LTE Band 4, 1.4MHz, 16QAM, Channel 19957

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
5136.02	-36.98	6.86	10.09	-33.75	-13.00	20.75	H
8558.01	-33.96	8.57	13.01	-29.52	-13.00	16.52	H
10271.01	-44.39	9.54	13.01	-40.92	-13.00	27.92	V
11988.01	-34.42	10.11	13.00	-31.53	-13.00	18.53	V
13706.01	-39.53	10.60	14.32	-35.81	-13.00	22.81	V
17151.00	-34.36	12.51	14.13	-32.74	-13.00	19.74	H

LTE Band 4, 1.4MHz, 16QAM, Channel 20175

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
5202.02	-40.71	6.96	10.18	-37.49	-13.00	24.49	H
6936.01	-46.11	7.80	11.52	-42.39	-13.00	29.39	H
8667.01	-35.07	8.40	13.03	-30.44	-13.00	17.44	H
12143.01	-39.21	10.22	13.06	-36.37	-13.00	23.37	V
13878.01	-41.91	10.76	14.43	-38.24	-13.00	25.24	H
17366.00	-35.27	12.46	14.61	-33.12	-13.00	20.12	H

LTE Band 4, 1.4MHz, 16QAM, Channel 20393

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
3509.02	-55.97	5.54	8.21	-53.30	-13.00	40.30	H
5267.02	-35.10	6.99	10.27	-31.82	-13.00	18.82	H
7024.01	-41.83	8.26	11.63	-38.46	-13.00	25.46	H
8776.01	-29.80	8.59	13.06	-25.33	-13.00	12.33	H
10533.01	-43.60	9.53	13.11	-40.02	-13.00	27.02	H
12297.01	-35.29	10.00	13.12	-32.17	-13.00	19.17	H

LTE Band 4, 1.4MHz, 64QAM, Channel 19957

Frequency(MHz)	P$_{Mea}$(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit（dBm）	Margin(dB)	Polarization
3421.02	-49.67	5.38	8.01	-47.04	-13.00	34.04	V
5136.02	-34.56	6.86	10.09	-31.33	-13.00	18.33	H
6849.01	-46.87	7.83	11.42	-43.28	-13.00	30.28	H
8559.01	-34.97	8.57	13.01	-30.53	-13.00	17.53	H
10270.01	-41.89	9.54	13.01	-38.42	-13.00	25.42	V
11986.01	-35.51	10.12	13.00	-32.63	-13.00	19.63	V

LTE Band 4, 1.4MHz, 64QAM, Channel 20175

Frequency(MHz)	P$_{Mea}$(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit（dBm）	Margin(dB)	Polarization
3465.02	-54.87	5.46	8.12	-52.21	-13.00	39.21	H
5202.02	-40.82	6.96	10.18	-37.60	-13.00	24.60	H
6935.01	-46.56	7.80	11.52	-42.84	-13.00	29.84	H
8667.01	-33.66	8.40	13.03	-29.03	-13.00	16.03	H
10401.01	-45.06	9.80	13.06	-41.80	-13.00	28.80	V
12141.01	-37.06	10.23	13.06	-34.23	-13.00	21.23	V

LTE Band 4, 1.4MHz, 64QAM, Channel 20393

Frequency(MHz)	P$_{Mea}$(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit（dBm）	Margin(dB)	Polarization
3509.02	-55.54	5.54	8.21	-52.87	-13.00	39.87	H
5267.02	-36.32	6.99	10.27	-33.04	-13.00	20.04	H
7021.01	-42.52	8.27	11.63	-39.16	-13.00	26.16	H
8776.01	-31.82	8.59	13.06	-27.35	-13.00	14.35	H
10532.01	-45.01	9.53	13.11	-41.43	-13.00	28.43	V
12296.01	-36.63	10.00	13.12	-33.51	-13.00	20.51	V

LTE Band 5, 1.4MHz, QPSK, Channel 20407

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1650.01	-55.34	3.57	5.23	2.15	-55.83	-13.00	42.83	H
2465.00	-53.07	4.59	6.00	2.15	-53.81	-13.00	40.81	V
3299.02	-52.95	5.29	7.72	2.15	-52.67	-13.00	39.67	V
4127.02	-56.00	6.04	9.03	2.15	-55.16	-13.00	42.16	H
4962.01	-54.58	6.67	9.86	2.15	-53.54	-13.00	40.54	V
5762.01	-54.74	7.25	10.55	2.15	-53.59	-13.00	40.59	V

LTE Band 5, 1.4MHz, QPSK, Channel 20525

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1673.01	-57.41	3.58	5.19	2.15	-57.95	-13.00	44.95	H
2503.00	-52.68	4.63	6.11	2.15	-53.35	-13.00	40.35	V
3355.02	-53.92	5.32	7.85	2.15	-53.54	-13.00	40.54	H
4180.02	-55.03	6.16	9.08	2.15	-54.26	-13.00	41.26	V
5025.01	-56.01	6.56	9.94	2.15	-54.78	-13.00	41.78	H
5856.01	-53.81	7.25	10.53	2.15	-52.68	-13.00	39.68	H

LTE Band 5, 1.4MHz, QPSK, Channel 20643

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1697.01	-55.91	3.60	5.15	2.15	-56.51	-13.00	43.51	H
2543.00	-52.42	4.66	6.18	2.15	-53.05	-13.00	40.05	H
3394.02	-54.65	5.36	7.95	2.15	-54.21	-13.00	41.21	V
4245.02	-55.59	6.24	9.15	2.15	-54.83	-13.00	41.83	H
5095.01	-55.05	6.76	10.03	2.15	-53.93	-13.00	40.93	H
5941.01	-53.20	7.47	10.51	2.15	-52.31	-13.00	39.31	H

LTE Band 5, 1.4MHz, 16QAM, Channel 20407

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1649.01	-55.40	3.56	5.23	2.15	-55.88	-13.00	42.88	H
2477.00	-53.77	4.60	6.03	2.15	-54.49	-13.00	41.49	V
3299.02	-54.55	5.29	7.72	2.15	-54.27	-13.00	41.27	V
4119.02	-55.50	6.04	9.02	2.15	-54.67	-13.00	41.67	H
4951.01	-55.52	6.69	9.85	2.15	-54.51	-13.00	41.51	H
5779.01	-54.10	7.22	10.54	2.15	-52.93	-13.00	39.93	H

LTE Band 5, 1.4MHz, 16QAM, Channel 20525

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1673.01	-57.00	3.58	5.19	2.15	-57.54	-13.00	44.54	H
2510.00	-50.52	4.63	6.12	2.15	-51.18	-13.00	38.18	V
3348.02	-54.34	5.32	7.84	2.15	-53.97	-13.00	40.97	H
4196.02	-55.08	6.20	9.10	2.15	-54.33	-13.00	41.33	V
5021.01	-55.26	6.57	9.93	2.15	-54.05	-13.00	41.05	V
5868.01	-54.06	7.29	10.53	2.15	-52.97	-13.00	39.97	V

LTE Band 5, 1.4MHz, 16QAM, Channel 20643

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1697.01	-54.77	3.60	5.15	2.15	-55.37	-13.00	42.37	H
2537.00	-52.54	4.66	6.17	2.15	-53.18	-13.00	40.18	H
3394.02	-53.83	5.36	7.95	2.15	-53.39	-13.00	40.39	V
4253.02	-54.85	6.24	9.15	2.15	-54.09	-13.00	41.09	H
5087.01	-55.75	6.74	10.02	2.15	-54.62	-13.00	41.62	H
5949.01	-53.06	7.47	10.51	2.15	-52.17	-13.00	39.17	V

LTE Band 5, 1.4MHz, 64QAM, Channel 20407

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1650.01	-55.05	3.57	5.23	2.15	-55.54	-13.00	42.54	H
2464.00	-53.31	4.59	5.99	2.15	-54.06	-13.00	41.06	H
3299.02	-54.12	5.29	7.72	2.15	-53.84	-13.00	40.84	V
4125.02	-56.22	6.04	9.03	2.15	-55.38	-13.00	42.38	H
4936.01	-55.75	6.71	9.84	2.15	-54.77	-13.00	41.77	H
5787.01	-55.00	7.21	10.54	2.15	-53.82	-13.00	40.82	V

LTE Band 5, 1.4MHz, 64QAM, Channel 20525

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1673.01	-56.00	3.58	5.19	2.15	-56.54	-13.00	43.54	H
2508.00	-53.57	4.63	6.11	2.15	-54.24	-13.00	41.24	H
3349.02	-54.81	5.32	7.84	2.15	-54.44	-13.00	41.44	V
4174.02	-55.82	6.15	9.07	2.15	-55.05	-13.00	42.05	V
5010.01	-55.87	6.59	9.91	2.15	-54.70	-13.00	41.70	H
5846.01	-54.36	7.22	10.53	2.15	-53.20	-13.00	40.20	V

LTE Band 5, 1.4MHz, 64QAM, Channel 20643

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1697.01	-56.05	3.60	5.15	2.15	-56.65	-13.00	43.65	H
2548.00	-52.87	4.67	6.19	2.15	-53.50	-13.00	40.50	H
3402.02	-55.78	5.36	7.96	2.15	-55.33	-13.00	42.33	V
4247.02	-55.97	6.24	9.15	2.15	-55.21	-13.00	42.21	H
5087.01	-55.63	6.74	10.02	2.15	-54.50	-13.00	41.50	H
5953.01	-53.77	7.47	10.51	2.15	-52.88	-13.00	39.88	H

LTE Band 7, 5 MHz, QPSK, Channel 20775

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit（dBm）	Margin(dB)	Polarization
5006.02	-54.50	6.59	9.91	-51.18	-13.00	38.18	V
7513.01	-51.78	8.34	12.21	-47.91	-13.00	34.91	V
10017.01	-39.85	9.23	12.91	-36.17	-13.00	23.17	V
12528.01	-38.55	10.26	13.22	-35.59	-13.00	22.59	V
15032.00	-44.14	11.26	13.98	-41.42	-13.00	28.42	H
17507.00	-42.63	12.75	14.91	-40.47	-13.00	27.47	H

LTE Band 7, 5 MHz, QPSK, Channel 21100

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit（dBm）	Margin(dB)	Polarization
5075.02	-52.35	6.70	10.01	-49.04	-13.00	36.04	H
7610.01	-46.98	8.02	12.29	-42.71	-13.00	29.71	V
10147.01	-42.98	9.39	12.96	-39.41	-13.00	26.41	V
12691.01	-40.53	10.31	13.31	-37.53	-13.00	24.53	H
15224.00	-46.21	11.37	13.87	-43.71	-13.00	30.71	H
17735.00	-44.62	12.38	15.23	-41.77	-13.00	28.77	H

LTE Band 7, 5 MHz, QPSK, Channel 21425

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit（dBm）	Margin(dB)	Polarization
5137.02	-53.35	6.86	10.09	-50.12	-13.00	37.12	V
7705.01	-52.09	8.42	12.36	-48.15	-13.00	35.15	V
10277.01	-47.54	9.56	13.01	-44.09	-13.00	31.09	V
12857.01	-39.18	10.62	13.41	-36.39	-13.00	23.39	V
15405.00	-46.12	11.40	13.76	-43.76	-13.00	30.76	V
17985.00	-42.61	12.90	15.58	-39.93	-13.00	26.93	H

LTE Band 7, 5 MHz, 16QAM, Channel 20775

Frequency(MHz)	P$_{Mea}$(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
5006.02	-54.41	6.59	9.91	-51.09	-13.00	38.09	V
7512.01	-51.30	8.34	12.21	-47.43	-13.00	34.43	V
10017.01	-39.55	9.23	12.91	-35.87	-13.00	22.87	V
12528.01	-38.98	10.26	13.22	-36.02	-13.00	23.02	V
15022.00	-45.65	11.24	13.99	-42.90	-13.00	29.90	H
17509.00	-42.76	12.76	14.91	-40.61	-13.00	27.61	H

LTE Band 7, 5 MHz, 16QAM, Channel 21100

Frequency(MHz)	P$_{Mea}$(dBm)	Path Loss	Antenn a Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarizatio n
5074.02	-53.96	6.70	10.00	-50.66	-13.00	37.66	H
7609.01	-46.09	8.01	12.29	-41.81	-13.00	28.81	V
10147.01	-42.52	9.39	12.96	-38.95	-13.00	25.95	V
12691.01	-39.81	10.31	13.31	-36.81	-13.00	23.81	H
15211.00	-45.89	11.39	13.87	-43.41	-13.00	30.41	V
17745.00	-43.31	12.43	15.24	-40.50	-13.00	27.50	H

LTE Band 7, 5 MHz, 16QAM, Channel 21425

Frequency(MHz)	P$_{Mea}$(dBm)	Path Loss	Antenn a Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarizatio n
5138.02	-52.96	6.86	10.09	-49.73	-13.00	36.73	V
7705.01	-51.87	8.42	12.36	-47.93	-13.00	34.93	V
10277.01	-47.67	9.56	13.01	-44.22	-13.00	31.22	V
12857.01	-39.10	10.62	13.41	-36.31	-13.00	23.31	V
15414.00	-45.81	11.41	13.75	-43.47	-13.00	30.47	V
17992.00	-42.06	12.90	15.59	-39.37	-13.00	26.37	V

LTE Band 7, 5 MHz, 64QAM, Channel 20775

Frequency(MHz)	P$_{Mea}$(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
5006.02	-55.17	6.59	9.91	-51.85	-13.00	38.85	V
7512.01	-51.03	8.34	12.21	-47.16	-13.00	34.16	V
10017.01	-39.31	9.23	12.91	-35.63	-13.00	22.63	V
12528.01	-39.09	10.26	13.22	-36.13	-13.00	23.13	V
15018.00	-45.53	11.24	13.99	-42.78	-13.00	29.78	V
17529.00	-43.72	12.84	14.94	-41.62	-13.00	28.62	H

LTE Band 7, 5 MHz, 64QAM, Channel 21100

Frequency(MHz)	P$_{Mea}$(dBm)	Path Loss	Antenn a Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarizatio n
5072.02	-53.63	6.69	10.00	-50.32	-13.00	37.32	H
7611.01	-45.45	8.02	12.29	-41.18	-13.00	28.18	V
10147.01	-41.50	9.39	12.96	-37.93	-13.00	24.93	V
12691.01	-39.90	10.31	13.31	-36.90	-13.00	23.90	V
15219.00	-46.71	11.38	13.87	-44.22	-13.00	31.22	H
17747.00	-44.07	12.44	15.25	-41.26	-13.00	28.26	H

LTE Band 7, 5 MHz, 64QAM, Channel 21425

Frequency(MHz)	P$_{Mea}$(dBm)	Path Loss	Antenn a Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarizatio n
5140.02	-53.75	6.87	10.10	-50.52	-13.00	37.52	H
7705.01	-50.44	8.42	12.36	-46.50	-13.00	33.50	V
10277.01	-46.75	9.56	13.01	-43.30	-13.00	30.30	V
12858.01	-39.43	10.62	13.41	-36.64	-13.00	23.64	V
15412.00	-45.89	11.41	13.75	-43.55	-13.00	30.55	V
17999.00	-40.36	12.90	15.60	-37.66	-13.00	24.66	V

LTE Band 12, 1.4MHz, QPSK, Channel 23017

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1399.01	-54.70	3.23	4.97	2.15	-55.11	-13.00	42.11	H
2114.00	-54.96	4.20	4.94	2.15	-56.37	-13.00	43.37	H
2799.00	-49.73	4.91	6.64	2.15	-50.15	-13.00	37.15	V
3499.02	-54.01	5.52	8.20	2.15	-53.48	-13.00	40.48	H
4186.02	-55.90	6.17	9.09	2.15	-55.13	-13.00	42.13	V
4908.01	-55.27	6.73	9.81	2.15	-54.34	-13.00	41.34	H

LTE Band 12, 1.4MHz, QPSK, Channel 23095

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1415.01	-55.72	3.25	5.06	2.15	-56.06	-13.00	43.06	H
2123.00	-44.54	4.21	4.97	2.15	-45.93	-13.00	32.93	V
2830.00	-50.07	4.95	6.69	2.15	-50.48	-13.00	37.48	V
3538.02	-55.47	5.70	8.25	2.15	-55.07	-13.00	42.07	V
4237.02	-55.63	6.25	9.14	2.15	-54.89	-13.00	41.89	H
4958.01	-55.81	6.68	9.86	2.15	-54.78	-13.00	41.78	H

LTE Band 12, 1.4MHz, QPSK, Channel 23173

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1431.01	-57.28	3.28	5.14	2.15	-57.57	-13.00	44.57	H
2135.00	-54.86	4.23	5.01	2.15	-56.23	-13.00	43.23	V
2862.00	-48.36	4.96	6.75	2.15	-48.72	-13.00	35.72	V
3581.02	-55.65	6.14	8.31	2.15	-55.63	-13.00	42.63	V
4296.02	-54.79	6.20	9.20	2.15	-53.94	-13.00	40.94	H
5021.01	-55.59	6.57	9.93	2.15	-54.38	-13.00	41.38	V

LTE Band 12, 1.4MHz, 16QAM, Channel 23017

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1399.01	-55.57	3.23	4.97	2.15	-55.98	-13.00	42.98	H
2103.00	-54.47	4.19	4.91	2.15	-55.90	-13.00	42.90	H
2799.00	-50.72	4.91	6.64	2.15	-51.14	-13.00	38.14	V
3499.02	-53.58	5.52	8.20	2.15	-53.05	-13.00	40.05	H
4185.02	-53.03	6.17	9.09	2.15	-52.26	-13.00	39.26	V
4894.01	-55.20	6.73	9.79	2.15	-54.29	-13.00	41.29	H

LTE Band 12, 1.4MHz 16QAM, Channel 23095

Frequency(MHz)	PMea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1415.01	-55.73	3.25	5.06	2.15	-56.07	-13.00	43.07	H
2124.00	-55.85	4.21	4.97	2.15	-57.24	-13.00	44.24	H
2830.00	-50.64	4.95	6.69	2.15	-51.05	-13.00	38.05	V
3541.02	-56.22	5.73	8.26	2.15	-55.84	-13.00	42.84	V
4243.02	-55.80	6.25	9.14	2.15	-55.06	-13.00	42.06	H
4946.01	-55.20	6.70	9.85	2.15	-54.20	-13.00	41.20	H

LTE Band 12, 1.4MHz, 16QAM, Channel 23173

Frequency(MHz)	PMea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1431.01	-57.30	3.28	5.14	2.15	-57.59	-13.00	44.59	H
2160.00	-55.23	4.26	5.08	2.15	-56.56	-13.00	43.56	V
2862.00	-48.47	4.96	6.75	2.15	-48.83	-13.00	35.83	V
3577.02	-56.03	6.10	8.31	2.15	-55.97	-13.00	42.97	V
4306.02	-54.72	6.19	9.21	2.15	-53.85	-13.00	40.85	H
5005.01	-55.43	6.59	9.91	2.15	-54.26	-13.00	41.26	V

LTE Band 12, 1.4MHz, 64QAM, Channel 23017

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1400.01	-55.59	3.24	4.98	2.15	-56.00	-13.00	43.00	H
2111.00	-56.09	4.20	4.93	2.15	-57.51	-13.00	44.51	V
2799.00	-51.41	4.91	6.64	2.15	-51.83	-13.00	38.83	V
3499.02	-54.02	5.52	8.20	2.15	-53.49	-13.00	40.49	H
4190.02	-55.02	6.18	9.09	2.15	-54.26	-13.00	41.26	V
4884.01	-56.24	6.72	9.78	2.15	-55.33	-13.00	42.33	H

LTE Band 12, 1.4MHz 64QAM, Channel 23095

Frequency(MHz)	PMea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1415.01	-56.44	3.25	5.06	2.15	-56.78	-13.00	43.78	H
2135.00	-55.29	4.23	5.01	2.15	-56.66	-13.00	43.66	V
2830.00	-51.31	4.95	6.69	2.15	-51.72	-13.00	38.72	V
3545.02	-56.02	5.77	8.26	2.15	-55.68	-13.00	42.68	V
4243.02	-55.57	6.25	9.14	2.15	-54.83	-13.00	41.83	H
4938.01	-55.13	6.71	9.84	2.15	-54.15	-13.00	41.15	H

LTE Band 12, 1.4MHz, 64QAM, Channel 23173

Frequency(MHz)	PMea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1431.01	-58.35	3.28	5.14	2.15	-58.64	-13.00	45.64	H
2135.00	-54.66	4.23	5.01	2.15	-56.03	-13.00	43.03	V
2862.00	-50.54	4.96	6.75	2.15	-50.90	-13.00	37.90	V
3568.02	-55.96	6.01	8.30	2.15	-55.82	-13.00	42.82	H
4278.02	-55.15	6.21	9.18	2.15	-54.33	-13.00	41.33	H
5013.01	-55.76	6.58	9.92	2.15	-54.57	-13.00	41.57	V

LTE Band 26(814MHz~824MHz), 1.4MHz, QPSK, Channel 26697

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1630.01	-54.76	3.55	5.27	2.15	-55.19	-13.00	42.19	H
2454.00	-52.21	4.58	5.96	2.15	-52.98	-13.00	39.98	V
3259.02	-51.77	5.28	7.62	2.15	-51.58	-13.00	38.58	V
4076.02	-55.98	6.04	8.98	2.15	-55.19	-13.00	42.19	H
4899.01	-55.25	6.73	9.80	2.15	-54.33	-13.00	41.33	H
5703.01	-54.43	7.29	10.56	2.15	-53.31	-13.00	40.31	V

LTE Band 26(814MHz~824MHz), 1.4MHz, QPSK, Channel 26740

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1638.01	-57.43	3.56	5.25	2.15	-57.89	-13.00	44.89	H
2454.00	-52.43	4.58	5.96	2.15	-53.20	-13.00	40.20	V
3276.02	-51.84	5.28	7.66	2.15	-51.61	-13.00	38.61	V
4098.02	-55.94	6.04	9.00	2.15	-55.13	-13.00	42.13	H
4931.01	-55.41	6.72	9.83	2.15	-54.45	-13.00	41.45	H
5731.01	-54.16	7.29	10.55	2.15	-53.05	-13.00	40.05	V

LTE Band 26(814MHz~824MHz), 1.4MHz, QPSK, Channel 26783

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1646.01	-55.83	3.56	5.24	2.15	-56.30	-13.00	43.30	H
2455.00	-52.29	4.58	5.97	2.15	-53.05	-13.00	40.05	V
3292.02	-53.80	5.29	7.70	2.15	-53.54	-13.00	40.54	V
4099.02	-55.66	6.04	9.00	2.15	-54.85	-13.00	41.85	H
4923.01	-54.91	6.73	9.82	2.15	-53.97	-13.00	40.97	H
5768.01	-54.49	7.24	10.55	2.15	-53.33	-13.00	40.33	H

LTE Band 26(814MHz~824MHz), 1.4MHz, 16QAM, Channel 26697

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1630.01	-54.27	3.55	5.27	2.15	-54.70	-13.00	41.70	H
2454.00	-51.99	4.58	5.96	2.15	-52.76	-13.00	39.76	V
3259.02	-51.89	5.28	7.62	2.15	-51.70	-13.00	38.70	V
4061.02	-55.85	6.04	8.96	2.15	-55.08	-13.00	42.08	H
4892.01	-56.06	6.73	9.79	2.15	-55.15	-13.00	42.15	H
5719.01	-54.55	7.30	10.56	2.15	-53.44	-13.00	40.44	H

LTE Band 26(814MHz~824MHz), 1.4MHz, 16QAM, Channel 26740

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1637.01	-50.13	3.56	5.25	2.15	-50.59	-13.00	37.59	V
2454.00	-52.59	4.58	5.96	2.15	-53.36	-13.00	40.36	V
3274.02	-52.91	5.28	7.66	2.15	-52.68	-13.00	39.68	V
4081.02	-55.22	6.04	8.98	2.15	-54.43	-13.00	41.43	H
4913.01	-55.09	6.73	9.81	2.15	-54.16	-13.00	41.16	H
5725.01	-54.45	7.30	10.55	2.15	-53.35	-13.00	40.35	H

LTE Band 26(814MHz~824MHz), 1.4MHz, 16QAM, Channel 26783

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1646.01	-56.15	3.56	5.24	2.15	-56.62	-13.00	43.62	H
2455.00	-51.56	4.58	5.97	2.15	-52.32	-13.00	39.32	V
3291.02	-55.07	5.29	7.70	2.15	-54.81	-13.00	41.81	V
4104.02	-55.36	6.04	9.00	2.15	-54.55	-13.00	41.55	H
4952.01	-55.81	6.69	9.85	2.15	-54.80	-13.00	41.80	V
5750.01	-53.80	7.26	10.55	2.15	-52.66	-13.00	39.66	H

LTE Band 26(814MHz~824MHz), 1.4MHz, 64QAM, Channel 26697

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1644.01	-59.68	3.56	5.24	2.15	-60.15	-13.00	47.15	H
2454.00	-51.58	4.58	5.96	2.15	-52.35	-13.00	39.35	V
3248.02	-55.38	5.27	7.60	2.15	-55.20	-13.00	42.20	V
4091.02	-55.70	6.04	8.99	2.15	-54.90	-13.00	41.90	H
4906.01	-55.85	6.73	9.81	2.15	-54.92	-13.00	41.92	V
5709.01	-54.70	7.29	10.56	2.15	-53.58	-13.00	40.58	V

LTE Band 26(814MHz~824MHz), 1.4MHz, 64QAM, Channel 26740

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1638.01	-60.20	3.56	5.25	2.15	-60.66	-13.00	47.66	H
2455.00	-53.18	4.58	5.97	2.15	-53.94	-13.00	40.94	V
3295.02	-54.97	5.29	7.71	2.15	-54.70	-13.00	41.70	V
4111.02	-55.49	6.04	9.01	2.15	-54.67	-13.00	41.67	H
4923.01	-55.74	6.73	9.82	2.15	-54.80	-13.00	41.80	V
5748.01	-54.59	7.27	10.55	2.15	-53.46	-13.00	40.46	H

LTE Band 26(814MHz~824MHz), 1.4MHz, 64QAM, Channel 26783

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1665.01	-59.90	3.58	5.20	2.15	-60.43	-13.00	47.43	H
2455.00	-52.67	4.58	5.97	2.15	-53.43	-13.00	40.43	V
3300.02	-55.65	5.29	7.72	2.15	-55.37	-13.00	42.37	V
4100.02	-55.77	6.04	9.00	2.15	-54.96	-13.00	41.96	H
4954.01	-56.13	6.68	9.85	2.15	-55.11	-13.00	42.11	V
5773.01	-54.72	7.23	10.55	2.15	-53.55	-13.00	40.55	V

LTE Band 26(824MHz~849MHz), 1.4MHz, QPSK, Channel 26797

Frequency(MHz)	P$_{Mea}$(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1650.01	-55.14	3.57	5.23	2.15	-55.63	-13.00	42.63	H
2455.00	-52.11	4.58	5.97	2.15	-52.87	-13.00	39.87	V
3299.02	-53.71	5.29	7.72	2.15	-53.43	-13.00	40.43	V
4111.02	-55.55	6.04	9.01	2.15	-54.73	-13.00	41.73	H
4931.01	-55.17	6.72	9.83	2.15	-54.21	-13.00	41.21	H
5776.01	-53.84	7.23	10.54	2.15	-52.68	-13.00	39.68	H

LTE Band 26(824MHz~849MHz), 1.4MHz, QPSK, Channel 26915

Frequency(MHz)	P$_{Mea}$(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1673.01	-55.40	3.58	5.19	2.15	-55.94	-13.00	42.94	H
2507.00	-52.77	4.63	6.11	2.15	-53.44	-13.00	40.44	H
3338.02	-54.56	5.31	7.81	2.15	-54.21	-13.00	41.21	H
4166.02	-54.91	6.13	9.07	2.15	-54.12	-13.00	41.12	V
5033.01	-55.76	6.58	9.95	2.15	-54.54	-13.00	41.54	H
5864.01	-53.53	7.28	10.53	2.15	-52.43	-13.00	39.43	V

