

UT35a with AE9,AE3 and AE5, Ant 6
LTE Band 4, 20MHz QPSK, Channel 20050

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3482.02	-67.09	5.49	8.16	-64.42	-13.00	51.42	H
5155.02	-65.99	6.89	10.12	-62.76	-13.00	49.76	V
6868.01	-64.66	7.80	11.44	-61.02	-13.00	48.02	V
8624.01	-64.29	8.46	13.02	-59.73	-13.00	46.73	V
10359.01	-61.70	9.74	13.04	-58.40	-13.00	45.40	V
12049.01	-59.85	10.20	13.02	-57.03	-13.00	44.03	V

LTE Band 4,20MHz, QPSK, Channel 20175

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3501.02	-67.05	5.52	8.20	-64.37	-13.00	51.37	H
5174.02	-65.92	6.92	10.14	-62.70	-13.00	49.70	V
6977.01	-64.49	8.12	11.57	-61.04	-13.00	48.04	V
8651.01	-64.34	8.42	13.03	-59.73	-13.00	46.73	V
10348.01	-61.76	9.72	13.04	-58.44	-13.00	45.44	V
12173.01	-59.77	10.14	13.07	-56.84	-13.00	43.84	V

LTE Band 4, 20MHz, QPSK, Channel 20300

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3501.02	-66.93	5.52	8.20	-64.25	-13.00	51.25	H
5185.02	-66.12	6.94	10.16	-62.90	-13.00	49.90	V
6982.01	-64.48	8.16	11.58	-61.06	-13.00	48.06	V
8746.01	-64.46	8.50	13.05	-59.91	-13.00	46.91	V
10494.01	-61.82	9.66	13.10	-58.38	-13.00	45.38	V
12188.01	-59.75	10.09	13.08	-56.76	-13.00	43.76	V

Note:The measurement results showed here are worst cases.

UT35a with AE9,AE3 and AE5, Ant 6
LTE Band 7, 20 MHz, QPSK, Channel 20850

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5004.02	-56.38	6.60	9.91	-53.07	-25.00	28.07	V
7516.01	-54.19	8.33	12.21	-50.31	-25.00	25.31	H
10038.01	-52.82	9.29	12.92	-49.19	-25.00	24.19	V
12566.01	-48.76	10.37	13.24	-45.89	-25.00	20.89	V
15079.00	-45.53	11.32	13.95	-42.90	-25.00	17.90	V
17553.00	-43.68	12.93	14.97	-41.64	-25.00	16.64	H

LTE Band 7, 20 MHz, QPSK, Channel 21100

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5058.02	-55.89	6.65	9.98	-52.56	-25.00	27.56	H
7603.01	-54.54	7.99	12.28	-50.25	-25.00	25.25	H
10122.01	-52.26	9.43	12.95	-48.74	-25.00	23.74	V
12684.01	-47.84	10.33	13.31	-44.86	-25.00	19.86	V
15219.00	-45.70	11.38	13.87	-43.21	-25.00	18.21	V
17756.00	-44.30	12.49	15.26	-41.53	-25.00	16.53	H

LTE Band 7, 20 MHz, QPSK, Channel 21350

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5123.02	-55.43	6.84	10.07	-52.20	-25.00	27.20	H
7661.01	-53.54	8.25	12.33	-49.46	-25.00	24.46	V
10259.01	-52.09	9.50	13.00	-48.59	-25.00	23.59	V
12797.01	-48.08	10.75	13.38	-45.45	-25.00	20.45	H
15372.00	-45.27	11.36	13.78	-42.85	-25.00	17.85	H
17915.00	-44.15	12.88	15.48	-41.55	-25.00	16.55	V

Note:The measurement results showed here are worst cases.

UT35a with AE9,AE3 and AE5, Ant 0
LTE Band 12, 10 MHz, QPSK, Channel 23060

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1396.01	-47.05	3.23	4.96	2.15	-47.47	-13.00	34.47	V
2112.00	-50.42	4.20	4.94	2.15	-51.83	-13.00	38.83	V
2827.00	-52.65	4.95	6.69	2.15	-53.06	-13.00	40.06	H
3531.02	-54.29	5.63	8.24	2.15	-53.83	-13.00	40.83	H
4238.02	-54.12	6.25	9.14	2.15	-53.38	-13.00	40.38	H
4922.01	-54.47	6.73	9.82	2.15	-53.53	-13.00	40.53	V

LTE Band 12, 10 MHz, QPSK, Channel 23095

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1415.01	-48.38	3.25	5.06	2.15	-48.72	-13.00	35.72	V
2123.00	-52.05	4.21	4.97	2.15	-53.44	-13.00	40.44	V
2838.00	-51.96	4.95	6.71	2.15	-52.35	-13.00	39.35	V
3536.02	-53.62	5.68	8.25	2.15	-53.20	-13.00	40.20	H
4242.02	-54.36	6.25	9.14	2.15	-53.62	-13.00	40.62	H
4938.01	-54.89	6.71	9.84	2.15	-53.91	-13.00	40.91	H

LTE Band 12, 10 MHz, QPSK, Channel 23130

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1422.01	-45.60	3.26	5.09	2.15	-45.92	-13.00	32.92	V
2133.00	-49.33	4.23	5.00	2.15	-50.71	-13.00	37.71	V
2851.00	-52.46	4.96	6.73	2.15	-52.84	-13.00	39.84	H
3553.02	-54.45	5.85	8.27	2.15	-54.18	-13.00	41.18	V
4277.02	-54.48	6.22	9.18	2.15	-53.67	-13.00	40.67	V
4964.01	-54.44	6.67	9.86	2.15	-53.40	-13.00	40.40	V

Note:The measurement results showed here are worst cases.

UT35a with AE9,AE3 and AE5, Ant 2
LTE Band 26(814MHz~824MHz), 1.4MHz, QPSK, Channel 26697

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2444.00	-41.82	4.57	5.93	2.15	-42.61	-13.00	29.61	V
6521.01	-52.41	7.50	11.03	2.15	-51.03	-13.00	38.03	H
7333.01	-52.09	8.10	12.00	2.15	-50.34	-13.00	37.34	V
8152.01	-51.68	8.42	12.72	2.15	-49.53	-13.00	36.53	V
8955.00	-51.36	9.04	13.09	2.15	-49.46	-13.00	36.46	V
9786.00	-50.45	9.00	13.11	2.15	-48.49	-13.00	35.49	H

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

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1638.01	-56.53	3.56	5.25	2.15	-56.99	-13.00	43.99	V
2458.00	-41.12	4.58	5.97	2.15	-41.88	-13.00	28.88	V
3260.02	-54.05	5.28	7.62	2.15	-53.86	-13.00	40.86	V
4081.02	-54.54	6.04	8.98	2.15	-53.75	-13.00	40.75	V
4900.01	-53.82	6.73	9.80	2.15	-52.90	-13.00	39.90	V
5742.01	-53.44	7.28	10.55	2.15	-52.32	-13.00	39.32	V

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

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
2470.00	-40.68	4.59	6.01	2.15	-41.41	-13.00	28.41	V
3106.02	-47.82	5.34	7.25	2.15	-48.06	-13.00	35.06	H
6749.01	-50.72	7.96	11.30	2.15	-49.53	-13.00	36.53	H
8180.01	-51.07	8.47	12.74	2.15	-48.95	-13.00	35.95	V
8979.00	-48.58	9.13	13.10	2.15	-46.76	-13.00	33.76	H
9895.00	-50.70	9.09	13.00	2.15	-48.94	-13.00	35.94	V

Note:The measurement results showed here are worst cases.

UT35a with AE9,AE3 and AE5, Ant 0
LTE Band 26(824MHz~849MHz), 5MHz, QPSK, Channel 26815

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1653.01	-57.05	3.57	5.22	2.15	-57.55	-13.00	44.55	H
2480.00	-46.22	4.60	6.04	2.15	-46.93	-13.00	33.93	V
3316.02	-53.27	5.29	7.76	2.15	-52.95	-13.00	39.95	H
4130.02	-51.38	6.05	9.03	2.15	-50.55	-13.00	37.55	H
4955.01	-54.26	6.68	9.86	2.15	-53.23	-13.00	40.23	V
5781.01	-53.23	7.22	10.54	2.15	-52.06	-13.00	39.06	V

LTE Band 26(824MHz~849MHz), 5MHz, QPSK, Channel 26915

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1673.01	-57.16	3.58	5.19	2.15	-57.70	-13.00	44.70	V
2510.00	-43.46	4.63	6.12	2.15	-44.12	-13.00	31.12	H
3341.02	-53.85	5.31	7.82	2.15	-53.49	-13.00	40.49	H
4190.02	-41.28	6.18	9.09	2.15	-40.52	-13.00	27.52	H
5027.01	-53.92	6.57	9.94	2.15	-52.70	-13.00	39.70	V
5836.01	-52.52	7.19	10.53	2.15	-51.33	-13.00	38.33	V

LTE Band 26(824MHz~849MHz), 5MHz, QPSK, Channel 27015

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Correction (dB)	Peak ERP (dBm)	Limit (dBm)	Margin (dB)	Polarization
1693.01	-56.04	3.59	5.15	2.15	-56.63	-13.00	43.63	V
2540.00	-40.62	4.66	6.17	2.15	-41.26	-13.00	28.26	H
3371.02	-54.17	5.34	7.89	2.15	-53.77	-13.00	40.77	V
4238.02	-52.47	6.25	9.14	2.15	-51.73	-13.00	38.73	H
5088.01	-53.61	6.74	10.02	2.15	-52.48	-13.00	39.48	V
5908.01	-52.82	7.42	10.52	2.15	-51.87	-13.00	38.87	H

Note:The measurement results showed here are worst cases.

UT35a with AE9,AE3 and AE5, Ant 1
LTE Band 38, 20 MHz, QPSK, Channel 37850

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5161.02	-47.93	6.90	10.13	-44.70	-25.00	19.70	H
7767.01	-54.35	8.33	12.41	-50.27	-25.00	25.27	V
10336.01	-51.48	9.70	13.03	-48.15	-25.00	23.15	V
12903.01	-48.48	10.51	13.44	-45.55	-25.00	20.55	V
15513.00	-44.21	11.53	13.70	-42.04	-25.00	17.04	H
16774.00	-42.63	12.01	13.71	-40.93	-25.00	15.93	H

LTE Band 38, 20MHz, QPSK, Channel 38000

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5191.02	-46.52	6.95	10.17	-43.30	-25.00	18.30	H
7784.01	-53.47	8.31	12.43	-49.35	-25.00	24.35	H
10369.01	-50.89	9.75	13.05	-47.59	-25.00	22.59	V
13005.01	-47.92	10.49	13.51	-44.90	-25.00	19.90	V
15595.00	-44.61	11.49	13.70	-42.40	-25.00	17.40	H
16840.00	-42.00	12.07	13.74	-40.33	-25.00	15.33	H

LTE Band 38, 20MHz, QPSK, Channel 38225

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5221.02	-46.90	6.99	10.21	-43.68	-25.00	18.68	H
7848.01	-54.12	8.35	12.48	-49.99	-25.00	24.99	V
10458.01	-51.09	9.71	13.08	-47.72	-25.00	22.72	V
13042.01	-47.45	10.66	13.56	-44.55	-25.00	19.55	H
15629.00	-43.48	11.52	13.70	-41.30	-25.00	16.30	V
16935.00	-42.15	12.13	13.77	-40.51	-25.00	15.51	V

Note:The measurement results showed here are worst cases.

UT35a with AE9,AE3 and AE5, Ant 6
LTE Band 41, 5MHz, QPSK, Channel 39675

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4997.02	-53.10	6.61	9.90	-49.81	-25.00	24.81	H
7495.01	-54.61	8.38	12.19	-50.80	-25.00	25.80	H
9998.01	-52.20	9.18	12.90	-48.48	-25.00	23.48	V
12492.01	-48.91	10.19	13.20	-45.90	-25.00	20.90	V
14995.00	-46.39	11.21	14.00	-43.60	-25.00	18.60	H
17487.00	-44.95	12.69	14.87	-42.77	-25.00	17.77	H

LTE Band 41, 5MHz, QPSK, Channel 40620

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5187.02	-45.28	6.94	10.16	-42.06	-25.00	17.06	H
7786.01	-53.83	8.31	12.43	-49.71	-25.00	24.71	V
10373.01	-51.62	9.76	13.05	-48.33	-25.00	23.33	V
12955.01	-48.78	10.48	13.47	-45.79	-25.00	20.79	V
15565.00	-44.85	11.50	13.70	-42.65	-25.00	17.65	H
16840.00	-41.71	12.07	13.74	-40.04	-25.00	15.04	H

LTE Band 41, 5MHz, QPSK, Channel 41565

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5379.02	-46.71	6.87	10.43	-43.15	-25.00	18.15	H
8065.01	-51.07	8.32	12.65	-46.74	-25.00	21.74	V
10736.01	-51.33	9.39	13.15	-47.57	-25.00	22.57	V
13421.01	-48.69	10.58	14.09	-45.18	-25.00	20.18	H
16129.00	-43.36	11.82	13.67	-41.51	-25.00	16.51	H
17460.00	-44.32	12.63	14.81	-42.14	-25.00	17.14	V

Note:The measurement results showed here are worst cases.

UT35a with AE9,AE3 and AE5, Ant 6
LTE Band 66, 1.4MHz QPSK, Channel 131979

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3479.02	-67.21	5.48	8.15	-64.54	-13.00	51.54	H
5153.02	-65.82	6.89	10.11	-62.60	-13.00	49.60	V
6875.01	-64.65	7.79	11.45	-60.99	-13.00	47.99	V
8578.01	-64.39	8.53	13.02	-59.90	-13.00	46.90	V
10327.01	-61.79	9.69	13.03	-58.45	-13.00	45.45	V
12038.01	-60.01	10.16	13.02	-57.15	-13.00	44.15	V

LTE Band 66, 1.4MHz, QPSK, Channel 132322

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3499.02	-66.94	5.52	8.20	-64.26	-13.00	51.26	H
5277.02	-66.09	6.99	10.29	-62.79	-13.00	49.79	V
6987.01	-64.41	8.20	11.58	-61.03	-13.00	48.03	V
8670.01	-64.57	8.40	13.03	-59.94	-13.00	46.94	V
10493.01	-61.87	9.66	13.10	-58.43	-13.00	45.43	V
12183.01	-59.84	10.11	13.07	-56.88	-13.00	43.88	V

LTE Band 66, 1.4MHz, QPSK, Channel 132665

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
3599.02	-65.82	6.33	8.34	-63.81	-13.00	50.81	V
5282.02	-66.22	6.99	10.29	-62.92	-13.00	49.92	V
7148.01	-64.75	8.17	11.78	-61.14	-13.00	48.14	V
8928.01	-63.96	8.94	13.09	-59.81	-13.00	46.81	V
10669.01	-61.62	9.30	13.13	-57.79	-13.00	44.79	V
12496.01	-59.56	10.18	13.20	-56.54	-13.00	43.54	V

Note:The measurement results showed here are worst cases.

UT35a with AE9,AE3 and AE5, Ant 1
LTE Band 7, 20 MHz+20 MHz, QPSK, Channel 20850

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5034.02	-55.26	6.59	9.95	-51.90	-25.00	26.90	V
7549.01	-55.07	8.19	12.24	-51.02	-25.00	26.02	H
10050.01	-53.14	9.32	12.92	-49.54	-25.00	24.54	H
12556.01	-49.10	10.34	13.23	-46.21	-25.00	21.21	V
15052.00	-45.59	11.29	13.97	-42.91	-25.00	17.91	H
17564.00	-44.22	12.97	14.99	-42.20	-25.00	17.20	H

LTE Band 7,20 MHz+20 MHz, QPSK, Channel 21001

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5061.02	-56.45	6.66	9.99	-53.12	-25.00	28.12	V
7581.01	-54.22	8.05	12.26	-50.01	-25.00	25.01	V
10086.01	-52.01	9.42	12.93	-48.50	-25.00	23.50	V
12621.01	-47.94	10.43	13.27	-45.10	-25.00	20.10	H
15139.00	-45.86	11.37	13.92	-43.31	-25.00	18.31	H
17674.00	-45.11	12.43	15.14	-42.40	-25.00	17.40	V

LTE Band 7, 20 MHz+20 MHz, QPSK, Channel 21152

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5073.02	-55.13	6.70	10.00	-51.83	-25.00	26.83	H
7631.01	-55.08	8.11	12.30	-50.89	-25.00	25.89	V
10176.01	-51.29	9.34	12.97	-47.66	-25.00	22.66	V
12696.01	-48.44	10.30	13.32	-45.42	-25.00	20.42	V
15227.00	-45.66	11.37	13.86	-43.17	-25.00	18.17	V
17797.00	-43.87	12.71	15.32	-41.26	-25.00	16.26	V

Note:The measurement results showed here are worst cases.

UT35a with AE9,AE3 and AE5, Ant 6
LTE Band 38, 15 MHz+15 MHz, QPSK, Channel 37825+37975

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5154.02	-55.42	6.89	10.12	-52.19	-25.00	27.19	V
7762.01	-54.39	8.34	12.41	-50.32	-25.00	25.32	V
10278.01	-51.28	9.57	13.01	-47.84	-25.00	22.84	V
12887.01	-48.73	10.54	13.43	-45.84	-25.00	20.84	H
15465.00	-43.83	11.49	13.72	-41.60	-25.00	16.60	H
16776.00	-42.51	12.02	13.71	-40.82	-25.00	15.82	H

LTE Band 38, 15 MHz+15 MHz, QPSK, Channel 37925+98075

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5181.02	-55.79	6.93	10.15	-52.57	-25.00	27.57	H
7765.01	-54.33	8.34	12.41	-50.26	-25.00	25.26	H
10363.01	-51.19	9.74	13.05	-47.88	-25.00	22.88	H
12944.01	-49.39	10.49	13.47	-46.41	-25.00	21.41	V
15532.00	-44.85	11.52	13.70	-42.67	-25.00	17.67	H
16840.00	-41.73	12.07	13.74	-40.06	-25.00	15.06	V

LTE Band 38, 15 MHz+15 MHz, QPSK, Channel 38025+38175

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5177.02	-55.61	6.92	10.15	-52.38	-25.00	27.38	V
7814.01	-54.12	8.31	12.45	-49.98	-25.00	24.98	V
10355.01	-51.63	9.73	13.04	-48.32	-25.00	23.32	H
13015.01	-48.41	10.54	13.52	-45.43	-25.00	20.43	V
15569.00	-44.51	11.50	13.70	-42.31	-25.00	17.31	H
16880.00	-42.34	12.02	13.75	-40.61	-25.00	15.61	H

Note:The measurement results showed here are worst cases.

UT35a with AE9,AE3 and AE5, Ant 6
LTE Band 41, 20 MHz+5 MHz, QPSK, Channel 39750+39867

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
4986.02	-55.77	6.63	9.89	-52.51	-25.00	27.51	H
7489.01	-53.82	8.36	12.19	-49.99	-25.00	24.99	H
10051.01	-52.20	9.32	12.92	-48.60	-25.00	23.60	V
12529.01	-48.10	10.26	13.22	-45.14	-25.00	20.14	H
15028.00	-45.69	11.25	13.98	-42.96	-25.00	17.96	V
17558.00	-44.29	12.95	14.98	-42.26	-25.00	17.26	V

LTE Band 41, 20 MHz+5 MHz, QPSK, Channel 40595+40712

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5178.02	-55.38	6.93	10.15	-52.16	-25.00	27.16	H
7784.01	-53.65	8.31	12.43	-49.53	-25.00	24.53	H
10370.01	-51.69	9.75	13.05	-48.39	-25.00	23.39	V
12980.01	-48.82	10.47	13.49	-45.80	-25.00	20.80	V
15566.00	-44.61	11.50	13.70	-42.41	-25.00	17.41	V
16825.00	-41.45	12.09	13.73	-39.81	-25.00	14.81	H

LTE Band 41, 20 MHz+5 MHz, QPSK, Channel 41440+41557

Frequency (MHz)	P _{Mea} (dBm)	Path Loss(dB)	Antenna Gain(dBi)	Peak EIRP (dBm)	Limit (dBm)	Margin (dB)	Polarization
5328.02	-56.24	6.98	10.36	-52.86	-25.00	27.86	V
8051.01	-54.93	8.32	12.64	-50.61	-25.00	25.61	H
10697.01	-51.43	9.30	13.14	-47.59	-25.00	22.59	V
13382.01	-47.93	10.57	14.03	-44.47	-25.00	19.47	H
16077.00	-43.46	11.85	13.68	-41.63	-25.00	16.63	V
17410.00	-44.31	12.52	14.70	-42.13	-25.00	17.13	V

Note1: The measurement results showed here are worst cases.

Note2: The maximum value of expanded measurement uncertainty for this test item is $U = 5.16$ dB, $k = 2$.

A.3 Frequency Stability

A.3.1 Method of Measurement

Frequency stability is a measure of the frequency drift due to temperature and supply voltage variations, with reference to the frequency measured at +20 °C and rated supply voltage. Two reference points are established at the applicable unwanted emissions limit using a RBW equal to the RBW required by the unwanted emissions specification of the applicable regulatory standard. These reference points measured using the lowest and highest channel of operation shall be identified as F_L and F_H respectively.

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 CMW500.

1. Measure the carrier frequency at room temperature.
2. Subject the EUT to overnight soak at -30°C.
3. With the EUT, powered via nominal voltage, connected to the CMW500, and in a simulated call on middle channel for each LTE band, 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°C increments from -30°C to +50°C. 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°C.
7. With the EUT, powered via nominal voltage, connected to the CMW500 and in a simulated call on the center 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 °C increments from +50°C to -30°C. Allow at least 1.5 hours at each temperature, unpowered, before making measurements.
9. At all temperature levels hold the temperature to +/- 0.5°C during the measurement procedure.

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 the lower, higher and nominal voltage. Operation above or below these voltage limits is prohibited by transceiver software in order to prevent improper operation as well as to protect components from overstress.

A.3.2 Measurement results

LTE Band 2-ANT1, 20MHz bandwidth QPSK (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.87	1850.833	1909.199		
50				1.24	0.0007
40				0.01	0.0000
30				-0.84	0.0004
10				0.17	0.0001
0				1.39	0.0007
-10				0.97	0.0005
-20				1.43	0.0008
-30				-0.51	0.0003

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	1850.833	1909.199	11.17	0.0059
4.45				0.92	0.0005

LTE Band 4-ANT1, 20MHz bandwidth QPSK (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.87	1710.833	1754.199		
50				-1.22	0.0007
40				10.41	0.0060
30				-0.66	0.0004
10				9.31	0.0054
0				-1.07	0.0006
-10				-1.30	0.0008
-20				9.33	0.0054
-30				-1.37	0.0008

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	1710.833	1754.199	9.13	0.0053
4.45				8.94	0.0052

LTE Band 7-ANT3, 20MHz bandwidth QPSK (worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.87	2500.962	2569.071		
50				11.99	0.0047
40				-0.16	0.0001
30				0.60	0.0002
10				12.77	0.0050
0				15.34	0.0061
-10				1.00	0.0004
-20				1.47	0.0006
-30				1.39	0.0005

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	2500.962	2569.071	12.67	0.0050
4.45				12.26	0.0048

LTE Band 12-ANT0, 10MHz bandwidth QPSK (worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.87	699.481	715.519		
50				0.80	0.0011
40				7.07	0.0100
30				-0.34	0.0005
10				-1.70	0.0024
0				0.46	0.0007
-10				0.03	0.0000
-20				0.51	0.0007
-30				0.72	0.0010

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	699.481	715.519	0.72	0.0010
4.45				-0.83	0.0012

LTE Band 26(814MHz~824MHz)-ANT0, 10MHz bandwidth QPSK (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.87	814.385	823.611		
50				-8.55	0.0104
40				-1.56	0.0019
30				-6.01	0.0073
10				-0.60	0.0007
0				-7.21	0.0088
-10				-6.74	0.0082
-20				-7.48	0.0091
-30				-6.90	0.0084

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	814.385	823.611	-0.80	0.0010
4.45				-6.44	0.0079

LTE Band 26(824MHz~849MHz)-ANT0, 15MHz bandwidth QPSK (worst case of all bandwidths)

Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.87	824.553	848.471		
50				1.52	0.0018
40				0.01	0.0000
30				0.57	0.0007
10				0.03	0.0000
0				0.40	0.0005
-10				-0.46	0.0005
-20				-0.62	0.0007
-30				-0.92	0.0011

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	824.553	848.471	0.59	0.0007
4.45				1.09	0.0013

LTE Band 38-ANT1, 20MHz bandwidth QPSK (worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.87	2570.513	2619.487		
50				2.02	0.0008
40				3.48	0.0013
30				1.52	0.0006
10				2.43	0.0009
0				1.70	0.0007
-10				1.96	0.0008
-20				-0.19	0.0001
-30				1.00	0.0004

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	2570.513	2619.487	2.20	0.0008
4.45				0.84	0.0003

LTE Band 41-ANT1, 20MHz bandwidth QPSK (worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.87	2496.449	2689.487		
50				1.67	0.0006
40				0.31	0.0001
30				-3.00	0.0012
10				0.49	0.0002
0				1.42	0.0005
-10				0.90	0.0003
-20				-2.29	0.0009
-30				-2.36	0.0009

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	2496.449	2689.487	0.16	0.0001
4.45				3.26	0.0013

LTE Band 66-ANT1, 20MHz bandwidth QPSK (worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.87	1710.833	1779.199		
50				-0.31	0.0002
40				0.94	0.0005
30				-1.49	0.0009
10				8.44	0.0048
0				-0.01	0.0000
-10				1.24	0.0007
-20				1.73	0.0010
-30				0.90	0.0005

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	1710.833	1779.199	0.50	0.0003
4.45				1.39	0.0008

LTE Band 7_CA-ANT3, 20MHz+20MHz bandwidth QPSK(worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.87	2500.99	2569.55		
50				1.60	0.0007
40				4.00	0.0017
30				4.60	0.0020
10				3.10	0.0013
0				5.50	0.0024
-10				4.00	0.0017
-20				8.00	0.0034
-30				3.60	0.0015

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	2500.99	2569.55	5.90	0.0025
4.45				5.60	0.0024

LTE Band 38_CA-ANT1, 20MHz+20MHz bandwidth QPSK(worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.87	2570.88	2619.09		
50				-1.90	0.0007
40				-2.70	0.0010
30				-1.40	0.0005
10				1.00	0.0004
0				3.50	0.0013
-10				4.20	0.0016
-20				6.00	0.0023
-30				2.70	0.0010

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	2570.88	2619.09	-1.30	0.0005
4.45				-0.90	0.0003

LTE Band 41-ANT1_CA, 20MHz+20MHz bandwidth QPSK(worst case of all bandwidths)
Frequency Error vs Temperature

Temperature(°C)	Voltage(V)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
20	3.87	2496.83	2689.07		
50				5.10	0.0020
40				-1.00	0.0004
30				2.40	0.0009
10				-1.70	0.0007
0				-0.10	0.0000
-10				3.90	0.0015
-20				5.10	0.0020
-30				4.30	0.0017

Frequency Error vs Voltage

Voltage(V)	Temperature(°C)	F _L (MHz)	F _H (MHz)	Offset(Hz)	Frequency error(ppm)
3.60	20	2496.83	2689.07	0.5	0.0002
4.45				3.6	0.0014

A.4 Occupied Bandwidth

Occupied bandwidth measurements are only provided for selected frequencies in order to reduce the amount of submitted data. Data were taken at the mid frequencies frequency. The table below lists the measured 99% BW. Spectrum analyzer plots are included on the following pages.

The measurement method is from ANSI C63.26:

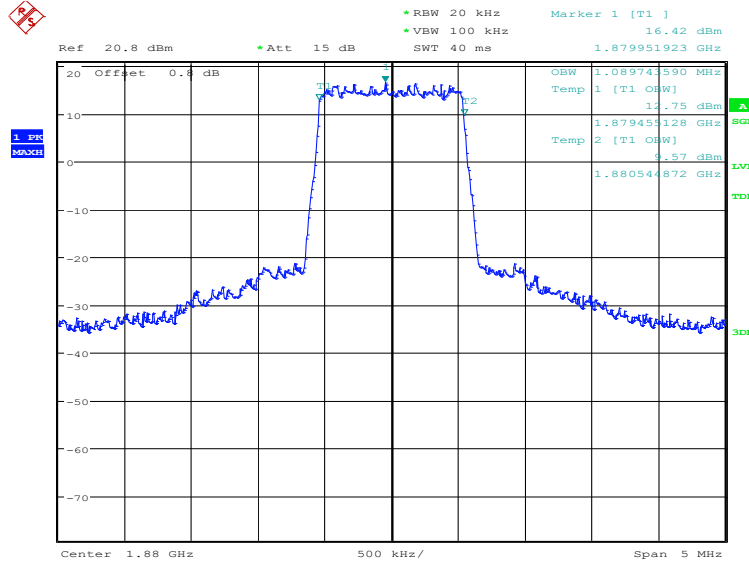
- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts.
- b) The nominal IF filter 3 dB bandwidth (RBW) shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set $\geq 3 \times \text{RBW}$.
- c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation.
- d) Set the detection mode to peak, and the trace mode to max-hold.

