



# Appendix B

## **E-UTRA BAND 25 E-UTRA BAND 2**



## **CONTENT**

	Page
<b>1 EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA .....</b>	<b>3</b>
<b>2 PEAK-TO-AVERAGE RATIO.....</b>	<b>21</b>
2.1 FOR LTE .....	21
2.1.1 <i>Test Band = LTE BAND 25</i> .....	21
<b>3 MODULATION CHARACTERISTICS.....</b>	<b>29</b>
3.1 FOR LTE .....	29
3.1.1 <i>Test Band = LTE BAND 25</i> .....	29
<b>4 BANDWIDTH .....</b>	<b>31</b>
4.1 FOR LTE .....	33
4.1.1 <i>Test Band = LTE BAND 25</i> .....	33
<b>5 BAND EDGES COMPLIANCE.....</b>	<b>69</b>
5.1 FOR LTE .....	69
5.1.1 <i>Test Band = LTE BAND 25</i> .....	69
<b>6 SPURIOUS EMISSION AT ANTENNA TERMINAL.....</b>	<b>128</b>
6.1 FOR LTE .....	128
6.1.1 <i>Test Band = LTE BAND 25</i> .....	128
<b>7 FIELD STRENGTH OF SPURIOUS RADIATION .....</b>	<b>134</b>
7.1 FOR LTE .....	134
7.1.1 <i>Test Band = LTE BAND 25</i> .....	134
<b>8 FREQUENCY STABILITY .....</b>	<b>136</b>
8.1 FREQUENCY ERROR VS. VOLTAGE.....	136
8.2 FREQUENCY ERROR VS. TEMPERATURE.....	137

