

Appendix B

E-UTRA BAND 66

E-UTRA BAND 4

CONTENT

Page

1	EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA	3
2	PEAK-TO-AVERAGE RATIO.....	21
2.1	FOR LTE	21
2.1.1	<i>Test Mode = LTE/TM1.Bandwidth=20MHz</i>	<i>21</i>
2.1.2	<i>Test Mode = LTE/TM2.Bandwidth=20MHz</i>	<i>23</i>
2.1.3	<i>Test Mode = LTE/TM3.Bandwidth=20MHz</i>	<i>25</i>
3	MODULATION CHARACTERISTICS.....	28
3.1	FOR LTE	28
3.1.1	<i>Test Band = LTE BAND 66.....</i>	<i>28</i>
4	BANDWIDTH	31
4.1	FOR LTE	32
4.1.1	<i>Test Band = LTE BAND 66.....</i>	<i>32</i>
5	BAND EDGES COMPLIANCE.....	68
5.1	FOR LTE	68
5.1.1	<i>Test Band = LTE BAND 66.....</i>	<i>68</i>
6	SPURIOUS EMISSION AT ANTENNA TERMINAL.....	118
6.1	FOR LTE	118
6.1.1	<i>Test Band = LTE BAND 66.....</i>	<i>118</i>
7	FIELD STRENGTH OF SPURIOUS RADIATION	123
7.1	FOR LTE	123
7.1.1	<i>Test Band = LTE BAND 66.....</i>	<i>123</i>
8	FREQUENCY STABILITY	125
8.1	FREQUENCY ERROR VS. VOLTAGE.....	125
8.2	FREQUENCY ERROR VS. TEMPERATURE.....	126

1 Effective (Isotropic) Radiated Power Output Data

Effective Isotropic Radiated Power of Transmitter (EIRP) for LTE BAND 66

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM1	1.4M	LCH	RB1#0	22.46	24.46	33.00	PASS
				RB1#2	22.35	24.35	33.00	PASS
				RB1#5	22.27	24.27	33.00	PASS
				RB3#0	22.65	24.65	33.00	PASS
				RB3#2	22.51	24.51	33.00	PASS
				RB3#3	22.49	24.49	33.00	PASS
				RB6#0	21.47	23.47	33.00	PASS
			MCH	RB1#0	22.31	24.31	33.00	PASS
				RB1#2	22.33	24.33	33.00	PASS
				RB1#5	22.26	24.26	33.00	PASS
				RB3#0	22.36	24.36	33.00	PASS
				RB3#2	22.46	24.46	33.00	PASS
				RB3#3	22.35	24.35	33.00	PASS
				RB6#0	21.2	23.2	33.00	PASS
			HCH	RB1#0	22.2	24.2	33.00	PASS
				RB1#2	22.26	24.26	33.00	PASS
				RB1#5	22.15	24.15	33.00	PASS
				RB3#0	22.16	24.16	33.00	PASS
				RB3#2	22.34	24.34	33.00	PASS
				RB3#3	22.16	24.16	33.00	PASS
				RB6#0	21.23	23.23	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM2	1.4M	LCH	RB1#0	21.44	23.44	33.00	PASS
				RB1#2	21.44	23.44	33.00	PASS
				RB1#5	21.4	23.4	33.00	PASS
				RB3#0	21.64	23.64	33.00	PASS
				RB3#2	21.54	23.54	33.00	PASS
				RB3#3	21.62	23.62	33.00	PASS
				RB6#0	20.48	22.48	33.00	PASS
			MCH	RB1#0	21.4	23.4	33.00	PASS
				RB1#2	21.45	23.45	33.00	PASS
				RB1#5	21.37	23.37	33.00	PASS
				RB3#0	21.35	23.35	33.00	PASS
				RB3#2	21.43	23.43	33.00	PASS
				RB3#3	21.36	23.36	33.00	PASS
				RB6#0	20.33	22.33	33.00	PASS
			HCH	RB1#0	21.26	23.26	33.00	PASS
				RB1#2	21.34	23.34	33.00	PASS
				RB1#5	21.26	23.26	33.00	PASS
				RB3#0	21.28	23.28	33.00	PASS
				RB3#2	21.21	23.21	33.00	PASS
				RB3#3	21.25	23.25	33.00	PASS
				RB6#0	20.17	22.17	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM3	1.4M	LCH	RB1#0	21.81	23.81	33.00	PASS
				RB1#2	21.73	23.73	33.00	PASS
				RB1#5	21.83	23.83	33.00	PASS
				RB3#0	21.81	23.81	33.00	PASS
				RB3#2	21.85	23.85	33.00	PASS
				RB3#3	21.72	23.72	33.00	PASS
				RB6#0	20.86	22.86	33.00	PASS
			MCH	RB1#0	21.93	23.93	33.00	PASS
				RB1#2	22.06	24.06	33.00	PASS
				RB1#5	21.96	23.96	33.00	PASS
				RB3#0	21.64	23.64	33.00	PASS
				RB3#2	22.01	24.01	33.00	PASS
				RB3#3	21.77	23.77	33.00	PASS
				RB6#0	20.86	22.86	33.00	PASS
			HCH	RB1#0	21.95	23.95	33.00	PASS
				RB1#2	21.90	23.90	33.00	PASS
				RB1#5	21.77	23.77	33.00	PASS
				RB3#0	21.82	23.82	33.00	PASS
				RB3#2	21.65	23.65	33.00	PASS
				RB3#3	21.79	23.79	33.00	PASS
				RB6#0	21.84	23.84	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM1	3M	LCH	RB1#0	22.44	24.44	33.00	PASS
				RB1#7	22.38	24.38	33.00	PASS
				RB1#14	22.29	24.29	33.00	PASS
				RB8#0	21.4	23.4	33.00	PASS
				RB8#4	21.32	23.32	33.00	PASS
				RB8#7	21.3	23.3	33.00	PASS
				RB15#0	21.34	23.34	33.00	PASS
			MCH	RB1#0	22.34	24.34	33.00	PASS
				RB1#7	22.29	24.29	33.00	PASS
				RB1#14	22.18	24.18	33.00	PASS
				RB8#0	21.28	23.28	33.00	PASS
				RB8#4	21.28	23.28	33.00	PASS
				RB8#7	21.25	23.25	33.00	PASS
				RB15#0	21.26	23.26	33.00	PASS
			HCH	RB1#0	22.29	24.29	33.00	PASS
				RB1#7	22.26	24.26	33.00	PASS
				RB1#14	22.09	24.09	33.00	PASS
				RB8#0	21.23	23.23	33.00	PASS
				RB8#4	21.11	23.11	33.00	PASS
				RB8#7	21.19	23.19	33.00	PASS
				RB15#0	21.32	23.32	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM2	3M	LCH	RB1#0	21.93	23.93	33.00	PASS
				RB1#7	21.84	23.84	33.00	PASS
				RB1#14	21.74	23.74	33.00	PASS
				RB8#0	20.6	22.6	33.00	PASS
				RB8#4	20.44	22.44	33.00	PASS
				RB8#7	20.53	22.53	33.00	PASS
				RB15#0	20.61	22.61	33.00	PASS
			MCH	RB1#0	21.46	23.46	33.00	PASS
				RB1#7	21.41	23.41	33.00	PASS
				RB1#14	21.41	23.41	33.00	PASS
				RB8#0	20.27	22.27	33.00	PASS
				RB8#4	20.16	22.16	33.00	PASS
				RB8#7	20.22	22.22	33.00	PASS
				RB15#0	20.23	22.23	33.00	PASS
			HCH	RB1#0	21.31	23.31	33.00	PASS
				RB1#7	21.26	23.26	33.00	PASS
				RB1#14	21.23	23.23	33.00	PASS
				RB8#0	20.37	22.37	33.00	PASS
				RB8#4	20.35	22.35	33.00	PASS
				RB8#7	20.3	22.3	33.00	PASS
				RB15#0	20.33	22.33	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM3	3M	LCH	RB1#0	21.97	23.97	33.00	PASS
				RB1#2	21.64	23.64	33.00	PASS
				RB1#5	21.87	23.87	33.00	PASS
				RB3#0	21.93	23.93	33.00	PASS
				RB3#2	21.02	23.02	33.00	PASS
				RB3#3	20.95	22.95	33.00	PASS
				RB6#0	20.72	22.72	33.00	PASS
			MCH	RB1#0	21.96	23.96	33.00	PASS
				RB1#2	22.05	24.05	33.00	PASS
				RB1#5	21.95	23.95	33.00	PASS
				RB3#0	21.00	23.00	33.00	PASS
				RB3#2	21.00	23.00	33.00	PASS
				RB3#3	20.98	22.98	33.00	PASS
				RB6#0	20.95	22.95	33.00	PASS
			HCH	RB1#0	21.81	23.81	33.00	PASS
				RB1#2	21.88	23.88	33.00	PASS
				RB1#5	21.84	23.84	33.00	PASS
				RB3#0	21.03	23.03	33.00	PASS
				RB3#2	20.91	22.91	33.00	PASS
				RB3#3	20.91	22.91	33.00	PASS
				RB6#0	20.84	22.84	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM1	5M	LCH	RB1#0	22.52	24.52	33.00	PASS
				RB1#13	22.42	24.42	33.00	PASS
				RB1#24	22.26	24.26	33.00	PASS
				RB12#0	21.43	23.43	33.00	PASS
				RB12#6	21.33	23.33	33.00	PASS
				RB12#13	21.31	23.31	33.00	PASS
				RB25#0	21.47	23.47	33.00	PASS
			MCH	RB1#0	22.39	24.39	33.00	PASS
				RB1#13	22.28	24.28	33.00	PASS
				RB1#24	22.16	24.16	33.00	PASS
				RB12#0	21.33	23.33	33.00	PASS
				RB12#6	21.36	23.36	33.00	PASS
				RB12#13	21.19	23.19	33.00	PASS
				RB25#0	21.23	23.23	33.00	PASS
			HCH	RB1#0	22.35	24.35	33.00	PASS
				RB1#13	22.28	24.28	33.00	PASS
				RB1#24	22.15	24.15	33.00	PASS
				RB12#0	21.37	23.37	33.00	PASS
				RB12#6	21.41	23.41	33.00	PASS
				RB12#13	21.23	23.23	33.00	PASS
				RB25#0	21.23	23.23	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM2	5M	LCH	RB1#0	21.36	23.36	33.00	PASS
				RB1#13	21.35	23.35	33.00	PASS
				RB1#24	21.23	23.23	33.00	PASS
				RB12#0	20.46	22.46	33.00	PASS
				RB12#6	20.32	22.32	33.00	PASS
				RB12#13	20.36	22.36	33.00	PASS
				RB25#0	20.43	22.43	33.00	PASS
			MCH	RB1#0	21.65	23.65	33.00	PASS
				RB1#13	21.61	23.61	33.00	PASS
				RB1#24	21.44	23.44	33.00	PASS
				RB12#0	20.34	22.34	33.00	PASS
				RB12#6	20.41	22.41	33.00	PASS
				RB12#13	20.23	22.23	33.00	PASS
				RB25#0	20.22	22.22	33.00	PASS
			HCH	RB1#0	21.28	23.28	33.00	PASS
				RB1#13	21.3	23.3	33.00	PASS
				RB1#24	21.17	23.17	33.00	PASS
				RB12#0	20.36	22.36	33.00	PASS
				RB12#6	20.24	22.24	33.00	PASS
				RB12#13	20.26	22.26	33.00	PASS
				RB25#0	20.34	22.34	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM3	5M	LCH	RB1#0	21.95	23.95	33.00	PASS
				RB1#2	21.93	23.93	33.00	PASS
				RB1#5	22.01	24.01	33.00	PASS
				RB3#0	20.93	22.93	33.00	PASS
				RB3#2	20.91	22.91	33.00	PASS
				RB3#3	20.84	22.84	33.00	PASS
				RB6#0	20.92	22.92	33.00	PASS
			MCH	RB1#0	22.10	24.10	33.00	PASS
				RB1#2	21.98	23.98	33.00	PASS
				RB1#5	21.90	23.90	33.00	PASS
				RB3#0	21.00	23.00	33.00	PASS
				RB3#2	20.99	22.99	33.00	PASS
				RB3#3	20.94	22.94	33.00	PASS
				RB6#0	20.96	22.96	33.00	PASS
			HCH	RB1#0	21.95	23.95	33.00	PASS
				RB1#2	21.90	23.90	33.00	PASS
				RB1#5	21.82	23.82	33.00	PASS
				RB3#0	20.99	22.99	33.00	PASS
				RB3#2	20.98	22.98	33.00	PASS
				RB3#3	20.82	22.82	33.00	PASS
				RB6#0	20.97	22.97	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM1	10M	LCH	RB1#0	22.77	24.77	33.00	PASS
				RB1#25	22.43	24.43	33.00	PASS
				RB1#49	22.35	24.35	33.00	PASS
				RB25#0	21.51	23.51	33.00	PASS
				RB25#13	21.47	23.47	33.00	PASS
				RB25#25	21.38	23.38	33.00	PASS
				RB50#0	21.53	23.53	33.00	PASS
			MCH	RB1#0	22.54	24.54	33.00	PASS
				RB1#25	22.27	24.27	33.00	PASS
				RB1#49	22.28	24.28	33.00	PASS
				RB25#0	21.45	23.45	33.00	PASS
				RB25#13	21.44	23.44	33.00	PASS
				RB25#25	21.24	23.24	33.00	PASS
				RB50#0	21.33	23.33	33.00	PASS
			HCH	RB1#0	22.55	24.55	33.00	PASS
				RB1#25	22.12	24.12	33.00	PASS
				RB1#49	22.15	24.15	33.00	PASS
				RB25#0	21.36	23.36	33.00	PASS
				RB25#13	21.23	23.23	33.00	PASS
				RB25#25	21.28	23.28	33.00	PASS
				RB50#0	21.23	23.23	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM2	10M	LCH	RB1#0	22.16	24.16	33.00	PASS
				RB1#25	21.92	23.92	33.00	PASS
				RB1#49	21.82	23.82	33.00	PASS
				RB25#0	20.63	22.63	33.00	PASS
				RB25#13	20.55	22.55	33.00	PASS
				RB25#25	20.48	22.48	33.00	PASS
				RB50#0	20.5	22.5	33.00	PASS
			MCH	RB1#0	21.71	23.71	33.00	PASS
				RB1#25	21.41	23.41	33.00	PASS
				RB1#49	21.43	23.43	33.00	PASS
				RB25#0	20.46	22.46	33.00	PASS
				RB25#13	20.46	22.46	33.00	PASS
				RB25#25	20.26	22.26	33.00	PASS
				RB50#0	20.35	22.35	33.00	PASS
			HCH	RB1#0	21.56	23.56	33.00	PASS
				RB1#25	21.18	23.18	33.00	PASS
				RB1#49	21.21	23.21	33.00	PASS
				RB25#0	20.37	22.37	33.00	PASS
				RB25#13	20.42	22.42	33.00	PASS
				RB25#25	20.26	22.26	33.00	PASS
				RB50#0	20.25	22.25	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM3	10M	LCH	RB1#0	22.03	24.03	33.00	PASS
				RB1#2	21.96	23.96	33.00	PASS
				RB1#5	21.99	23.99	33.00	PASS
				RB3#0	21.08	23.08	33.00	PASS
				RB3#2	21.02	23.02	33.00	PASS
				RB3#3	20.97	22.97	33.00	PASS
				RB6#0	21.08	23.08	33.00	PASS
			MCH	RB1#0	22.20	24.20	33.00	PASS
				RB1#2	21.94	23.94	33.00	PASS
				RB1#5	22.04	24.04	33.00	PASS
				RB3#0	21.13	23.13	33.00	PASS
				RB3#2	21.01	23.01	33.00	PASS
				RB3#3	20.95	22.95	33.00	PASS
				RB6#0	21.04	23.04	33.00	PASS
			HCH	RB1#0	22.20	24.20	33.00	PASS
				RB1#2	21.80	23.80	33.00	PASS
				RB1#5	21.93	23.93	33.00	PASS
				RB3#0	21.07	23.07	33.00	PASS
				RB3#2	20.93	22.93	33.00	PASS
				RB3#3	20.97	22.97	33.00	PASS
				RB6#0	20.98	22.98	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM1	15M	LCH	RB1#0	22.48	24.48	33.00	PASS
				RB1#38	21.81	23.81	33.00	PASS
				RB1#74	21.95	23.95	33.00	PASS
				RB36#0	21.11	23.11	33.00	PASS
				RB36#18	21.08	23.08	33.00	PASS
				RB36#39	20.84	22.84	33.00	PASS
				RB75#0	20.91	22.91	33.00	PASS
			MCH	RB1#0	22.43	24.43	33.00	PASS
				RB1#38	21.69	23.69	33.00	PASS
				RB1#74	21.93	23.93	33.00	PASS
				RB36#0	20.97	22.97	33.00	PASS
				RB36#18	21	23	33.00	PASS
				RB36#39	20.73	22.73	33.00	PASS
				RB75#0	20.75	22.75	33.00	PASS
			HCH	RB1#0	22.73	24.73	33.00	PASS
				RB1#38	22.08	24.08	33.00	PASS
				RB1#74	22.05	24.05	33.00	PASS
				RB36#0	21.14	23.14	33.00	PASS
				RB36#18	21.03	23.03	33.00	PASS
				RB36#39	20.87	22.87	33.00	PASS
				RB75#0	21.01	23.01	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM2	15M	LCH	RB1#0	22.01	24.01	33.00	PASS
				RB1#38	21.41	23.41	33.00	PASS
				RB1#74	21.52	23.52	33.00	PASS
				RB36#0	20.09	22.09	33.00	PASS
				RB36#18	20.12	22.12	33.00	PASS
				RB36#39	19.87	21.87	33.00	PASS
				RB75#0	20.06	22.06	33.00	PASS
			MCH	RB1#0	21.52	23.52	33.00	PASS
				RB1#38	20.84	22.84	33.00	PASS
				RB1#74	20.95	22.95	33.00	PASS
				RB36#0	20.16	22.16	33.00	PASS
				RB36#18	20.12	22.12	33.00	PASS
				RB36#39	19.83	21.83	33.00	PASS
				RB75#0	19.81	21.81	33.00	PASS
			HCH	RB1#0	21.86	23.86	33.00	PASS
				RB1#38	21.12	23.12	33.00	PASS
				RB1#74	21.43	23.43	33.00	PASS
				RB36#0	20.02	22.02	33.00	PASS
				RB36#18	20.08	22.08	33.00	PASS
				RB36#39	19.74	21.74	33.00	PASS
				RB75#0	19.89	21.89	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM3	15M	LCH	RB1#0	22.17	24.17	33.00	PASS
				RB1#2	22.06	24.06	33.00	PASS
				RB1#5	21.84	23.84	33.00	PASS
				RB3#0	21.06	23.06	33.00	PASS
				RB3#2	20.93	22.93	33.00	PASS
				RB3#3	20.72	22.72	33.00	PASS
				RB6#0	20.79	22.79	33.00	PASS
			MCH	RB1#0	22.57	24.57	33.00	PASS
				RB1#2	21.80	23.80	33.00	PASS
				RB1#5	22.03	24.03	33.00	PASS
				RB3#0	21.14	23.14	33.00	PASS
				RB3#2	20.85	22.85	33.00	PASS
				RB3#3	20.86	22.86	33.00	PASS
				RB6#0	20.89	22.89	33.00	PASS
			HCH	RB1#0	22.57	24.57	33.00	PASS
				RB1#2	21.71	23.71	33.00	PASS
				RB1#5	22.02	24.02	33.00	PASS
				RB3#0	21.05	23.05	33.00	PASS
				RB3#2	20.87	22.87	33.00	PASS
				RB3#3	20.81	22.81	33.00	PASS
				RB6#0	20.95	22.95	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM1	20M	LCH	RB1#0	22.88	24.88	33.00	PASS
				RB1#50	21.85	23.85	33.00	PASS
				RB1#99	22.14	24.14	33.00	PASS
				RB50#0	21.51	23.51	33.00	PASS
				RB50#25	21.13	23.13	33.00	PASS
				RB50#50	21	23	33.00	PASS
				RB100#0	21.14	23.14	33.00	PASS
			MCH	RB1#0	22.97	24.97	33.00	PASS
				RB1#50	21.95	23.95	33.00	PASS
				RB1#99	22.28	24.28	33.00	PASS
				RB50#0	21.15	23.15	33.00	PASS
				RB50#25	21.08	23.08	33.00	PASS
				RB50#50	20.96	22.96	33.00	PASS
				RB100#0	21.07	23.07	33.00	PASS
			HCH	RB1#0	22.82	24.82	33.00	PASS
				RB1#50	21.68	23.68	33.00	PASS
				RB1#99	21.99	23.99	33.00	PASS
				RB50#0	21.18	23.18	33.00	PASS
				RB50#25	21.06	23.06	33.00	PASS
				RB50#50	20.73	22.73	33.00	PASS
				RB100#0	20.87	22.87	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM2	20M	LCH	RB1#0	22.36	24.36	33.00	PASS
				RB1#50	21.31	23.31	33.00	PASS
				RB1#99	21.65	23.65	33.00	PASS
				RB50#0	20.44	22.44	33.00	PASS
				RB50#25	20.54	22.54	33.00	PASS
				RB50#50	19.96	21.96	33.00	PASS
				RB100#0	20.08	22.08	33.00	PASS
			MCH	RB1#0	22.13	24.13	33.00	PASS
				RB1#50	21.22	23.22	33.00	PASS
				RB1#99	20.48	22.48	33.00	PASS
				RB50#0	20.87	22.87	33.00	PASS
				RB50#25	20.44	22.44	33.00	PASS
				RB50#50	20.39	22.39	33.00	PASS
				RB100#0	20.03	22.03	33.00	PASS
			HCH	RB1#0	22.44	24.44	33.00	PASS
				RB1#50	21.19	23.19	33.00	PASS
				RB1#99	21.56	23.56	33.00	PASS
				RB50#0	20.28	22.28	33.00	PASS
				RB50#25	20.18	22.18	33.00	PASS
				RB50#50	19.89	21.89	33.00	PASS
				RB100#0	20.1	22.1	33.00	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 66	LTE/TM3	20M	LCH	RB1#0	22.77	24.77	33.00	PASS
				RB1#2	21.89	23.89	33.00	PASS
				RB1#5	22.14	24.14	33.00	PASS
				RB3#0	21.26	23.26	33.00	PASS
				RB3#2	20.96	22.96	33.00	PASS
				RB3#3	20.97	22.97	33.00	PASS
				RB6#0	21.17	23.17	33.00	PASS
			MCH	RB1#0	22.78	24.78	33.00	PASS
				RB1#2	21.83	23.83	33.00	PASS
				RB1#5	22.19	24.19	33.00	PASS
				RB3#0	21.26	23.26	33.00	PASS
				RB3#2	20.90	22.90	33.00	PASS
				RB3#3	20.94	22.94	33.00	PASS
				RB6#0	21.01	23.01	33.00	PASS
			HCH	RB1#0	22.80	24.80	33.00	PASS
				RB1#2	21.84	23.84	33.00	PASS
				RB1#5	22.29	24.29	33.00	PASS
				RB3#0	21.25	23.25	33.00	PASS
				RB3#2	20.83	22.83	33.00	PASS
				RB3#3	20.89	22.89	33.00	PASS
				RB6#0	21.09	23.09	33.00	PASS

Note:

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

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

b: SGP=Signal Generator Level

2 Peak-to-Average Ratio

Part I - Test Results

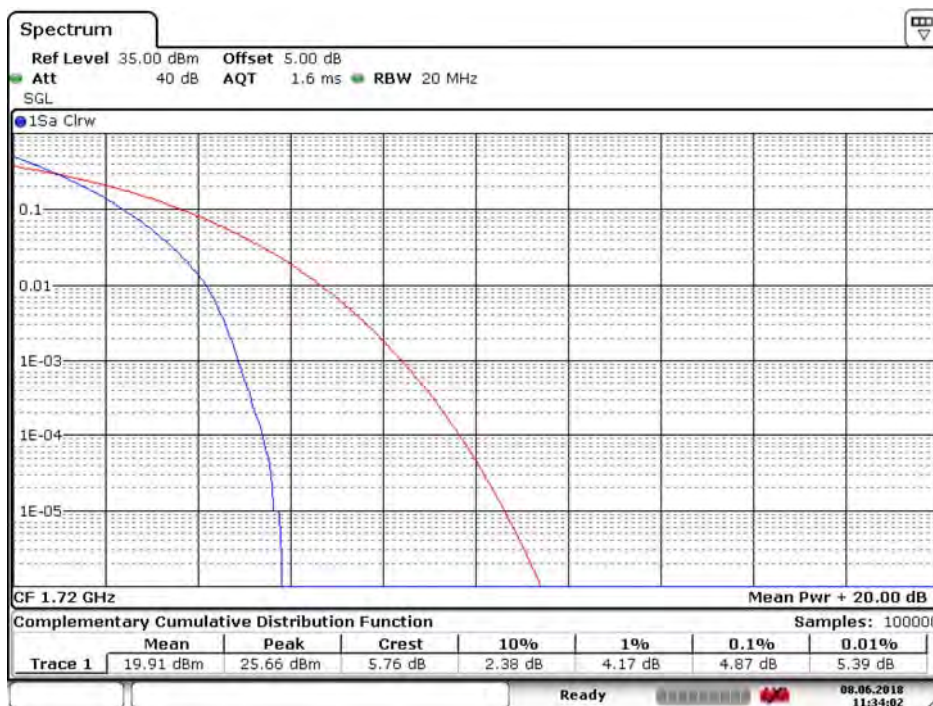
Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
BAND 66	TM1/20M	LCH	4.87	13	PASS
		MCH	4.93	13	PASS
		HCH	5.01	13	PASS
	TM2/20M	LCH	5.83	13	PASS
		MCH	5.88	13	PASS
		HCH	6	13	PASS
	TM3/20M	LCH	5.91	13	PASS
		MCH	6	13	PASS
		HCH	6	13	PASS

Part II - Test Plots

2.1 For LTE

2.1.1 Test Mode = LTE/TM1.Bandwidth=20MHz

2.1.1.1 Test Channel = LCH



Date: 8 JUN 2018 11:34:02

2.1.1.2 Test Channel = MCH



Date: 8 JUN 2018 11:34:18

2.1.1.3 Test Channel = HCH



Date: 8 JUN 2018 11:35:05

2.1.2 Test Mode = LTE/TM2.Bandwidth=20MHz

2.1.2.1 Test Channel = LCH



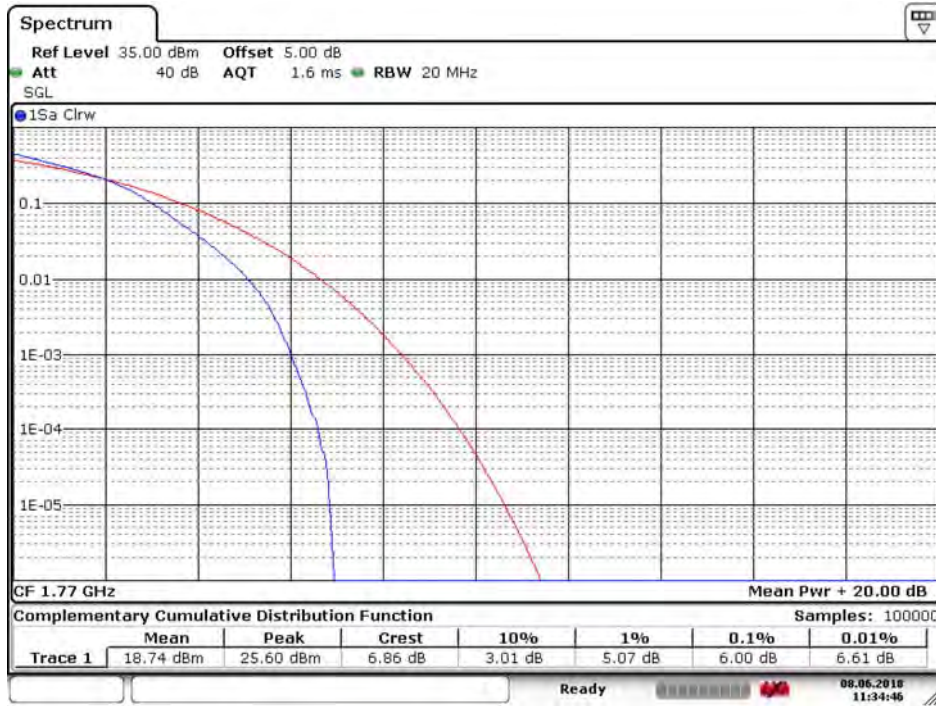
Date: 8 JUN 2018 11:33:42

2.1.2.2 Test Channel = MCH



Date: 8 JUN 2018 11:34:30

2.1.2.3 Test Channel = HCH



Date: 8 JUN.2018 11:34:47

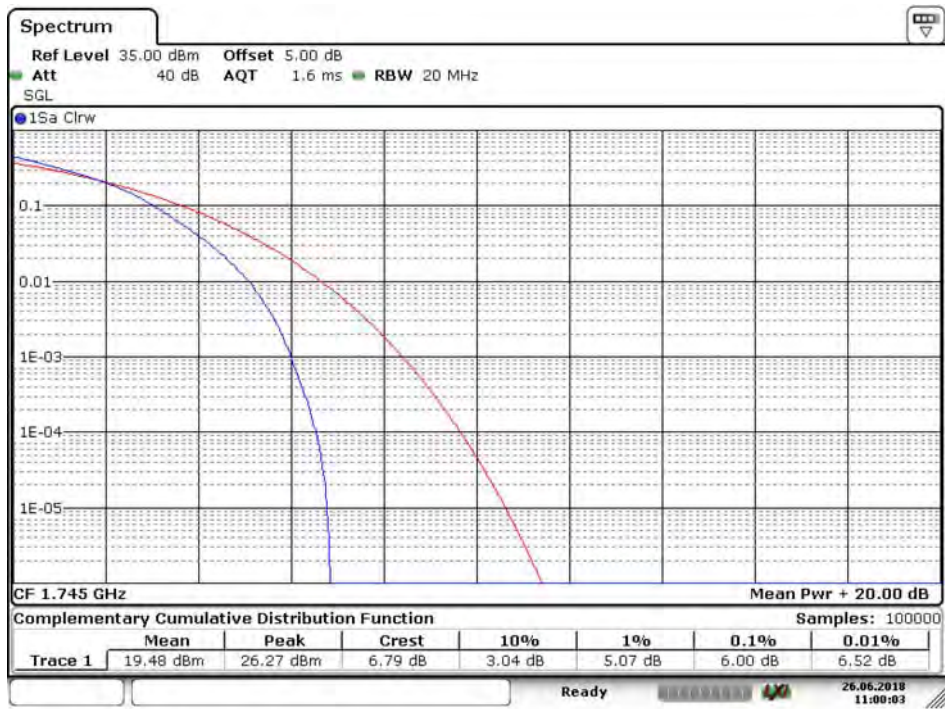
2.1.3 Test Mode = LTE/TM3.Bandwidth=20MHz

2.1.3.1 Test Channel = LCH



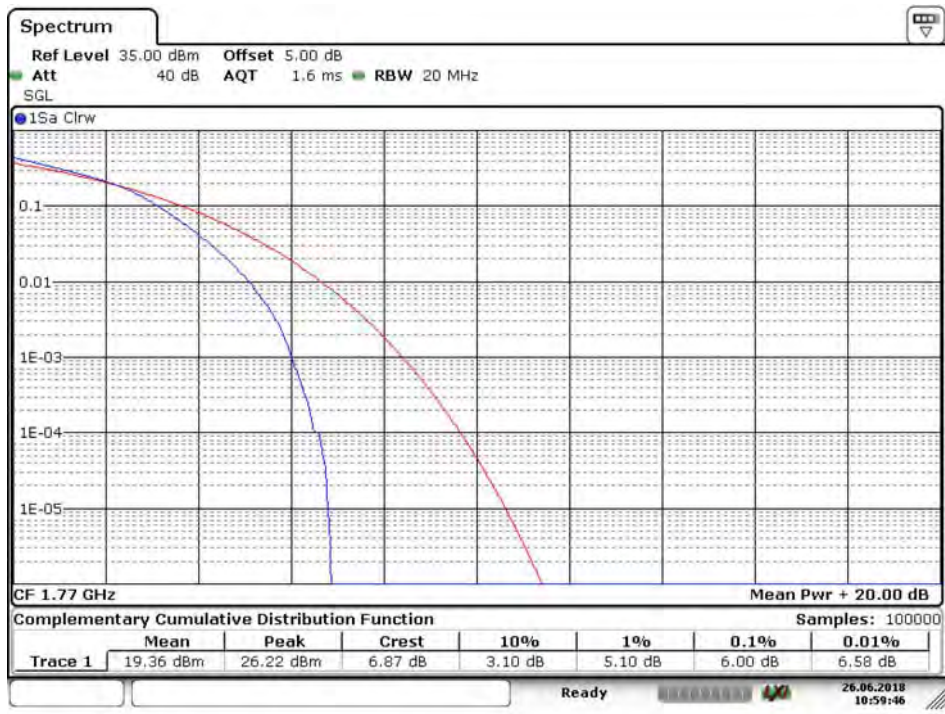
Date: 26 JUN 2018 11:00:28

2.1.3.2 Test Channel = MCH



Date: 26 JUN 2018 11:00:03

2.1.3.3 Test Channel = HCH



Date: 26 JUN 2018 10:59:46

3 Modulation Characteristics

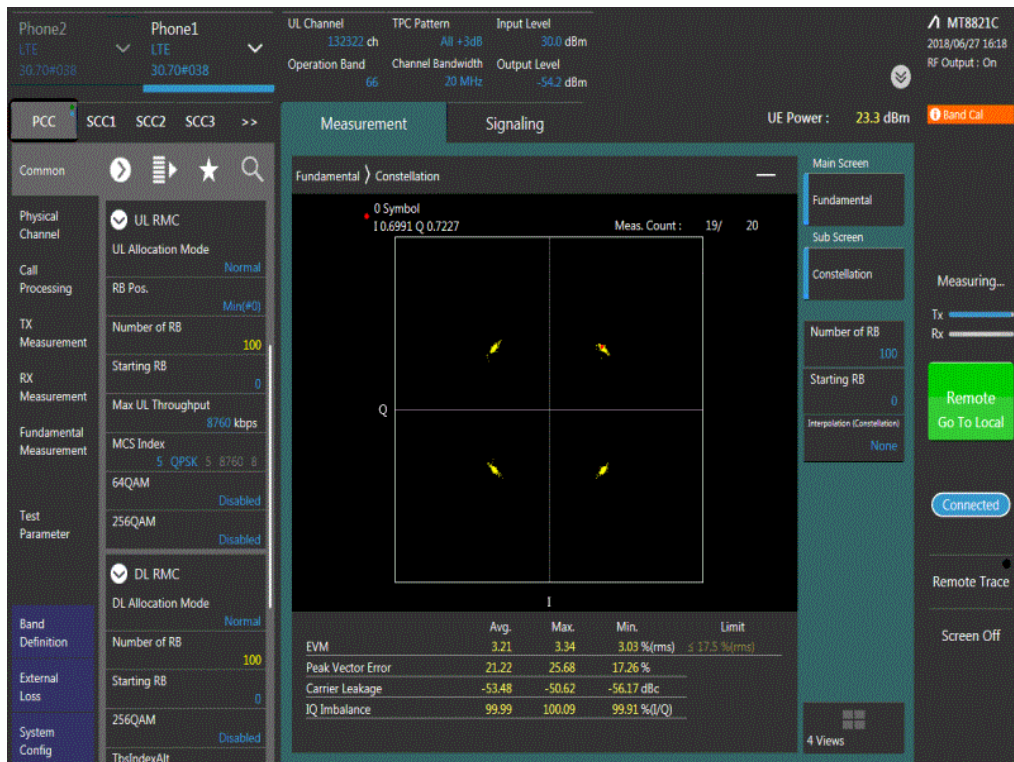
Part I - Test Plots

3.1 For LTE

3.1.1 Test Band = LTE BAND 66

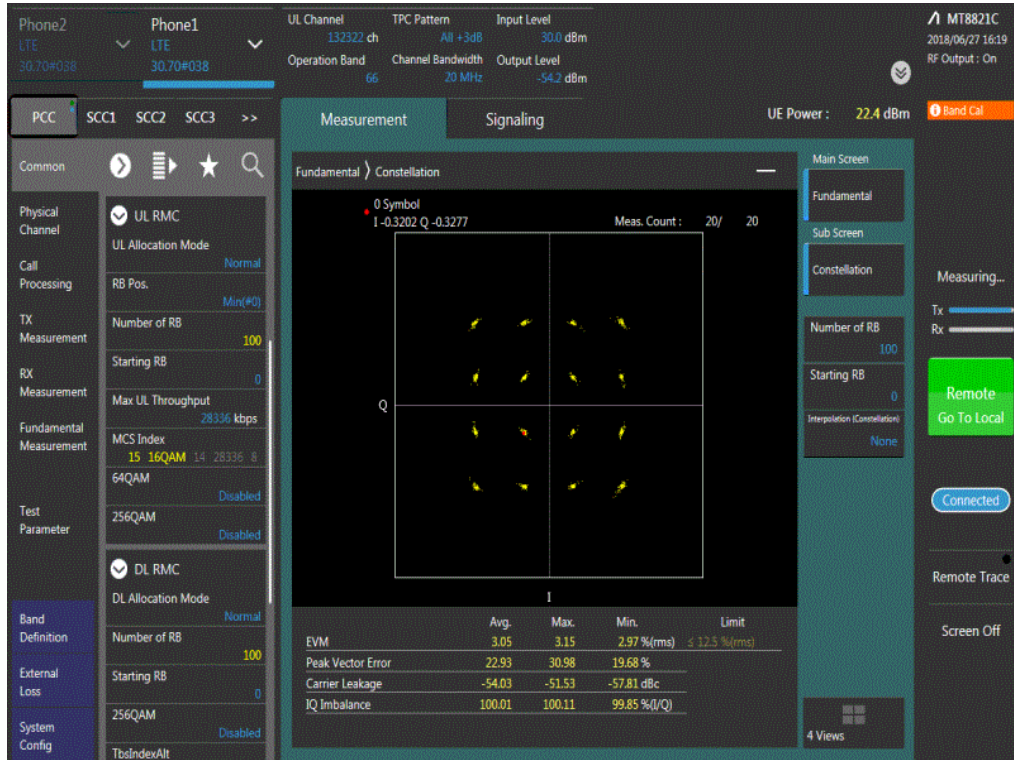
3.1.1.1 Test Mode = LTE /TM1 20MHz

3.1.1.1.1 Test Channel = MCH



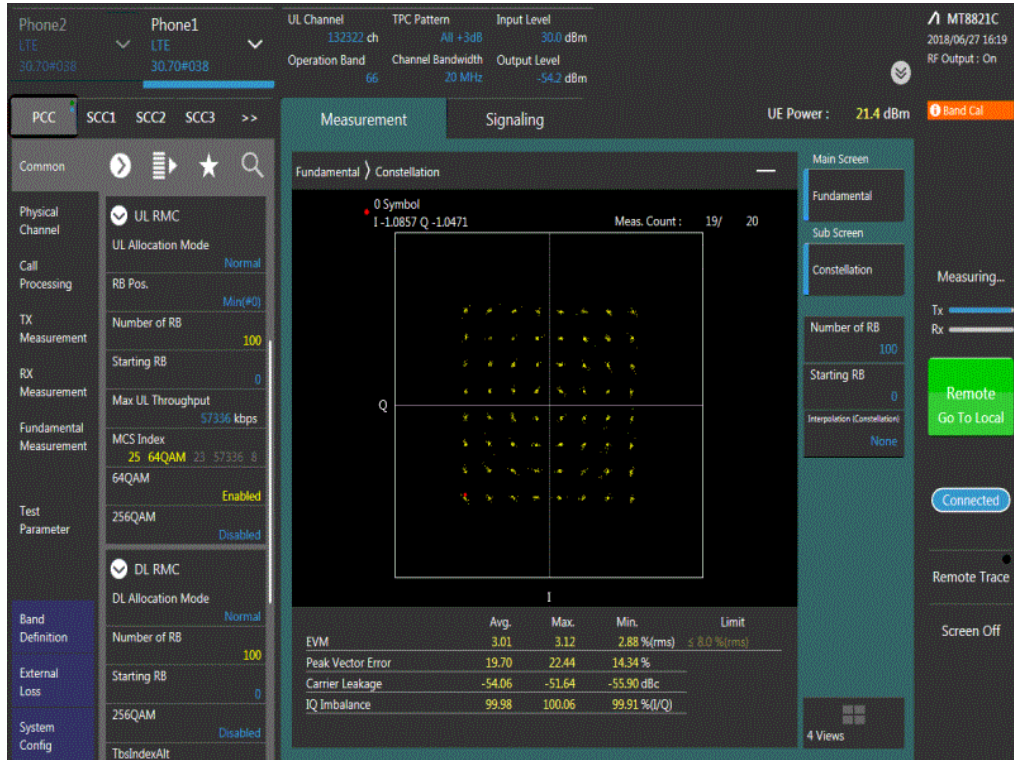
3.1.1.2 Test Mode = LTE /TM2 20MHz

3.1.1.2.1 Test Channel = MCH



3.1.1.3 Test Mode = LTE /TM3 20MHz

3.1.1.3.1 Test Channel = MCH



4 Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
BAND 66	TM1/1.4MHz	LCH	1.09	1.24	PASS
		MCH	1.09	1.24	PASS
		HCH	1.09	1.23	PASS
	TM2/1.4MHz	LCH	1.09	1.25	PASS
		MCH	1.09	1.23	PASS
		HCH	1.09	1.24	PASS
	TM3/1.4MHz	LCH	1.09	1.24	PASS
		MCH	1.09	1.24	PASS
		HCH	1.09	1.24	PASS
	TM1/ 3MHz	LCH	2.68	2.93	PASS
		MCH	2.68	2.93	PASS
		HCH	2.67	2.91	PASS
	TM2/3MHz	LCH	2.67	2.92	PASS
		MCH	2.68	2.93	PASS
		HCH	2.67	2.95	PASS
	TM3/3MHz	LCH	2.68	2.93	PASS
		MCH	2.68	2.94	PASS
		HCH	2.68	2.92	PASS
	TM1/ 5MHz	LCH	4.46	4.88	PASS
		MCH	4.47	4.84	PASS
		HCH	4.46	4.90	PASS
	TM2/ 5MHz	LCH	4.46	4.86	PASS
		MCH	4.48	4.89	PASS
		HCH	4.48	4.90	PASS
	TM3/ 5MHz	LCH	4.46	4.84	PASS
		MCH	4.46	4.83	PASS
		HCH	4.46	4.87	PASS
TM1/10MHz	LCH	8.95	9.65	PASS	
	MCH	8.93	9.65	PASS	
	HCH	8.95	9.71	PASS	
TM2/ 10MHz	LCH	8.93	9.69	PASS	
	MCH	8.93	9.67	PASS	
	HCH	8.93	9.65	PASS	
TM3/ 10MHz	LCH	8.91	9.67	PASS	
	MCH	8.93	9.63	PASS	
	HCH	8.93	9.67	PASS	
TM1/ 15MHz	LCH	13.48	14.80	PASS	