LTE Band 26(824MHz~849MHz), 1.4MHz, QPSK, Channel 27033

Frequency(MHz)	P$_{Mea}$(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1697.01	-53.72	3.60	5.15	2.15	-54.32	-13.00	41.32	H
2545.00	-52.92	4.66	6.18	2.15	-53.55	-13.00	40.55	V
3413.02	-55.02	5.37	7.99	2.15	-54.55	-13.00	41.55	H
4252.02	-55.59	6.24	9.15	2.15	-54.83	-13.00	41.83	H
5095.01	-55.34	6.76	10.03	2.15	-54.22	-13.00	41.22	H
5939.01	-53.12	7.47	10.51	2.15	-52.23	-13.00	39.23	H

LTE Band 26(824MHz~849MHz), 1.4MHz, 16QAM, Channel 26797

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1650.01	-55.16	3.57	5.23	2.15	-55.65	-13.00	42.65	H
2490.00	-52.48	4.61	6.07	2.15	-53.17	-13.00	40.17	H
3299.02	-53.90	5.29	7.72	2.15	-53.62	-13.00	40.62	V
4110.02	-55.51	6.04	9.01	2.15	-54.69	-13.00	41.69	V
4968.01	-55.40	6.66	9.87	2.15	-54.34	-13.00	41.34	H
5775.01	-54.27	7.23	10.54	2.15	-53.11	-13.00	40.11	H

LTE Band 26(824MHz~849MHz), 1.4MHz, 16QAM, Channel 26915

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1673.01	-54.56	3.58	5.19	2.15	-55.10	-13.00	42.10	H
2519.00	-52.36	4.64	6.13	2.15	-53.02	-13.00	40.02	H
3360.02	-53.88	5.33	7.86	2.15	-53.50	-13.00	40.50	H
4195.02	-54.78	6.19	9.10	2.15	-54.02	-13.00	41.02	V
5003.01	-55.10	6.60	9.90	2.15	-53.95	-13.00	40.95	V
5846.01	-53.43	7.22	10.53	2.15	-52.27	-13.00	39.27	V

LTE Band 26(824MHz~849MHz), 1.4MHz, 16QAM, Channel 27033

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1697.01	-55.39	3.60	5.15	2.15	-55.99	-13.00	42.99	H
2557.00	-52.34	4.67	6.20	2.15	-52.96	-13.00	39.96	H
3405.02	-55.00	5.37	7.97	2.15	-54.55	-13.00	41.55	V
4259.02	-55.46	6.23	9.16	2.15	-54.68	-13.00	41.68	H
5094.01	-55.60	6.76	10.03	2.15	-54.48	-13.00	41.48	H
5955.01	-53.34	7.47	10.51	2.15	-52.45	-13.00	39.45	H

LTE Band 26(824MHz~849MHz), 1.4MHz, 64QAM, Channel 26797

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1650.01	-56.37	3.57	5.23	2.15	-56.86	-13.00	43.86	H
2455.00	-53.25	4.58	5.97	2.15	-54.01	-13.00	41.01	V
3312.02	-55.42	5.29	7.75	2.15	-55.11	-13.00	42.11	H
4122.02	-56.03	6.04	9.02	2.15	-55.20	-13.00	42.20	H
4952.01	-54.32	6.69	9.85	2.15	-53.31	-13.00	40.31	H
5758.01	-53.97	7.25	10.55	2.15	-52.82	-13.00	39.82	H

LTE Band 26(824MHz~849MHz), 1.4MHz, 64QAM, Channel 26915

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1673.01	-56.18	3.58	5.19	2.15	-56.72	-13.00	43.72	H
2528.00	-53.10	4.65	6.15	2.15	-53.75	-13.00	40.75	V
3351.02	-54.94	5.32	7.84	2.15	-54.57	-13.00	41.57	H
4172.02	-55.54	6.14	9.07	2.15	-54.76	-13.00	41.76	V
5023.01	-56.24	6.56	9.93	2.15	-55.02	-13.00	42.02	V
5839.01	-53.87	7.20	10.53	2.15	-52.69	-13.00	39.69	H

LTE Band 26(824MHz~849MHz), 1.4MHz, 64QAM, Channel 27033

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Correction (dB)	Peak ERP(dBm)	Limit （dBm）	Margin(dB)	Polarization
1697.01	-55.61	3.60	5.15	2.15	-56.21	-13.00	43.21	H
2545.00	-53.37	4.66	6.18	2.15	-54.00	-13.00	41.00	H
3398.02	-55.41	5.36	7.96	2.15	-54.96	-13.00	41.96	V
4259.02	-55.98	6.23	9.16	2.15	-55.20	-13.00	42.20	H
5070.01	-55.56	6.69	10.00	2.15	-54.40	-13.00	41.40	H
5953.01	-53.34	7.47	10.51	2.15	-52.45	-13.00	39.45	H

LTE Band 38, 5MHz, QPSK, Channel 37775

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
5147.02	-52.89	6.88	10.11	-49.66	-13.00	36.66	H
7721.01	-48.83	8.40	12.38	-44.85	-13.00	31.85	V
10337.01	-51.45	9.70	13.03	-48.12	-13.00	35.12	V
12880.01	-48.26	10.56	13.43	-45.39	-13.00	32.39	H
15448.00	-45.16	11.46	13.73	-42.89	-13.00	29.89	V
17979.00	-43.58	12.90	15.57	-40.91	-13.00	27.91	H

LTE Band 38, 5MHz, QPSK, Channel 38000

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
5196.02	-48.28	6.95	10.17	-45.06	-13.00	32.06	H
9120.01	-54.16	8.93	13.17	-49.92	-13.00	36.92	H
11713.01	-50.54	9.68	13.06	-47.16	-13.00	34.16	V
14301.00	-46.03	10.98	14.44	-42.57	-13.00	29.57	V
15554.00	-44.97	11.51	13.70	-42.78	-13.00	29.78	V
16899.00	-42.29	12.00	13.76	-40.53	-13.00	27.53	V

LTE Band 38, 5MHz, QPSK, Channel 38225

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
5238.02	-46.54	7.00	10.23	-43.31	-13.00	30.31	H
9197.01	-54.66	8.93	13.22	-50.37	-13.00	37.37	H
11804.01	-48.96	10.13	13.04	-46.05	-13.00	33.05	V
14413.00	-46.59	11.03	14.42	-43.20	-13.00	30.20	V
15673.00	-45.12	11.57	13.70	-42.99	-13.00	29.99	V
16970.00	-41.48	12.26	13.79	-39.95	-13.00	26.95	H

LTE Band 38, 5MHz, 16QAM, Channel 37775

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
5153.02	-56.47	6.89	10.11	-53.25	-13.00	40.25	V
7724.01	-48.11	8.39	12.38	-44.12	-13.00	31.12	V
10319.01	-51.30	9.67	13.03	-47.94	-13.00	34.94	H
12882.01	-47.76	10.55	13.43	-44.88	-13.00	31.88	H
15436.00	-45.04	11.44	13.74	-42.74	-13.00	29.74	V
17973.00	-43.23	12.89	15.56	-40.56	-13.00	27.56	H

LTE Band 38, 5MHz, 16QAM, Channel 38000

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
5192.02	-48.23	6.95	10.17	-45.01	-13.00	32.01	H
9084.01	-54.21	8.98	13.15	-50.04	-13.00	37.04	V
11715.01	-49.95	9.69	13.06	-46.58	-13.00	33.58	H
14276.00	-45.91	10.95	14.44	-42.42	-13.00	29.42	V
15550.00	-44.70	11.51	13.70	-42.51	-13.00	29.51	V
16876.00	-42.12	12.02	13.75	-40.39	-13.00	27.39	V

LTE Band 38, 5MHz, 16QAM, Channel 38225

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
5238.02	-49.18	7.00	10.23	-45.95	-13.00	32.95	H
9112.01	-54.37	8.93	13.17	-50.13	-13.00	37.13	H
11809.01	-50.06	10.15	13.04	-47.17	-13.00	34.17	H
14401.00	-46.68	11.04	14.42	-43.30	-13.00	30.30	V
15699.00	-45.70	11.61	13.70	-43.61	-13.00	30.61	V
17028.00	-41.23	12.46	13.86	-39.83	-13.00	26.83	V

LTE Band 38, 5MHz, 64QAM, Channel 37775

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit（dBm）	Margin(dB)	Polarization
5149.02	-51.29	6.88	10.11	-48.06	-13.00	35.06	H
7724.01	-49.09	8.39	12.38	-45.10	-13.00	32.10	V
10323.01	-52.15	9.68	13.03	-48.80	-13.00	35.80	H
12878.01	-41.35	10.56	13.43	-38.48	-13.00	25.48	V
15421.00	-45.95	11.42	13.75	-43.62	-13.00	30.62	V
17991.00	-43.86	12.90	15.59	-41.17	-13.00	28.17	V

LTE Band 38, 5MHz, 64QAM, Channel 38000

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit（dBm）	Margin(dB)	Polarization
5194.02	-48.79	6.95	10.17	-45.57	-13.00	32.57	H
9055.01	-53.68	9.05	13.13	-49.60	-13.00	36.60	V
11717.01	-50.08	9.70	13.06	-46.72	-13.00	33.72	H
14244.01	-46.43	10.92	14.45	-42.90	-13.00	29.90	H
15552.00	-45.31	11.51	13.70	-43.12	-13.00	30.12	V
16857.00	-42.58	12.05	13.74	-40.89	-13.00	27.89	H

LTE Band 38, 5MHz, 64QAM, Channel 38225

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit（dBm）	Margin(dB)	Polarization
5239.02	-48.47	7.00	10.23	-45.24	-13.00	32.24	H
9167.01	-54.66	8.93	13.20	-50.39	-13.00	37.39	H
11791.01	-49.94	10.07	13.04	-46.97	-13.00	33.97	V
14352.00	-46.31	11.01	14.43	-42.89	-13.00	29.89	V
15673.00	-45.90	11.57	13.70	-43.77	-13.00	30.77	H
16973.00	-42.48	12.27	13.79	-40.96	-13.00	27.96	V

LTE Band 41, 5MHz, QPSK, Channel 39675

Frequency(MHz)	P$_{Mea}$(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit（dBm）	Margin(dB)	Polarization
5026.02	-57.80	6.56	9.94	-54.42	-13.00	41.42	V
7486.01	-54.73	8.36	12.18	-50.91	-13.00	37.91	H
9999.01	-48.49	9.18	12.90	-44.77	-13.00	31.77	V
12508.01	-36.30	10.20	13.20	-33.30	-13.00	20.30	V
15004.00	-45.77	11.22	14.00	-42.99	-13.00	29.99	H
17517.00	-37.47	12.79	14.92	-35.34	-13.00	22.34	V

LTE Band 41, 5MHz, QPSK, Channel 40620

Frequency(MHz)	P$_{Mea}$(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit（dBm）	Margin(dB)	Polarization
5191.02	-48.72	6.95	10.17	-45.50	-13.00	32.50	H
9056.01	-54.19	9.05	13.13	-50.11	-13.00	37.11	H
11665.01	-51.25	9.68	13.07	-47.86	-13.00	34.86	V
14234.01	-46.95	10.91	14.45	-43.41	-13.00	30.41	H
15575.00	-44.67	11.50	13.70	-42.47	-13.00	29.47	H
16843.00	-40.83	12.06	13.74	-39.15	-13.00	26.15	V

LTE Band 41, 5MHz, QPSK, Channel 41565

Frequency(MHz)	P$_{Mea}$(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit（dBm）	Margin(dB)	Polarization
5377.02	-56.94	6.88	10.43	-53.39	-13.00	40.39	V
8068.01	-41.97	8.32	12.65	-37.64	-13.00	24.64	V
10765.01	-39.16	9.46	13.15	-35.47	-13.00	22.47	H
13457.01	-44.30	10.61	14.14	-40.77	-13.00	27.77	H
16148.00	-45.96	11.79	13.67	-44.08	-13.00	31.08	H
17481.00	-43.25	12.68	14.86	-41.07	-13.00	28.07	H

LTE Band 41 5MHz, 16QAM, Channel 39675

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
5028.02	-57.74	6.57	9.94	-54.37	-13.00	41.37	H
7497.01	-51.54	8.39	12.20	-47.73	-13.00	34.73	H
10002.01	-51.77	9.19	12.90	-48.06	-13.00	35.06	H
12509.01	-36.19	10.20	13.21	-33.18	-13.00	20.18	V
15013.00	-45.43	11.23	13.99	-42.67	-13.00	29.67	H
17516.00	-42.04	12.79	14.92	-39.91	-13.00	26.91	V

LTE Band 41, 5MHz, 16QAM, Channel 40620

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
5191.02	-48.41	6.95	10.17	-45.19	-13.00	32.19	H
9103.01	-54.21	8.93	13.16	-49.98	-13.00	36.98	H
11703.01	-50.82	9.63	13.06	-47.39	-13.00	34.39	V
14287.00	-46.65	10.96	14.44	-43.17	-13.00	30.17	H
15536.00	-45.25	11.52	13.70	-43.07	-13.00	30.07	V
16835.00	-42.64	12.07	13.73	-40.98	-13.00	27.98	V

LTE Band 41, 5MHz, 16QAM, Channel 41565

Frequency(MHz)	P_Mea(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
5377.02	-56.70	6.88	10.43	-53.15	-13.00	40.15	H
8069.01	-40.01	8.32	12.66	-35.67	-13.00	22.67	V
10763.01	-42.64	9.46	13.15	-38.95	-13.00	25.95	V
13459.01	-36.30	10.61	14.14	-32.77	-13.00	19.77	V
16116.00	-45.47	11.83	13.68	-43.62	-13.00	30.62	H
17480.00	-43.02	12.68	14.86	-40.84	-13.00	27.84	H

LTE Band 41 5MHz, 64QAM, Channel 39675

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
4998.02	-54.99	6.61	9.90	-51.70	-13.00	38.70	V
7501.01	-50.07	8.39	12.20	-46.26	-13.00	33.26	H
10002.01	-48.13	9.19	12.90	-44.42	-13.00	31.42	H
12499.01	-41.57	10.18	13.20	-38.55	-13.00	25.55	V
15010.00	-46.07	11.23	13.99	-43.31	-13.00	30.31	H
17505.00	-43.68	12.74	14.91	-41.51	-13.00	28.51	H

LTE Band 41, 5MHz, 64QAM, Channel 40620

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
6443.02	-55.95	7.55	10.94	-52.56	-13.00	39.56	H
7785.01	-50.93	8.31	12.43	-46.81	-13.00	33.81	V
9107.01	-54.31	8.93	13.16	-50.08	-13.00	37.08	H
10379.01	-49.28	9.77	13.05	-46.00	-13.00	33.00	V
11670.01	-50.31	9.67	13.07	-46.91	-13.00	33.91	V
12981.01	-39.59	10.47	13.49	-36.57	-13.00	23.57	V

LTE Band 41, 5MHz, 64QAM, Channel 41565

Frequency(MHz)	P_{Mea}(dBm)	Path Loss	Antenna Gain	Peak EIRP(dBm)	Limit （dBm）	Margin(dB)	Polarization
4030.02	-57.40	6.05	8.93	-54.52	-13.00	41.52	V
5377.02	-55.13	6.88	10.43	-51.58	-13.00	38.58	H
6740.02	-55.43	7.97	11.29	-52.11	-13.00	39.11	V
8062.01	-49.81	8.32	12.65	-45.48	-13.00	32.48	V
9425.01	-54.99	9.16	13.36	-50.79	-13.00	37.79	H
10754.01	-31.63	9.44	13.15	-27.92	-13.00	14.92	H

Note: The maximum value of expanded measurement uncertainty for this test item is U = 4.2 dB, k = 2.

A.3   FREQUENCY STABILITY

A.3.1 Method of Measurement

In order to measure the carrier frequency under the condition of AFC lock, it is necessary to make measurements with the EUT in a "call mode". This is accomplished with the use of R&S CMW500 DIGITAL RADIO COMMUNICATION TESTER.

1. Measure the carrier frequency at room temperature.
2. Subject the EUT to overnight soak at -10℃.
3. With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on middle channel for LTE band 2 4 5 7 12 26 38 41, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
4. Repeat the above measurements at 10℃ increments from -10℃ to +50℃. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
5. Re-measure carrier frequency at room temperature with nominal voltage. Vary supply voltage from minimum voltage to maximum voltage, in 0.1Volt increments re-measuring carrier frequency at each voltage. Pause at nominal voltage for 1.5 hours unpowered, to allow any self-heating to stabilize, before continuing.
6. Subject the EUT to overnight soak at +50℃.
7. With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on the centre channel, measure the carrier frequency. These measurements should be made within 2 minutes of Powering up the EUT, to prevent significant self-warming.
8. Repeat the above measurements at 10 ℃increments from -10℃ to +50℃. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
9. At all temperature levels hold the temperature to +/- 0.5℃ during the measurement procedure.

A.3.2 Measurement Limit

A.3.2.1 For Hand carried battery powered equipment

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.   As this transceiver is considered "Hand carried, battery powered equipment" Section 2.1055(d)(2) applies. This requires that the lower voltage for frequency stability testing be specified by the manufacturer. This transceiver is specified to operate with an input voltage of between 3.6VDC and 4.4VDC, with a nominal voltage of 3.85VDC.

A.3.2.2 For equipment powered by primary supply voltage

The frequency stability of the carrier shall be accurate to within 0.1 ppm of the received frequency from the base station. This accuracy is sufficient to meet Sec. 24.235, Frequency Stability. The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. For this EUT section 2.1055(d)(1) applies. This requires varying primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.

A.3.3 Measurement results

LTE Band 2, 1.4MHz bandwidth (worst case of all bandwidths)
Frequency Error vs Voltage

Voltage	Frequency error (Hz)		Frequency error (ppm)	
(V)	QPSK	16QAM	QPSK	16QAM
3.6	4.38	8.61	0.002	0.005
3.85	-4.92	20.23	0.003	0.011
4.4	-0.82	34.82	0.000	0.019

Frequency Error vs Temperature

Temperature	Frequency error (Hz)		Frequency error (ppm)	
(℃)	QPSK	16QAM	QPSK	16QAM
50	-32.00	14.12	0.017	0.008
40	-8.63	12.90	0.005	0.007
30	6.14	13.15	0.003	0.007
20	2.85	11.13	0.002	0.006
10	10.61	9.24	0.006	0.005
0	-4.11	28.05	0.002	0.015
–10	8.30	8.45	0.004	0.004

LTE Band 4, 1.4MHz bandwidth (worst case of all bandwidths)
Frequency Error vs Voltage

Voltage	Frequency error (Hz)		Frequency error (ppm)	
(V)	QPSK	16QAM	QPSK	16QAM
3.6	10.74	0.006	21.49	0.012
3.85	12.87	0.007	24.78	0.014
4.4	0.77	0.000	20.13	0.012

Frequency Error vs Temperature

Temperature	Frequency error (Hz)		Frequency error (ppm)	
(℃)	QPSK	16QAM	QPSK	16QAM
50	-7.08	0.004	16.18	0.009
40	2.40	0.001	14.03	0.008
30	-6.11	0.004	13.89	0.008
20	-1.02	0.001	15.55	0.009
10	-9.27	0.005	16.35	0.009
0	-1.83	0.001	25.45	0.015
–10	-11.42	0.007	19.74	0.011

LTE Band 5, 1.4MHz bandwidth (worst case of all bandwidths)
Frequency Error vs Voltage

Voltage	Frequency error (Hz)		Frequency error (ppm)	
(V)	QPSK	16QAM	QPSK	16QAM
3.6	0.26	18.65	0.000	0.022
3.85	2.90	20.13	0.003	0.024
4.4	-7.38	12.50	0.009	0.015

Frequency Error vs Temperature

Temperature	Frequency error (Hz)		Frequency error (ppm)	
(℃)	QPSK	16QAM	QPSK	16QAM
50	-6.78	13.90	0.008	0.017
40	3.05	16.05	0.004	0.019
30	3.69	15.13	0.004	0.018
20	2.06	16.25	0.002	0.019
10	2.98	18.50	0.004	0.022
0	-5.89	18.42	0.007	0.022
-10	-0.23	20.40	0.000	0.024

LTE Band 7, 10MHz bandwidth (worst case of all bandwidths)
Frequency Error vs Voltage

Voltage	Frequency error (Hz)		Frequency error (ppm)	
(V)	QPSK	16QAM	QPSK	16QAM
3.6	-7.55	4.13	0.003	0.002
3.85	-7.28	1.19	0.003	0.000
4.4	0.90	-0.64	0.000	0.000

Frequency Error vs Temperature

Temperature	Frequency error (Hz)		Frequency error (ppm)	
(℃)	QPSK	16QAM	QPSK	16QAM
50	-10.89	-0.06	0.004	0.000
40	10.61	8.28	0.004	0.003
30	-7.38	-9.84	0.003	0.004
20	3.06	5.35	0.001	0.002
10	3.42	-6.18	0.001	0.002
0	-5.21	1.23	0.002	0.000
-10	9.30	7.67	0.004	0.003

LTE Band 12, 5MHz bandwidth (worst case of all bandwidths)
Frequency Error vs Voltage

Voltage	Frequency error (Hz)		Frequency error (ppm)	
(V)	QPSK	16QAM	QPSK	16QAM
3.6	-3.29	15.71	0.005	0.022
3.85	-7.55	15.99	0.011	0.023
4.4	-1.83	16.82	0.003	0.024

Frequency Error vs Temperature

Temperature	Frequency error (Hz)		Frequency error (ppm)	
(℃)	QPSK	16QAM	QPSK	16QAM
50	-4.02	14.33	0.006	0.020
40	-0.53	14.26	0.001	0.020
30	3.59	12.35	0.005	0.017
20	0.46	12.92	0.001	0.018
10	-3.13	11.04	0.004	0.016
0	-4.05	20.20	0.006	0.029
– 10	-4.18	19.86	0.006	0.028

LTE Band 26(814MHz~824MHz), 5MHz bandwidth (worst case of all bandwidths)
Frequency Error vs Voltage

Voltage	Frequency error (Hz)		Frequency error (ppm)	
(V)	QPSK	16QAM	QPSK	16QAM
3.6	0.26	18.61	0.000	0.023
3.85	-6.64	20.10	0.008	0.025
4.4	6.35	20.01	0.008	0.024

Frequency Error vs Temperature

Temperature	Frequency error (Hz)		Frequency error (ppm)	
(℃)	QPSK	16QAM	QPSK	16QAM
50	-4.72	22.47	0.006	0.027
40	-1.26	23.45	0.002	0.029
30	0.73	16.21	0.001	0.020
20	-0.21	18.08	0.000	0.022
10	-4.58	9.57	0.006	0.012
0	0.19	18.93	0.000	0.023
– 10	1.85	17.81	0.002	0.022

LTE Band 26(824MHz~849MHz), 1.4MHz bandwidth (worst case of all bandwidths)
Frequency Error vs Voltage

Voltage	Frequency error (Hz)		Frequency error (ppm)	
(V)	QPSK	16QAM	QPSK	16QAM
3.6	-0.30	19.04	0.000	0.023
3.85	-7.72	18.90	0.009	0.023
4.4	-1.34	16.38	0.002	0.020

Frequency Error vs Temperature

Temperature	Frequency error (Hz)		Frequency error (ppm)	
(℃)	QPSK	16QAM	QPSK	16QAM
50	-2.40	20.80	0.003	0.025
40	-1.12	18.04	0.001	0.022
30	8.14	22.50	0.010	0.027
20	5.41	19.11	0.006	0.023
10	-0.01	17.27	0.000	0.021
0	2.56	9.17	0.003	0.011
–10	4.23	17.25	0.005	0.021

LTE Band 38, 5MHz bandwidth (worst case of all bandwidths)
Frequency Error vs Voltage

Voltage	Frequency error (Hz)		Frequency error (ppm)	
(V)	QPSK	16QAM	QPSK	16QAM
3.6	-1.83	3.35	0.001	0.001
3.85	-5.24	5.09	0.002	0.002
4.4	8.96	13.52	0.003	0.005

Frequency Error vs Temperature

Temperature	Frequency error (Hz)		Frequency error (ppm)	
(℃)	QPSK	16QAM	QPSK	16QAM
50	7.51	2.05	0.003	0.001
40	-4.91	6.37	0.002	0.002
30	-6.54	13.06	0.003	0.005
20	-7.21	1.89	0.003	0.001
10	-2.30	4.52	0.001	0.002
0	1.93	14.26	0.001	0.005
–10	-4.46	-3.73	0.002	0.001

LTE Band 41, 5MHz bandwidth (worst case of all bandwidths)
Frequency Error vs Voltage

Voltage	Frequency error (Hz)		Frequency error (ppm)	
(V)	QPSK	16QAM	QPSK	16QAM
3.6	1.42	15.96	0.001	0.006
3.85	6.97	16.02	0.003	0.006
4.4	1.77	18.15	0.001	0.007

Frequency Error vs Temperature

Temperature	Frequency error (Hz)		Frequency error (ppm)	
(℃)	QPSK	16QAM	QPSK	16QAM
50	7.01	6.97	0.003	0.003
40	13.75	8.63	0.005	0.003
30	3.68	15.68	0.001	0.006
20	8.27	-2.25	0.003	0.001
10	2.82	8.35	0.001	0.003
0	11.52	9.51	0.004	0.004
－ 10	11.20	10.46	0.004	0.004

Expanded measurement uncertainty for this test item is 10 Hz, $k = 2$.