LTE Band 2-ANT1

LTE Band 2, 1.4MHz (99%)

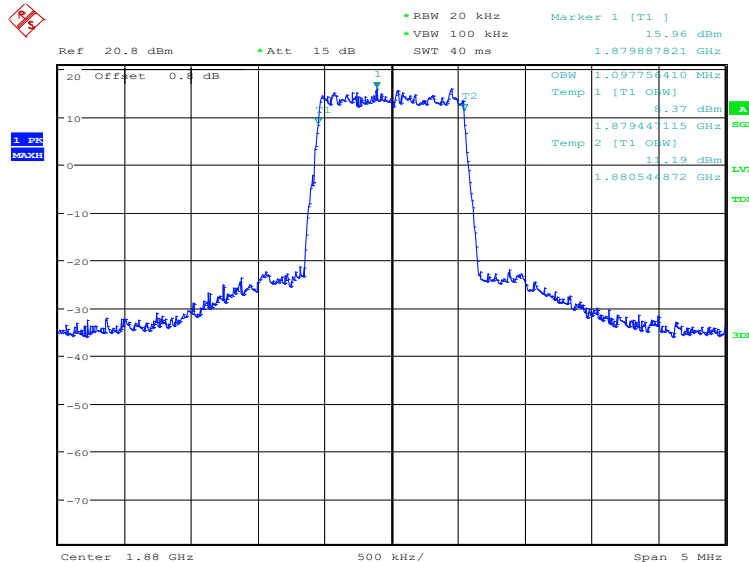
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1880.0	QPSK	16QAM
	1089.74	1097.76

LTE Band 2, 1.4MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 17:24:44

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

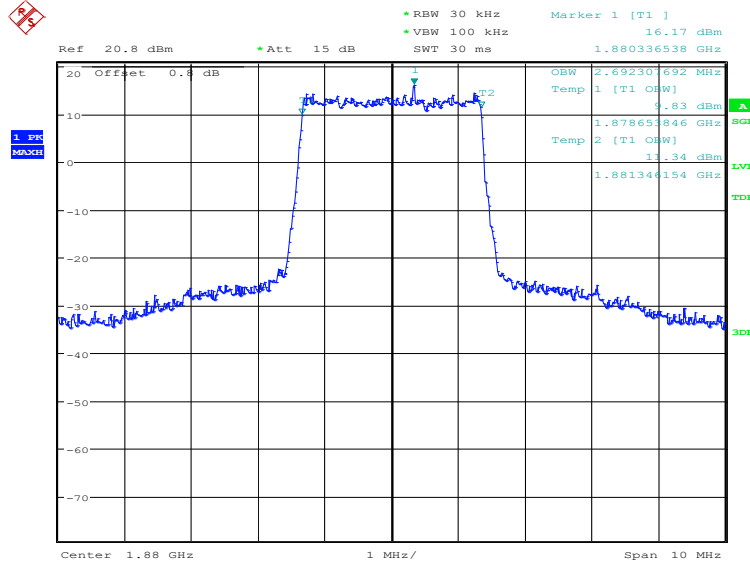


Date: 10.JUN.2021 17:25:23

LTE Band 2, 3MHz (99%)

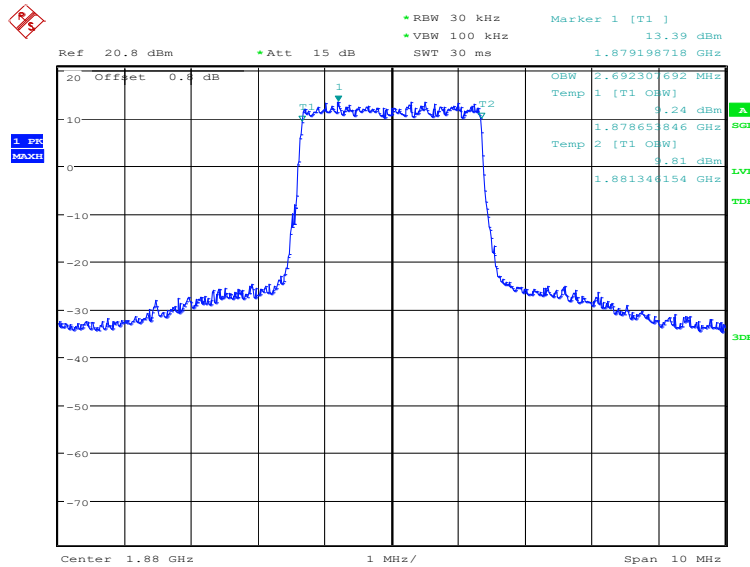
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1880.0	QPSK	16QAM
	2692.31	2692.31

LTE Band 2, 3MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 17:26:05

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

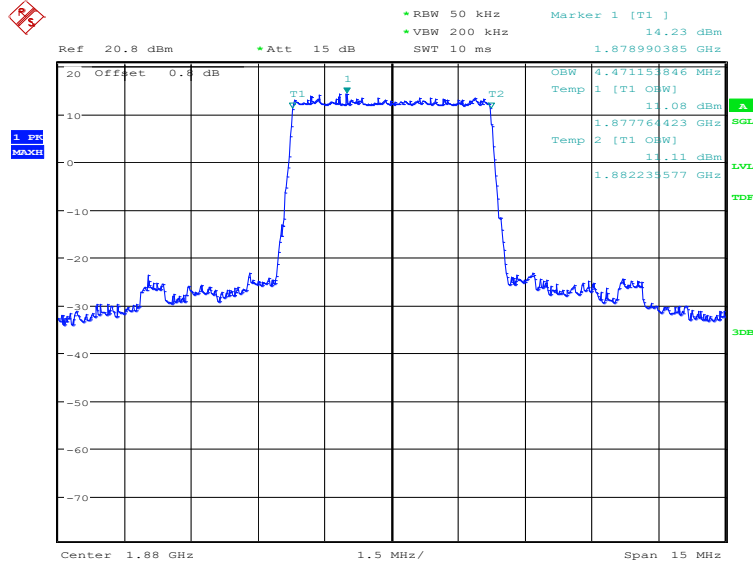


Date: 10.JUN.2021 17:26:44

LTE Band 2, 5MHz (99%)

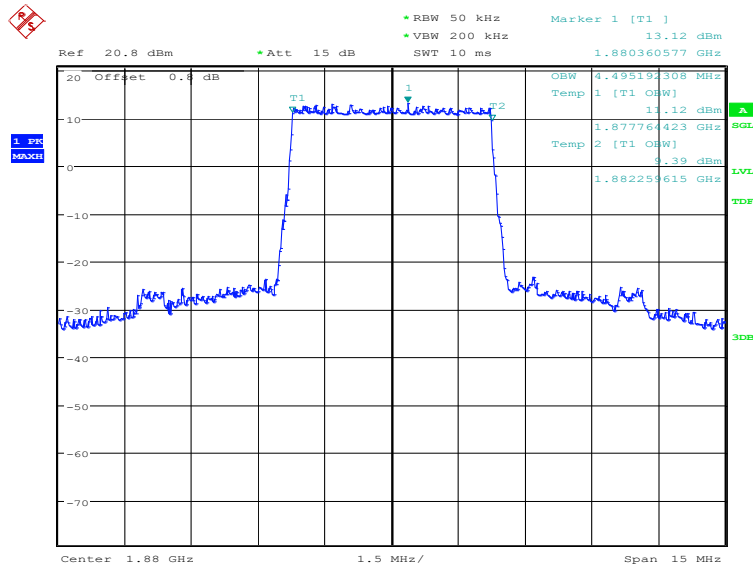
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1880.0	QPSK	16QAM
	4471.15	4495.19

LTE Band 2, 5MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 17:27:25

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

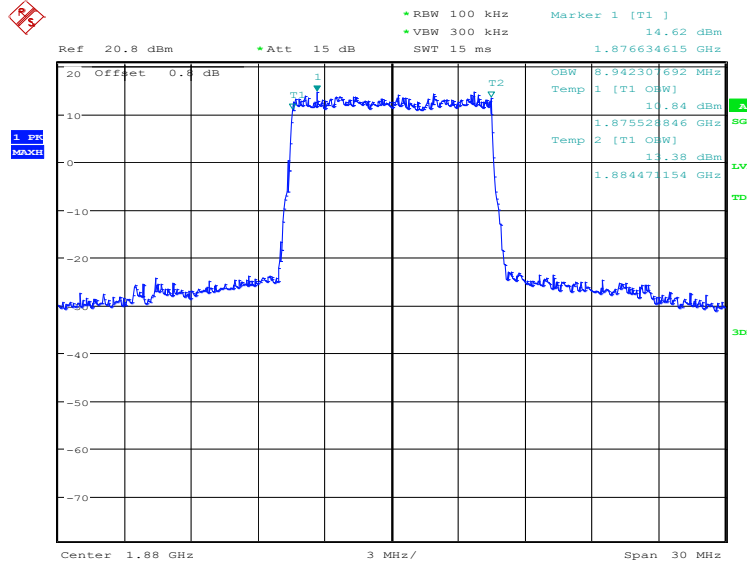


Date: 10.JUN.2021 17:28:05

LTE Band 2, 10MHz (99%)

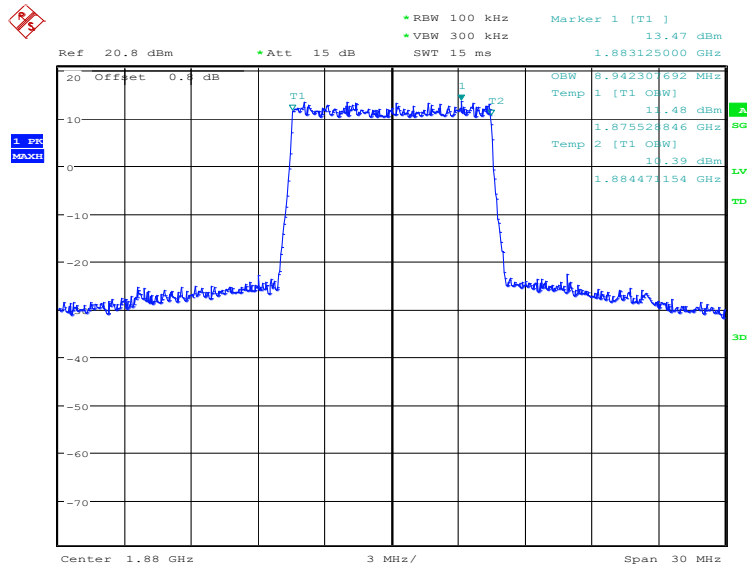
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1880.0	QPSK	16QAM
	8942.31	8942.31

LTE Band 2, 10MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 17:28:46

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



Date: 10.JUN.2021 17:29:26

Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1880.0	QPSK	16QAM
	13485.58	13485.58

The screenshot displays a Spectrum Analyzer interface. The main plot shows a signal with two markers, T1 and T2, indicating a frequency range. The Y-axis represents power in dBm, ranging from -70 to 20. The X-axis represents frequency in GHz, ranging from 1.88 to 1.89. The signal is centered at 1.88 GHz with a span of 45 MHz. The plot shows a signal level of approximately 15 dBm between T1 and T2, and a noise floor of approximately -30 dBm outside this range.

Key parameters and measurements displayed on the screen include:

- Ref:** 20.8 dBm
- * Att:** 15 dB
- * RBW:** 200 kHz
- * VBW:** 1 MHz
- SWT:** 5 ms
- Marker 1 [T1]:** 16.33 dBm, 1.877908654 GHz
- Marker 2 [T2]:** 16.33 dBm, 1.877908654 GHz
- OSW:** 13.485574923 MHz
- Temp 1 [T1 OSW]:** 1.873293269 GHz, 12.50 dBm
- Temp 2 [T1 OSW]:** 1.886778846 GHz, 10.84 dBm

The interface also includes a vertical scale bar on the left labeled "1.50 MHz" and a horizontal scale bar at the bottom labeled "4.5 MHz".

Date: 10.JUN.2021 17:30:07

The screenshot displays a spectrum analyzer interface with a blue trace showing a signal. The signal is centered at 1.88 GHz with a span of 45 MHz. The trace shows a flat baseline at approximately -30 dBm, with a sharp rise to about +15 dBm between 1.875 and 1.885 GHz, and a sharp fall back to -30 dBm. Two markers, T1 and T2, are placed on the rising and falling edges of the signal, respectively. The T1 marker is at 1.875889423 GHz with a value of 11.76 dBm. The T2 marker is at 1.886778846 GHz with a value of 11.68 dBm. The interface includes a top status bar with various parameters: RBW 200 kHz, VBW 1 MHz, SWT 5 ms, and a reference level of 20.8 dBm. The left side of the screen shows a vertical scale from -70 to 20 dBm. The bottom of the screen shows the center frequency (1.88 GHz) and span (45 MHz).

Parameter	Value
Ref	20.8 dBm
* Att	15 dB
* RBW	200 kHz
* VBW	1 MHz
SWT	5 ms
Marker 1 [T1]	1.875889423 GHz
Temp 1 [T1 OHW]	11.76 dBm
Temp 2 [T1 OHW]	11.68 dBm
Temp 2 [T2 OHW]	11.68 dBm
Temp 2 [T2 OHW]	1.886778846 GHz

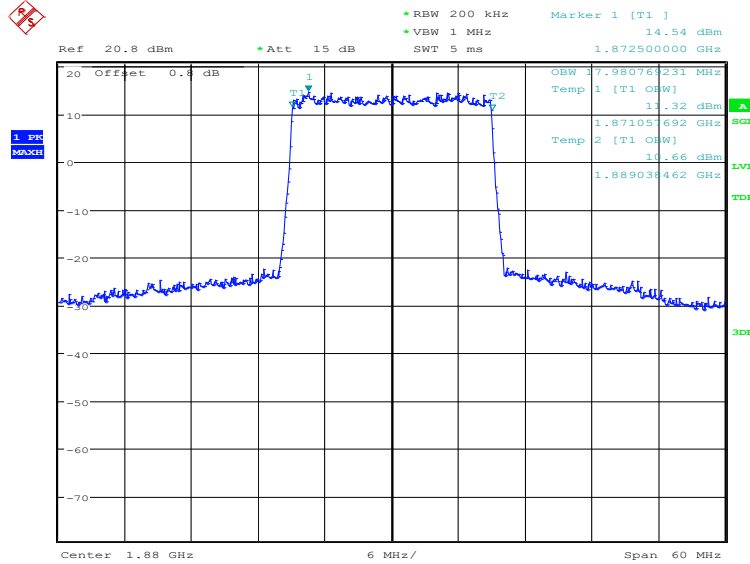
Center 1.88 GHz Span 45 MHz

Date: 10.JUN.2021 17:30:46

LTE Band 2, 20MHz (99%)

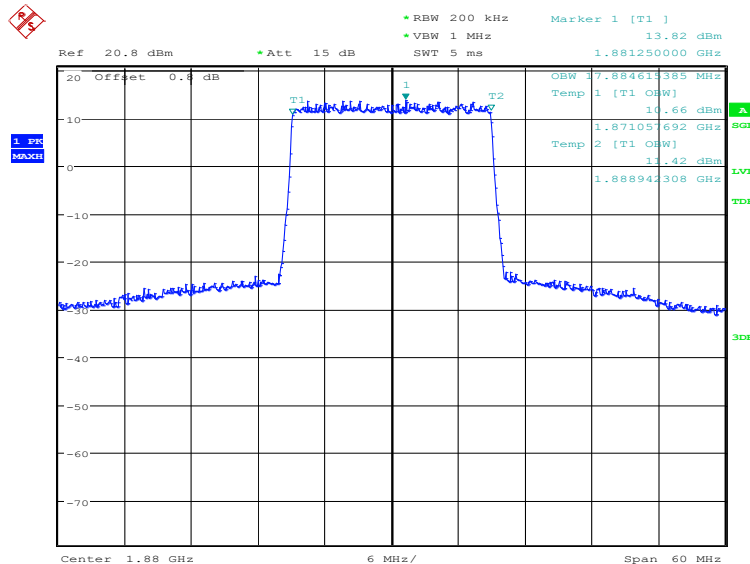
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1880.0	QPSK	16QAM
	17980.77	17884.62

LTE Band 2, 20MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 17:31:28

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



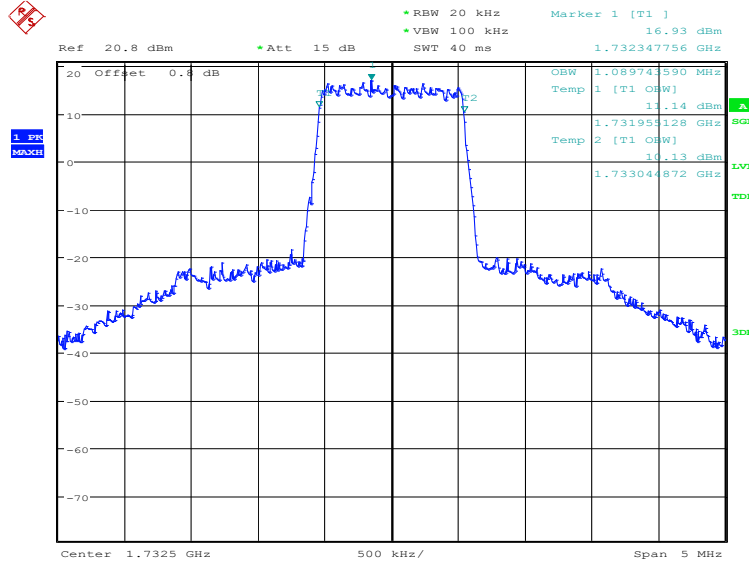
Date: 10.JUN.2021 17:32:07

LTE Band 4-ANT1

LTE Band 4, 1.4MHz (99%)

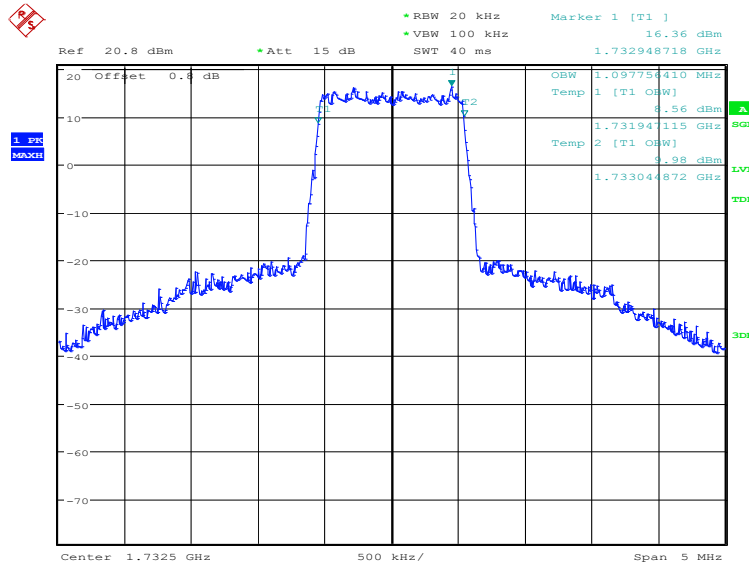
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1732.5	QPSK	16QAM
	1089.74	1097.76

LTE Band 4, 1.4MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 17:32:52

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

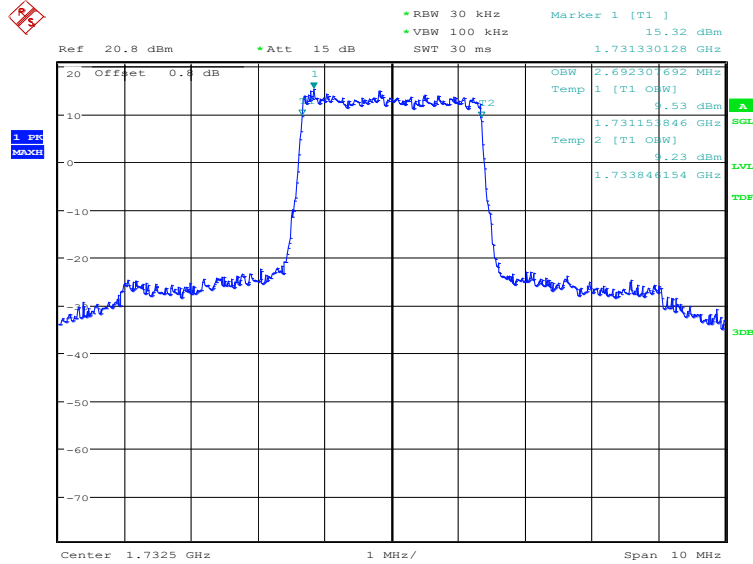


Date: 10.JUN.2021 17:33:31

LTE Band 4, 3MHz (99%)

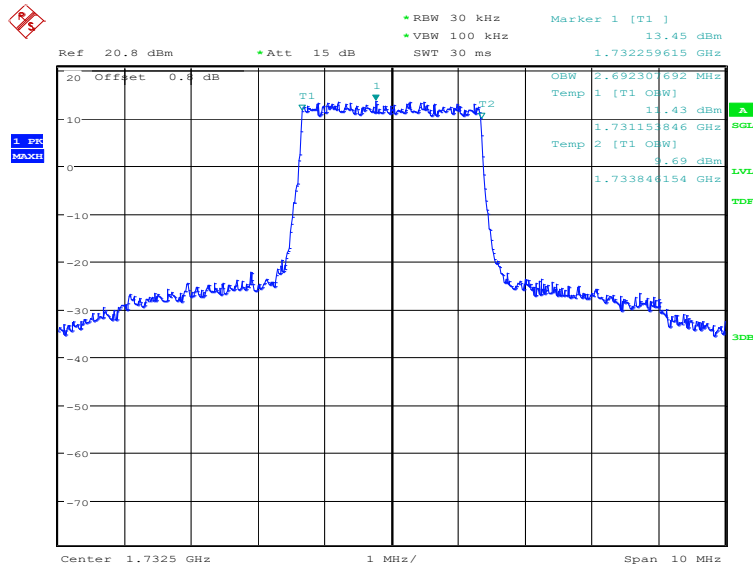
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1732.5	QPSK	16QAM
	2692.31	2692.31

LTE Band 4, 3MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 17:34:12

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

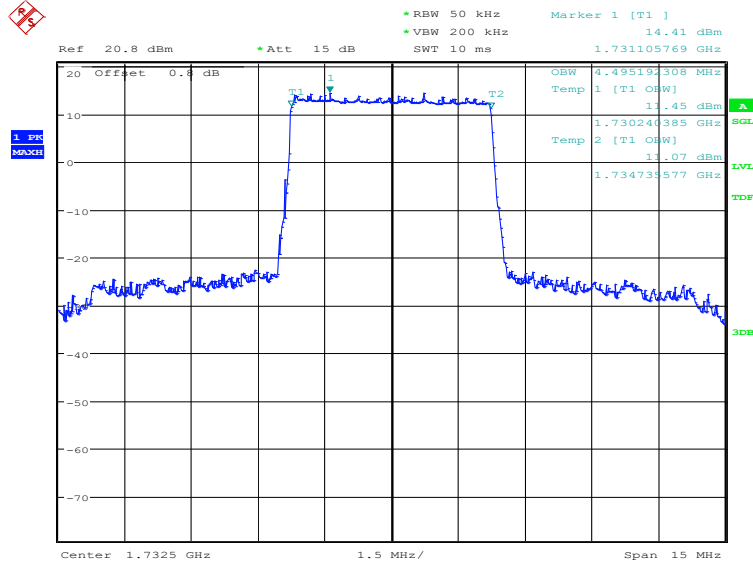


Date: 10.JUN.2021 17:34:52

LTE Band 4, 5MHz (99%)

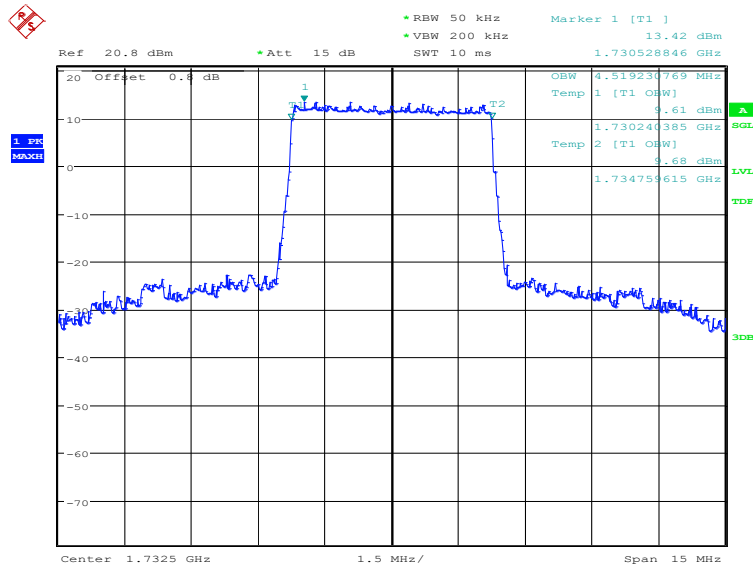
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1732.5	QPSK	16QAM
	4495.19	4519.23

LTE Band 4, 5MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 17:35:33

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

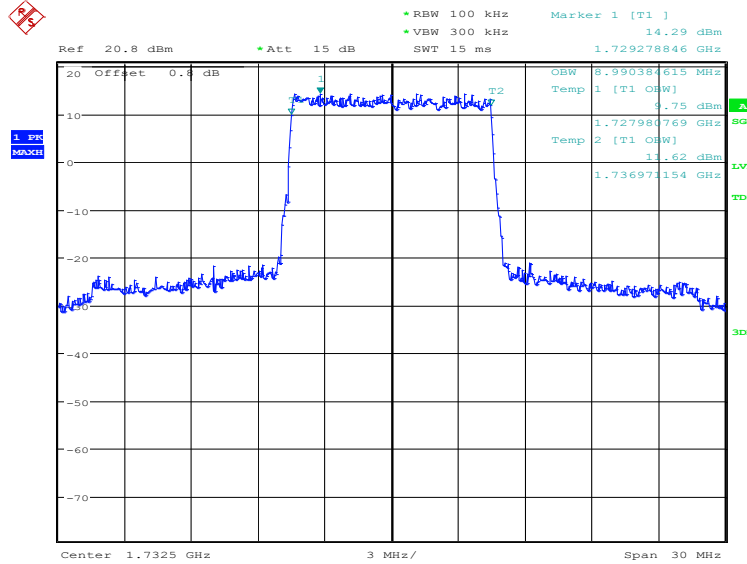


Date: 10.JUN.2021 17:36:13

LTE Band 4, 10MHz (99%)

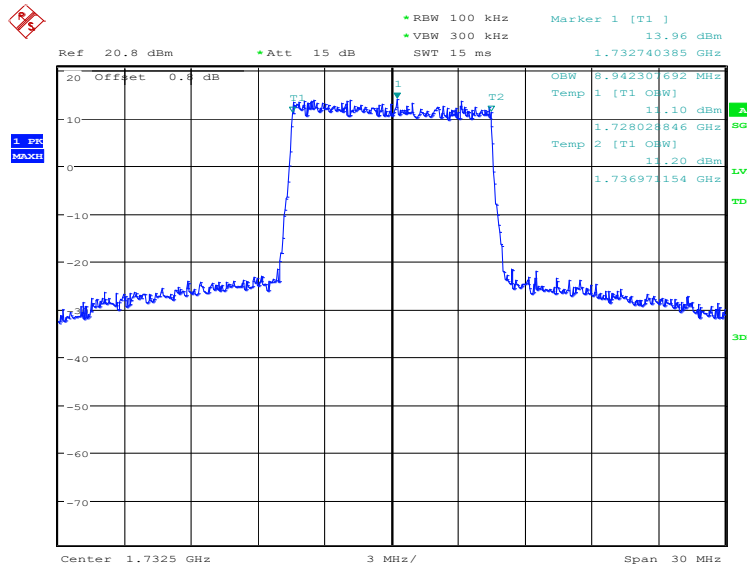
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1732.5	QPSK	16QAM
	8990.38	8942.31

LTE Band 4, 10MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 17:36:54

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

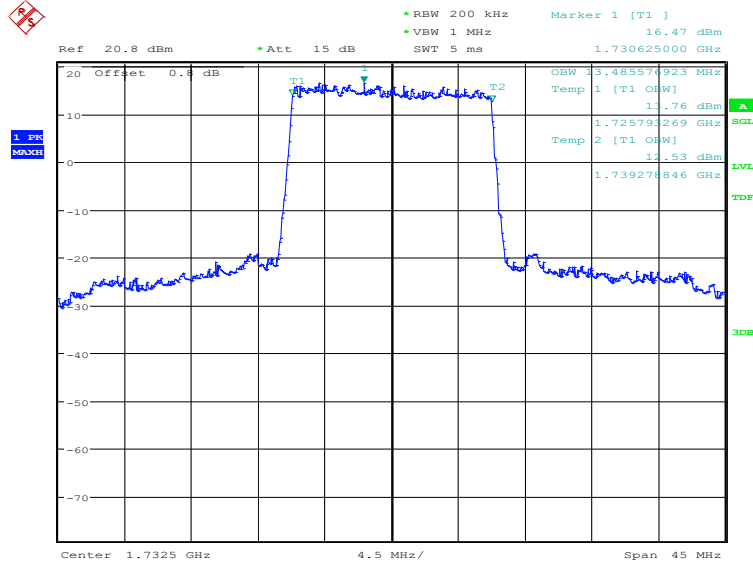


Date: 10.JUN.2021 17:37:34

LTE Band 4, 15MHz (99%)

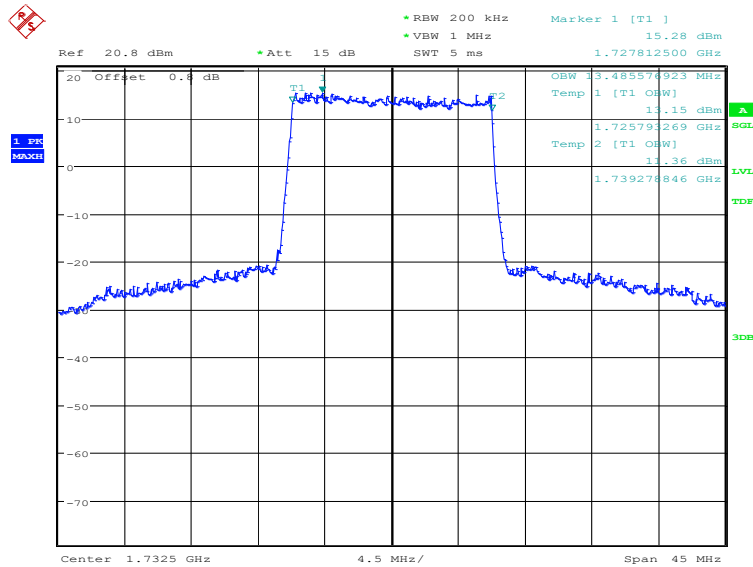
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1732.5	QPSK	16QAM
	13485.58	13485.58

LTE Band 4, 15MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 17:38:15

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

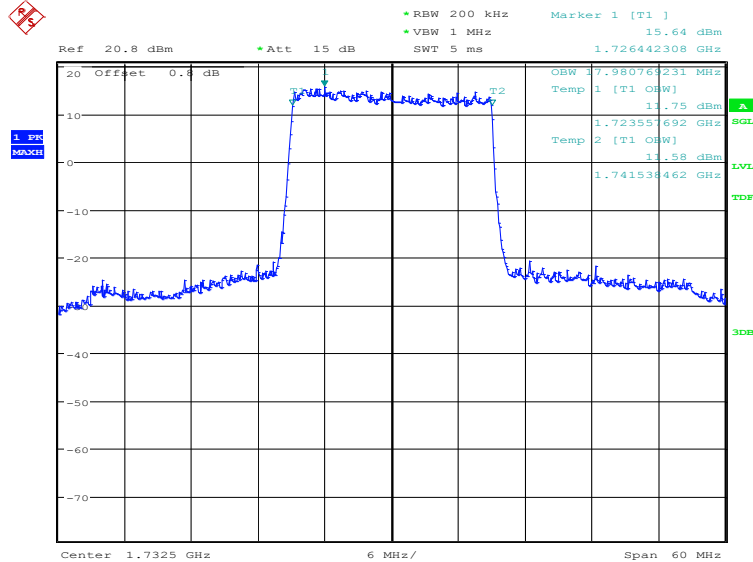


Date: 10.JUN.2021 17:38:55

LTE Band 4, 20MHz (99%)