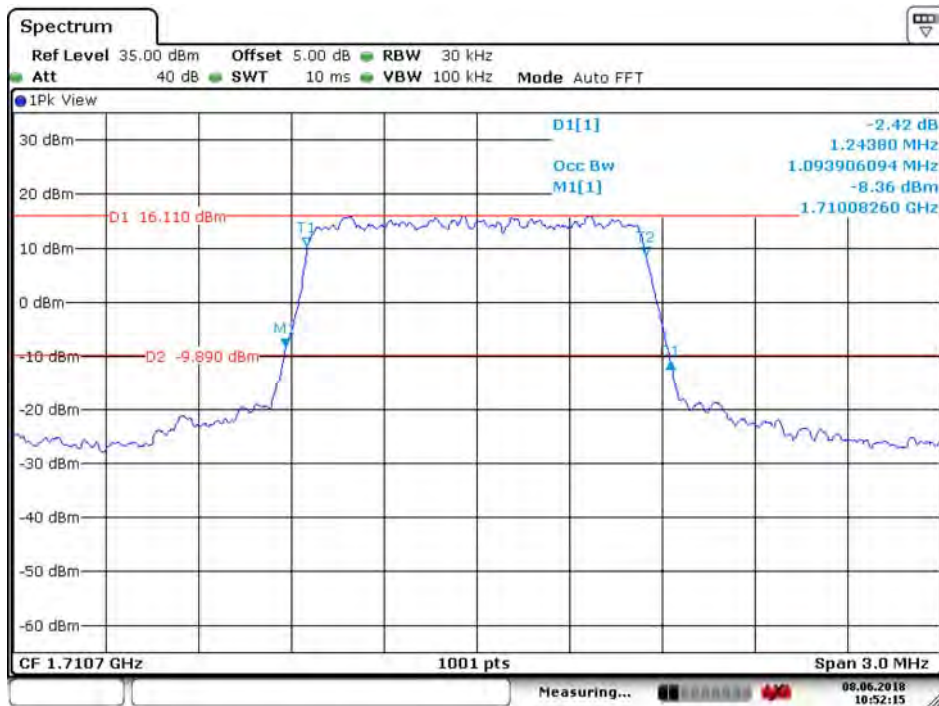
Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
		MCH	13.42	14.77	PASS
		HCH	13.45	14.71	PASS
	TM2/ 15MHz	LCH	13.48	14.77	PASS
		MCH	13.45	14.77	PASS
		HCH	13.48	14.68	PASS
	TM3/ 15MHz	LCH	13.36	14.5	PASS
		MCH	13.45	14.665	PASS
		HCH	13.48	14.77	PASS
	TM1/ 20MHz	LCH	17.90	19.30	PASS
		MCH	17.90	19.38	PASS
		HCH	17.82	19.18	PASS
	TM2/ 20MHz	LCH	17.86	19.26	PASS
		MCH	17.94	19.46	PASS
		HCH	17.86	19.38	PASS
	TM3/ 20MHz	LCH	17.9	19.3	PASS
		MCH	17.9	19.3	PASS
		HCH	17.9	19.38	PASS