A.4   OCCUPIED BANDWIDTH

A.4.1 Occupied Bandwidth Results

Occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the extreme and mid frequencies of the US Cellular/PCS frequency bands. The table below lists the measured 99% BW. Spectrum analyzer plots are included on the following pages.
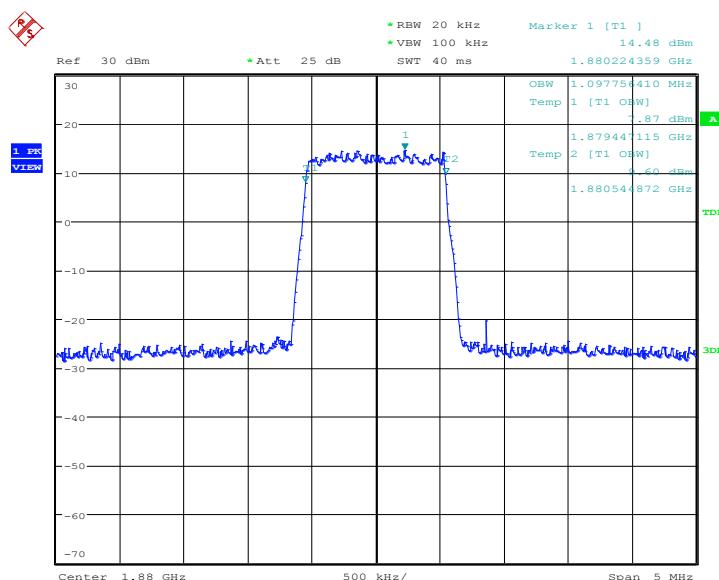
The measurement method is from KDB 971168 4.2:

a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (i.e., two to five times the OBW).

b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.

c) Set the reference level of the instrument as required to keep the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope must be at least 10log (OBW / RBW) below the reference level.

d) Set the detection mode to peak, and the trace mode to max hold.

e) Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

LTE band 2, 1.4MHz (99%)
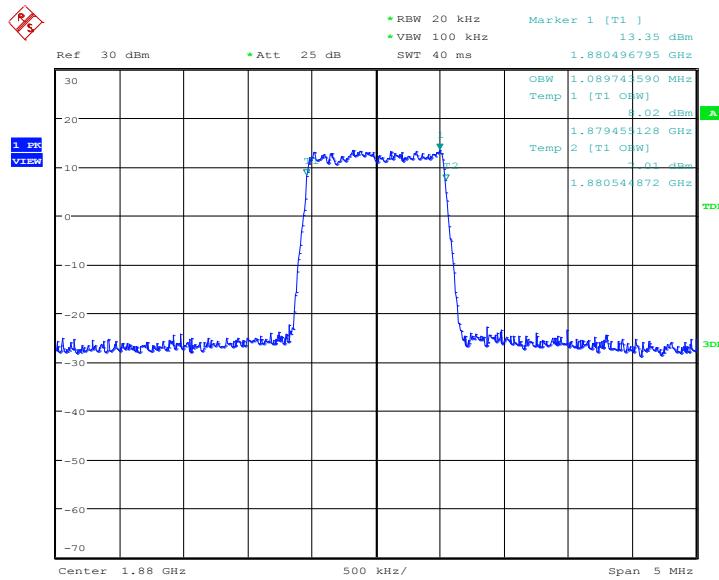
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
1880.0	QPSK	16QAM	64QAM
	1097.76	1089.74	1089.74

LTE band 2, 1.4MHz Bandwidth, QPSK (99% BW)
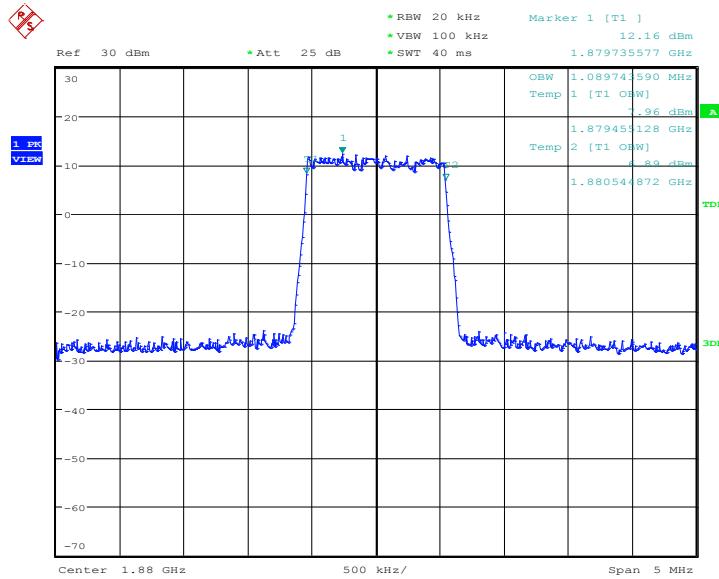
Date: 10.MAY.2018 12:49:57

LTE band 2, 1.4MHz Bandwidth, 16QAM (99% BW)

Date: 10.MAY.2018 12:50:11
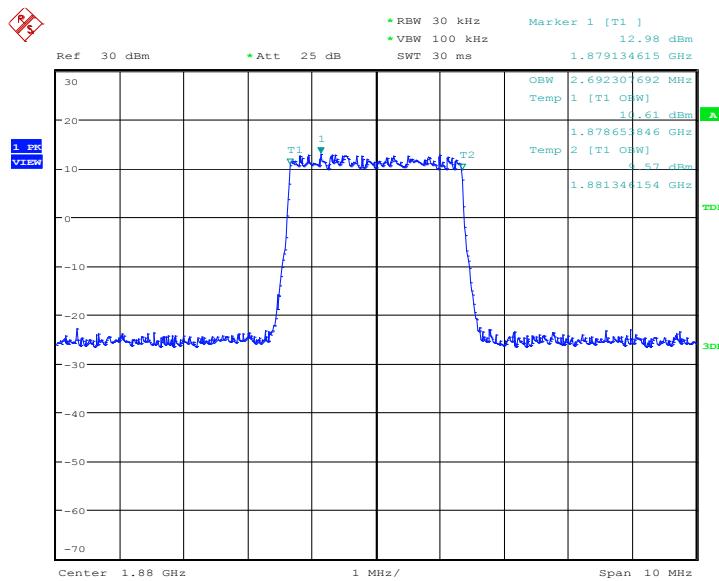
LTE band 2, 1.4MHz Bandwidth, 64QAM (99% BW)
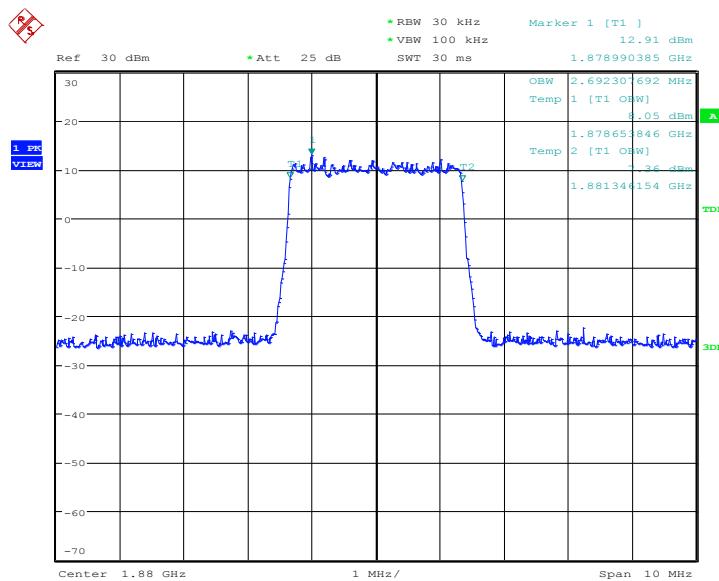
Date: 24.MAY.2018 09:52:08

LTE band 2, 3MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
1880.0	2692.31	2692.31	2692.31
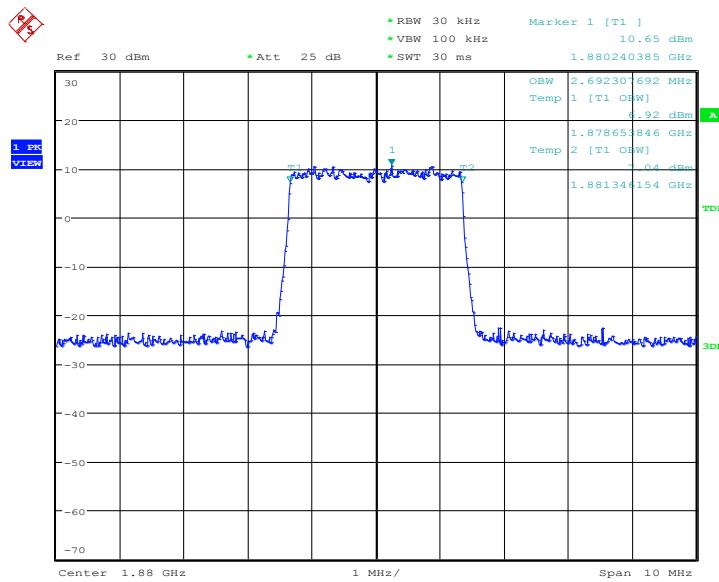
LTE band 2, 3MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 12:56:46

LTE band 2, 3MHz Bandwidth, 16QAM (99% BW)

Date: 10.MAY.2018 12:56:59
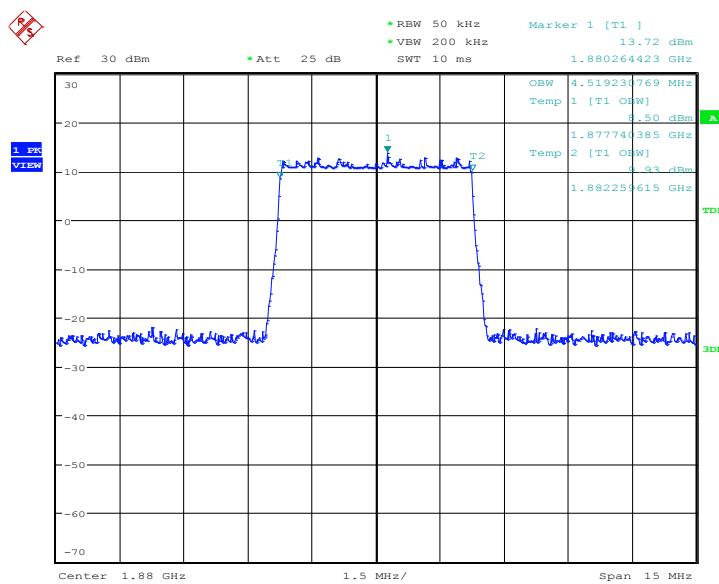
LTE band 2, 3MHz Bandwidth, 64QAM (99% BW)
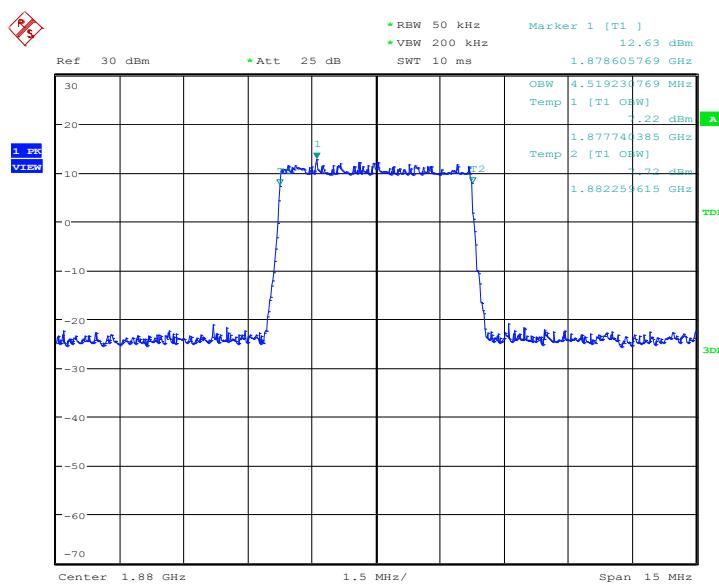
Date: 24.MAY.2018 10:03:05

LTE band 2, 5MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
1880.0	4519.23	4519.23	4519.23
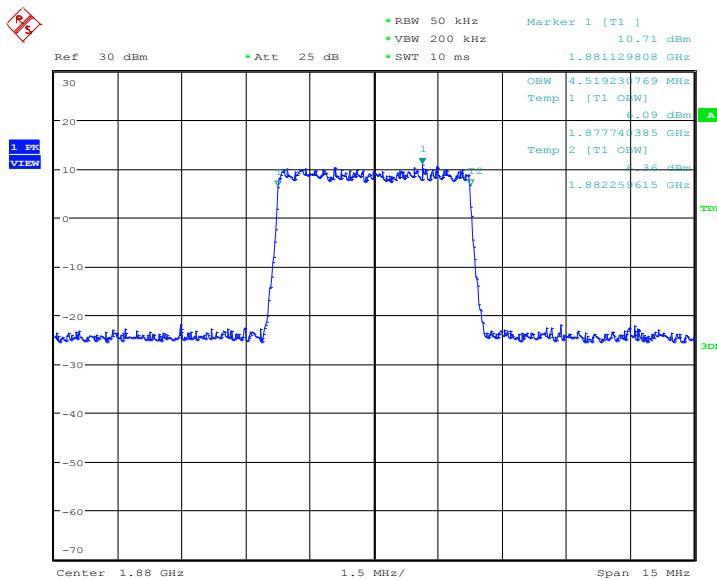
LTE band 2, 5MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 13:03:37

LTE band 2, 5MHz Bandwidth,16QAM (99% BW)

Date: 10.MAY.2018 13:03:50

LTE band 2, 5MHz Bandwidth,64QAM (99% BW)
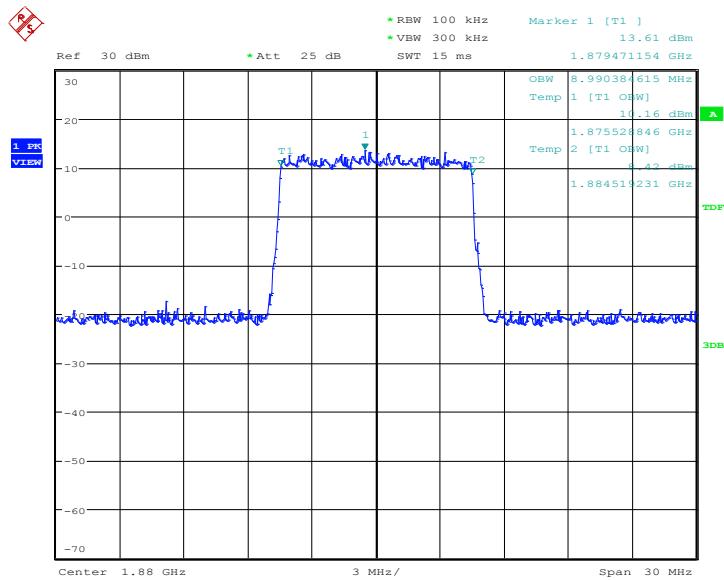
Date: 24.MAY.2018 10:23:57

LTE band 2, 10MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
1880.0	8990.38	9038.46	8942.31

LTE band 2, 10MHz Bandwidth, QPSK (99% BW)
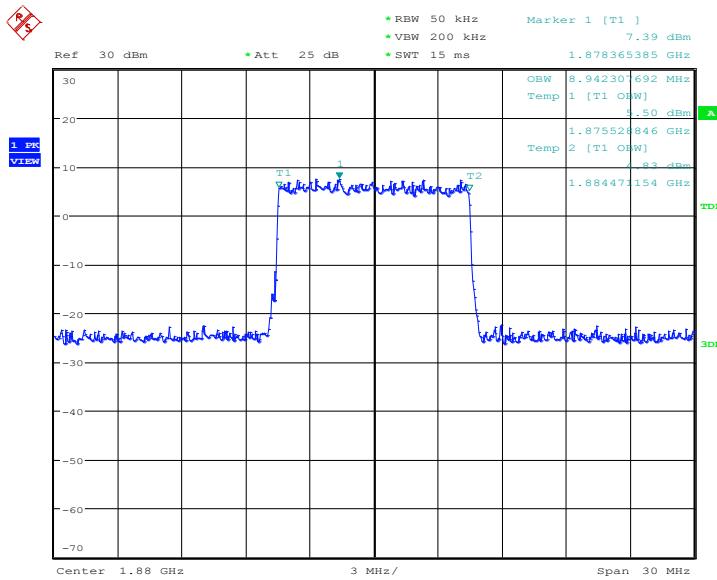
Date: 10.MAY.2018 13:10:27

LTE band 2, 10MHz Bandwidth, 16QAM (99% BW)

Date: 10.MAY.2018 13:10:41
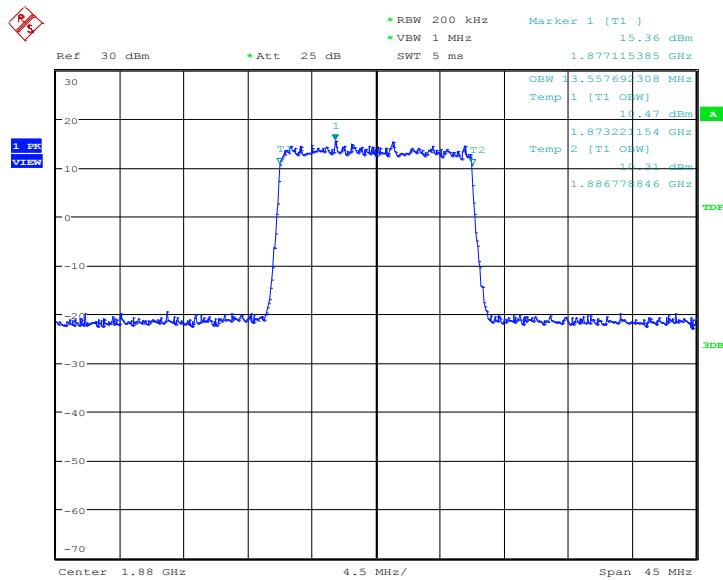
LTE band 2, 10MHz Bandwidth, 64QAM (99% BW)
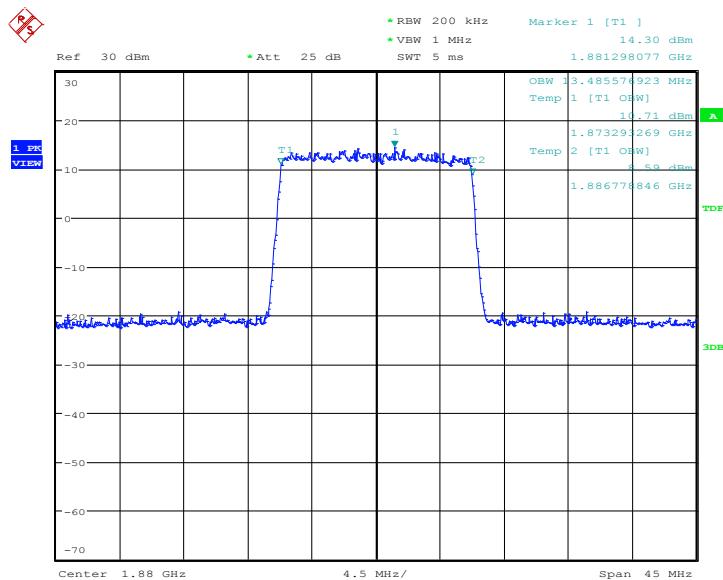
Date: 24.MAY.2018 10:29:28

LTE band 2, 15MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
1880.0	13557.69	13485.58	13485.58
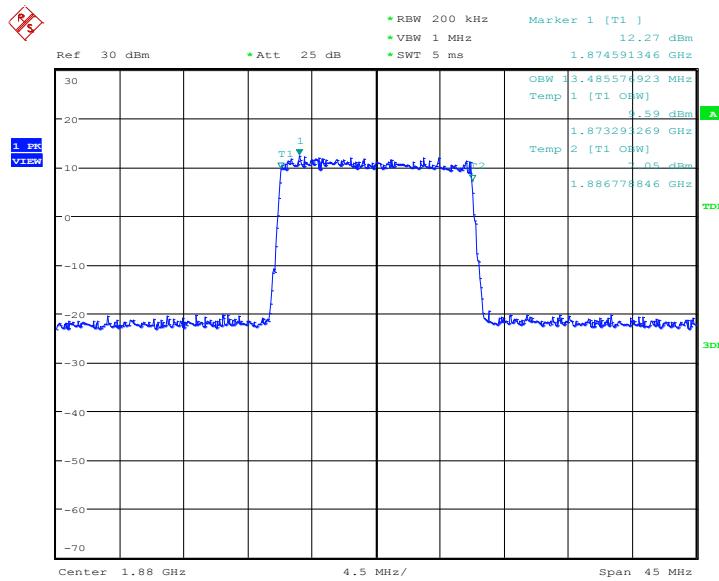
LTE band 2, 15MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 13:17:56

LTE band 2, 15MHz Bandwidth, 16QAM (99% BW)

Date: 10.MAY.2018 13:18:09
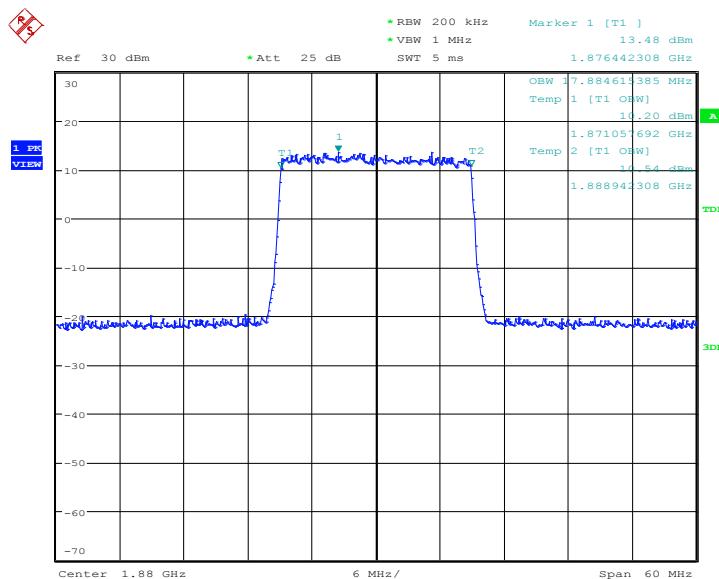
LTE band 2, 15MHz Bandwidth, 64QAM (99% BW)
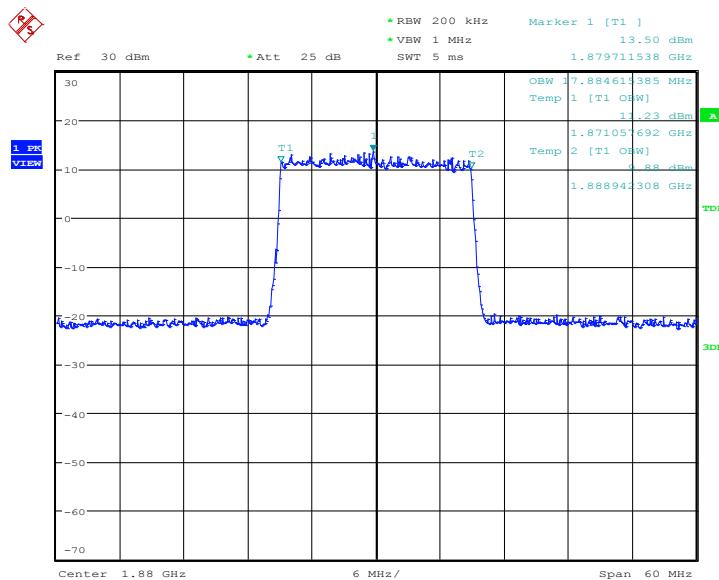
Date: 24.MAY.2018 11:01:04

LTE band 2, 20MHz (99%)

| Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
1880.0	17884.62	17884.62	17980.77
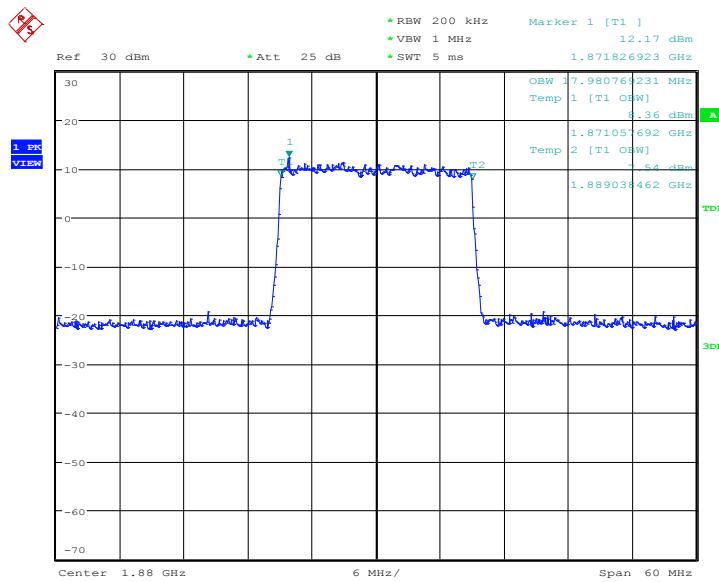
LTE band 2, 20MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 13:25:27

LTE band 2, 20MHz Bandwidth, 16QAM (99% BW)

Date: 10.MAY.2018 13:25:41
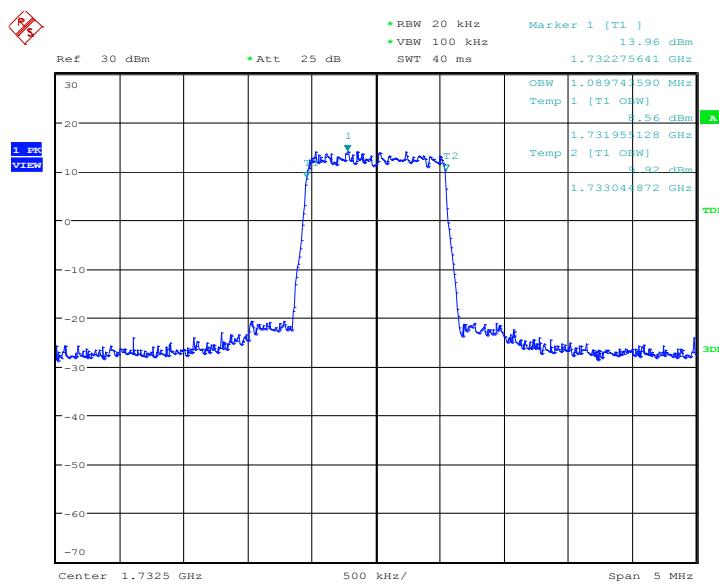
LTE band 2, 20MHz Bandwidth, 64QAM (99% BW)
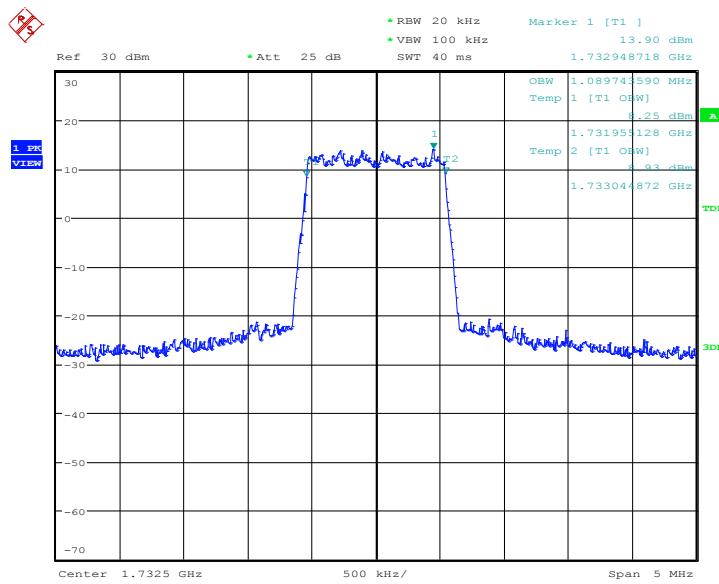
Date: 24.MAY.2018 11:02:15

LTE band 4, 1.4MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
1732.5	QPSK	16QAM	64QAM
	1089.74	1089.74	1089.74
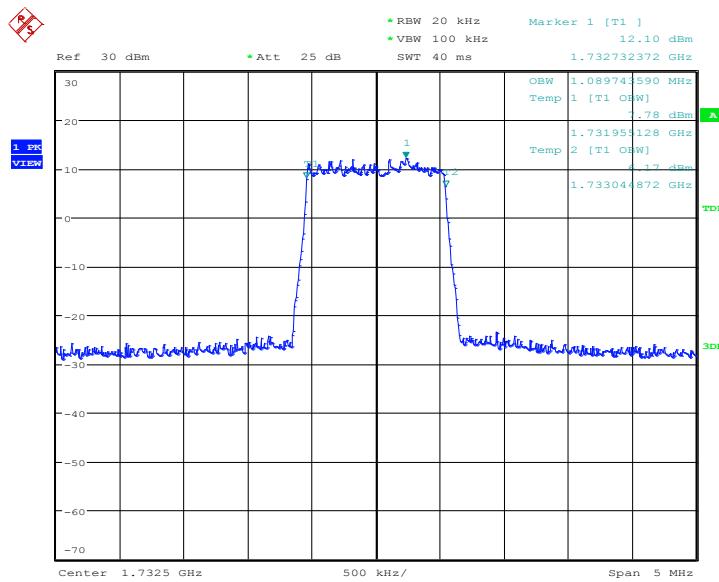
LTE band 4, 1.4MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 14:25:25

LTE band 4, 1.4MHz Bandwidth, 16QAM (99% BW)

Date: 10.MAY.2018 14:25:39
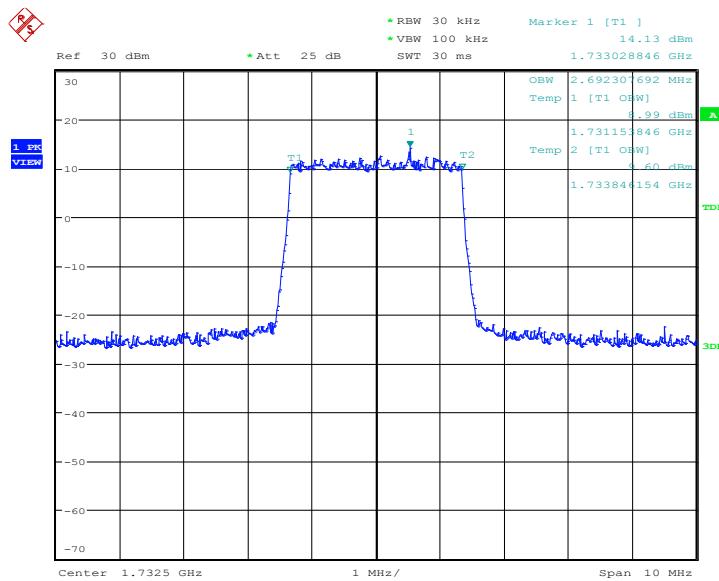
LTE band 4, 1.4MHz Bandwidth, 64QAM (99% BW)
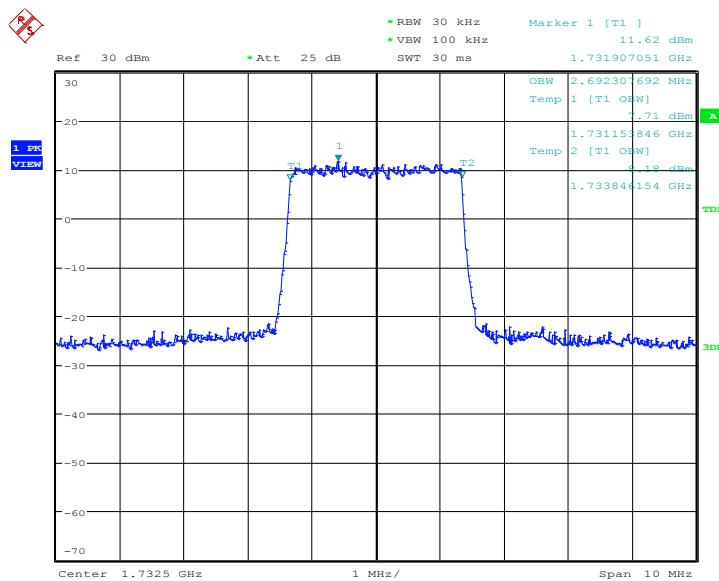
Date: 14.JUN.2018 09:43:17

