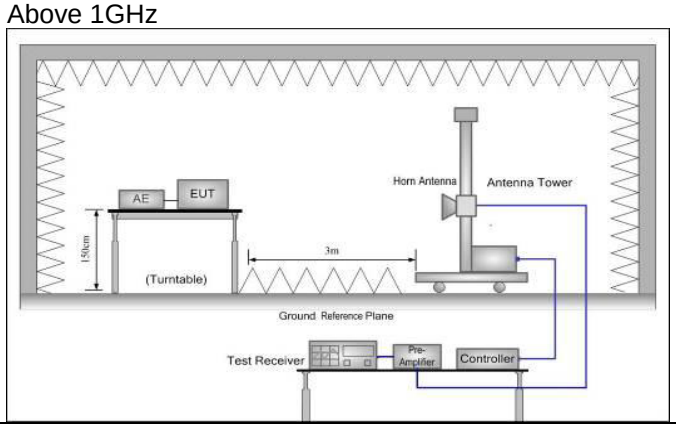
LTE Band 7, BW: 15MHz	
16QAM & RB Size 1	
	
Lowest channel	Highest channel
16QAM & RB Size 75	
	
Lowest channel	Highest channel

LTE Band 7, BW: 15MHz	
QPSK & RB Size 1	
 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 2.482 G / 2.490 G / 1.00 M / 2.487332 G / -28.40 / -3.40 2.490 G / 2.496 G / 1.00 M / 2.495890 G / -16.52 / -3.52 2.496 G / 2.499 G / 1.00 M / 2.497839 G / -16.70 / -6.70 2.499 G / 2.500 G / 30.00 k / 2.499997 G / -26.88 / -16.88 2.500 G / 2.518 G / 100.00 k / 2.500840 G / 20.65 / -12.35 Date: 31.JUL.2018 10:35:43	 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 2.553 G / 2.570 G / 100.00 k / 2.555842 G / 20.31 / -12.69 2.570 G / 2.571 G / 30.00 k / 2.570058 G / -44.15 / -34.15 2.571 G / 2.575 G / 1.00 M / 2.572492 G / -18.05 / -8.05 2.575 G / 2.585 G / 1.00 M / 2.576470 G / -29.25 / -16.25 2.585 G / 2.587 G / 1.00 M / 2.585668 G / -39.06 / -14.06 Date: 31.JUL.2018 10:36:49
Lowest channel	Highest channel
QPSK & RB Size 75	
 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 2.482 G / 2.490 G / 1.00 M / 2.490108 G / -26.51 / -1.51 2.490 G / 2.496 G / 1.00 M / 2.495725 G / -20.18 / -7.18 2.496 G / 2.499 G / 1.00 M / 2.497645 G / -22.32 / -12.32 2.499 G / 2.500 G / 300.00 k / 2.499534 G / -14.57 / -4.57 2.500 G / 2.518 G / 100.00 k / 2.508400 G / 2.44 / -30.56 Date: 31.JUL.2018 10:36:08	 Start [Hz] / Stop [Hz] / RBW [Hz] / Freq [Hz] / PwrAbs [dBm] / ΔLimit [dB] 2.553 G / 2.570 G / 100.00 k / 2.563385 G / 2.86 / -30.14 2.570 G / 2.571 G / 300.00 k / 2.570048 G / -12.16 / -2.16 2.571 G / 2.575 G / 1.00 M / 2.571304 G / -13.67 / -3.67 2.575 G / 2.585 G / 1.00 M / 2.575330 G / -18.62 / -5.62 2.585 G / 2.587 G / 1.00 M / 2.586028 G / -39.00 / -14.00 Date: 31.JUL.2018 10:38:09
Lowest channel	Highest channel

LTE Band 7, BW: 20MHz	
16QAM & RB Size 1	
	
Lowest channel	Highest channel
16QAM & RB Size 100	
	
Lowest channel	Highest channel

LTE Band 7, BW: 20MHz	
QPSK & RB Size 1	
	
Lowest channel	Highest channel
QPSK & RB Size 100	
	
Lowest channel	Highest channel

6.5 ERP, EIRP Measurement

Test Requirement:	Part 24.232(c), Part 27.50(d)(4), Part 27.50 (h)
Test Method:	ANSI/TIA-603-D 2010
Limit:	LTE Band 2: 2W EIRP, LTE Band 4: 1W EIRP, LTE Band 7: 2W EIRP
Test setup:	Below 1GHz  Above 1GHz 
Test Procedure:	1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. 2. During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna from 4m to 1m. The reading was recorded and the field strength (E in dBuV/m) was calculated. 3. ERP in frequency band below 1GHz were measured using a substitution method. The EUT was replaced by dipole antenna connected, the S.G. output was recorded and ERP was calculated as follows: ERP = S.G. output (dBm) + Antenna Gain (dBd) – Cable Loss (dB) 4. EIRP in frequency band above 1GHz were measured using a substitution method. The EUT was replaced by or horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows: EIRP = S.G. output (dBm) + Antenna Gain (dBi) – Cable Loss (dB) 5. The worse case was relating to the conducted output power.
Test Instruments:	Refer to section 5.9 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data:

LTE Band 2 part:

LTE Band 2							
BW: 1.4MHz							
Frequency (MHz)	UL Channel	Modulation	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
Lowest Channel							
1850.70	18607	QPSK	H	V	12.35	33.00	Pass
				H	17.18		
1850.70	18607	16QAM	H	V	13.36		
				H	17.49		
Middle Channel							
1880.00	18900	QPSK	H	V	18.32	33.00	Pass
				H	21.57		
1880.00	18900	16QAM	H	V	19.32		
				H	20.47		
Highest Channel							
1909.3	19193	QPSK	H	V	16.36	33.00	Pass
				H	16.41		
1909.3	19193	16QAM	H	V	16.23		
				H	15.79		
BW: 3MHz							
Frequency (MHz)	UL Channel	Modulation	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
Lowest Channel							
1851.50	18615	QPSK	H	V	13.32	33.00	Pass
				H	16.62		
1851.50	18615	16QAM	H	V	14.57		
				H	16.79		
Middle Channel							
1880.00	18900	QPSK	H	V	17.64	33.00	Pass
				H	20.52		
1880.00	18900	16QAM	H	V	19.34		
				H	20.55		
Highest Channel							
1908.50	19185	QPSK	H	V	16.22	33.00	Pass
				H	16.37		
1908.50	19185	16QAM	H	V	16.47		
				H	15.44		

LTE Band 2							
BW: 5MHz							
Frequency (MHz)	UL Channel	Modulation	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
Lowest Channel							
1852.50	18625	QPSK	H	V	14.36	33.00	Pass
				H	16.32		
1852.50	18625	16QAM	H	V	15.27		
				H	17.49		
Middle Channel							
1880.00	18900	QPSK	H	V	16.34	33.00	Pass
				H	19.64		
1880.00	18900	16QAM	H	V	19.22		
				H	20.44		
Highest Channel							
1907.50	19175	QPSK	H	V	17.64	33.00	Pass
				H	16.25		
1907.50	19175	16QAM	H	V	17.64		
				H	15.89		
BW: 10MHz							
Frequency (MHz)	UL Channel	Modulation	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
Lowest Channel							
1855.00	18650	QPSK	H	V	19.32	33.00	Pass
				H	20.02		
1855.00	18650	16QAM	H	V	17.64		
				H	21.03		
Middle Channel							
1880.00	18900	QPSK	H	V	16.34	33.00	Pass
				H	17.21		
1880.00	18900	16QAM	H	V	16.45		
				H	16.79		
Highest Channel							
1905.00	19150	QPSK	H	V	17.64	33.00	Pass
				H	18.21		
1905.00	19150	16QAM	H	V	16.34		
				H	19.87		

LTE Band 2							
BW: 15MHz							
Frequency (MHz)	UL Channel	Modulation	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
Lowest Channel							
1857.50	18675	QPSK	H	V	18.32	33.00	Pass
				H	21.44		
1857.50	18675	16QAM	H	V	18.41		
				H	21.11		
Middle Channel							
1880.00	18900	QPSK	H	V	17.32	33.00	Pass
				H	18.26		
1880.00	18900	16QAM	H	V	16.45		
				H	17.84		
Highest Channel							
1902.5	19125	QPSK	H	V	17.45	33.00	Pass
				H	19.63		
1902.5	19125	16QAM	H	V	17.64		
				H	19.77		
BW: 20MHz							
Frequency (MHz)	UL Channel	Modulation	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
Lowest Channel							
1860.00	18700	QPSK	H	V	18.74	33.00	Pass
				H	21.37		
1860.00	18700	16QAM	H	V	18.26		
				H	21.03		
Middle Channel							
1880.00	18900	QPSK	H	V	17.34	33.00	Pass
				H	18.89		
1880.00	18900	16QAM	H	V	16.34		
				H	18.76		
Highest Channel							
1900.00	19100	QPSK	H	V	18.10	33.00	Pass
				H	19.33		
1900.00	19100	16QAM	H	V	18.45		
				H	19.74		

LTE Band 4 part:

LTE Band 4							
BW: 1.4MHz							
Frequency (MHz)	UL Channel	Modulation	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
Lowest Channel							
1710.70	19957	QPSK	H	V	19.11	30.00	Pass
				H	18.15		
1710.70	19957	16QAM	H	V	18.23		
				H	17.62		
Middle Channel							
1732.50	20175	QPSK	H	V	19.00	30.00	Pass
				H	19.47		
1732.50	20175	16QAM	H	V	19.25		
				H	18.20		
Highest Channel							
1754.30	20393	QPSK	H	V	17.33	30.00	Pass
				H	19.23		
1754.30	20393	16QAM	H	V	19.62		
				H	18.77		
BW: 3MHz							
Frequency (MHz)	UL Channel	Modulation	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
Lowest Channel							
1711.50	19965	QPSK	H	V	19.56	30.00	Pass
				H	17.52		
1711.50	19965	16QAM	H	V	18.60		
				H	16.49		
Middle Channel							
1732.50	20175	QPSK	H	V	18.25	30.00	Pass
				H	18.45		
1732.50	20175	16QAM	H	V	19.32		
				H	19.76		
Highest Channel							
1753.50	20385	QPSK	H	V	18.24	30.00	Pass
				H	19.63		
1753.50	20385	16QAM	H	V	18.79		
				H	18.52		

LTE Band 4							
BW: 5MHz							
Frequency (MHz)	UL Channel	Modulation	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
Lowest Channel							
1712.50	19975	QPSK	H	V	19.25	30.00	Pass
				H	16.43		
1712.50	19975	16QAM	H	V	18.75		
				H	17.48		
Middle Channel							
1732.50	20175	QPSK	H	V	17.62	30.00	Pass
				H	18.23		
1732.50	20175	16QAM	H	V	19.64		
				H	18.77		
Highest Channel							
1752.50	20375	QPSK	H	V	18.14	30.00	Pass
				H	19.58		
1752.50	20375	16QAM	H	V	19.74		
				H	18.15		
BW: 10MHz							
Frequency (MHz)	UL Channel	Modulation	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
Lowest Channel							
1715.00	20000	QPSK	H	V	19.23	30.00	Pass
				H	16.34		
1715.00	20000	16QAM	H	V	17.64		
				H	16.89		
Middle Channel							
1732.50	20175	QPSK	H	V	17.63	30.00	Pass
				H	19.62		
1732.50	20175	16QAM	H	V	18.62		
				H	18.29		
Highest Channel							
1750.00	20350	QPSK	H	V	19.25	30.00	Pass
				H	18.46		
1750.00	20350	16QAM	H	V	18.21		
				H	19.79		

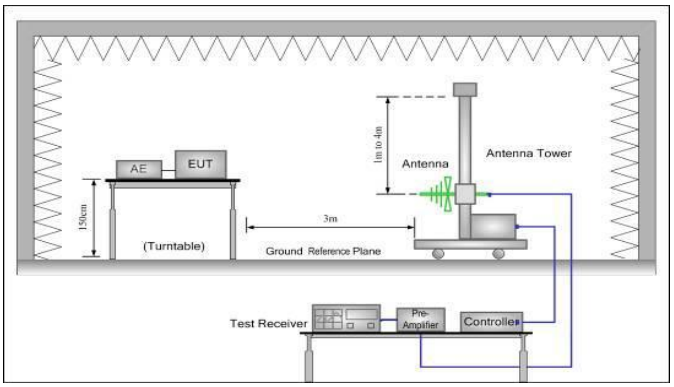
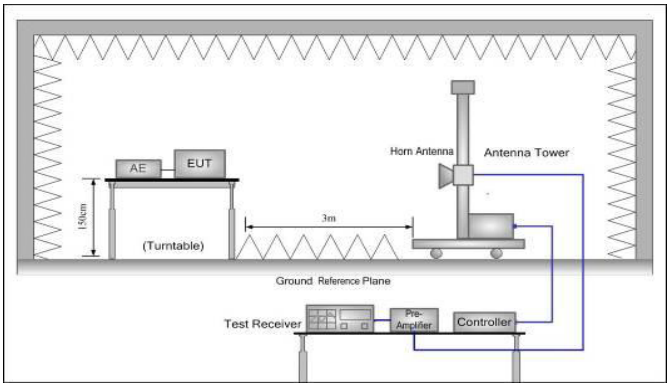
LTE Band 4							
BW: 15MHz							
Frequency (MHz)	UL Channel	Modulation	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
Lowest Channel							
1717.50	20025	QPSK	H	V	19.22	30.00	Pass
				H	17.64		
1717.50	20025	16QAM	H	V	16.29		
				H	16.82		
Middle Channel							
1732.50	20175	QPSK	H	V	16.34	30.00	Pass
				H	19.62		
1732.50	20175	16QAM	H	V	17.59		
				H	17.44		
Highest Channel							
1747.50	20325	QPSK	H	V	18.26	30.00	Pass
				H	17.63		
1747.50	20325	16QAM	H	V	19.26		
				H	19.52		
BW: 20MHz							
Frequency (MHz)	UL Channel	Modulation	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
Lowest Channel							
1720.00	20050	QPSK	H	V	18.26	30.00	Pass
				H	16.92		
1720.00	20050	16QAM	H	V	17.45		
				H	16.85		
Middle Channel							
1732.50	20175	QPSK	H	V	17.62	30.00	Pass
				H	19.35		
1732.50	20175	16QAM	H	V	18.41		
				H	17.95		
Highest Channel							
1745.00	20300	QPSK	H	V	18.45	30.00	Pass
				H	17.95		
1745.00	20300	16QAM	H	V	16.30		
				H	17.89		