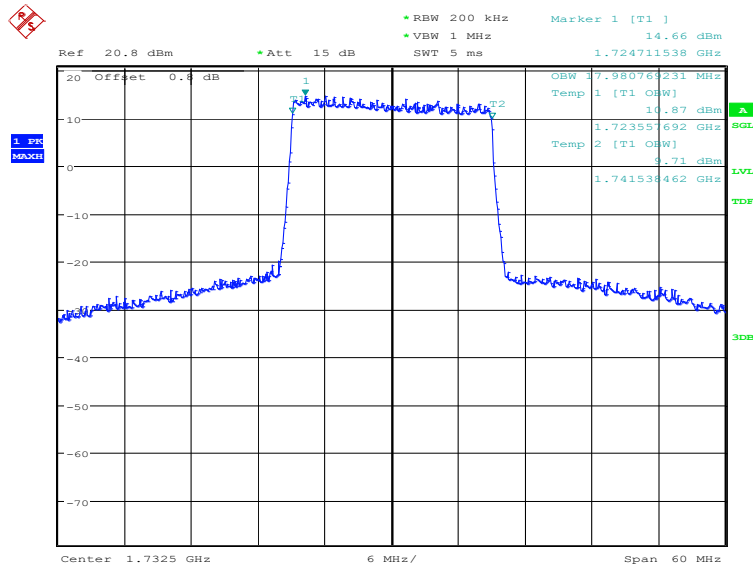
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1732.5	QPSK	16QAM
	17980.77	17980.77

LTE Band 4, 20MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 17:39:36

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



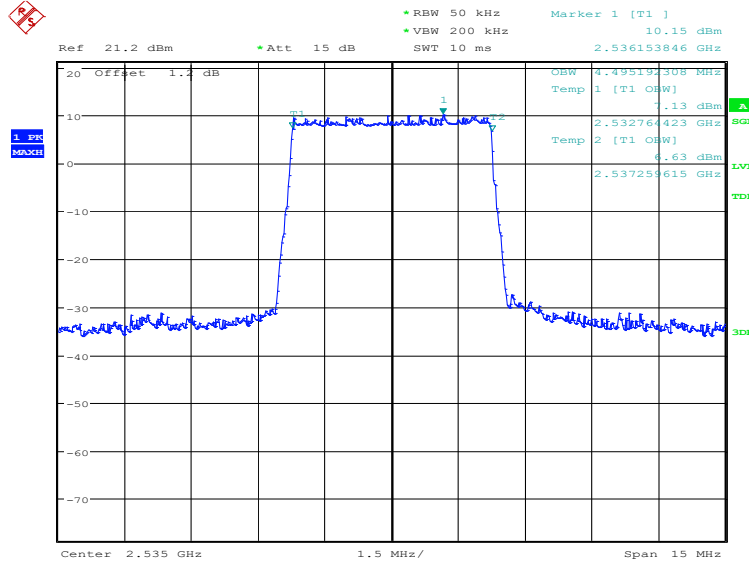
Date: 10.JUN.2021 17:40:16

LTE Band 7-ANT3

LTE Band 7, 5MHz (99%)

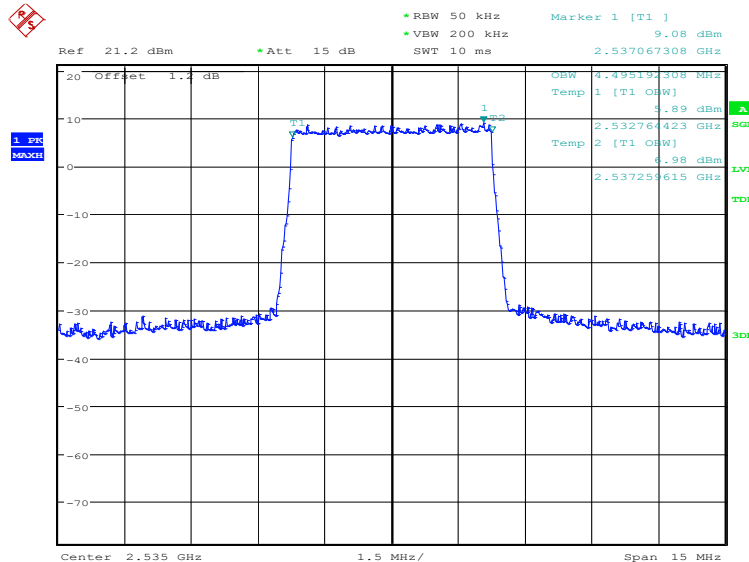
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2535.0	QPSK	16QAM
	4495.19	4495.19

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



Date: 11.JUN.2021 10:30:21

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

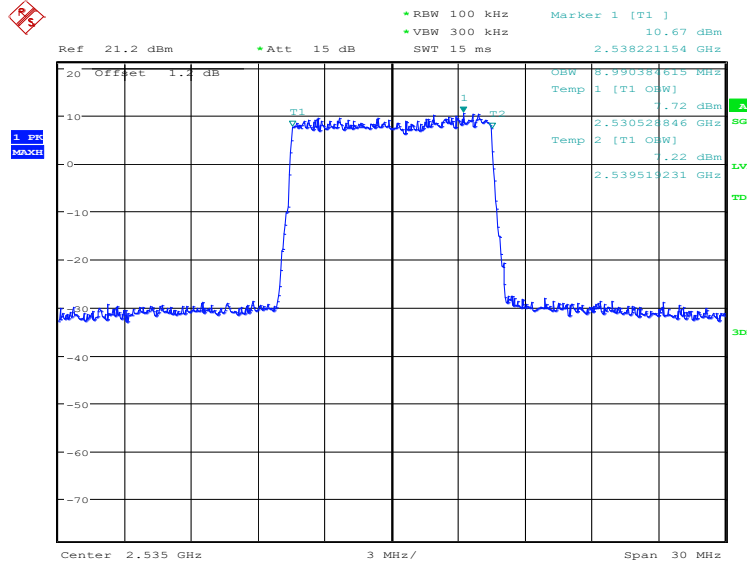


Date: 11.JUN.2021 10:31:00

LTE Band 7, 10MHz (99%)

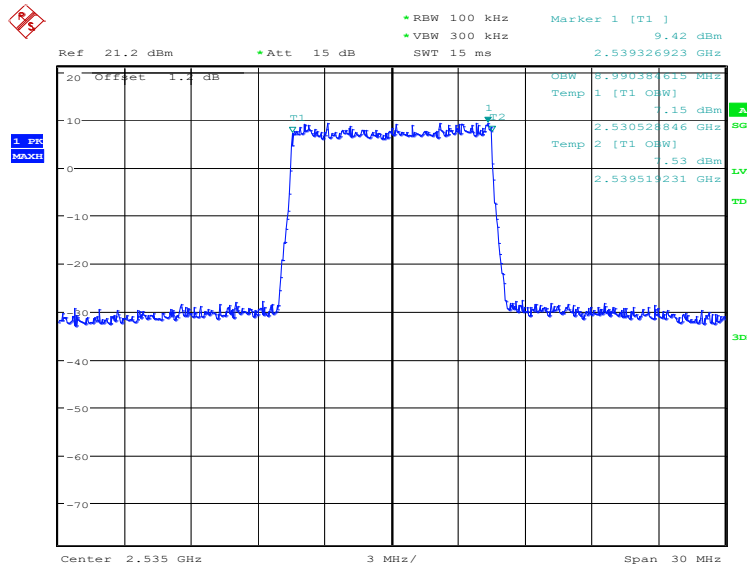
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2535.0	QPSK	16QAM
	8990.38	8990.38

LTE Band 7, 10MHz Bandwidth, QPSK (99% BW)



Date: 11.JUN.2021 10:31:41

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

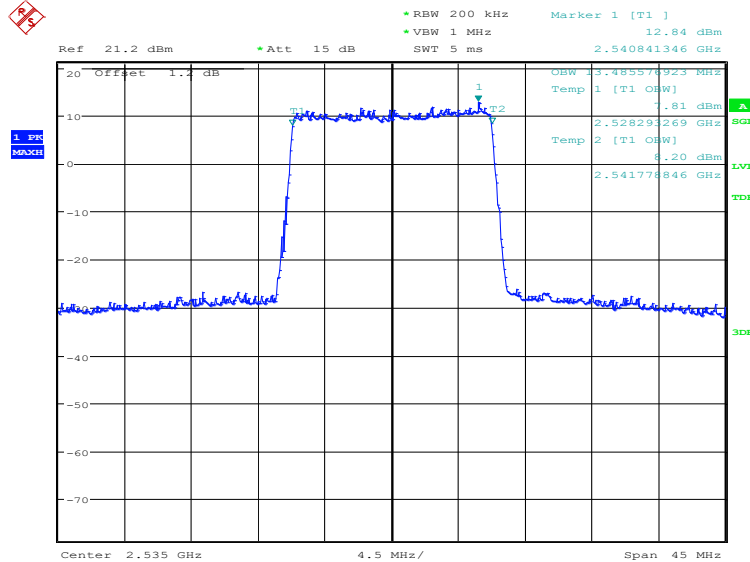


Date: 11.JUN.2021 10:32:21

LTE Band 7, 15MHz (99%)

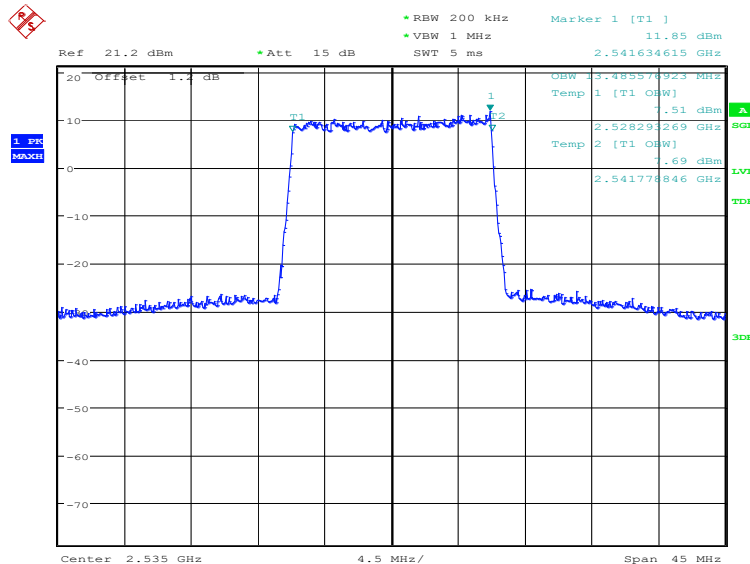
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2535.0	QPSK	16QAM
	13485.58	13485.58

LTE Band 7, 15MHz Bandwidth, QPSK (99% BW)



Date: 11.JUN.2021 10:33:02

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

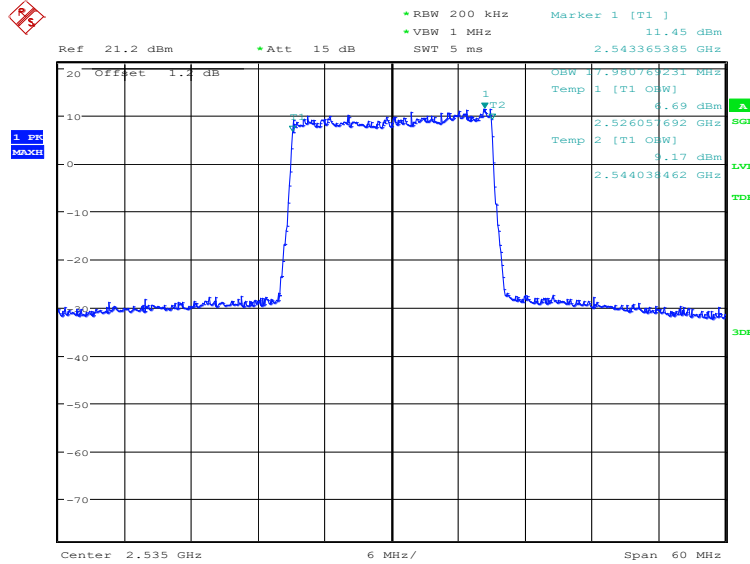


Date: 11.JUN.2021 10:33:42

LTE Band 7, 20MHz (99%)

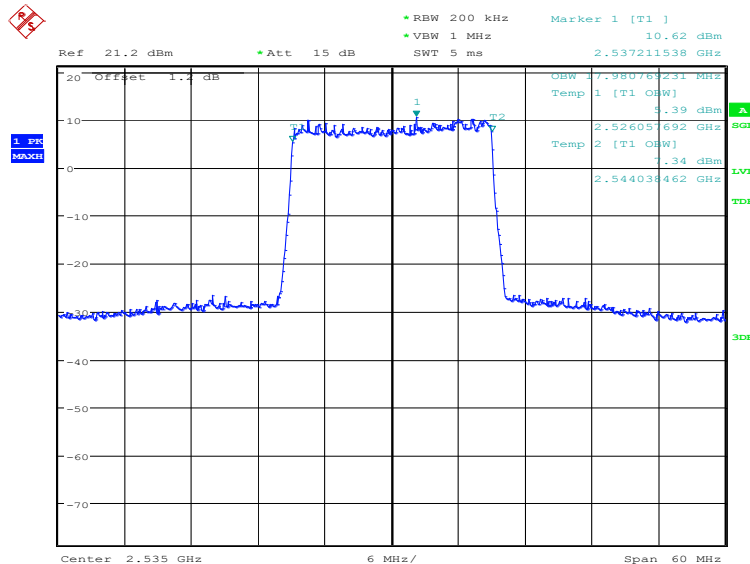
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2535.0	QPSK	16QAM
	17980.77	17980.77

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



Date: 11.JUN.2021 10:34:23

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



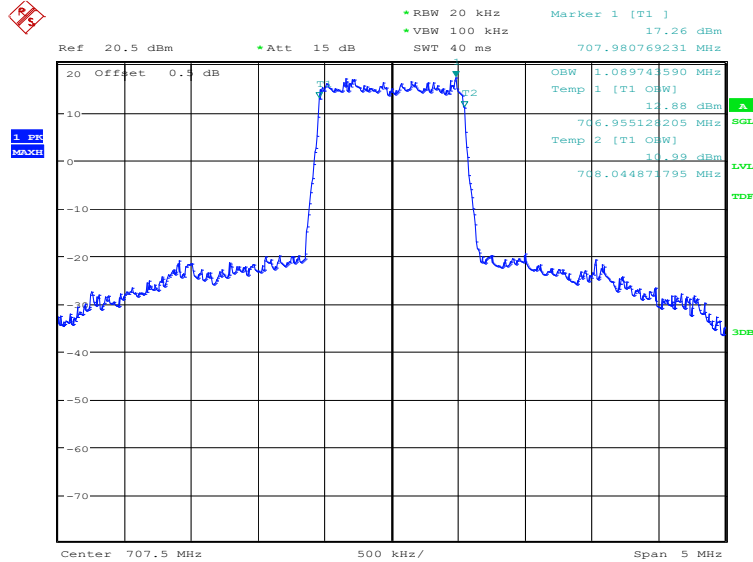
Date: 11.JUN.2021 10:35:03

LTE Band 12-ANT0

LTE Band 12, 1.4MHz (99%)

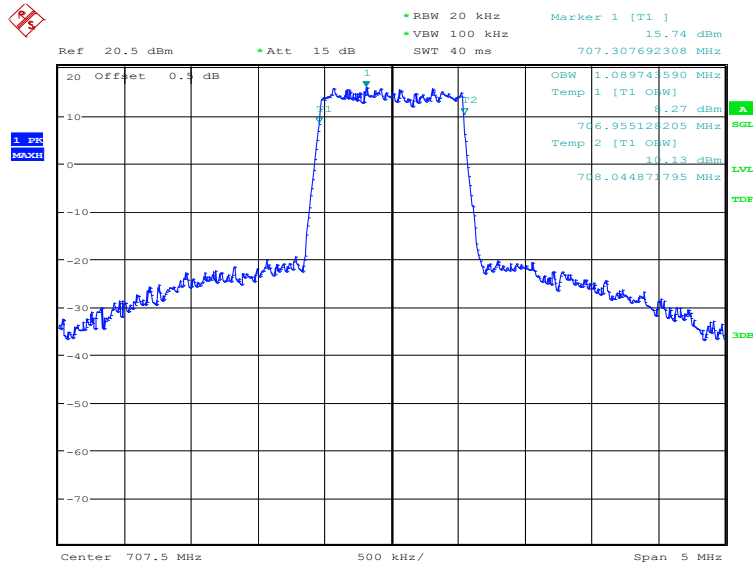
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
707.5	QPSK	16QAM
	1089.74	1089.74

LTE Band 12, 1.4MHz Bandwidth, QPSK (99% BW)



Date: 7.JUL.2021 09:22:39

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

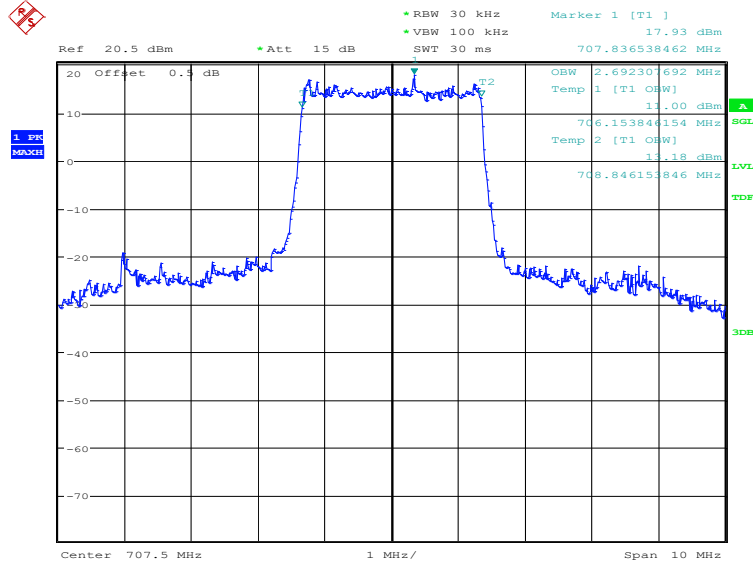


Date: 7.JUL.2021 09:23:19

LTE Band 12, 3MHz (99%)

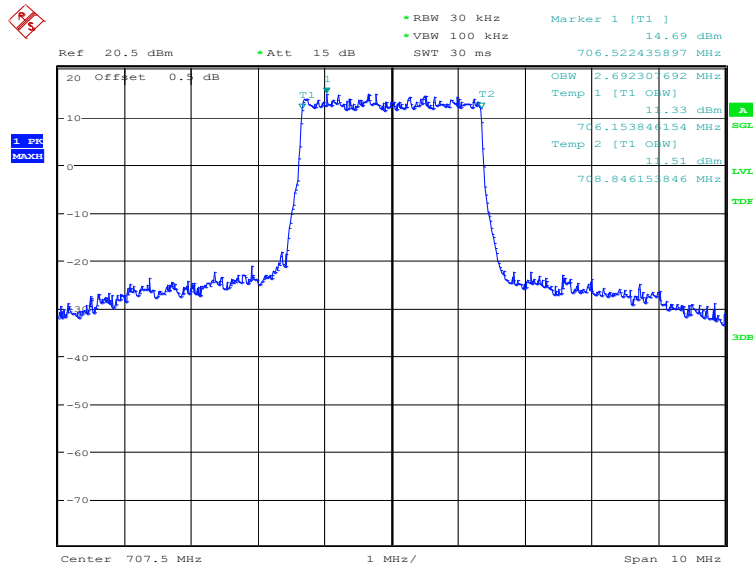
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
707.5	QPSK	16QAM
	2692.31	2692.31

LTE Band 12, 3MHz Bandwidth, QPSK (99% BW)



Date: 7.JUL.2021 09:24:01

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

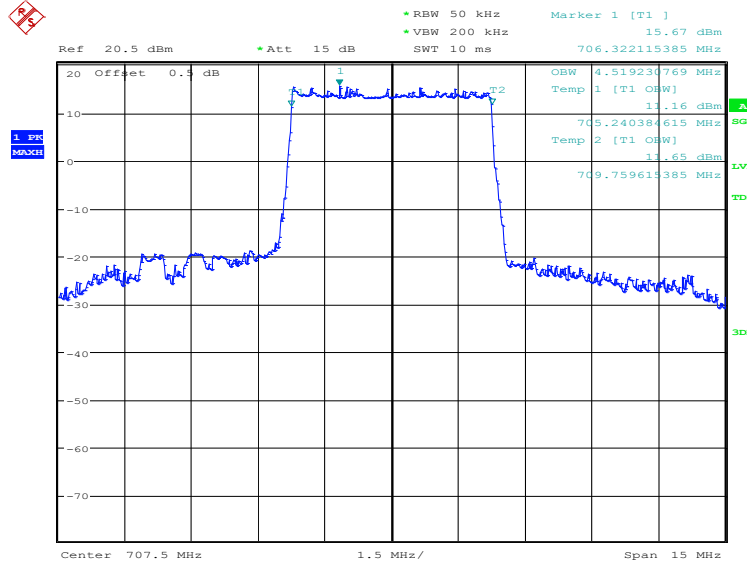


Date: 7.JUL.2021 09:24:40

LTE Band 12, 5MHz (99%)

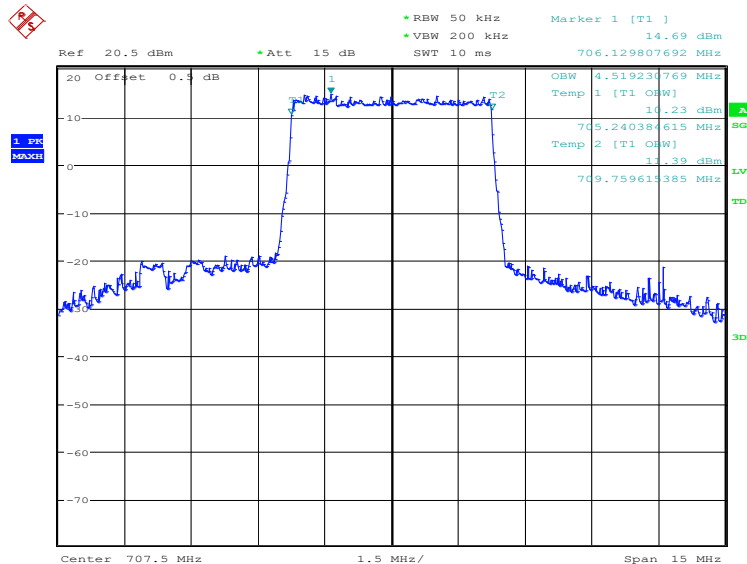
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
707.5	QPSK	16QAM
	4519.23	4519.23

LTE Band 12, 5MHz Bandwidth, QPSK (99% BW)



Date: 7.JUL.2021 09:25:22

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

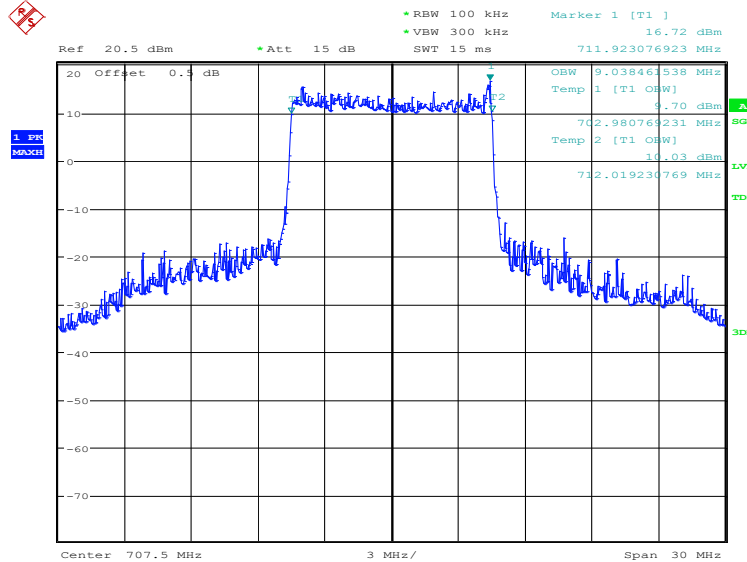


Date: 7.JUL.2021 09:26:01

LTE Band 12, 10MHz (99%)

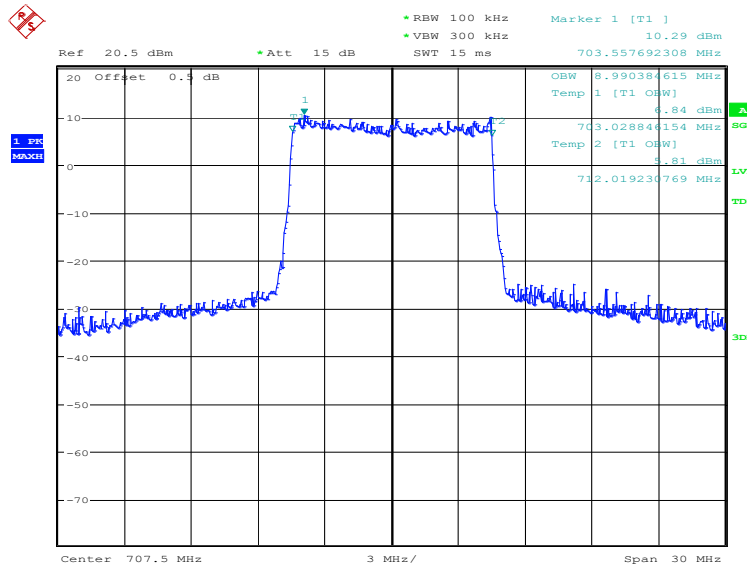
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
707.5	QPSK	16QAM
	9038.46	8990.38

LTE Band 12, 10MHz Bandwidth, QPSK (99% BW)



Date: 7.JUL.2021 09:36:38

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



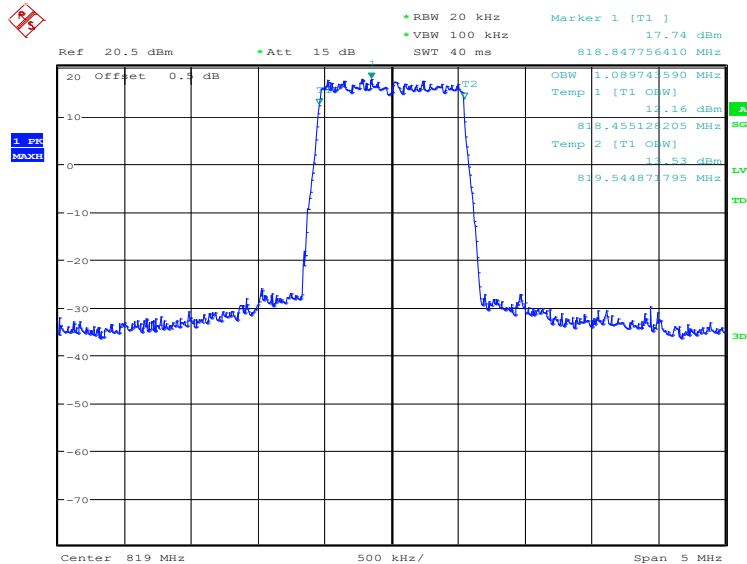
Date: 7.JUL.2021 09:37:17

LTE Band 26-ANT0

LTE Band 26(814MHz~824MHz), 1.4MHz (99%)

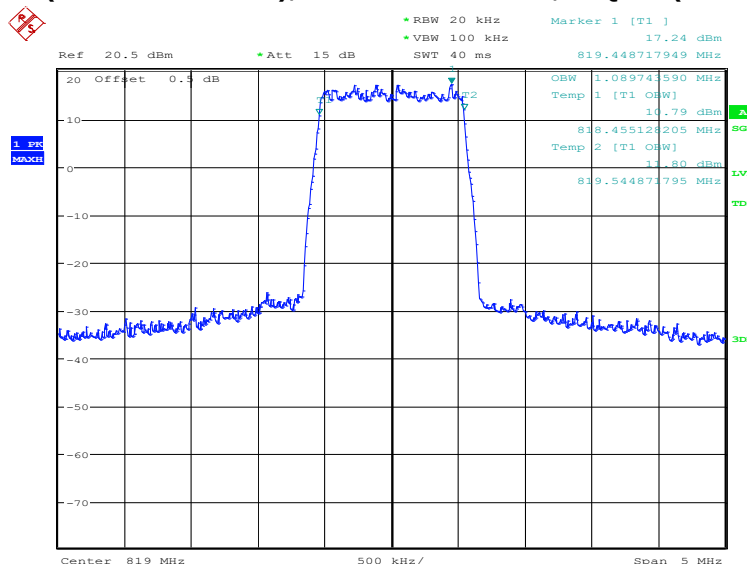
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
819.0	QPSK	16QAM
	1089.74	1089.74

LTE Band 26(814MHz~824MHz), 1.4MHz Bandwidth, QPSK (99% BW)



Date: 11.JUN.2021 09:02:39

LTE Band 26(814MHz~824MHz), 1.4MHz Bandwidth, 16QAM (99% BW)

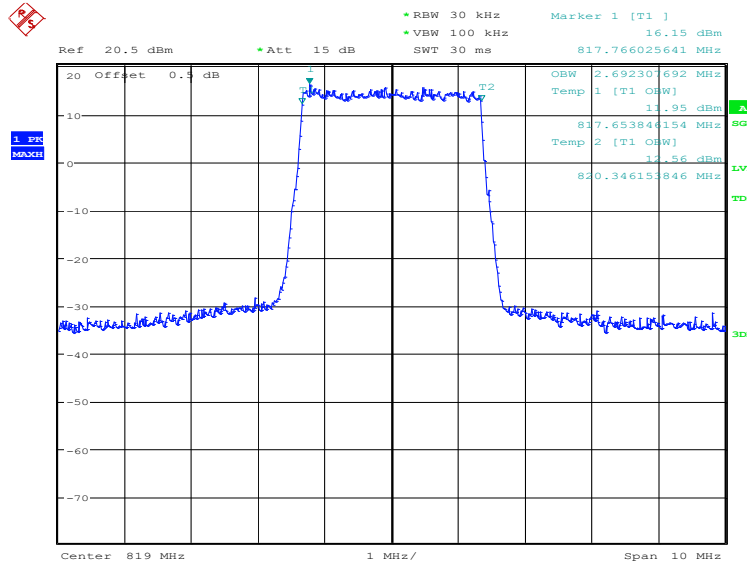


Date: 11.JUN.2021 09:03:18

LTE Band 26(814MHz~824MHz), 3MHz (99%)