4.1 For LTE

4.1.1 Test Band = LTE BAND 66

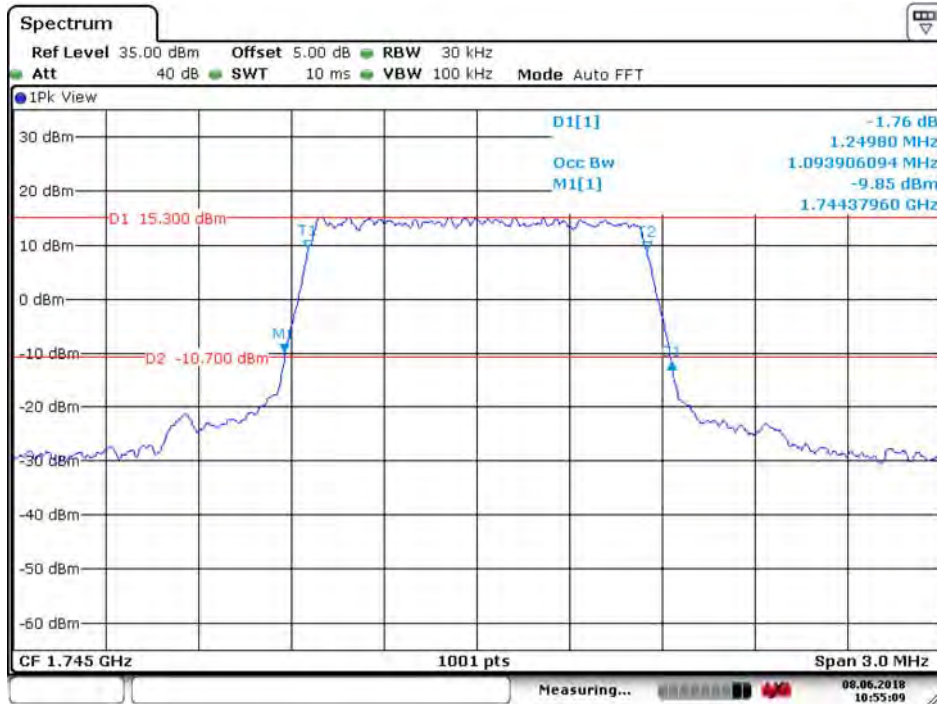
4.1.1.1 Test Mode = LTE/TM1 1.4MHz

4.1.1.1.1 Test Channel = LCH



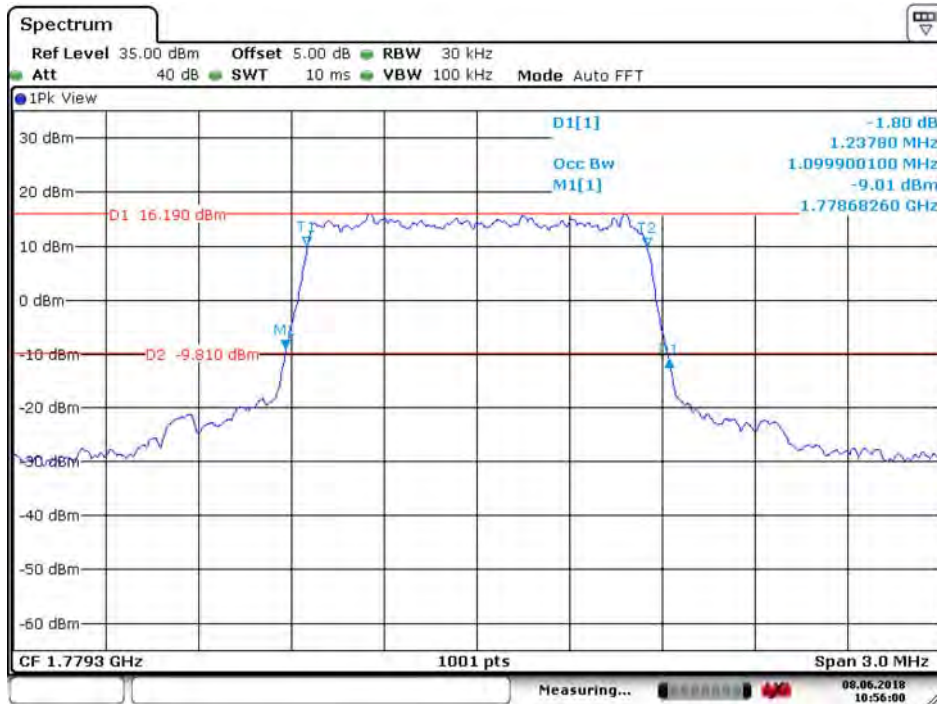
Date: 8.JUN.2018 10:52:16

4.1.1.1.2 Test Channel = MCH



Date: 8.JUN.2018 10:55:09

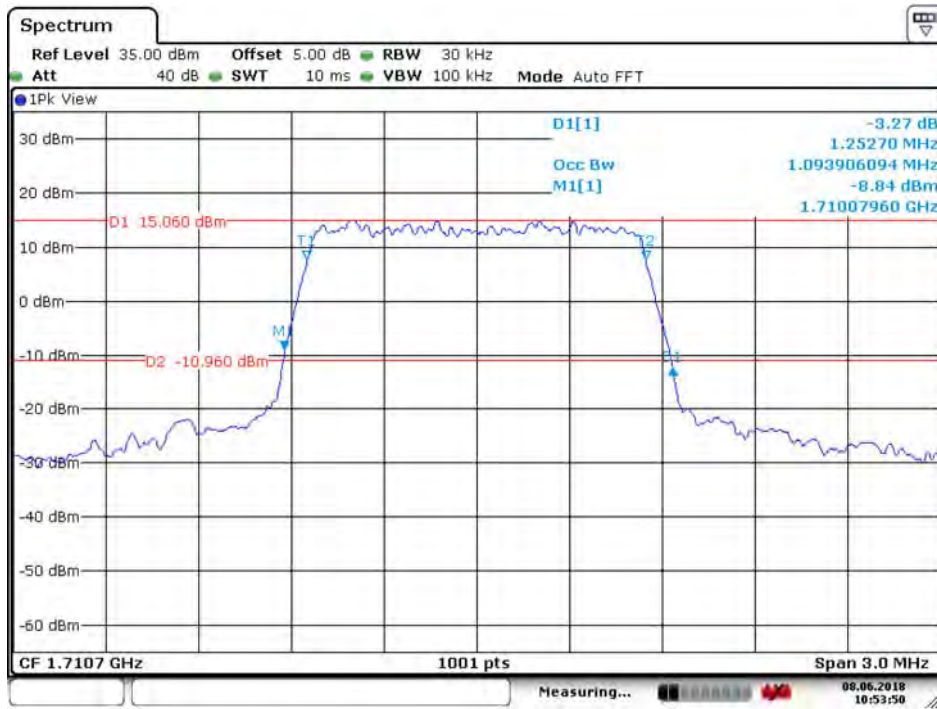
4.1.1.1.3 Test Channel = HCH



Date: 8.JUN.2018 10:56:01

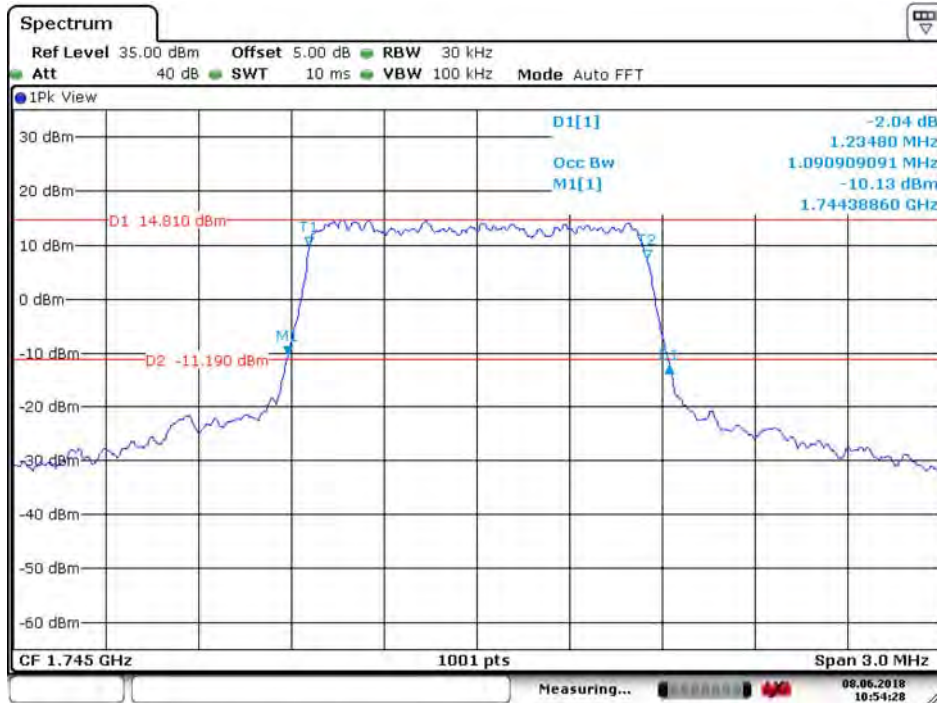
4.1.1.2 Test Mode = LTE/TM2 1.4MHz

4.1.1.2.1 Test Channel = LCH



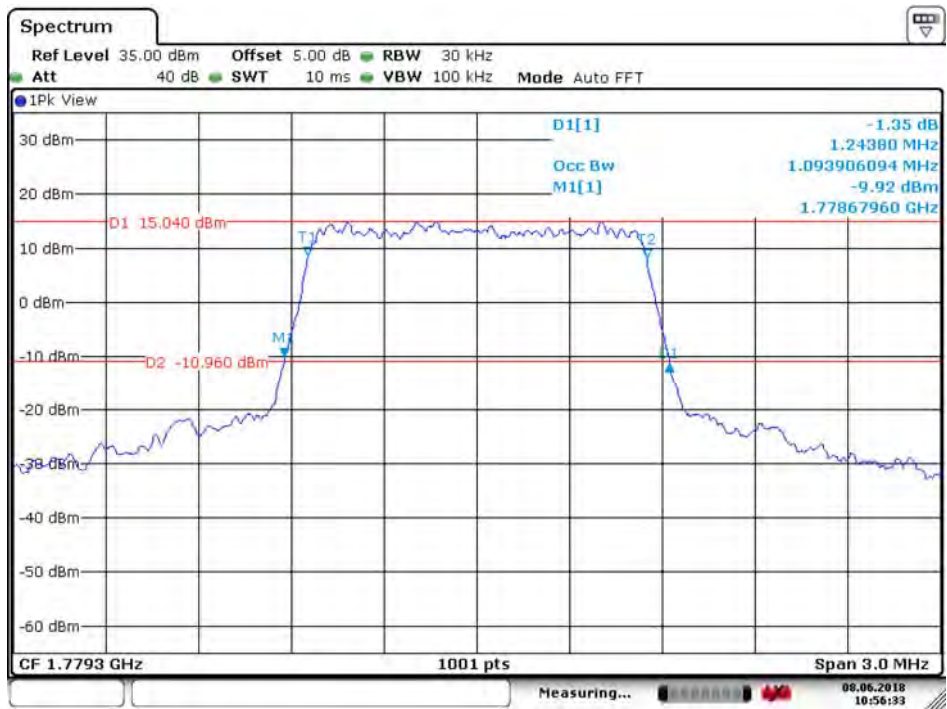
Date: 8 JUN.2018 10:53:51

4.1.1.2.2 Test Channel = MCH



Date: 8 JUN.2018 10:54:28

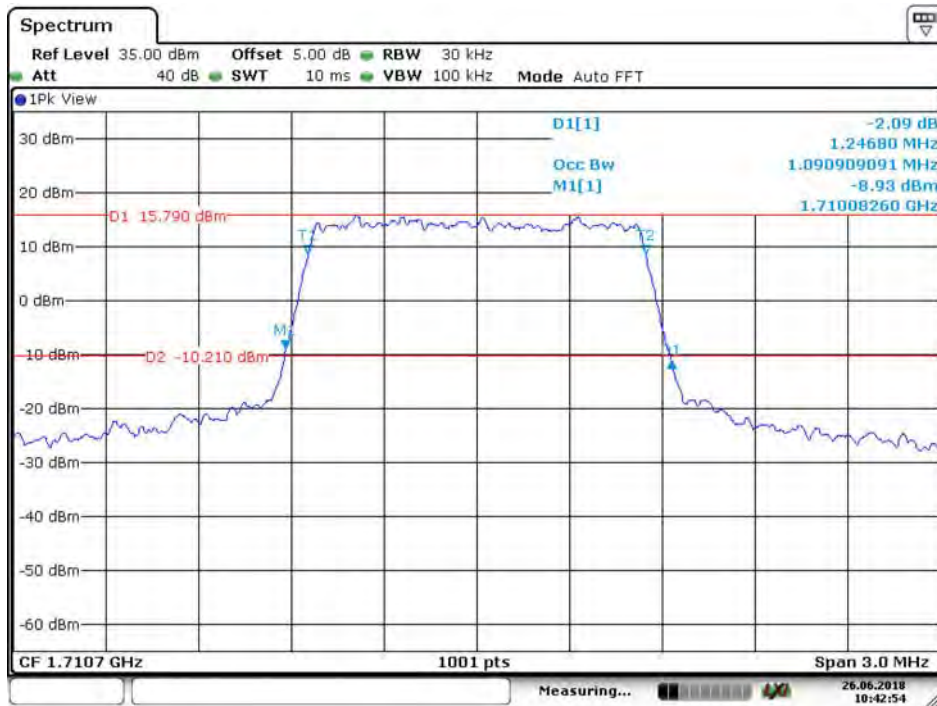
4.1.1.2.3 Test Channel = HCH



Date: 8 JUN 2018 10:56:33

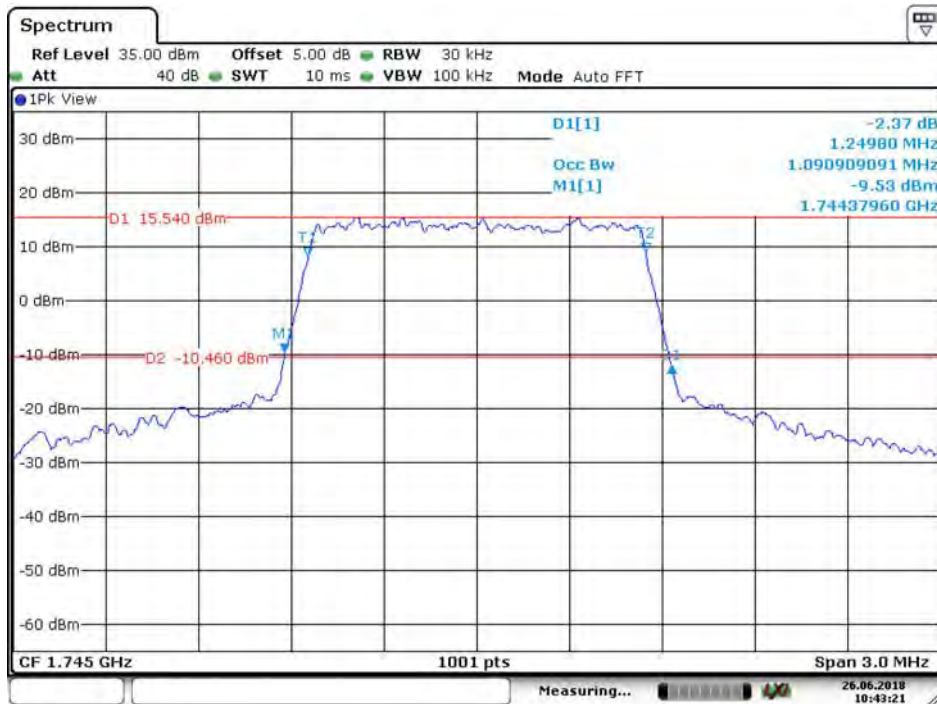
4.1.1.3 Test Mode = LTE/TM3 1.4MHz

4.1.1.3.1 Test Channel = LCH



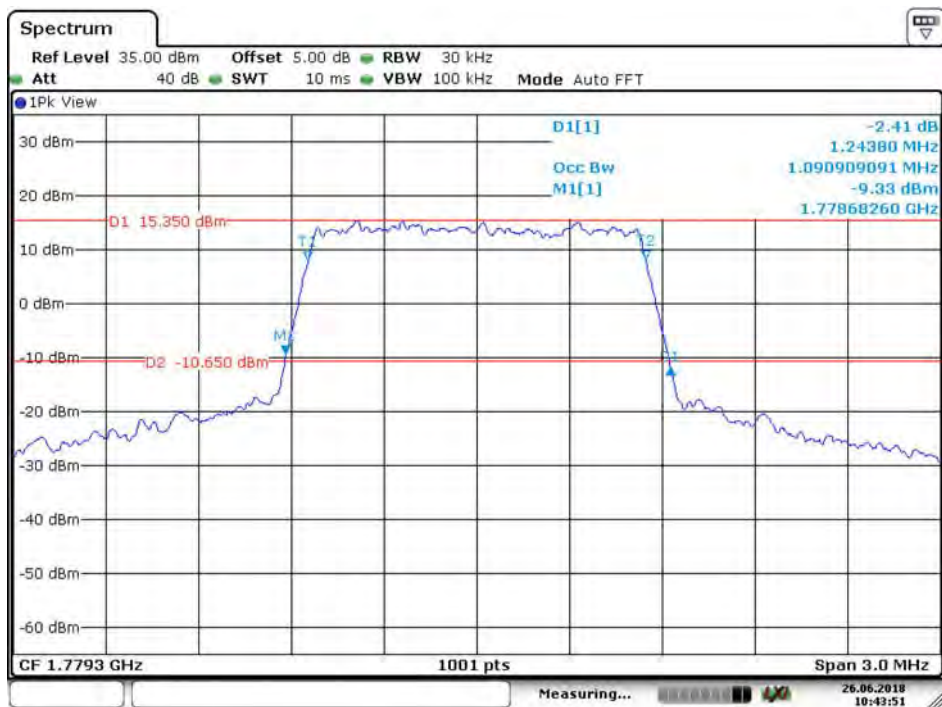
Date: 26 JUN 2018 10:42:54

4.1.1.3.2 Test Channel = MCH



Date: 26 JUN 2018 10:43:21

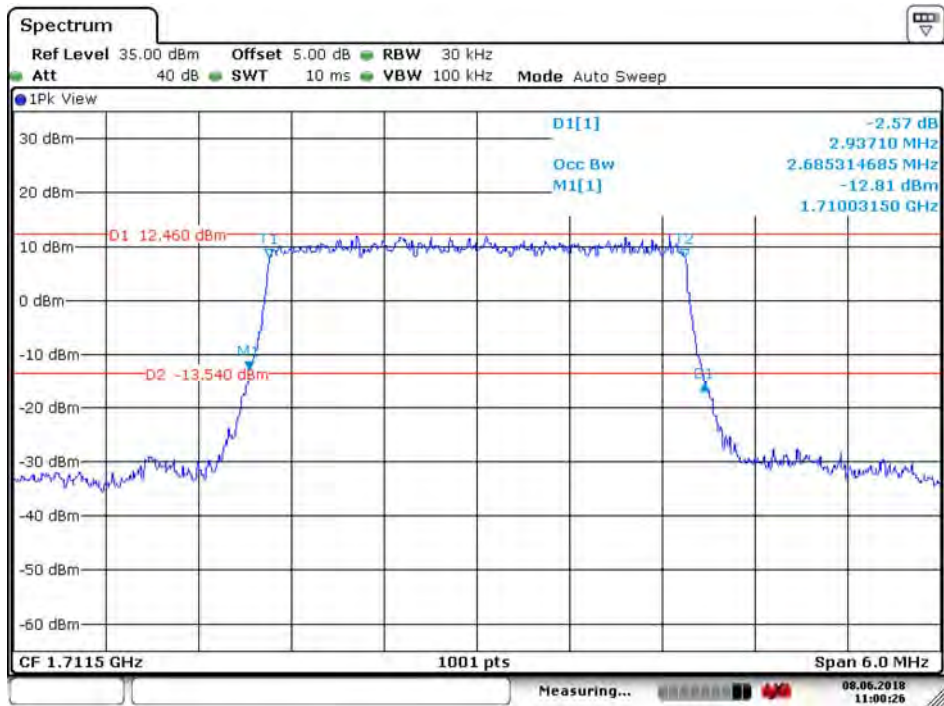
4.1.1.3.3 Test Channel = HCH



Date: 26 JUN 2018 10:43:52

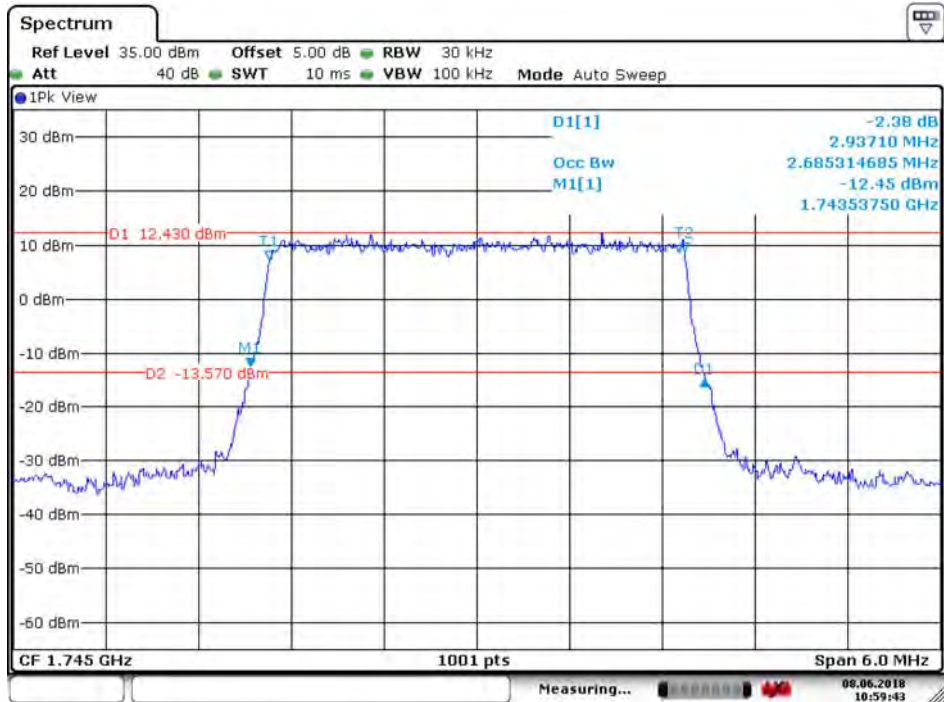
4.1.1.4 Test Mode = LTE/TM1 3MHz

4.1.1.4.1 Test Channel = LCH



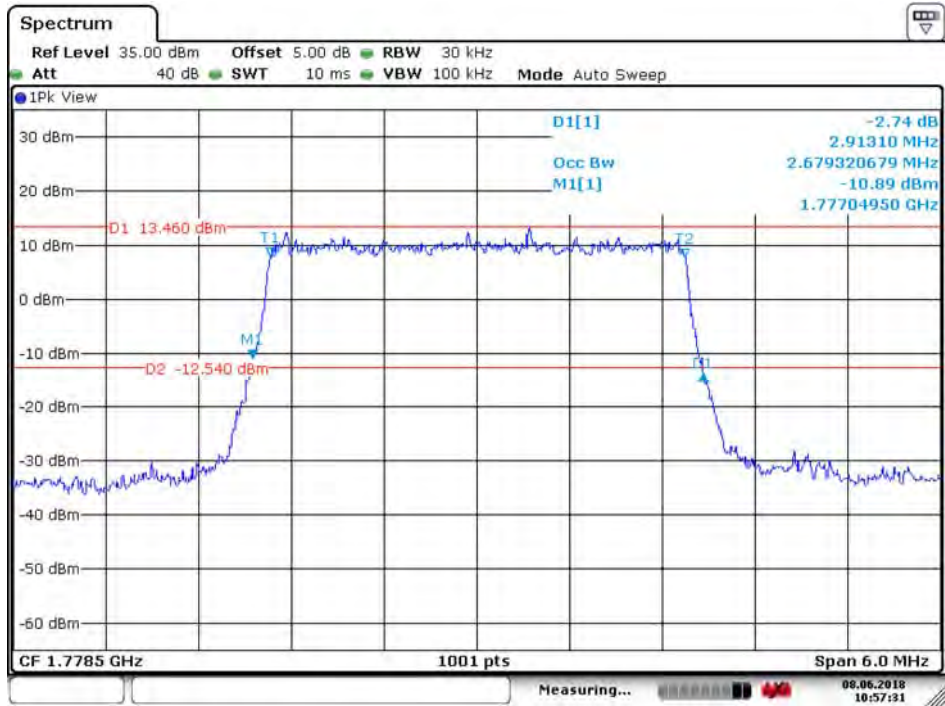
Date: 8 JUN 2018 11:00:26

Test Channel = MCH



Date: 8 JUN 2018 10:59:44

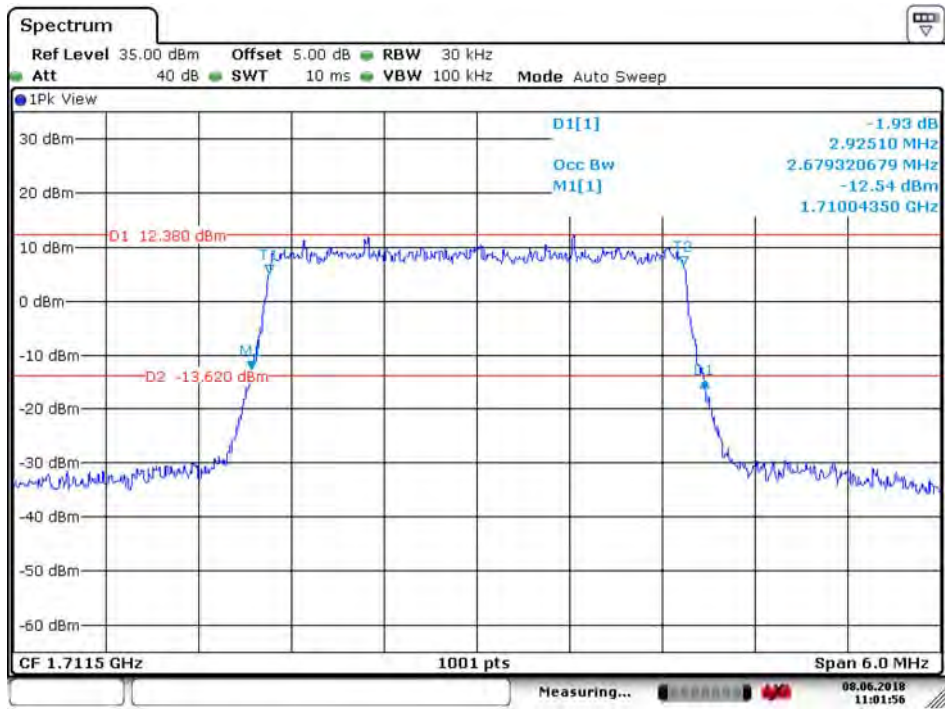
4.1.1.4.2 Test Channel = HCH



Date: 8 JUN 2018 10:57:31

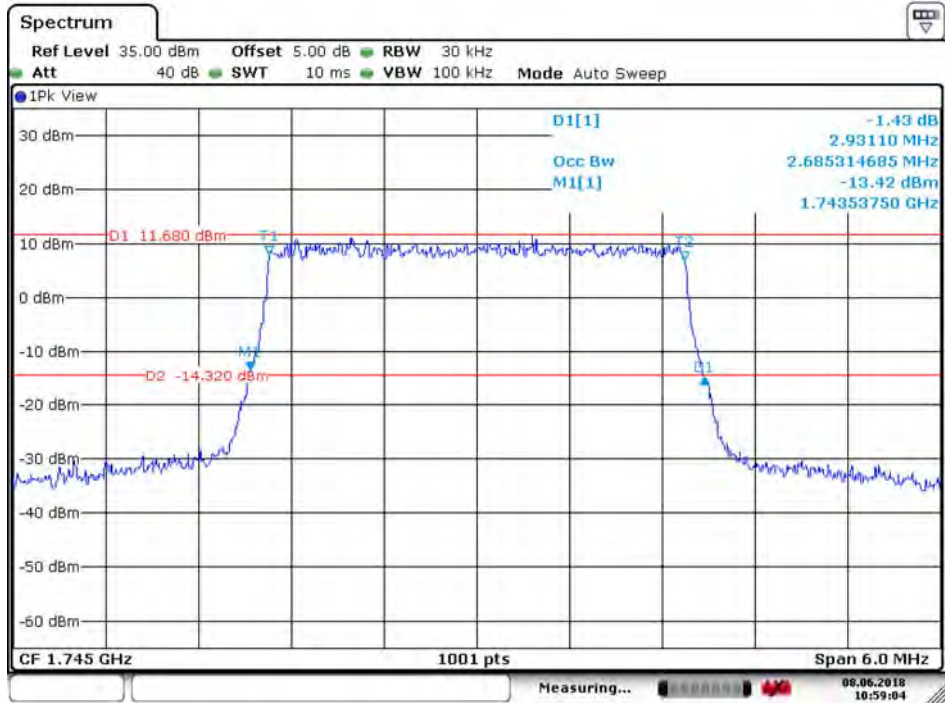
4.1.1.5 Test Mode = LTE/TM2 3MHz

4.1.1.5.1 Test Channel = LCH



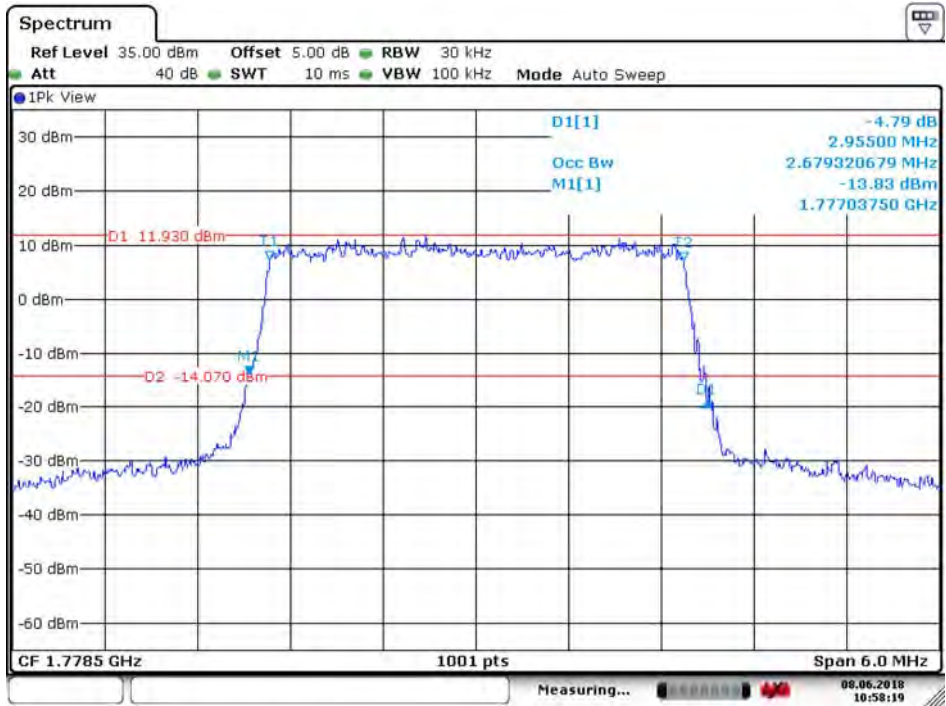
Date: 8 JUN.2018 11:01:56

4.1.1.5.2 Test Channel = MCH



Date: 8 JUN.2018 10:59:04

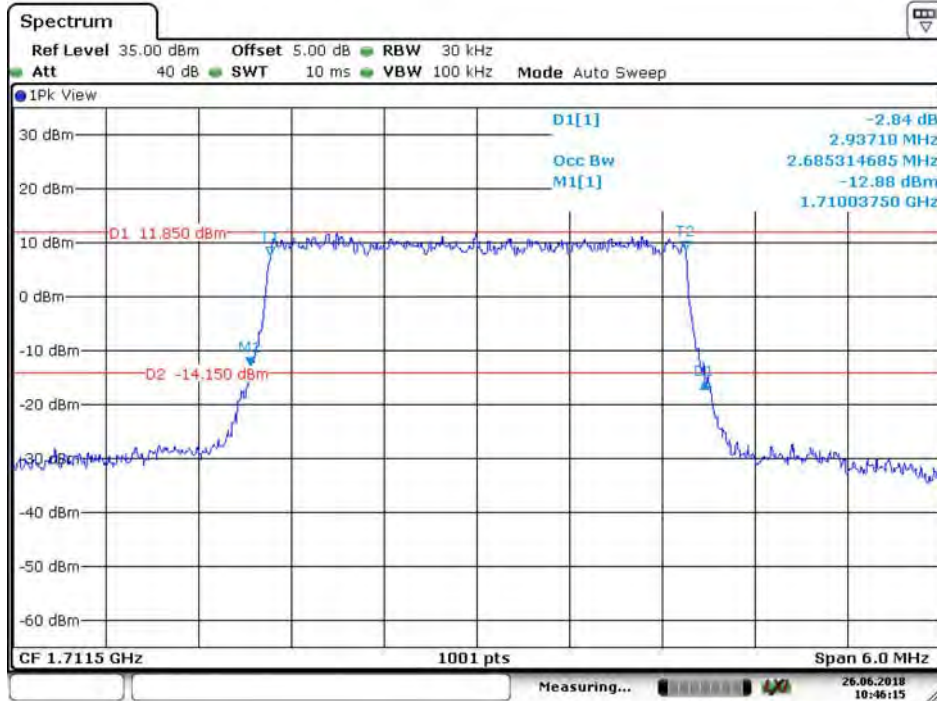
Test Channel = HCH



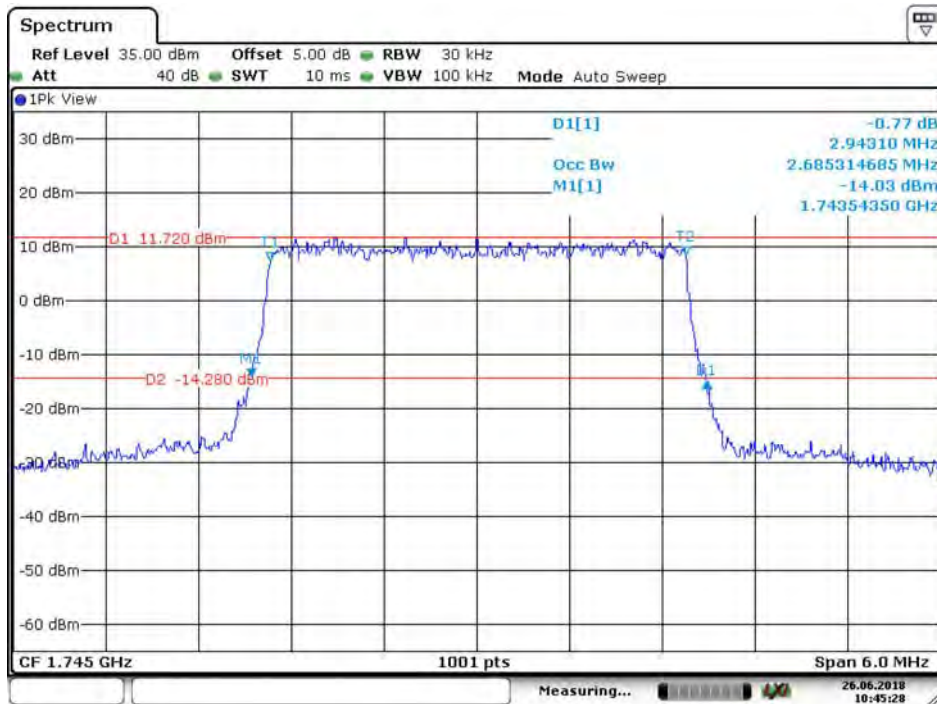
Date: 8.JUN.2018 10:58:19

4.1.1.6 Test Mode = LTE/TM3 3MHz

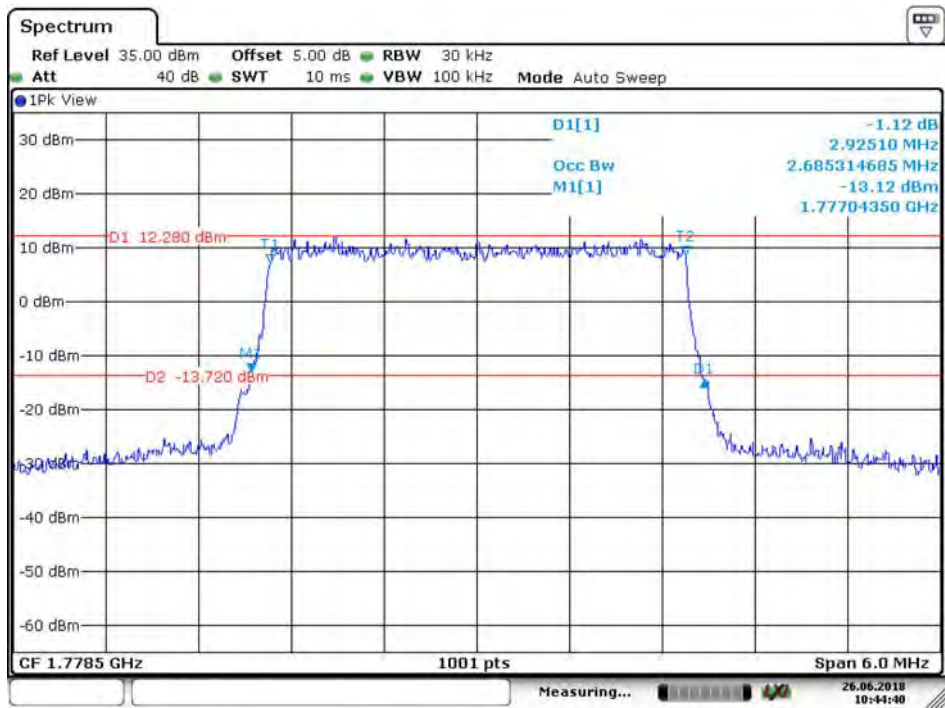
4.1.1.6.1 Test Channel = LCH



4.1.1.6.2 Test Channel = MCH



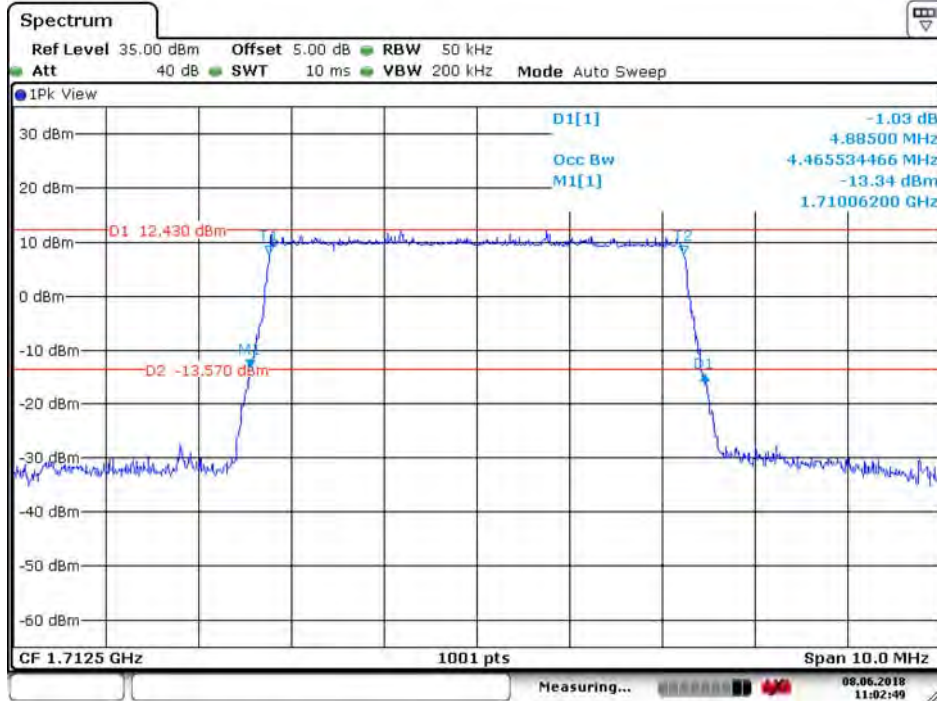
4.1.1.6.3 Test Channel = HCH



Date: 26 JUN 2018 10:44:40

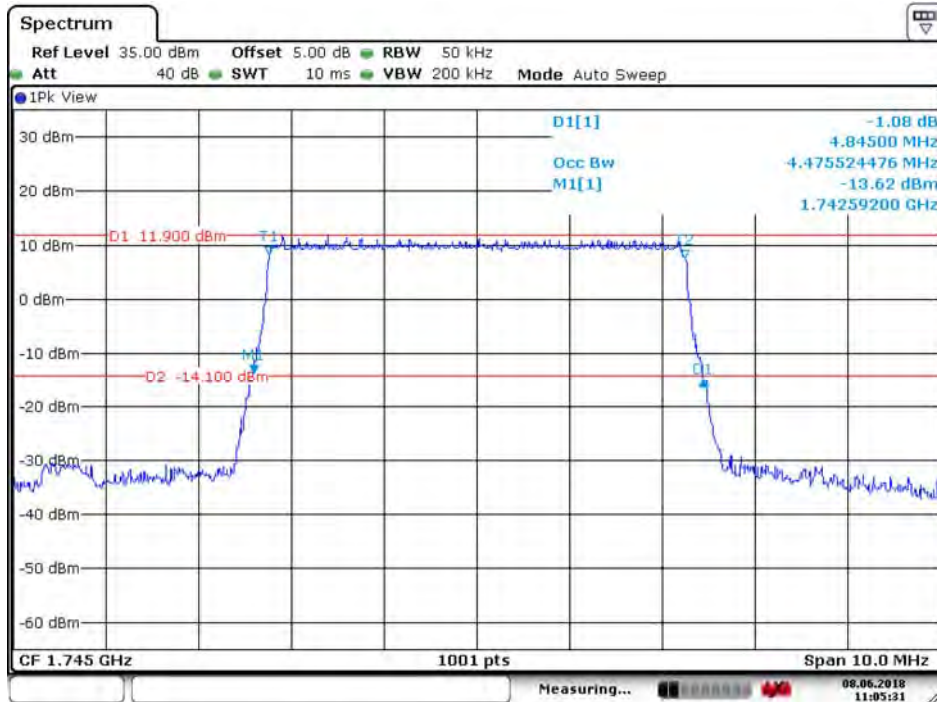
4.1.1.7 Test Mode = LTE/TM1 5MHz

4.1.1.7.1 Test Channel = LCH



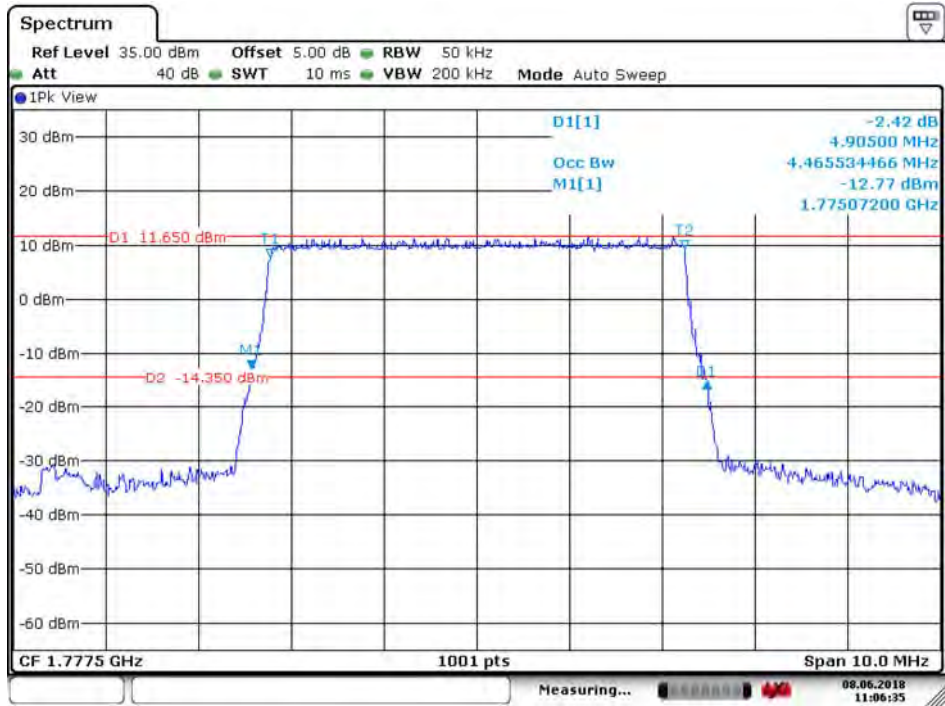
Date: 8 JUN.2018 11:02:49

4.1.1.7.2 Test Channel = MCH



Date: 8 JUN.2018 11:05:32

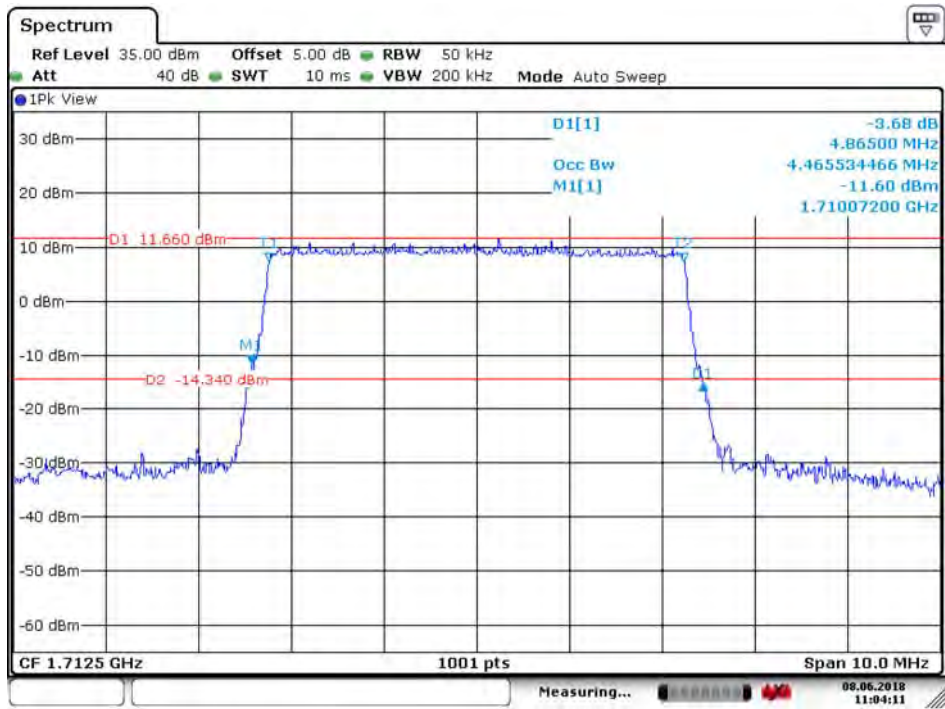
4.1.1.7.3 Test Channel = HCH



Date: 8.JUN.2018 11:06:35

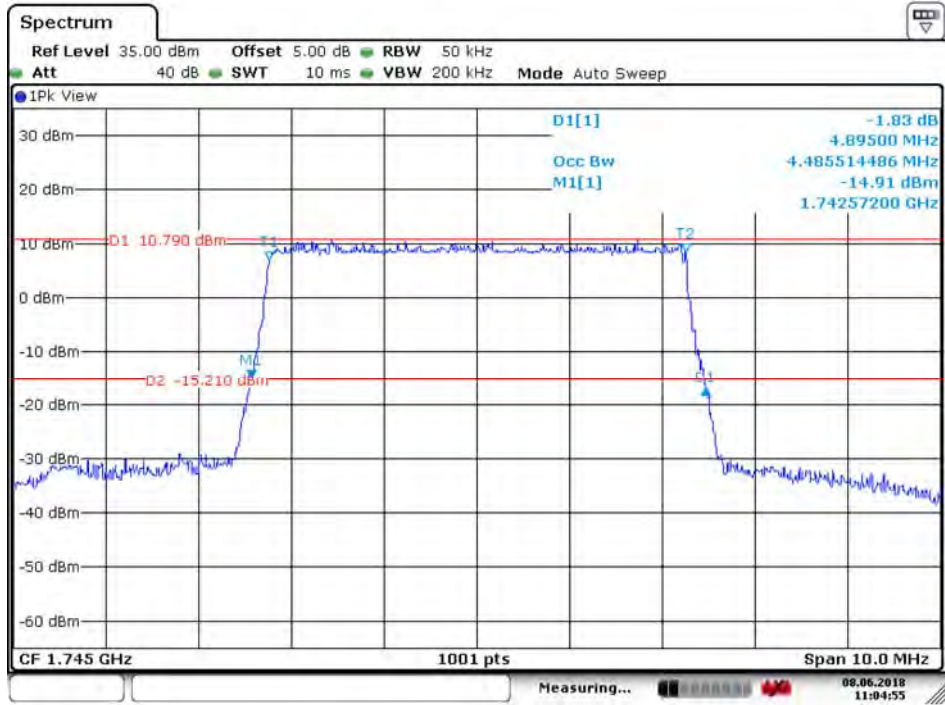
4.1.1.8 Test Mode = LTE/TM2 5MHz

4.1.1.8.1 Test Channel = LCH



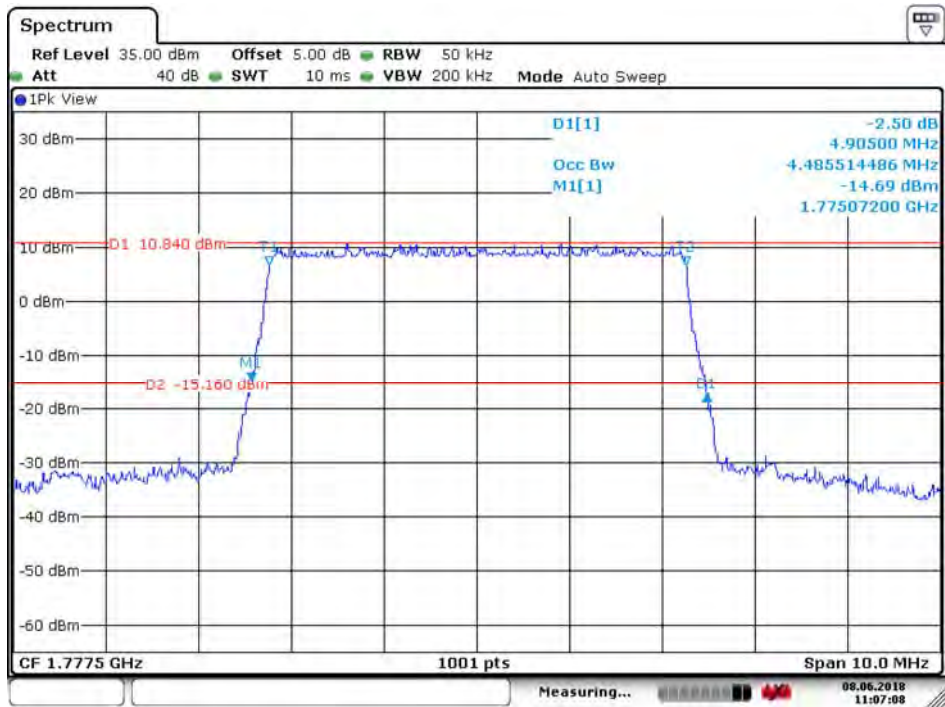
Date: 8.JUN.2018 11:04:12

4.1.1.8.2 Test Channel = MCH



Date: 8.JUN.2018 11:04:55

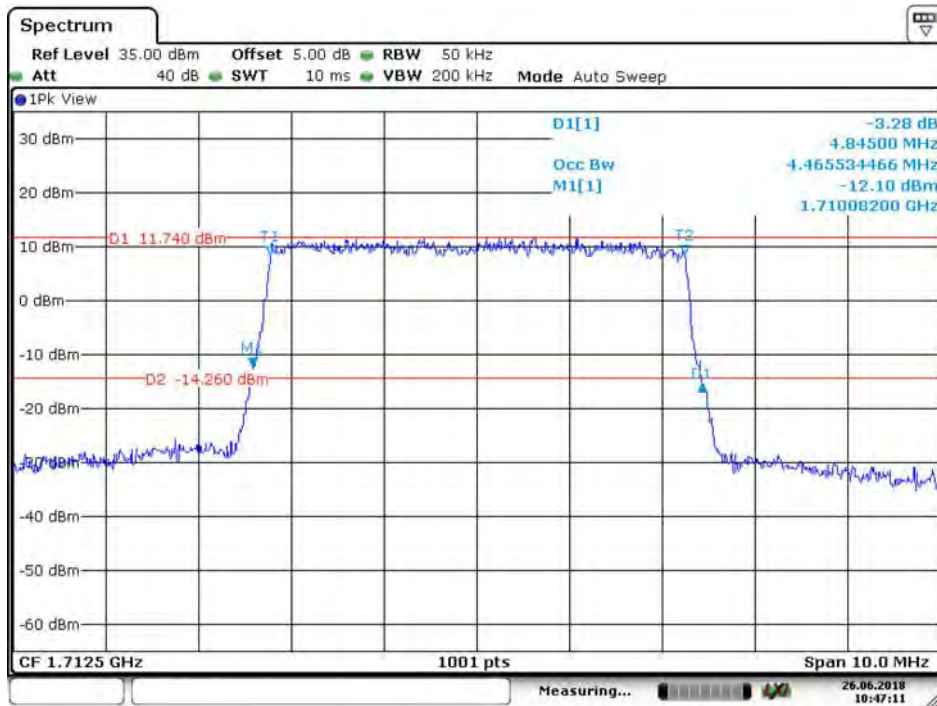
4.1.1.8.3 Test Channel = HCH



Date: 8.JUN.2018 11:07:09

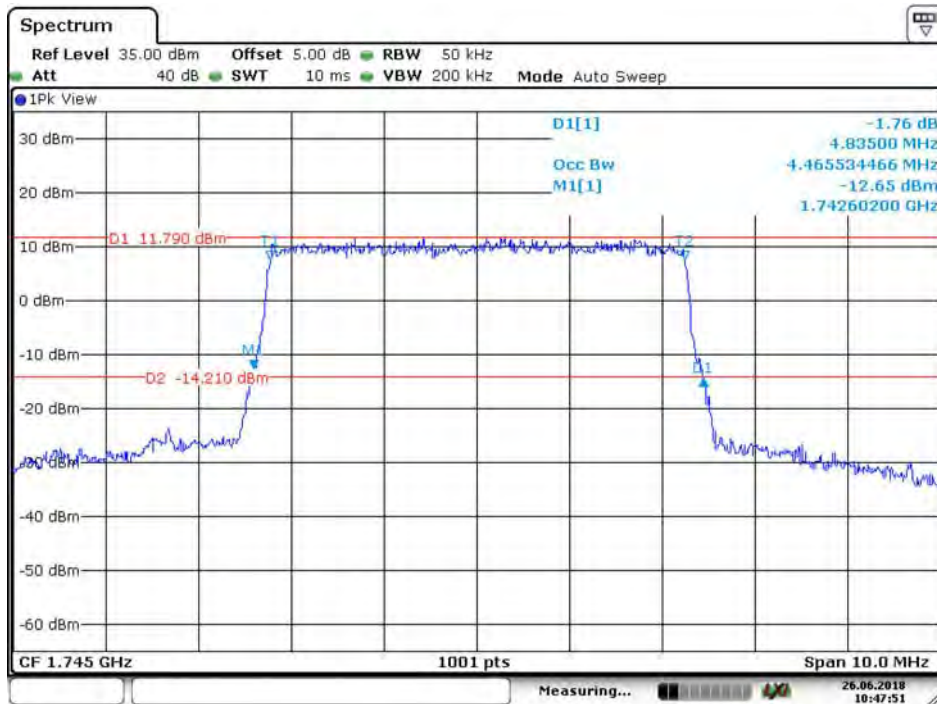
4.1.1.9 Test Mode = LTE/TM3 5MHz

4.1.1.9.1 Test Channel = LCH



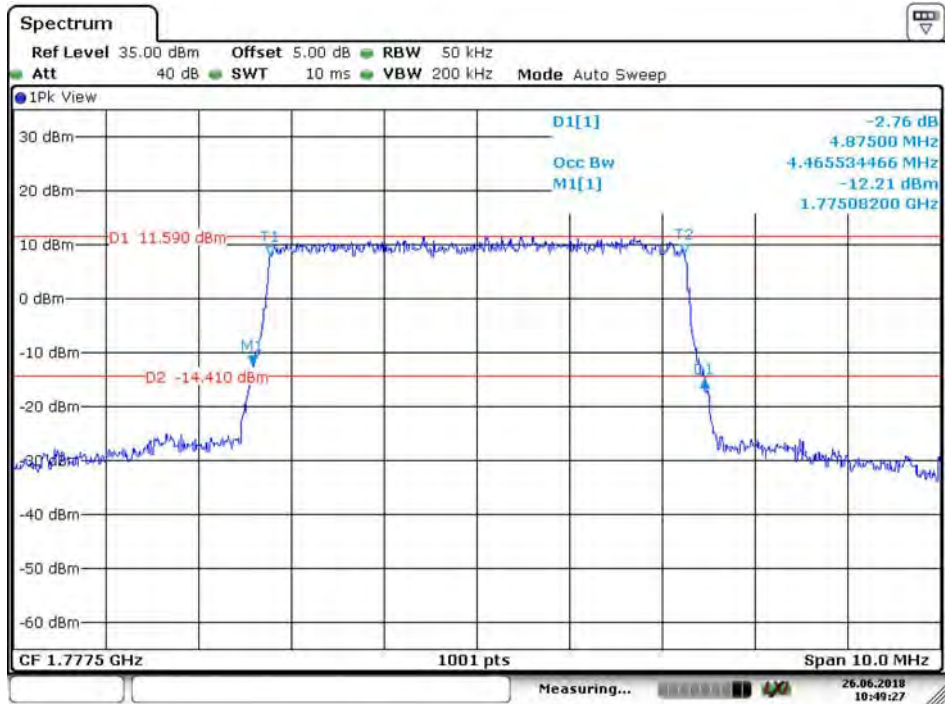
Date: 26 JUN 2018 10:47:12

4.1.1.9.2 Test Channel = MCH



Date: 26 JUN 2018 10:47:51

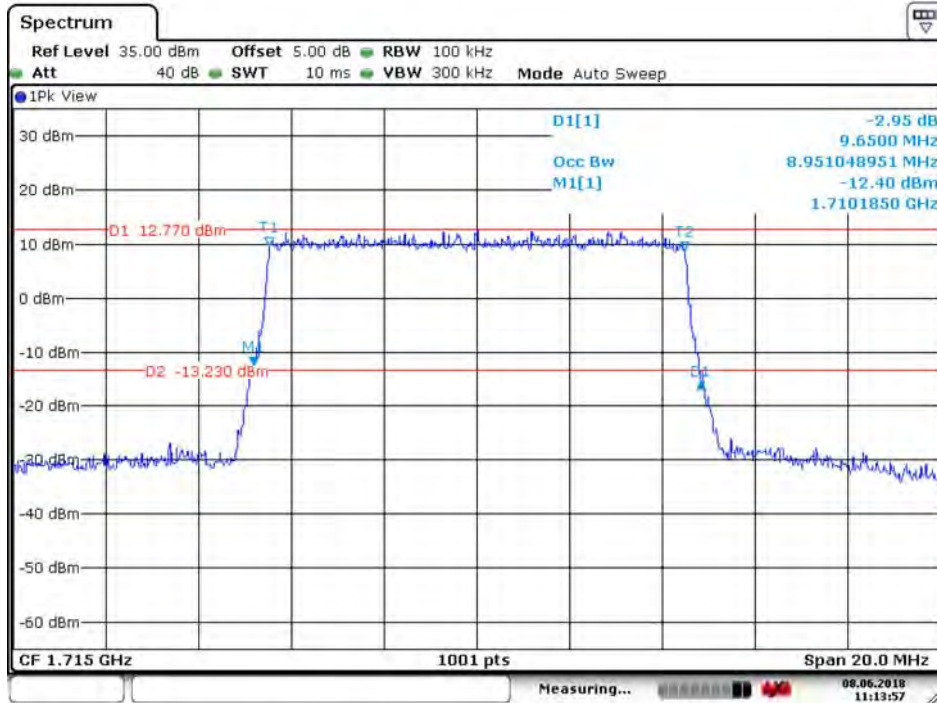
4.1.1.9.3 Test Channel = HCH



Date: 26 JUN 2018 10:49:28

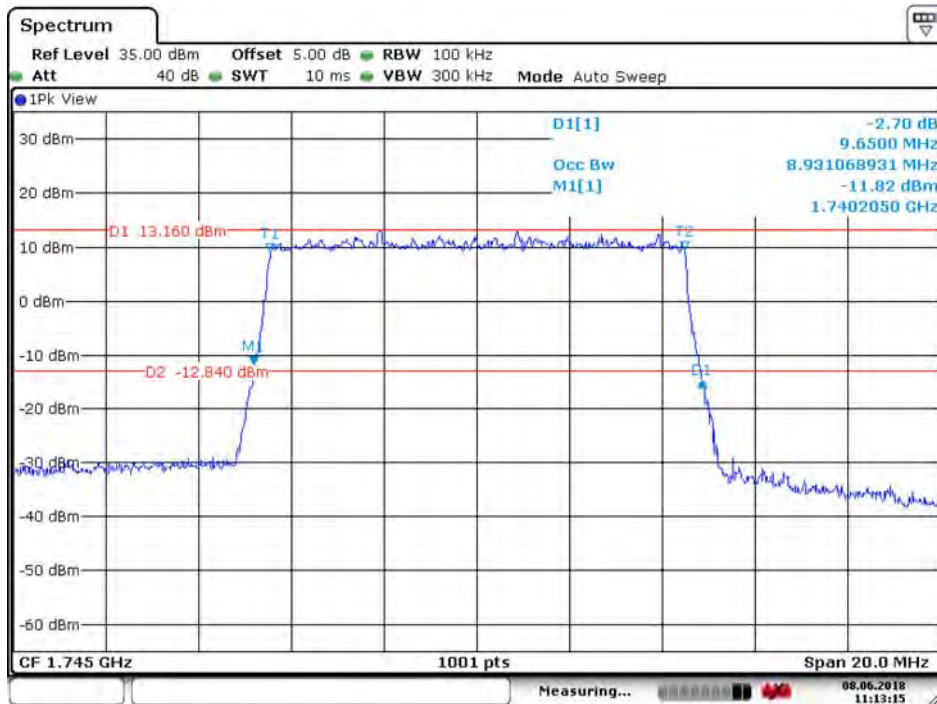
4.1.1.10 Test Mode = LTE/TM1 10MHz

4.1.1.10.1 Test Channel = LCH