LTE band 7 part:

LTE Band 7							
BW: 5MHz							
Frequency (MHz)	UL Channel	Modulation	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
Lowest Channel							
2502.50	20775	QPSK	H	V	13.77	33.00	Pass
				H	15.40		
2502.50	20775	16QAM	H	V	13.26		
				H	14.62		
Middle Channel							
2535.00	21100	QPSK	H	V	13.83	33.00	Pass
				H	14.08		
2535.00	21100	16QAM	H	V	13.26		
				H	14.02		
Highest Channel							
2567.50	21425	QPSK	H	V	13.27	33.00	Pass
				H	14.32		
2567.50	21425	16QAM	H	V	14.03		
				H	15.49		
BW: 10MHz							
Frequency (MHz)	UL Channel	Modulation	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
Lowest Channel							
2505.00	20800	QPSK	H	V	13.65	33.00	Pass
				H	15.62		
2505.00	20800	16QAM	H	V	13.47		
				H	13.59		
Middle Channel							
2535.00	21100	QPSK	H	V	14.62	33.00	Pass
				H	15.32		
2535.00	21100	16QAM	H	V	13.69		
				H	14.57		
Highest Channel							
2565.00	21400	QPSK	H	V	13.45	33.00	Pass
				H	15.76		
2565.00	21400	16QAM	H	V	14.37		
				H	15.49		

LTE Band 7							
BW: 15MHz							
Frequency (MHz)	UL Channel	Modulation	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
Lowest Channel							
2507.50	20825	QPSK	H	V	14.25	33.00	Pass
				H	13.32		
2507.50	20825	16QAM	H	V	13.56		
				H	13.78		
Middle Channel							
2535.00	21100	QPSK	H	V	14.32	33.00	Pass
				H	15.20		
2535.00	21100	16QAM	H	V	13.65		
				H	14.78		
Highest Channel							
2562.50	21375	QPSK	H	V	13.62	33.00	Pass
				H	15.39		
2562.50	21375	16QAM	H	V	14.57		
				H	15.33		
BW: 20MHz							
Frequency (MHz)	UL Channel	Modulation	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
Lowest Channel							
2510.00	20850	QPSK	H	V	14.22	33.00	Pass
				H	13.36		
2510.00	20850	16QAM	H	V	14.57		
				H	14.79		
Middle Channel							
2535.00	21100	QPSK	H	V	13.36	33.00	Pass
				H	14.62		
2535.00	21100	16QAM	H	V	14.25		
				H	15.06		
Highest Channel							
2565.00	21350	QPSK	H	V	13.62	33.00	Pass
				H	14.36		
2565.00	21350	16QAM	H	V	13.46		
				H	15.79		

6.6 Field strength of spurious radiation measurement

Test Requirement:	Part 24.238 (a), Part 27.53(m),Part 27.53(h)
Test Method:	ANSI/TIA-603-D 2010
Limit:	LTE Band 2 & 4: The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 $\log_{10}$(P) dB (-13 dBm). LTE Band 7: For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz.
Test setup:	Below 1GHz  Above 1GHz 
Test Procedure:	1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. 2. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations. 3. The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission

	was determined using the substitution method. 4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency. ERP / EIRP = S.G. output (dBm) + Antenna Gain(dB/dBi) – Cable Loss (dB)
Test Instruments:	Refer to section 5.9 for details
Test mode:	Refer to section 5.3 for details.
Test results:	Passed

Measurement Data:

LTE Band 2 part:

LTE Band 2, WB: 1.4MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest Channel				
3701.40	Vertical	-43.83	-13.00	Pass
5552.10	V	-38.33		
7402.00	V	-27.04		
3701.40	Horizontal	-44.68		
5552.10	H	-39.66		
7402.00	H	-31.20		
Middle Channel				
3760.00	Vertical	-43.96	-13.00	Pass
5640.00	V	-37.62		
7520.00	V	-23.78		
3760.00	Horizontal	-49.15		
5640.00	H	-38.65		
7520.00	H	-34.23		
Highest Channel				
3816.60	Vertical	-43.13	-13.00	Pass
5724.90	V	-27.05		
7633.20	V	-26.41		
3816.60	Horizontal	-49.08		
5724.90	H	-39.11		
7633.20	H	-37.07		

Note:
1. The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.
2. For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