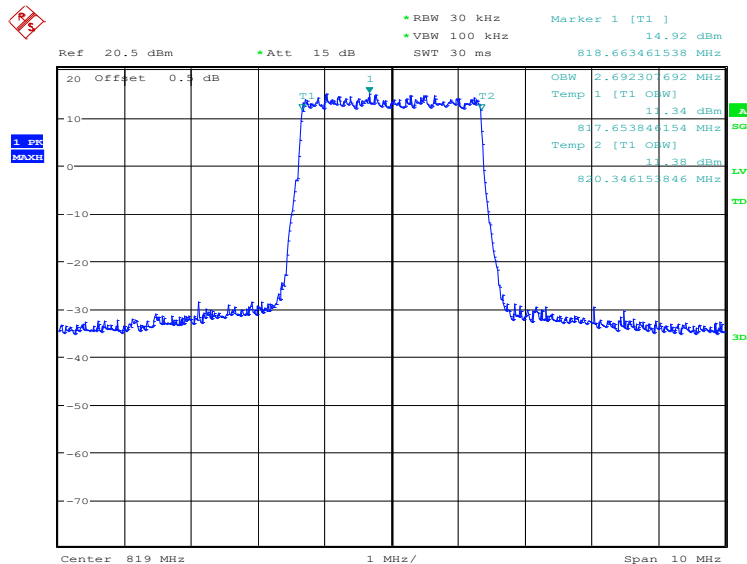
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
819.0	QPSK	16QAM
	2692.31	2692.31

LTE Band 26(814MHz~824MHz), 3MHz Bandwidth, QPSK (99% BW)



Date: 11.JUN.2021 09:04:00

LTE Band 26(814MHz~824MHz), 3MHz Bandwidth, 16QAM (99% BW)

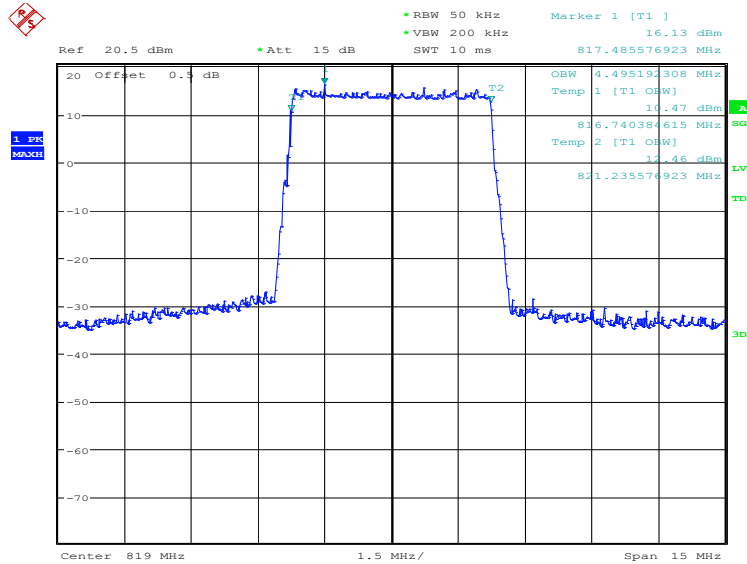


Date: 11.JUN.2021 09:04:40

LTE Band 26(814MHz~824MHz), 5MHz (99%)

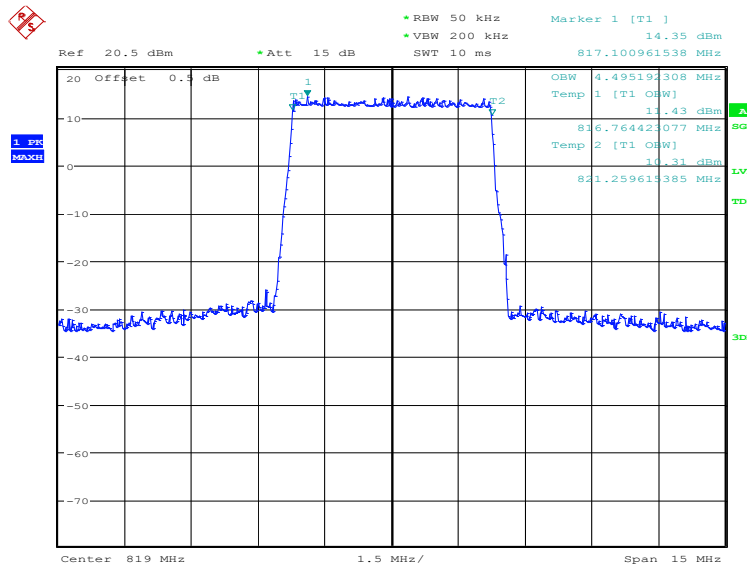
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
819.0	QPSK	16QAM
	4495.19	4495.19

LTE Band 26(814MHz~824MHz), 5MHz Bandwidth, QPSK (99% BW)



Date: 11.JUN.2021 09:05:22

LTE Band 26(814MHz~824MHz), 5MHz Bandwidth, 16QAM (99% BW)

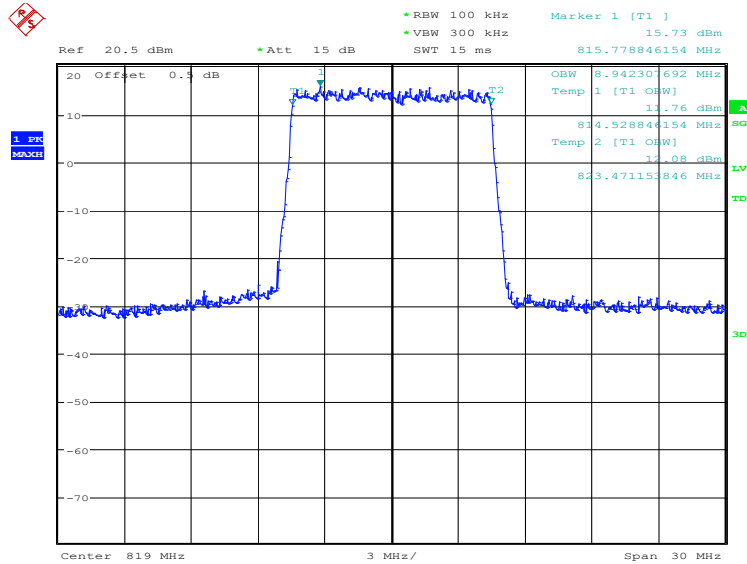


Date: 11.JUN.2021 09:06:02

LTE Band 26(814MHz~824MHz), 10MHz (99%)

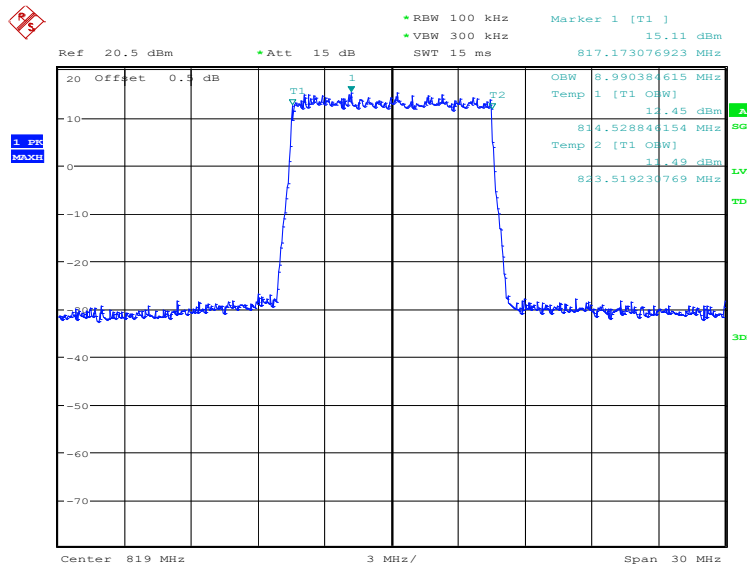
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
819.0	QPSK	16QAM
	8942.31	8990.38

LTE Band 26(814MHz~824MHz), 10MHz Bandwidth, QPSK (99% BW)



Date: 11.JUN.2021 09:06:44

LTE Band 26(814MHz~824MHz), 10MHz Bandwidth, 16QAM (99% BW)

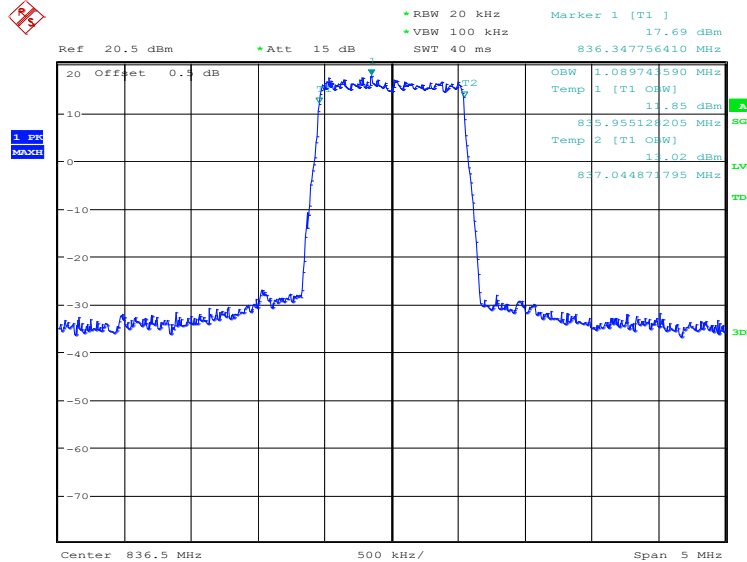


Date: 11.JUN.2021 09:07:24

LTE Band 26(824MHz~849MHz), 1.4MHz (99%)

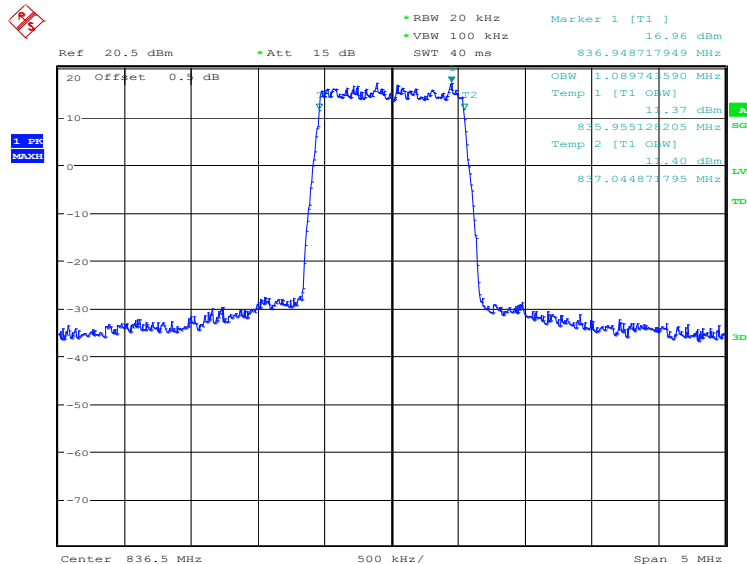
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
836.5	QPSK	16QAM
	1089.74	1089.74

LTE Band 26(824MHz~849MHz), 1.4MHz Bandwidth, QPSK (99% BW)



Date: 11.JUN.2021 08:55:10

LTE Band 26(824MHz~849MHz), 1.4MHz Bandwidth, 16QAM (99% BW)

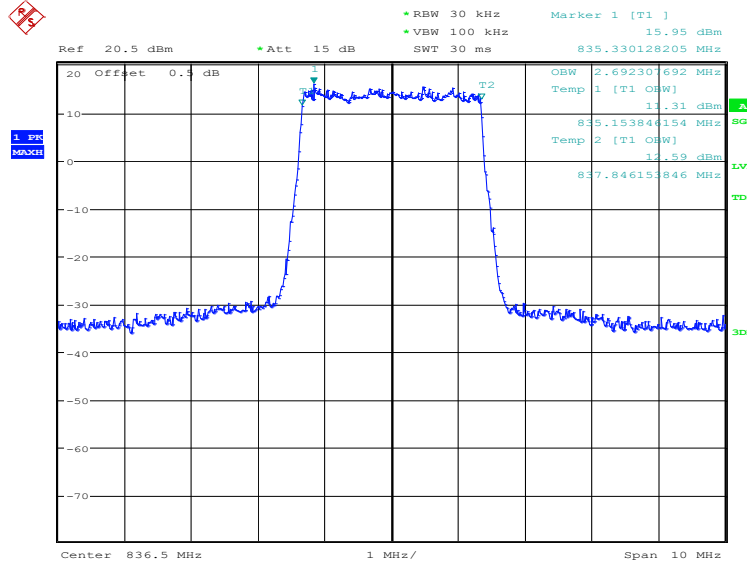


Date: 11.JUN.2021 08:55:50

LTE Band 26(824MHz~849MHz), 3MHz (99%)

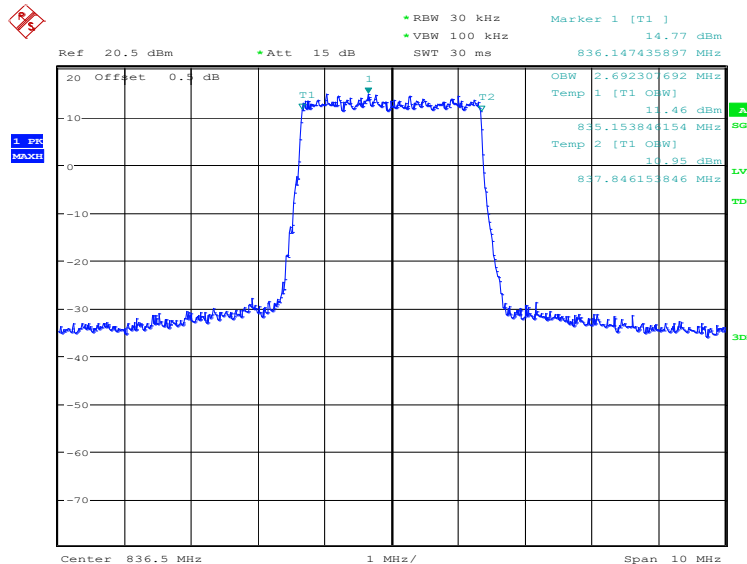
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
836.5	QPSK	16QAM
	2692.31	2692.31

LTE Band 26(824MHz~849MHz), 3MHz Bandwidth, QPSK (99% BW)



Date: 11.JUN.2021 08:56:32

LTE Band 26(824MHz~849MHz), 3MHz Bandwidth, 16QAM (99% BW)

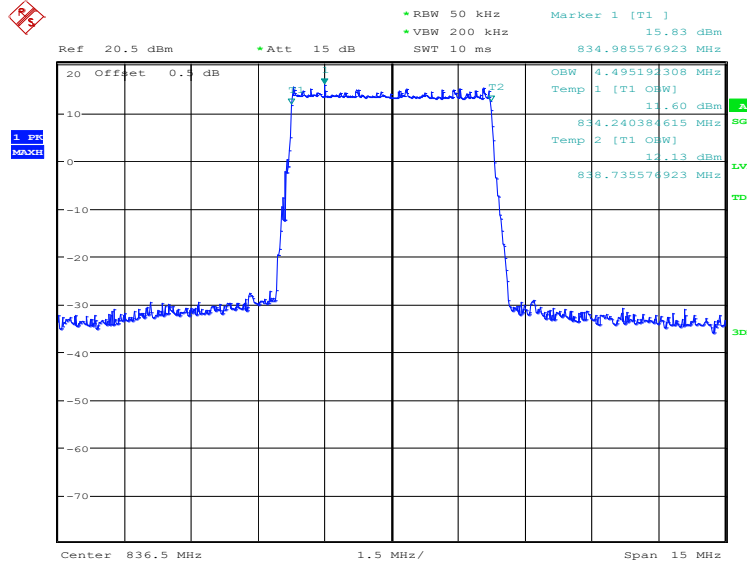


Date: 11.JUN.2021 08:57:12

LTE Band 26(824MHz~849MHz), 5MHz (99%)

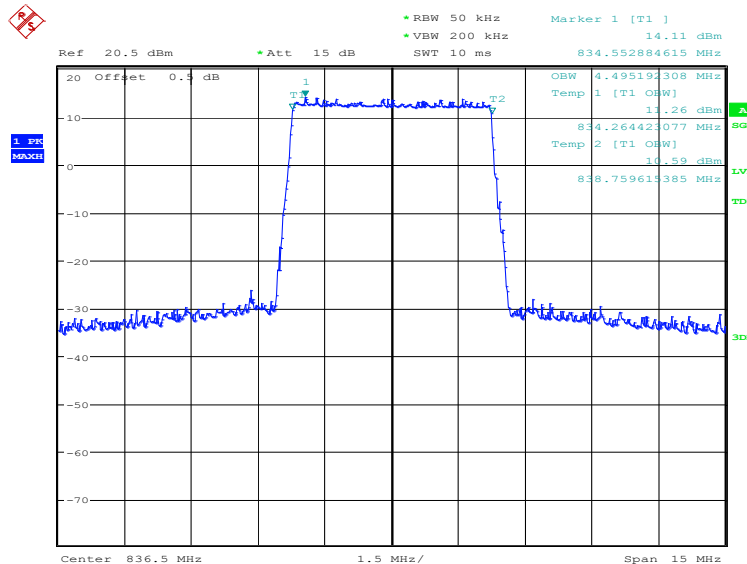
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
836.5	QPSK	16QAM
	4495.19	4495.19

LTE Band 26(824MHz~849MHz), 5MHz Bandwidth, QPSK (99% BW)



Date: 11.JUN.2021 08:57:54

LTE Band 26(824MHz~849MHz), 5MHz Bandwidth, 16QAM (99% BW)

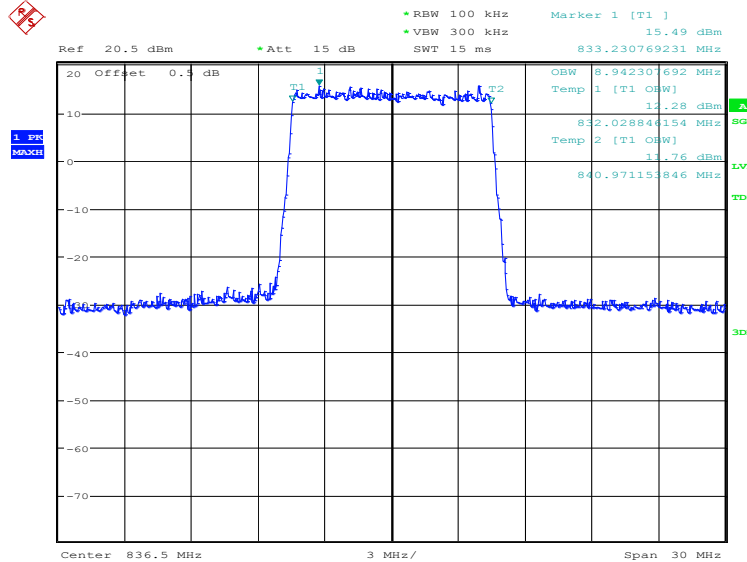


Date: 11.JUN.2021 08:58:34

LTE Band 26(824MHz~849MHz), 10MHz (99%)

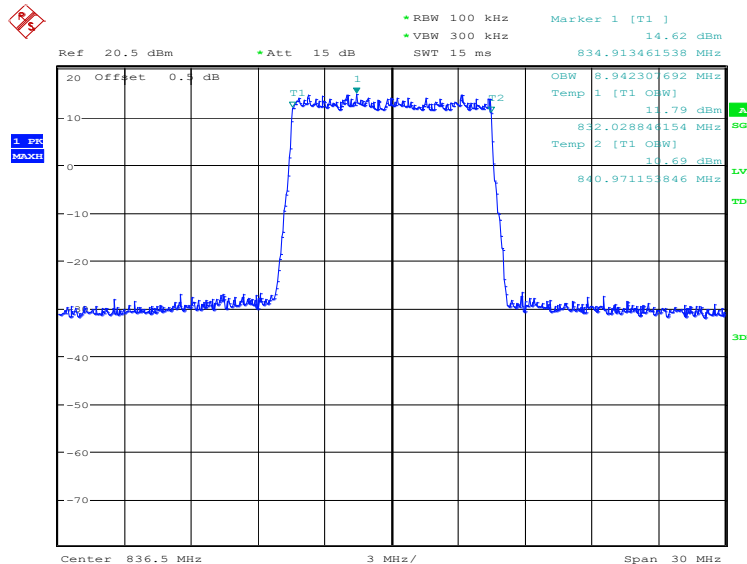
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
836.5	QPSK	16QAM
	8942.31	8942.31

LTE Band 26(824MHz~849MHz), 10MHz Bandwidth, QPSK (99% BW)



Date: 11.JUN.2021 08:59:16

LTE Band 26(824MHz~849MHz), 10MHz Bandwidth, 16QAM (99% BW)

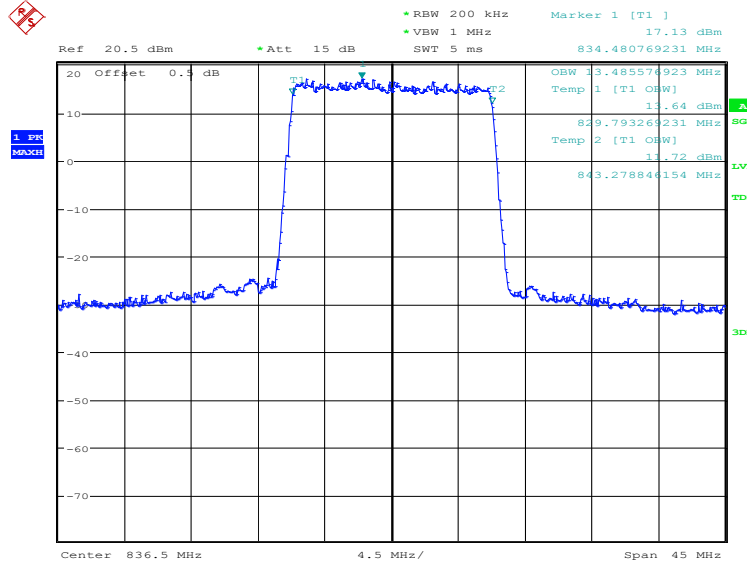


Date: 11.JUN.2021 08:59:55

LTE Band 26(824MHz~849MHz), 15MHz (99%)

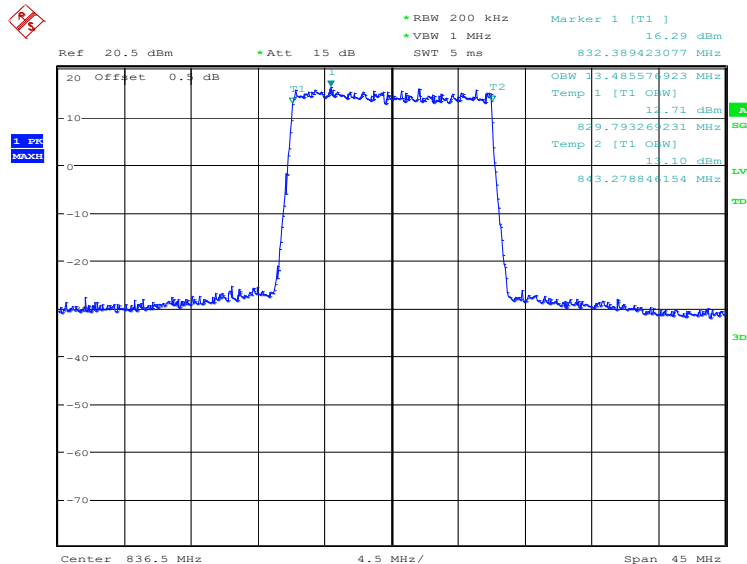
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
836.5	QPSK	16QAM
	13485.58	13485.58

LTE Band 26(824MHz~849MHz), 15MHz Bandwidth, QPSK (99% BW)



Date: 11.JUN.2021 09:00:37

LTE Band 26(824MHz~849MHz), 15MHz Bandwidth, 16QAM (99% BW)



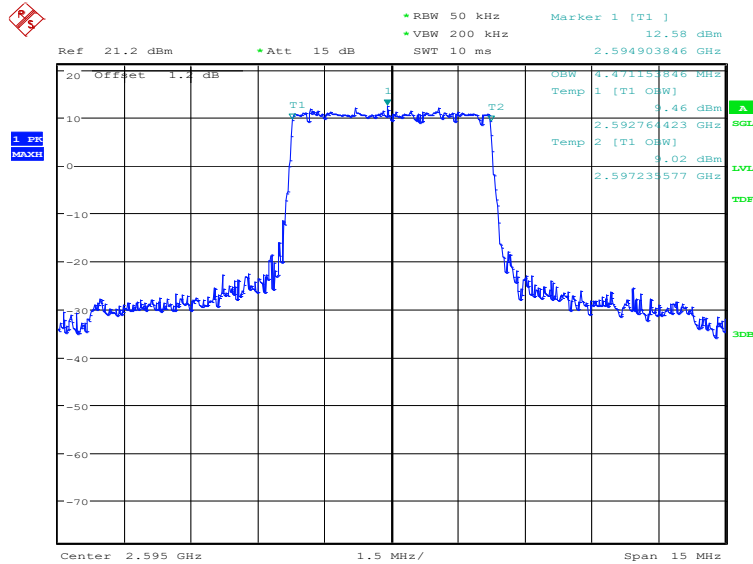
Date: 11.JUN.2021 09:01:17

LTE Band 38-ANT1

LTE Band 38, 5MHz (99%)

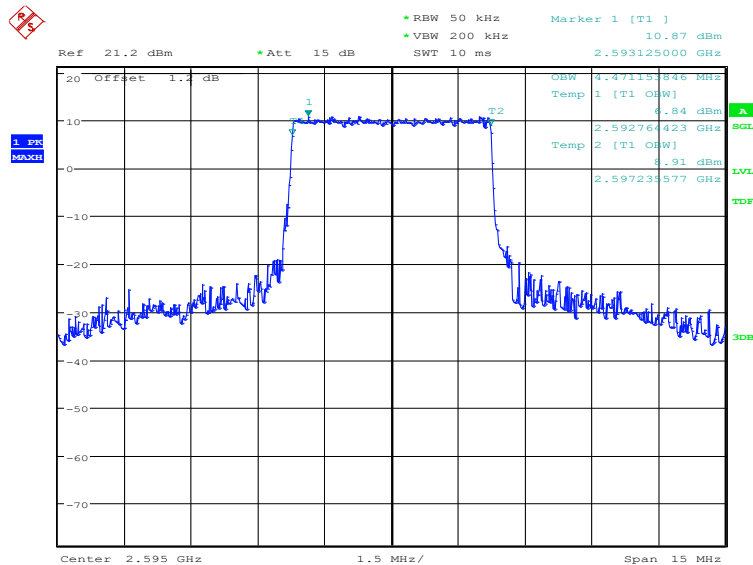
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2595.0	QPSK	16QAM
	4471.15	4471.15

LTE Band 38, 5MHz Bandwidth, QPSK (99% BW)



Date: 23.JUL.2021 09:46:29

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

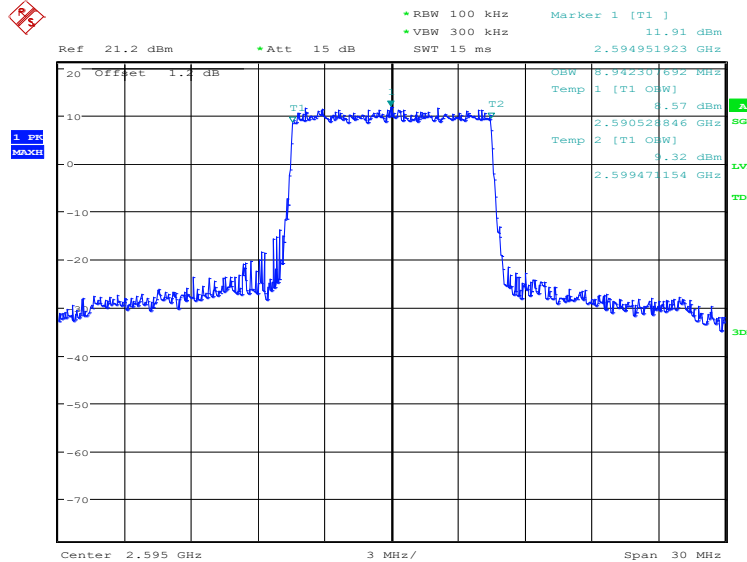


Date: 23.JUL.2021 09:47:09

LTE Band 38, 10MHz (99%)

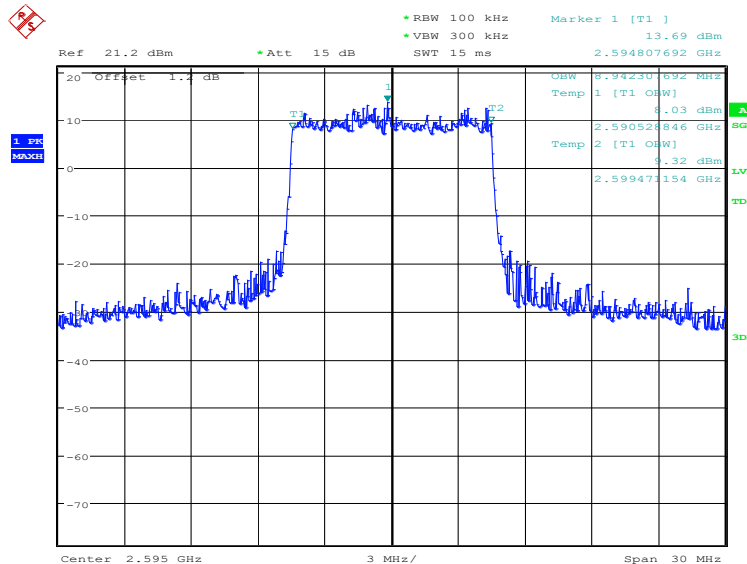
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2595.0	QPSK	16QAM
	8942.31	8942.31

LTE Band 38, 10MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 18:12:30

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

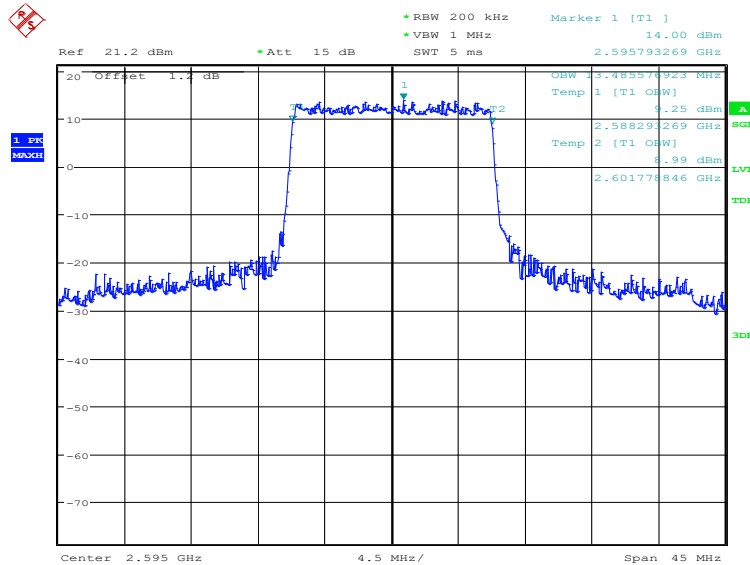


Date: 10.JUN.2021 18:13:09

LTE Band 38,15MHz (99%)