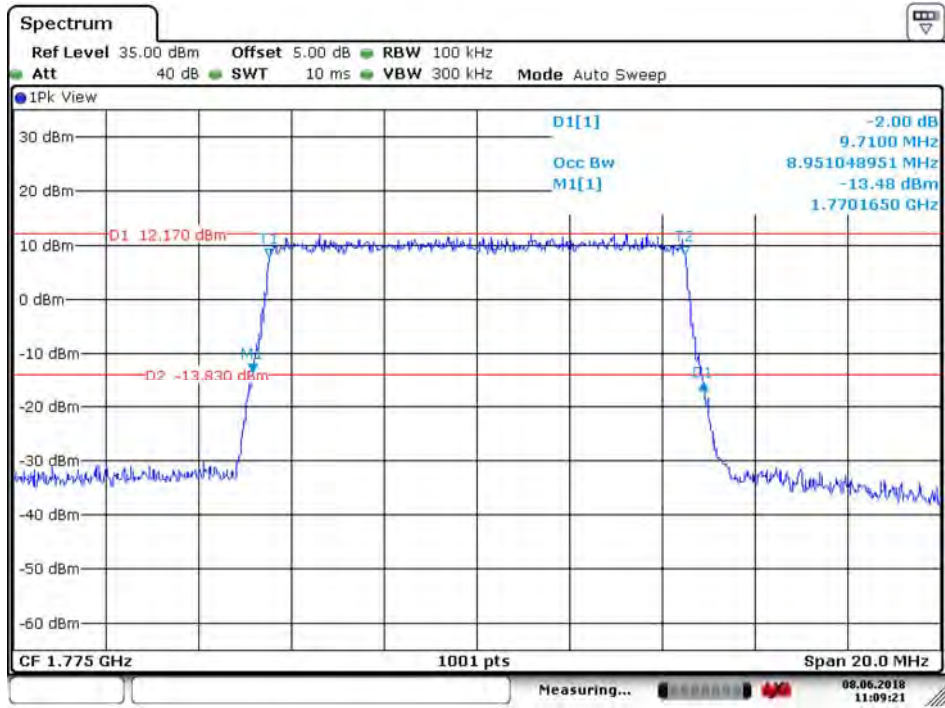
Date: 8 JUN.2018 11:13:58

4.1.1.10.2 Test Channel = MCH



Date: 8 JUN.2018 11:13:15

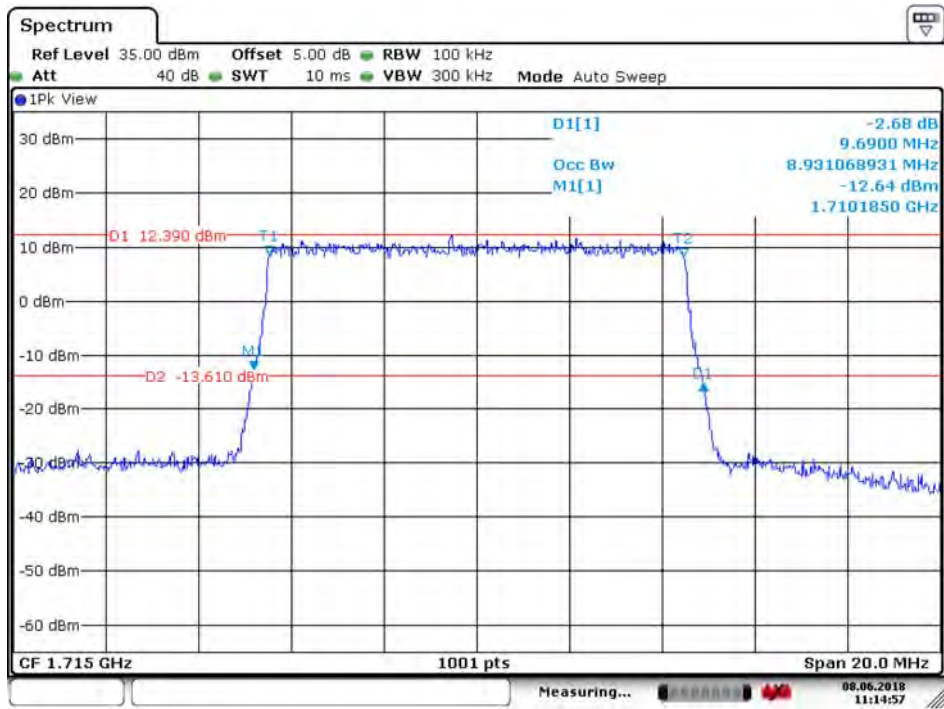
4.1.1.10.3 Test Channel = HCH



Date: 8.JUN.2018 11:09:22

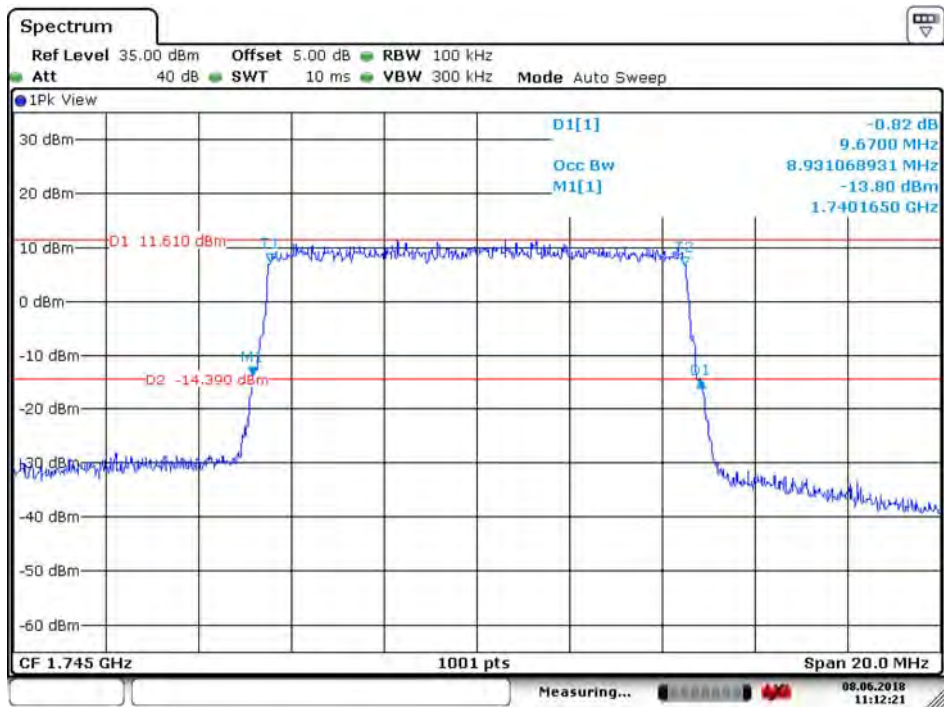
4.1.1.11 Test Mode = LTE/TM2 10MHz

4.1.1.11.1 Test Channel = LCH



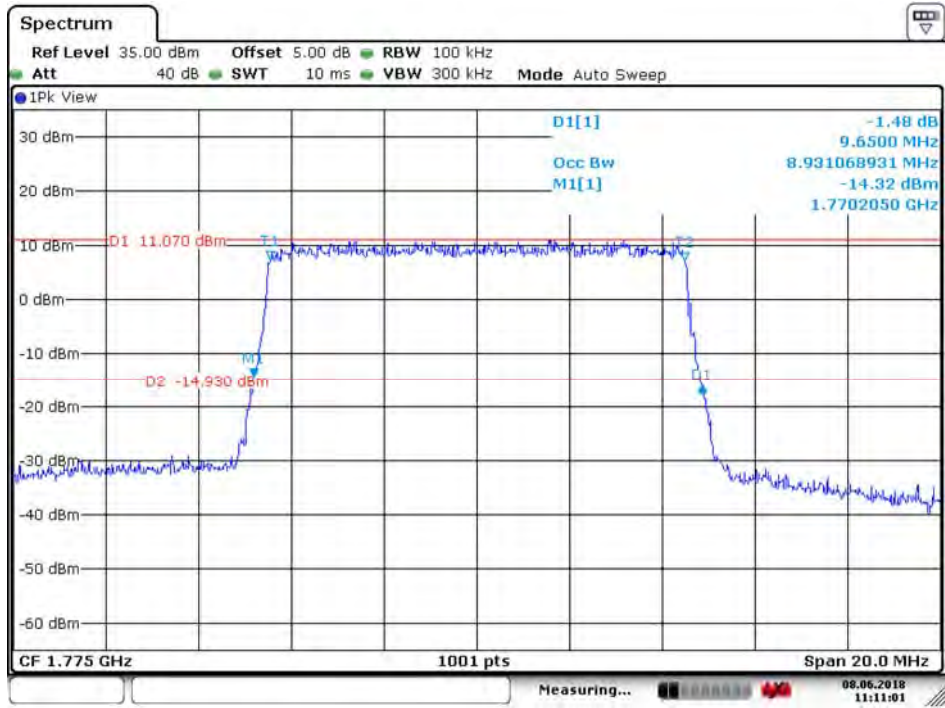
Date: 8 JUN 2018 11:14:57

4.1.1.11.2 Test Channel = MCH



Date: 8 JUN 2018 11:12:21

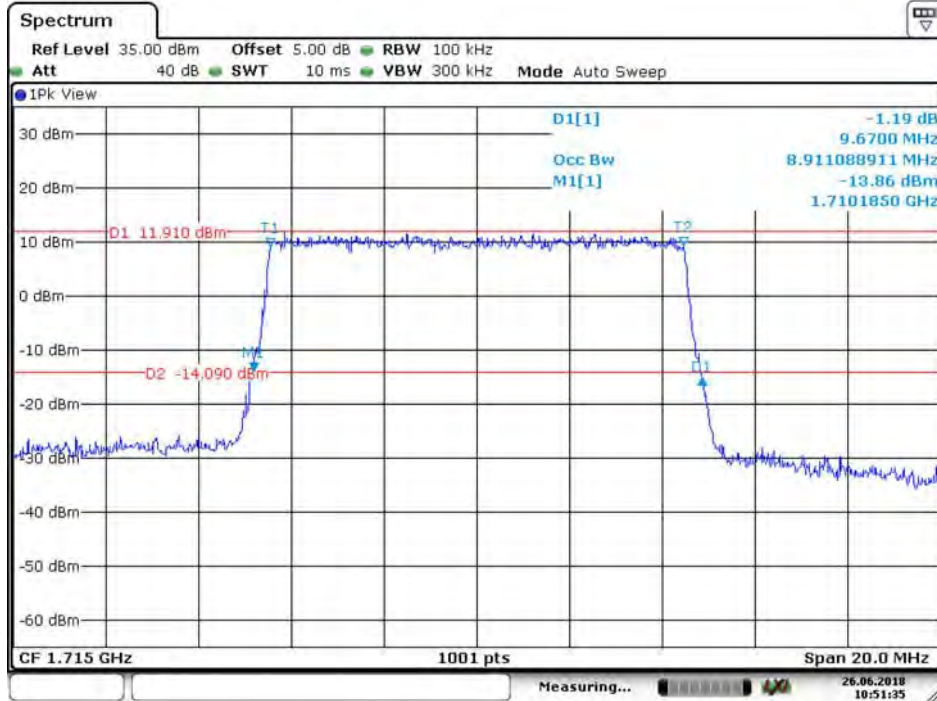
4.1.1.11.3 Test Channel = HCH



Date: 8.JUN.2018 11:11:01

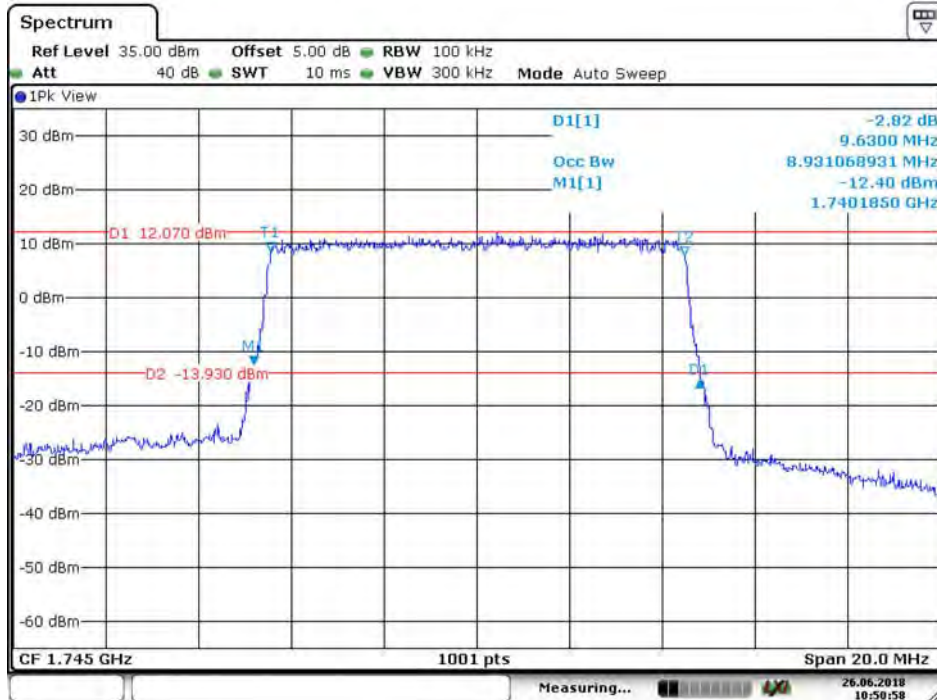
4.1.1.12 Test Mode = LTE/TM3 10MHz

4.1.1.12.1 Test Channel = LCH



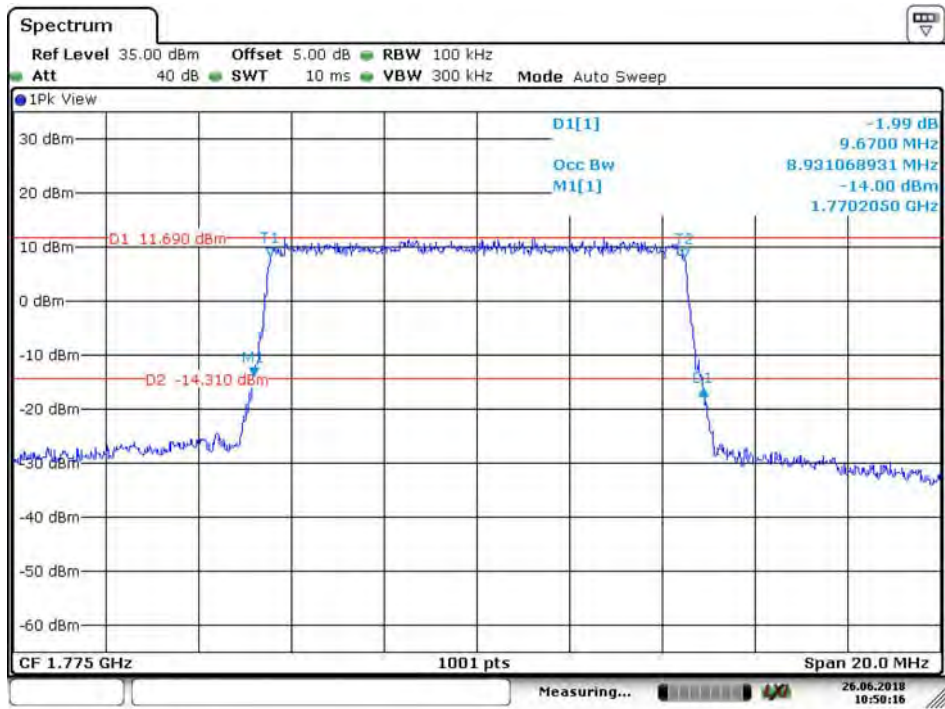
Date: 26 JUN 2018 10:51:35

4.1.1.12.2 Test Channel = MCH



Date: 26 JUN 2018 10:50:59

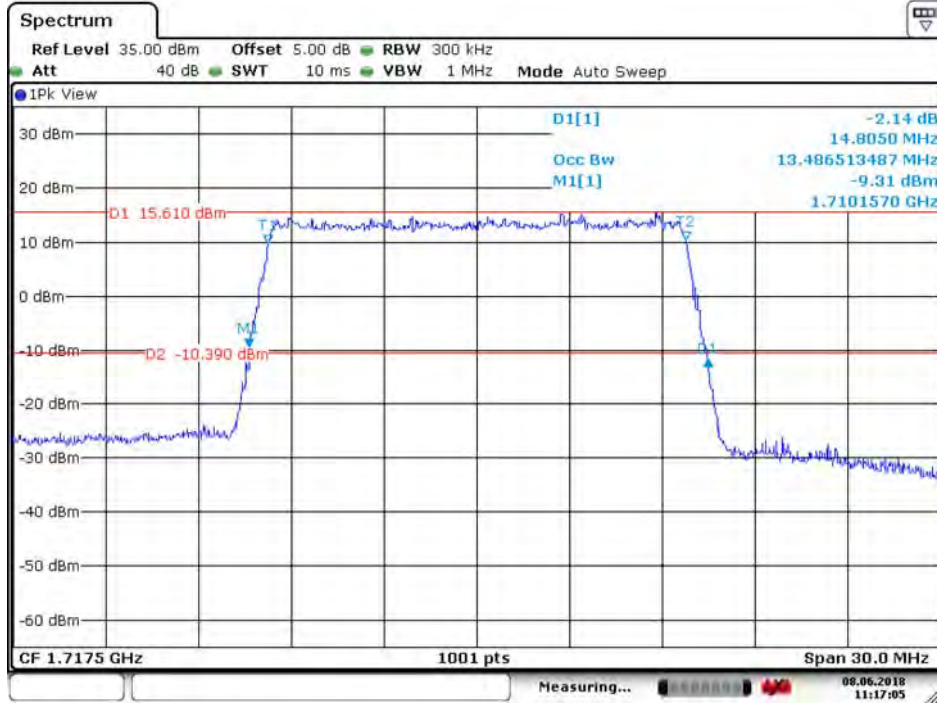
4.1.1.12.3 Test Channel = HCH



Date: 26 JUN 2018 10:50:16

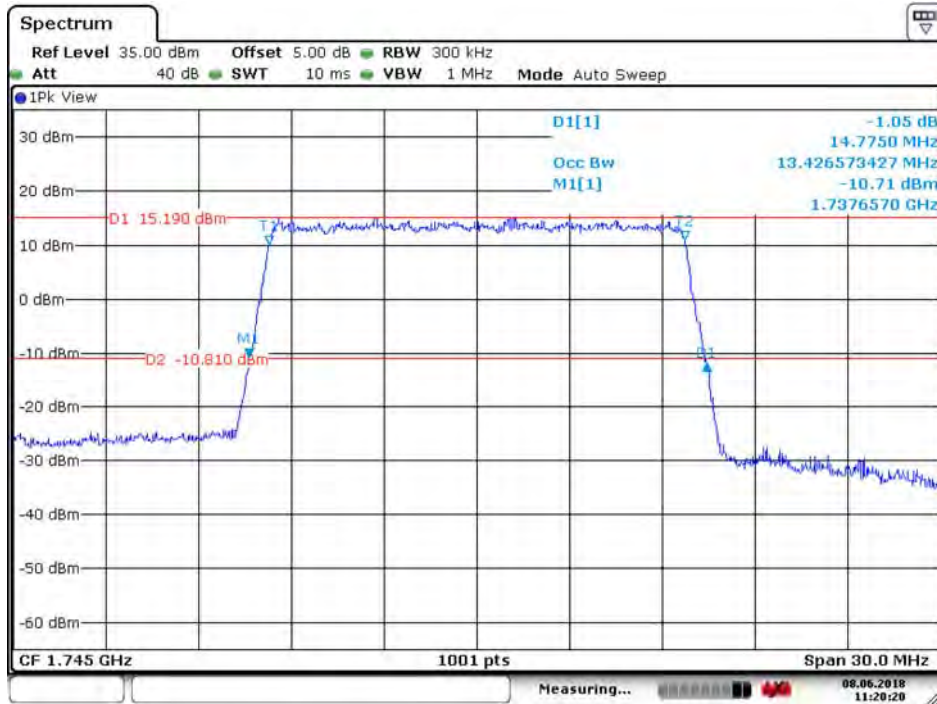
4.1.1.13 Test Mode = LTE/TM1 15MHz

4.1.1.13.1 Test Channel = LCH



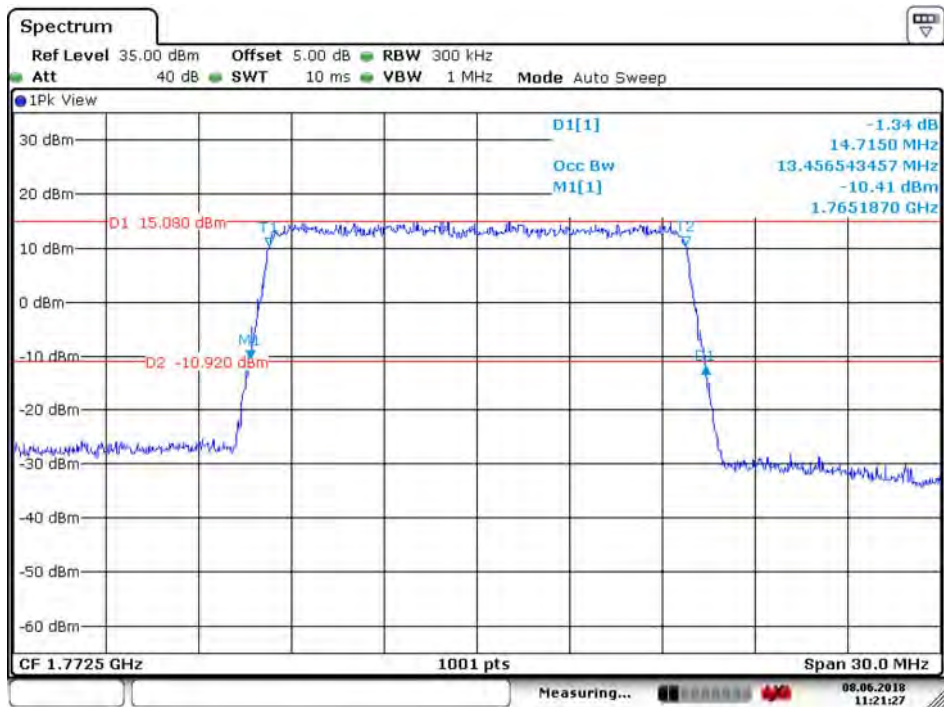
Date: 8 JUN.2018 11:17:05

4.1.1.13.2 Test Channel = MCH



Date: 8 JUN.2018 11:20:20

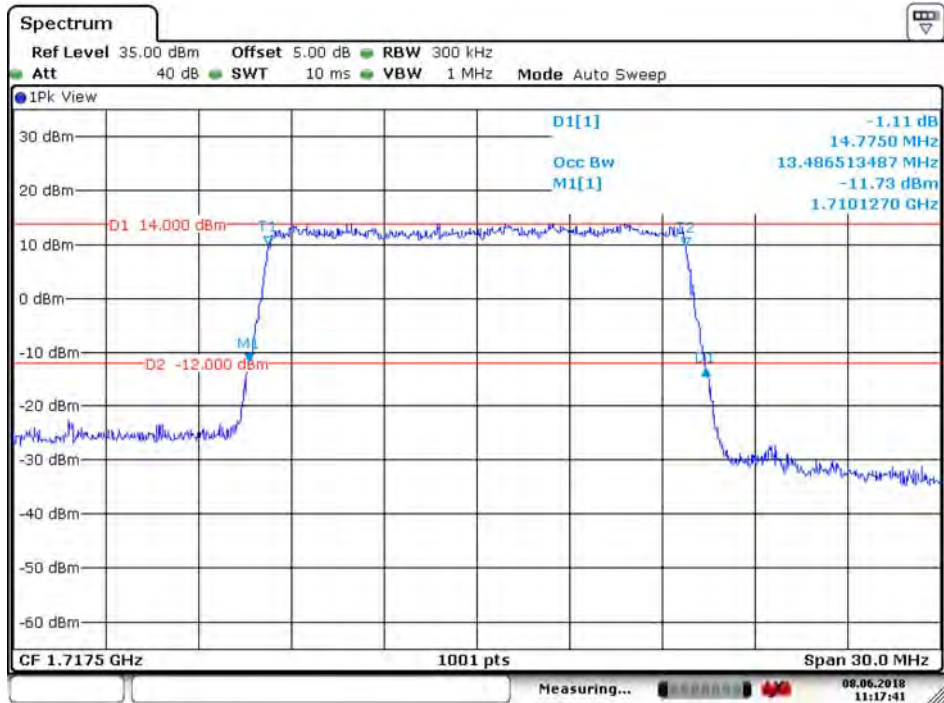
4.1.1.13.3 Test Channel = HCH



Date: 8.JUN.2018 11:21:28

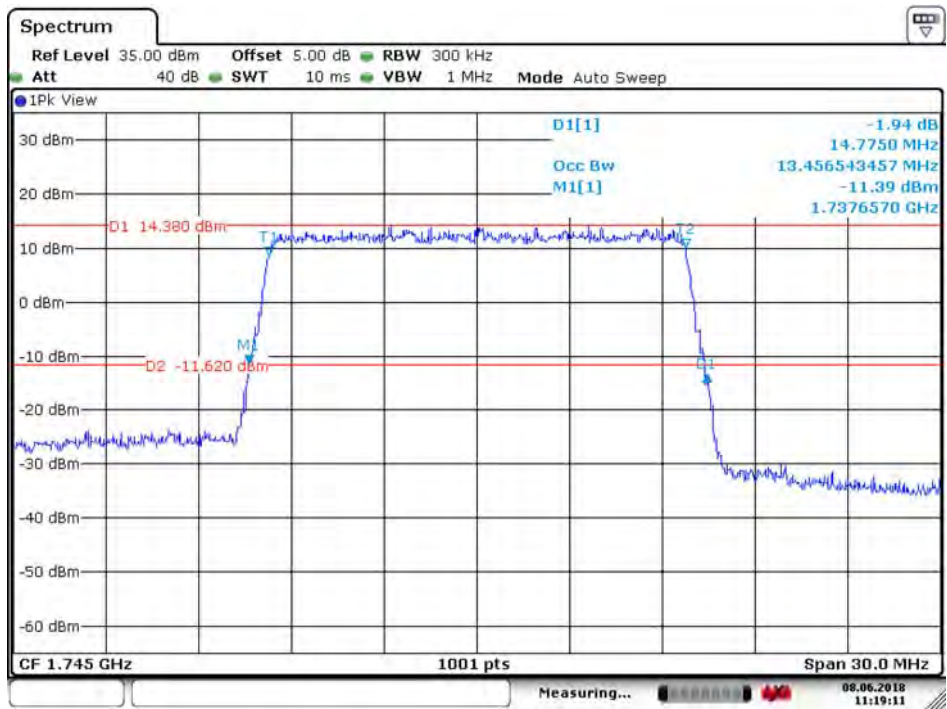
4.1.1.14 Test Mode = LTE/TM2 15MHz

4.1.1.14.1 Test Channel = LCH



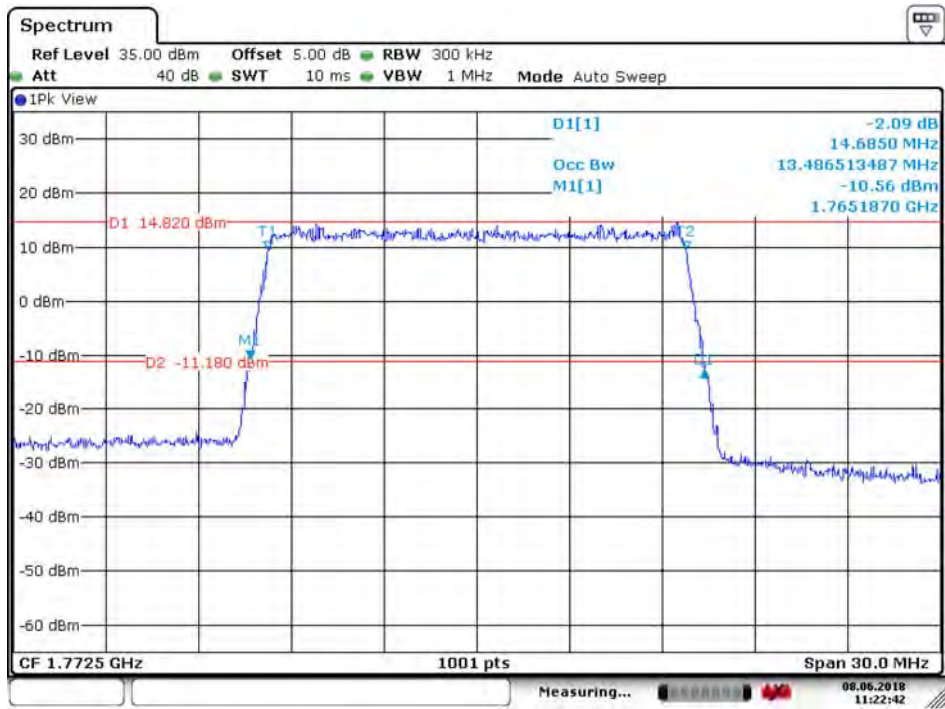
Date: 8.JUN.2018 11:17:42

4.1.1.14.2 Test Channel = MCH



Date: 8.JUN.2018 11:19:12

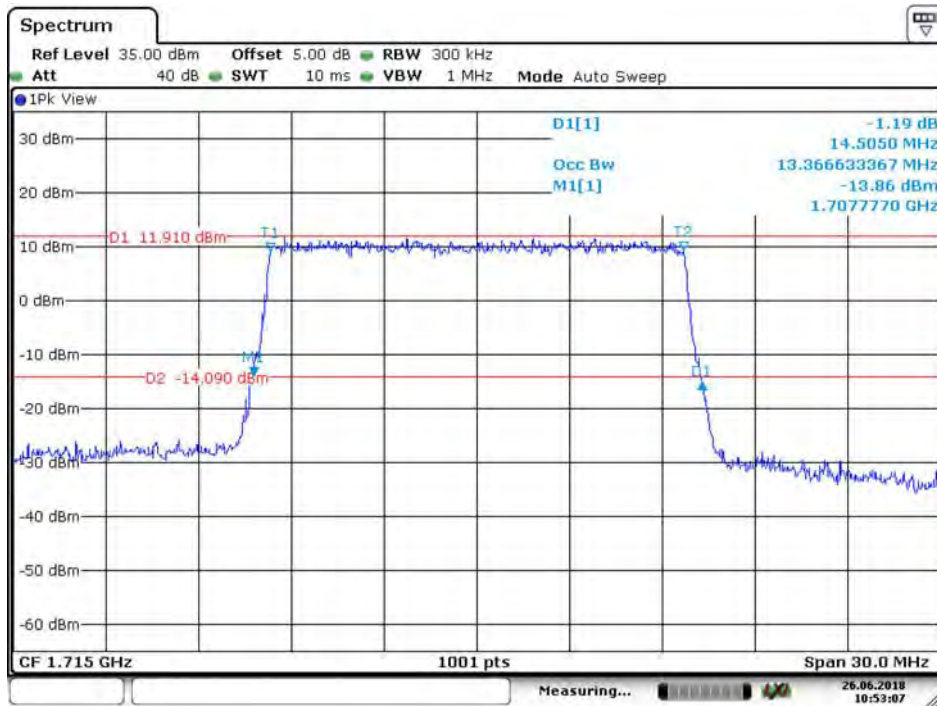
4.1.1.14.3 Test Channel = HCH



Date: 8.JUN.2018 11:22:43

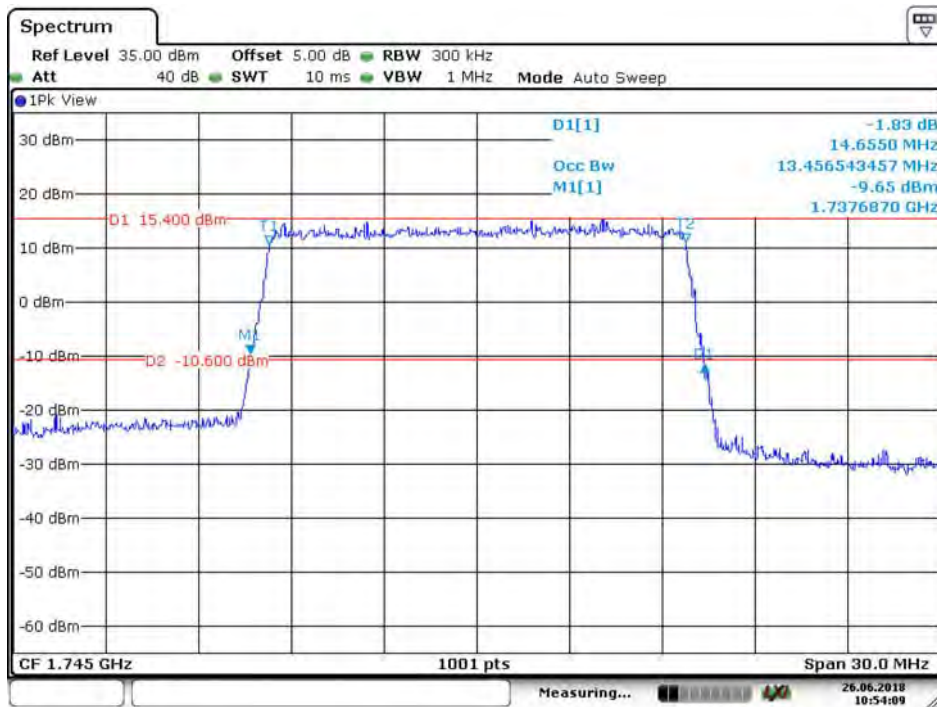
4.1.1.15 Test Mode = LTE/TM3 15MHz

4.1.1.15.1 Test Channel = LCH



Date: 26 JUN 2018 10:53:08

4.1.1.15.2 Test Channel = MCH



Date: 26 JUN 2018 10:54:10

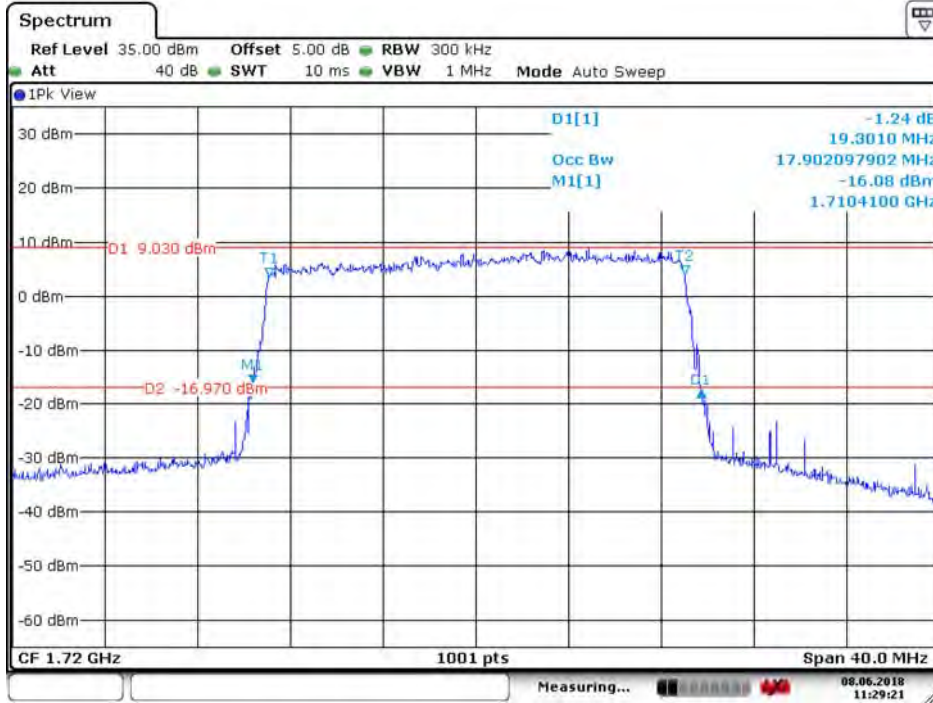
4.1.1.15.3 Test Channel = HCH



Date: 26 JUN 2018 10:55:09

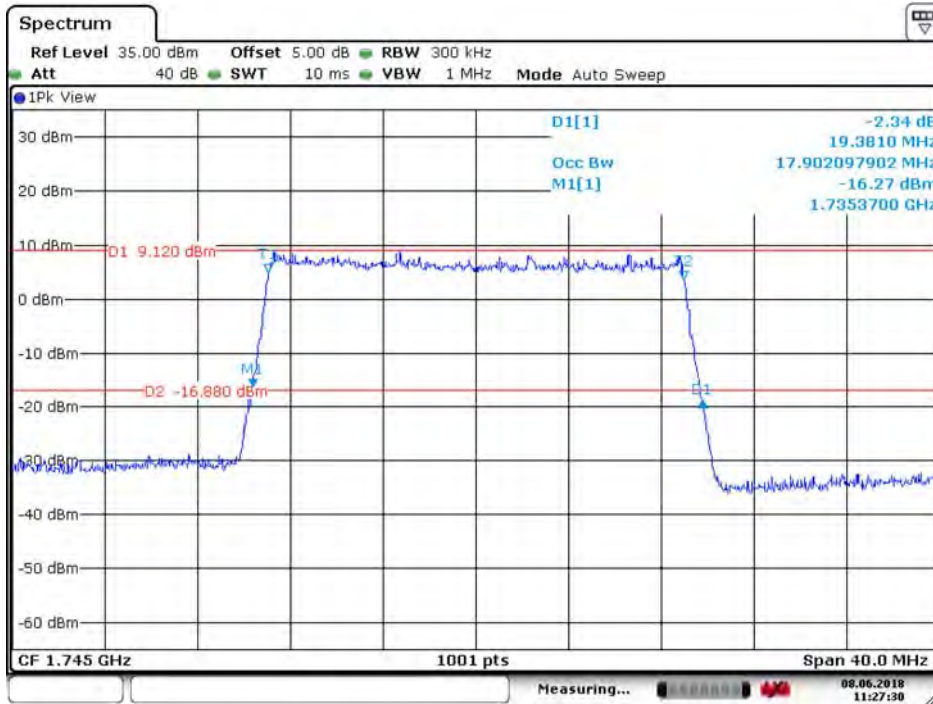
4.1.1.16 Test Mode = LTE/TM1 20MHz

4.1.1.16.1 Test Channel = LCH



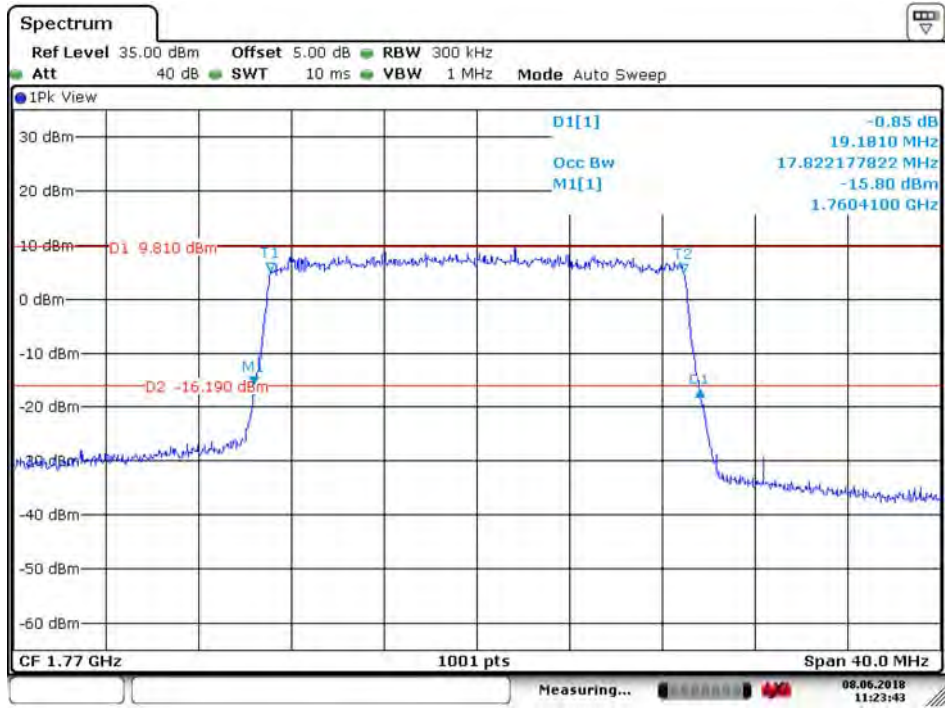
Date: 8.JUN.2018 11:29:21

4.1.1.16.2 Test Channel = MCH



Date: 8.JUN.2018 11:27:31

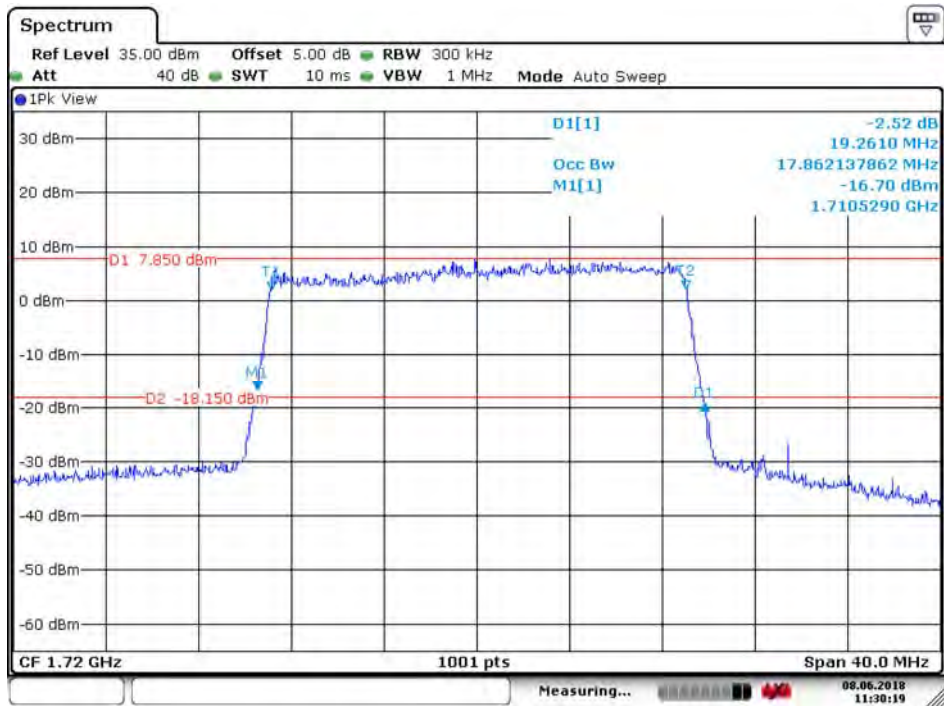
4.1.1.16.3 Test Channel = HCH



Date: 8.JUN.2018 11:23:43

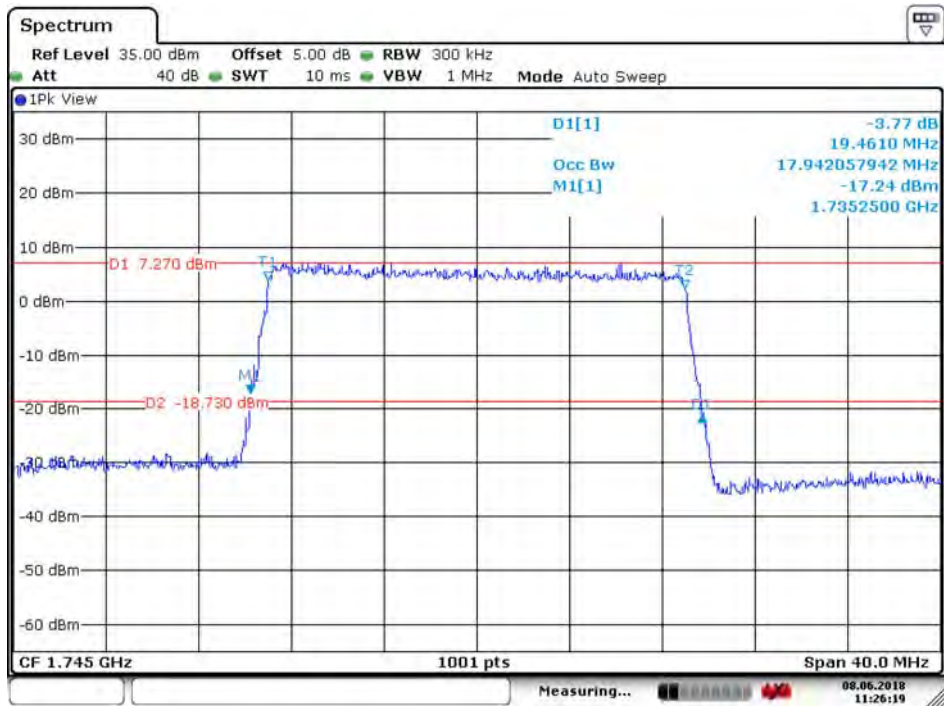
4.1.1.17 Test Mode = LTE/TM2 20MHz

4.1.1.17.1 Test Channel = LCH



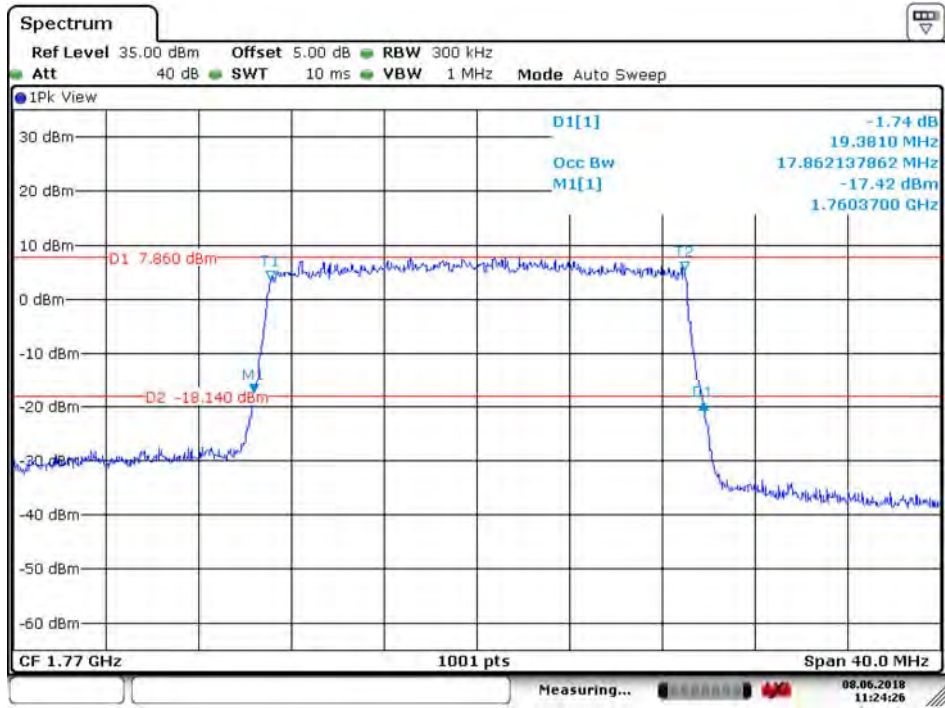
Date: 8 JUN.2018 11:30:19

4.1.1.17.2 Test Channel = MCH



Date: 8 JUN.2018 11:26:19

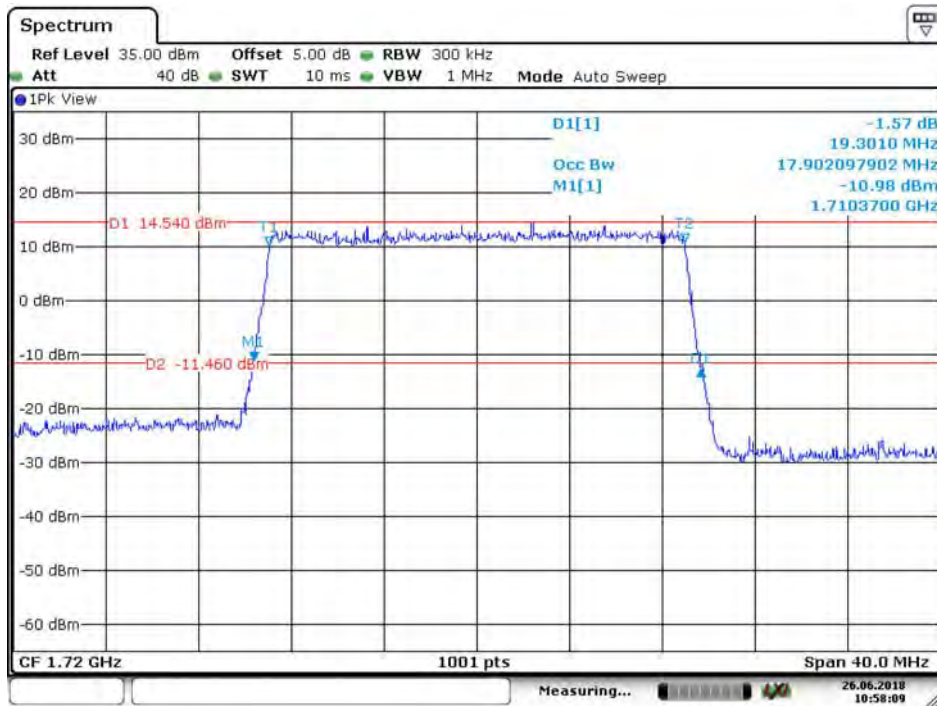
4.1.1.17.3 Test Channel = HCH



Date: 8.JUN.2018 11:24:26

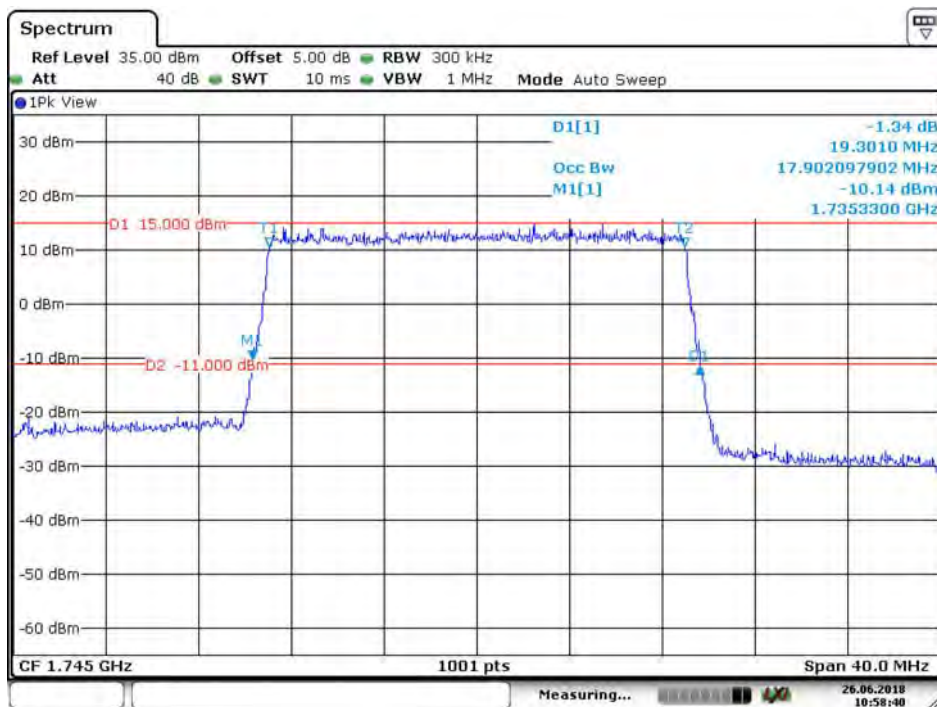
4.1.1.18 Test Mode = LTE/TM3 20MHz

4.1.1.18.1 Test Channel = LCH



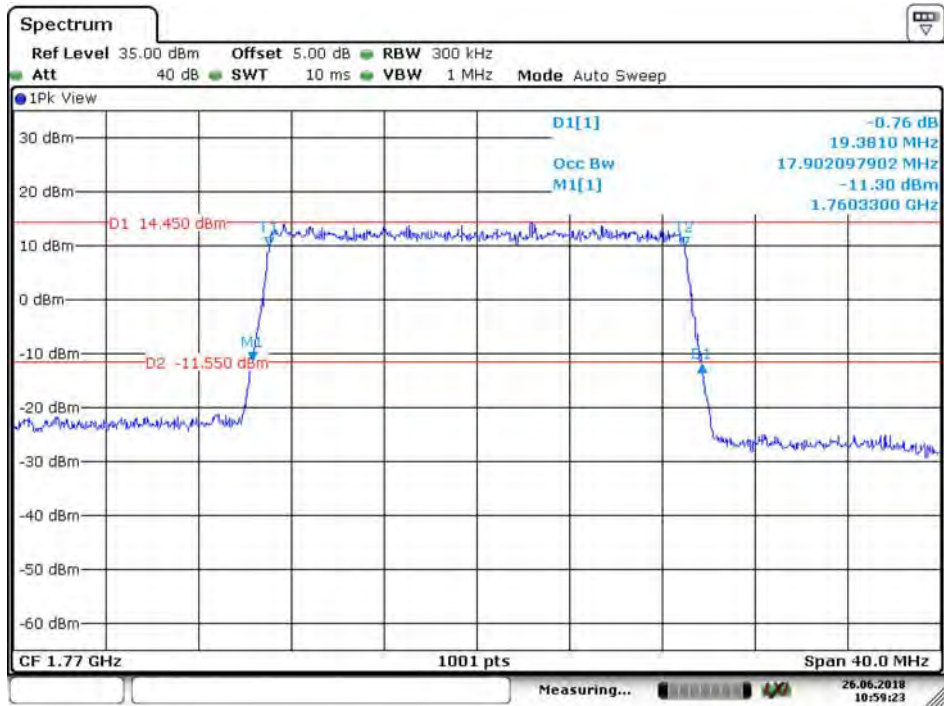
Date: 26 JUN 2018 10:58:10

4.1.1.18.2 Test Channel = MCH



Date: 26 JUN 2018 10:58:40

4.1.1.18.3 Test Channel = HCH



Date: 26 JUN 2018 10:59:24

5 Band Edges Compliance

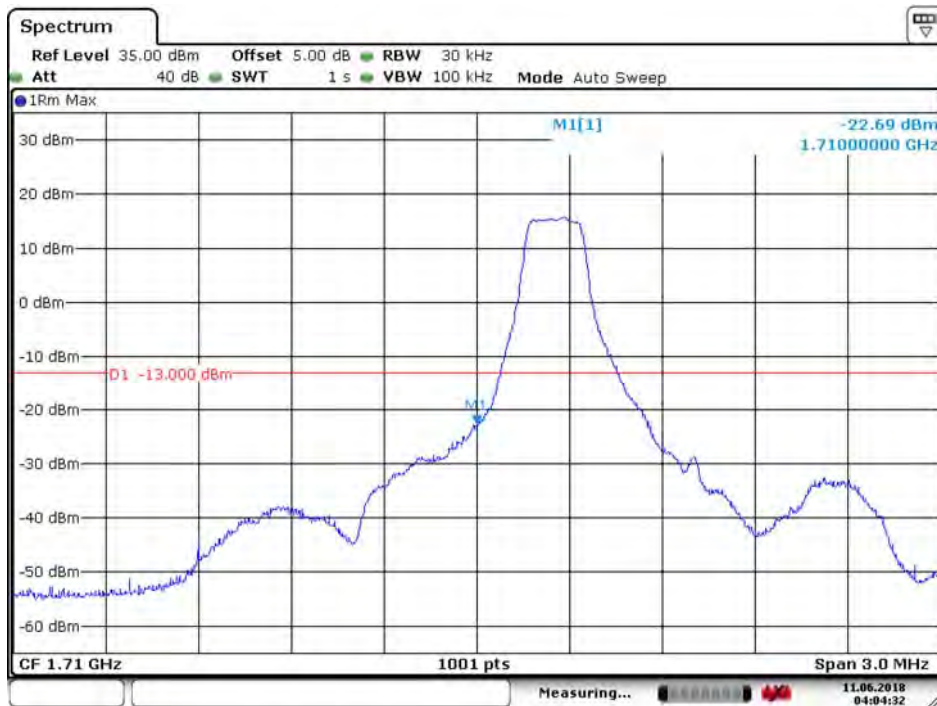
5.1 For LTE

5.1.1 Test Band = LTE BAND 66

5.1.1.1 Test Mode = LTE/TM1 1.4MHz

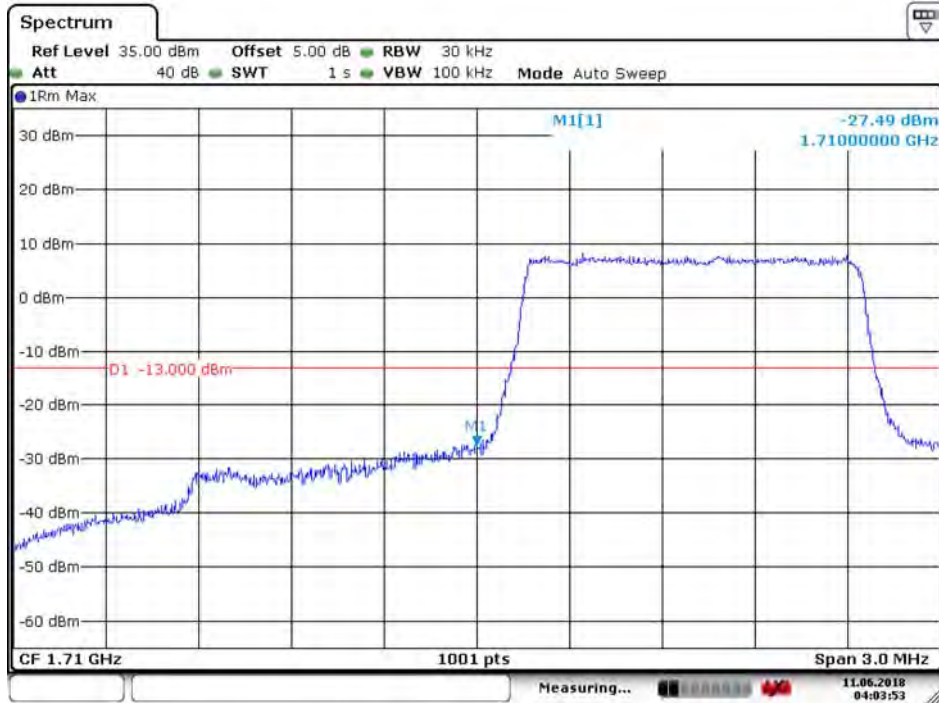
5.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1 Test RB=1RB