LTE Band 2, WB: 3MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest Channel				
3703.00	Vertical	-45.23	-13.00	Pass
5554.50	V	-39.36		
7406.00	V	-30.15		
3703.00	Horizontal	-45.25		
5554.50	H	-36.69		
7406.00	H	-31.25		
Middle Channel				
3760.00	Vertical	-42.23	-13.00	Pass
5640.00	V	-37.69		
7520.00	V	-23.96		
3760.00	Horizontal	-49.58		
5640.00	H	-37.61		
7520.00	H	-36.69		
Highest Channel				
3817.00	Vertical	-41.53	-13.00	Pass
5725.50	V	-30.36		
7634.00	V	-27.64		
3817.00	Horizontal	-42.28		
5725.50	H	-39.67		
7634.00	H	-36.44		

Note:

1. The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.

2. For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

LTE Band 2, WB: 5MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest Channel				
3705.00	Vertical	-42.32	-13.00	Pass
5557.50	V	-39.62		
7410.00	V	-26.37		
3705.00	Horizontal	-45.25		
5557.50	H	-37.64		
7410.00	H	-32.02		
Middle Channel				
3760.00	Vertical	-42.62	-13.00	Pass
5640.00	V	-39.62		
7520.00	V	-23.54		
3760.00	Horizontal	-49.75		
5640.00	H	-37.69		
7520.00	H	-35.22		
Highest Channel				
3815.00	Vertical	-42.62	-13.00	Pass
5722.50	V	-28.67		
7630.00	V	-27.93		
3815.00	Horizontal	-49.78		
5722.50	H	-39.87		
7630.00	H	-38.45		

Note:

1. The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.

2. For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

LTE Band 2, WB: 10MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest Channel				
3710.00	Vertical	-45.26	-13.00	Pass
5565.00	V	-40.36		
7420.00	V	-29.62		
3710.00	Horizontal	-44.53		
5565.00	H	-37.62		
7420.00	H	-31.58		
Middle Channel				
3760.00	Vertical	-41.52	-13.00	Pass
5640.00	V	-36.23		
7520.00	V	-24.36		
3760.00	Horizontal	-49.22		
5640.00	H	-36.21		
7520.00	H	-37.48		
Highest Channel				
3810.00	Vertical	-42.21	-13.00	Pass
5715.00	V	-29.26		
7620.00	V	-26.48		
3810.00	Horizontal	-41.34		
5715.00	H	-38.95		
7620.00	H	-37.49		

Note:

1. The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.

2. For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

LTE Band 2, WB: 15MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest Channel				
3715.00	Vertical	-43.62	-13.00	Pass
5572.50	V	-40.56		
7430.00	V	-27.41		
3715.00	Horizontal	-46.87		
5572.50	H	-36.89		
7430.00	H	-33.03		
Middle Channel				
3760.00	Vertical	-41.69	-13.00	Pass
5640.00	V	-37.86		
7520.00	V	-24.56		
3760.00	Horizontal	-49.31		
5640.00	H	-36.85		
7520.00	H	-34.57		
Highest Channel				
3805.00	Vertical	-42.12	-13.00	Pass
5707.50	V	-27.34		
7610.00	V	-26.58		
3805.00	Horizontal	-41.37		
5707.50	H	-37.84		
7610.00	H	-38.45		

Note:

1. The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.

2. For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

LTE Band 2, WB: 20MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest Channel				
3720.00	Vertical	-43.23	-13.00	Pass
5580.00	V	-39.62		
7440.00	V	-28.62		
3720.00	Horizontal	-45.26		
5580.00	H	-37.64		
7440.00	H	-32.32		
Middle Channel				
3760.00	Vertical	-42.25	-13.00	Pass
5640.00	V	-37.64		
7520.00	V	-23.62		
3760.00	Horizontal	-50.26		
5640.00	H	-37.64		
7520.00	H	-36.32		
Highest Channel				
3800.00	Vertical	-41.43	-13.00	Pass
5700.00	V	-26.85		
7600.00	V	-27.46		
3800.00	Horizontal	-42.13		
5700.00	H	-37.89		
7600.00	H	-39.46		

Note:

1. The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.

2. For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

LTE Band 4 part:

LTE Band 4, WB: 1.4MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest Channel				
3421.40	Vertical	-45.77	-13.00	Pass
5132.10	V	-44.71		
6842.80	V	-39.13		
3421.40	Horizontal	-48.15		
5132.10	H	-45.37		
6842.80	H	-39.60		
Middle Channel				
3465.00	Vertical	-47.01	-13.00	Pass
5197.50	V	-45.17		
6930.00	V	-34.91		
3465.00	Horizontal	-50.75		
5197.50	H	-46.36		
6930.00	H	-39.37		
Highest Channel				
3508.60	Vertical	-48.22	-13.00	Pass
5262.90	V	-45.58		
7017.20	V	-32.85		
3508.60	Horizontal	-49.49		
5262.90	H	-45.51		
7017.20	H	-35.94		

Note:
1. The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.
2. For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