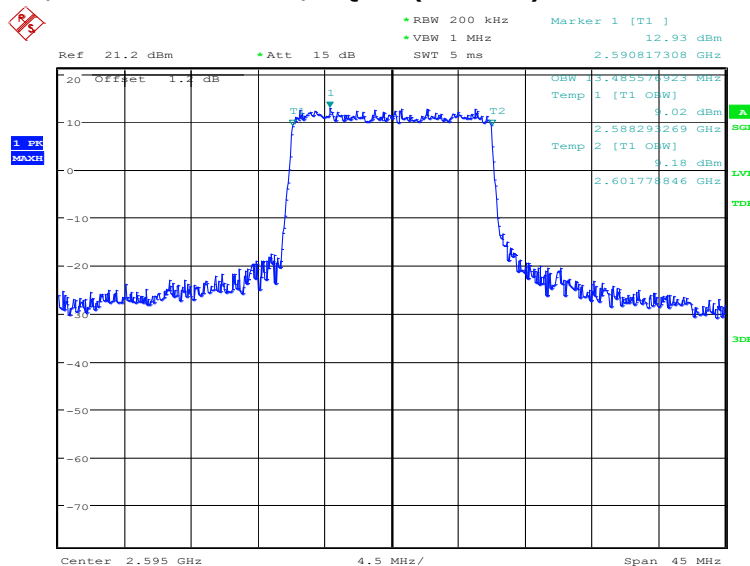
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2595.0	QPSK	16QAM
	13485.58	13485.58

LTE Band 38,15MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 18:13:50

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

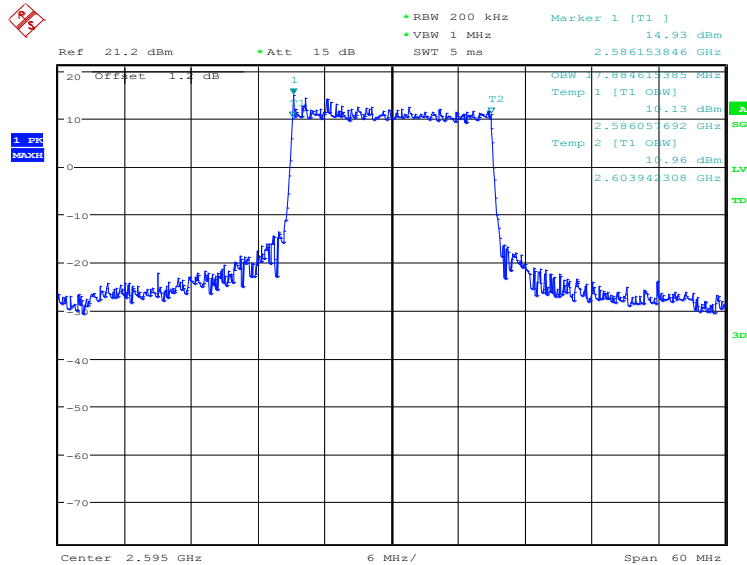


Date: 10.JUN.2021 18:14:29

LTE Band 38, 20MHz (99%)

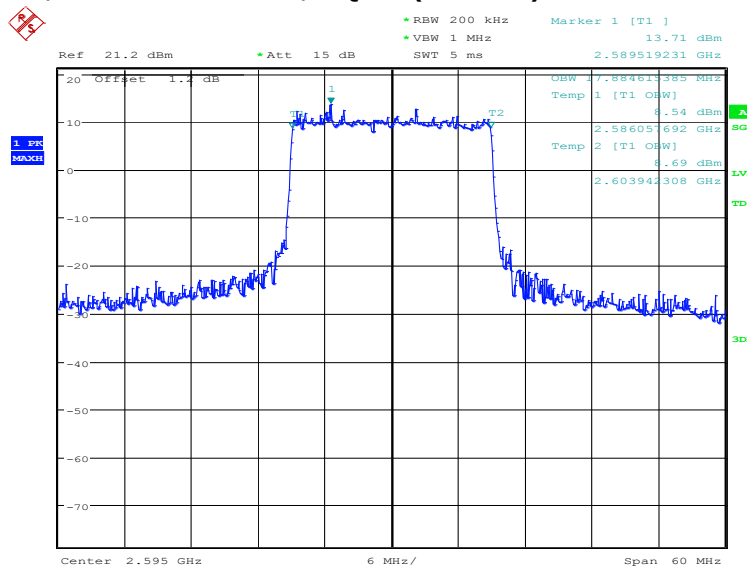
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2595.0	QPSK	16QAM
	17884.62	17884.62

LTE Band 38, 20MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 18:15:10

LTE Band 38, 20MHz Bandwidth,16QAM (99% BW)



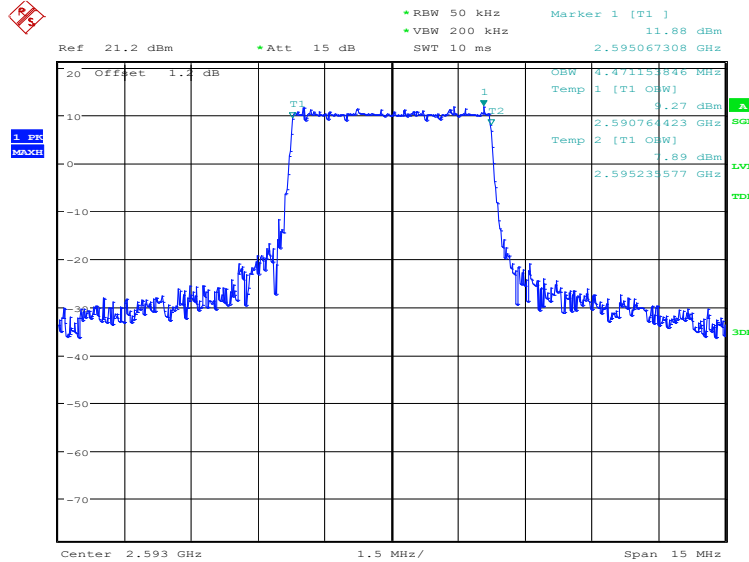
Date: 10.JUN.2021 18:15:49

LTE Band 41-ANT1

LTE Band 41, 5MHz (99%)

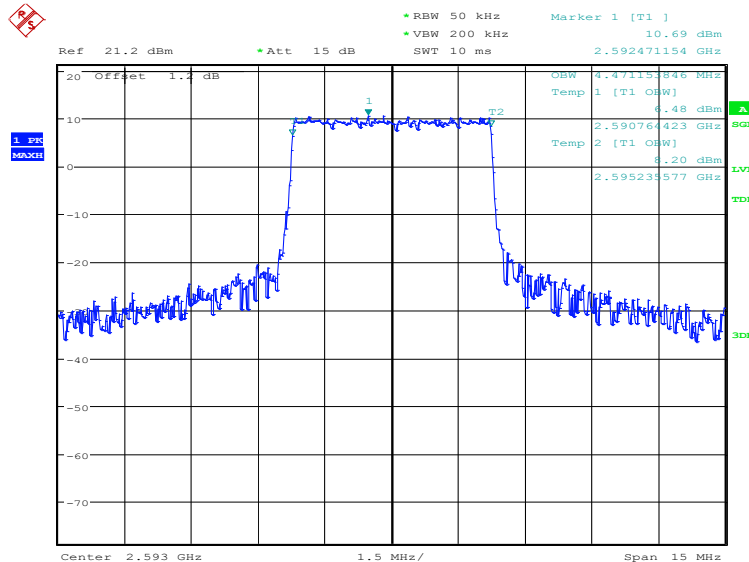
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2593.0	QPSK	16QAM
	4471.15	4471.15

LTE Band 41, 5MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 18:16:32

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

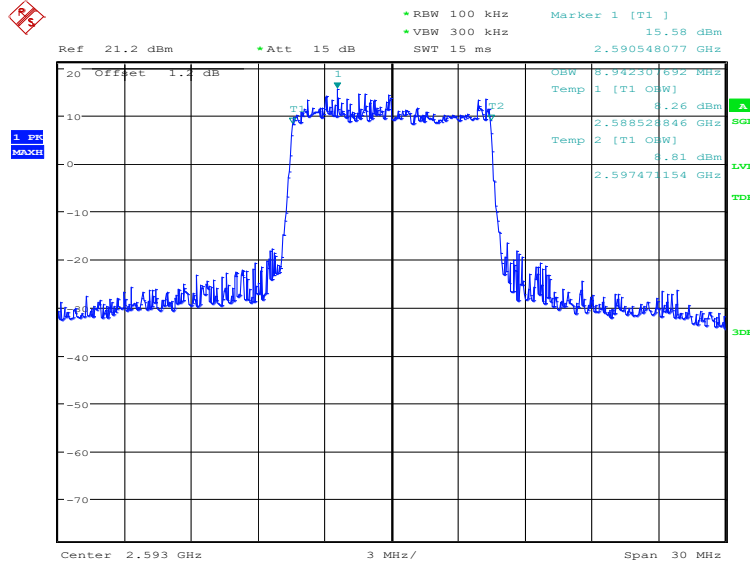


Date: 10.JUN.2021 18:17:11

LTE Band 41, 10MHz (99%)

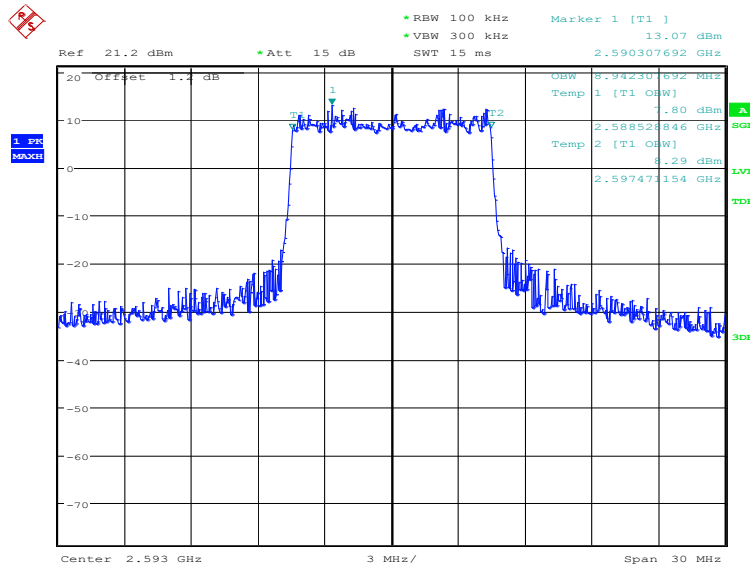
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2593.0	QPSK	16QAM
	8942.31	8942.31

LTE Band 41, 10MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 18:17:52

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

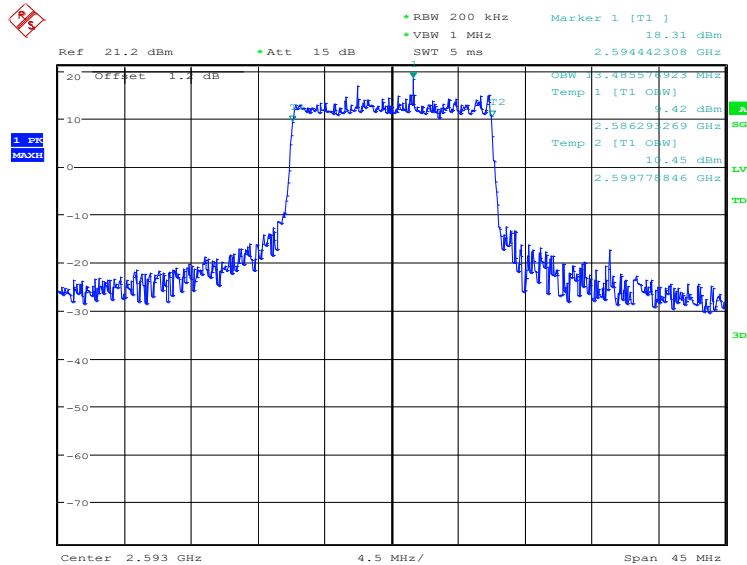


Date: 10.JUN.2021 18:18:31

LTE Band 41, 15MHz (99%)

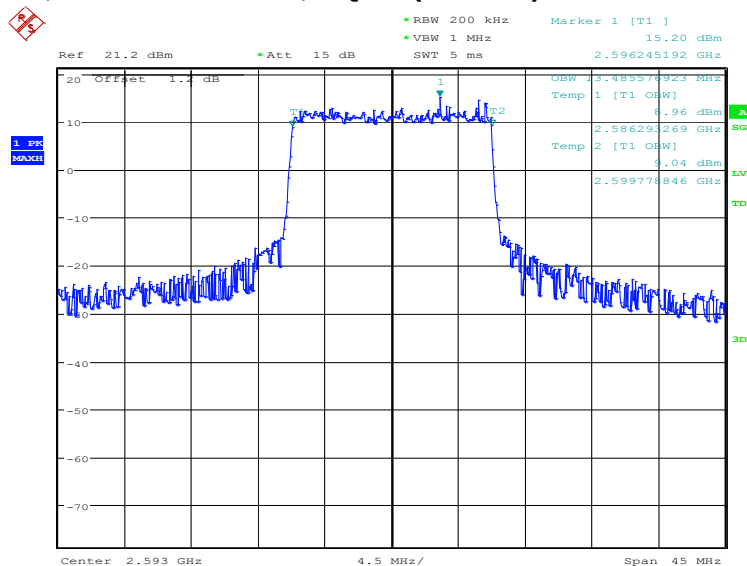
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2593.0	QPSK	16QAM
	13485.58	13485.58

LTE Band 41, 15MHz Bandwidth, QPSK (99% BW)



Date: 10.JUN.2021 18:19:12

LTE Band 41, 15MHz Bandwidth, 16QAM (99% BW)

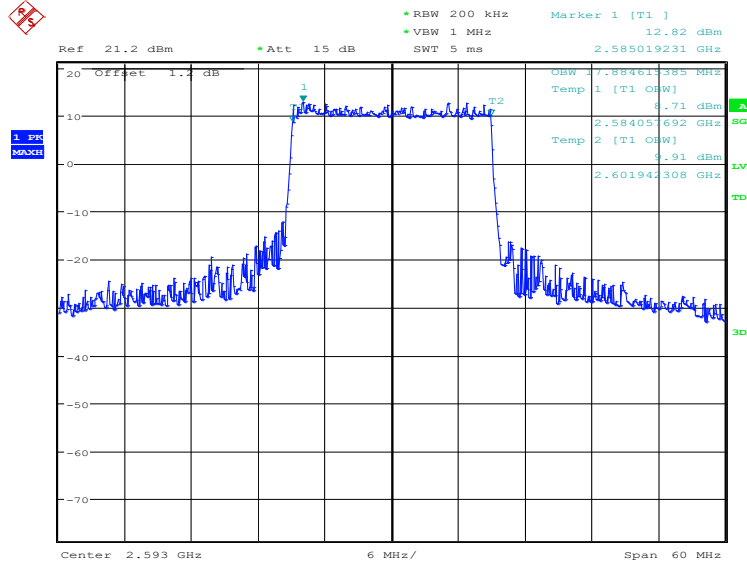


Date: 10.JUN.2021 18:19:51

LTE Band 41, 20MHz (99%)

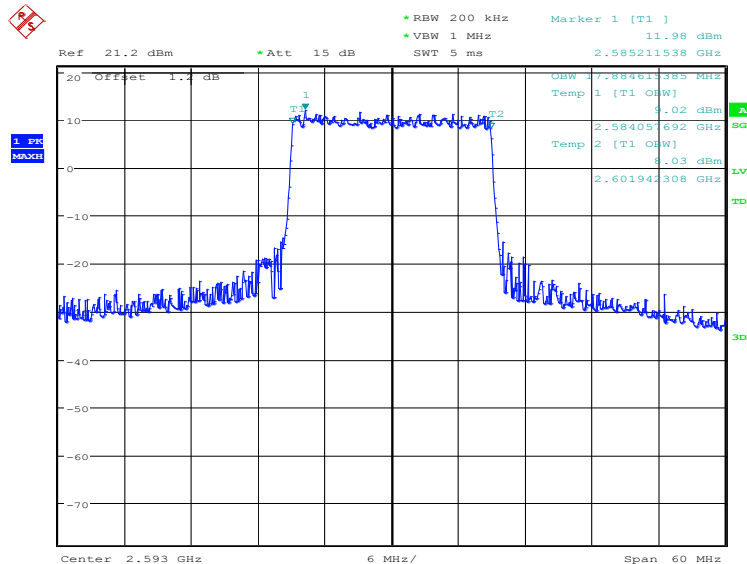
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
2593.0	QPSK	16QAM
	17884.62	17884.62

LTE Band 41, 20MHz Bandwidth, QPSK (99% BW)



Date: 7.JUL.2021 09:19:21

LTE Band 41, 20MHz Bandwidth,16QAM (99% BW)



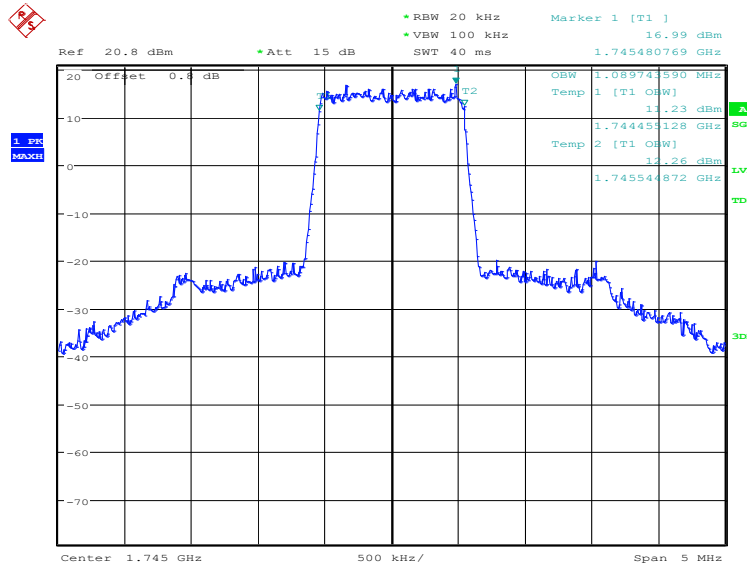
Date: 7.JUL.2021 09:20:01

LTE Band 66-ANT1

LTE Band 66, 1.4MHz (99%)

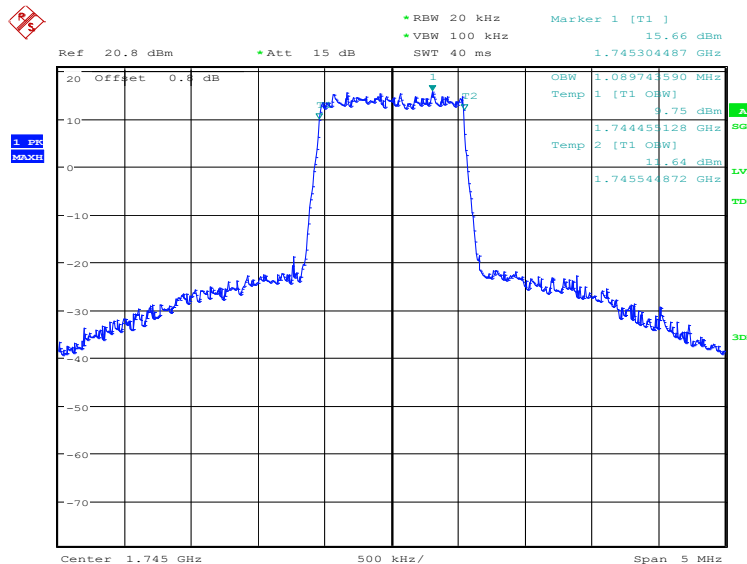
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	1089.74	1089.74

LTE Band 66, 1.4MHz Bandwidth, QPSK (99% BW)



Date: 16.JUN.2021 15:18:41

LTE Band 66, 1.4MHz Bandwidth, 16QAM (99% BW)

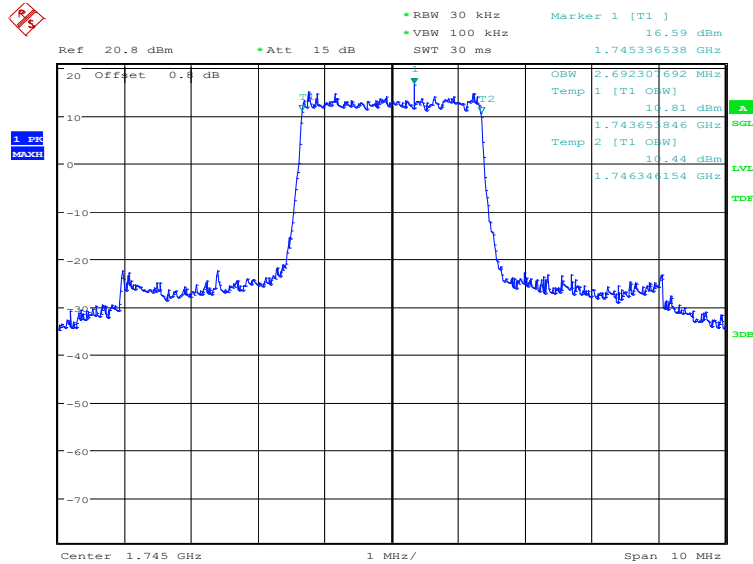


Date: 16.JUN.2021 15:19:20

LTE Band 66, 3MHz (99%)

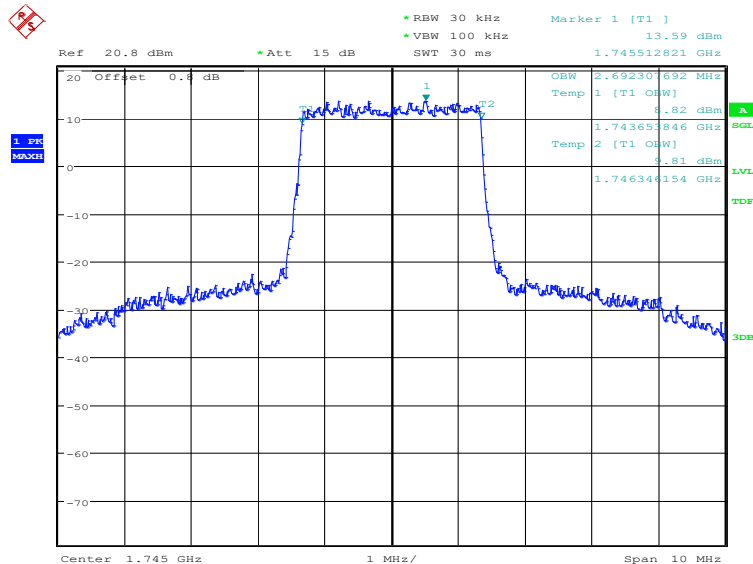
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	2692.31	2692.31

LTE Band 66, 3MHz Bandwidth, QPSK (99% BW)



Date: 16.JUN.2021 15:20:01

LTE Band 66, 3MHz Bandwidth, 16QAM (99% BW)

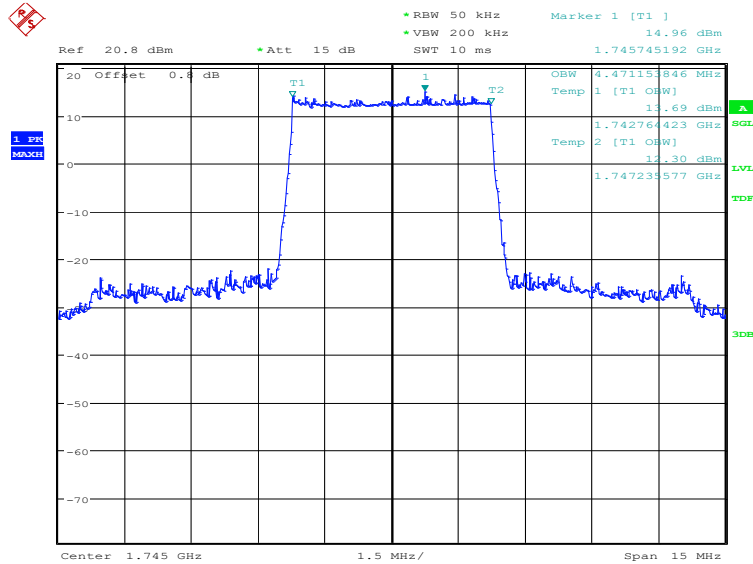


Date: 16.JUN.2021 15:20:41

LTE Band 66, 5MHz (99%)

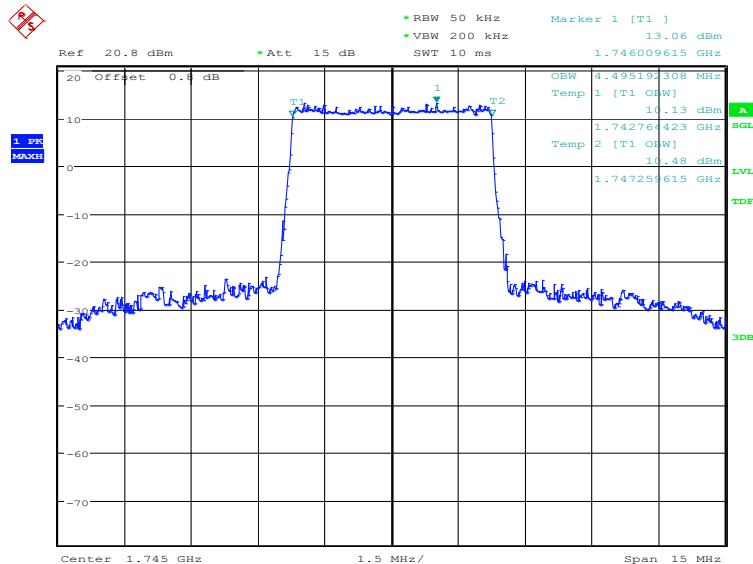
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	4471.15	4495.19

LTE Band 66, 5MHz Bandwidth, QPSK (99% BW)



Date: 16.JUN.2021 15:21:22

LTE Band 66, 5MHz Bandwidth, 16QAM (99% BW)

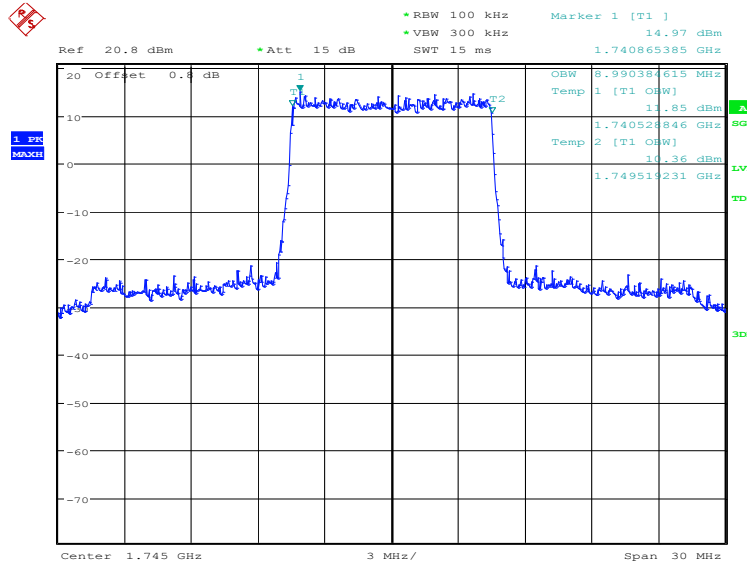


Date: 16.JUN.2021 15:22:01

LTE Band 66, 10MHz (99%)

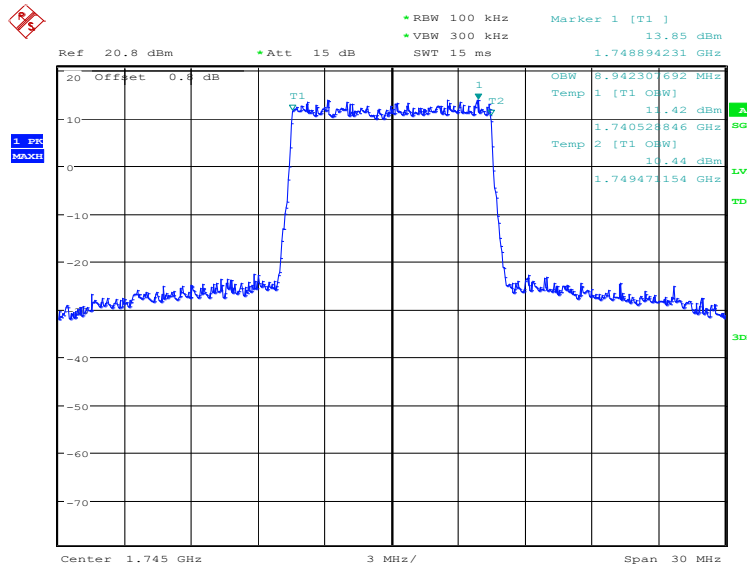
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	8990.38	8942.31

LTE Band 66, 10MHz Bandwidth, QPSK (99% BW)



Date: 16.JUN.2021 15:22:43

LTE Band 66, 10MHz Bandwidth, 16QAM (99% BW)

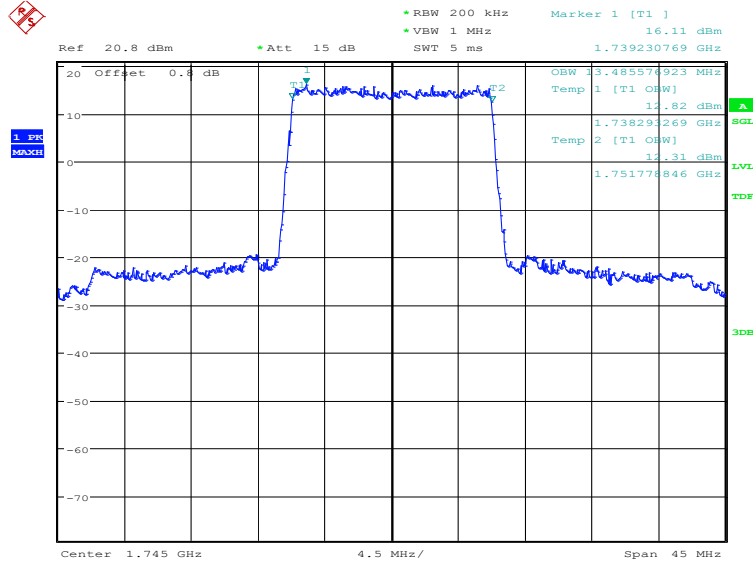


Date: 16.JUN.2021 15:23:22

LTE Band 66, 15MHz (99%)