Date: 11.JUN.2018 04:04:32

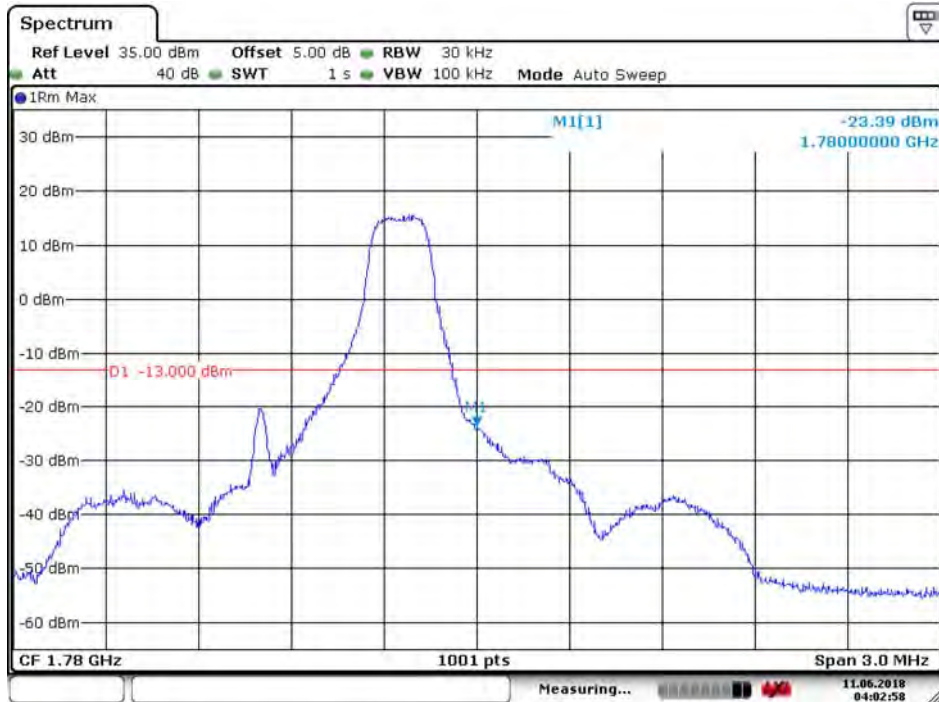
5.1.1.1.1.2 Test RB=6RB



Date: 11.JUN 2018 04:03:54

5.1.1.1.2 Test Channel = HCH

5.1.1.1.2.1 Test RB=1RB

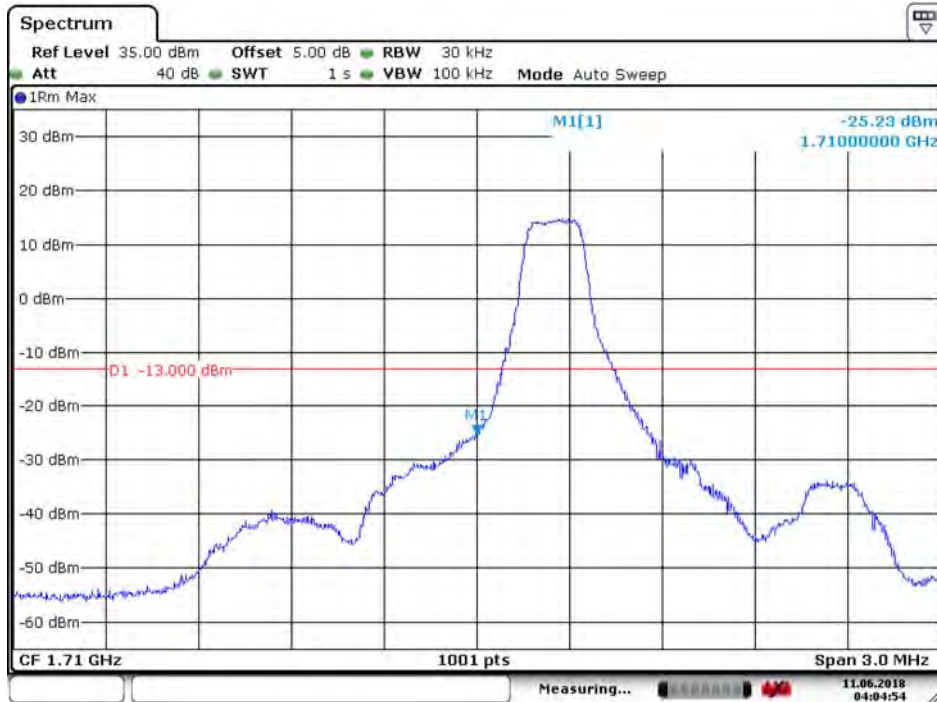


Date: 11.JUN 2018 04:02:59

5.1.1.2 Test Mode = LTE/TM2 1.4MHz

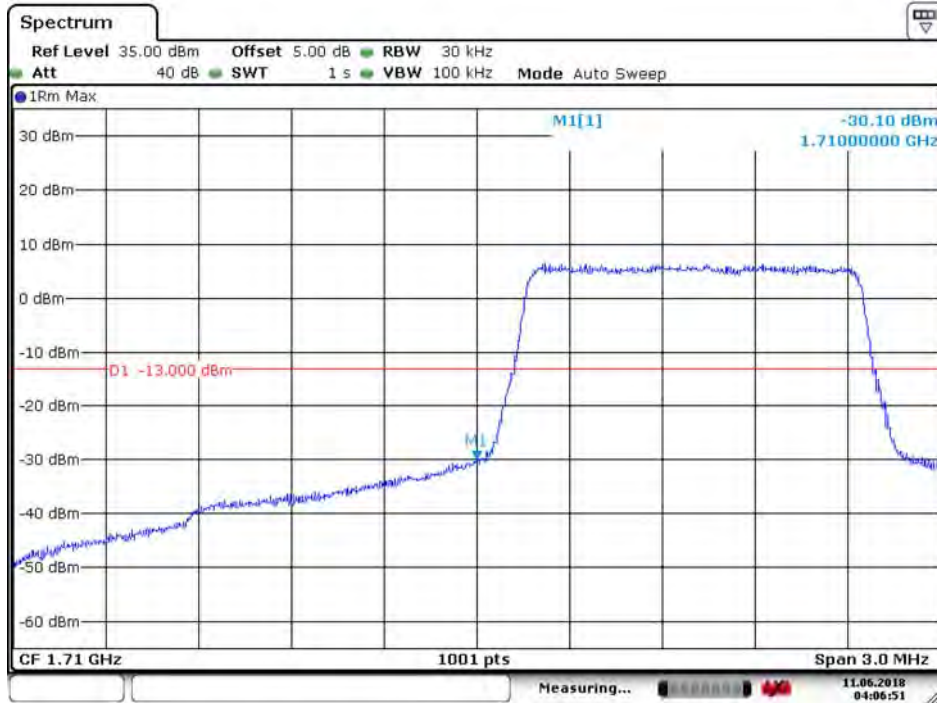
5.1.1.2.1 Test Channel = LCH

5.1.1.2.1.1 Test RB=1RB



Date: 11.JUN.2018 04:04:54

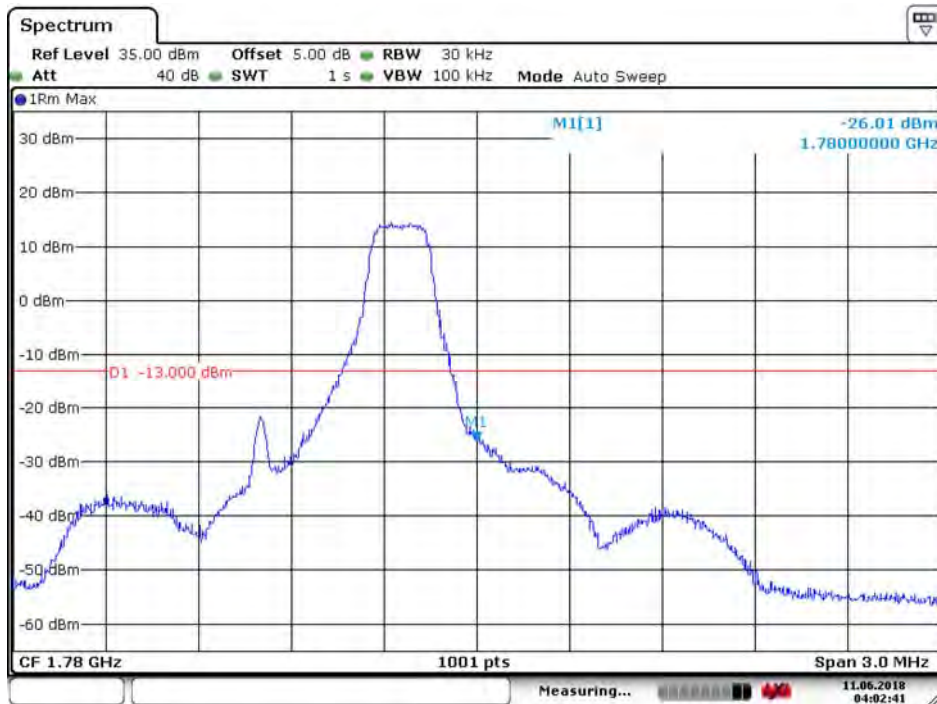
5.1.1.2.1.2 Test RB=6RB



Date: 11 JUN 2018 04:06:51

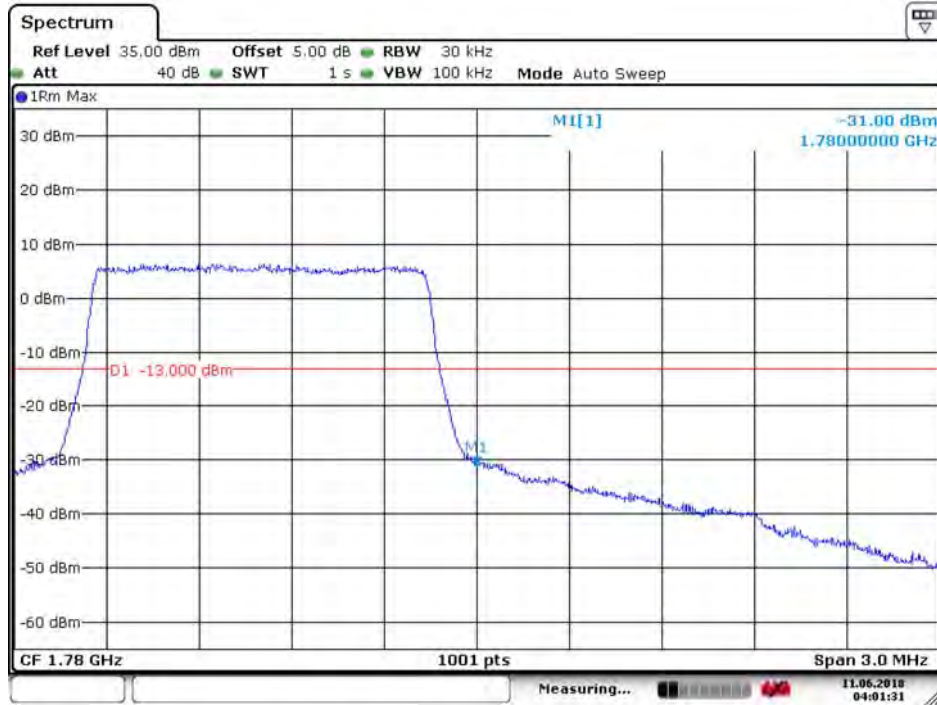
5.1.1.2.2 Test Channel = HCH

5.1.1.2.2.1 Test RB=1RB



Date: 11 JUN 2018 04:02:42

5.1.1.2.2.2 Test RB=6RB

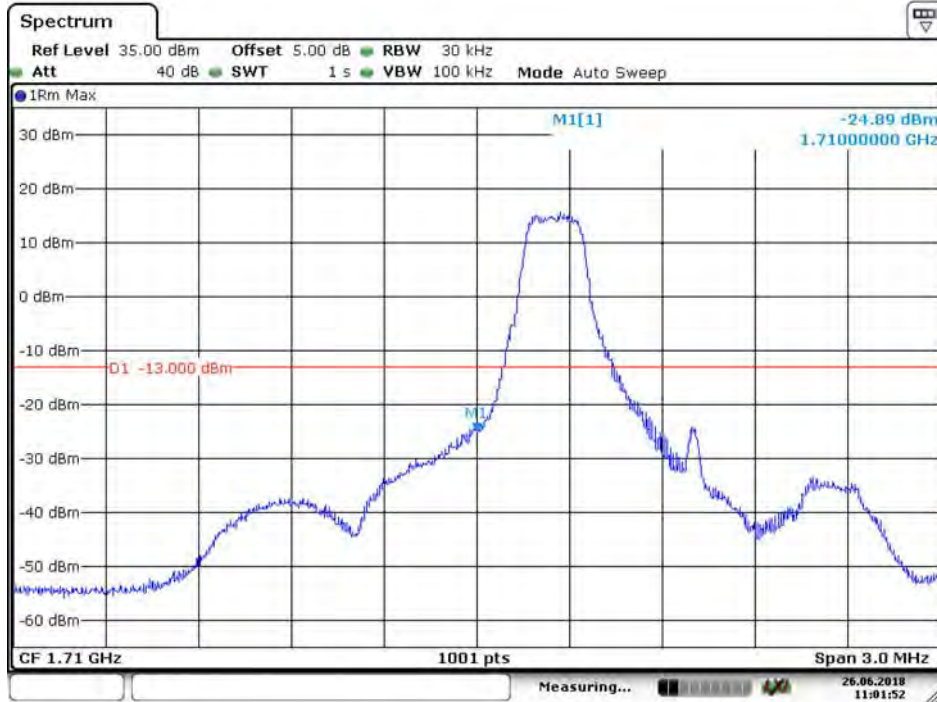


Date: 11.JUN.2018 04:01:31

5.1.1.3 Test Mode = LTE/TM3 1.4MHz

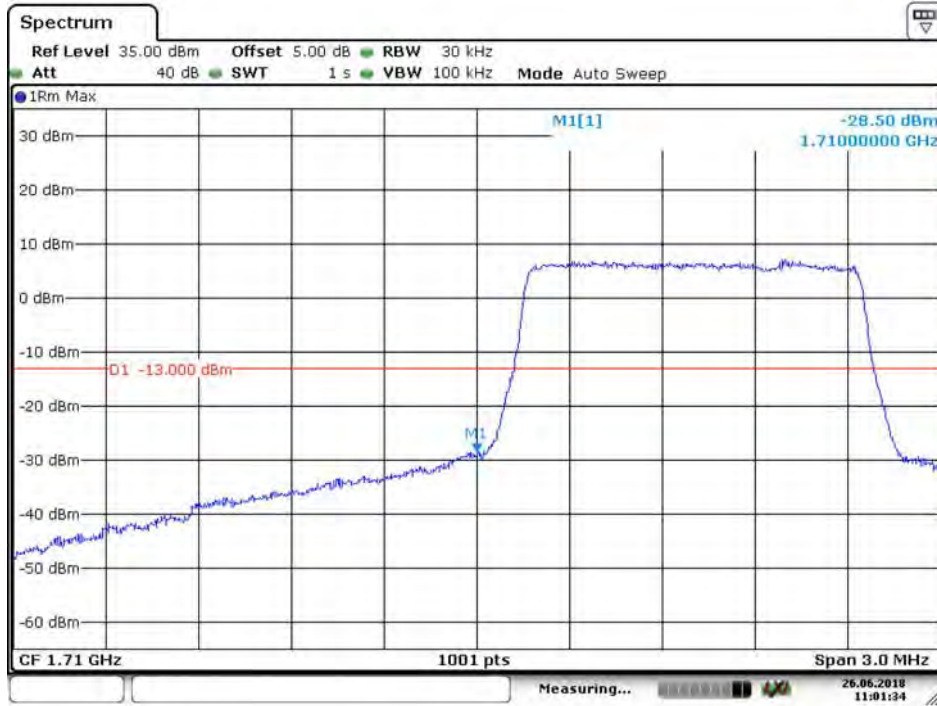
5.1.1.3.1 Test Channel = LCH

5.1.1.3.1.1 Test RB=1RB



Date: 26 JUN.2018 11:01:53

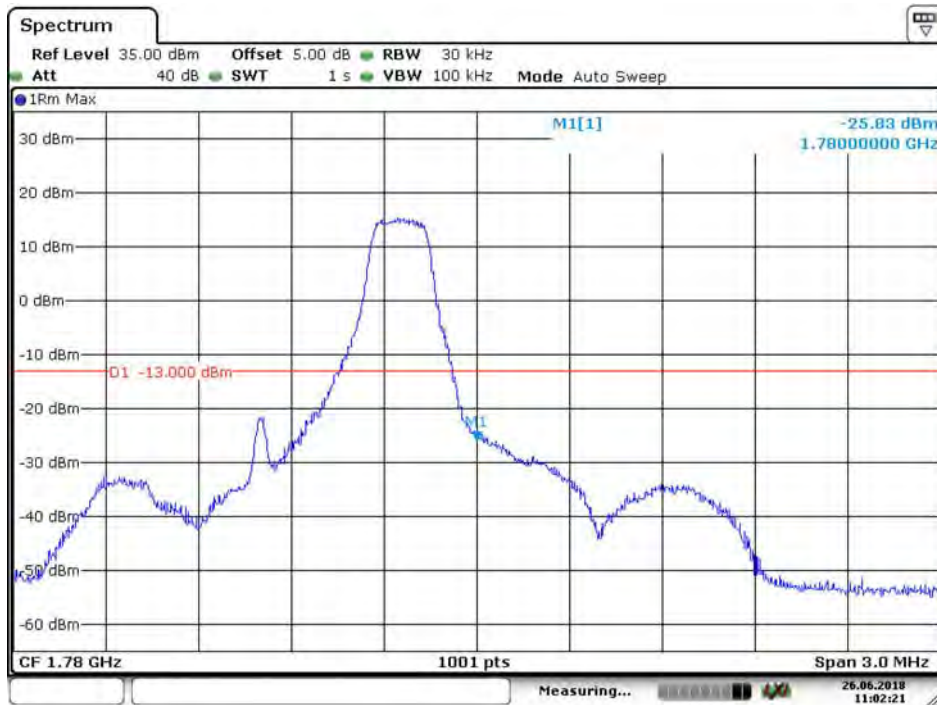
5.1.1.3.1.2 Test RB=6RB



Date: 26 JUN 2018 11:01:34

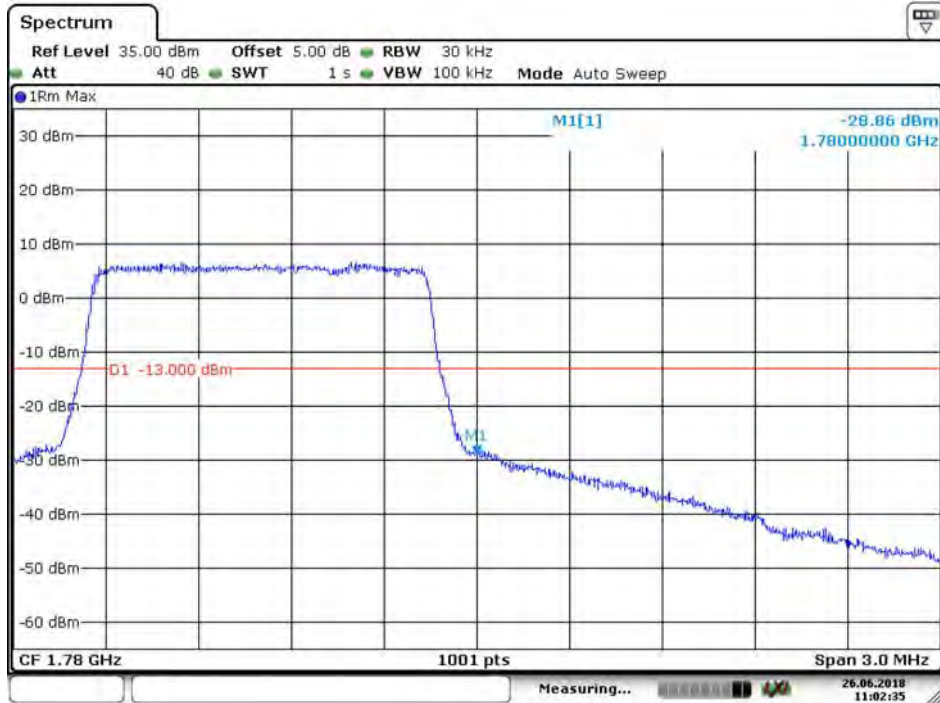
5.1.1.3.2 Test Channel = HCH

5.1.1.3.2.1 Test RB=1RB



Date: 26 JUN 2018 11:02:21

5.1.1.3.2.2 Test RB=6RB

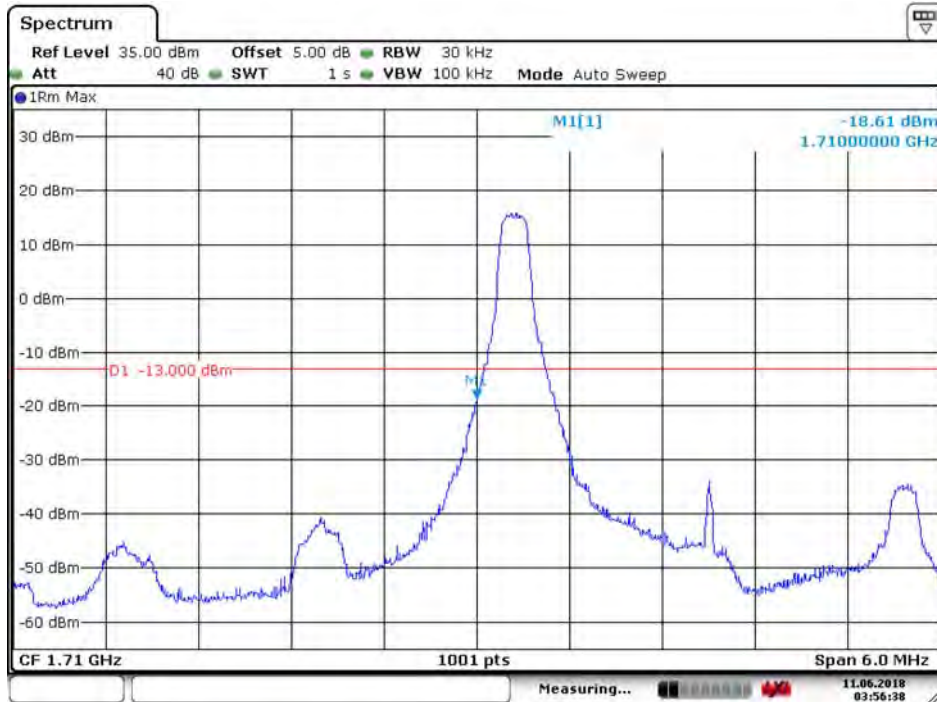


Date: 26 JUN 2018 11:02:35

5.1.1.4 Test Mode = LTE/TM1 3MHz

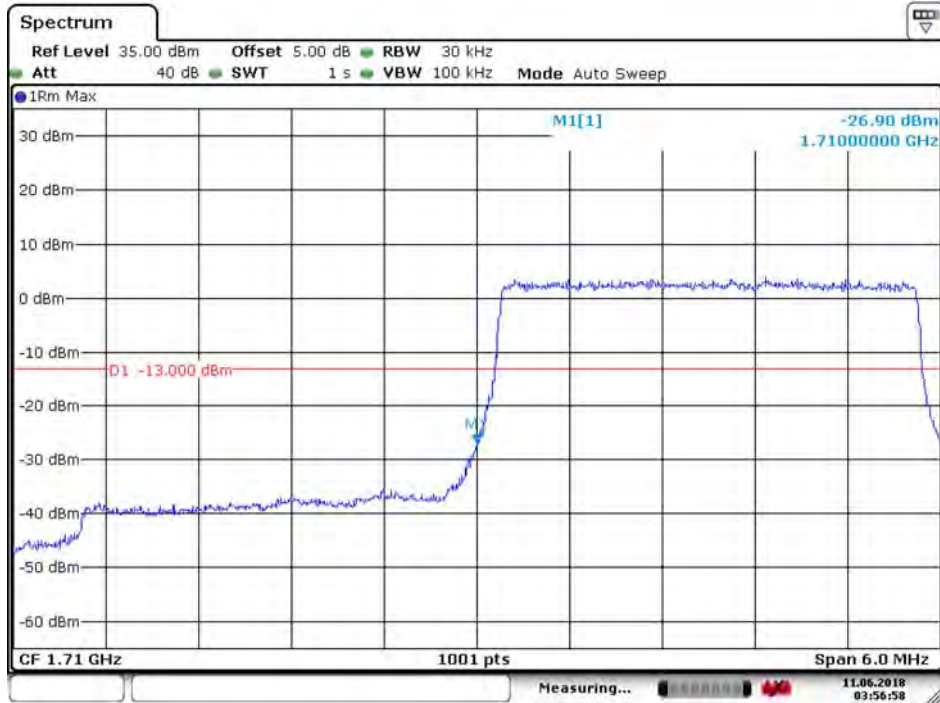
5.1.1.4.1 Test Channel = LCH

5.1.1.4.1.1 Test RB=1RB



Date: 11.JUN 2018 03:56:39

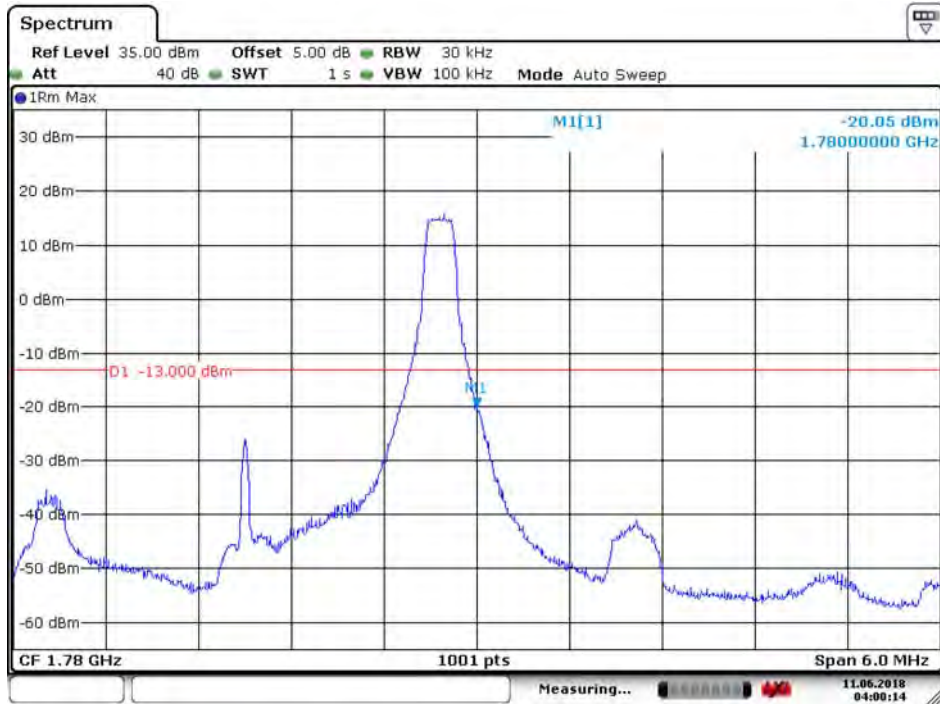
5.1.1.4.1.2 Test RB=15RB



Date: 11.JUN.2018 03:56:58

5.1.1.4.2 Test Channel = HCH

5.1.1.4.2.1 Test RB=1RB

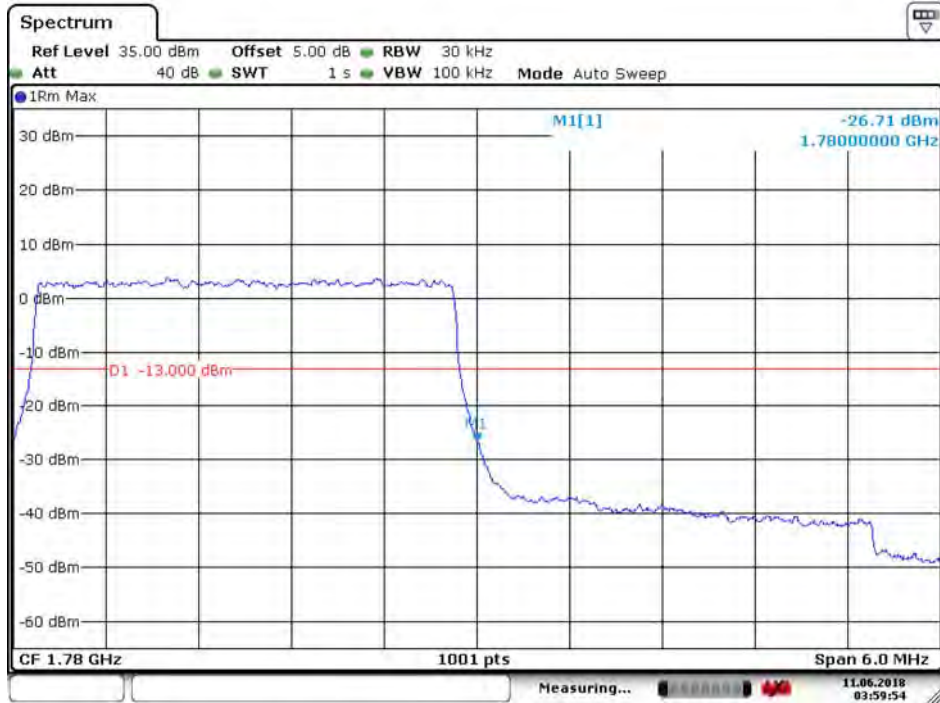


Date: 11.JUN.2018 04:00:15

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



5.1.1.4.2.2 Test RB=15RB



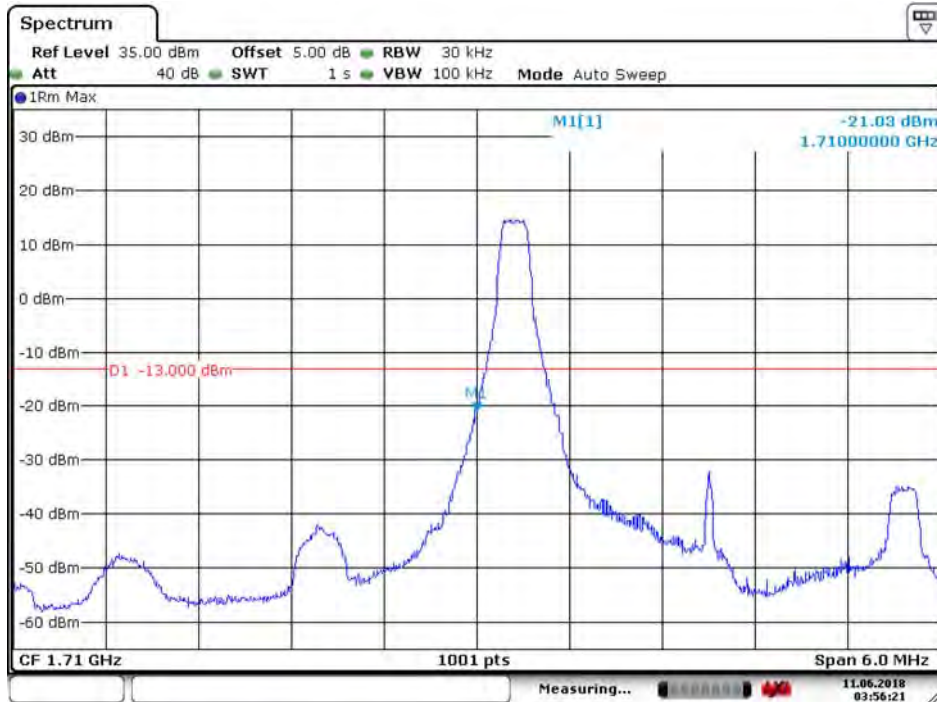
Date: 11.JUN 2018 03:59:54



5.1.1.5 Test Mode = LTE/TM2 3MHz

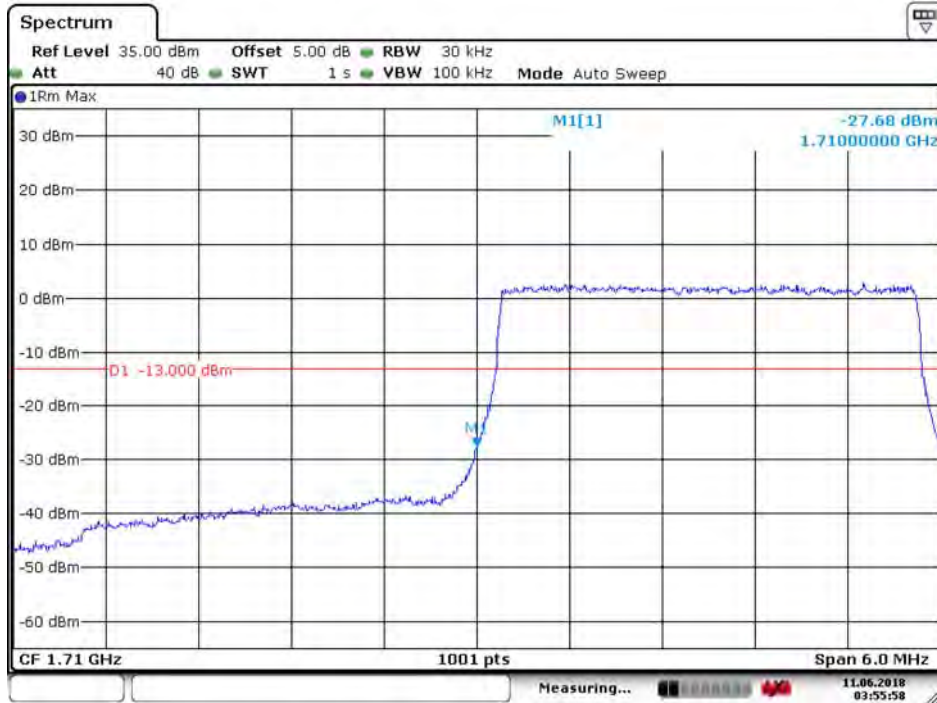
5.1.1.5.1 Test Channel = LCH

5.1.1.5.1.1 Test RB=1RB



Date: 11.JUN.2018 03:56:21

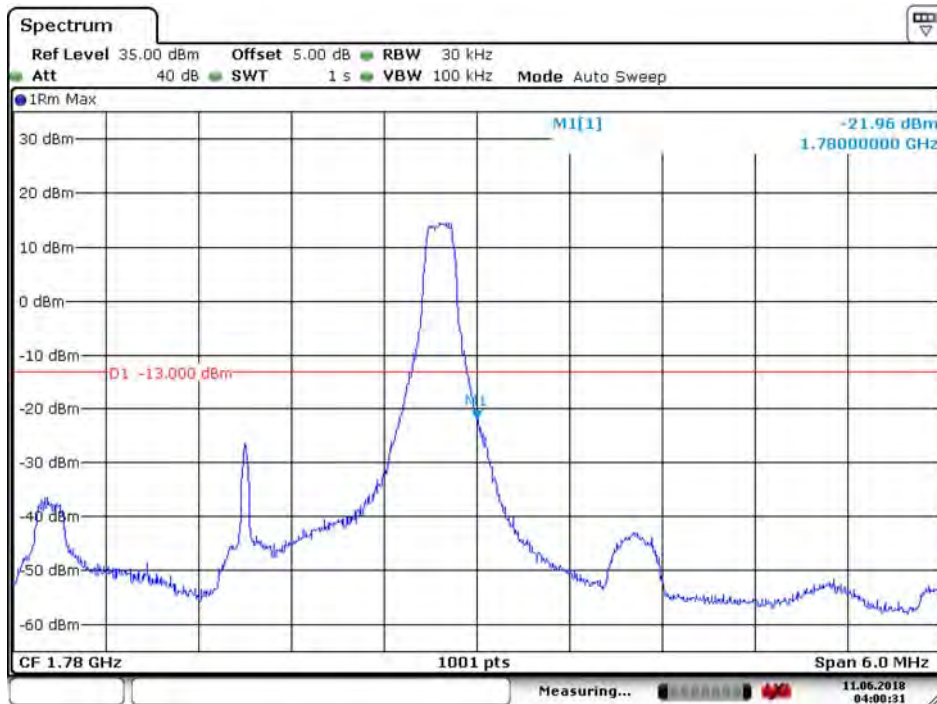
5.1.1.5.1.2 Test RB=15RB



Date: 11.JUN.2018 03:55:58

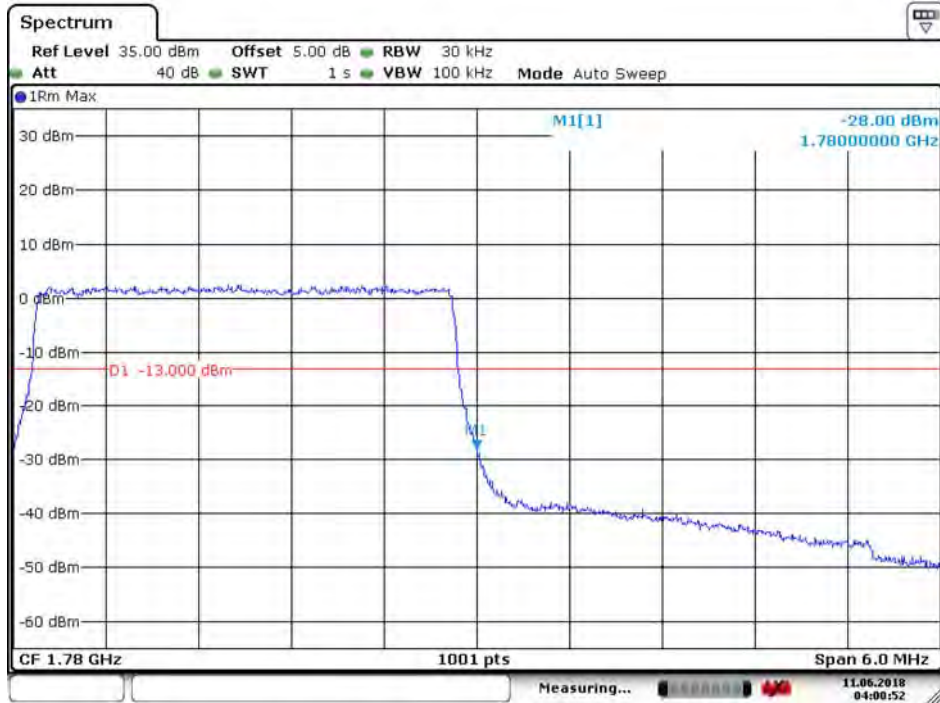
5.1.1.5.2 Test Channel = HCH

5.1.1.5.2.1 Test RB=1RB



Date: 11.JUN.2018 04:00:32

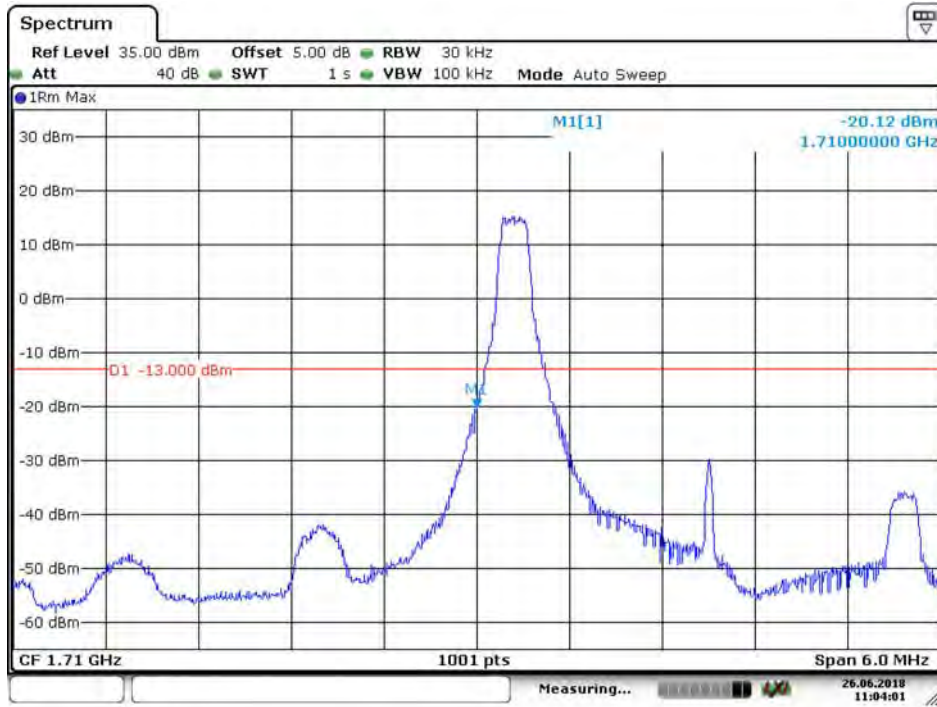
5.1.1.5.2.2 Test RB=15RB



Date: 11.JUN 2018 04:00:52

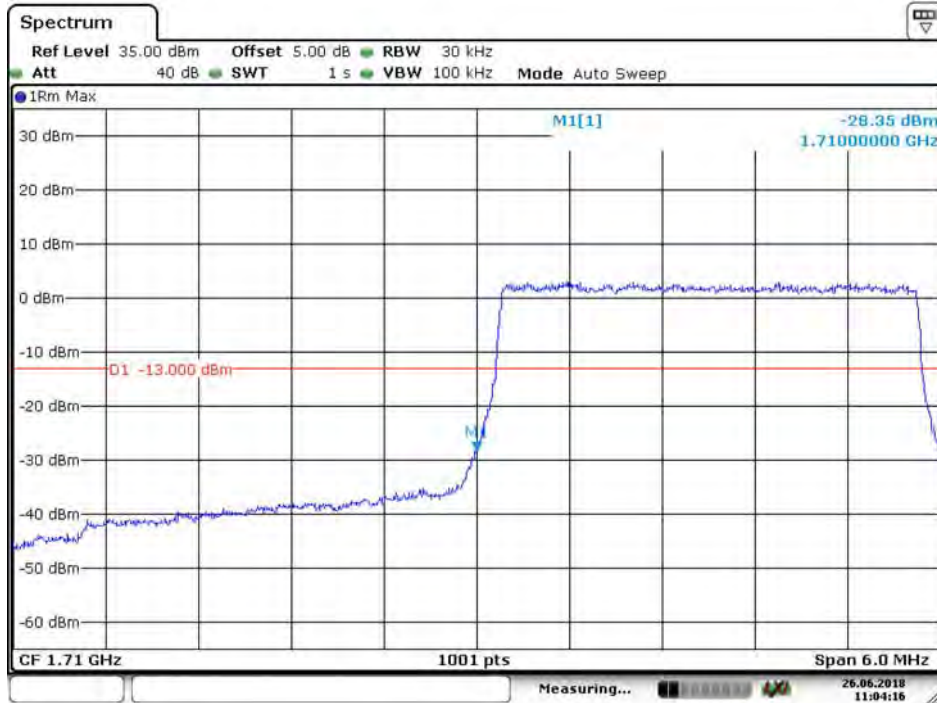


5.1.1.6 Test Mode = LTE/TM3 3MHz
5.1.1.6.1 Test Channel = LCH
5.1.1.6.1.1 Test RB=1RB



Date: 26 JUN 2018 11:04:02

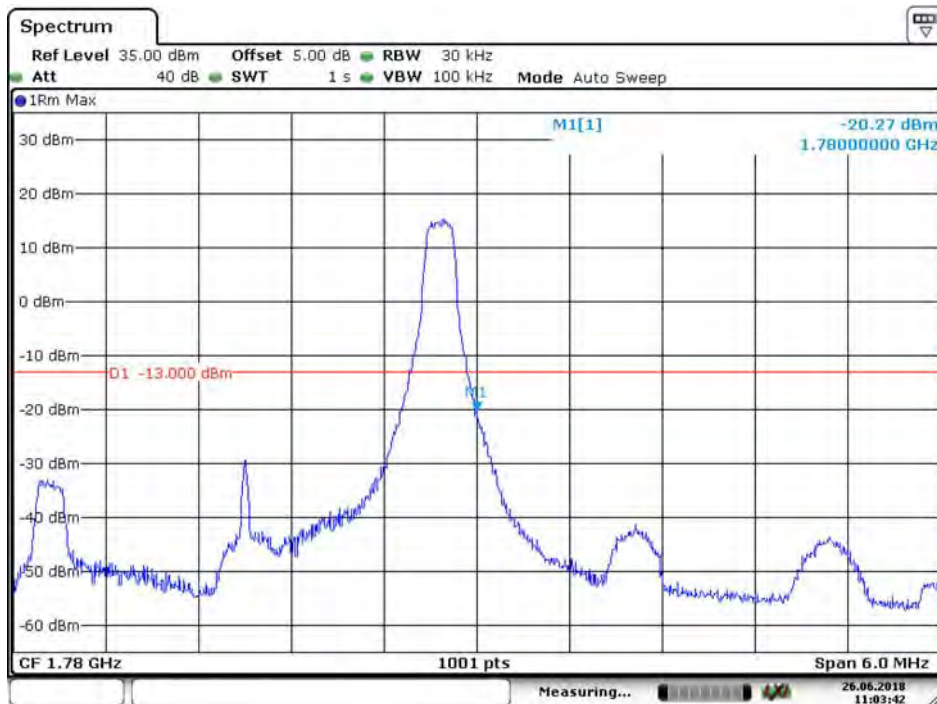
5.1.1.6.1.2 Test RB=15RB



Date: 26 JUN 2018 11:04:17

5.1.1.6.2 Test Channel = HCH

5.1.1.6.2.1 Test RB=1RB

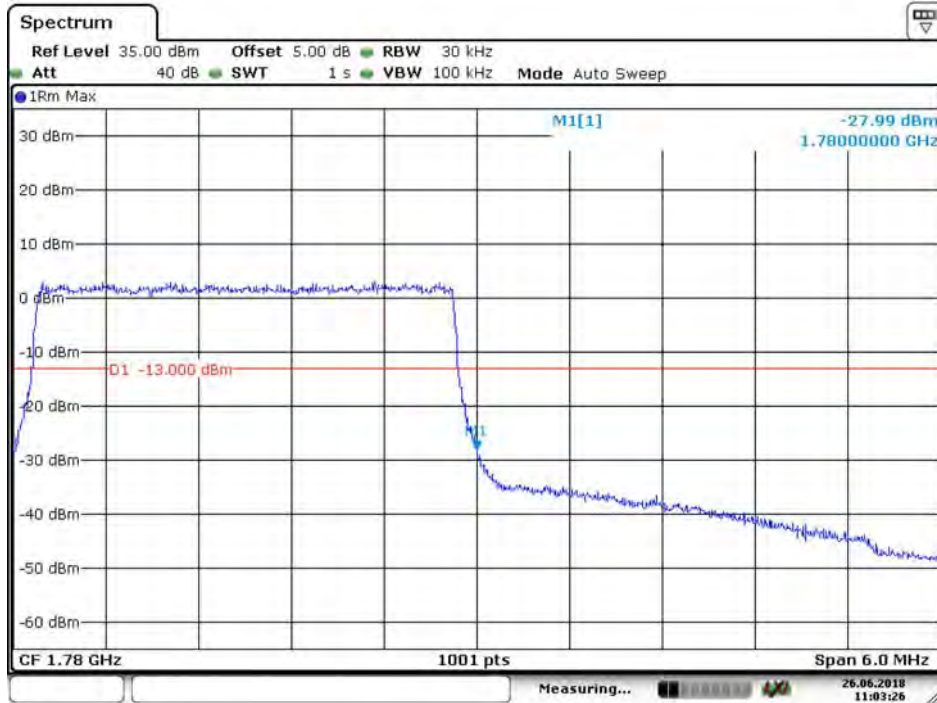


Date: 26 JUN 2018 11:03:42

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



5.1.1.6.2.2 Test RB=15RB

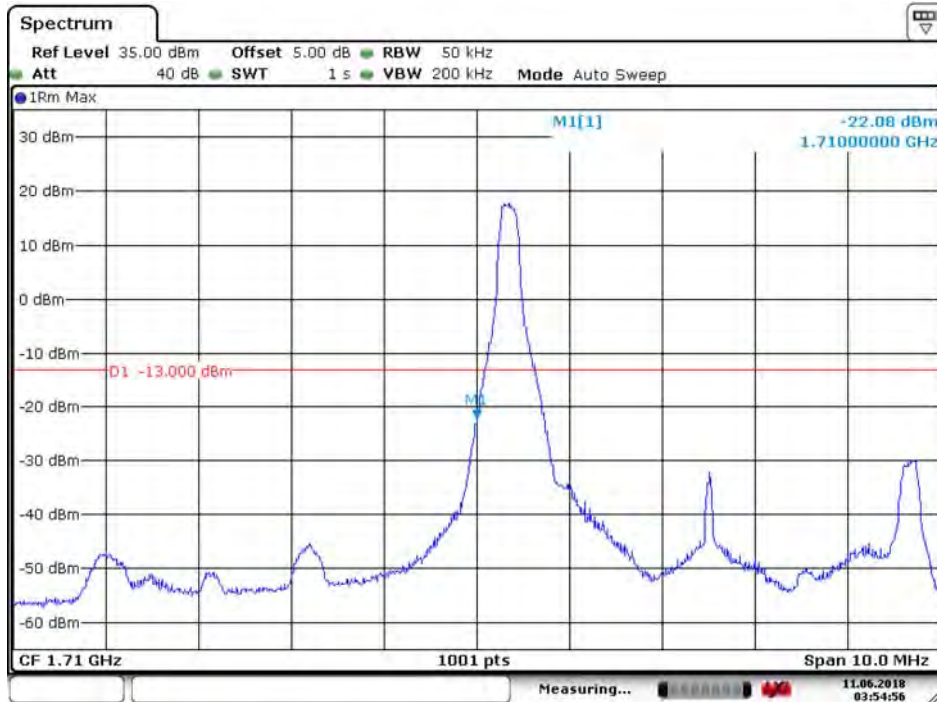


Date: 26 JUN 2018 11:03:26

5.1.1.7 Test Mode = LTE/TM1 5MHz

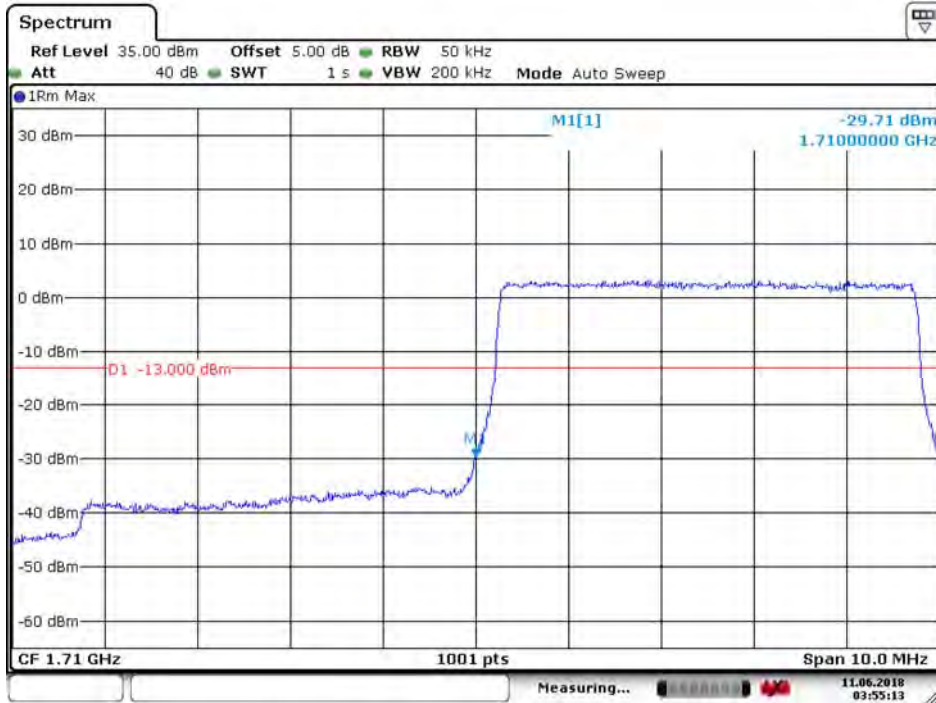
5.1.1.7.1 Test Channel = LCH

5.1.1.7.1.1 Test RB=1RB



Date: 11 JUN 2018 03:54:56

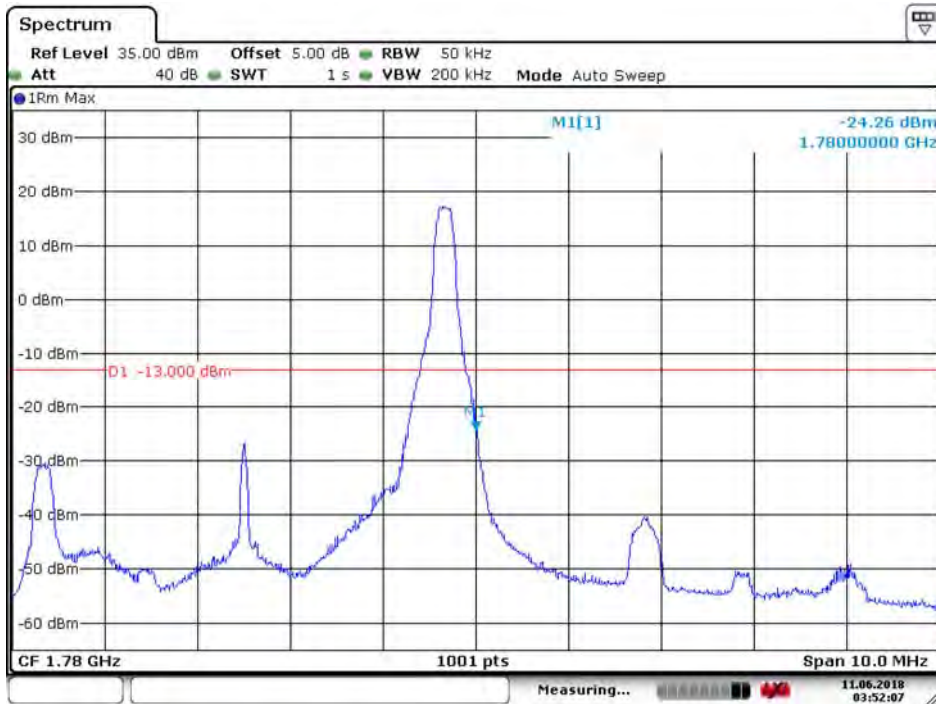
5.1.1.7.1.2 Test RB=25RB



Date: 11.JUN.2018 03:55:13

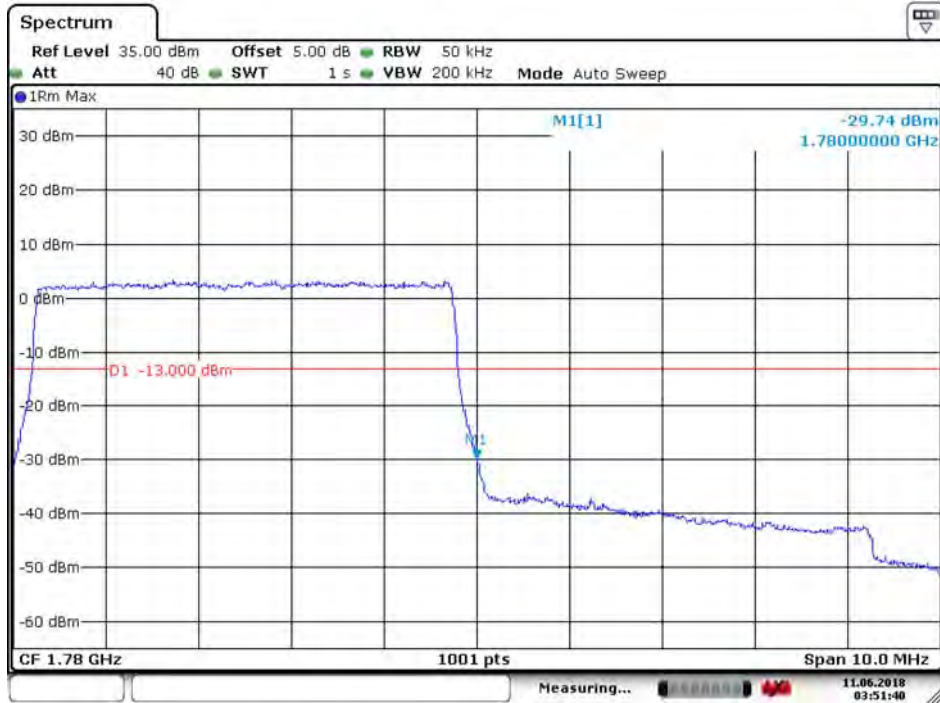
5.1.1.7.2 Test Channel = HCH

5.1.1.7.2.1 Test RB=1RB



Date: 11.JUN.2018 03:52:08

5.1.1.7.2.2 Test RB=25RB

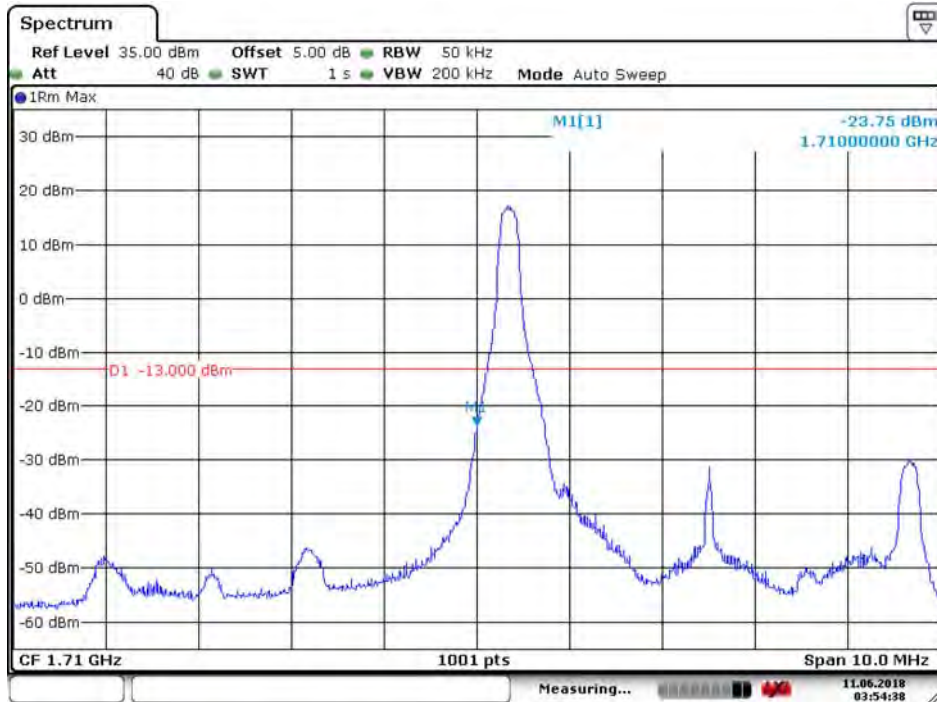


Date: 11 JUN 2018 03:51:40

5.1.1.8 Test Mode = LTE/TM2 5MHz

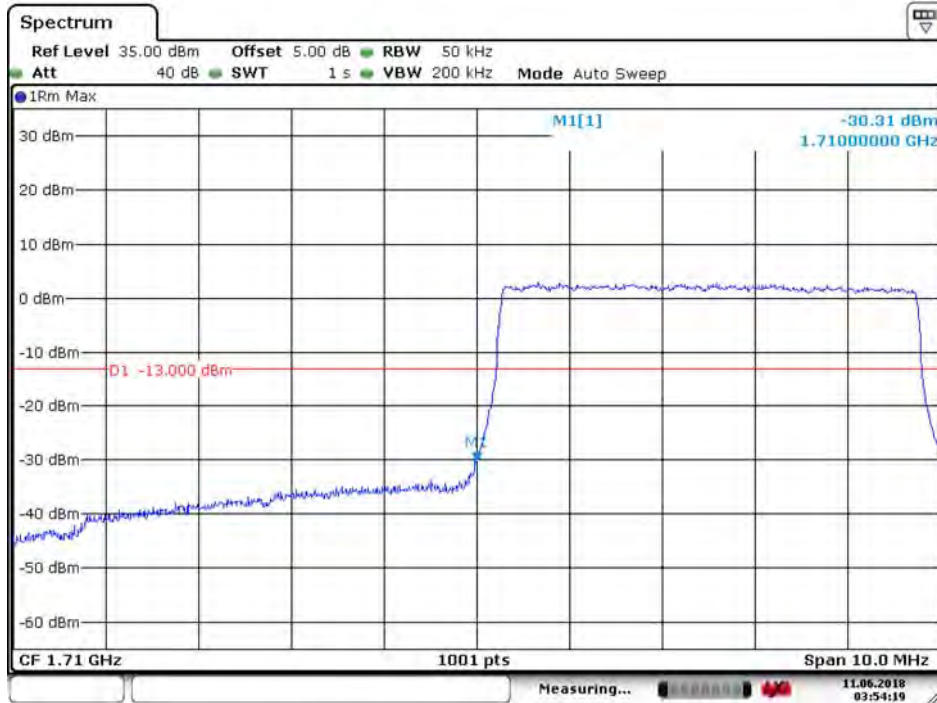
5.1.1.8.1 Test Channel = LCH

5.1.1.8.1.1 Test RB=1RB



Date: 11 JUN 2018 03:54:38

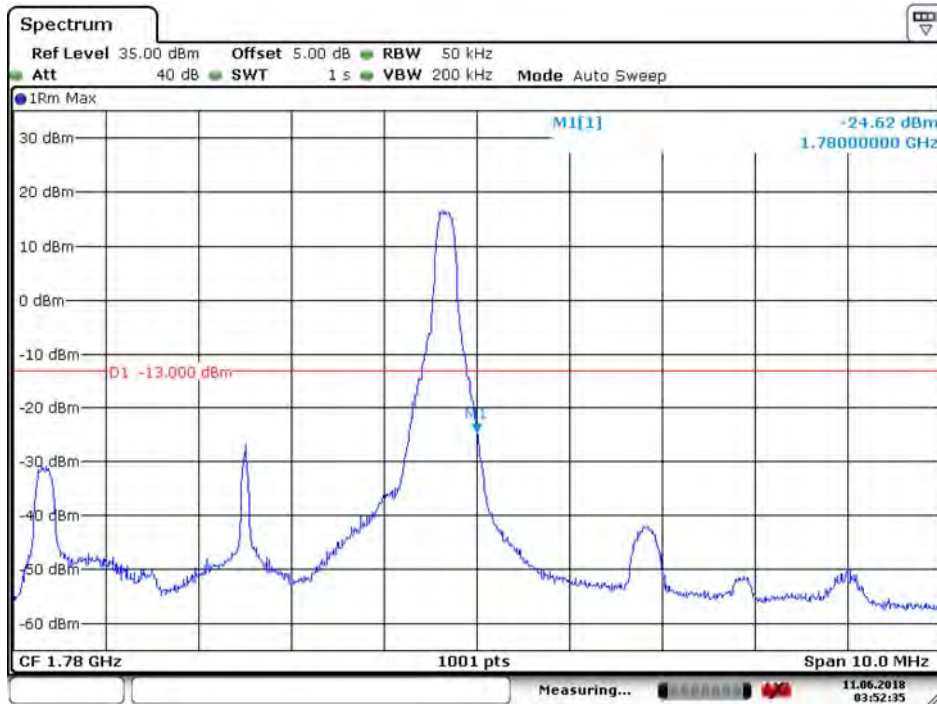
5.1.1.8.1.2 Test RB=25RB



Date: 11.JUN 2018 03:54:20

5.1.1.8.2 Test Channel = HCH

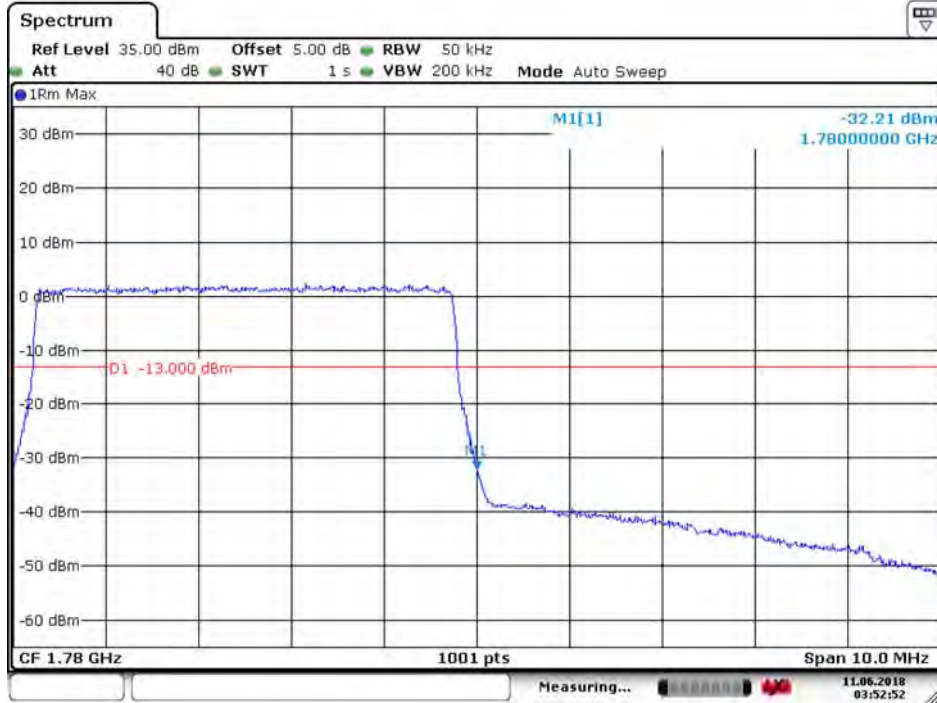
5.1.1.8.2.1 Test RB=1RB



Date: 11.JUN 2018 03:52:36



5.1.1.8.2.2 Test RB=25RB

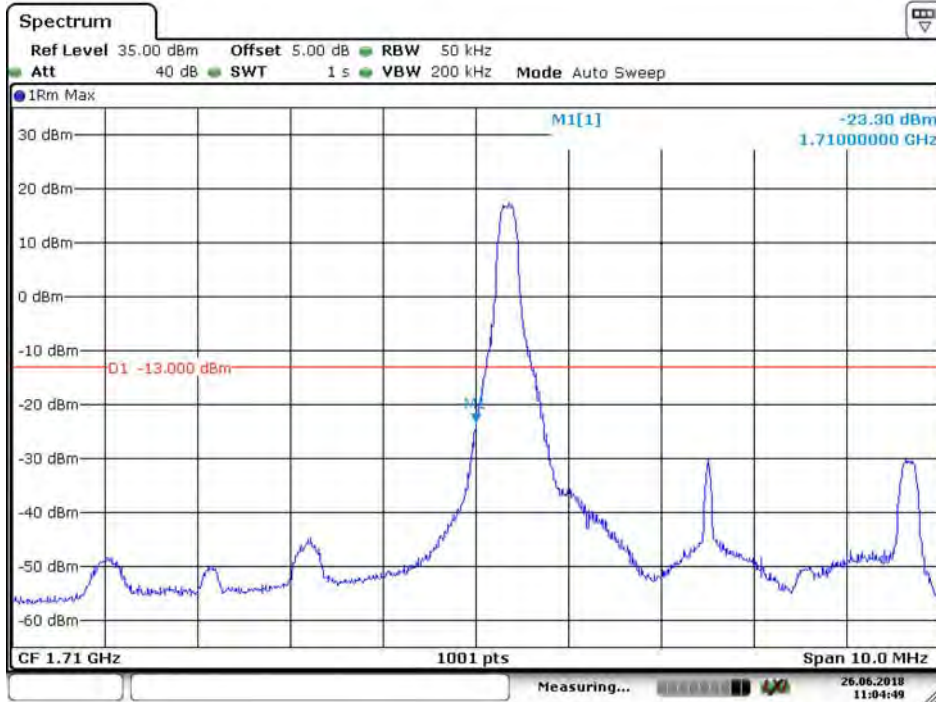


Date: 11.JUN 2018 03:52:52