LTE Band 4, WB: 3MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest Channel				
3423.00	Vertical	-45.23	-13.00	Pass
5134.50	V	-41.36		
6846.00	V	-40.85		
3423.00	Horizontal	-46.37		
5134.50	H	-45.11		
6846.00	H	-40.29		
Middle Channel				
3465.00	Vertical	-43.32	-13.00	Pass
5197.50	V	-42.56		
6930.00	V	-31.57		
3465.00	Horizontal	-45.26		
5197.50	H	-45.19		
6930.00	H	-33.69		
Highest Channel				
3507.00	Vertical	-45.26	-13.00	Pass
5260.50	V	-42.56		
7014.00	V	-32.25		
3507.00	Horizontal	-44.75		
5260.50	H	-43.16		
7014.00	H	-33.05		

Note:

1. The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.

2. For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

LTE Band 4, WB: 5MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest Channel				
3425.00	Vertical	-46.32	-13.00	Pass
5137.50	V	-43.62		
6850.00	V	-39.58		
3425.00	Horizontal	-47.21		
5137.50	H	-46.62		
6850.00	H	-40.87		
Middle Channel				
3465.00	Vertical	-46.32	-13.00	Pass
5197.50	V	-44.12		
6930.00	V	-35.62		
3465.00	Horizontal	-49.67		
5197.50	H	-47.85		
6930.00	H	-40.26		
Highest Channel				
3505.00	Vertical	-47.69	-13.00	Pass
5257.50	V	-45.21		
7010.00	V	-31.64		
3505.00	Horizontal	-45.87		
5257.50	H	-46.11		
7010.00	H	-36.45		

Note:

1. The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.

2. For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

LTE Band 4, WB: 10MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest Channel				
3430.00	Vertical	-44.32	-13.00	Pass
5145.00	V	-42.56		
6860.00	V	-39.67		
3430.00	Horizontal	-46.31		
5145.00	H	-45.21		
6860.00	H	-39.42		
Middle Channel				
3465.00	Vertical	-44.58	-13.00	Pass
5197.50	V	-42.15		
6930.00	V	-31.57		
3465.00	Horizontal	-45.29		
5197.50	H	-43.53		
6930.00	H	-34.19		
Highest Channel				
3500.00	Vertical	-43.25	-13.00	Pass
5250.00	V	-41.78		
7000.00	V	-31.56		
3500.00	Horizontal	-46.83		
5250.00	H	-42.16		
7000.00	H	-34.47		

Note:

1. The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.

2. For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

LTE Band 4, WB: 15MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest Channel				
3435.00	Vertical	-45.25	-13.00	Pass
5152.50	V	-42.23		
6870.00	V	-40.36		
3435.00	Horizontal	-46.37		
5152.50	H	-47.64		
6870.00	H	-39.15		
Middle Channel				
3465.00	Vertical	-45.25	-13.00	Pass
5197.50	V	-43.16		
6930.00	V	-36.32		
3465.00	Horizontal	-50.27		
5197.50	H	-46.95		
6930.00	H	-39.41		
Highest Channel				
3495.00	Vertical	-46.32	-13.00	Pass
5242.50	V	-46.21		
6990.00	V	-32.25		
3495.00	Horizontal	-46.89		
5242.50	H	-45.75		
6990.00	H	-34.12		

Note:

1. The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.

2. For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

LTE Band 4, WB: 20MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest Channel				
3440.00	Vertical	-45.26	-13.00	Pass
5160.00	V	-43.31		
6880.00	V	-39.62		
3440.00	Horizontal	-45.27		
5160.00	H	-46.36		
6880.00	H	-40.11		
Middle Channel				
3465.00	Vertical	-45.26	-13.00	Pass
5197.50	V	-43.62		
6930.00	V	-31.26		
3465.00	Horizontal	-46.37		
5197.50	H	-43.16		
6930.00	H	-33.79		
Highest Channel				
3490.00	Vertical	-44.31	-13.00	Pass
5235.00	V	-42.62		
6980.00	V	-32.26		
3490.00	Horizontal	-45.62		
5235.00	H	-42.19		
6980.00	H	-34.13		

Note:

1. The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.

2. For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

LTE Band 7 part:

LTE Band 7, WB: 5MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest Channel				
5005.00	Vertical	-43.48	-25.00	Pass
7507.50	V	-36.74		
10010.00	V	-31.19		
5005.00	Horizontal	-42.32		
7507.50	H	-34.83		
10010.00	H	-36.31		
Middle Channel				
5070.00	Vertical	-37.58	-25.00	Pass
7605.00	V	-29.73		
10140.00	V	-30.21		
5070.00	Horizontal	-38.07		
7605.00	H	-32.55		
10140.00	H	-30.46		
Highest Channel				
5135.00	Vertical	-42.51	-25.00	Pass
7702.50	V	-35.32		
10270.00	V	-31.70		
5135.00	Horizontal	-43.32		
7702.50	H	-36.99		
10270.00	H	-33.08		