LTE band 4, 3MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
1732.5	QPSK	16QAM	64QAM
	2692.31	2692.31	2692.31
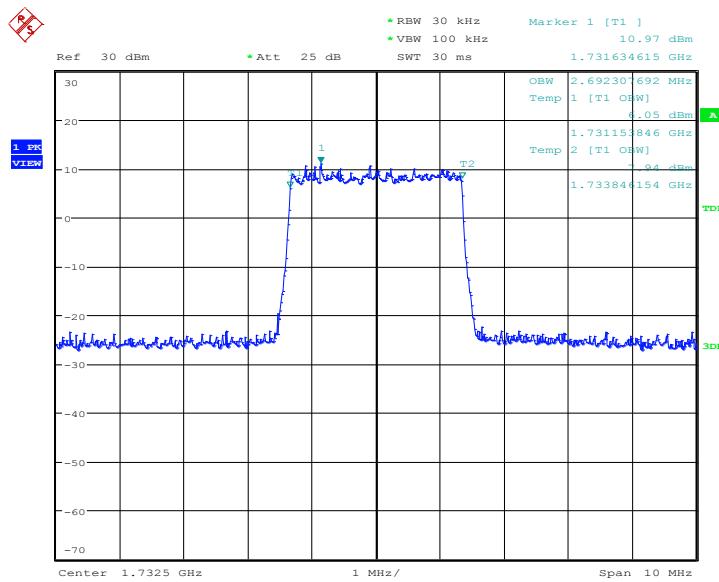
LTE band 4, 3MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 14:32:16

LTE band 4, 3MHz Bandwidth, 16QAM (99% BW)

Date: 10.MAY.2018 14:32:29
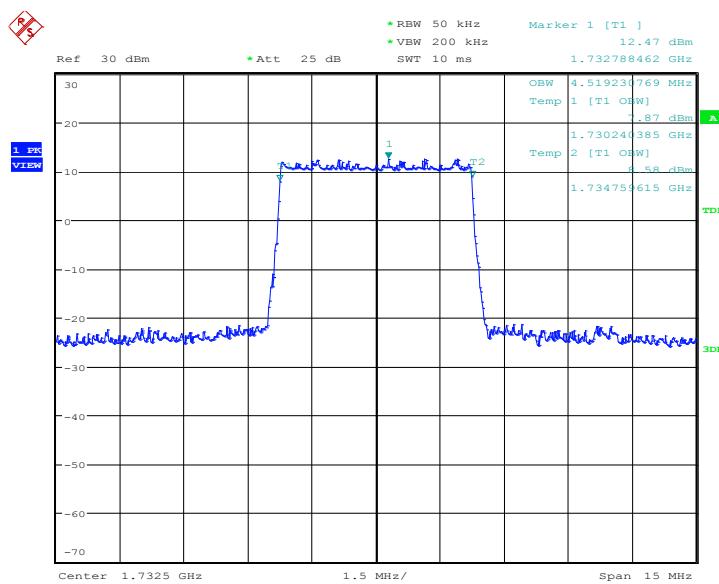
LTE band 4, 3MHz Bandwidth, 64QAM (99% BW)
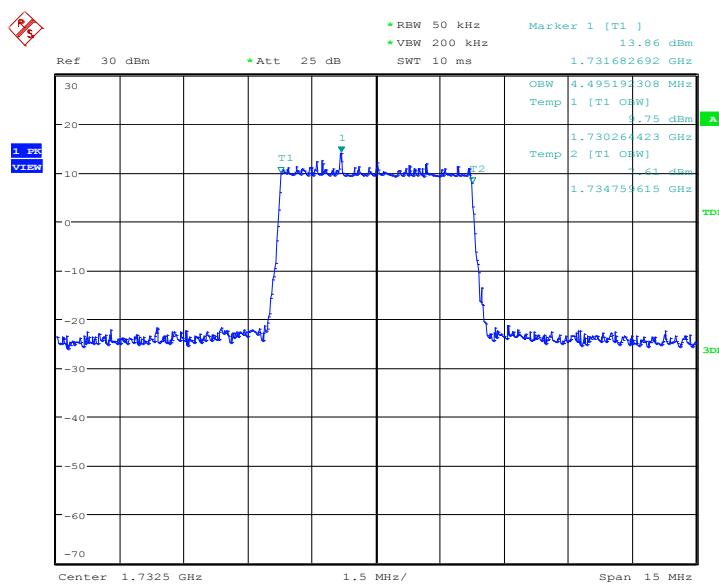
Date: 14.JUN.2018 09:46:33

LTE band 4, 5MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
1732.5	QPSK	16QAM	64QAM
	4519.23	4495.19	4495.19
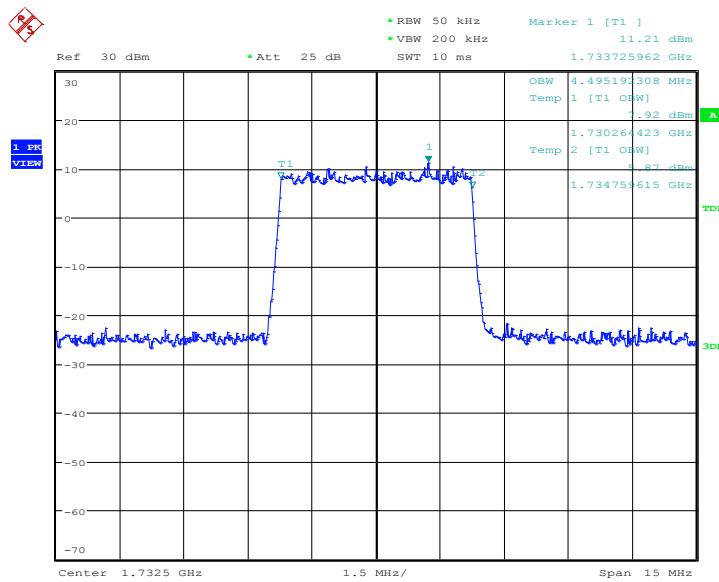
LTE band 4, 5MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 14:39:06

LTE band 4, 5MHz Bandwidth,16QAM (99% BW)

Date: 10.MAY.2018 14:39:20

LTE band 4, 5MHz Bandwidth,64QAM (99% BW)
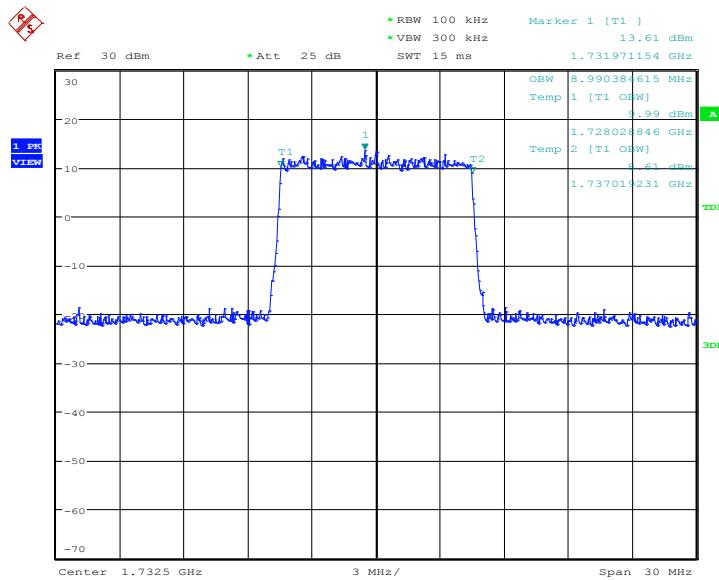
Date: 14.JUN.2018 09:48:48

LTE band 4, 10MHz (99%)
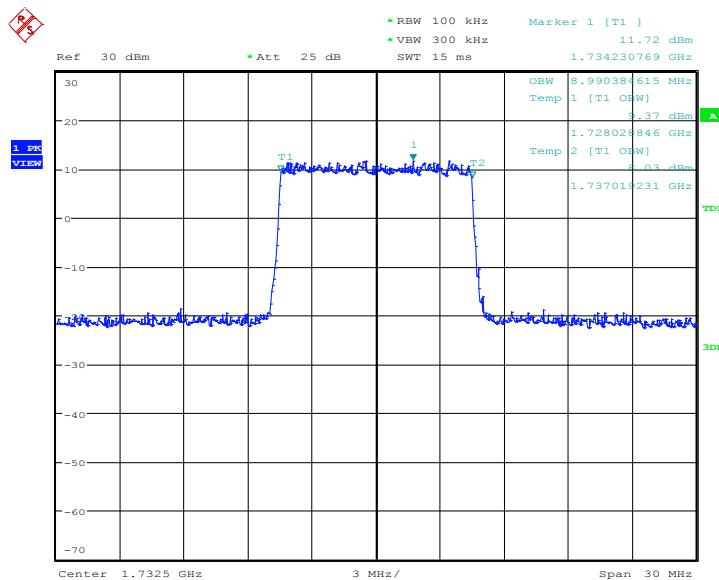
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
1732.5	QPSK	16QAM	64QAM
	8990.38	8990.38	8990.38

LTE band 4, 10MHz Bandwidth, QPSK (99% BW)
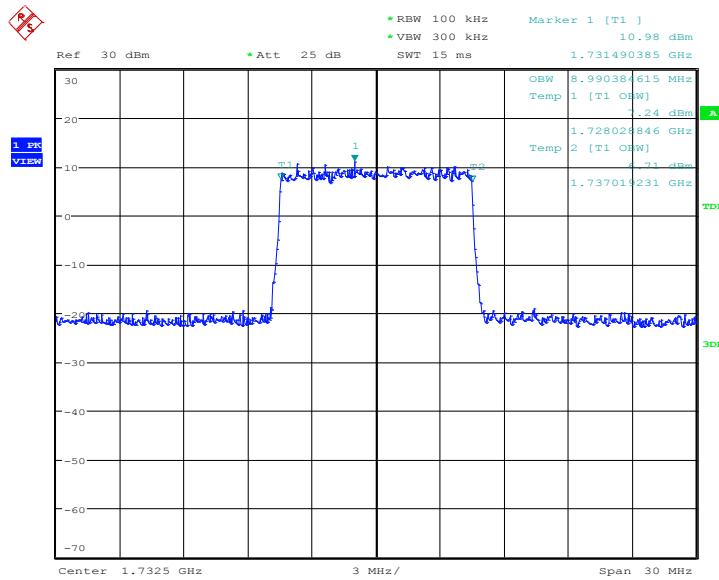
Date: 10.MAY.2018 14:45:56

LTE band 4, 10MHz Bandwidth, 16QAM (99% BW)

Date: 10.MAY.2018 14:46:09
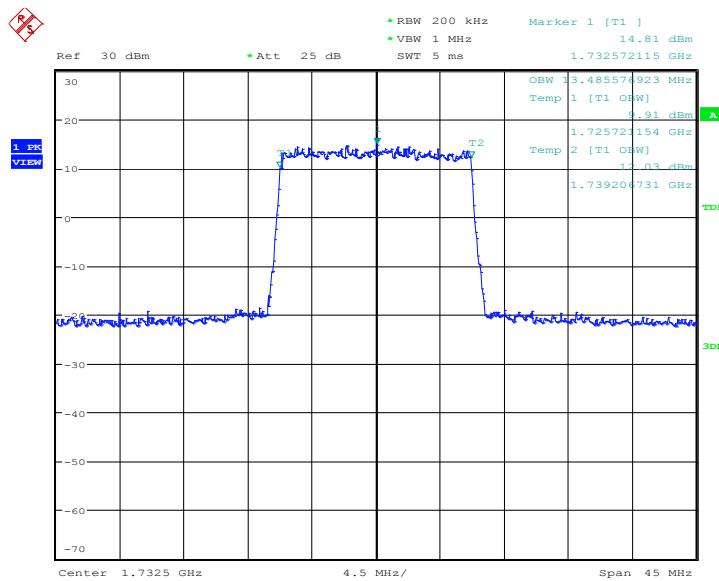
LTE band 4, 10MHz Bandwidth, 64QAM (99% BW)
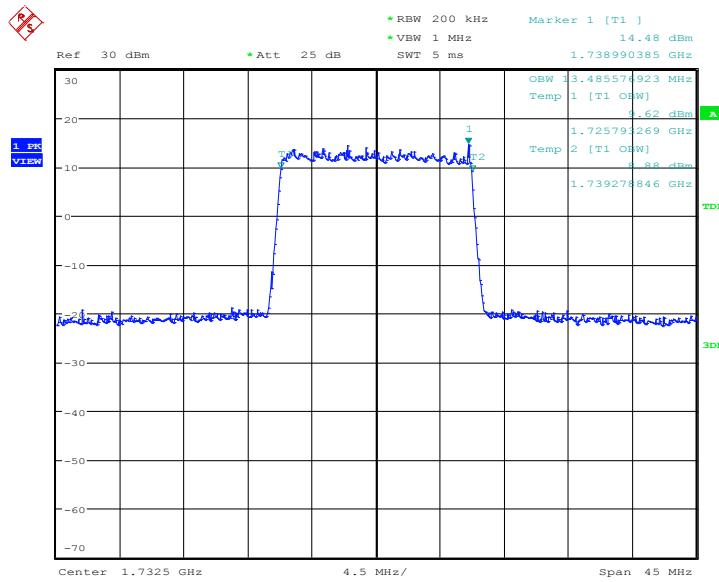
Date: 14.JUN.2018 09:55:31

LTE band 4, 15MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
1732.5	QPSK	16QAM	64QAM
	13485.58	13485.58	13485.6
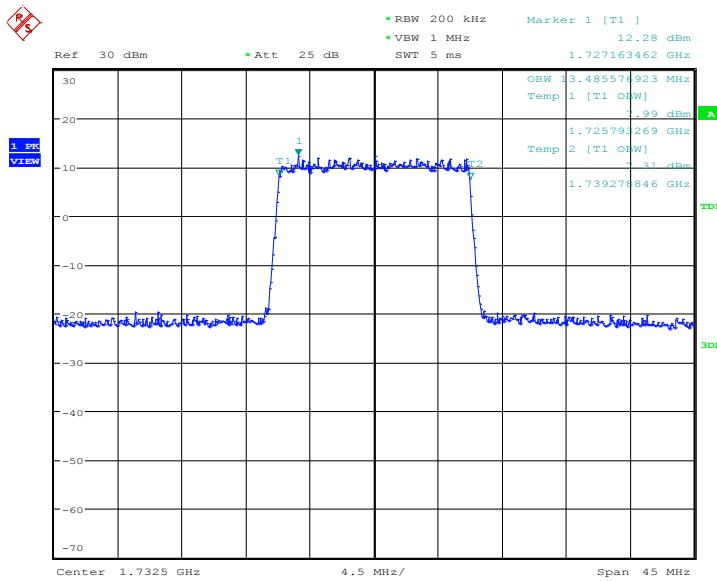
LTE band 4, 15MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 14:53:24

LTE band 4, 15MHz Bandwidth, 16QAM (99% BW)

Date: 10.MAY.2018 14:53:38
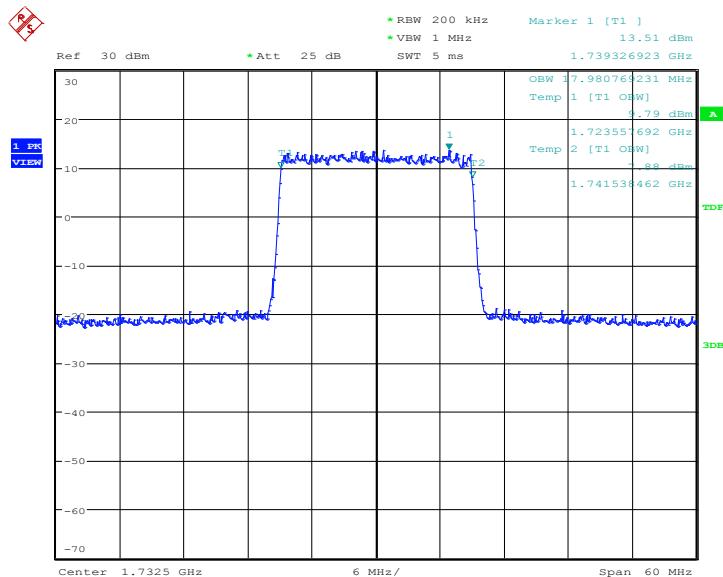
LTE band 4, 15MHz Bandwidth, 64QAM (99% BW)
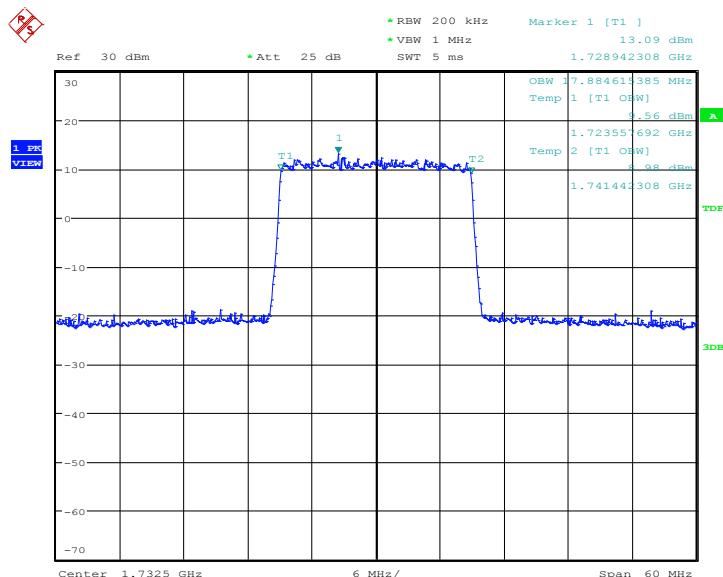
Date: 14.JUN.2018 09:51:58

LTE band 4, 20MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
1732.5	QPSK	16QAM	64QAM
	17980.77	17884.62	17980.8
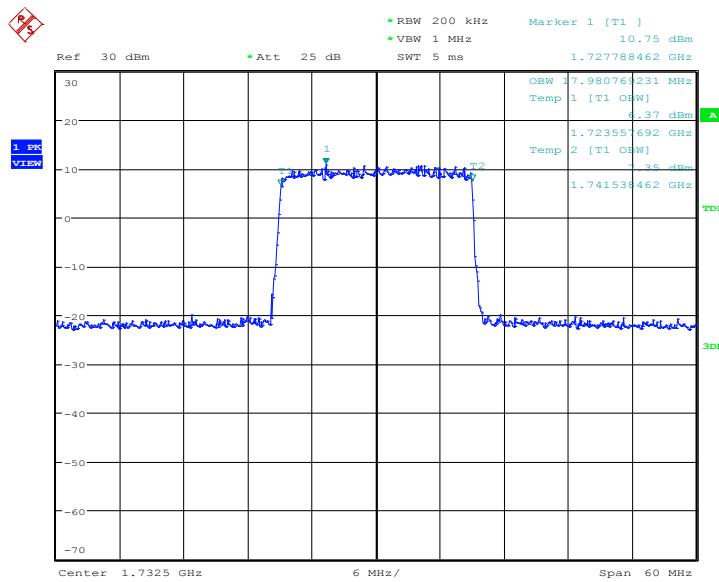
LTE band 4, 20MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 15:00:56

LTE band 4, 20MHz Bandwidth, 16QAM (99% BW)

Date: 10.MAY.2018 15:01:09
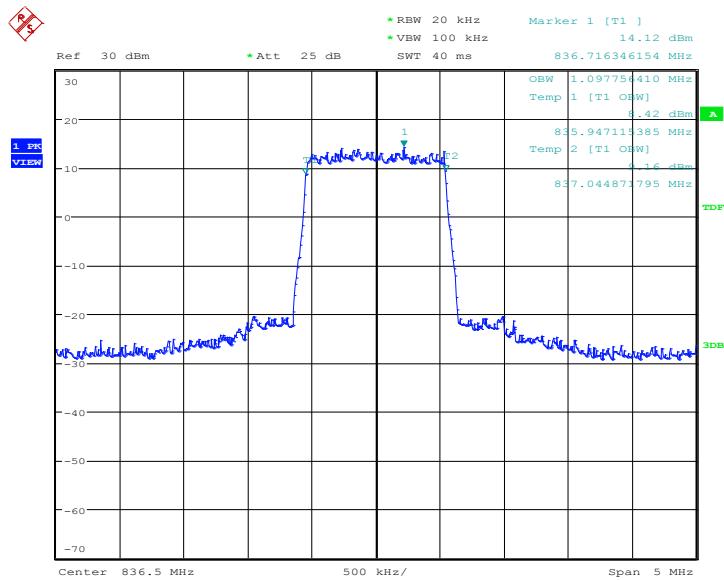
LTE band 4, 20MHz Bandwidth, 64QAM (99% BW)
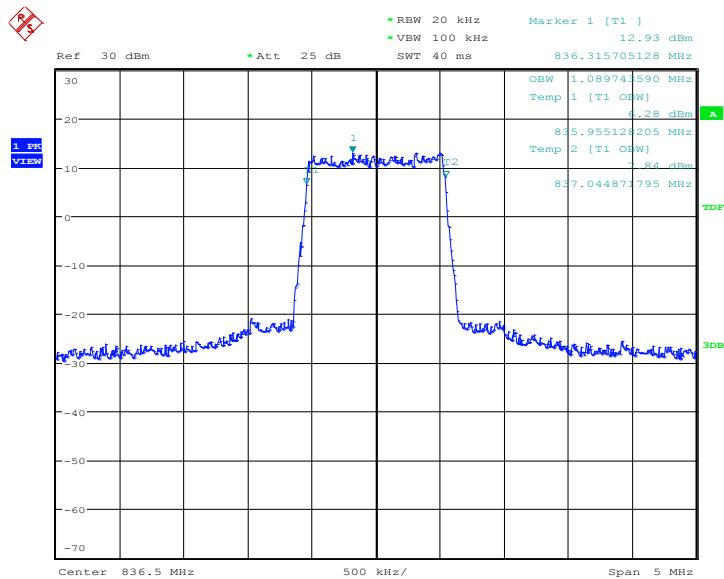
Date: 14.JUN.2018 09:53:00

LTE band 5, 1.4MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
836.5	QPSK	16QAM	64QAM
	1097.76	1089.74	1089.74
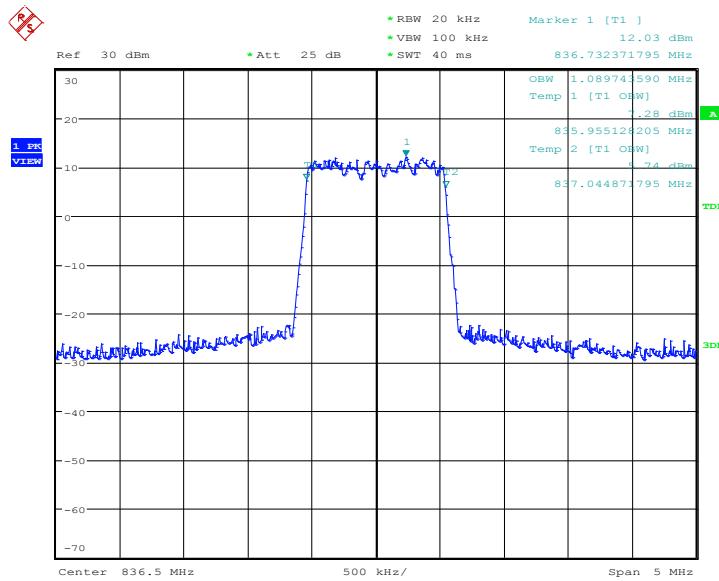
LTE band 5, 1.4MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 12:21:00

LTE band 5, 1.4MHz Bandwidth, 16QAM (99% BW)

Date: 10.MAY.2018 12:21:15
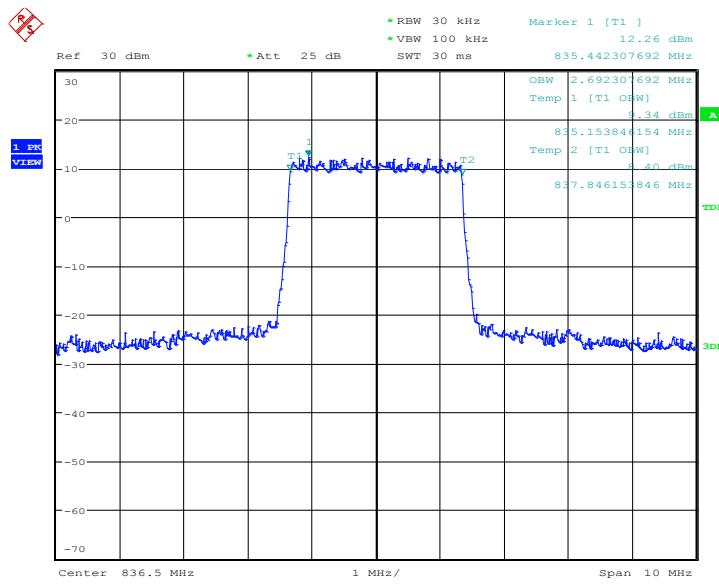
LTE band 5, 1.4MHz Bandwidth, 64QAM (99% BW)
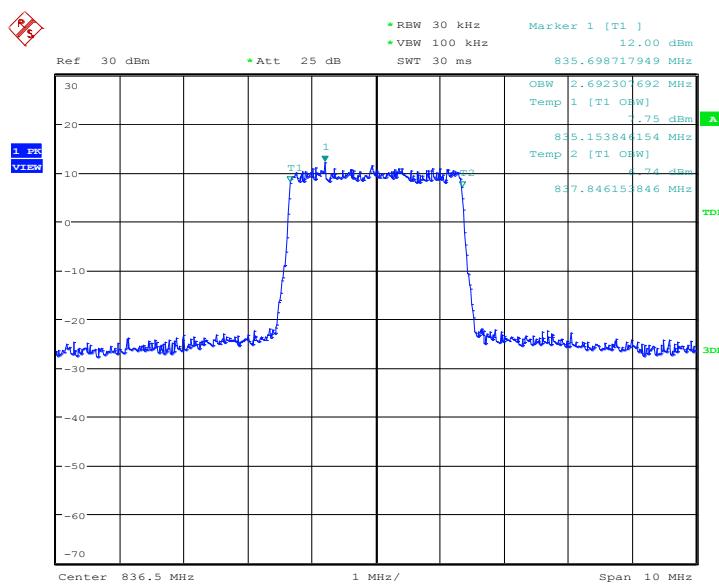
Date: 24.MAY.2018 13:06:38