## 1 Effective (Isotropic) Radiated Power Output Data

**Effective Isotropic Radiated Power of Transmitter (EIRP) for LTE BAND 25**

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM1	1.4M	LCH	RB1#0	23.5	25.50	33.00	PASS
				RB1#2	23.5	25.50	33.00	PASS
				RB1#5	23.41	25.41	33.00	PASS
				RB3#0	23.7	25.70	33.00	PASS
				RB3#2	23.58	25.58	33.00	PASS
				RB3#3	23.64	25.64	33.00	PASS
				RB6#0	22.45	24.45	33.00	PASS
			MCH	RB1#0	23.41	25.41	33.00	PASS
				RB1#2	23.54	25.54	33.00	PASS
				RB1#5	23.46	25.46	33.00	PASS
				RB3#0	23.5	25.50	33.00	PASS
				RB3#2	23.53	25.53	33.00	PASS
				RB3#3	23.49	25.49	33.00	PASS
				RB6#0	22.51	24.51	33.00	PASS
			HCH	RB1#0	23.12	25.12	33.00	PASS
				RB1#2	23.53	25.53	33.00	PASS
				RB1#5	23.37	25.37	33.00	PASS
				RB3#0	23.54	25.54	33.00	PASS
				RB3#2	23.46	25.46	33.00	PASS
				RB3#3	23.52	25.52	33.00	PASS
				RB6#0	22.6	24.60	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 4 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM2	1.4M	LCH	RB1#0	22.39	24.39	33.00	PASS
				RB1#2	22.81	24.81	33.00	PASS
				RB1#5	22.74	24.74	33.00	PASS
				RB3#0	22.86	24.86	33.00	PASS
				RB3#2	22.52	24.52	33.00	PASS
				RB3#3	22.58	24.58	33.00	PASS
				RB6#0	21.65	23.65	33.00	PASS
			MCH	RB1#0	22.64	24.64	33.00	PASS
				RB1#2	22.78	24.78	33.00	PASS
				RB1#5	22.69	24.69	33.00	PASS
				RB3#0	22.72	24.72	33.00	PASS
				RB3#2	22.62	24.62	33.00	PASS
				RB3#3	22.47	24.47	33.00	PASS
				RB6#0	21.57	23.57	33.00	PASS
			HCH	RB1#0	22.16	24.16	33.00	PASS
				RB1#2	22.54	24.54	33.00	PASS
				RB1#5	22.43	24.43	33.00	PASS
				RB3#0	22.86	24.86	33.00	PASS
				RB3#2	22.49	24.49	33.00	PASS
				RB3#3	22.43	24.43	33.00	PASS
				RB6#0	21.71	23.71	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 5 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM3	1.4M	LCH	RB1#0	22.56	24.56	33.00	PASS
				RB1#2	22.54	24.54	33.00	PASS
				RB1#5	22.46	24.46	33.00	PASS
				RB3#0	22.64	24.64	33.00	PASS
				RB3#2	22.56	24.56	33.00	PASS
				RB3#3	22.44	24.44	33.00	PASS
				RB6#0	21.43	23.43	33.00	PASS
			MCH	RB1#0	22.48	24.48	33.00	PASS
				RB1#2	22.60	24.60	33.00	PASS
				RB1#5	22.47	24.47	33.00	PASS
				RB3#0	22.46	24.46	33.00	PASS
				RB3#2	22.47	24.47	33.00	PASS
				RB3#3	22.45	24.45	33.00	PASS
				RB6#0	21.42	23.42	33.00	PASS
			HCH	RB1#0	22.06	24.06	33.00	PASS
				RB1#2	22.22	24.22	33.00	PASS
				RB1#5	21.83	23.83	33.00	PASS
				RB3#0	22.15	24.15	33.00	PASS
				RB3#2	22.09	24.09	33.00	PASS
				RB3#3	21.84	23.84	33.00	PASS
				RB6#0	21.12	23.12	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 6 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM1	3M	LCH	RB1#0	23.55	25.55	33.00	PASS
				RB1#7	23.72	25.72	33.00	PASS
				RB1#14	23.54	25.54	33.00	PASS
				RB8#0	22.59	24.59	33.00	PASS
				RB8#4	22.59	24.59	33.00	PASS
				RB8#7	22.53	24.53	33.00	PASS
				RB15#0	22.53	24.53	33.00	PASS
			MCH	RB1#0	23.51	25.51	33.00	PASS
				RB1#7	23.42	25.42	33.00	PASS
				RB1#14	23.54	25.54	33.00	PASS
				RB8#0	22.58	24.58	33.00	PASS
				RB8#4	22.62	24.62	33.00	PASS
				RB8#7	22.51	24.51	33.00	PASS
				RB15#0	22.59	24.59	33.00	PASS
			HCH	RB1#0	23.46	25.46	33.00	PASS
				RB1#7	23.2	25.20	33.00	PASS
				RB1#14	23.23	25.23	33.00	PASS
				RB8#0	22.58	24.58	33.00	PASS
				RB8#4	22.63	24.63	33.00	PASS