Note:

1. The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.

2. For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

LTE Band 7, WB: 10MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest Channel				
5010.00	Vertical	-42.26	-25.00	Pass
7515.00	V	-37.69		
10020.00	V	-33.36		
5010.00	Horizontal	-41.52		
7515.00	H	-37.43		
10020.00	H	-39.61		
Middle Channel				
5070.00	Vertical	-36.25	-25.00	Pass
7605.00	V	-30.44		
10140.00	V	-31.64		
5070.00	Horizontal	-35.76		
7605.00	H	-31.34		
10140.00	H	-29.78		
Highest Channel				
5130.00	Vertical	-37.34	-25.00	Pass
7695.00	V	-29.61		
10260.00	V	-32.02		
5130.00	Horizontal	-36.29		
7695.00	H	-31.34		
10260.00	H	-29.70		

Note:

1. The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.

2. For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

LTE Band 7, WB: 15MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest Channel				
5015.00	Vertical	-42.26	-25.00	Pass
7522.50	V	-36.32		
10030.00	V	-31.74		
5015.00	Horizontal	-43.61		
7522.50	H	-35.98		
10030.00	H	-37.64		
Middle Channel				
5070.00	Vertical	-36.25	-25.00	Pass
7605.00	V	-28.41		
10140.00	V	-31.46		
5070.00	Horizontal	-37.49		
7605.00	H	-31.52		
10140.00	H	-29.77		
Highest Channel				
5125.00	Vertical	-42.26	-25.00	Pass
7687.50	V	-36.19		
10250.00	V	-32.49		
5125.00	Horizontal	-42.57		
7687.50	H	-37.49		
10250.00	H	-33.11		

Note:

1. The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.

2. For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

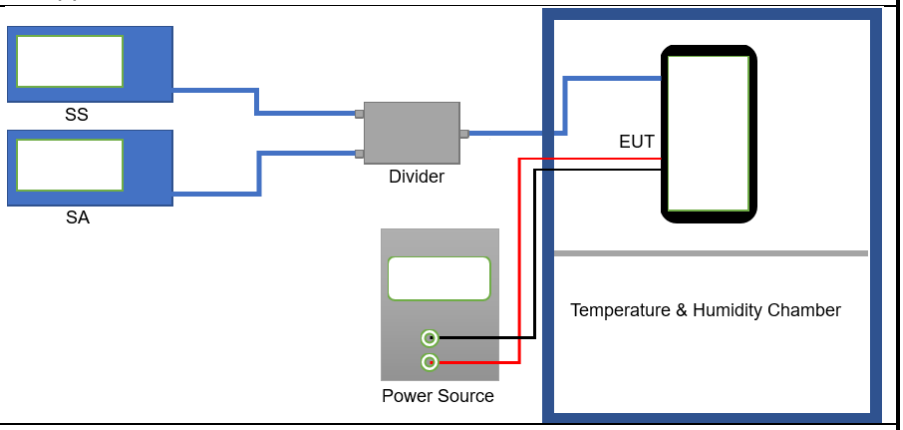
LTE Band 7, WB: 20MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
Lowest Channel				
5020.00	Vertical	-43.26	-25.00	Pass
7530.00	V	-37.64		
10040.00	V	-32.26		
5020.00	Horizontal	-43.15		
7530.00	H	-36.67		
10040.00	H	-38.49		
Middle Channel				
5070.00	Vertical	-37.64	-25.00	Pass
7605.00	V	-29.62		
10140.00	V	-32.25		
5070.00	Horizontal	-36.67		
7605.00	H	-32.25		
10140.00	H	-28.44		
Highest Channel				
5120.00	Vertical	-36.64	-25.00	Pass
7680.00	V	-30.49		
10240.00	V	-31.64		
5120.00	Horizontal	-37.64		
7680.00	H	-33.02		
10240.00	H	-29.79		

Note:

1. The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.

2. For above 1 GHz, all test modes were performed, and just the worst case shown in the report.

6.7 Frequency stability V.S. Temperature measurement

Test Requirement:	Part 22.355, Part 24.235, Part 27.54, Part 2.1055(a)(1)(b)
Test Method:	ANSI/TIA-603-D 2010
Limit:	±2.5ppm
Test setup:	
Test procedure:	1. The equipment under test was connected to an external DC power supply and input rated voltage. 2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. 3. The EUT was placed inside the temperature chamber. 4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25℃ operating frequency as reference frequency. 5. Turn EUT off and set the chamber temperature to –30℃. After the temperature stabilized for approximately 30 minutes recorded the frequency. 6. Repeat step measure with 10℃ increased per stage until the highest temperature of +50℃ reached
Test Instruments:	Refer to section 5.9 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data (worst case):

LTE Band 2 part:

Reference Frequency: LTE Band 2 (10MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.80	-30	200	0.106383	±2.5	Pass
	-20	157	0.083511		
	-10	165	0.087766		
	0	125	0.066489		
	10	190	0.101064		
	20	176	0.093617		
	30	116	0.061702		
	40	107	0.056915		
	50	152	0.080851		
16QAM					
3.80	-30	125	0.066489	±2.5	Pass
	-20	152	0.080851		
	-10	168	0.089362		
	0	124	0.065957		
	10	146	0.077660		
	20	142	0.075532		
	30	158	0.084043		
	40	135	0.071809		
	50	140	0.074468		
Note: Only the worst case shown in the report.					