LTE band 5, 3MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
836.5	2692.31	2692.31	2692.31
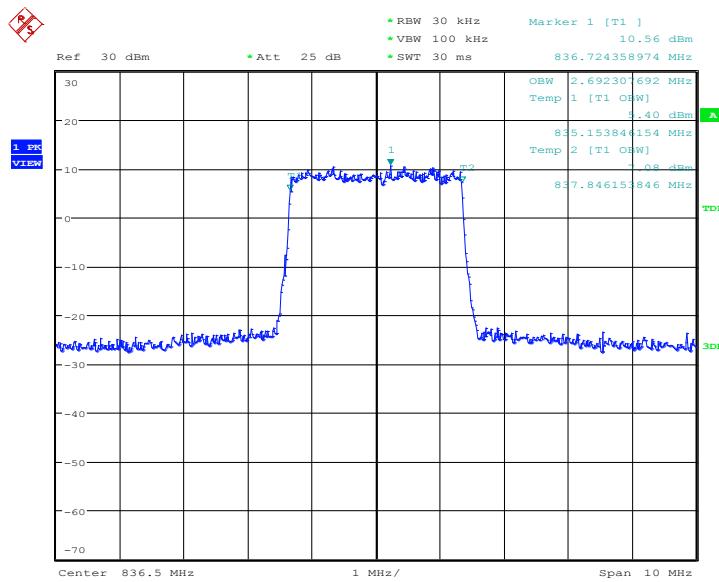
LTE band 5, 3MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 12:27:55

LTE band 5, 3MHz Bandwidth, 16QAM (99% BW)

Date: 10.MAY.2018 12:28:08
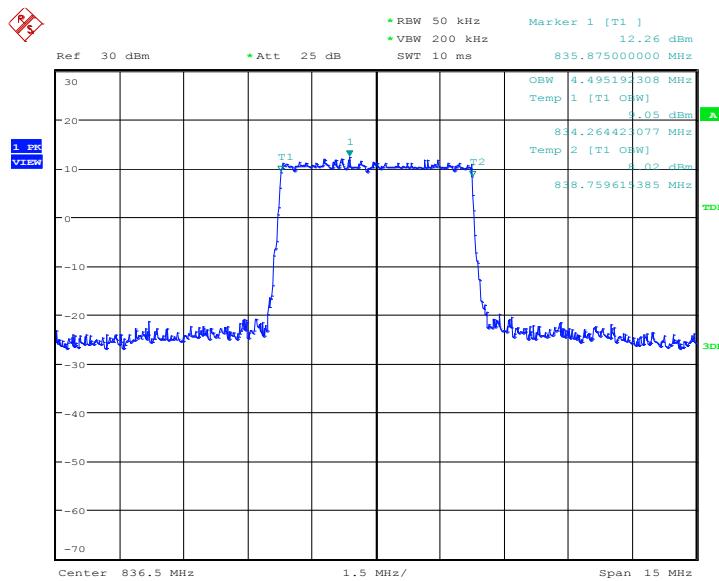
LTE band 5, 3MHz Bandwidth, 64QAM (99% BW)
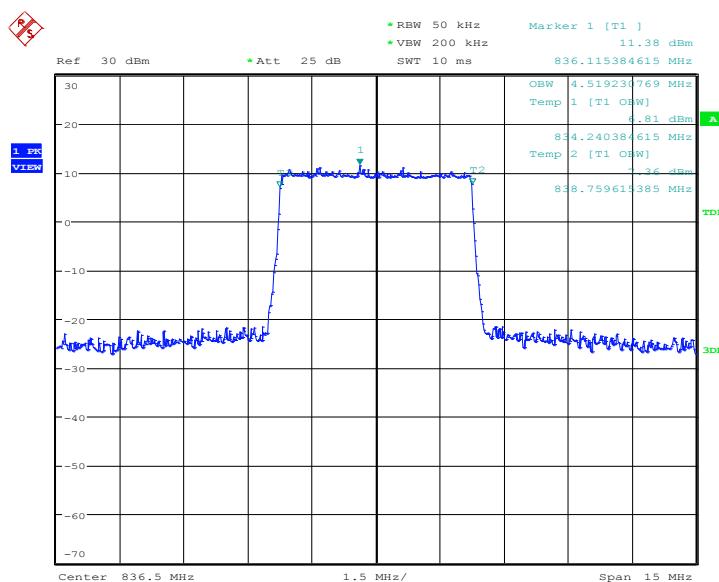
Date: 24.MAY.2018 13:10:19

LTE band 5, 5MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
836.5	4495.19	4519.23	4495.19
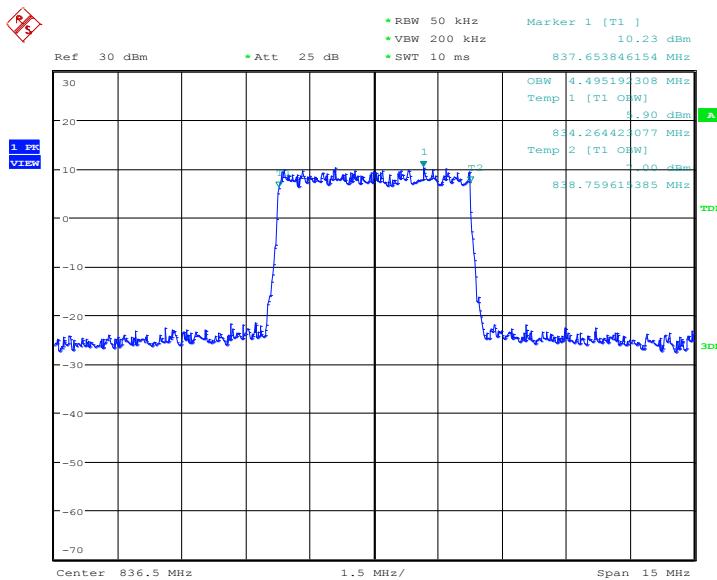
LTE band 5, 5MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 12:34:44

LTE band 5, 5MHz Bandwidth,16QAM (99% BW)

Date: 10.MAY.2018 12:34:57
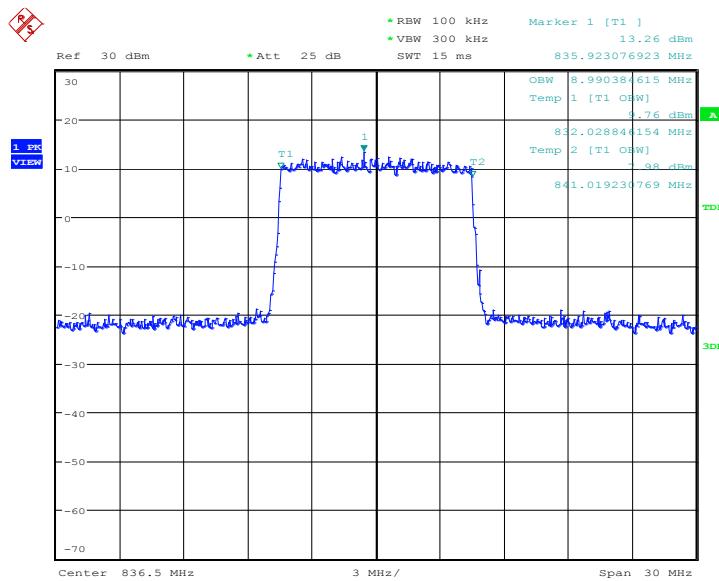
LTE band 5, 5MHz Bandwidth,64QAM (99% BW)
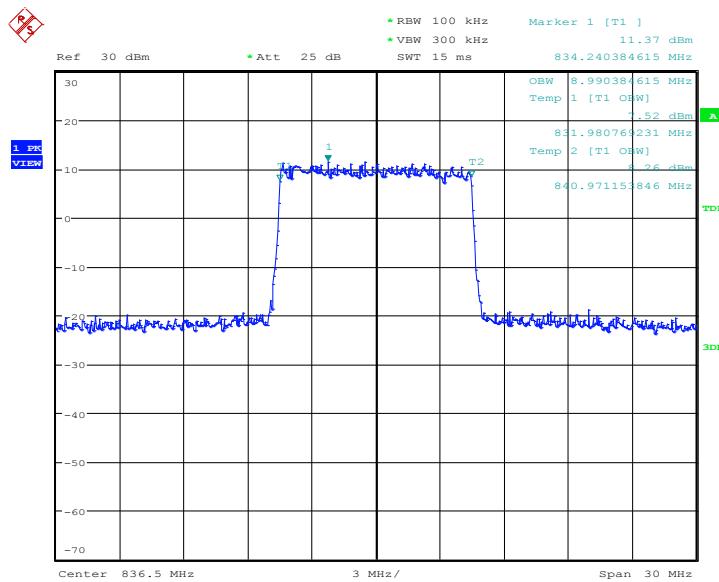
Date: 24.MAY.2018 13:20:59

LTE band 5, 10MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
836.5	8990.38	8990.38	8990.38
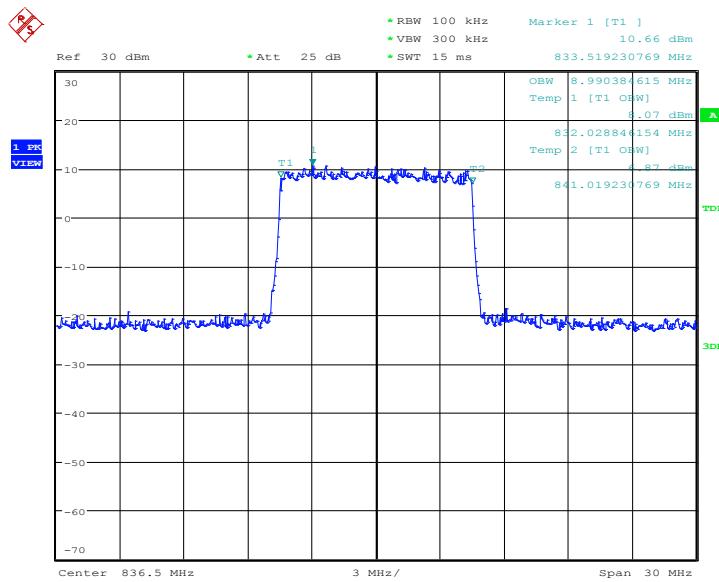
LTE band 5, 10MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 12:41:34

LTE band 5, 10MHz Bandwidth, 16QAM (99% BW)

Date: 10.MAY.2018 12:41:48
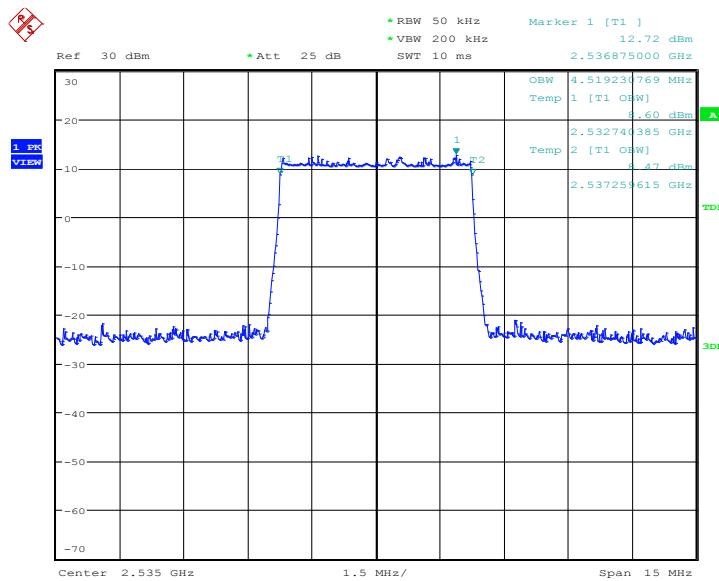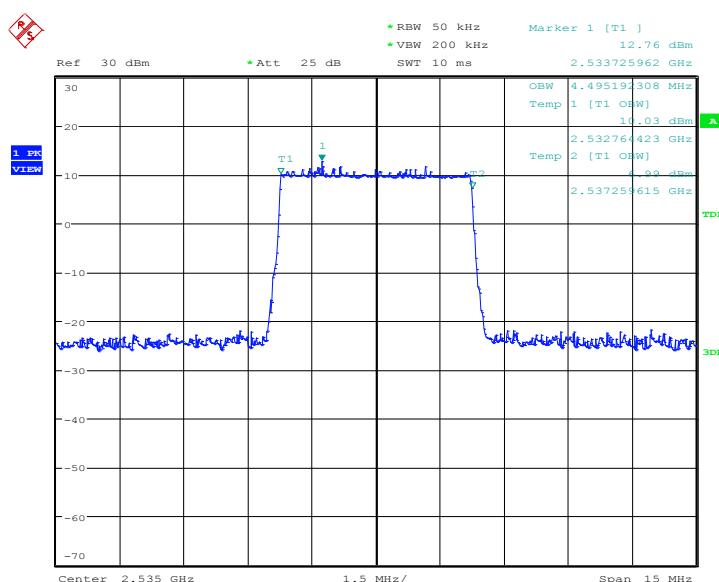
LTE band 5, 10MHz Bandwidth, 64QAM (99% BW)
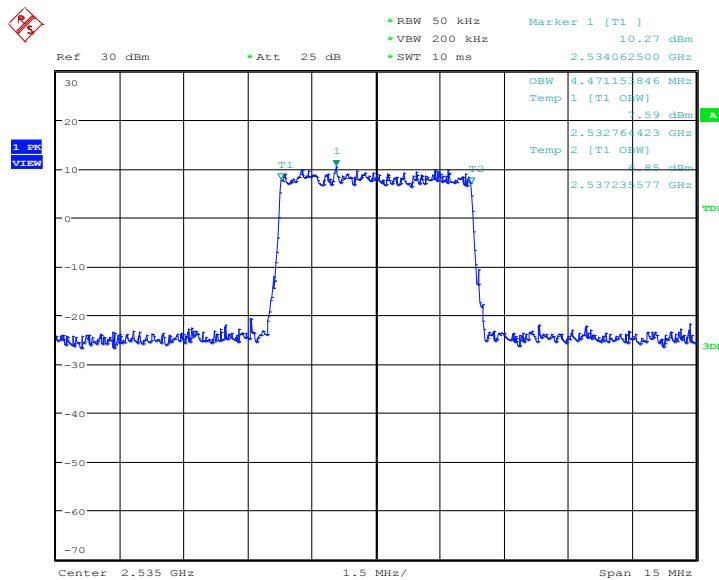
Date: 24.MAY.2018 13:26:12

LTE band 7, 5MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
2535.0	4519.23	4495.19	4471.15

LTE band 7, 5MHz Bandwidth, QPSK (99% BW)

Date: 11.MAY.2018 08:54:33

LTE band 7, 5MHz Bandwidth,16QAM (99% BW)

Date: 11.MAY.2018 08:54:48

LTE band 7, 5MHz Bandwidth,64QAM (99% BW)

* RBW 50 kHz	Marker 1 [T1]
* VBW 200 kHz	10.27 dBm
* SWT 10 ms	2.534062500 GHz

Ref 30 dBm   * Att 25 dB

OBW 4.471153846 MHz
Temp 1 [T1 OBW]
7.59 dBm
2.532764423 GHz
Temp 2 [T1 OBW]
6.85 dBm
2.537235577 GHz

Center 2.535 GHz   1.5 MHz/   Span 15 MHz
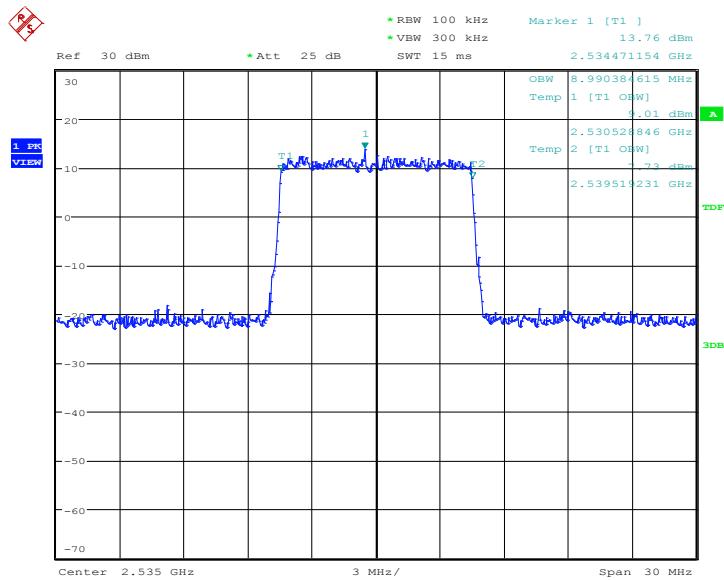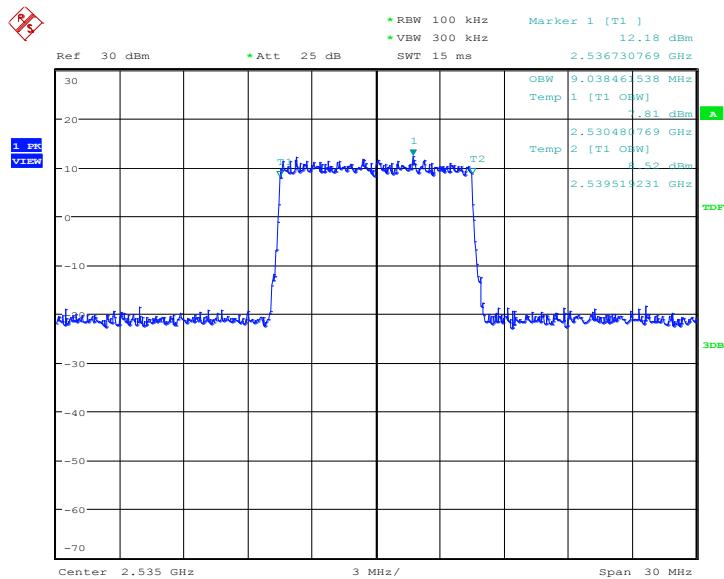
Date: 24.MAY.2018 16:11:46

LTE band 7, 10MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
2535.0	8990.38	9038.46	9038.46
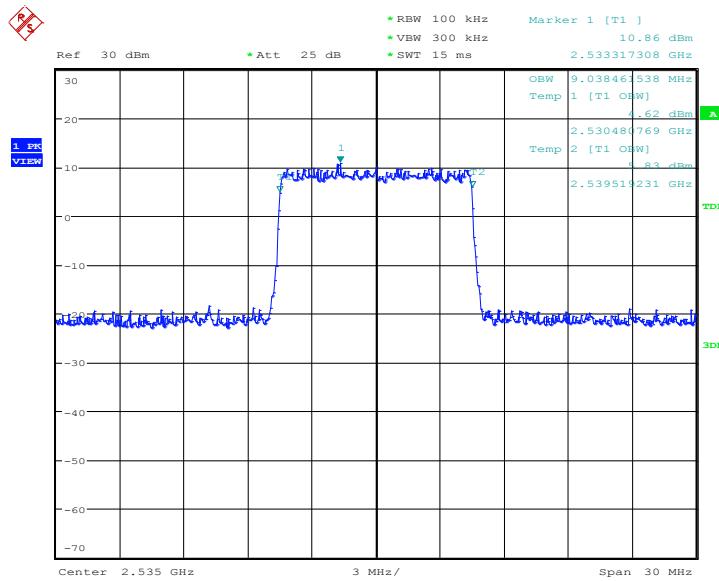
LTE band 7, 10MHz Bandwidth, QPSK (99% BW)

Date: 11.MAY.2018 09:01:33

LTE band 7, 10MHz Bandwidth, 16QAM (99% BW)

Date: 11.MAY.2018 09:01:48
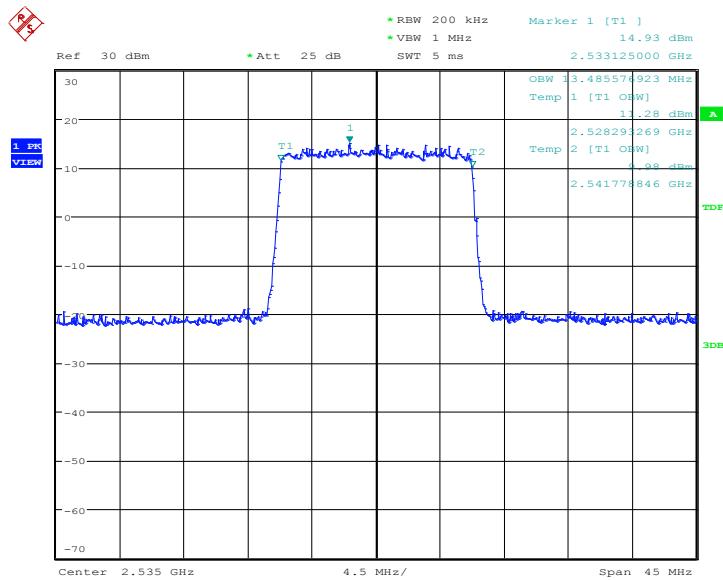
LTE band 7, 10MHz Bandwidth, 64QAM (99% BW)
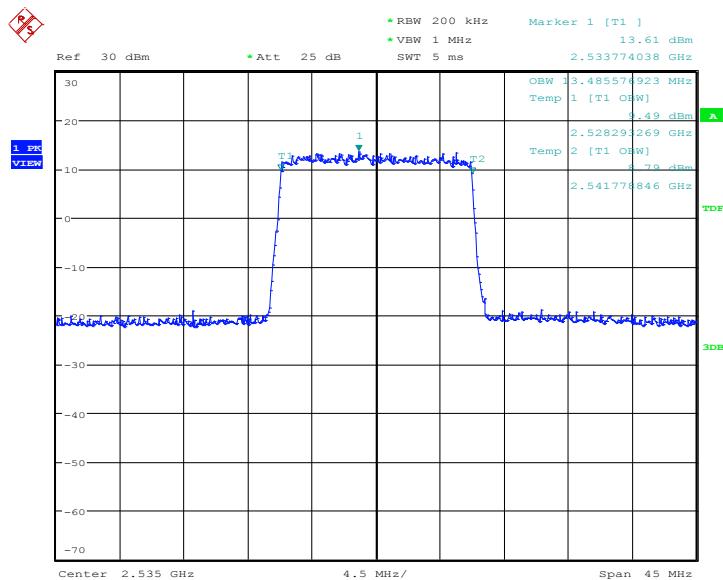
Date: 24.MAY.2018 16:16:43

LTE band 7, 15MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
2535.0	QPSK	16QAM	64QAM
	13485.58	13485.58	13485.58
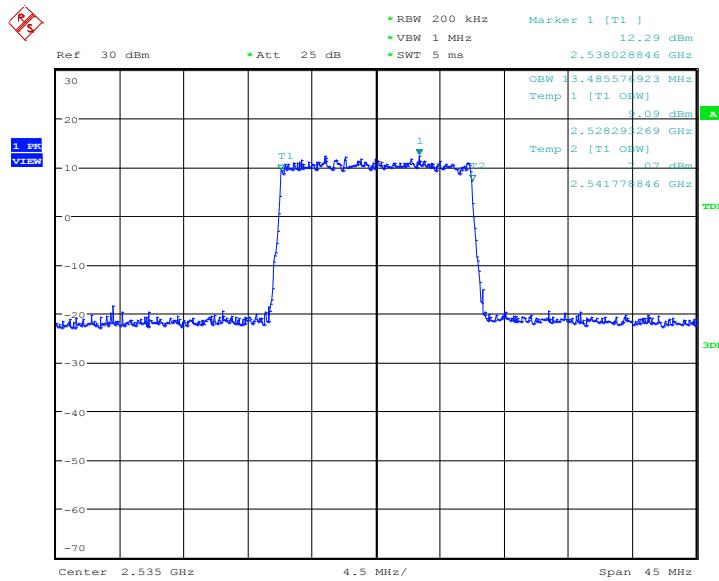
LTE band 7, 15MHz Bandwidth, QPSK (99% BW)

Date: 11.MAY.2018 09:09:09

LTE band 7, 15MHz Bandwidth, 16QAM (99% BW)

Date: 11.MAY.2018 09:09:24
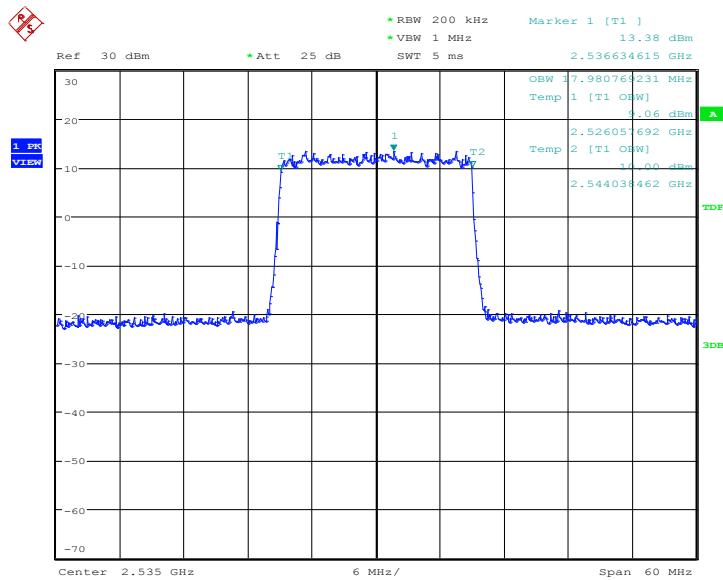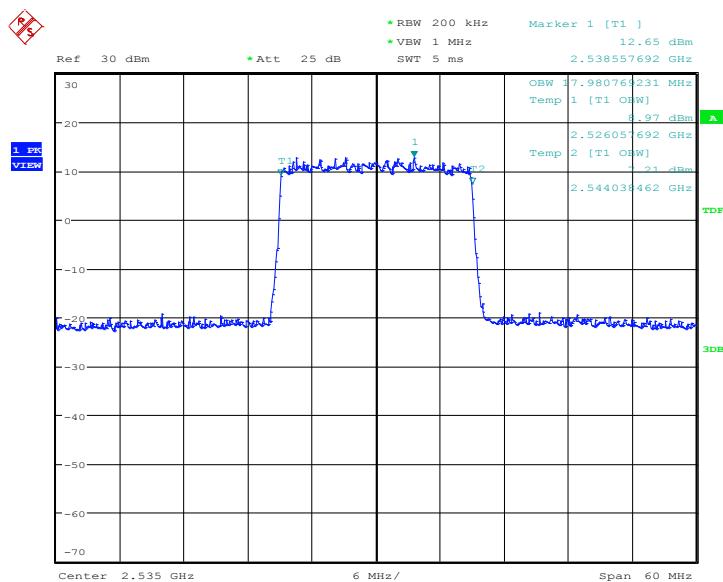
LTE band 7, 15MHz Bandwidth, 64QAM (99% BW)
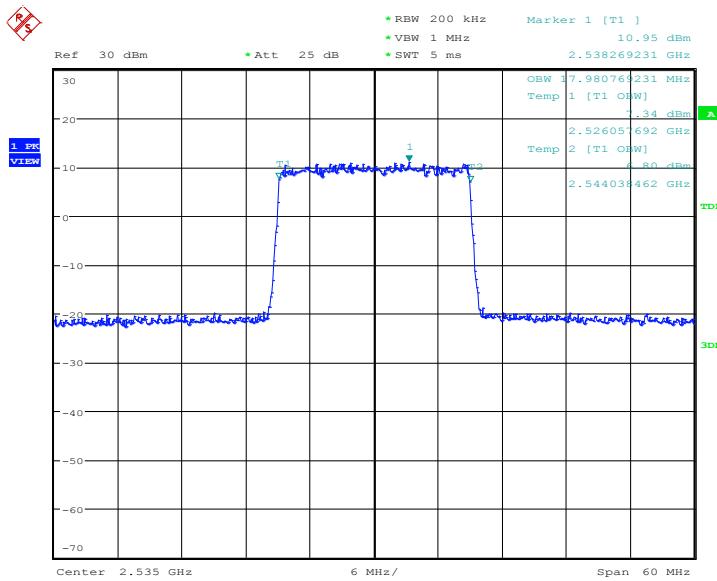
Date: 24.MAY.2018 16:19:57

LTE band 7, 20MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
2535.0	17980.77	17980.77	17980.77

LTE band 7, 20MHz Bandwidth, QPSK (99% BW)

Date: 11.MAY.2018 09:16:50

LTE band 7, 20MHz Bandwidth, 16QAM (99% BW)