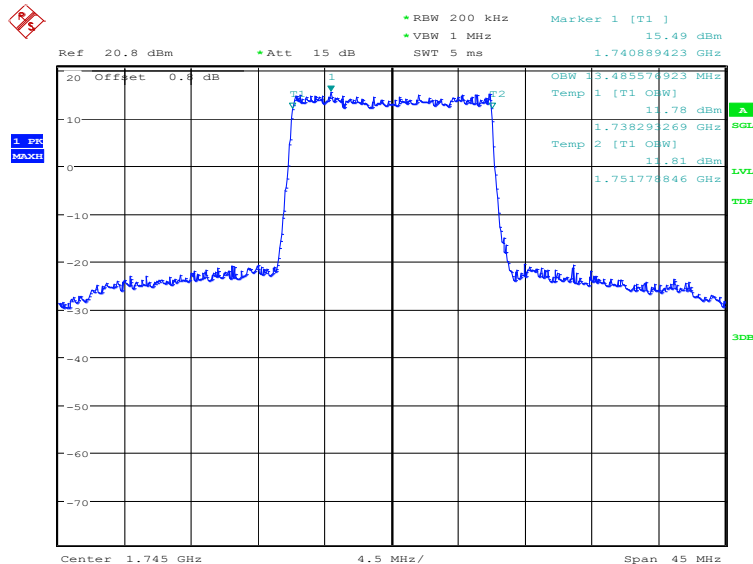
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	13485.58	13485.58

LTE Band 66, 15MHz Bandwidth, QPSK (99% BW)



Date: 16.JUN.2021 15:24:03

LTE Band 66, 15MHz Bandwidth, 16QAM (99% BW)

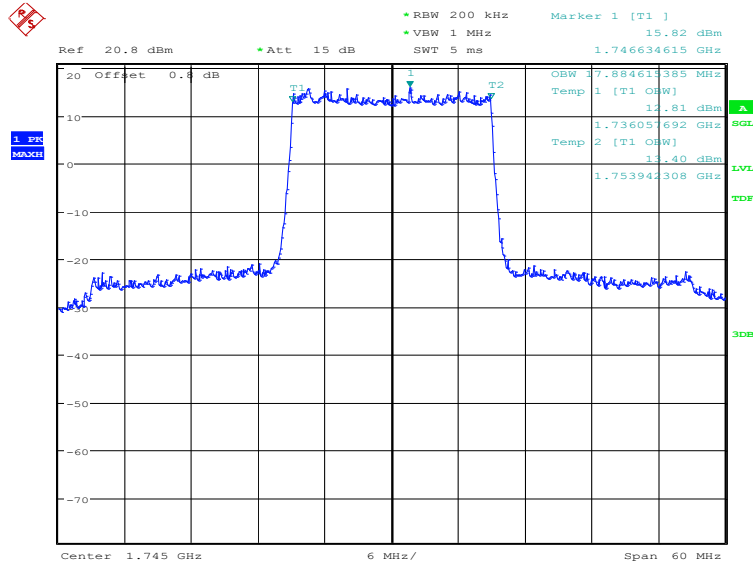


Date: 16.JUN.2021 15:24:43

LTE Band 66, 20MHz (99%)

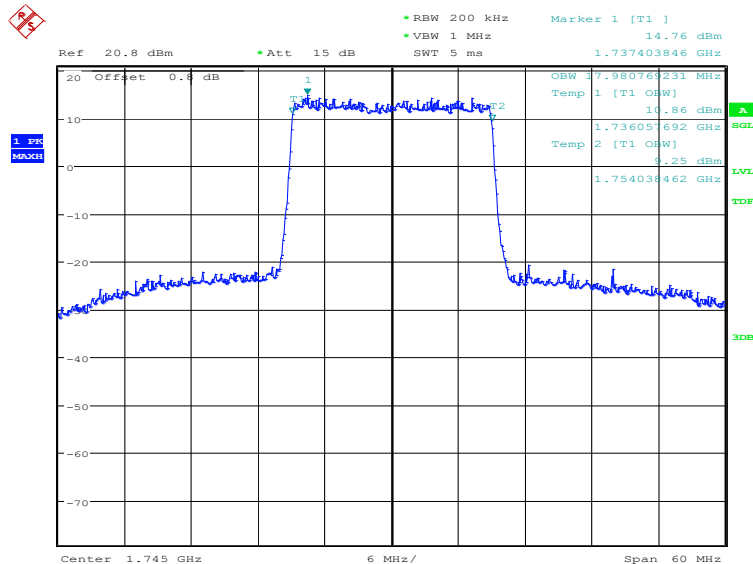
Frequency(MHz)	Occupied Bandwidth (99%)(kHz)	
1745.0	QPSK	16QAM
	17884.62	17980.77

LTE Band 66, 20MHz Bandwidth, QPSK (99% BW)



Date: 16.JUN.2021 15:25:24

LTE Band 66, 20MHz Bandwidth, 16QAM (99% BW)



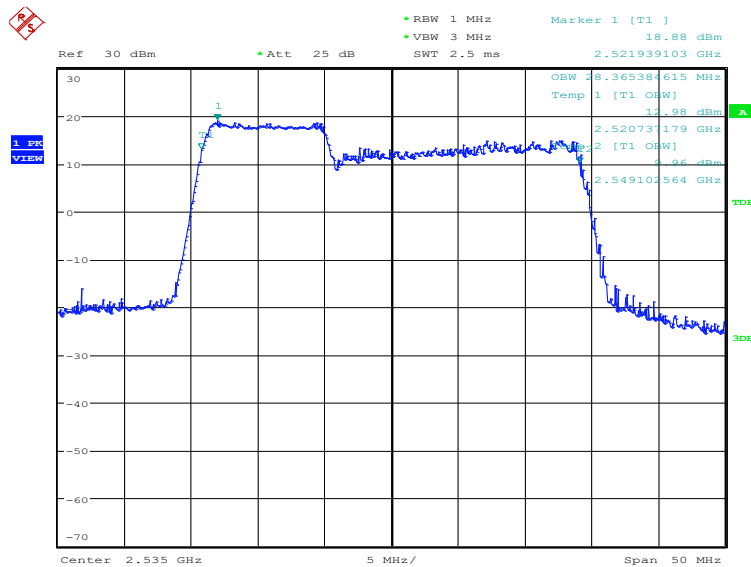
Date: 16.JUN.2021 15:26:03

LTE CA Band 7-ANT3

LTE CA Band 7 , 10MHz+20MHz (99%)

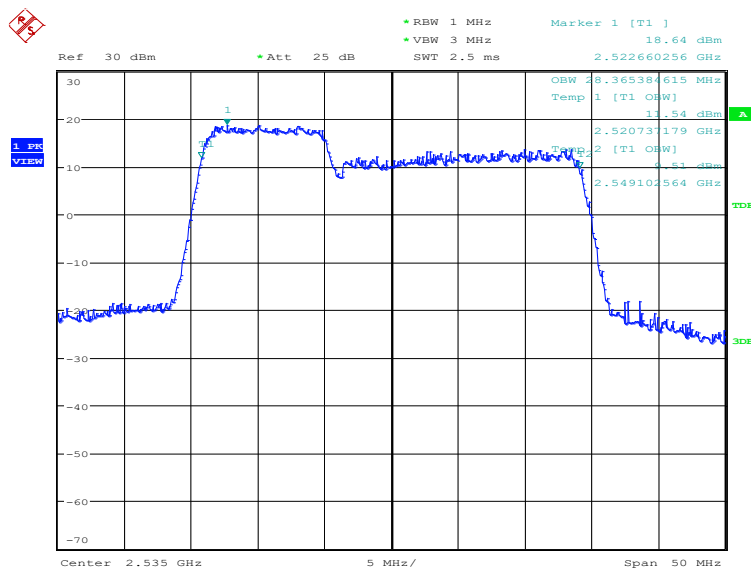
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2535.0	QPSK	16QAM
	28365.38	28365.38

LTE CA Band 7 , 10MHz+20MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 14:06:35

LTE CA Band 7 , 10MHz+20MHz Bandwidth,16QAM (99% BW)

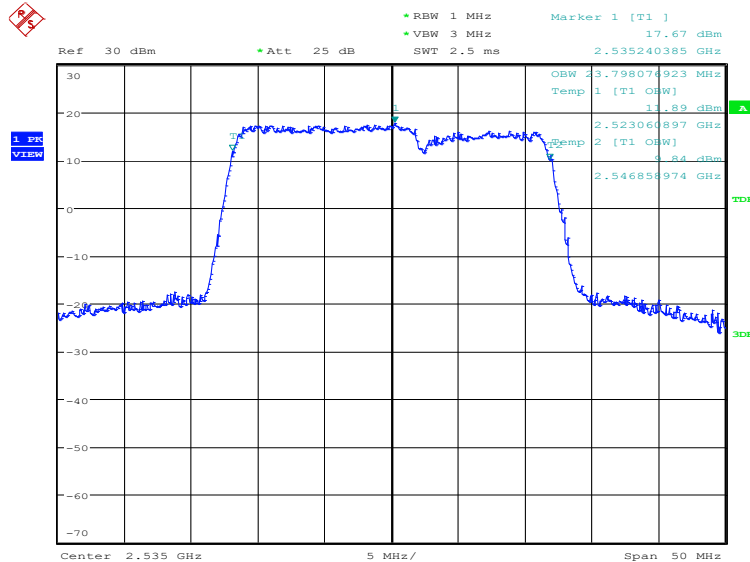


Date: 19.JUN.2021 14:07:57

LTE CA Band 7 , 15MHz+10MHz (99%)

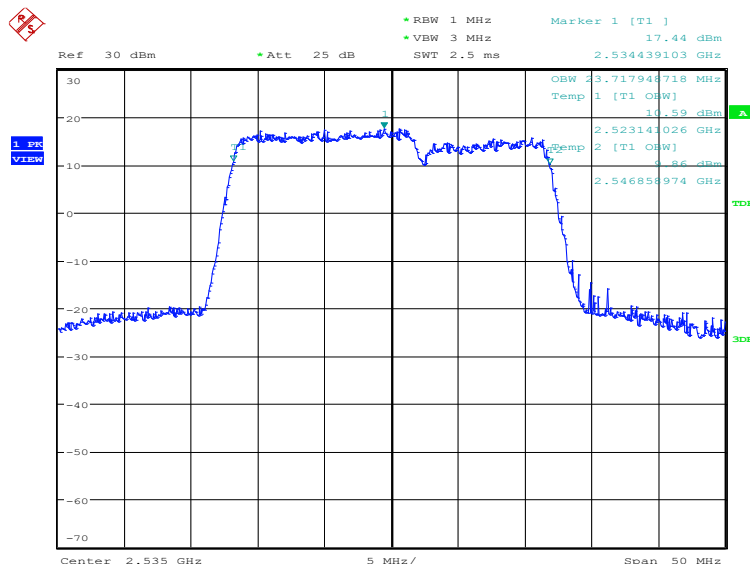
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2535.0	QPSK	16QAM
	23798.08	23717.95

LTE CA Band 7 , 15MHz+10MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 14:19:10

LTE CA Band 7 , 15MHz+10MHz Bandwidth,16QAM (99% BW)

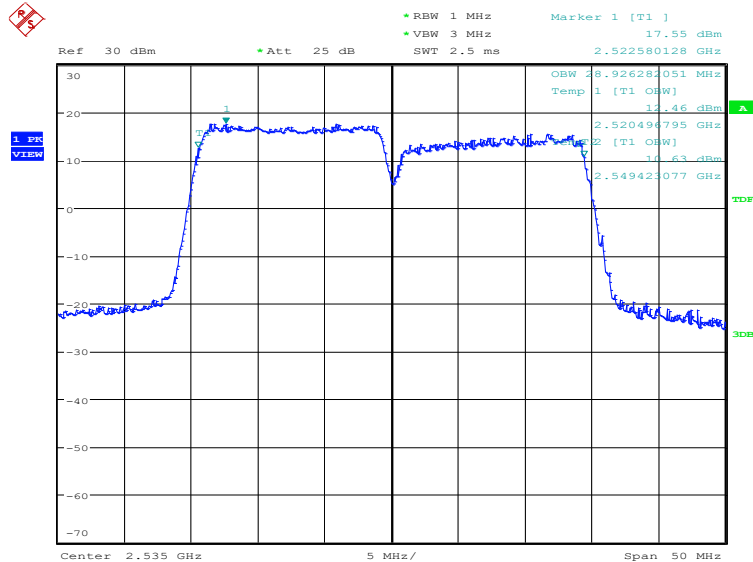


Date: 19.JUN.2021 14:20:34

LTE CA Band 7 , 15MHz+15MHz (99%)

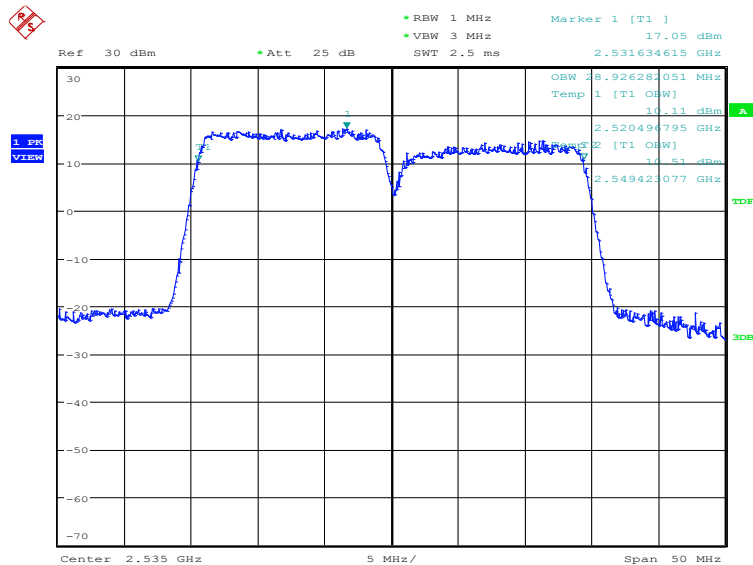
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2535.0	QPSK	16QAM
	28926.28	28926.28

LTE CA Band 7 , 15MHz+15MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 14:22:24

LTE CA Band 7 , 15MHz+15MHz Bandwidth,16QAM (99% BW)

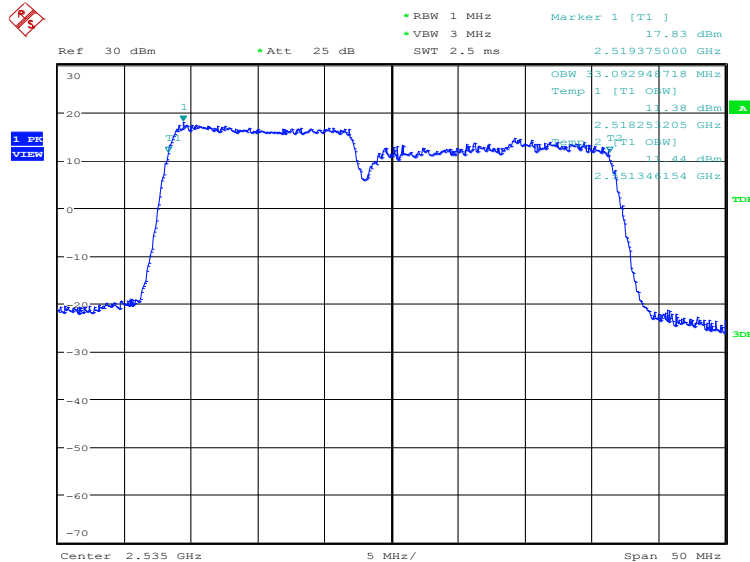


Date: 19.JUN.2021 14:23:57

LTE CA Band 7 , 15MHz+20MHz (99%)

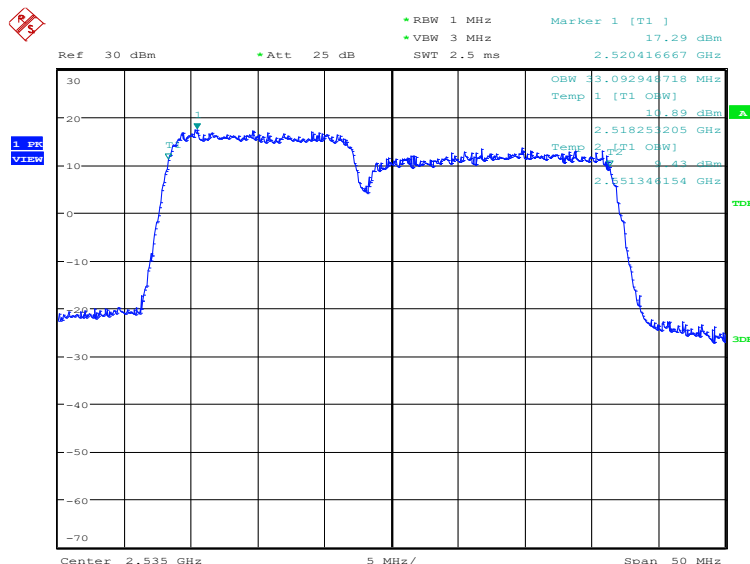
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2535.0	QPSK	16QAM
	33092.95	33092.95

LTE CA Band 7 , 15MHz+20MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 14:30:07

LTE CA Band 7 , 15MHz+20MHz Bandwidth,16QAM (99% BW)

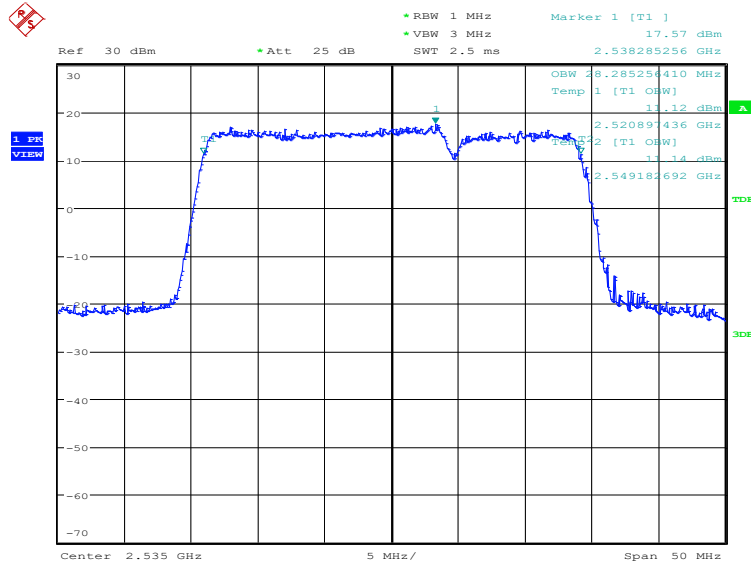


Date: 19.JUN.2021 14:31:12

LTE CA Band 7 , 20MHz+10MHz (99%)

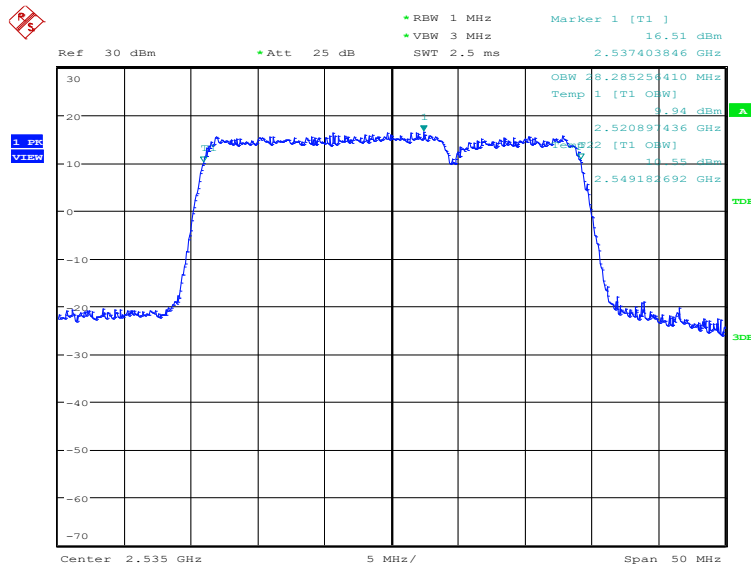
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2535.0	QPSK	16QAM
	28285.26	28285.26

LTE CA Band 7 , 20MHz+10MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 14:10:30

LTE CA Band 7 , 20MHz+10MHz Bandwidth,16QAM (99% BW)

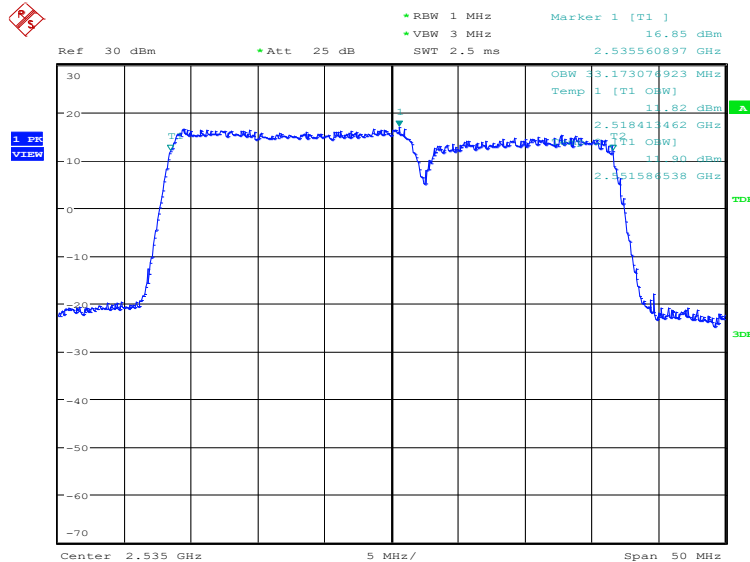


Date: 19.JUN.2021 14:12:36

LTE CA Band 7 , 20MHz+15MHz (99%)

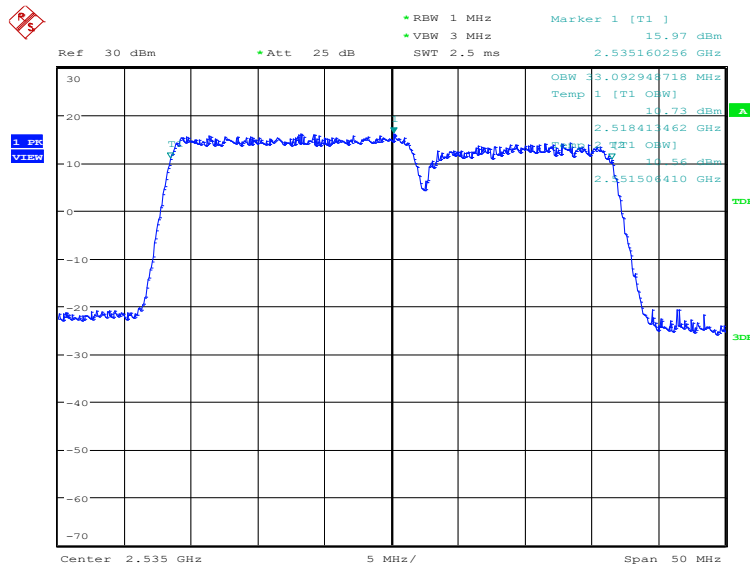
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2535.0	QPSK	16QAM
	33173.08	33092.95

LTE CA Band 7 , 20MHz+15MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 14:33:32

LTE CA Band 7 , 20MHz+15MHz Bandwidth, 16QAM (99% BW)

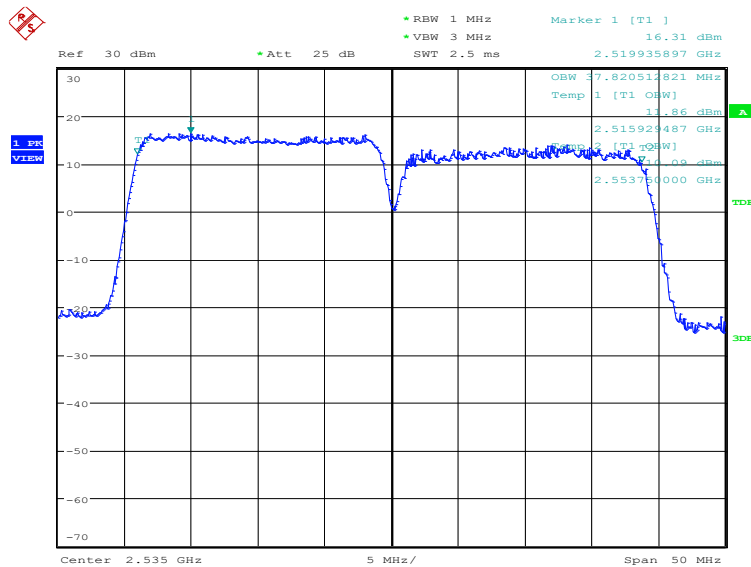


Date: 19.JUN.2021 14:35:15

LTE CA Band 7 , 20MHz+20MHz (99%)

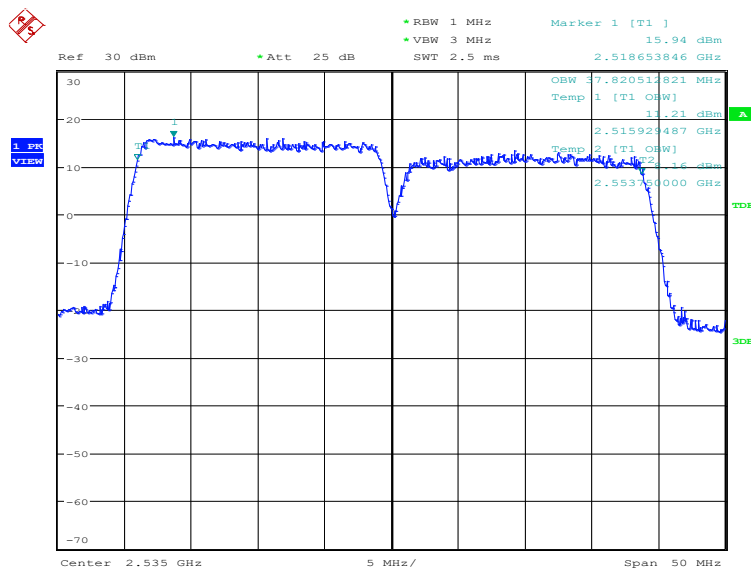
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2535.0	QPSK	16QAM
	37820.51	37820.51

LTE CA Band 7 , 20MHz+20MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 14:41:30

LTE CA Band 7 , 20MHz+20MHz Bandwidth,16QAM (99% BW)



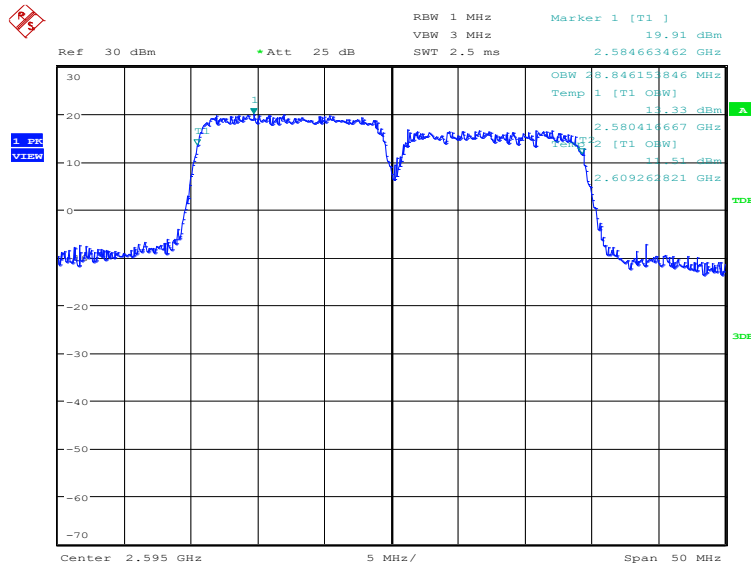
Date: 19.JUN.2021 14:42:34

LTE CA Band 38-ANT1

LTE CA Band 38 , 15MHz+15MHz (99%)

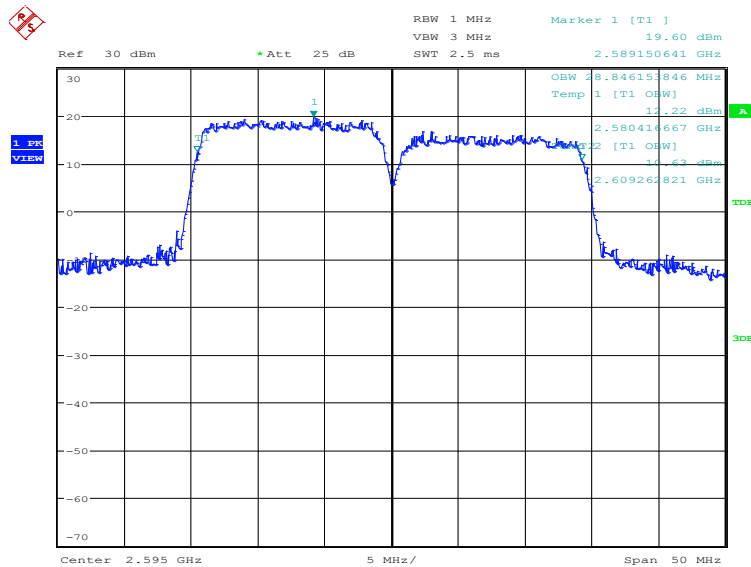
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2595.0	QPSK	16QAM
	28846.15	28846.15

LTE CA Band 38 , 15MHz+15MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 15:12:32

LTE CA Band 38 , 15MHz+15MHz Bandwidth,16QAM (99% BW)

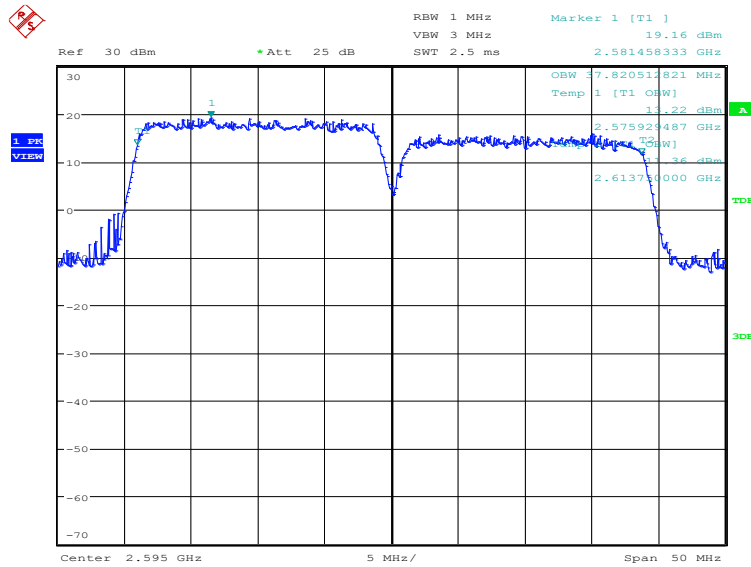


Date: 19.JUN.2021 15:13:46

LTE CA Band 38 , 20MHz+20MHz (99%)