5.1.1.9 Test Mode = LTE/TM3 5MHz

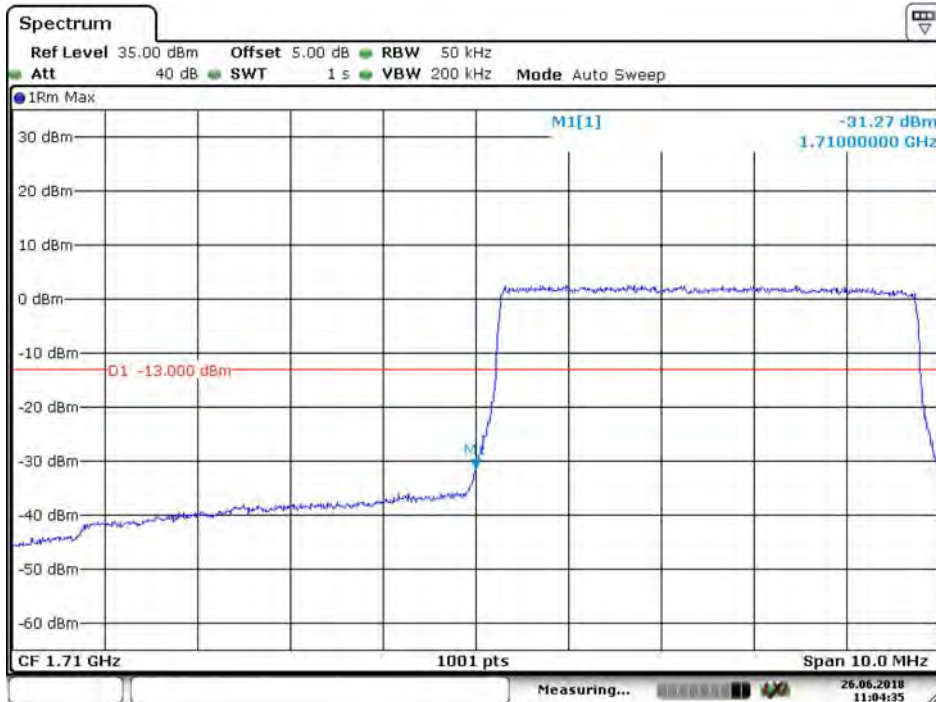
5.1.1.9.1 Test Channel = LCH

5.1.1.9.1.1 Test RB=1RB



Date: 26 JUN.2018 11:04:49

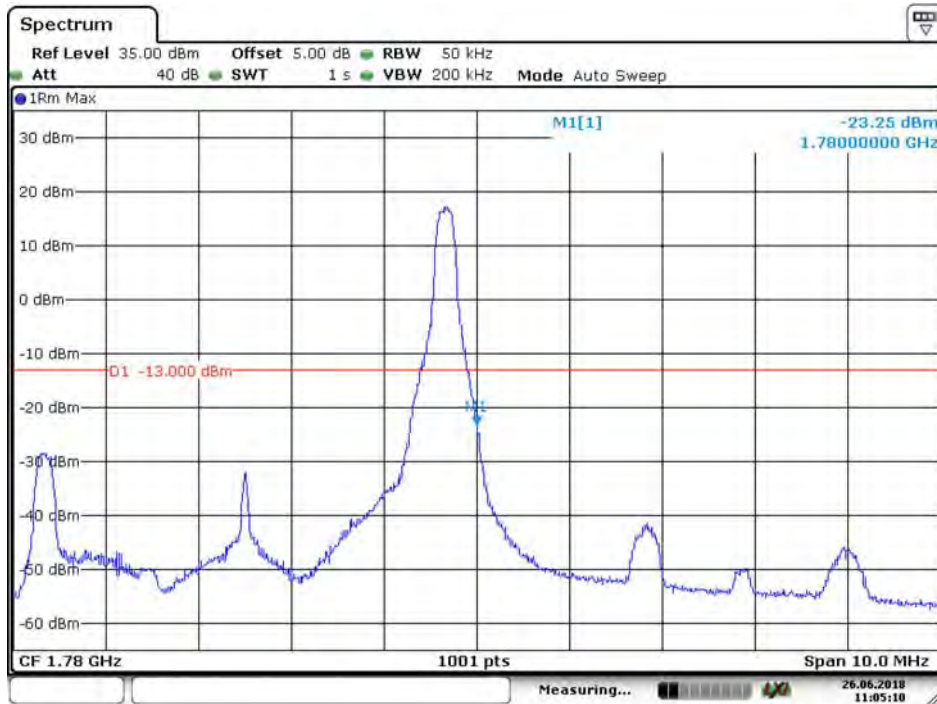
5.1.1.9.1.2 Test RB=25RB



Date: 26 JUN.2018 11:04:35

5.1.1.9.2 Test Channel = HCH

5.1.1.9.2.1 Test RB=1RB



Date: 26 JUN 2018 11:05:10

5.1.1.9.2.2 Test RB=25RB

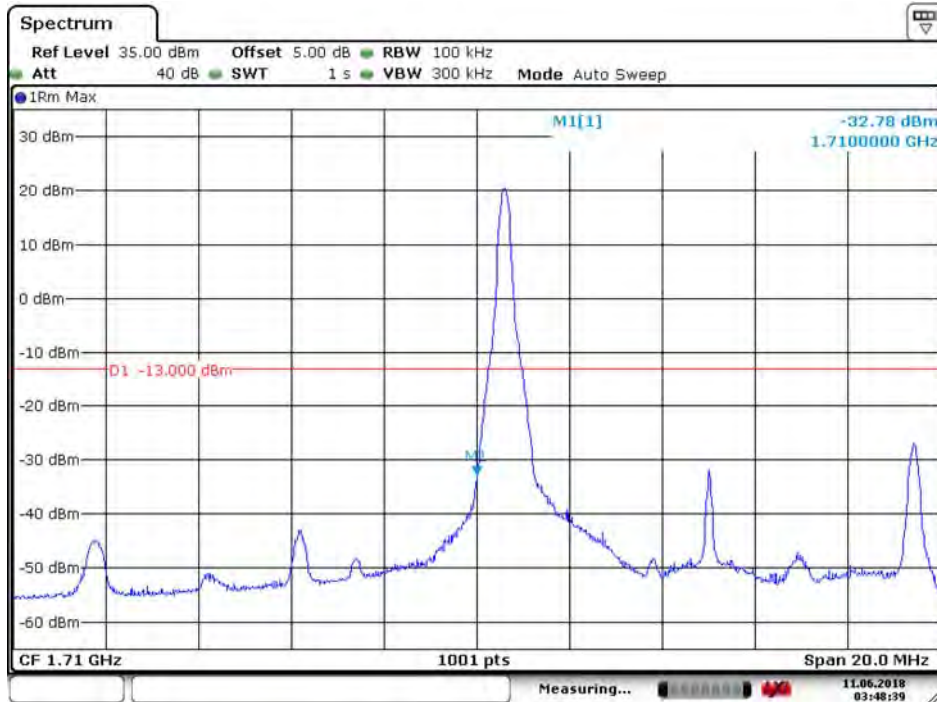


Date: 26 JUN 2018 11:05:20

5.1.1.10 Test Mode = LTE/TM1 10MHz

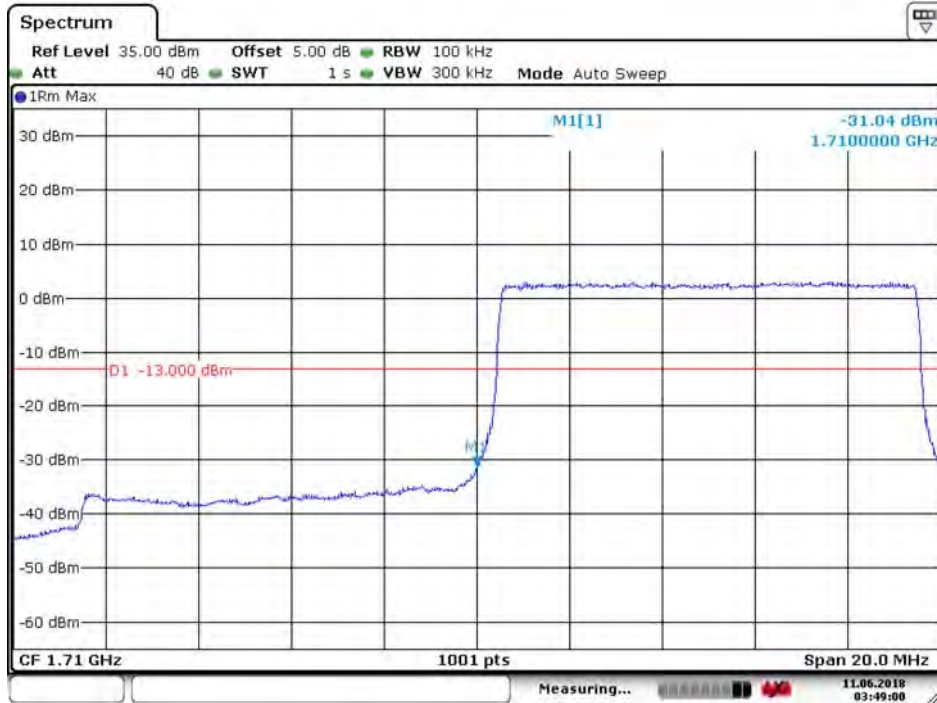
5.1.1.10.1 Test Channel = LCH

5.1.1.10.1.1 Test RB=1RB



Date: 11 JUN 2018 03:48:39

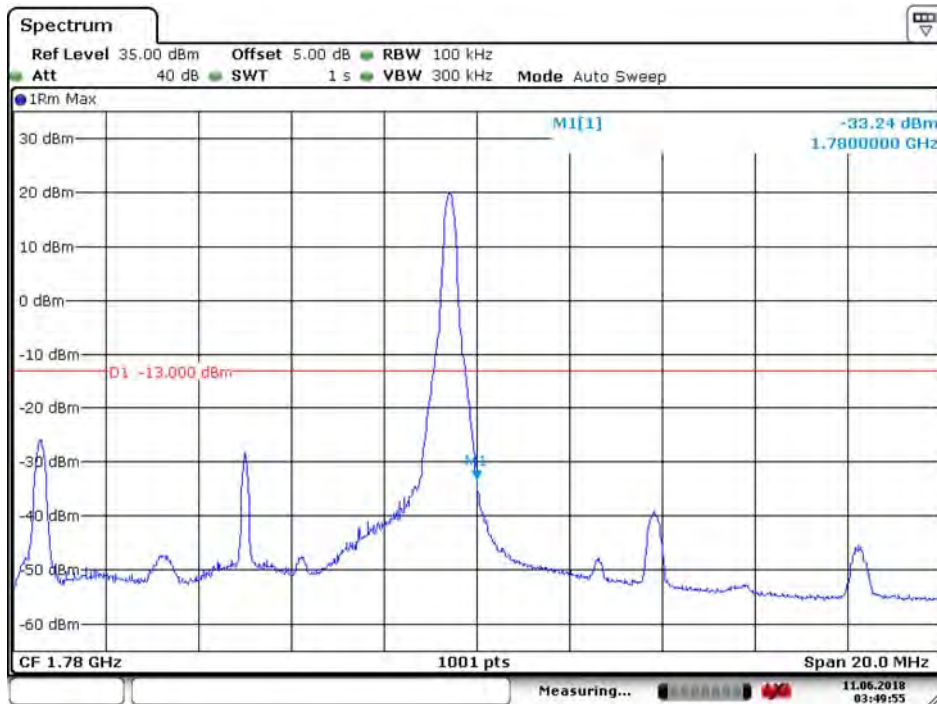
5.1.1.10.1.2 Test RB=50RB



Date: 11.JUN 2018 03:49:00

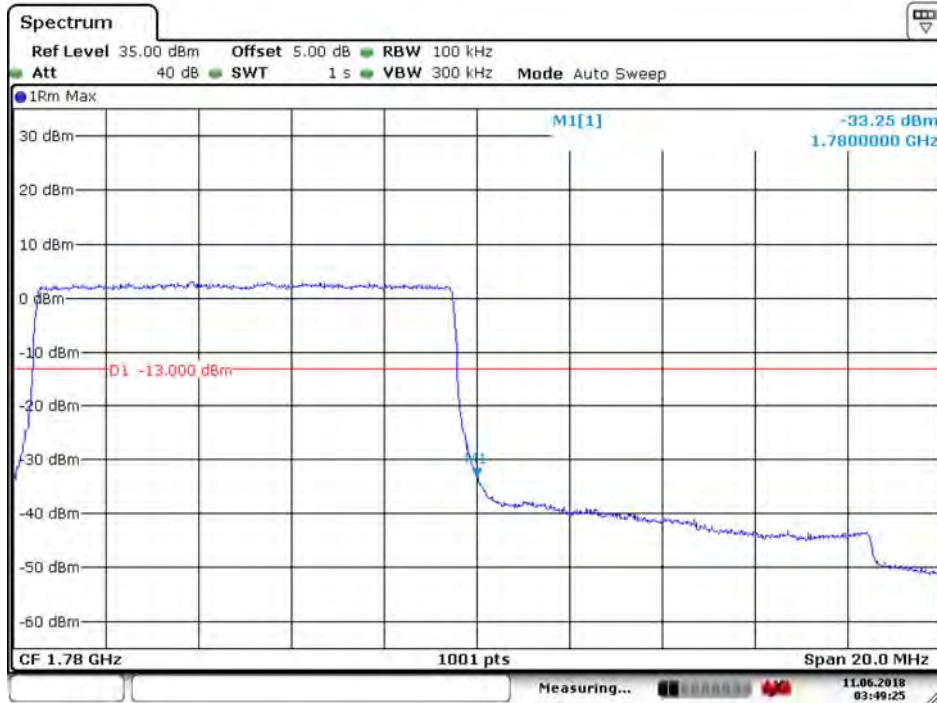
5.1.1.10.2 Test Channel = HCH

5.1.1.10.2.1 Test RB=1RB



Date: 11.JUN 2018 03:49:55

5.1.1.10.2.2 Test RB=50RB



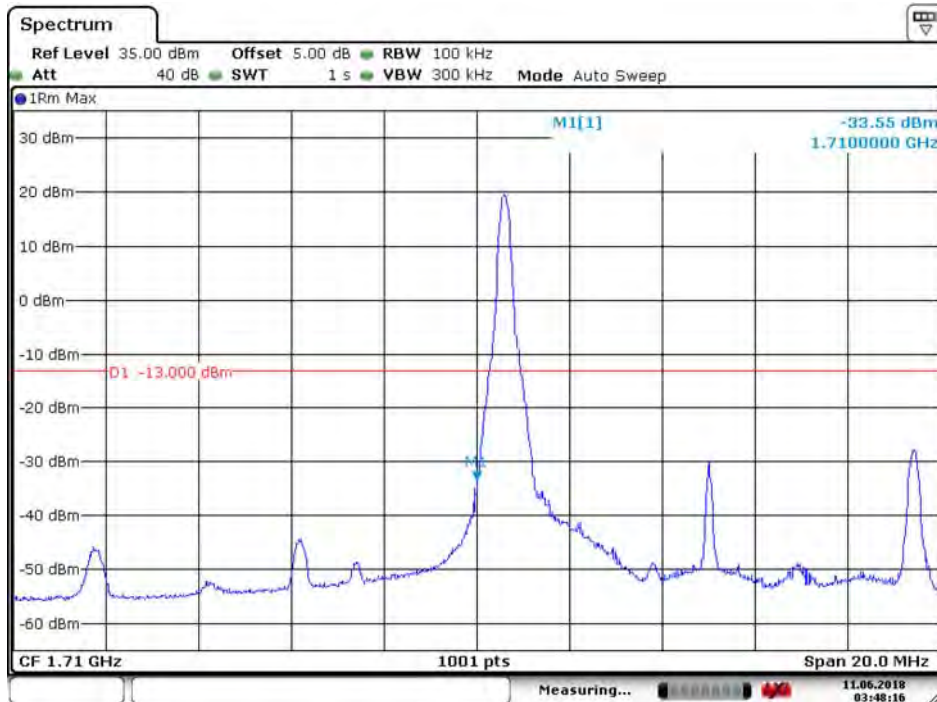
Date: 11.JUN.2018 03:49:26



5.1.1.11 Test Mode = LTE/TM2 10MHz

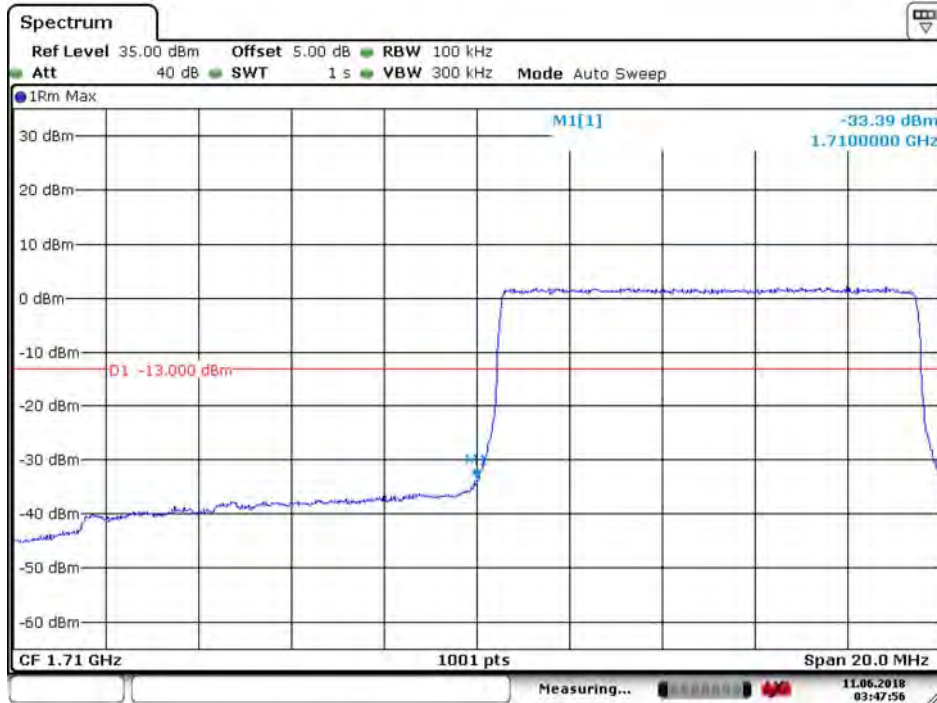
5.1.1.11.1 Test Channel = LCH

5.1.1.11.1.1 Test RB=1RB



Date: 11.JUN 2018 03:48:17

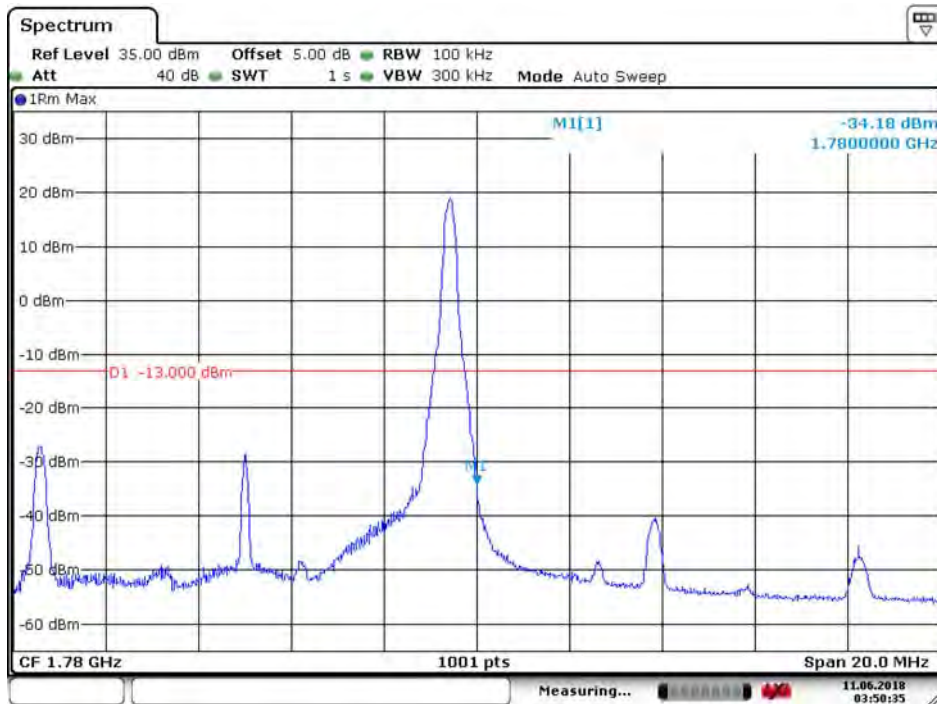
5.1.1.11.1.2 Test RB=50RB



Date: 11.JUN 2018 03:47:57

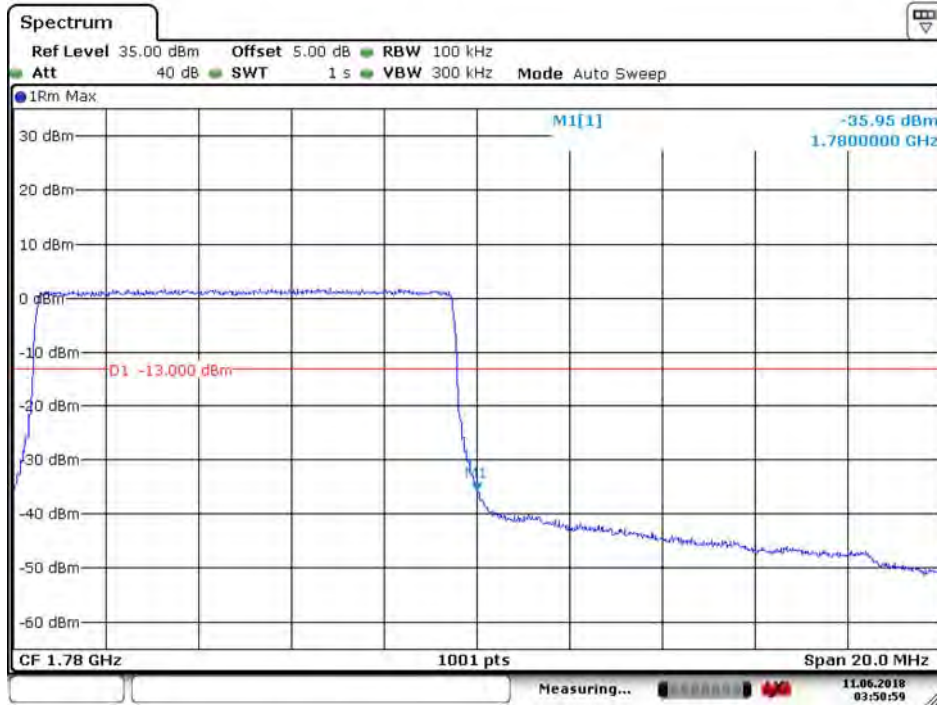
5.1.1.11.2 Test Channel = HCH

5.1.1.11.2.1 Test RB=1RB



Date: 11.JUN 2018 03:50:35

5.1.1.11.2.2 Test RB=50RB

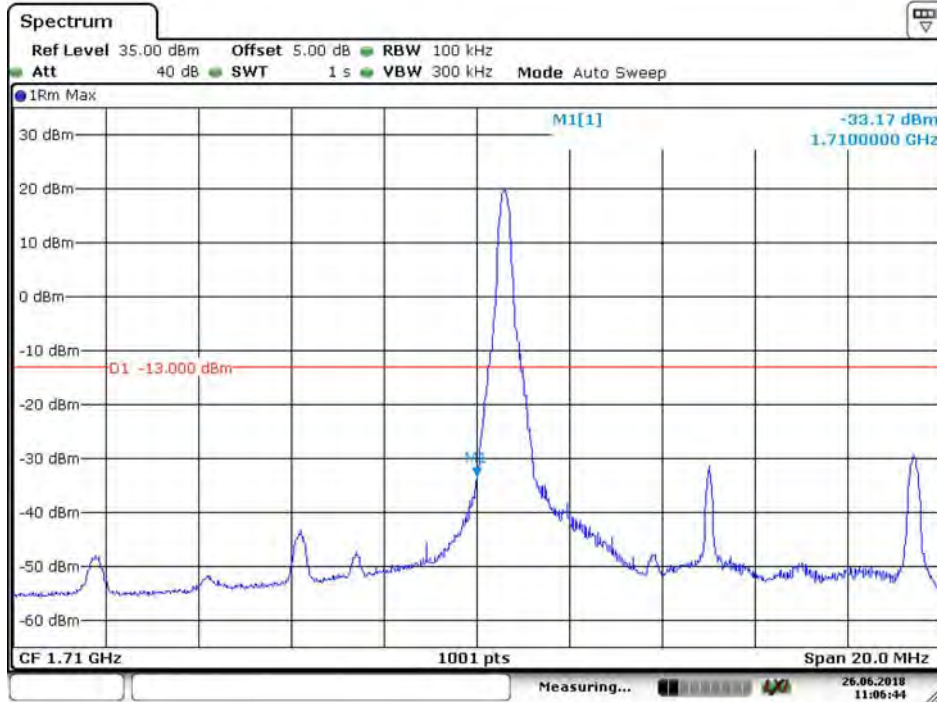


Date: 11.JUN 2018 03:50:59

5.1.1.12 Test Mode = LTE/TM3 10MHz

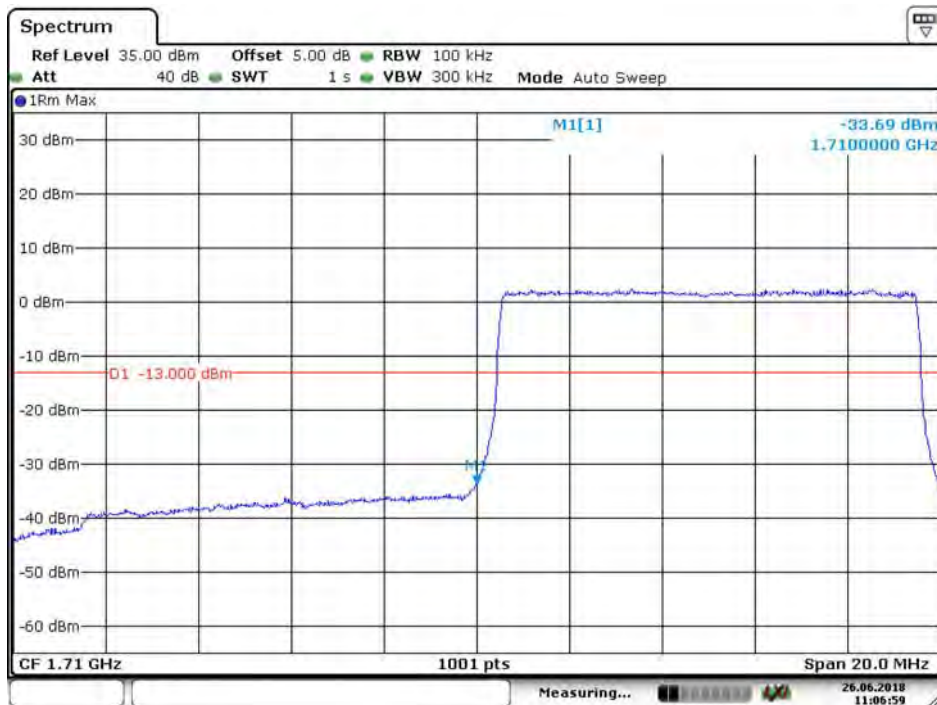
5.1.1.12.1 Test Channel = LCH

5.1.1.12.1.1 Test RB=1RB



Date: 26 JUN.2018 11:06:45

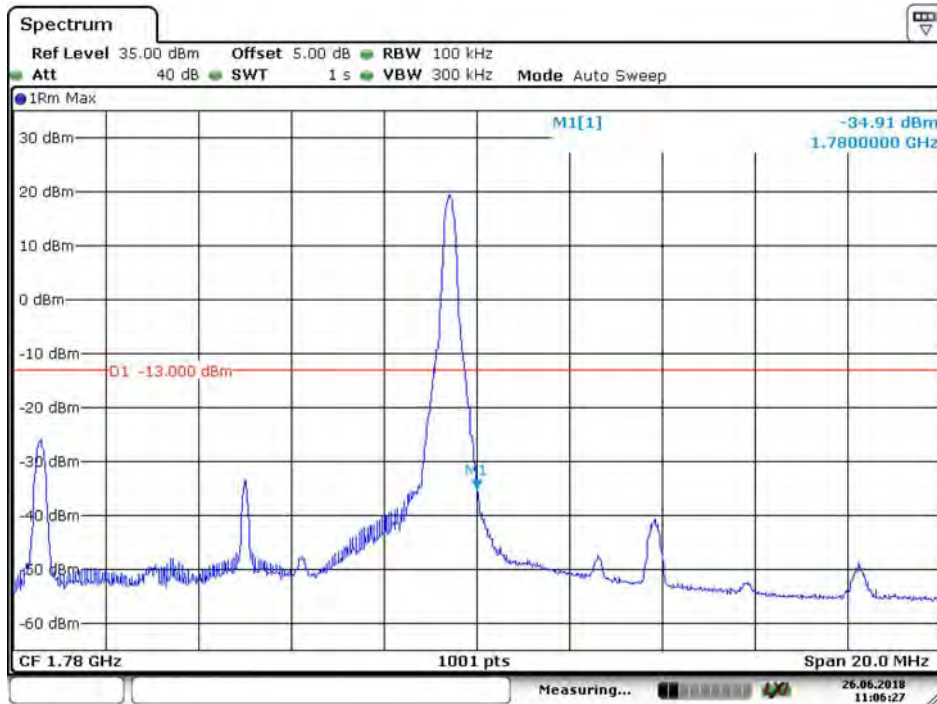
5.1.1.12.1.2 Test RB=50RB



Date: 26 JUN.2018 11:06:59

5.1.1.12.2 Test Channel = HCH

5.1.1.12.2.1 Test RB=1RB



Date: 26 JUN 2018 11:06:27

5.1.1.12.2.2 Test RB=50RB

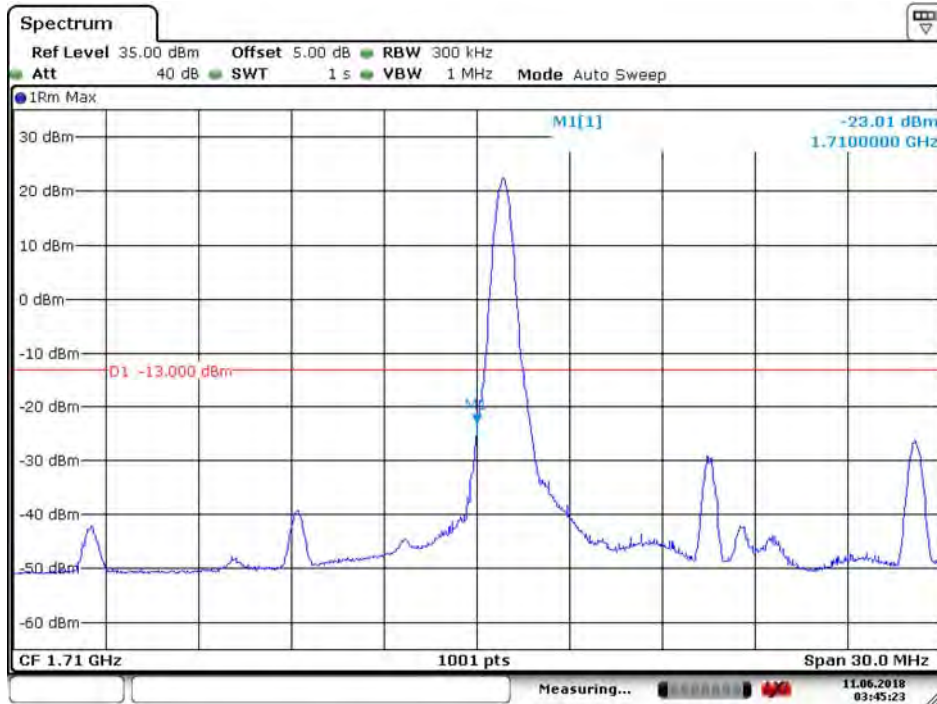


Date: 26 JUN 2018 11:06:06

5.1.1.13 Test Mode = LTE/TM1 15MHz

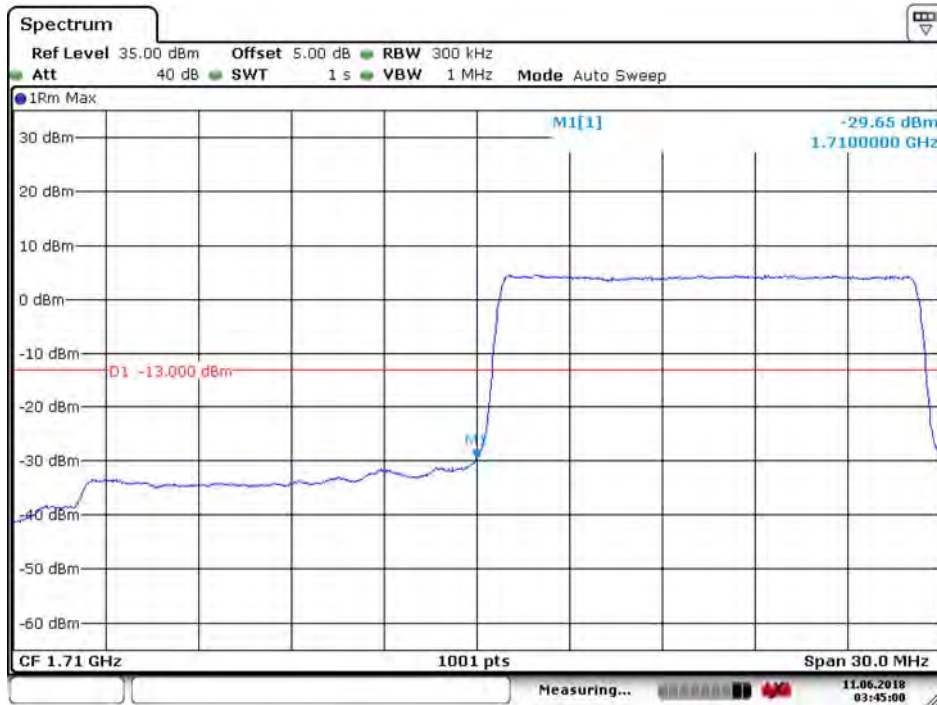
5.1.1.13.1 Test Channel = LCH

5.1.1.13.1.1 Test RB=1RB



Date: 11 JUN 2018 03:45:23

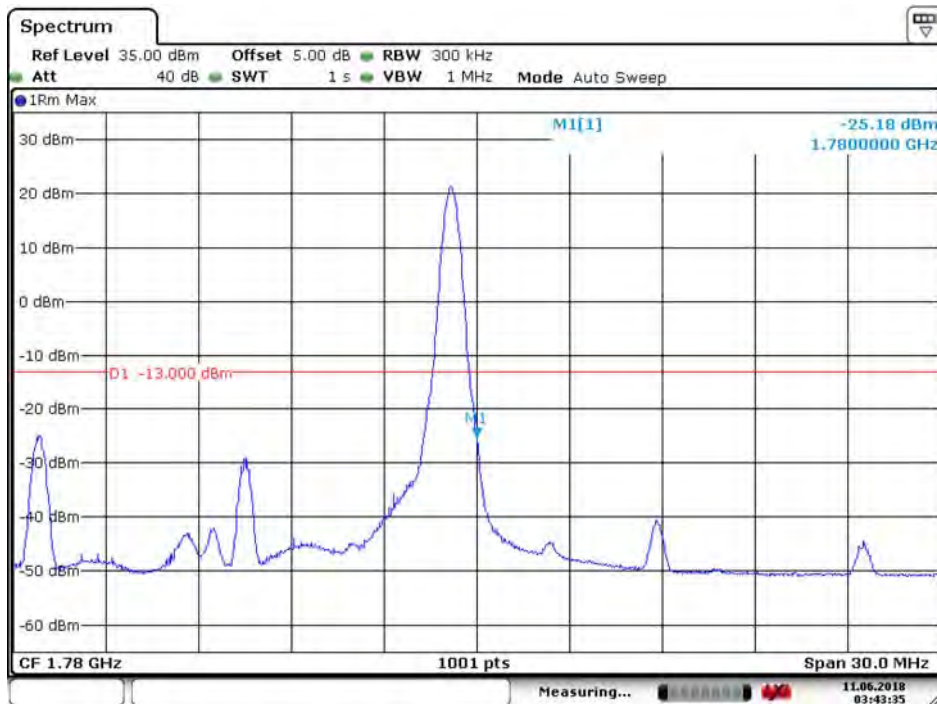
5.1.1.13.1.2 Test RB=75RB



Date: 11.JUN.2018 03:45:00

5.1.1.13.2 Test Channel = HCH

5.1.1.13.2.1 Test RB=1RB



Date: 11.JUN.2018 03:43:36

5.1.1.13.2.2 Test RB=75RB



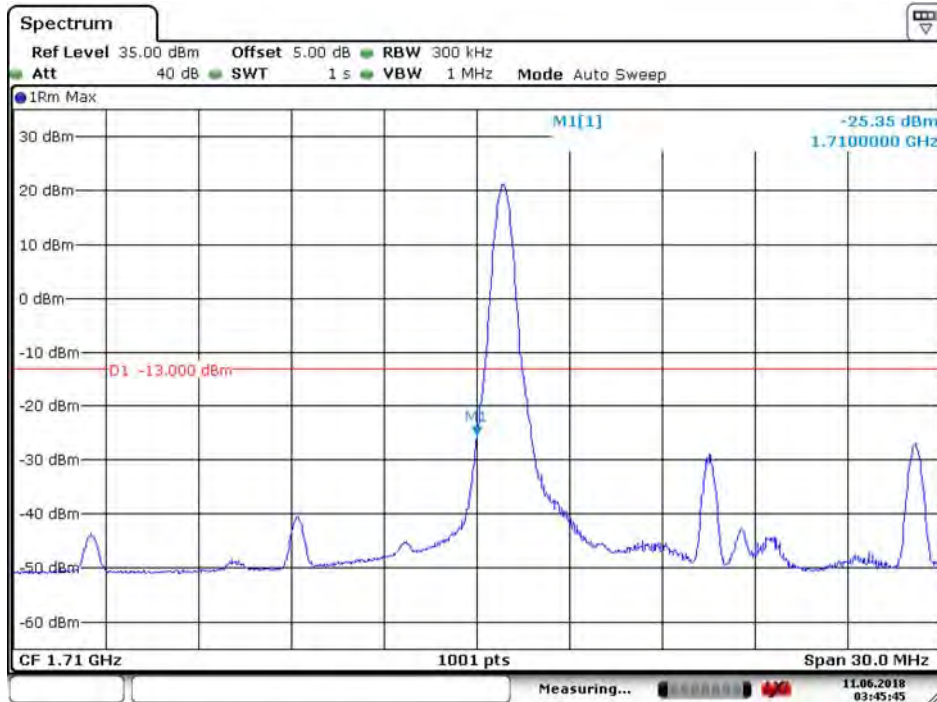
Date: 11.JUN.2018 03:43:57



5.1.1.14 Test Mode = LTE/TM2 15MHz

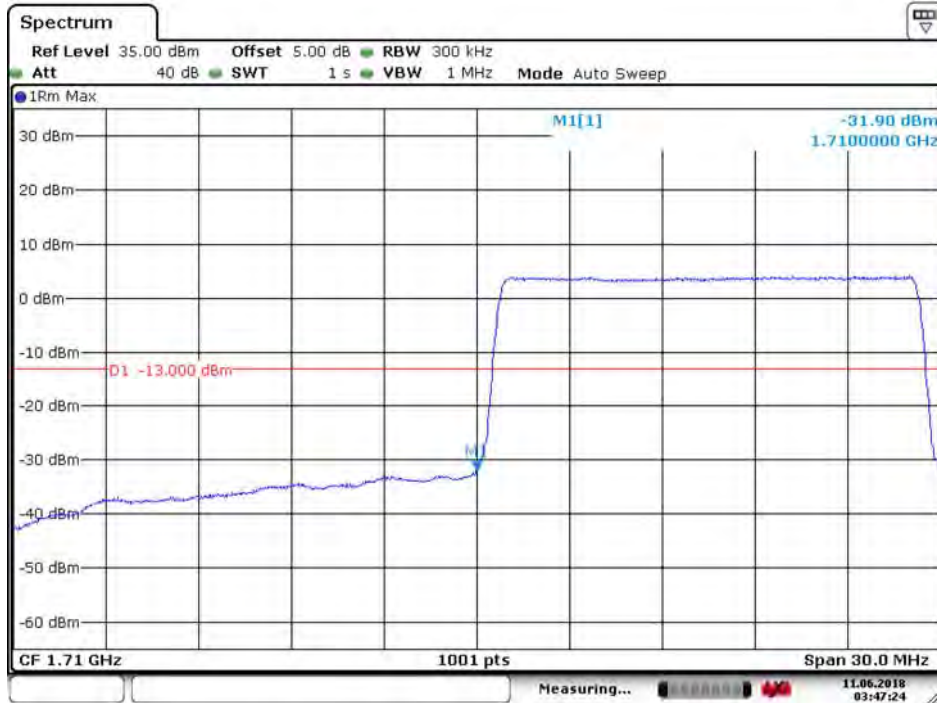
5.1.1.14.1 Test Channel = LCH

5.1.1.14.1.1 Test RB=1RB



Date: 11.JUN 2018 03:45:45

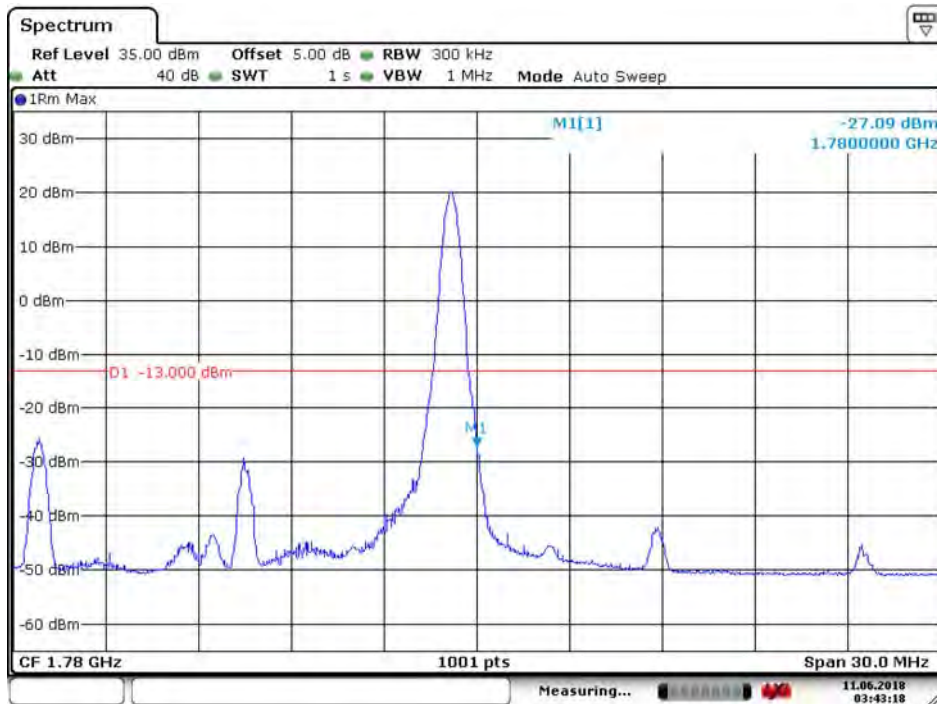
5.1.1.14.1.2 Test RB=75RB



Date: 11.JUN 2018 03:47:24

5.1.1.14.2 Test Channel = HCH

5.1.1.14.2.1 Test RB=1RB

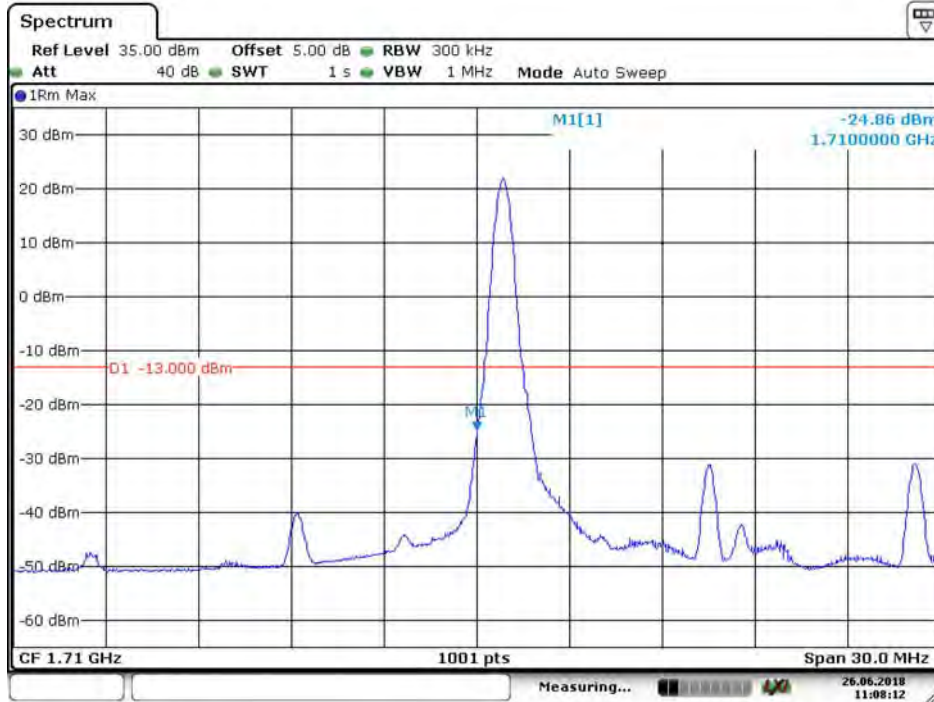


Date: 11.JUN 2018 03:43:19

5.1.1.15 Test Mode = LTE/TM3 15MHz

5.1.1.15.1 Test Channel = LCH

5.1.1.15.1.1 Test RB=1RB



Date: 26 JUN.2018 11:08:12

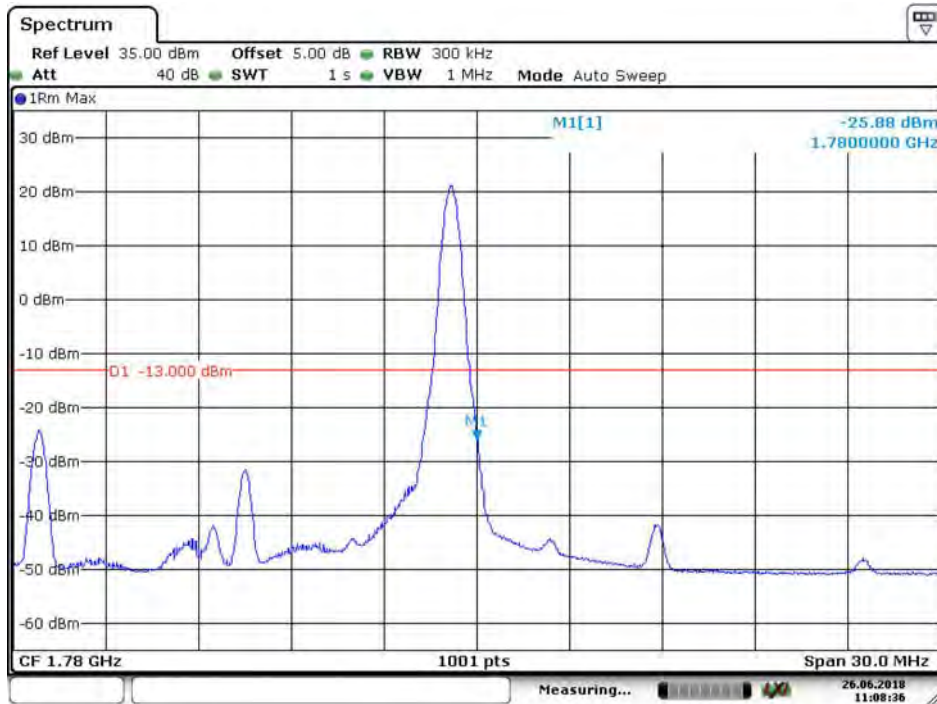
5.1.1.15.1.2 Test RB=75RB



Date: 26 JUN.2018 11:07:48

5.1.1.15.2 Test Channel = HCH

5.1.1.15.2.1 Test RB=1RB



Date: 26 JUN 2018 11:08:36

5.1.1.15.2.2 Test RB=75RB



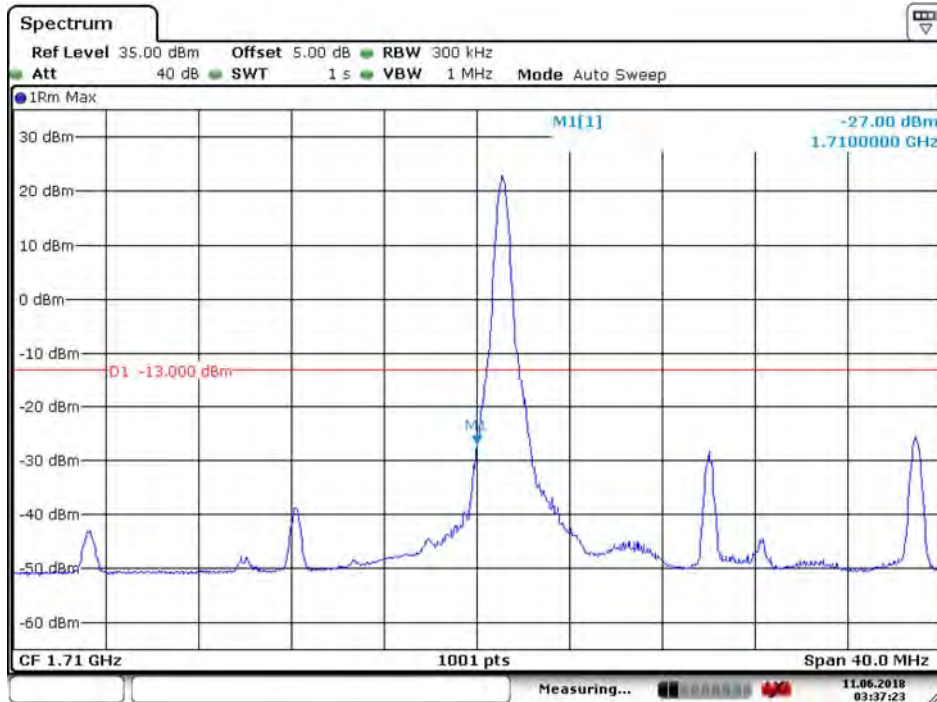
Date: 26 JUN 2018 11:08:50



5.1.1.16 Test Mode = LTE/TM1 20MHz

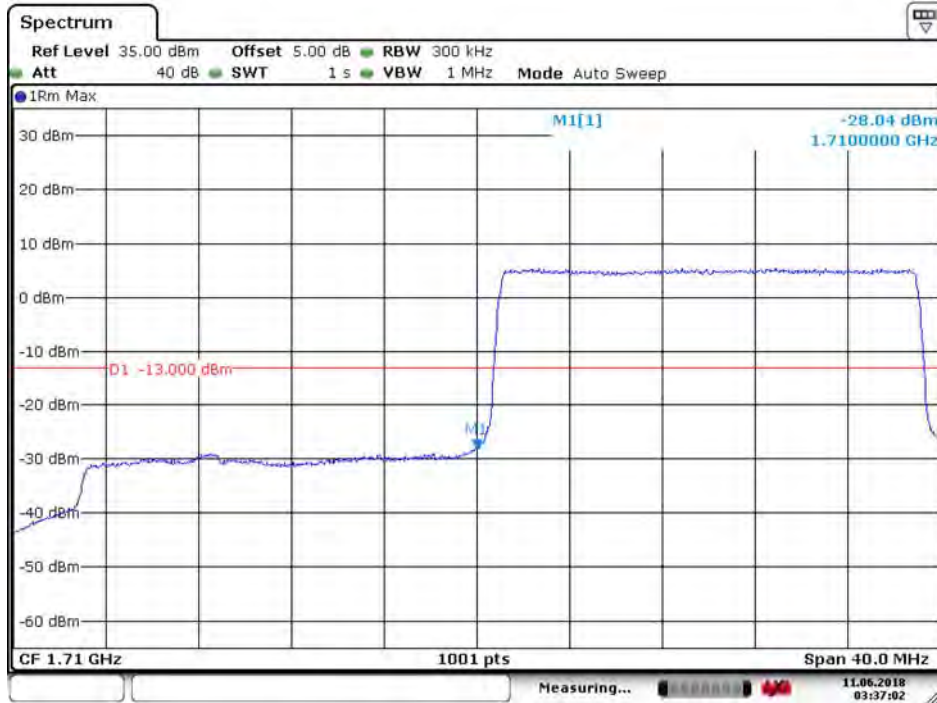
5.1.1.16.1 Test Channel = LCH

5.1.1.16.1.1 Test RB=1RB



Date: 11 JUN 2018 03:37:24

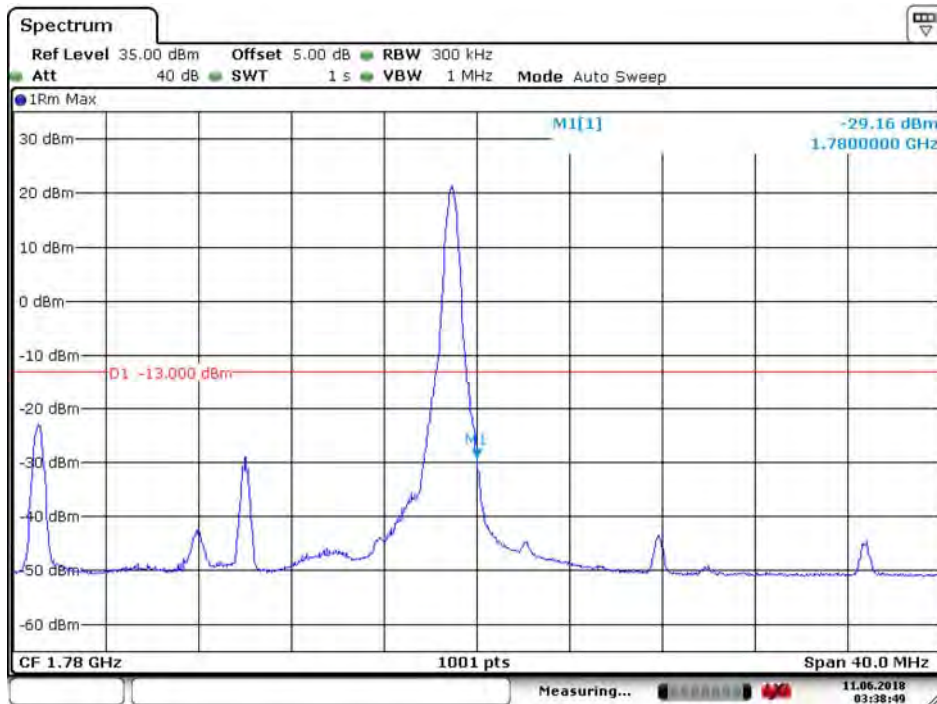
5.1.1.16.1.2 Test RB=100RB



Date: 11.JUN.2018 03:37:03

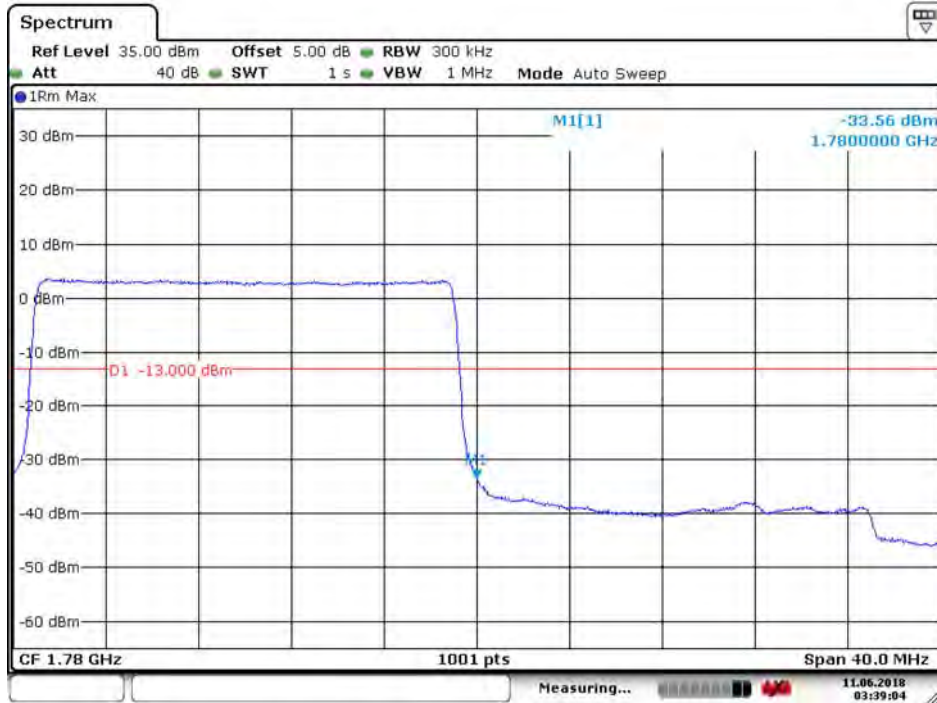
5.1.1.16.2 Test Channel = HCH

5.1.1.16.2.1 Test RB=1RB



Date: 11.JUN.2018 03:38:49

5.1.1.16.2.2 Test RB=100RB

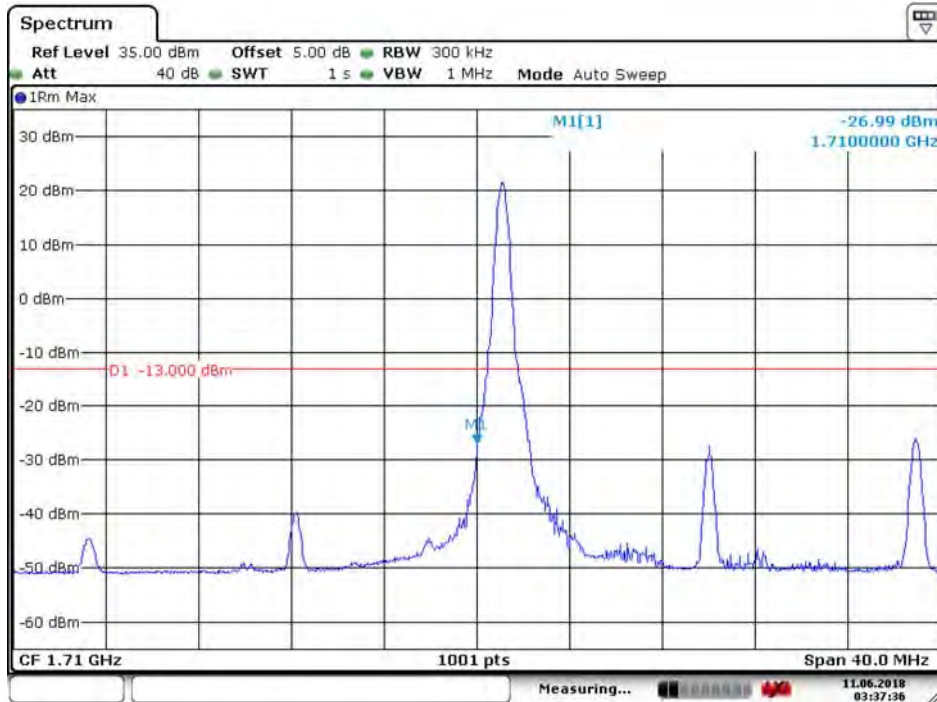


Date: 11.JUN 2018 03:39:04

5.1.1.17 Test Mode = LTE/TM2 20MHz

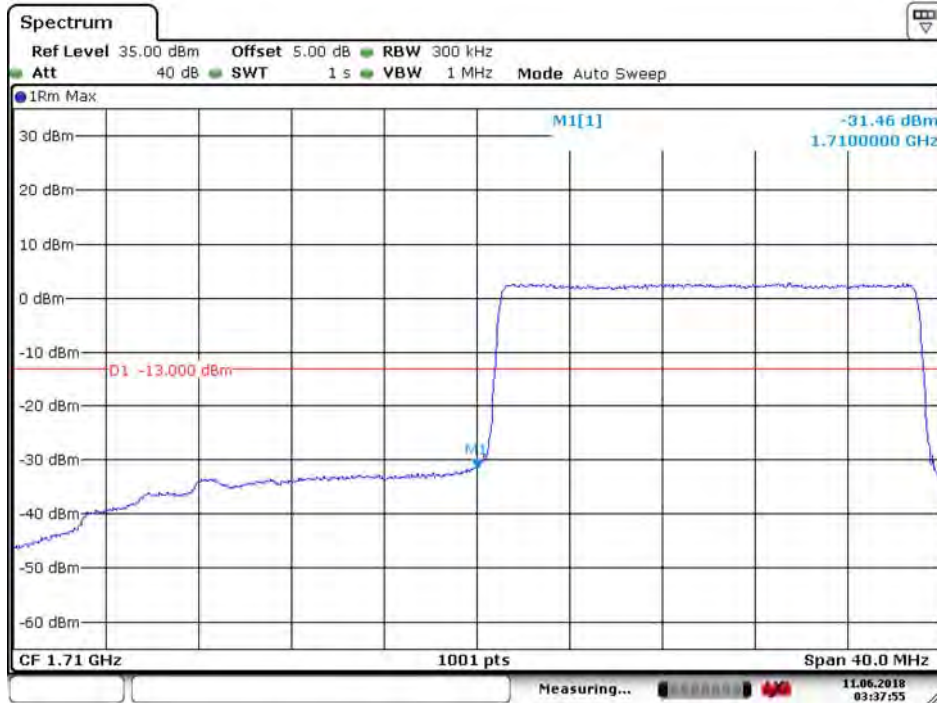
5.1.1.17.1 Test Channel = LCH

5.1.1.17.1.1 Test RB=1RB