Date: 11.MAY.2018 09:17:05
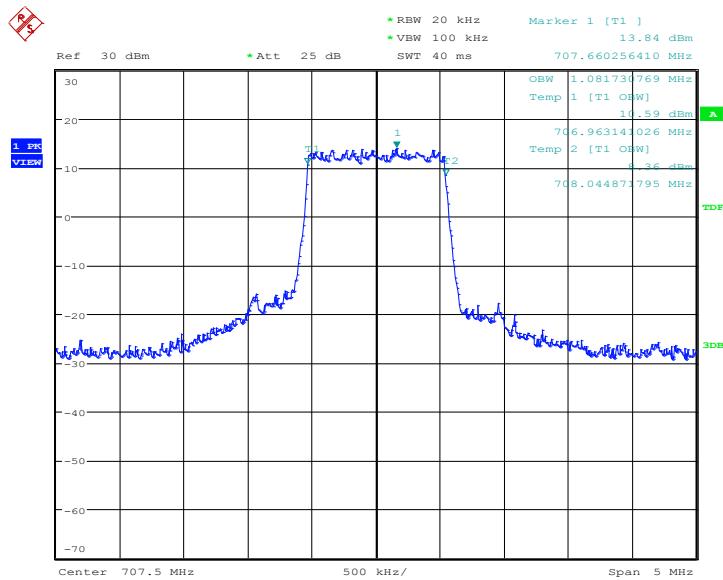
LTE band 7, 20MHz Bandwidth, 64QAM (99% BW)
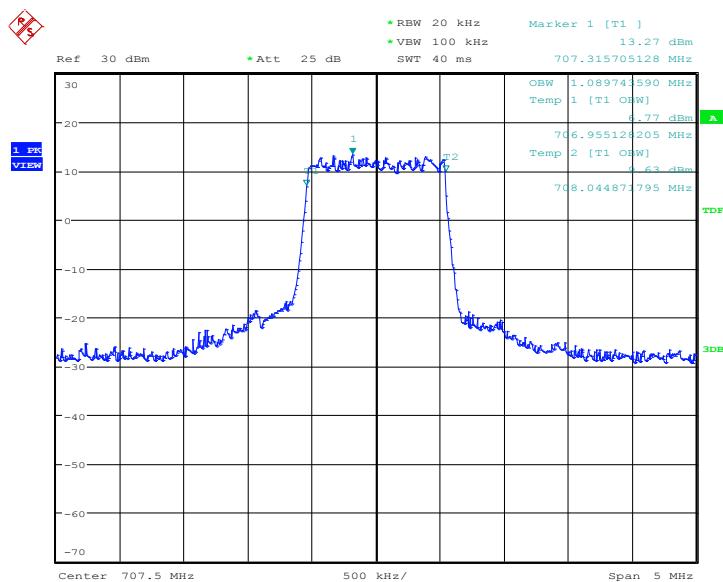
Date: 24.MAY.2018 16:23:16

LTE band 12, 1.4MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
707.5	QPSK	16QAM	64QAM
	1081.73	1089.74	1089.74
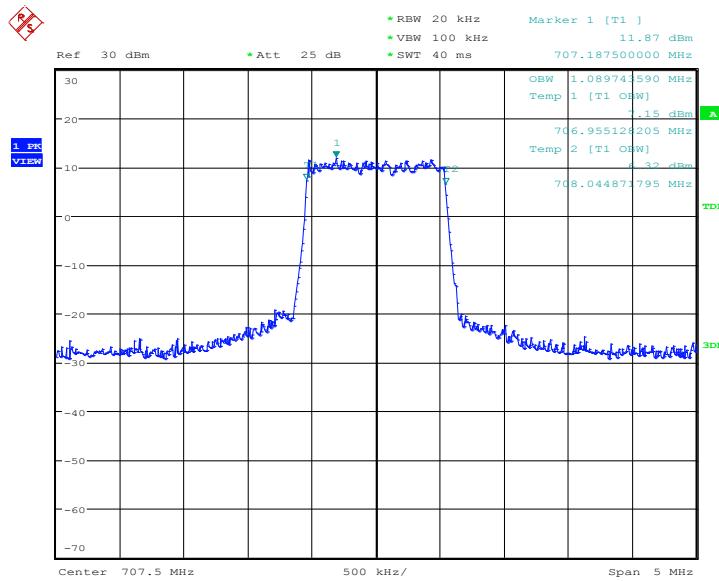
LTE band 12, 1.4MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 15:07:53

LTE band 12, 1.4MHz Bandwidth, 16QAM (99% BW)

Date: 10.MAY.2018 15:08:06
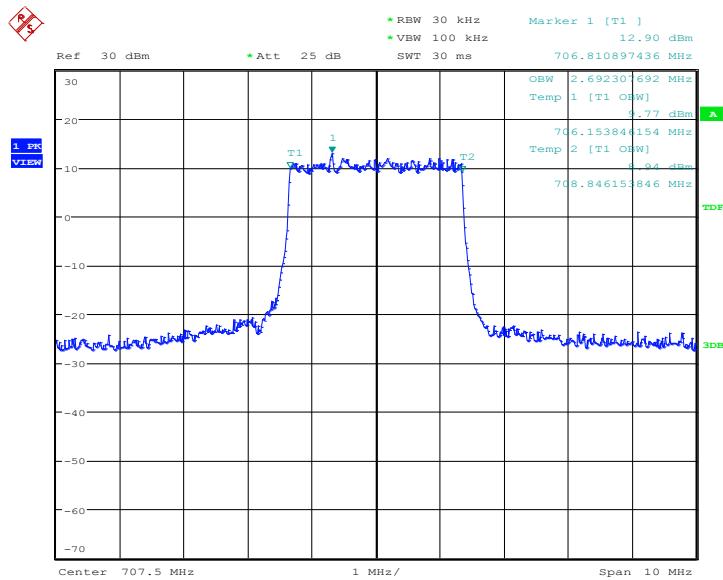
LTE band 12, 1.4MHz Bandwidth, 64QAM (99% BW)
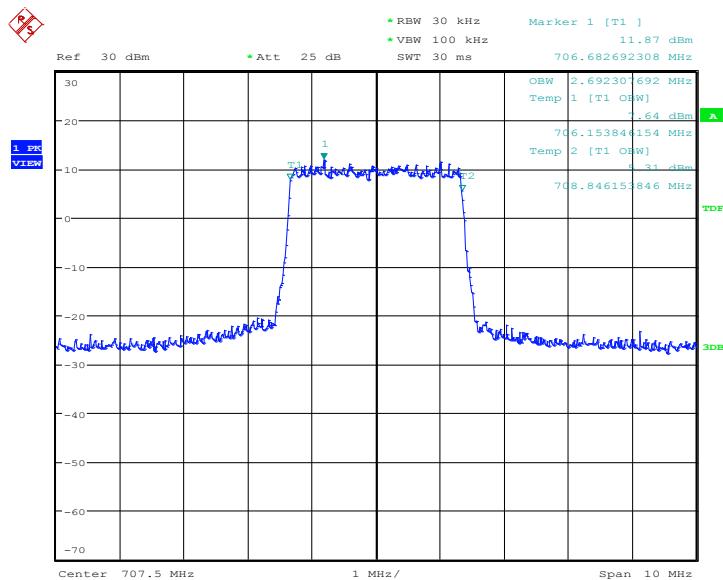
Date: 24.MAY.2018 16:34:53

LTE band 12, 3MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
707.5	QPSK	16QAM	64QAM
	2692.31	2692.31	2692.31
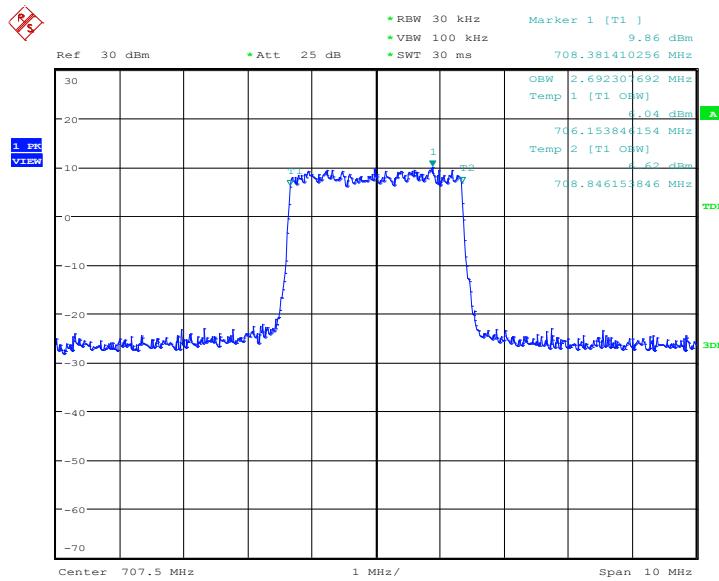
LTE band 12, 3MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 15:14:43

LTE band 12, 3MHz Bandwidth, 16QAM (99% BW)

Date: 10.MAY.2018 15:14:57
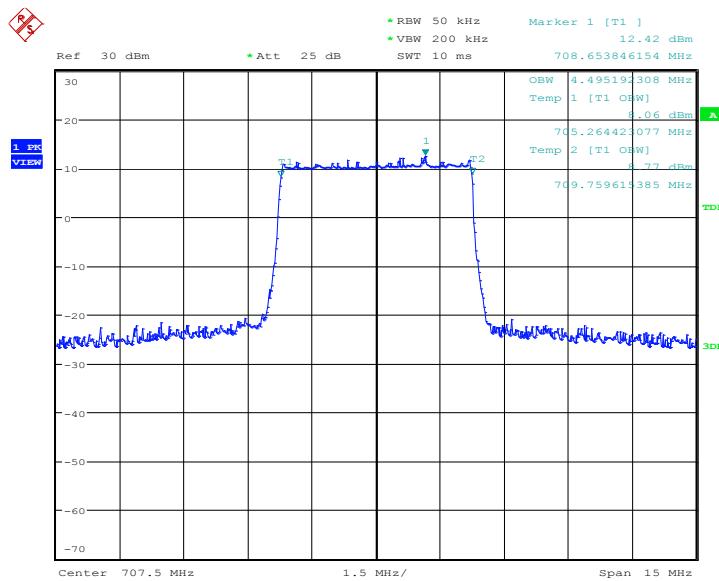
LTE band 12, 3MHz Bandwidth, 64QAM (99% BW)
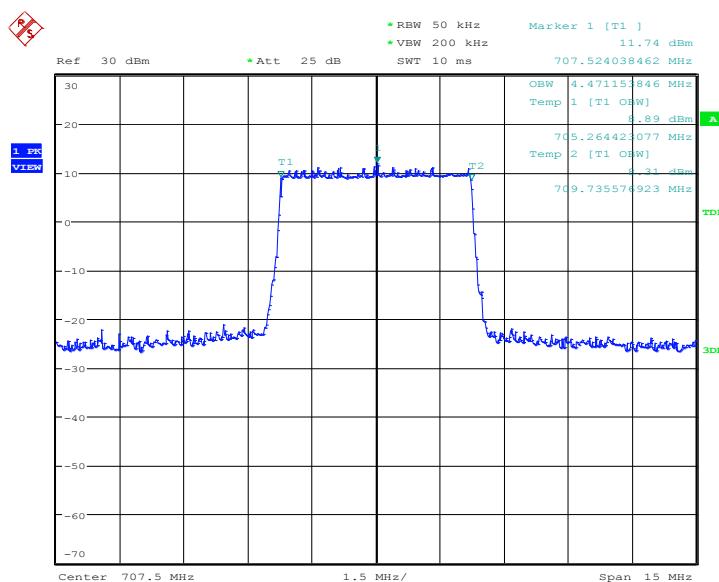
Date: 24.MAY.2018 16:37:57

LTE band 12, 5MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
707.5	QPSK	16QAM	64QAM
	4495.19	4471.15	4495.19
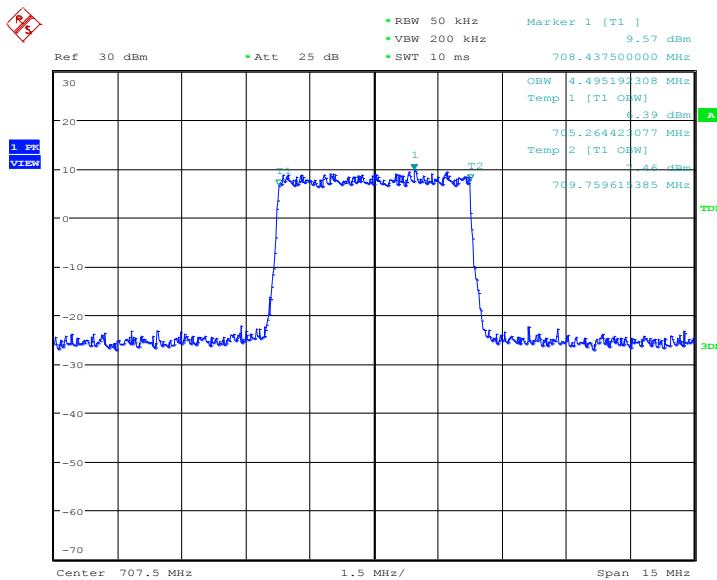
LTE band 12, 5MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 15:21:34

LTE band 12, 5MHz Bandwidth,16QAM (99% BW)

Date: 10.MAY.2018 15:21:48
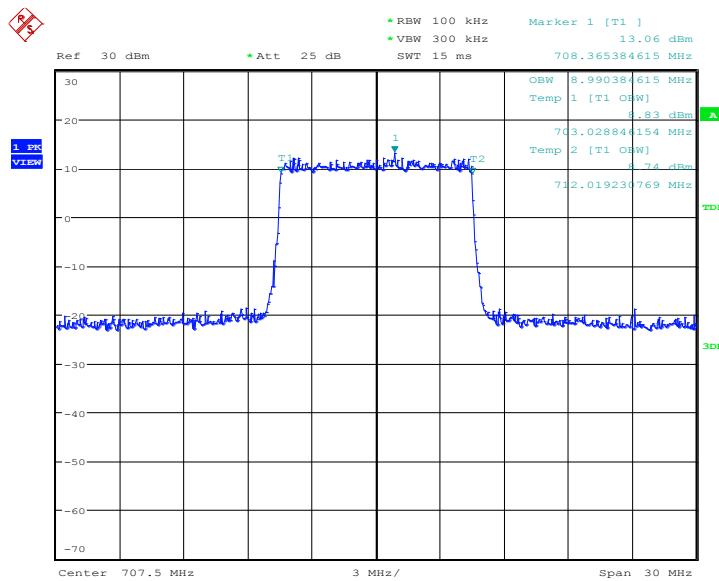
LTE band 12, 5MHz Bandwidth,64QAM (99% BW)
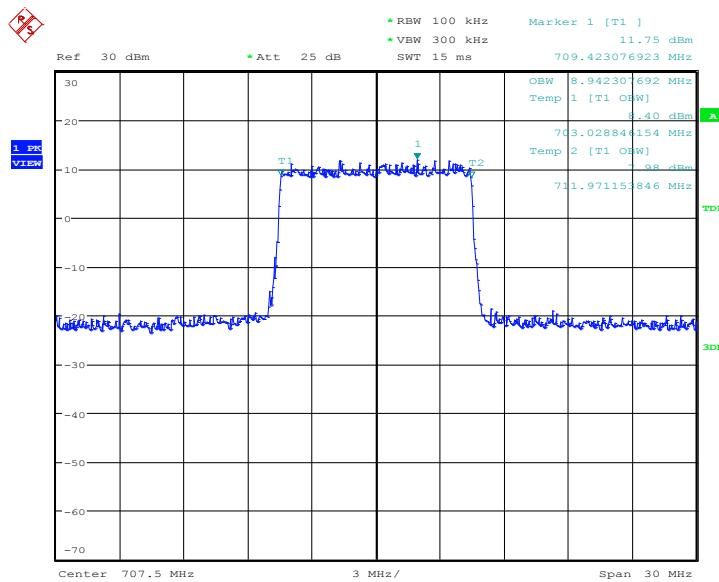
Date: 24.MAY.2018 16:41:20

LTE band 12, 10MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
707.5	QPSK	16QAM	64QAM
	8990.38	8942.31	9038.46
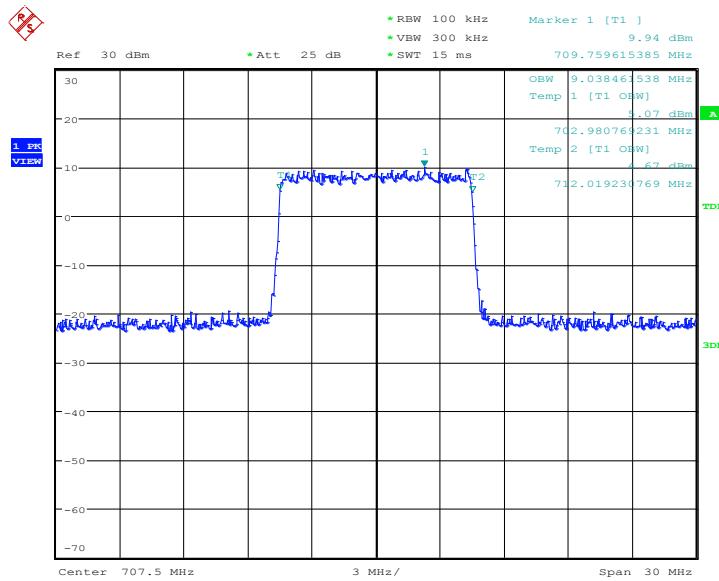
LTE band 12, 10MHz Bandwidth, QPSK (99% BW)

Date: 10.MAY.2018 15:28:25

LTE band 12, 10MHz Bandwidth, 16QAM (99% BW)

Date: 10.MAY.2018 15:28:38

LTE band 12, 10MHz Bandwidth, 64QAM (99% BW)


```
                                    *RBW  100 kHz       Marker 1 [T1 ]
                                    *VBW  300 kHz                    9.94 dBm
        Ref  30 dBm      *Att  25 dB  *SWT 15 ms         709.759615385 MHz
    30                                          OBW 9.038461538 MHz
                                                Temp 1 [T1 OBW]
    -20                                                    9.07 dBm    A
                                                702.980769231 MHz
1 PK                                            Temp 2 [T1 OBW]
VIEW  10                          1                       9.67 dBm
                                                712.019230769 MHz     TDF
     0
    -10
    -20                                                                3DB
    -30
    -40
    -50
    -60
    -70
      Center  707.5 MHz            3 MHz/              Span 30 MHz
```
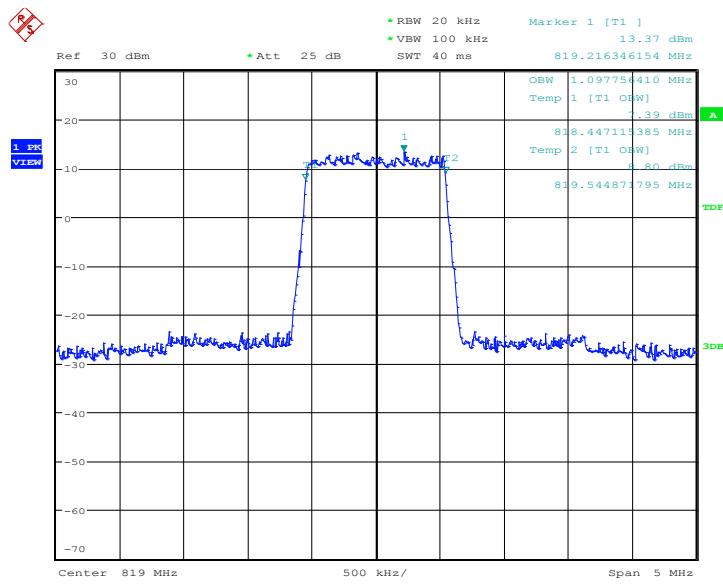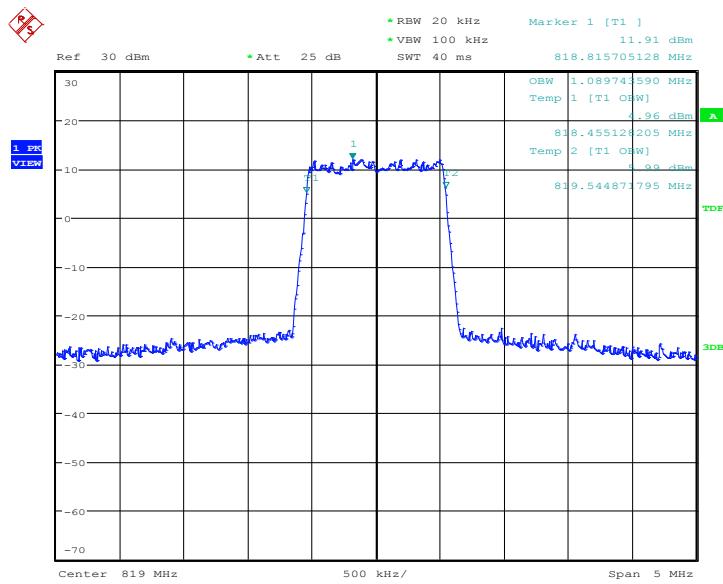
Date: 24.MAY.2018 16:45:11

LTE band 26(814MHz-824MHz), 1.4MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
819.0	1097.76	1089.74	1089.74
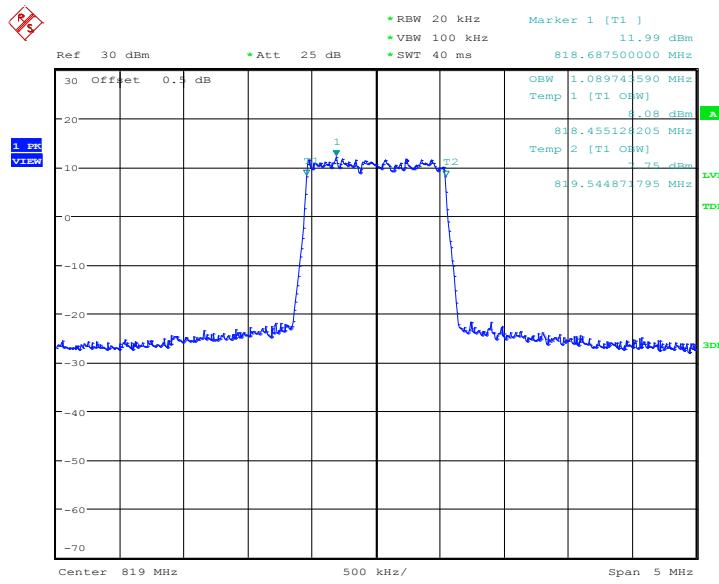
LTE band 26(814MHz-824MHz), 1.4MHz Bandwidth, QPSK (99% BW)

Date: 16.MAY.2018 16:15:02

LTE band 26(814MHz-824MHz), 1.4MHz Bandwidth, 16QAM (99% BW)

Date: 16.MAY.2018 16:15:17
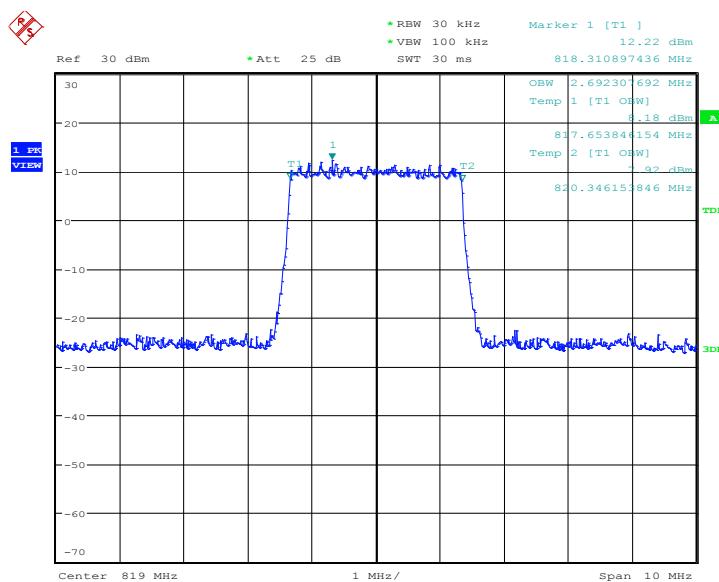
**LTE band 26(814MHz-824MHz), 1.4MHz Bandwidth, 64QAM (99% BW)**
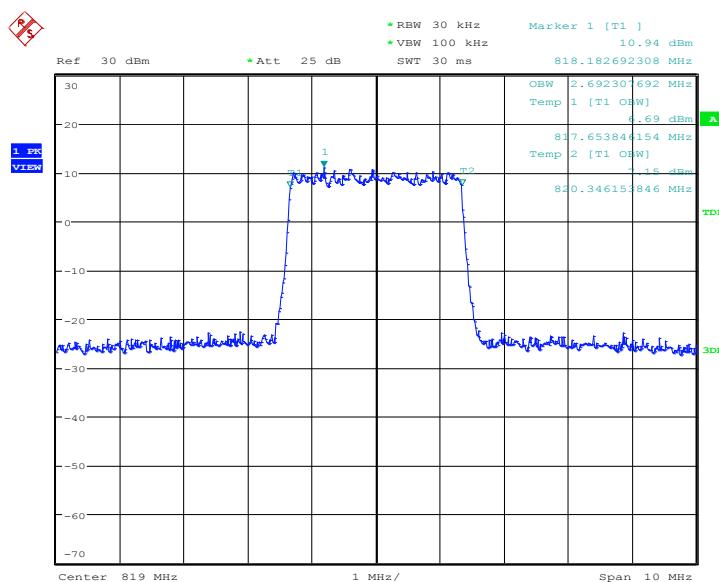
Date: 29.MAY.2018 11:19:52

LTE band 26(814MHz-824MHz), 3MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
819.0	2692.31	2692.31	2692.31
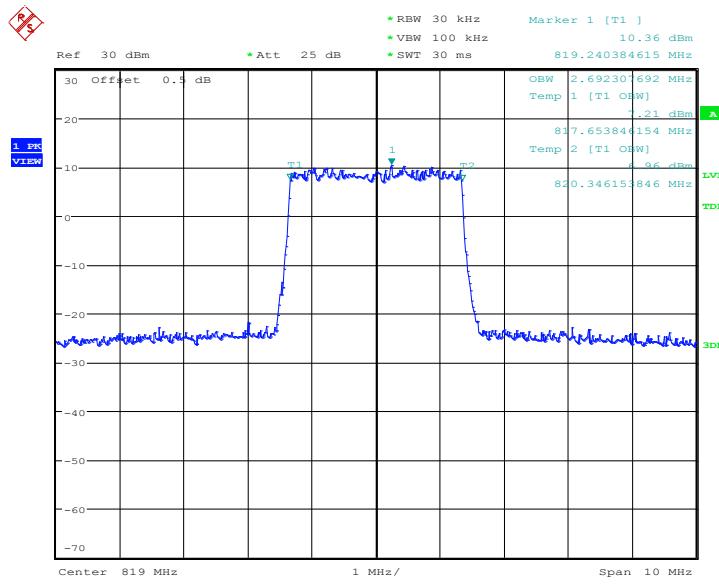
LTE band 26(814MHz-824MHz), 3MHz Bandwidth, QPSK (99% BW)


Date: 16.MAY.2018 16:22:01

LTE band 26(814MHz-824MHz), 3MHz Bandwidth, 16QAM (99% BW)