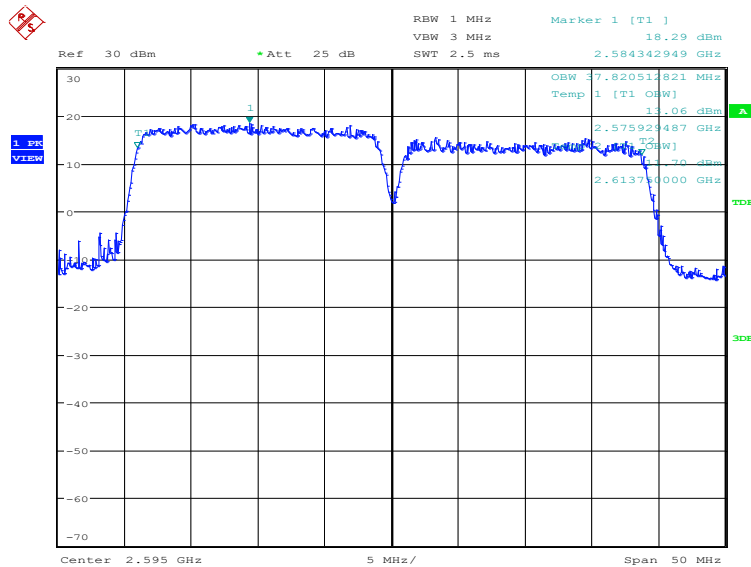
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2595.0	QPSK	16QAM
	37820.51	37820.51

LTE CA Band 38 , 20MHz+20MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 15:15:58

LTE CA Band 38 , 20MHz+20MHz Bandwidth,16QAM (99% BW)



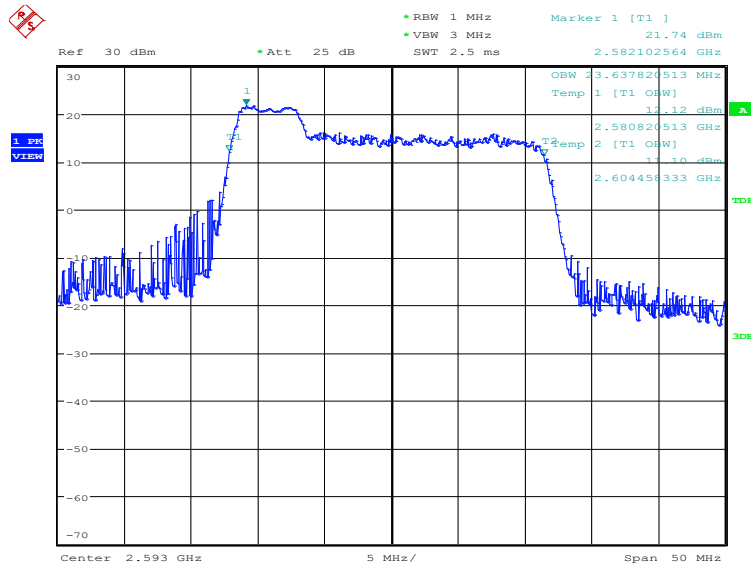
Date: 19.JUN.2021 15:20:21

LTE CA Band 41-ANT1

LTE CA Band 41 , 5MHz+20MHz (99%)

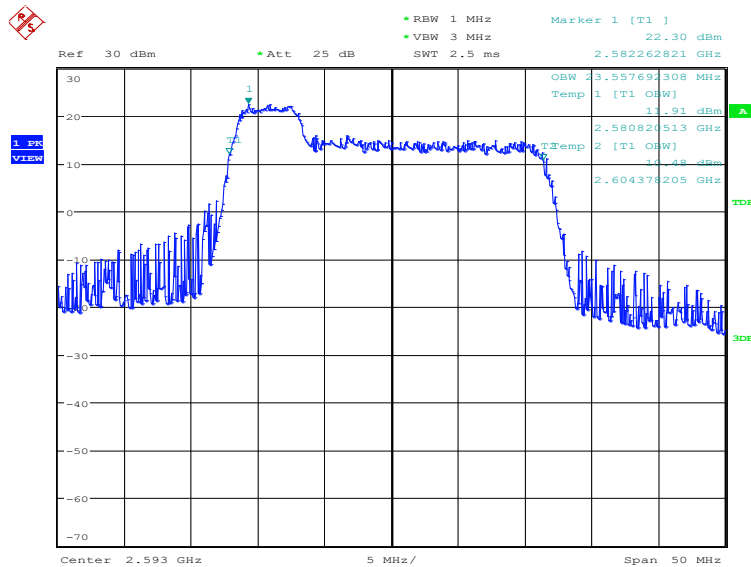
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2593.0	QPSK	16QAM
	23637.82	23557.69

LTE CA Band 41 , 5MHz+20MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 16:32:11

LTE CA Band 41 , 5MHz+20MHz Bandwidth,16QAM (99% BW)

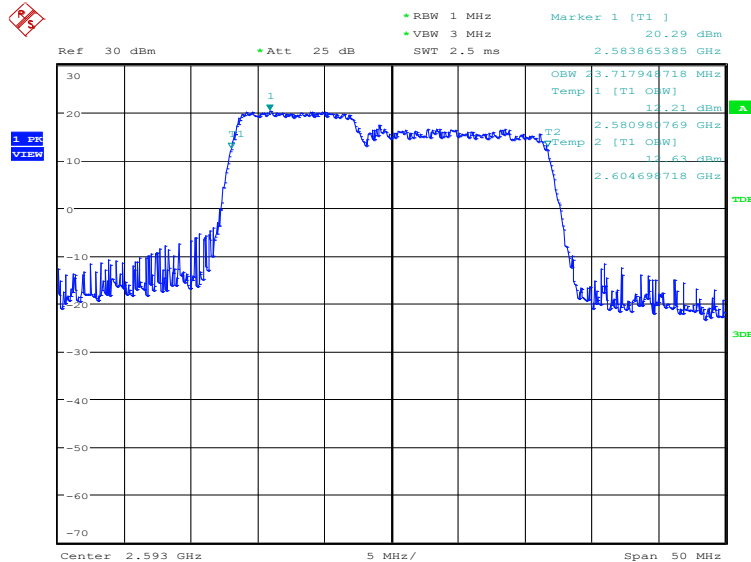


Date: 19.JUN.2021 16:33:39

LTE CA Band 41 , 10MHz+15MHz (99%)

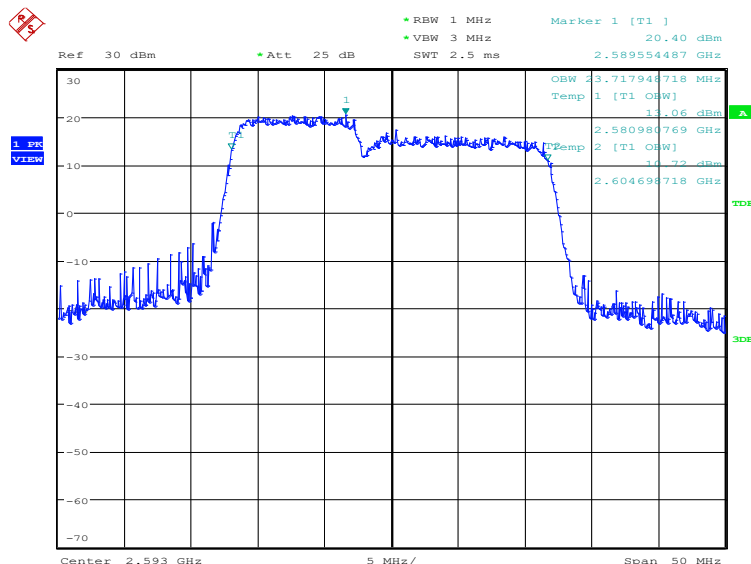
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2593.0	QPSK	16QAM
	23717.95	23717.95

LTE CA Band 41 , 10MHz+15MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 16:39:07

LTE CA Band 41 , 10MHz+15MHz Bandwidth,16QAM (99% BW)

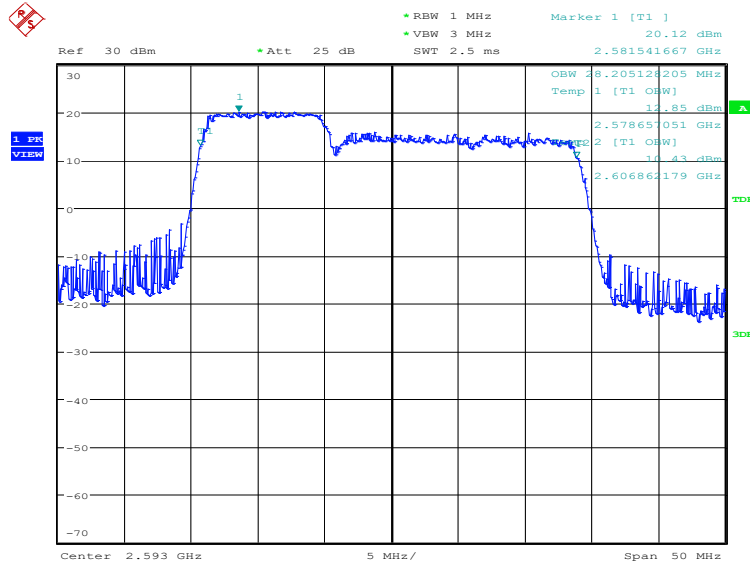


Date: 19.JUN.2021 16:40:15

LTE CA Band 41 , 10MHz+20MHz (99%)

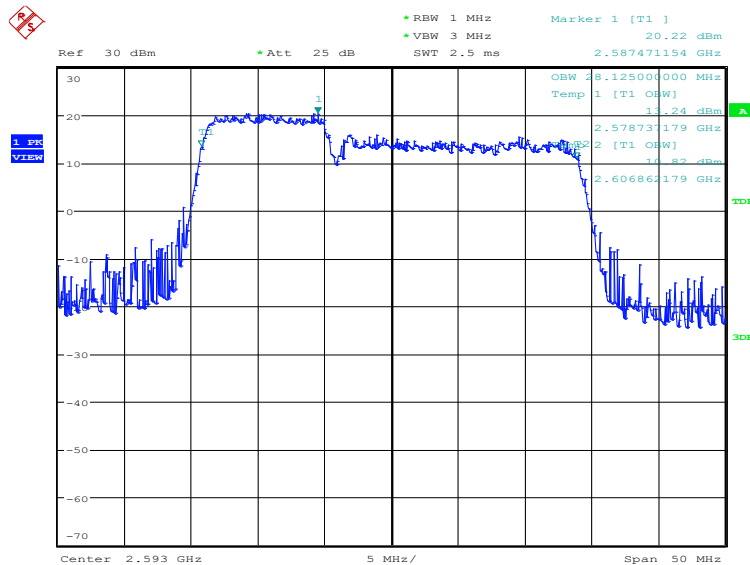
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2593.0	QPSK	16QAM
	28205.13	28125.00

LTE CA Band 41 , 10MHz+20MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 16:46:06

LTE CA Band 41 , 10MHz+20MHz Bandwidth,16QAM (99% BW)

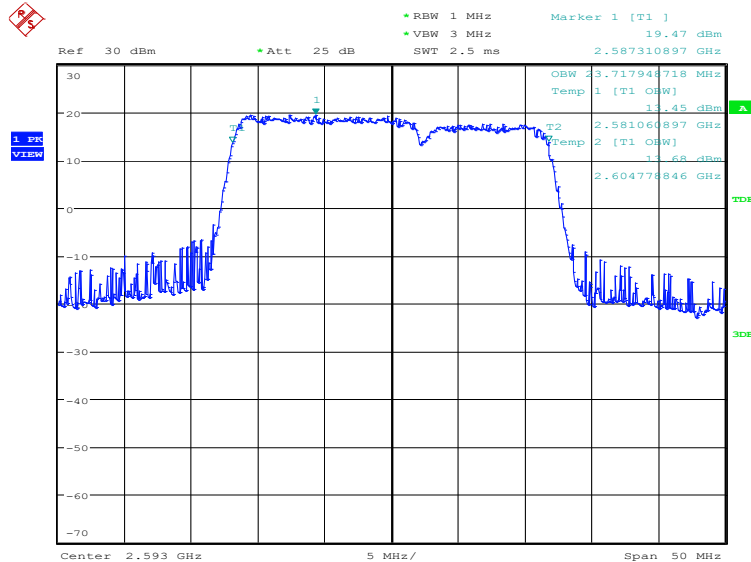


Date: 19.JUN.2021 16:47:29

LTE CA Band 41 , 15MHz+10MHz (99%)

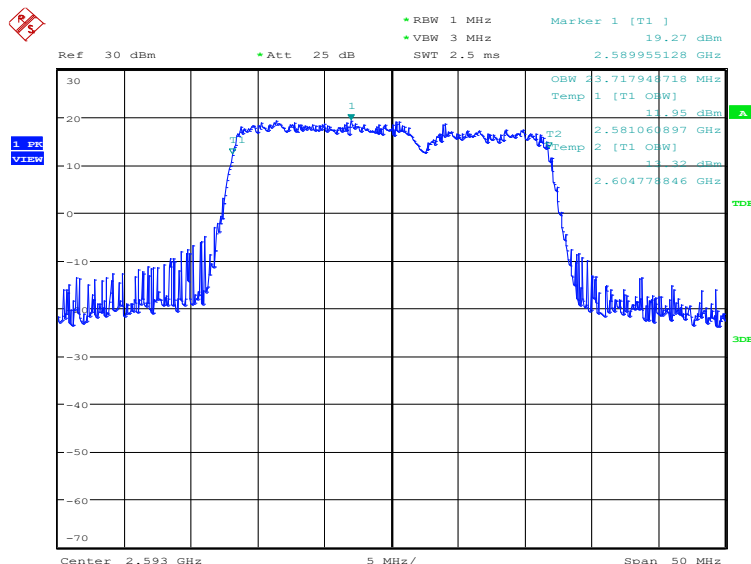
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2593.0	QPSK	16QAM
	23717.95	23717.95

LTE CA Band 41 , 15MHz+10MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 16:42:26

LTE CA Band 41 , 15MHz+10MHz Bandwidth,16QAM (99% BW)

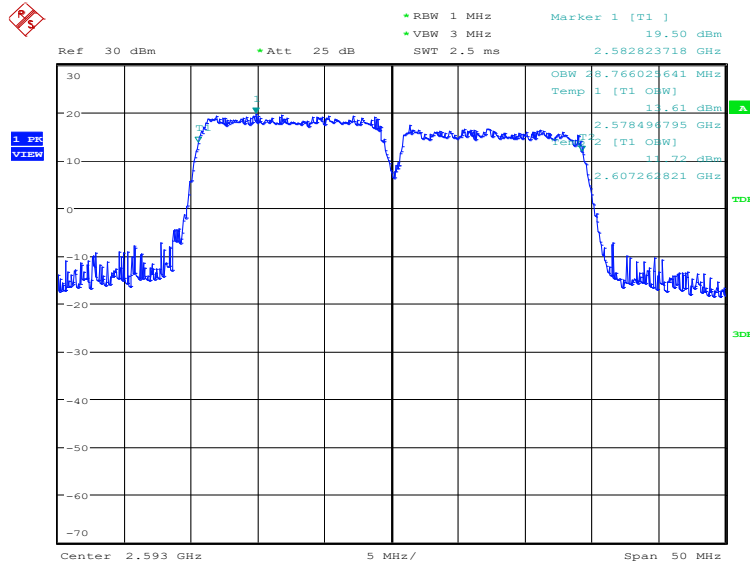


Date: 19.JUN.2021 16:43:40

LTE CA Band 41 , 15MHz+15MHz (99%)

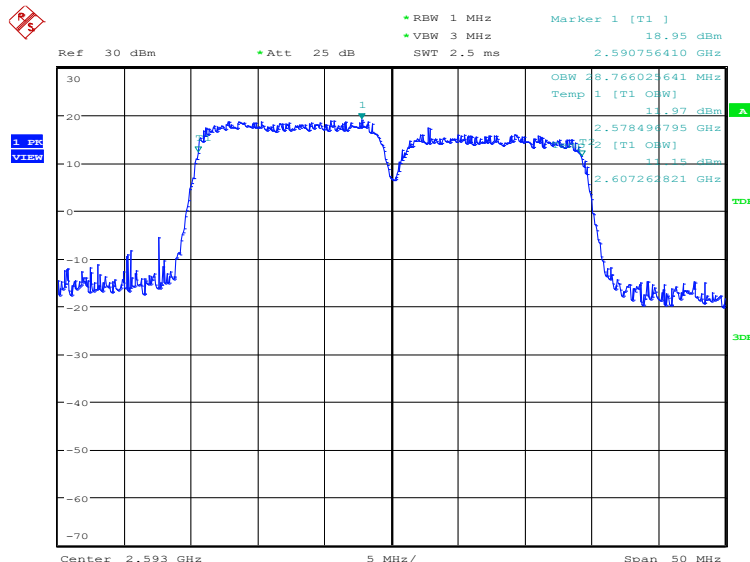
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2593.0	QPSK	16QAM
	28766.03	28766.03

LTE CA Band 41 , 15MHz+15MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 16:54:11

LTE CA Band 41 , 15MHz+15MHz Bandwidth,16QAM (99% BW)

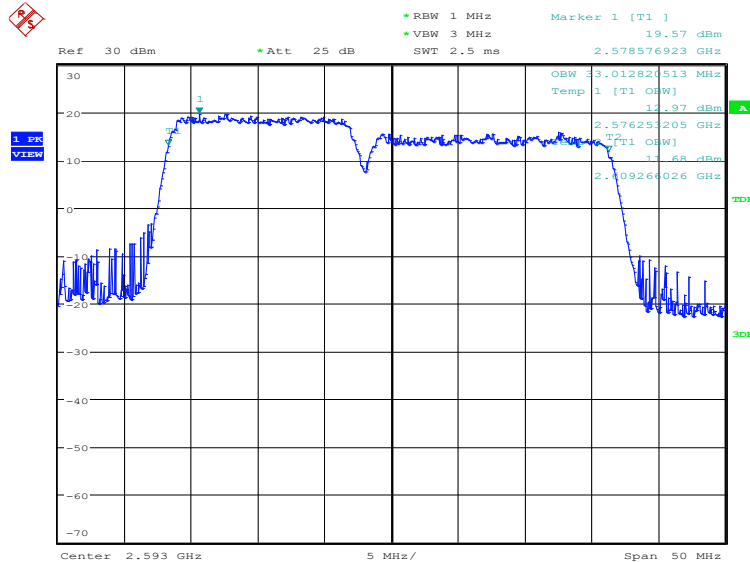


Date: 19.JUN.2021 16:55:19

LTE CA Band 41 , 15MHz+20MHz (99%)

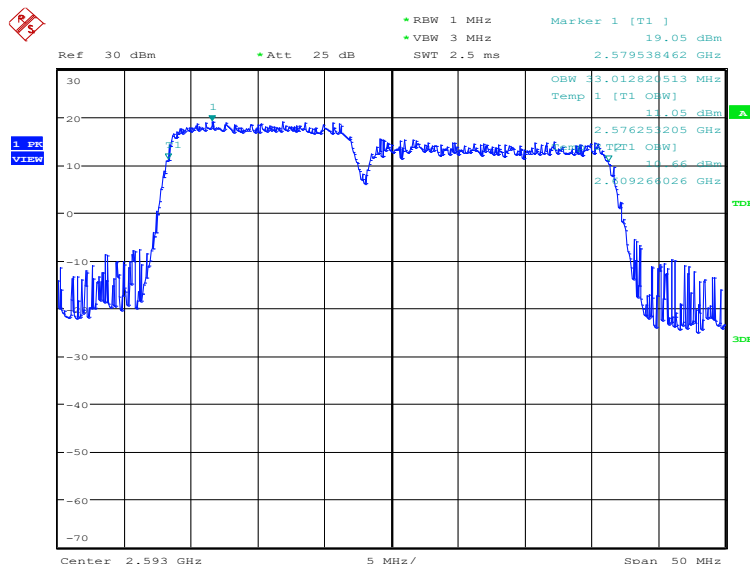
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2593.0	QPSK	16QAM
	33012.82	33012.82

LTE CA Band 41 , 15MHz+20MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 16:58:06

LTE CA Band 41 , 15MHz+20MHz Bandwidth,16QAM (99% BW)

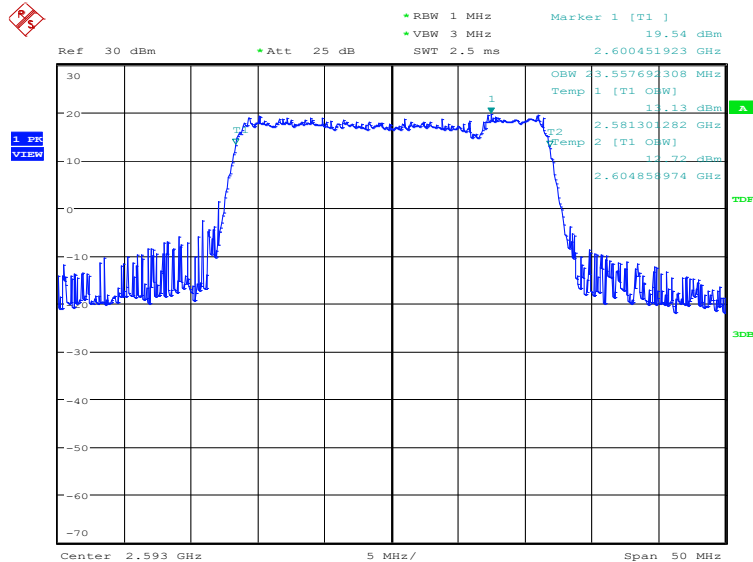


Date: 19.JUN.2021 16:59:22

LTE CA Band 41 , 20MHz+5MHz (99%)

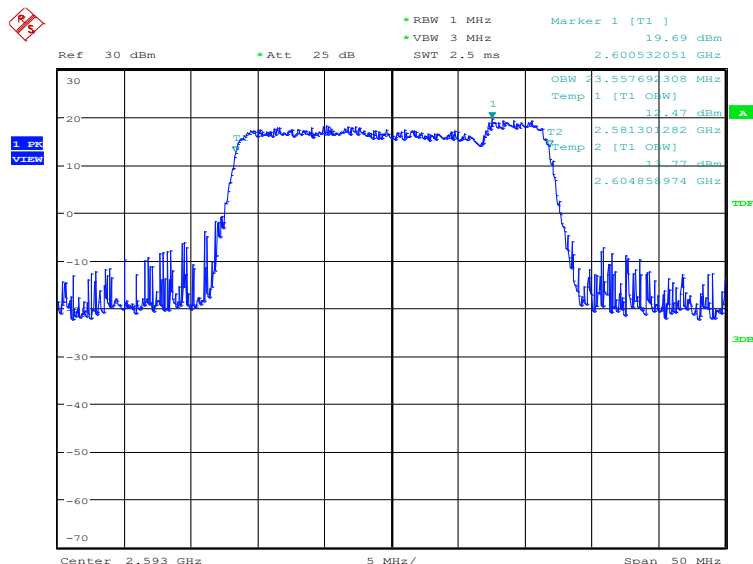
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2593.0	QPSK	16QAM
	23557.69	23557.69

LTE CA Band 41 , 20MHz+5MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 16:35:42

LTE CA Band 41 , 20MHz+5MHz Bandwidth,16QAM (99% BW)

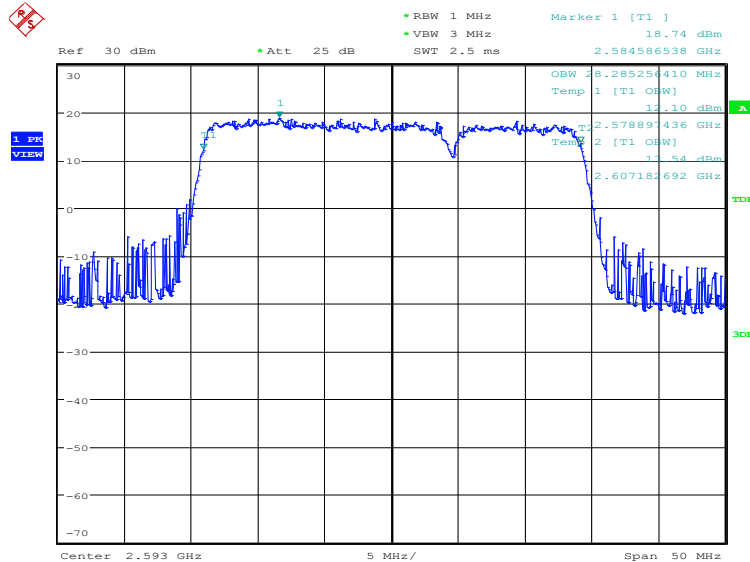


Date: 19.JUN.2021 16:36:59

LTE CA Band 41 , 20MHz+10MHz (99%)

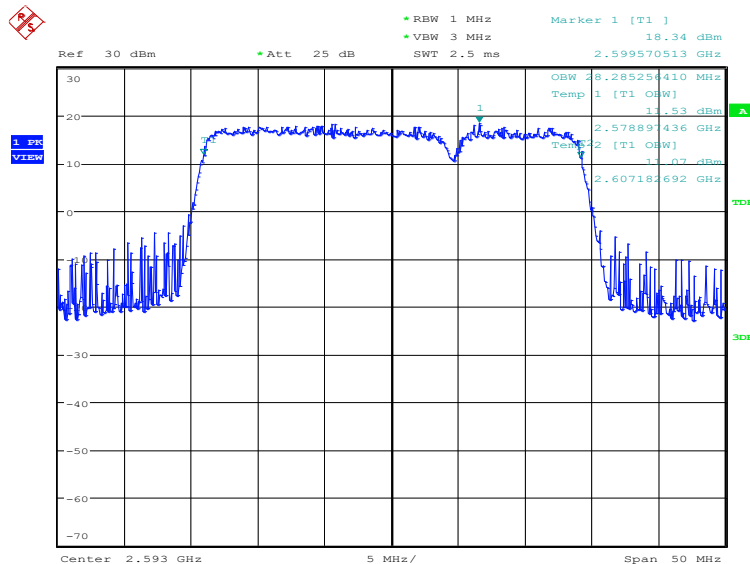
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2593.0	QPSK	16QAM
	28285.26	28285.26

LTE CA Band 41 , 20MHz+10MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 16:49:48

LTE CA Band 41 , 20MHz+10MHz Bandwidth,16QAM (99% BW)

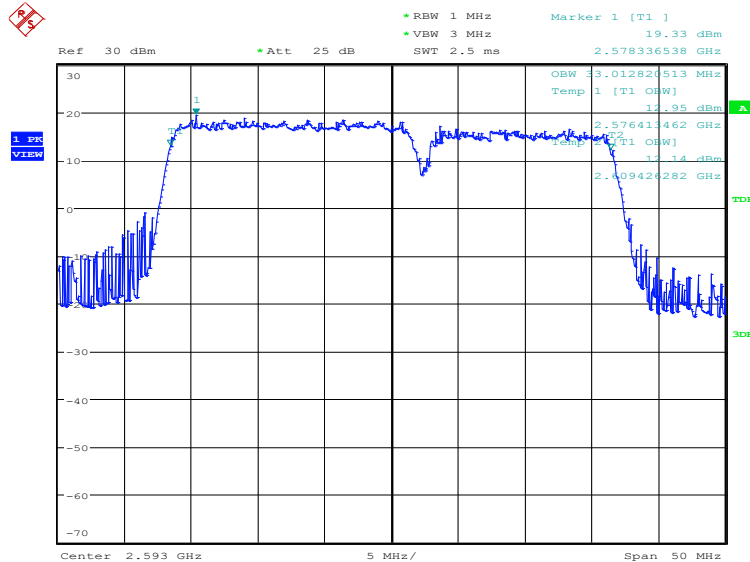


Date: 19.JUN.2021 16:50:58

LTE CA Band 41 , 20MHz+15MHz (99%)

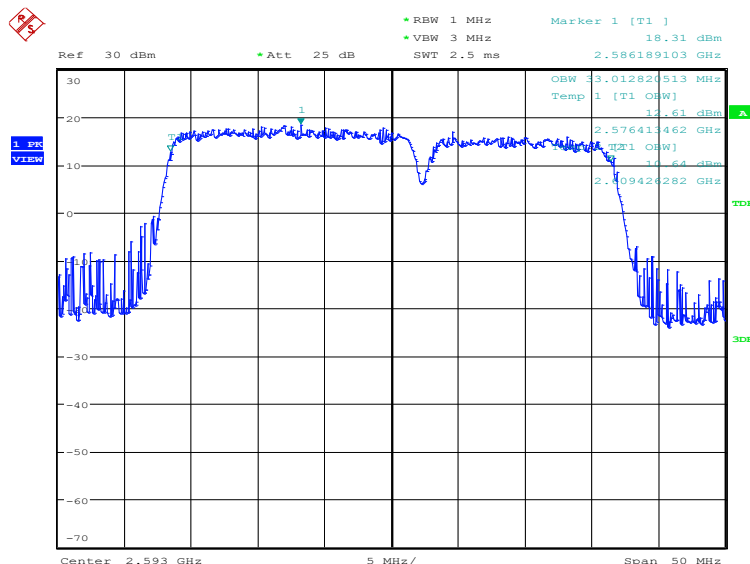
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2593.0	QPSK	16QAM
	33012.82	33012.82

LTE CA Band 41 , 20MHz+15MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 17:01:45

LTE CA Band 41 , 20MHz+15MHz Bandwidth,16QAM (99% BW)

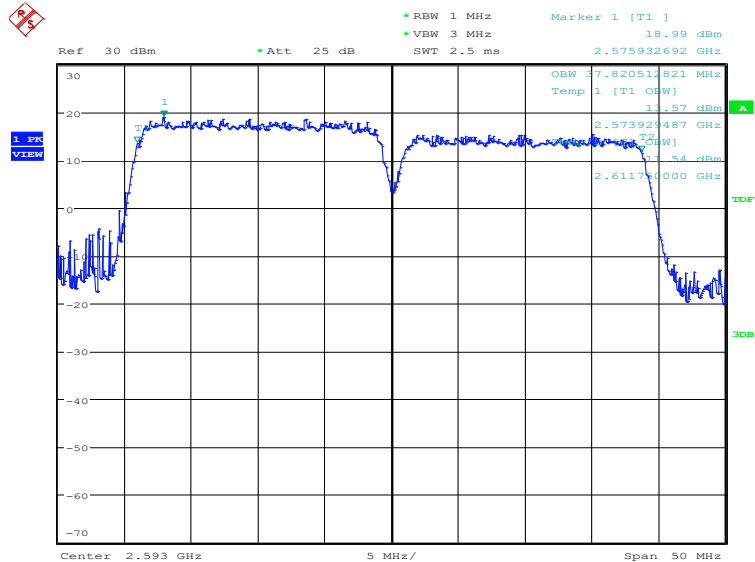


Date: 19.JUN.2021 17:02:54

LTE CA Band 41 , 20MHz+20MHz (99%)

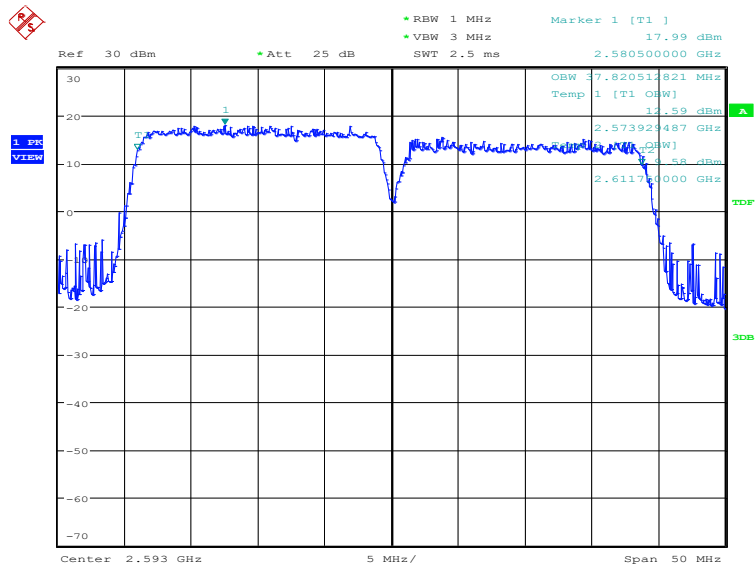
Frequency(MHz)	Occupied Bandwidth (99%)(KHz)	
2593.0	QPSK	16QAM
	37820.51	37820.51

LTE CA Band 41 , 20MHz+20MHz Bandwidth, QPSK (99% BW)



Date: 19.JUN.2021 17:08:02

LTE CA Band 41 , 20MHz+20MHz Bandwidth,16QAM (99% BW)



Date: 19.JUN.2021 17:09:12

A.5 Emission Bandwidth

The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. Table below lists the measured -26dBc BW. Spectrum analyzer plots are included on the following pages.