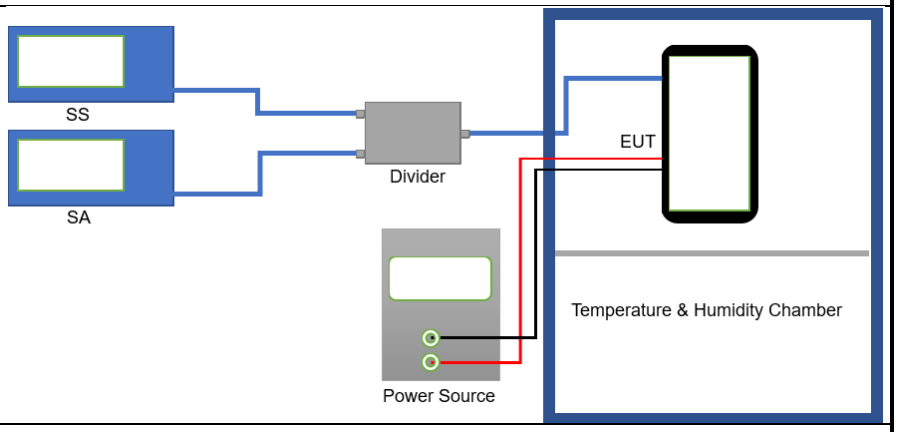
LTE Band 4 part:

Reference Frequency: LTE Band 4 (10MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.80	-30	196	0.113131	±2.5	Pass
	-20	153	0.088312		
	-10	161	0.092929		
	0	121	0.069841		
	10	186	0.107359		
	20	172	0.099278		
	30	112	0.064646		
	40	103	0.059452		
	50	148	0.085426		
16QAM					
3.80	-30	121	0.069841	±2.5	Pass
	-20	148	0.085426		
	-10	164	0.094661		
	0	120	0.069264		
	10	142	0.081962		
	20	138	0.079654		
	30	154	0.088889		
	40	131	0.075613		
	50	136	0.078499		
Note: Only the worst case shown in the report.					

LTE Band 7 part:

Reference Frequency: LTE Band 7 (10MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.80	-30	197	0.0777120	±2.5	Pass
	-20	154	0.0607495		
	-10	162	0.0639053		
	0	122	0.0481262		
	10	187	0.0737673		
	20	173	0.0682446		
	30	113	0.0445759		
	40	104	0.0410256		
	50	149	0.0587771		
16QAM					
3.80	-30	122	0.0481262	±2.5	Pass
	-20	149	0.0587771		
	-10	165	0.0650888		
	0	121	0.0477318		
	10	143	0.0564103		
	20	139	0.0548323		
	30	155	0.0611440		
	40	132	0.0520710		
	50	137	0.0540434		
Note: Only the worst case shown in the report.					

6.8 Frequency stability V.S. Voltage measurement

Test Requirement:	Part 22.355, Part 24.235, Part 27.54, Part 2.1055(d)(2)
Test Method:	ANSI/TIA-603-D 2010
Limit:	±2.5ppm
Test setup:	
Test procedure:	1. Set chamber temperature to 25℃. Use a variable DC power source to power the EUT and set the voltage to rated voltage. 2. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency. 3. Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.
Test Instruments:	Refer to section 5.9 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data (worst case):

LTE Band 2 part:

Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.35	100	0.053191	±2.5	Pass
	3.80	67	0.035638		
	3.50	76	0.040426		
16QAM					
25	4.35	82	0.043617	±2.5	Pass
	3.80	98	0.052128		
	3.50	50	0.026596		
Note: Only the worst case shown in the report.					

LTE Band 4 part:

Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.35	96	0.055411	±2.5	Pass
	3.80	63	0.036364		
	3.50	72	0.041558		
16QAM					
25	4.35	78	0.045022	±2.5	Pass
	3.80	94	0.054257		
	3.50	46	0.026551		
Note: Only the worst case shown in the report.					

LTE Band 7 part:

Reference Frequency: LTE Band 7(10MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.35	97	0.0382643	±2.5	Pass
	3.80	64	0.0252465		
	3.50	73	0.0287968		
16QAM					
25	4.35	79	0.0311637	±2.5	Pass
	3.80	95	0.0374753		
	3.50	47	0.0185404		
Note: Only the worst case shown in the report.					