Date: 16.MAY.2018 16:22:16
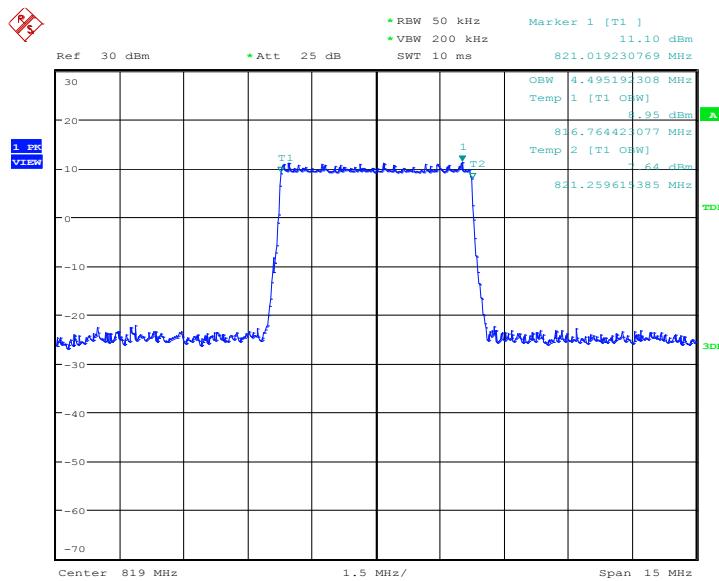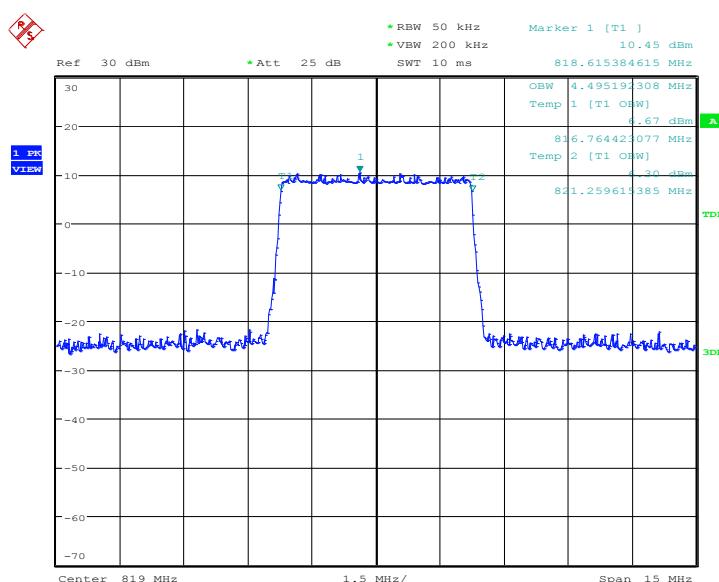
LTE band 26(814MHz-824MHz), 3MHz Bandwidth, 64QAM (99% BW)
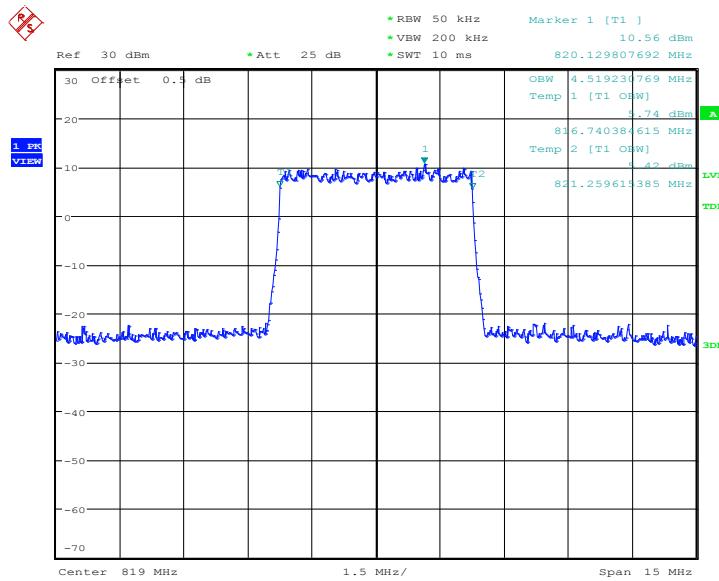
Date: 29.MAY.2018 13:16:59

LTE band 26(814MHz-824MHz), 5MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
819.0	4495.19	4495.19	4519.23

LTE band 26(814MHz-824MHz), 5MHz Bandwidth, QPSK (99% BW)

Date: 16.MAY.2018 16:28:54

LTE band 26(814MHz-824MHz), 5MHz Bandwidth,16QAM (99% BW)

Date: 16.MAY.2018 16:29:09
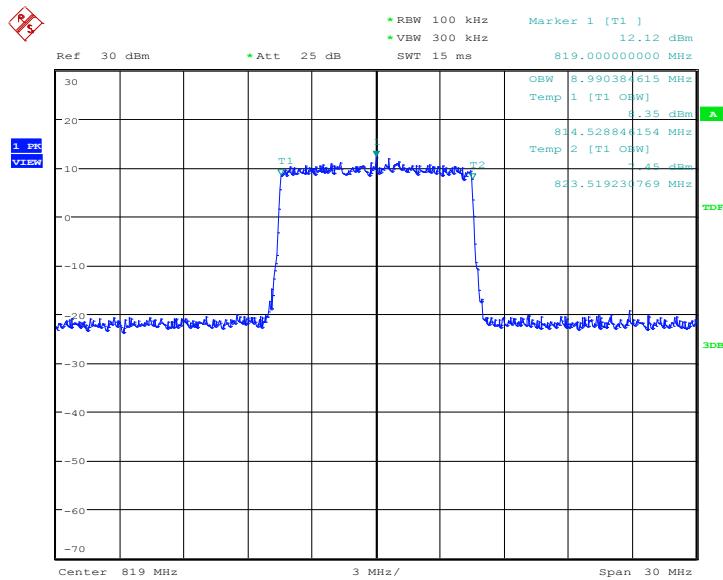
**LTE band 26(814MHz-824MHz), 5MHz Bandwidth,64QAM (99% BW)**
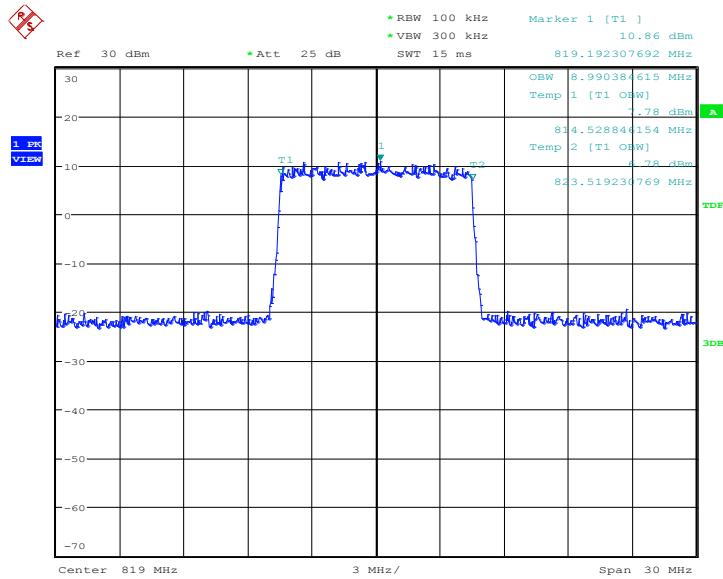
Date: 29.MAY.2018 13:24:13

**LTE band 26(814MHz-824MHz), 10MHz (99%)**

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
819.0	8990.38	8990.38	8990.38
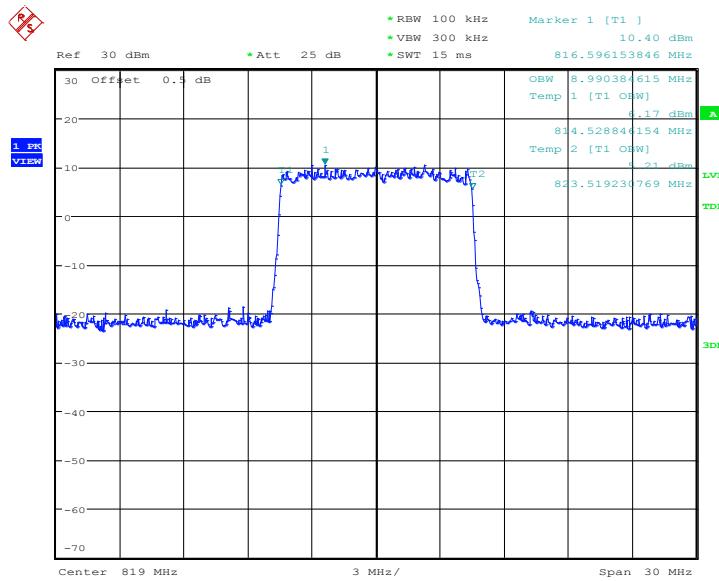
LTE band 26(814MHz-824MHz), 10MHz Bandwidth, QPSK (99% BW)


Date: 16.MAY.2018 16:35:47

LTE band 26(814MHz-824MHz), 10MHz Bandwidth, 16QAM (99% BW)

Date: 16.MAY.2018 16:36:02
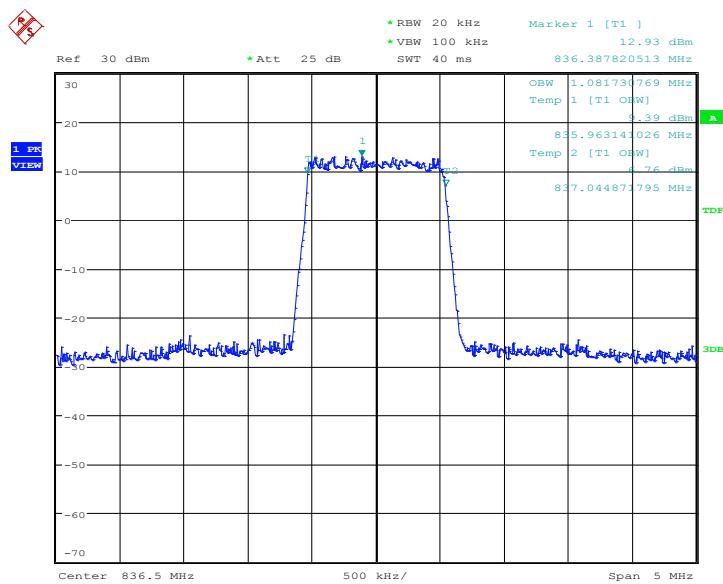
LTE band 26(814MHz-824MHz), 10MHz Bandwidth, 64QAM (99% BW)
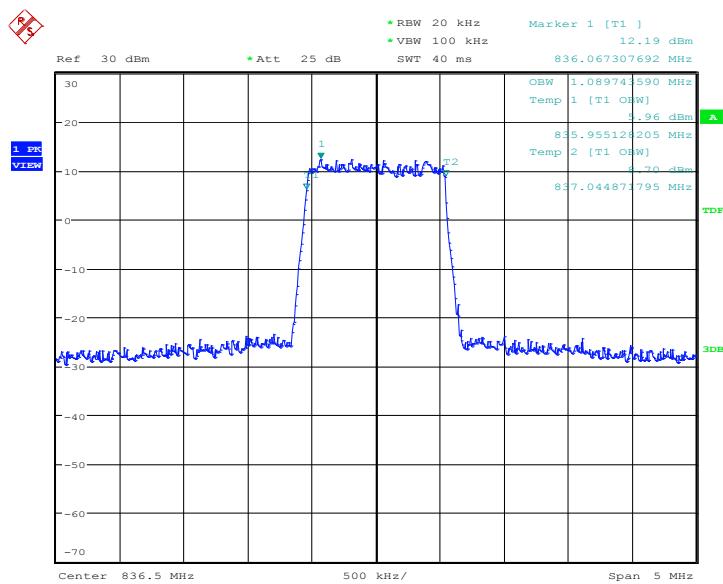
Date: 29.MAY.2018 13:28:01

LTE band 26(824MHz-849MHz), 1.4MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
836.5	1081.73	1089.74	1089.74
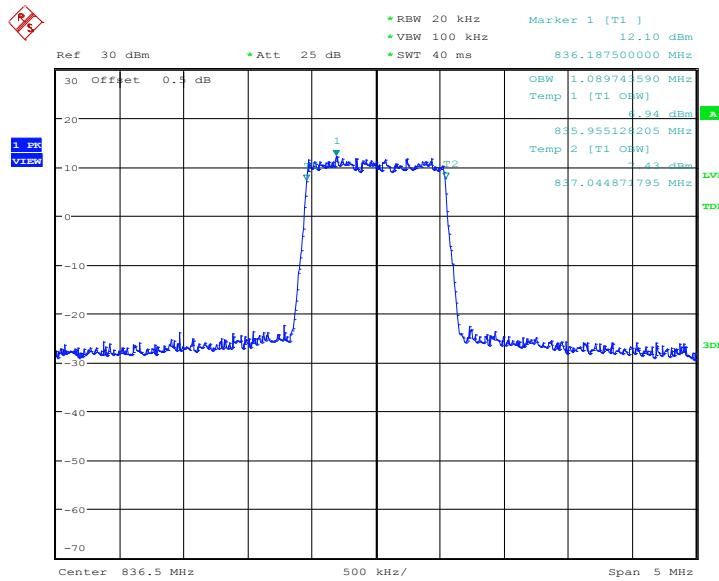
LTE band 26(824MHz-849MHz), 1.4MHz Bandwidth, QPSK (99% BW)

Date: 16.MAY.2018 15:39:48

LTE band 26(824MHz-849MHz), 1.4MHz Bandwidth, 16QAM (99% BW)

Date: 16.MAY.2018 15:40:03

**LTE band 26(824MHz-849MHz), 1.4MHz Bandwidth, 64QAM (99% BW)**
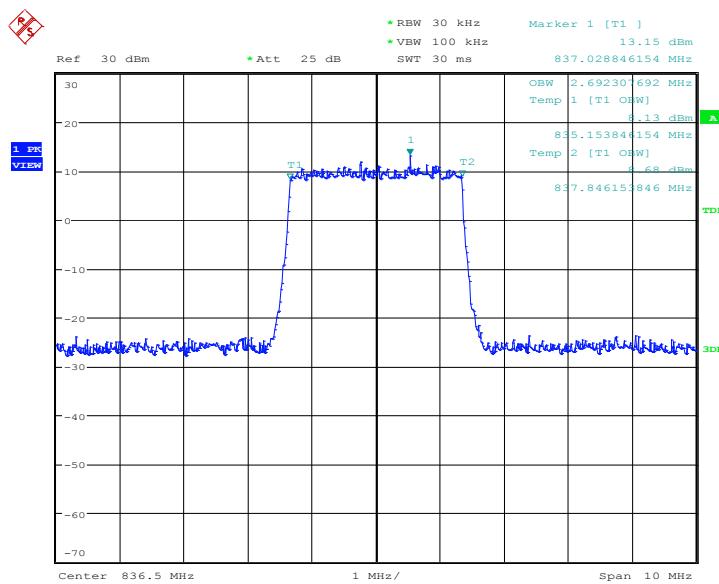

Date: 29.MAY.2018 13:35:27

LTE band 26(824MHz-849MHz), 3MHz (99%)
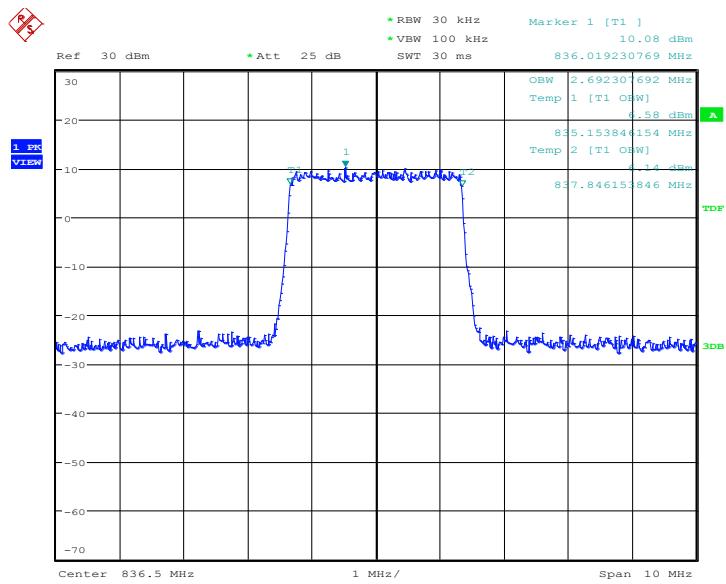
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
836.5	2692.31	2692.31	2692.31

LTE band 26(824MHz-849MHz), 3MHz Bandwidth, QPSK (99% BW)
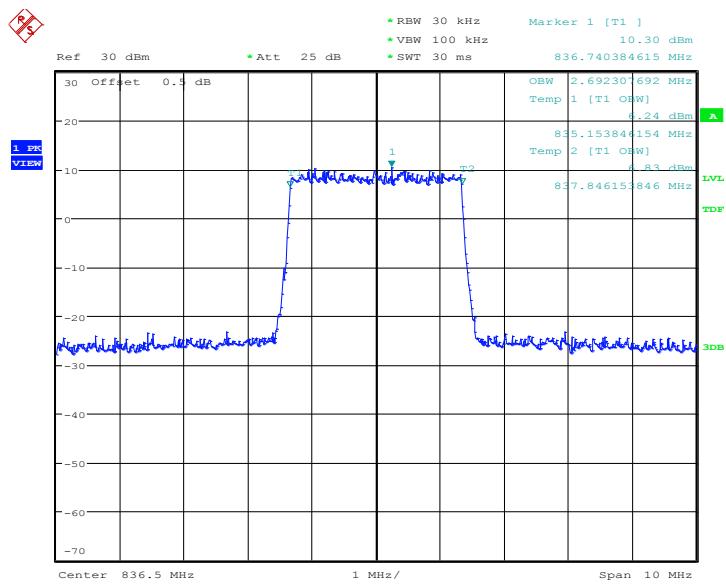
Date: 16.MAY.2018 15:46:45

LTE band 26(824MHz-849MHz), 3MHz Bandwidth, 16QAM (99% BW)

Date: 16.MAY.2018 15:47:01
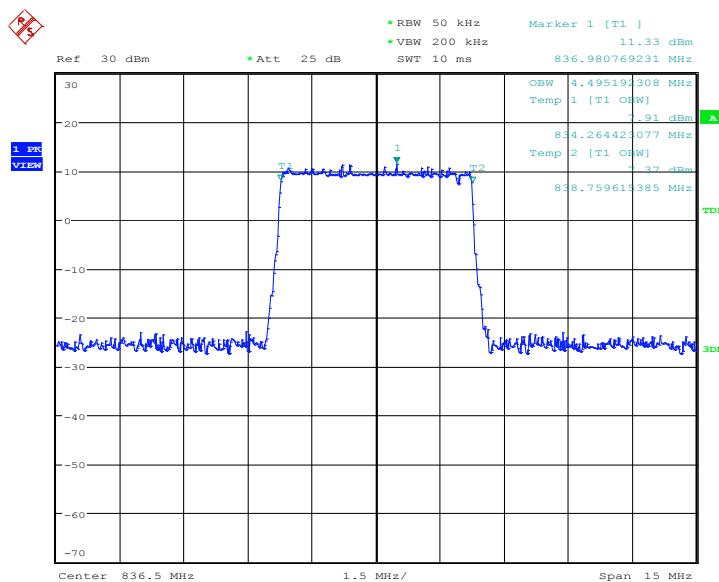
LTE band 26(824MHz-849MHz), 3MHz Bandwidth, 64QAM (99% BW)
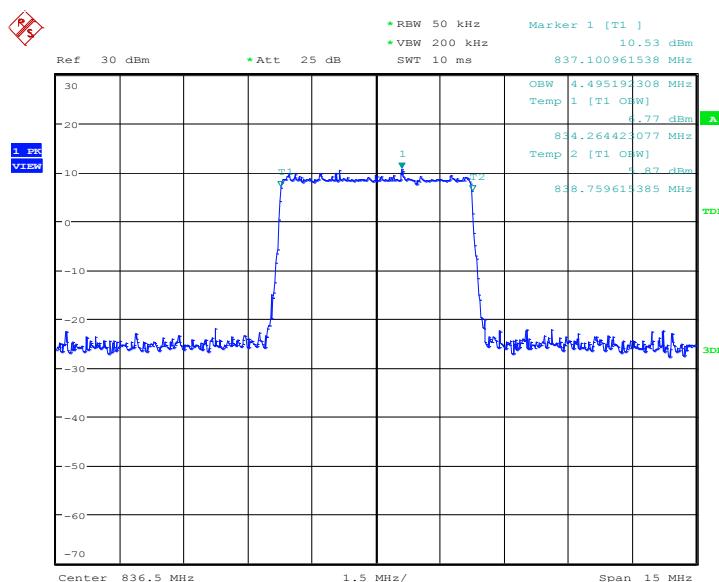
Date: 29.MAY.2018 13:38:47

LTE band 26(824MHz-849MHz), 5MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
836.5	4495.19	4494.19	4519.23
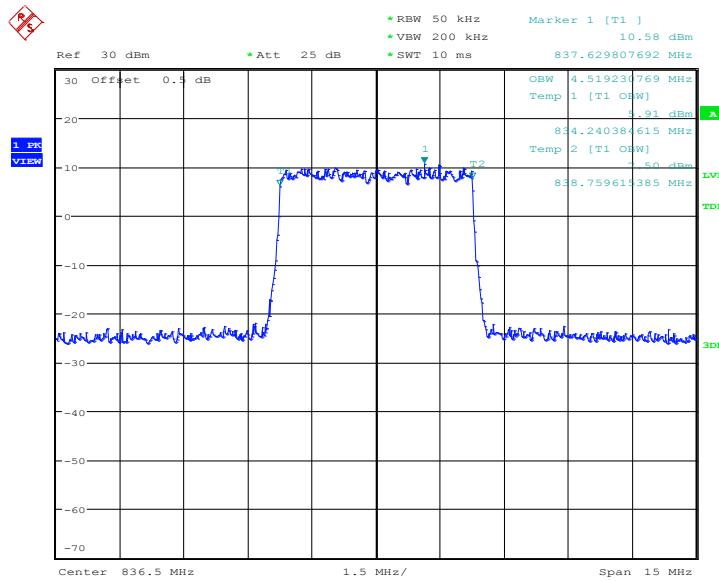
LTE band 26(824MHz-849MHz), 5MHz Bandwidth, QPSK (99% BW)

Date: 16.MAY.2018 15:53:40

LTE band 26(824MHz-849MHz), 5MHz Bandwidth,16QAM (99% BW)

Date: 16.MAY.2018 15:53:56
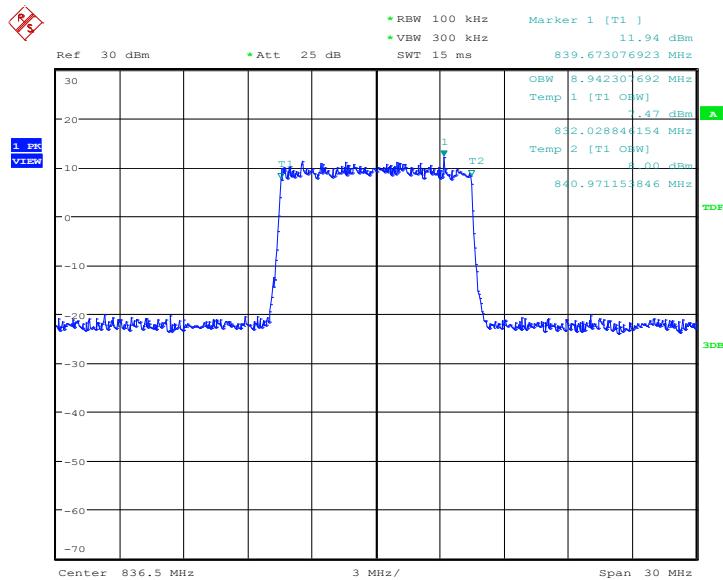
LTE band 26(824MHz-849MHz), 5MHz Bandwidth,64QAM (99% BW)
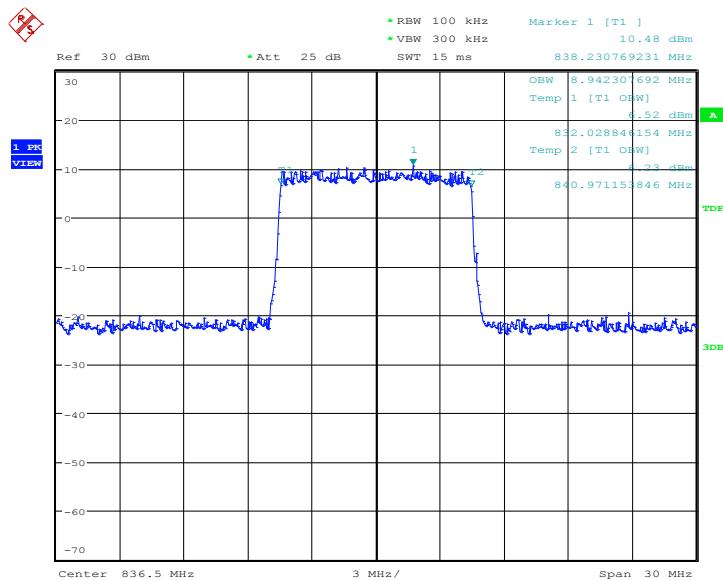
Date: 29.MAY.2018 13:42:57

LTE band 26(824MHz-849MHz), 10MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
836.5	QPSK	16QAM	64QAM
	8942.31	8942.31	8990.38
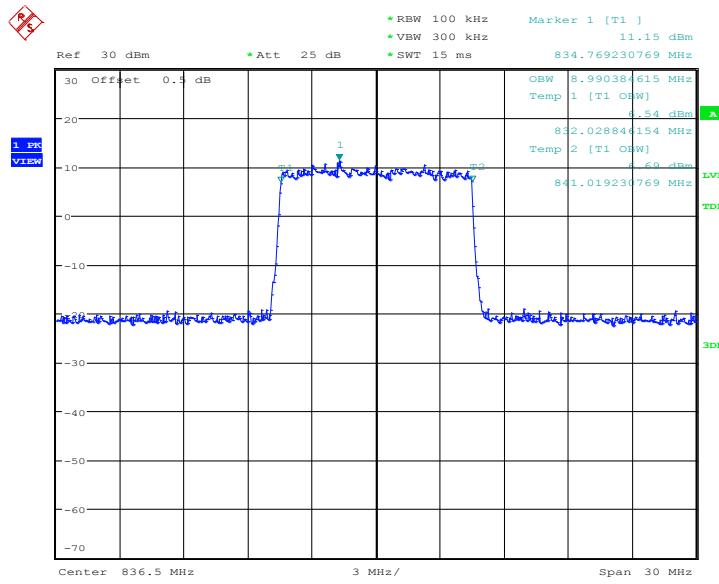
LTE band 26(824MHz-849MHz), 10MHz Bandwidth, QPSK (99% BW)

Date: 16.MAY.2018 16:00:34

LTE band 26(824MHz-849MHz), 10MHz Bandwidth, 16QAM (99% BW)

Date: 16.MAY.2018 16:00:49
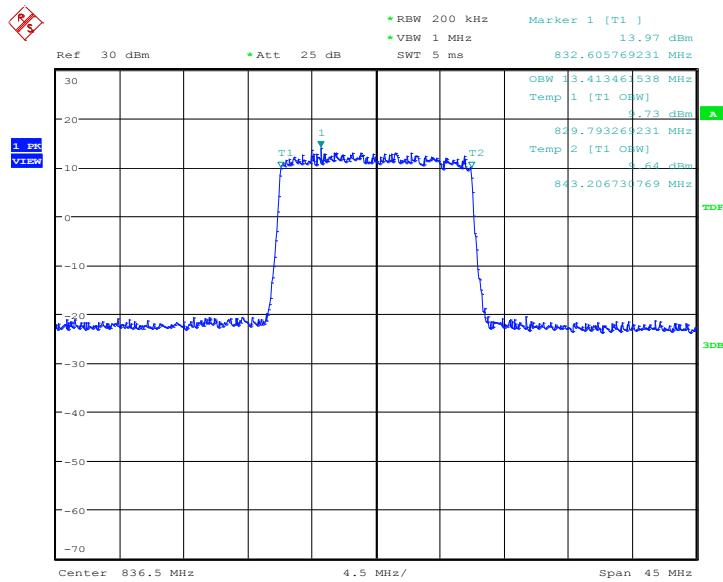
LTE band 26(824MHz-849MHz), 10MHz Bandwidth, 64QAM (99% BW)
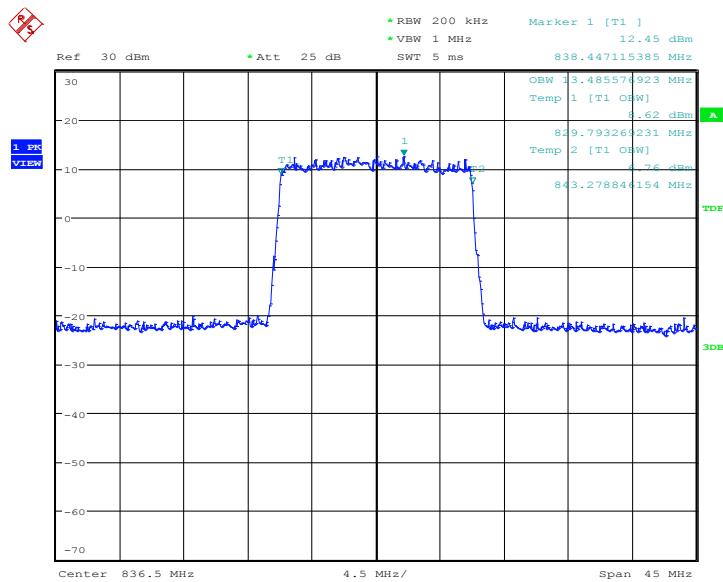
Date: 29.MAY.2018 13:46:33