Date: 11.JUN.2018 03:37:37

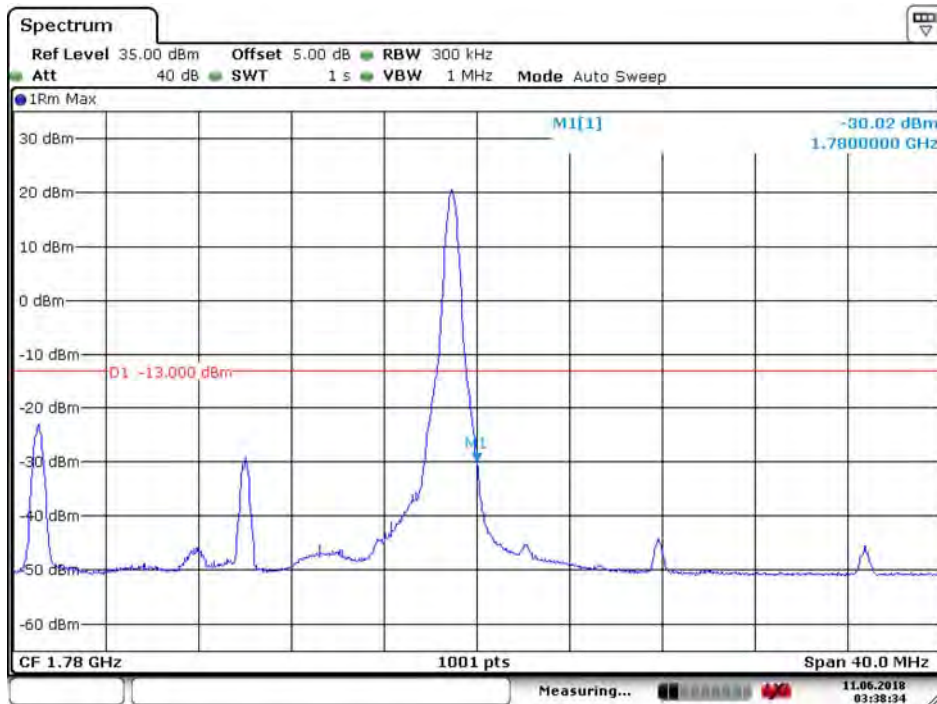
5.1.1.17.1.2 Test RB=100RB



Date: 11 JUN 2018 03:37:55

5.1.1.17.2 Test Channel = HCH

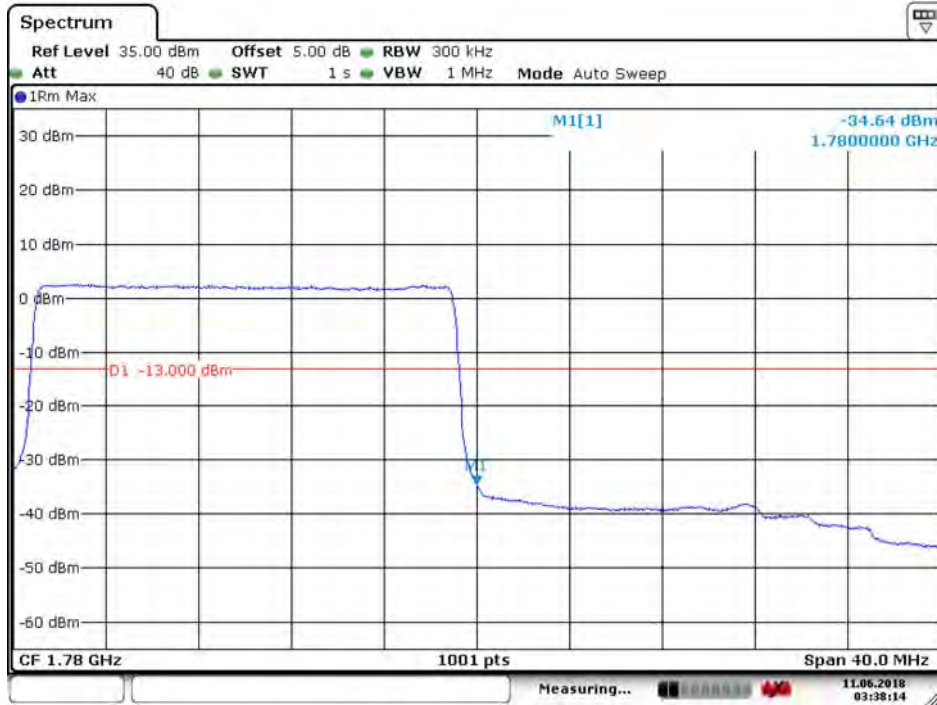
5.1.1.17.2.1 Test RB=1RB



Date: 11 JUN 2018 03:38:35

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

5.1.1.17.2.2 Test RB=100RB

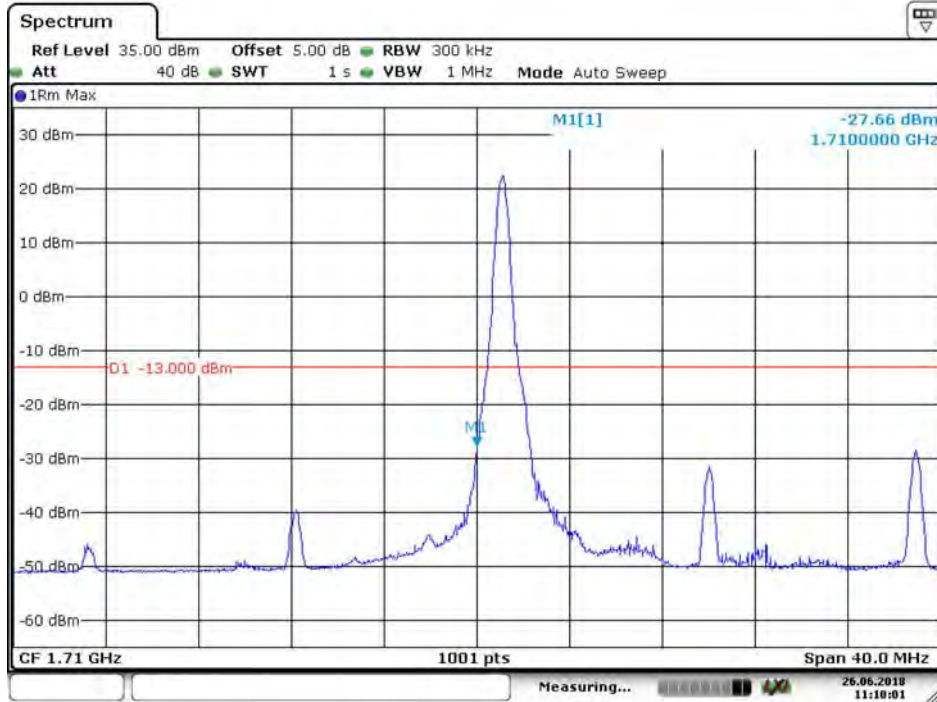


Date: 11.JUN 2018 03:38:15

5.1.1.18 Test Mode = LTE/TM3 20MHz

5.1.1.18.1 Test Channel = LCH

5.1.1.18.1.1 Test RB=1RB



Date: 26 JUN.2018 11:10:01

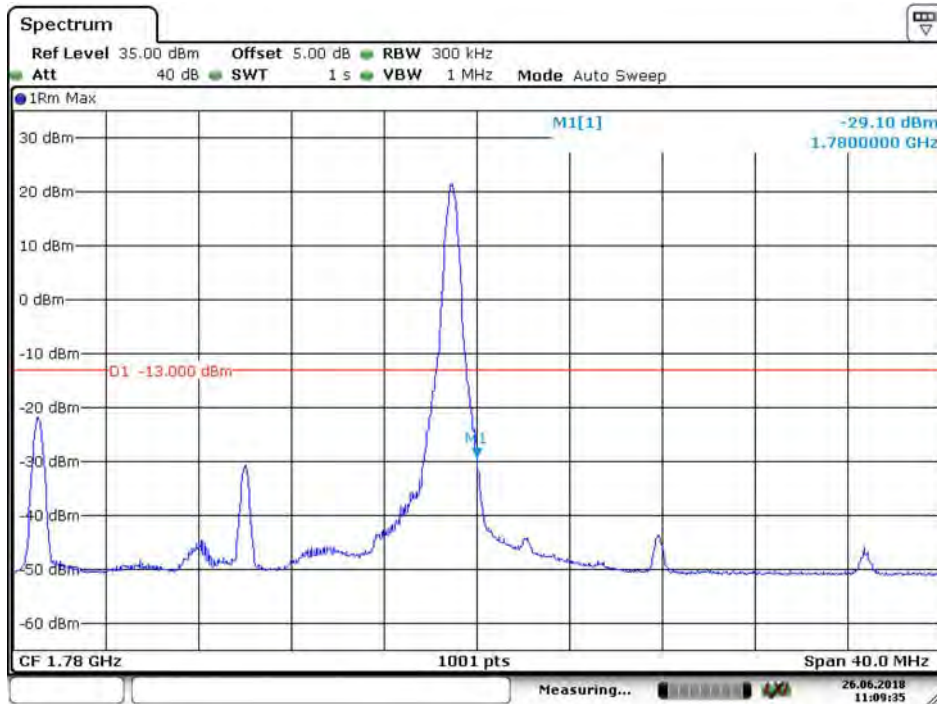
5.1.1.18.1.2 Test RB=100RB



Date: 26 JUN.2018 11:10:16

5.1.1.18.2 Test Channel = HCH

5.1.1.18.2.1 Test RB=1RB



Date: 26 JUN 2018 11:09:35

5.1.1.18.2.2 Test RB=100RB



Date: 26 JUN 2018 11:09:12

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.

6 Spurious Emission at Antenna Terminal

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

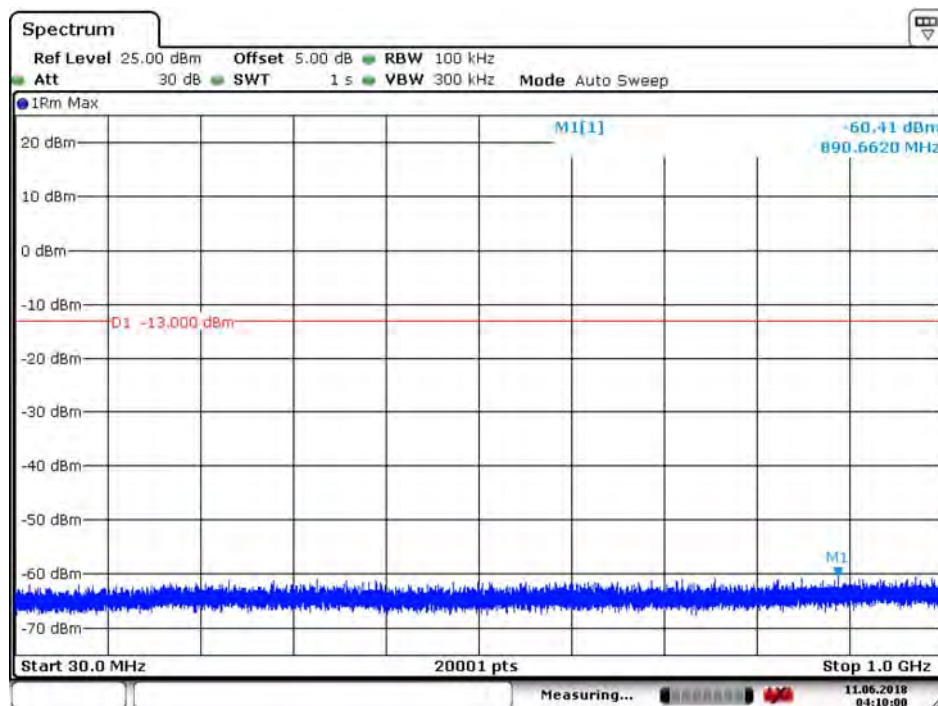
Part I - Test Plots

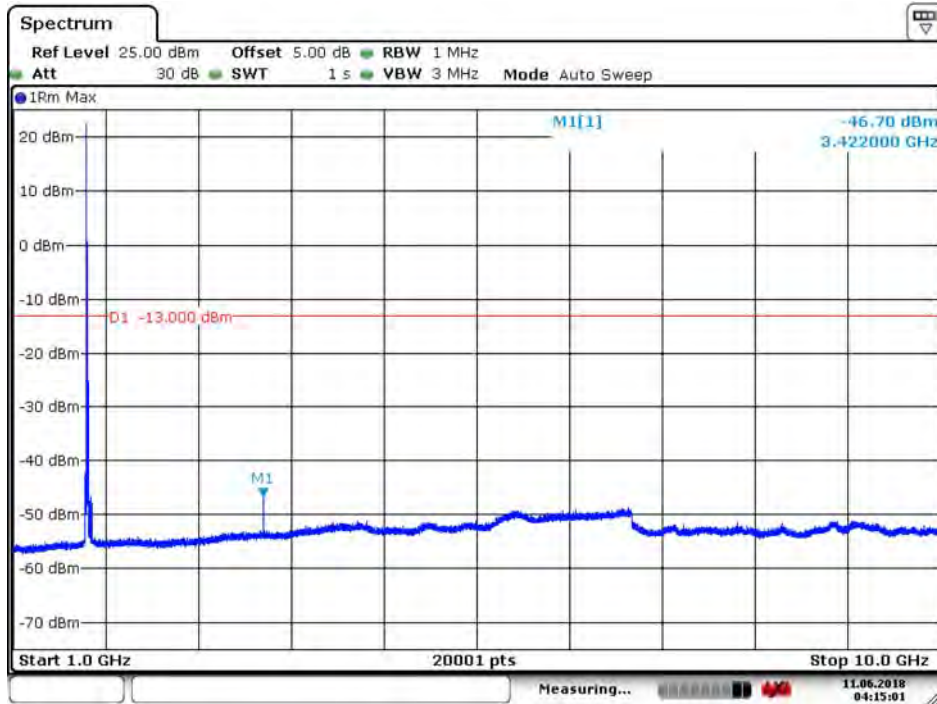
6.1 For LTE

6.1.1 Test Band = LTE BAND 66

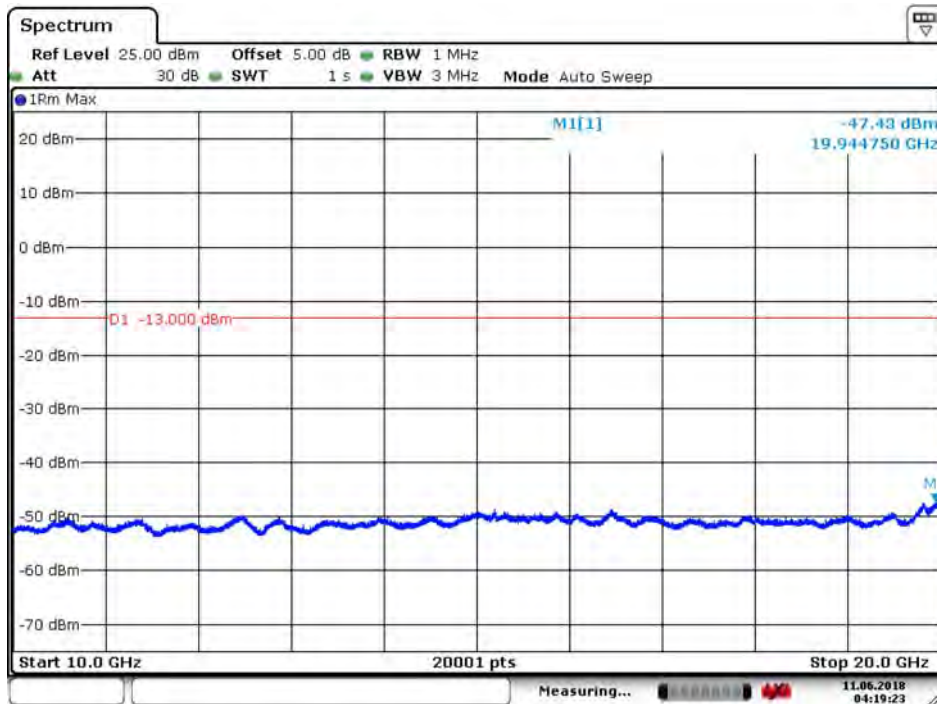
6.1.1.1 Test Mode = LTE / TM1 20MHz RB1#0

6.1.1.1.1 Test Channel = LCH



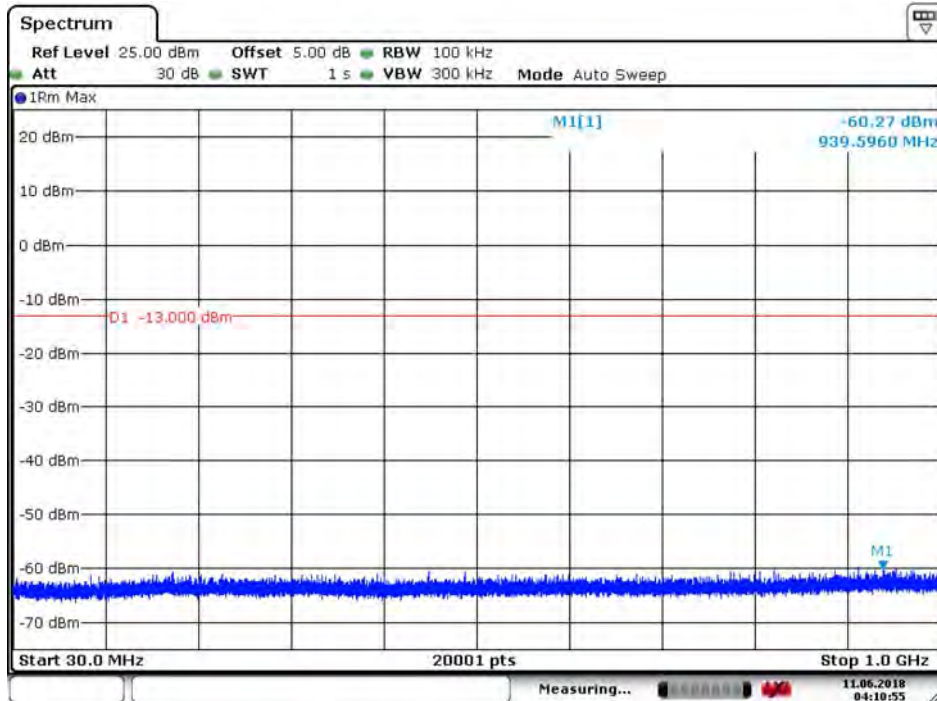


Date: 11.JUN.2018 04:15:02

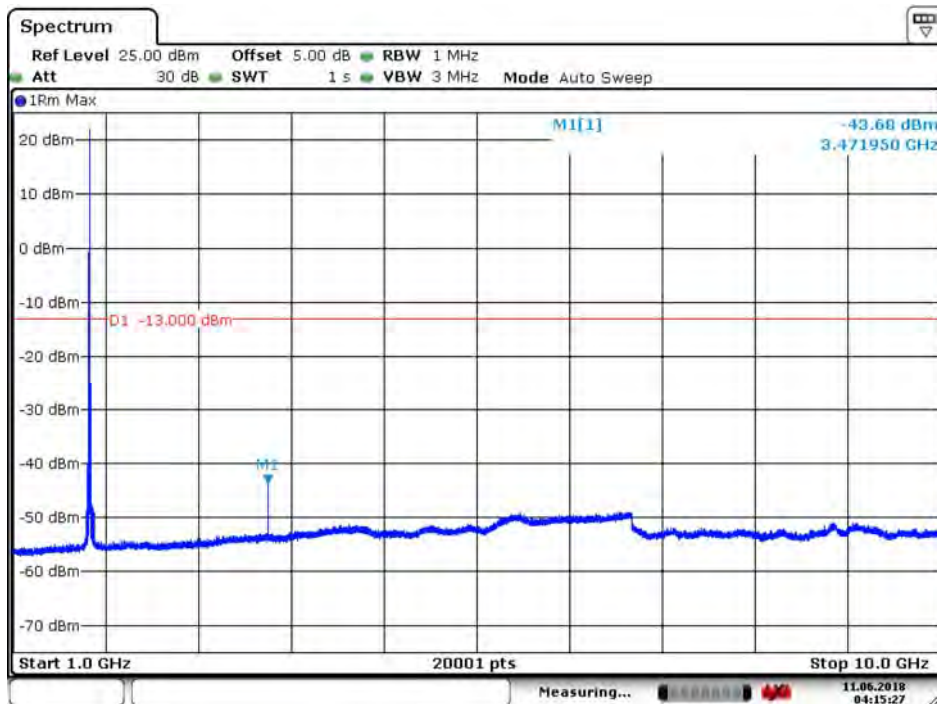


Date: 11.JUN.2018 04:19:23

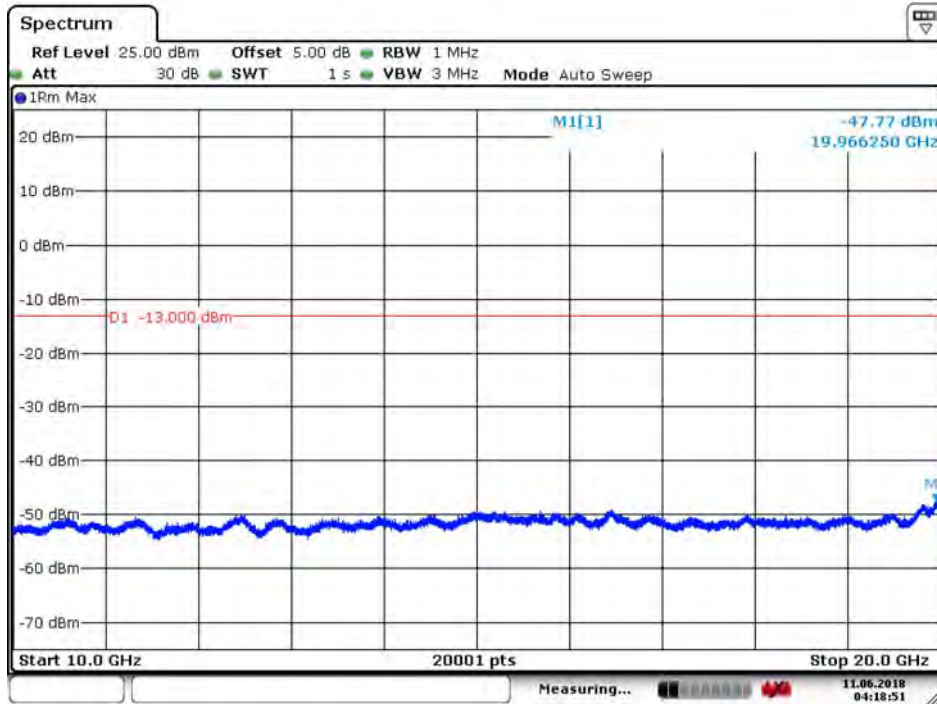
6.1.1.1.2 Test Channel = MCH



Date: 11.JUN 2018 04:10:55

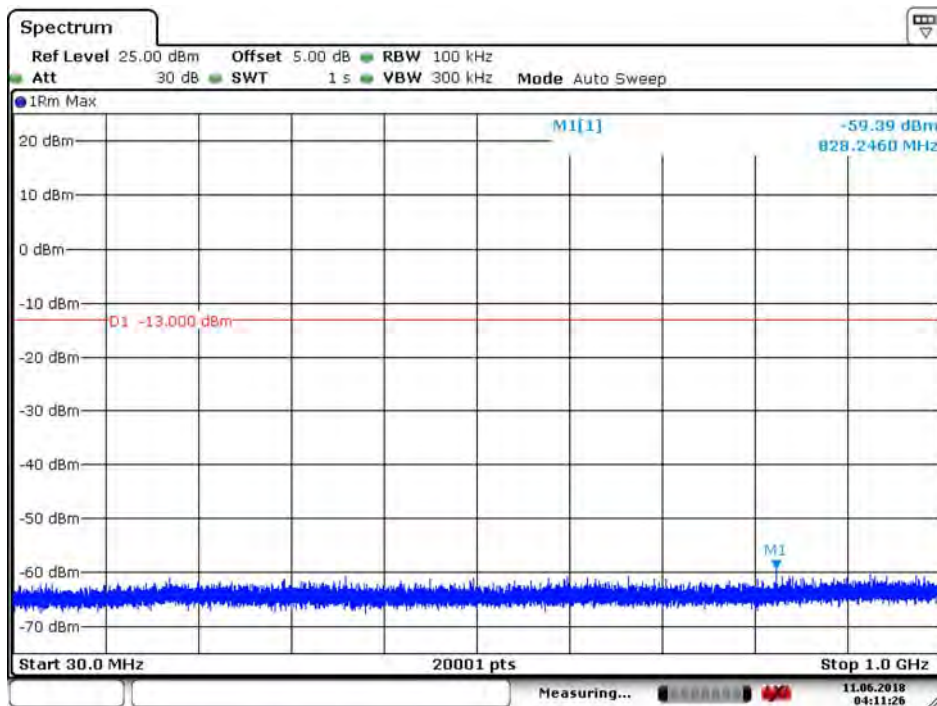


Date: 11.JUN 2018 04:15:27



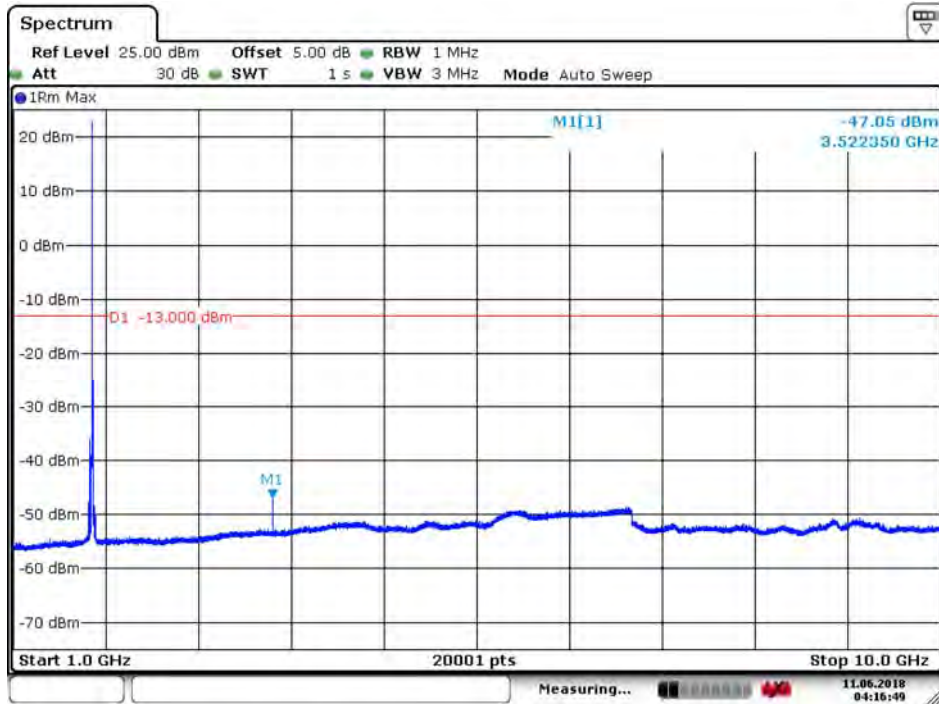
Date: 11.JUN.2018 04:18:51

6.1.1.1.3 Test Channel = HCH

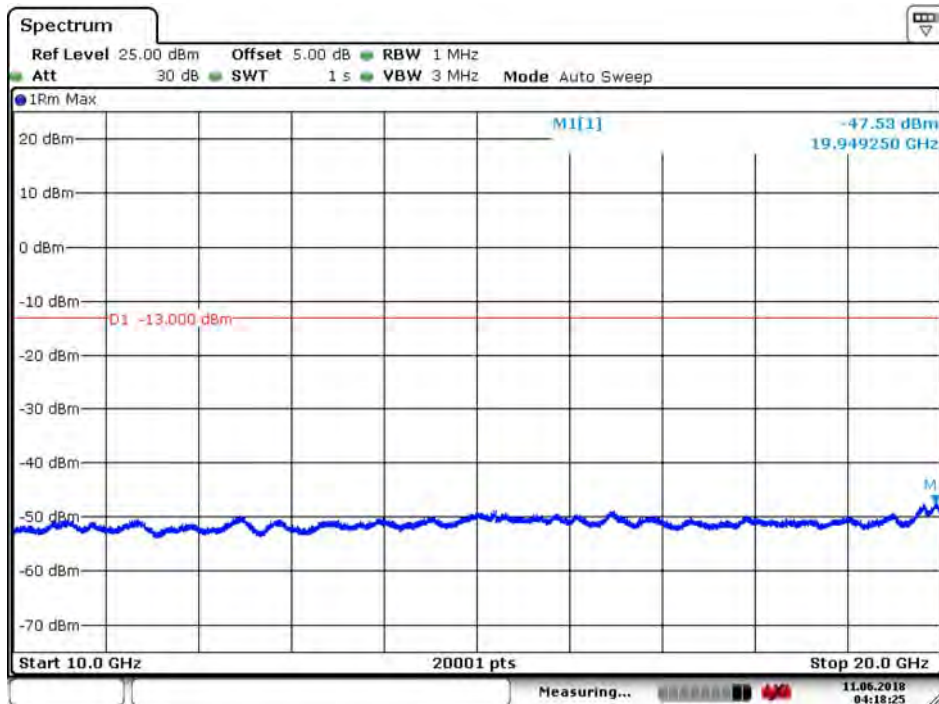


Date: 11.JUN.2018 04:11:27

"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



Date: 11.JUN 2018 04:16:49



Date: 11.JUN 2018 04:18:26



7 Field Strength of Spurious Radiation

7.1 For LTE

7.1.1 Test Band = LTE BAND 66

7.1.1.1 Test Mode =LTE/TM1 20MHz RB1#0

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
64.400000	-81.33	-13.00	68.33	Vertical
143.550000	-82.44	-13.00	69.44	Vertical
178.450000	-79.56	-13.00	66.56	Vertical
3422.500000	-62.16	-13.00	49.16	Vertical
5133.300000	-65.11	-13.00	52.11	Vertical
6844.100000	-62.60	-13.00	49.60	Vertical
63.250000	-77.59	-13.00	64.59	Horizontal
179.400000	-71.29	-13.00	58.29	Horizontal
622.195833	-79.06	-13.00	66.06	Horizontal
3421.525000	-52.90	-13.00	39.90	Horizontal
5133.300000	-64.66	-13.00	51.66	Horizontal
7958.200000	-63.65	-13.00	50.65	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
64.400000	-81.59	-13.00	68.59	Vertical
178.500000	-80.27	-13.00	67.27	Vertical
886.287500	-79.61	-13.00	66.61	Vertical
3471.900000	-61.12	-13.00	48.12	Vertical
5207.725000	-65.80	-13.00	52.80	Vertical
10631.975000	-63.05	-13.00	50.05	Vertical
62.300000	-77.56	-13.00	64.56	Horizontal
184.100000	-72.60	-13.00	59.60	Horizontal
1202.500000	-62.14	-13.00	49.14	Horizontal
3471.900000	-49.61	-13.00	36.61	Horizontal
5208.050000	-62.48	-13.00	49.48	Horizontal
7955.600000	-63.63	-13.00	50.63	Horizontal

⁴This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
65.280000	-80.64	-13.00	67.64	Vertical
141.650000	-81.89	-13.00	68.89	Vertical
177.450000	-79.22	-13.00	66.22	Vertical
3523.550000	-62.52	-13.00	49.52	Vertical
5352.250000	-64.98	-13.00	51.98	Vertical
7944.125000	-63.05	-13.00	50.05	Vertical
64.380000	-76.51	-13.00	63.51	Horizontal
181.400000	-70.25	-13.00	57.25	Horizontal
592.195833	-81.06	-13.00	68.06	Horizontal
3523.550000	-51.35	-13.00	38.35	Horizontal
5352.300000	-63.94	-13.00	50.94	Horizontal
10558.400000	-63.08	-13.00	50.08	Horizontal

NOTE:

- 1) The disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.
- 2) We have tested all modulation and all bandwidth, but only the worst case data presented in this report.