The measurement method is from ANSI C63.26:

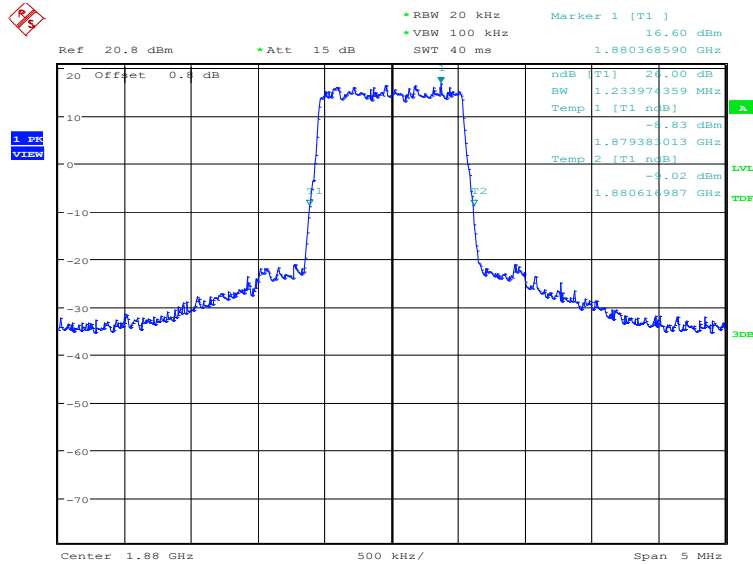
- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be wide enough to see sufficient roll off of the signal to make the measurement.
- b) The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW, and the VBW shall be set $\geq 3 \times \text{RBW}$.
- c) Set the reference level of the instrument as required to prevent the signal amplitude from exceeding the maximum spectrum analyzer input mixer level for linear operation.
- d) The dynamic range of the spectrum analyzer at the selected RBW shall be more than 10 dB below the target “-X dB” requirement, i.e., if the requirement calls for measuring the -26 dB OBW, the spectrum analyzer noise floor at the selected RBW shall be at least 36 dB below the reference level.
- e) Set spectrum analyzer detection mode to peak, and the trace mode to max hold.

LTE Band 2-ANT1

LTE Band 2, 1.4MHz (-26dBc)

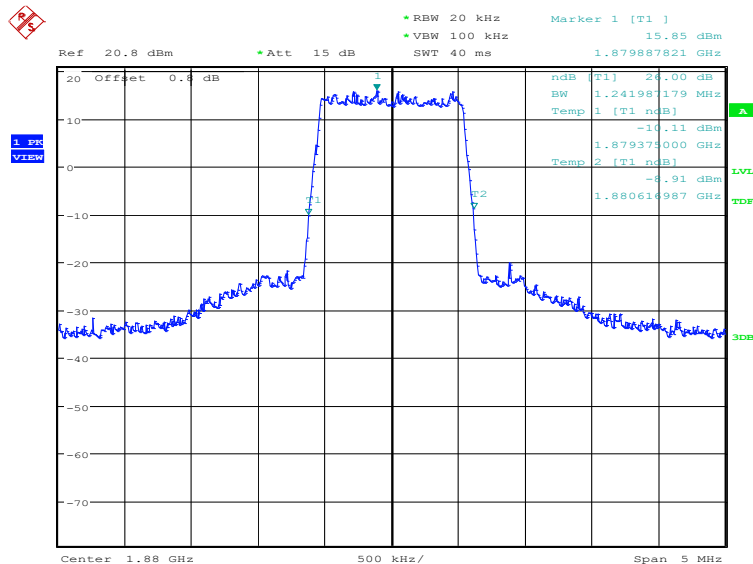
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
1880.0	QPSK	16QAM
	1233.97	1241.99

LTE Band 2, 1.4MHz Bandwidth, QPSK (-26dBc BW)



Date: 10.JUN.2021 18:22:25

LTE Band 2, 1.4MHz Bandwidth, 16QAM (-26dBc BW)

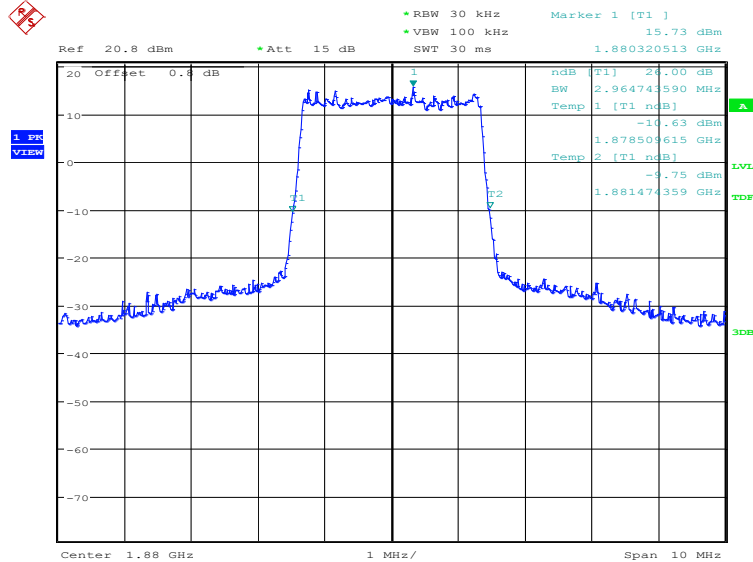


Date: 10.JUN.2021 18:23:04

LTE Band 2, 3MHz (-26dBc)

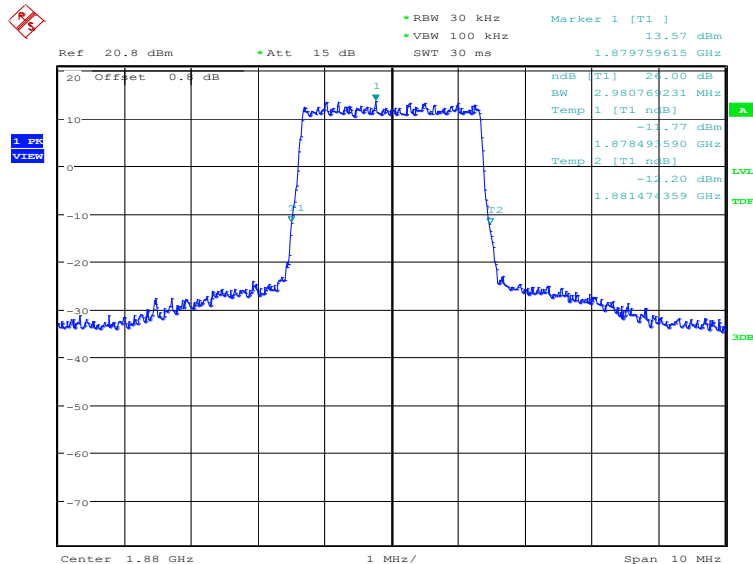
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
1880.0	QPSK	16QAM
	2964.74	2980.77

LTE Band 2, 3MHz Bandwidth, QPSK (-26dBc BW)



Date: 10.JUN.2021 18:23:46

LTE Band 2, 3MHz Bandwidth, 16QAM (-26dBc BW)

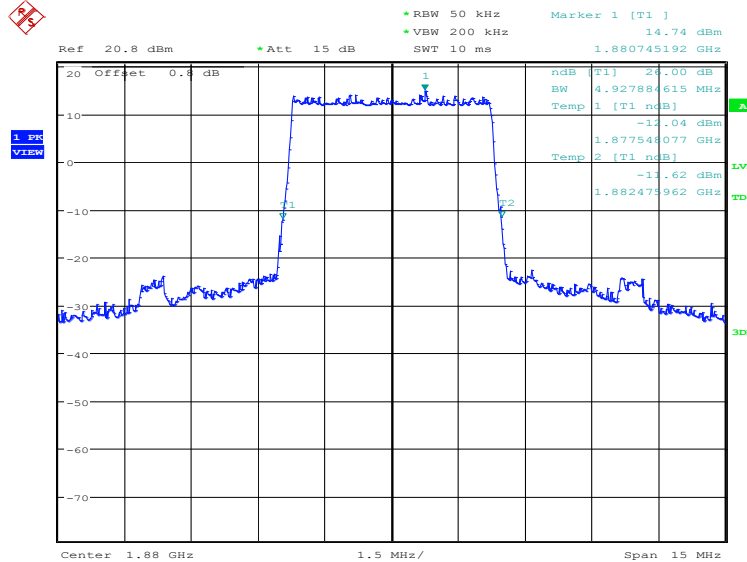


Date: 10.JUN.2021 18:24:25

LTE Band 2, 5MHz (-26dBc)

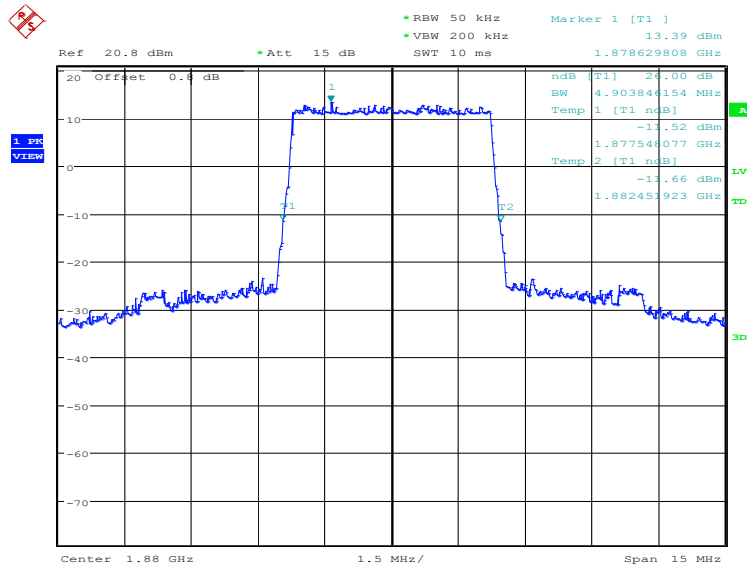
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
1880.0	QPSK	16QAM
	4927.88	4903.85

LTE Band 2, 5MHz Bandwidth, QPSK (-26dBc BW)



Date: 10.JUN.2021 18:25:07

LTE Band 2, 5MHz Bandwidth, 16QAM (-26dBc BW)

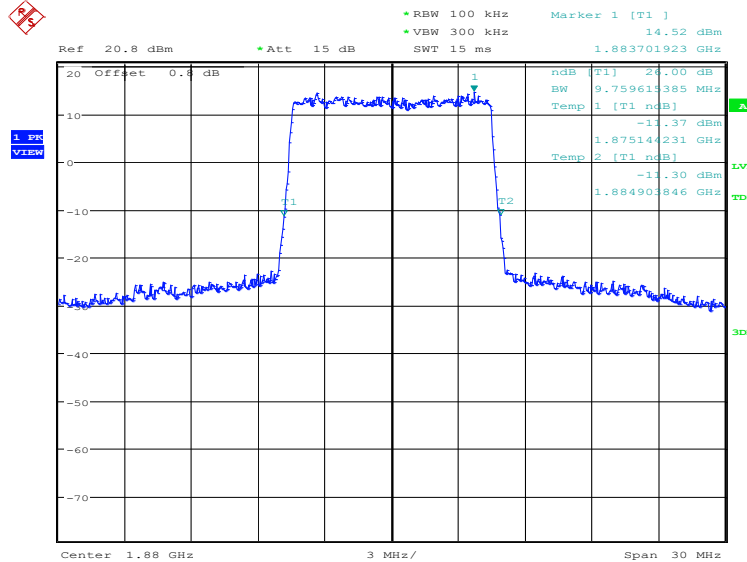


Date: 10.JUN.2021 18:25:46

LTE Band 2, 10MHz (-26dBc)

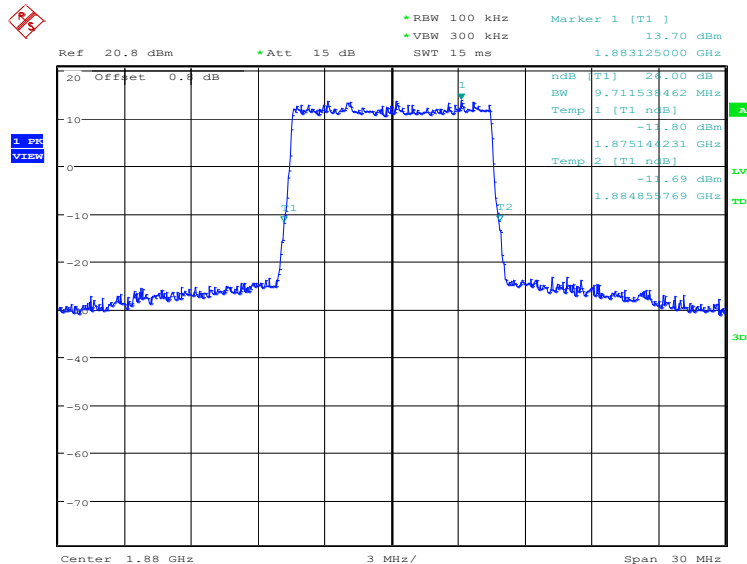
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
1880.0	QPSK	16QAM
	9759.62	9711.54

LTE Band 2, 10MHz Bandwidth, QPSK (-26dBc BW)



Date: 10.JUN.2021 18:26:27

LTE Band 2, 10MHz Bandwidth, 16QAM (-26dBc BW)

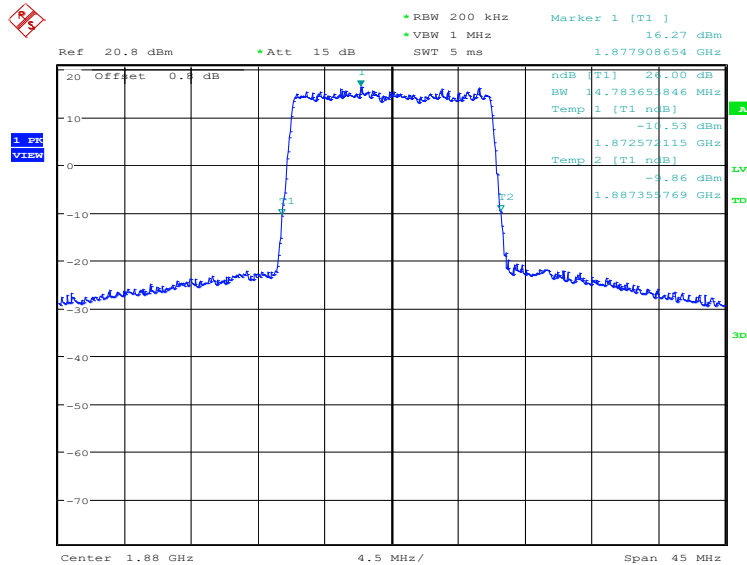


Date: 10.JUN.2021 18:27:06

LTE Band 2, 15MHz (-26dBc)

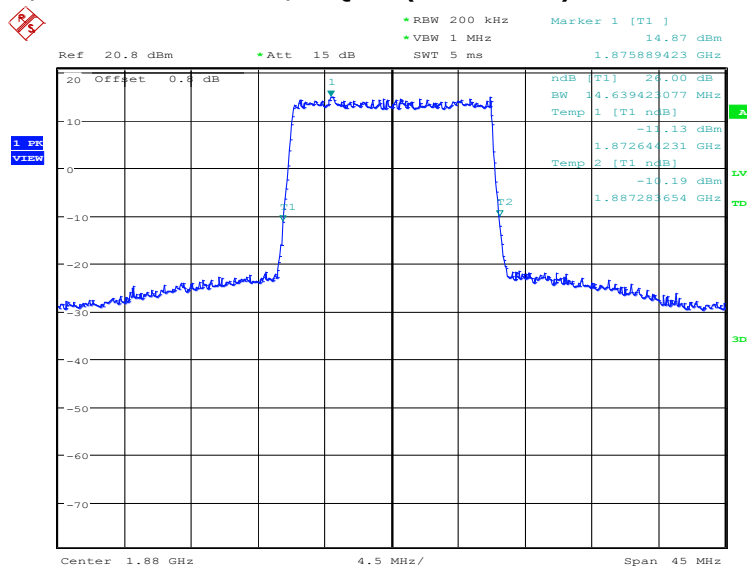
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
1880.0	QPSK	16QAM
	14783.65	14639.42

LTE Band 2, 15MHz Bandwidth, QPSK (-26dBc BW)



Date: 10.JUN.2021 18:27:48

LTE Band 2, 15MHz Bandwidth, 16QAM (-26dBc BW)

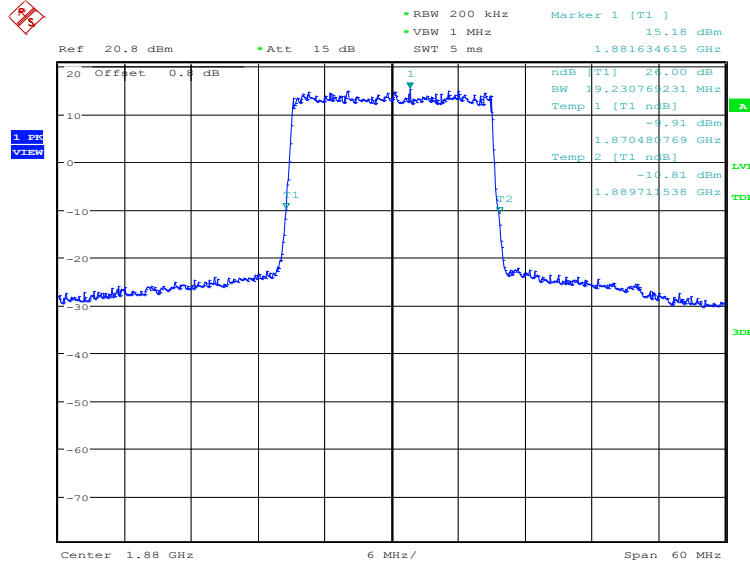


Date: 10.JUN.2021 18:28:27

LTE Band 2, 20MHz (-26dBc)

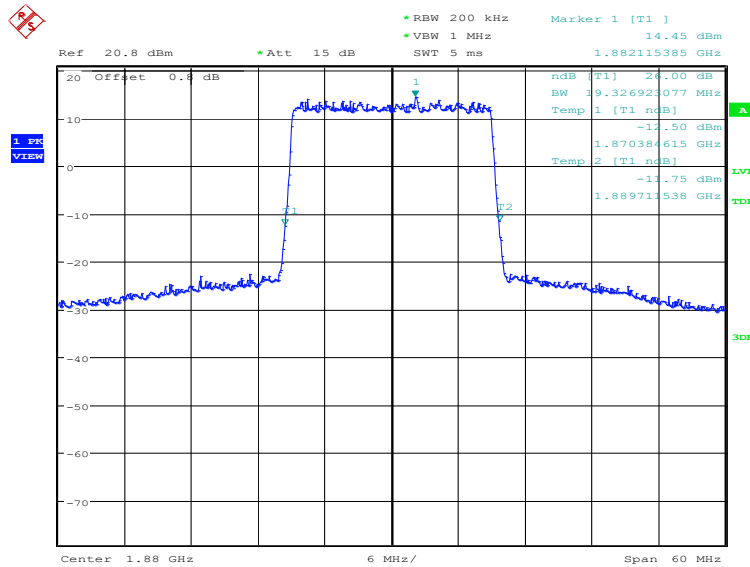
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
1880.0	QPSK	16QAM
	19230.77	19326.92

LTE Band 2, 20MHz Bandwidth, QPSK (-26dBc BW)



Date: 10.JUN.2021 18:29:09

LTE Band 2, 20MHz Bandwidth, 16QAM (-26dBc BW)



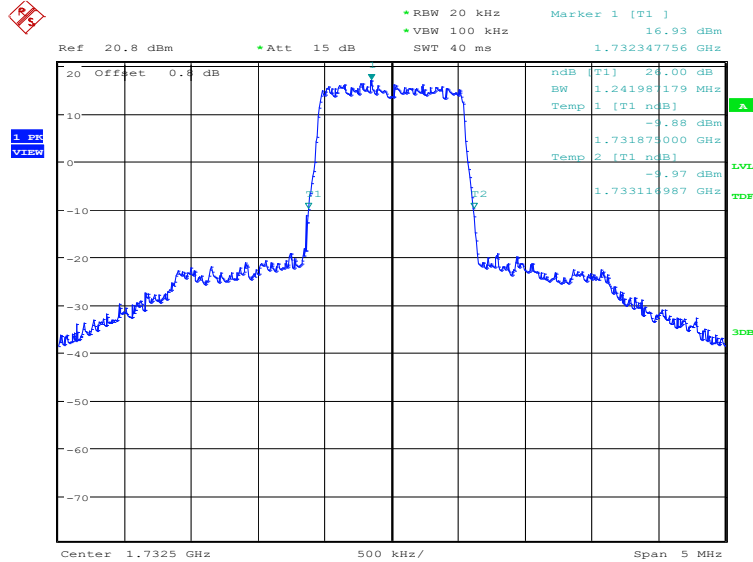
Date: 10.JUN.2021 18:29:48

LTE Band 4-ANT1

LTE Band 4, 1.4MHz (-26dBc)

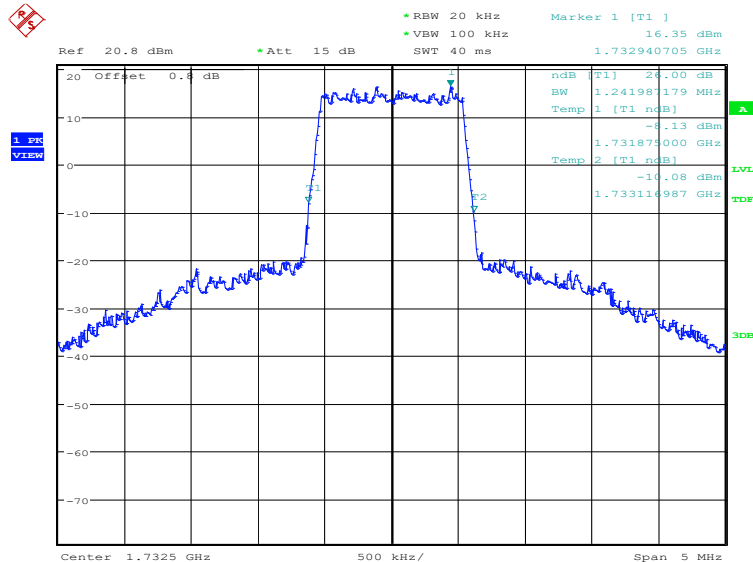
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
1732.5	QPSK	16QAM
	1241.99	1241.99

LTE Band 4, 1.4MHz Bandwidth, QPSK (-26dBc BW)



Date: 10.JUN.2021 18:30:32

LTE Band 4, 1.4MHz Bandwidth, 16QAM (-26dBc BW)

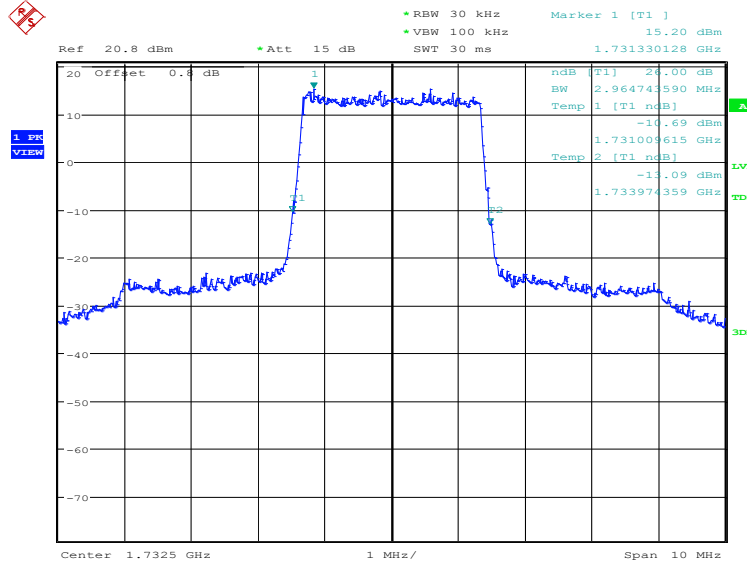


Date: 10.JUN.2021 18:31:11

LTE Band 4, 3MHz (-26dBc)

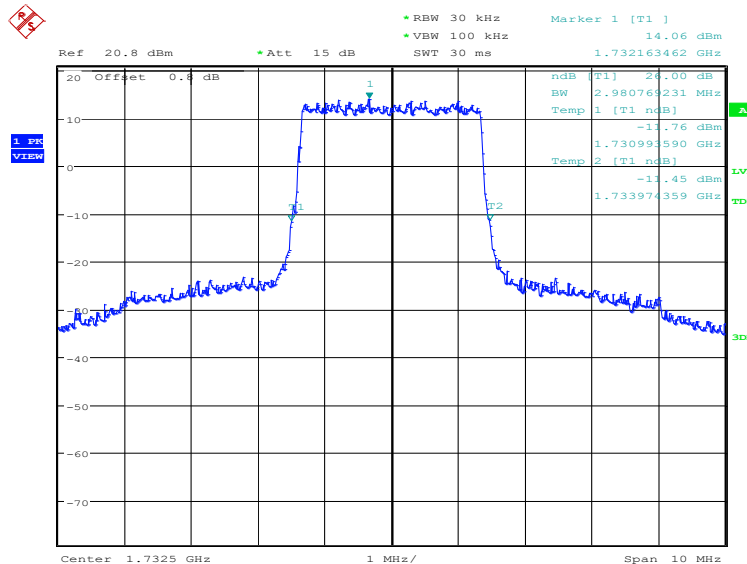
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
1732.5	QPSK	16QAM
	2964.74	2980.77

LTE Band 4, 3MHz Bandwidth, QPSK (-26dBc BW)



Date: 10.JUN.2021 18:31:53

LTE Band 4, 3MHz Bandwidth, 16QAM (-26dBc BW)

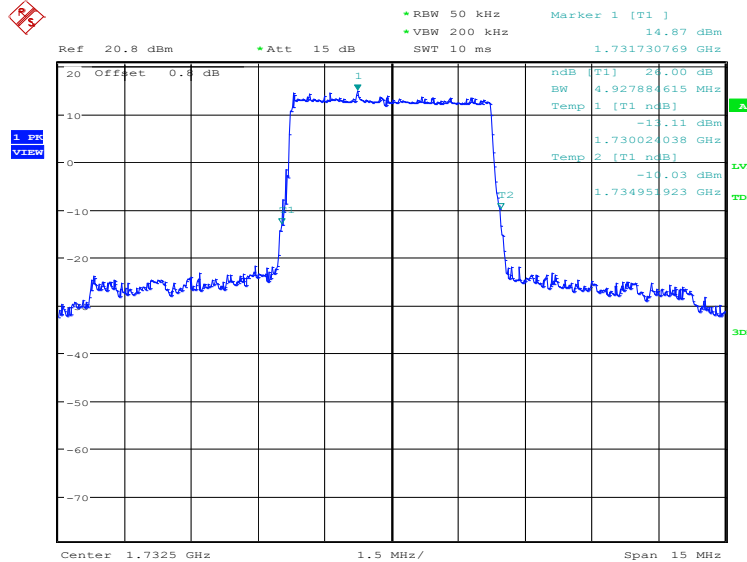


Date: 10.JUN.2021 18:32:32

LTE Band 4, 5MHz (-26dBc)

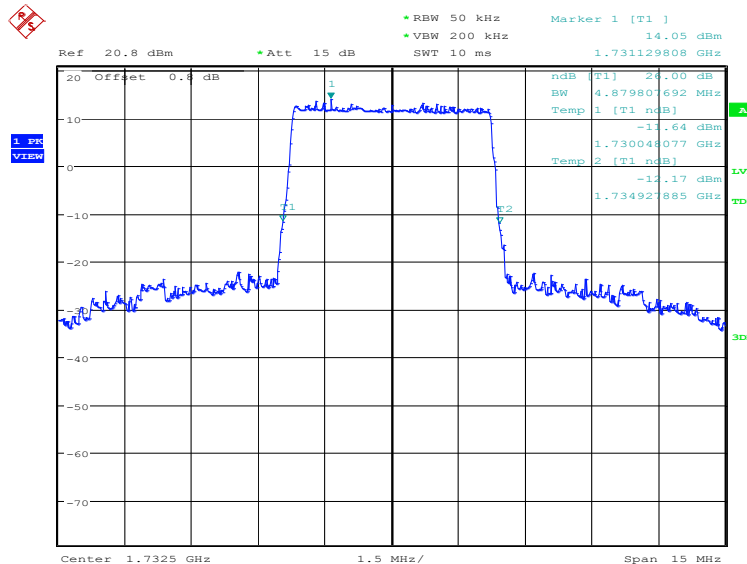
Frequency(MHz)	Emission Bandwidth (-26dBc)(kHz)	
1732.5	QPSK	16QAM
	4927.88	4879.81

LTE Band 4, 5MHz Bandwidth, QPSK (-26dBc BW)



Date: 10.JUN.2021 18:33:14

LTE Band 4, 5MHz Bandwidth, 16QAM (-26dBc BW)



Date: 10.JUN.2021 18:33:53