LTE band 26(824MHz-849MHz), 15MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
836.5	13413.46	13485.58	13485.58

LTE band 26(824MHz-849MHz), 15MHz Bandwidth, QPSK (99% BW)

Date: 16.MAY.2018 16:08:05

LTE band 26(824MHz-849MHz), 15MHz Bandwidth, 16QAM (99% BW)

Date: 16.MAY.2018 16:08:20
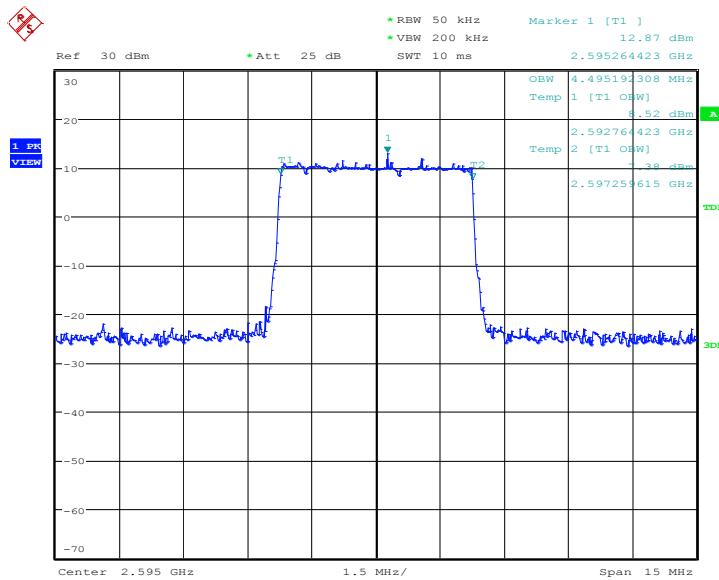
LTE band 26(824MHz-849MHz), 15MHz Bandwidth, 64QAM (99% BW)
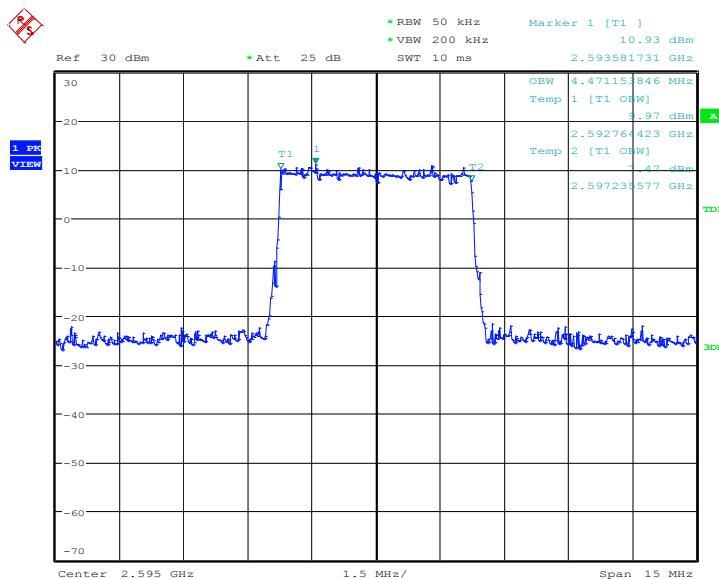
Date: 29.MAY.2018 13:49:20

LTE band 38, 5MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
2595.0	QPSK	16QAM	64QAM
	4495.19	4471.15	4519.23
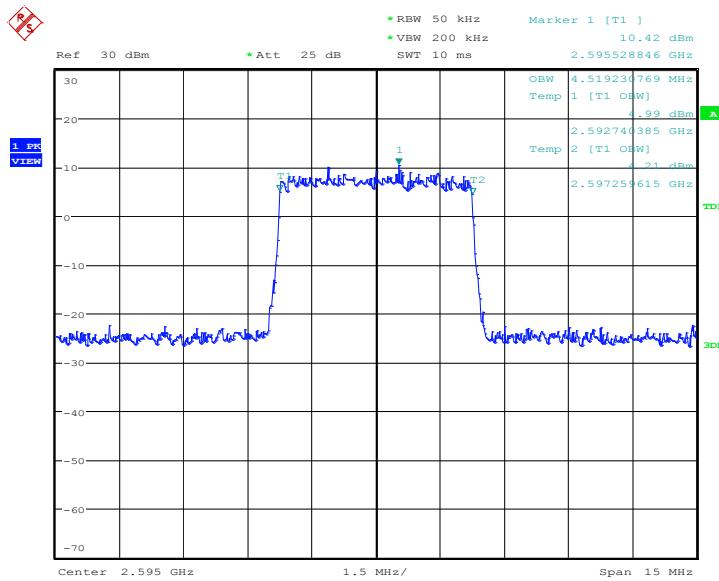
**LTE band 38, 5MHz Bandwidth, QPSK (99% BW)**

Date: 11.MAY.2018 09:25:25

LTE band 38, 5MHz Bandwidth,16QAM (99% BW)

Date: 11.MAY.2018 09:25:41
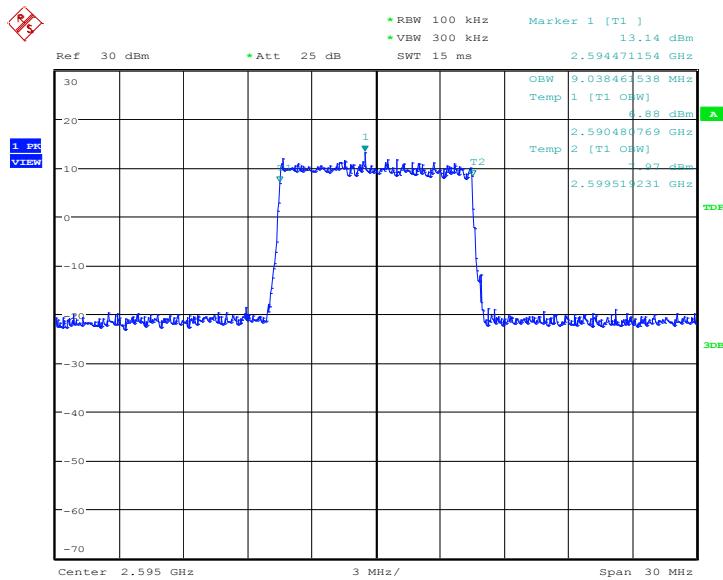
LTE band 38, 5MHz Bandwidth,64QAM (99% BW)
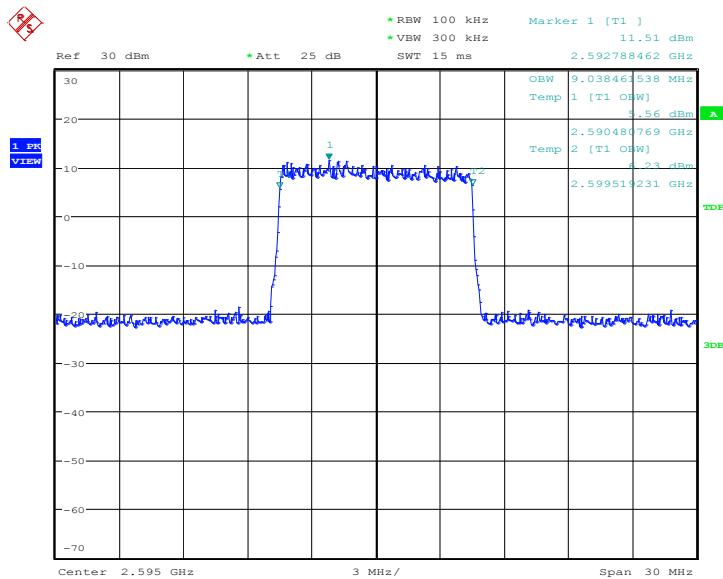
Date: 8.JUN.2018 15:11:33

LTE band 38, 10MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
	QPSK	16QAM	64QAM
2595.0	9038.46	9038.46	9038.46
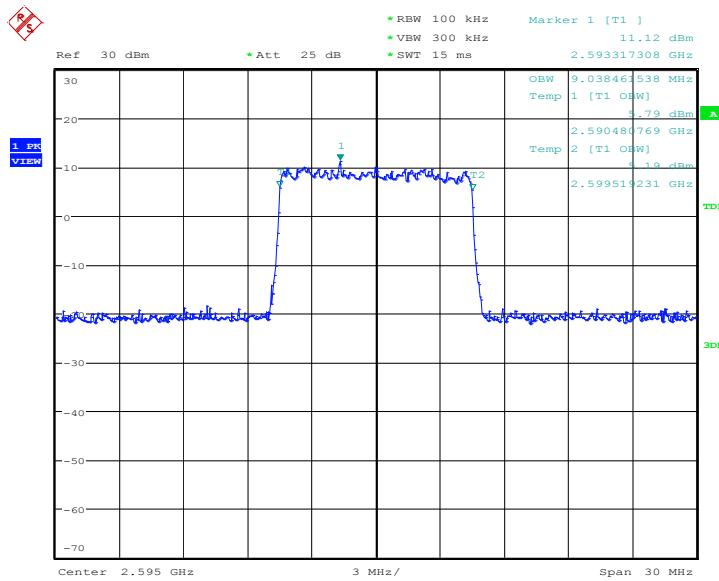
LTE band 38, 10MHz Bandwidth, QPSK (99% BW)

Date: 11.MAY.2018 09:32:24

LTE band 38, 10MHz Bandwidth, 16QAM (99% BW)

Date: 11.MAY.2018 09:32:39

LTE band 38, 10MHz Bandwidth, 64QAM (99% BW)

* RBW 100 kHz	Marker 1 [T1]
* VBW 300 kHz	11.12 dBm
Ref 30 dBm * Att 25 dB * SWT 15 ms	2.593317308 GHz

OBW 9.038461538 MHz
Temp 1 [T1 OBW]
5.79 dBm
2.590480769 GHz
Temp 2 [T1 OBW]
4.19 dBm
2.599519231 GHz

Center 2.595 GHz   3 MHz/   Span 30 MHz
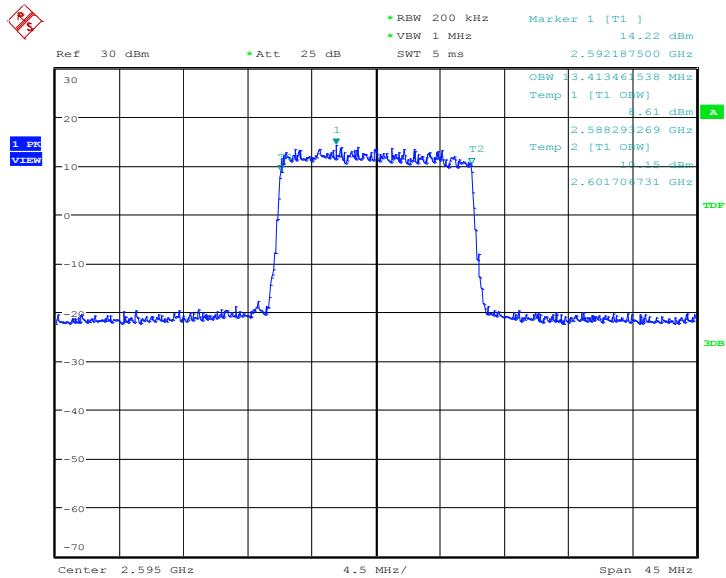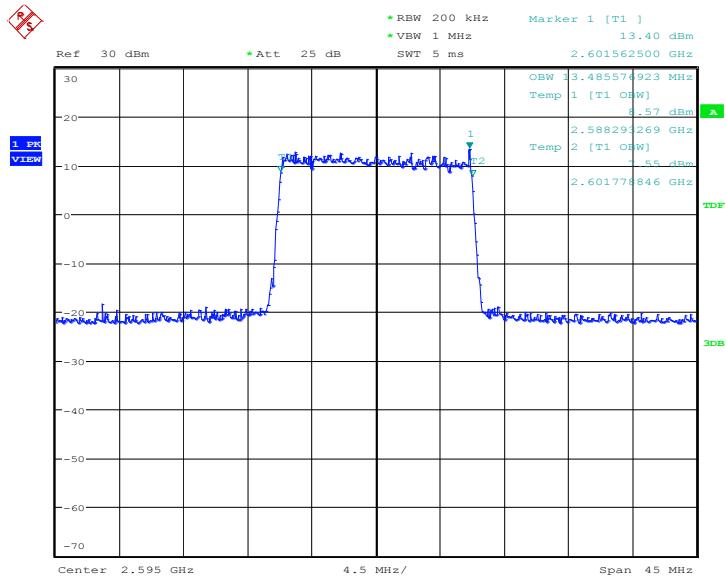
Date: 28.MAY.2018 11:00:59

LTE band 38, 15MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
2595.0	QPSK	16QAM	64QAM
	13413.46	13485.58	13485.58
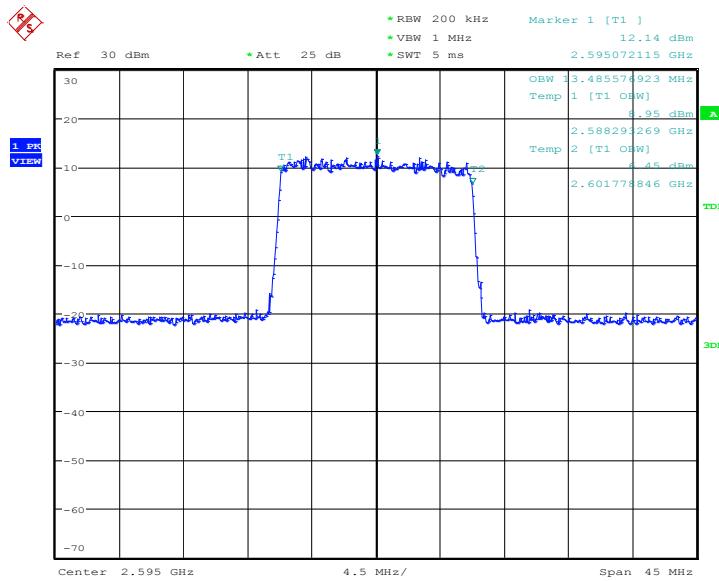
LTE band 38, 15MHz Bandwidth, QPSK (99% BW)


Date: 11.MAY.2018 09:40:01

LTE band 38, 15MHz Bandwidth, 16QAM (99% BW)

Date: 11.MAY.2018 09:40:16
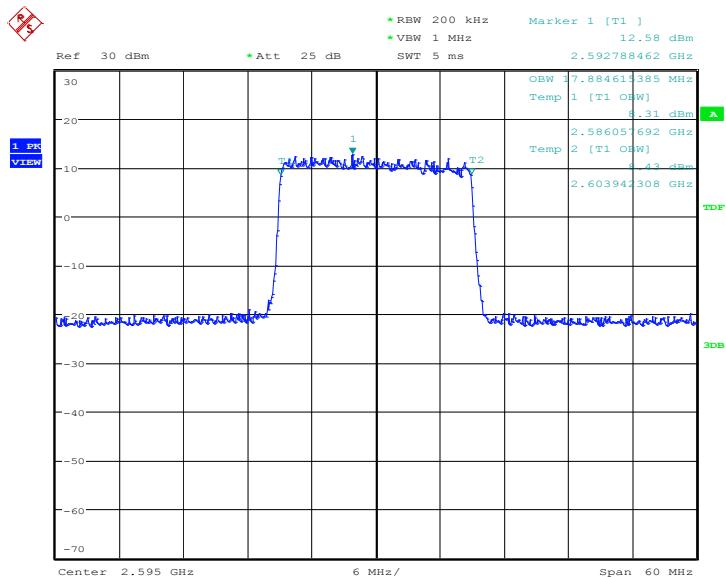
LTE band 38, 15MHz Bandwidth, 64QAM (99% BW)
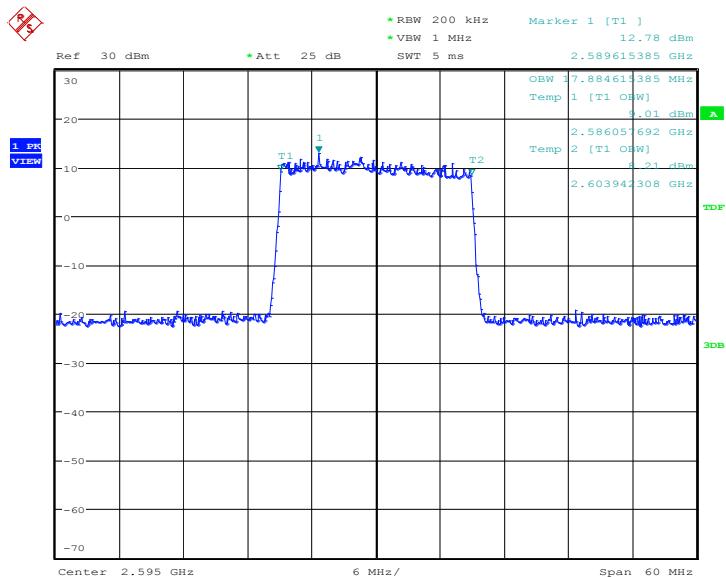

Date: 28.MAY.2018 11:03:45

LTE band 38, 20MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
2595.0	QPSK	16QAM	64QAM
	17884.62	17884.62	17884.62
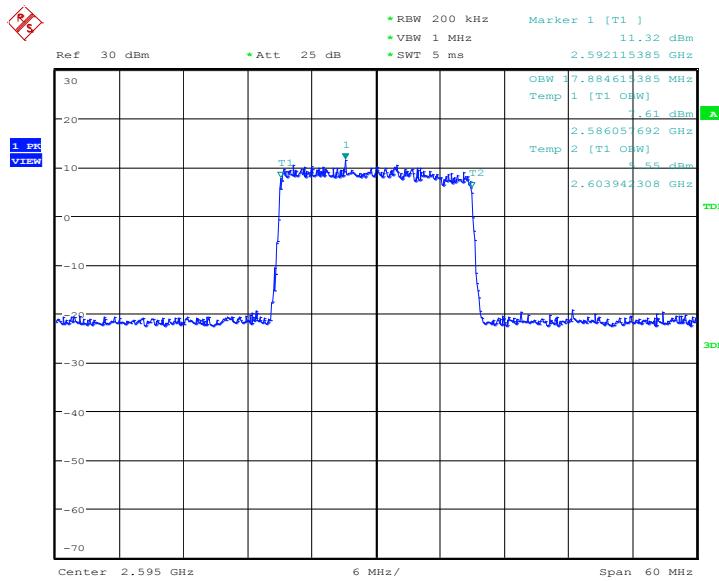
LTE band 38, 20MHz Bandwidth, QPSK (99% BW)

Date: 11.MAY.2018 09:47:43

LTE band38, 20MHz Bandwidth, 16QAM (99% BW)

Date: 11.MAY.2018 09:47:58
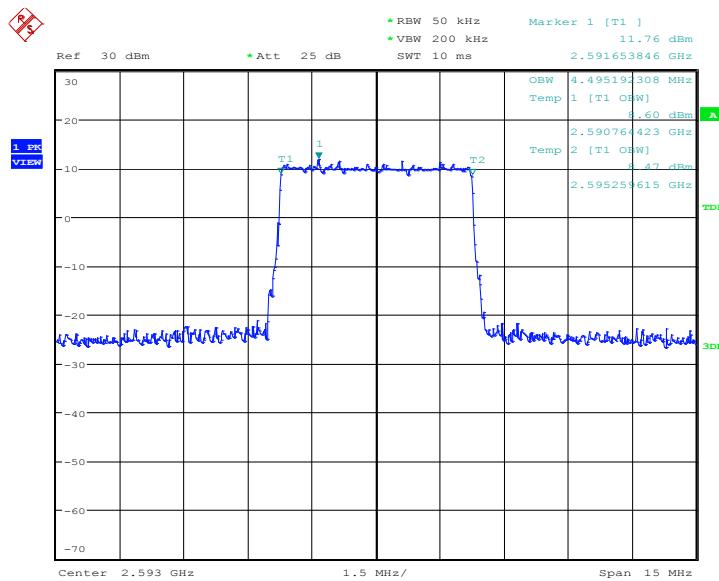
LTE band38, 20MHz Bandwidth, 64QAM (99% BW)
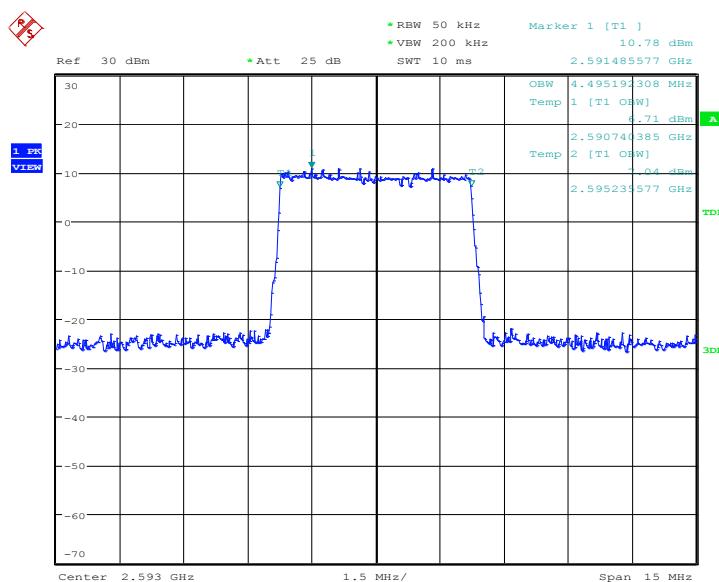
Date: 28.MAY.2018 11:06:10

LTE band 41, 5MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
2593.0	QPSK	16QAM	64QAM
	4495.19	4495.19	4471.15
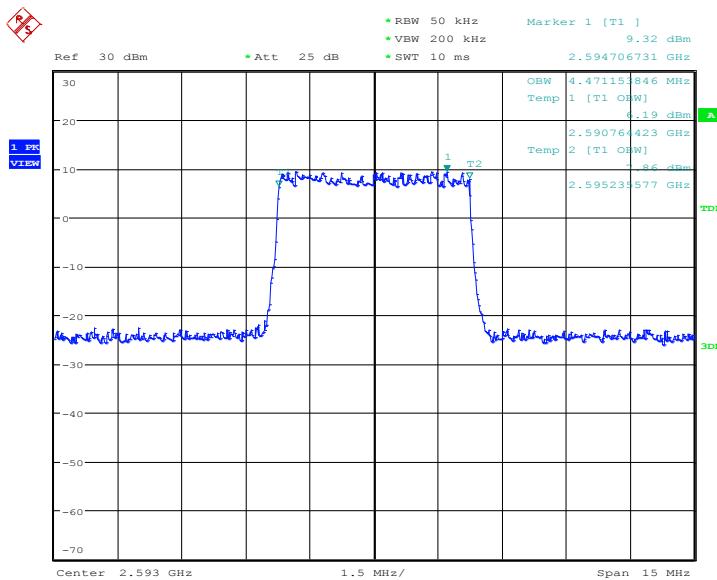
LTE band 41, 5MHz Bandwidth, QPSK (99% BW)

Date: 11.MAY.2018 09:54:46

LTE band 41, 5MHz Bandwidth,16QAM (99% BW)

Date: 11.MAY.2018 09:55:01
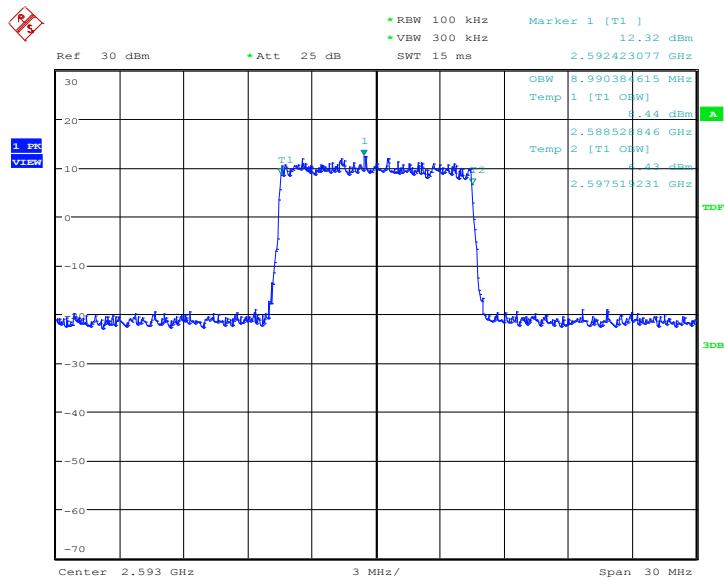
LTE band 41, 5MHz Bandwidth,64QAM (99% BW)
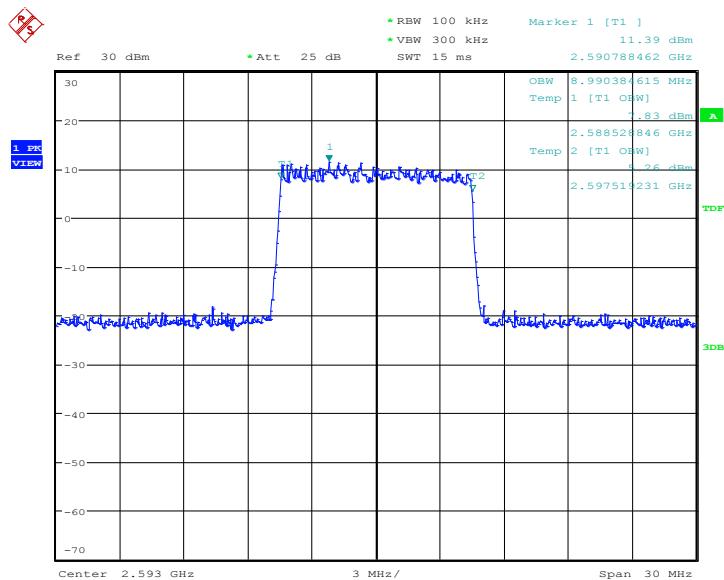
Date: 28.MAY.2018 11:11:25

LTE band 41, 10MHz (99%)

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)		
2593.0	QPSK	16QAM	64QAM
	8990.38	8990.38	9038.46
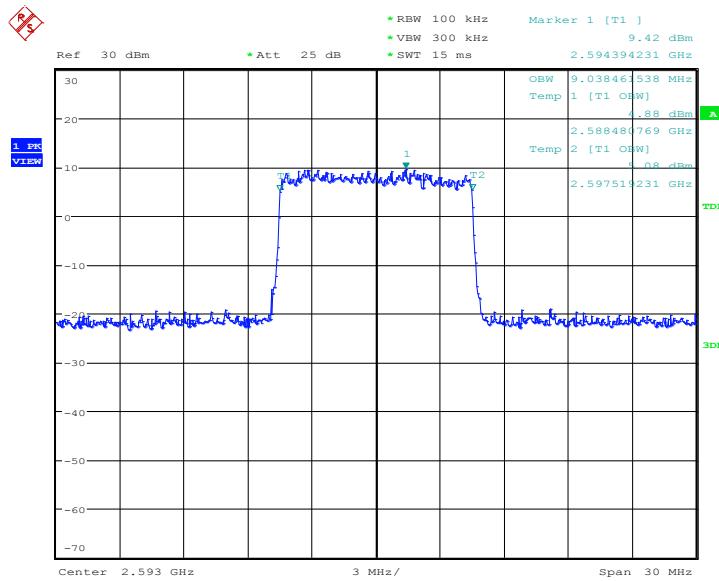
LTE band 41, 10MHz Bandwidth, QPSK (99% BW)

Date: 11.MAY.2018 10:01:43

LTE band 41, 10MHz Bandwidth, 16QAM (99% BW)

Date: 11.MAY.2018 10:01:58

LTE band 41, 10MHz Bandwidth, 64QAM (99% BW)

Date: 28.MAY.2018 11:13:52