8 Frequency Stability

8.1 Frequency Error VS. Voltage

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEBAND 66	LTE/TM1 20MHz	LCH	TN	VL	-11.88	-0.006905	PASS
				VN	0.47	0.000270	PASS
				VH	5.75	0.003344	PASS
		MCH	TN	VL	9.59	0.005495	PASS
				VN	9.54	0.005465	PASS
				VH	8.97	0.005141	PASS
		HCH	TN	VL	0.51	0.000288	PASS
				VN	4.67	0.002640	PASS
				VH	-4.56	-0.002574	PASS
	LTE/TM2 20MHz	LCH	TN	VL	-5.87	-0.003411	PASS
				VN	-0.66	-0.000386	PASS
				VH	-9.17	-0.005334	PASS
		MCH	TN	VL	0.71	0.000407	PASS
				VN	2.66	0.001525	PASS
				VH	8.99	0.005153	PASS
		HCH	TN	VL	2.02	0.001140	PASS
				VN	7.16	0.004042	PASS
				VH	-4.21	-0.002380	PASS
	LTE/TM3 20MHz	LCH	TN	VL	-3.45	-0.002004	PASS
				VN	-6.66	-0.003875	PASS
				VH	1.62	0.000939	PASS
		MCH	TN	VL	-2.69	-0.001543	PASS
				VN	-3.04	-0.001745	PASS
				VH	-1.89	-0.001082	PASS
		HCH	TN	VL	0.57	0.000320	PASS
				VN	-0.38	-0.000214	PASS
				VH	-2.05	-0.001157	PASS



8.2 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE BAND 66	LTE/TM1 20MHz	LCH	VN	-30	9.90	0.005758	PASS
				-20	7.00	0.004071	PASS
				-10	-0.38	-0.000221	PASS
				0	-8.93	-0.005189	PASS
				10	2.34	0.001362	PASS
				20	1.97	0.001147	PASS
				30	0.29	0.000168	PASS
				40	-9.31	-0.005414	PASS
				50	9.30	0.005405	PASS
		MCH	VN	-30	5.11	0.002927	PASS
				-20	-5.95	-0.003411	PASS
				-10	9.99	0.005725	PASS
				0	7.02	0.004022	PASS
				10	5.95	0.003410	PASS
				20	-2.61	-0.001495	PASS
				30	-5.89	-0.003378	PASS
				40	8.66	0.004961	PASS
				50	4.86	0.002786	PASS
		HCH	VN	-30	-0.79	-0.000446	PASS
				-20	4.88	0.002759	PASS
				-10	5.34	0.003016	PASS
				0	1.62	0.000914	PASS
				10	0.27	0.000152	PASS
				20	-4.83	-0.002728	PASS
30	-8.90			-0.005027	PASS		
40	1.95			0.001102	PASS		
50	-5.41			-0.003057	PASS		

⁴This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM180500453501

Page: 127 of 128

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEBAND 66	LTE/TM2 20MHz	LCH	VN	-30	-9.15	-0.005322	PASS
				-20	-9.23	-0.005365	PASS
				-10	-5.85	-0.003403	PASS
				0	6.36	0.003697	PASS
				10	9.83	0.005713	PASS
				20	8.26	0.004800	PASS
				30	6.87	0.003993	PASS
				40	-6.36	-0.003695	PASS
		MCH	VN	50	1.32	0.000769	PASS
				-30	8.85	0.005070	PASS
				-20	0.68	0.000389	PASS
				-10	1.64	0.000938	PASS
				0	-2.45	-0.001402	PASS
				10	4.86	0.002783	PASS
				20	0.35	0.000198	PASS
				30	-6.83	-0.003914	PASS
		HCH	VN	40	-2.40	-0.001378	PASS
				50	-9.98	-0.005718	PASS
				-30	-6.60	-0.003731	PASS
				-20	7.00	0.003955	PASS
				-10	2.88	0.001627	PASS
				0	9.76	0.005512	PASS
				10	0.38	0.000215	PASS
				20	-7.11	-0.004016	PASS
30	8.10	0.004574	PASS				
40	8.79	0.004965	PASS				
50	5.25	0.002968	PASS				

⁴This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM180500453501

Page: 128 of 128

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEBAND 66	LTE/TM3 20MHz	LCH	VN	-30	-1.34	-0.000780	PASS
				-20	-2.88	-0.001672	PASS
				-10	9.17	0.005331	PASS
				0	-6.01	-0.003493	PASS
				10	-2.56	-0.001486	PASS
				20	-9.87	-0.005738	PASS
				30	-9.57	-0.005566	PASS
				40	7.35	0.004274	PASS
				50	-7.95	-0.004623	PASS
		MCH	VN	-30	-3.40	-0.001951	PASS
				-20	3.31	0.001896	PASS
				-10	2.82	0.001614	PASS
				0	-3.83	-0.002195	PASS
				10	1.79	0.001026	PASS
				20	0.59	0.000336	PASS
				30	-0.32	-0.000184	PASS
				40	9.21	0.005279	PASS
				50	5.93	0.003397	PASS
		HCH	VN	-30	-0.18	-0.000100	PASS
				-20	-8.03	-0.004535	PASS
				-10	-0.71	-0.000403	PASS
				0	7.25	0.004098	PASS
				10	-3.56	-0.002012	PASS
				20	-3.55	-0.002004	PASS
				30	1.70	0.000958	PASS
				40	-0.21	-0.000116	PASS
				50	0.34	0.000190	PASS

The End

⁴This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Document.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.