				RB8#7	22.59	24.59	33.00	PASS
				RB15#0	22.53	24.53	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 7 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM2	3M	LCH	RB1#0	22.7	24.70	33.00	PASS
				RB1#7	22.75	24.75	33.00	PASS
				RB1#14	22.52	24.52	33.00	PASS
				RB8#0	21.7	23.70	33.00	PASS
				RB8#4	21.74	23.74	33.00	PASS
				RB8#7	21.67	23.67	33.00	PASS
				RB15#0	21.75	23.75	33.00	PASS
			MCH	RB1#0	22.8	24.80	33.00	PASS
				RB1#7	22.84	24.84	33.00	PASS
				RB1#14	22.9	24.90	33.00	PASS
				RB8#0	21.65	23.65	33.00	PASS
				RB8#4	21.77	23.77	33.00	PASS
				RB8#7	21.63	23.63	33.00	PASS
				RB15#0	21.64	23.64	33.00	PASS
			HCH	RB1#0	22.86	24.86	33.00	PASS
				RB1#7	22.92	24.92	33.00	PASS
				RB1#14	22.64	24.64	33.00	PASS
				RB8#0	21.79	23.79	33.00	PASS
				RB8#4	21.67	23.67	33.00	PASS
				RB8#7	21.86	23.86	33.00	PASS
				RB15#0	21.58	23.58	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 8 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM3	3M	LCH	RB1#0	22.40	24.40	33.00	PASS
				RB1#2	22.42	24.42	33.00	PASS
				RB1#5	22.42	24.42	33.00	PASS
				RB3#0	21.56	23.56	33.00	PASS
				RB3#2	21.51	23.51	33.00	PASS
				RB3#3	21.46	23.46	33.00	PASS
				RB6#0	21.47	23.47	33.00	PASS
			MCH	RB1#0	22.44	24.44	33.00	PASS
				RB1#2	22.49	24.49	33.00	PASS
				RB1#5	22.49	24.49	33.00	PASS
				RB3#0	21.55	23.55	33.00	PASS
				RB3#2	21.57	23.57	33.00	PASS
				RB3#3	21.49	23.49	33.00	PASS
				RB6#0	21.50	23.50	33.00	PASS
			HCH	RB1#0	22.41	24.41	33.00	PASS
				RB1#2	22.21	24.21	33.00	PASS
				RB1#5	21.75	23.75	33.00	PASS
				RB3#0	21.48	23.48	33.00	PASS
				RB3#2	21.64	23.64	33.00	PASS
				RB3#3	21.40	23.40	33.00	PASS
				RB6#0	21.23	23.23	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 9 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM1	5M	LCH	RB1#0	23.42	25.42	33.00	PASS
				RB1#13	23.58	25.58	33.00	PASS
				RB1#24	23.52	25.52	33.00	PASS
				RB12#0	22.6	24.60	33.00	PASS
				RB12#6	22.6	24.60	33.00	PASS
				RB12#13	22.48	24.48	33.00	PASS
				RB25#0	22.6	24.60	33.00	PASS
			MCH	RB1#0	23.55	25.55	33.00	PASS
				RB1#13	23.56	25.56	33.00	PASS
				RB1#24	23.45	25.45	33.00	PASS
				RB12#0	22.71	24.71	33.00	PASS
				RB12#6	22.63	24.63	33.00	PASS
				RB12#13	22.59	24.59	33.00	PASS
				RB25#0	22.57	24.57	33.00	PASS
			HCH	RB1#0	23.56	25.56	33.00	PASS
				RB1#13	23.6	25.60	33.00	PASS
				RB1#24	23.3	25.30	33.00	PASS
				RB12#0	22.65	24.65	33.00	PASS
				RB12#6	22.76	24.76	33.00	PASS
				RB12#13	22.49	24.49	33.00	PASS
				RB25#0	22.64	24.64	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 10 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM2	5M	LCH	RB1#0	22.49	24.49	33.00	PASS
				RB1#13	22.63	24.63	33.00	PASS
				RB1#24	22.5	24.50	33.00	PASS
				RB12#0	21.42	23.42	33.00	PASS
				RB12#6	21.39	23.39	33.00	PASS
				RB12#13	21.27	23.27	33.00	PASS
				RB25#0	21.32	23.32	33.00	PASS
			MCH	RB1#0	22.64	24.64	33.00	PASS
				RB1#13	22.52	24.52	33.00	PASS
				RB1#24	22.64	24.64	33.00	PASS
				RB12#0	21.47	23.47	33.00	PASS
				RB12#6	21.49	23.49	33.00	PASS
				RB12#13	21.36	23.36	33.00	PASS
				RB25#0	21.45	23.45	33.00	PASS
			HCH	RB1#0	22.4	24.40	33.00	PASS
				RB1#13	22.44	24.44	33.00	PASS
				RB1#24	22.21	24.21	33.00	PASS
				RB12#0	21.34	23.34	33.00	PASS
				RB12#6	21.07	23.07	33.00	PASS
				RB12#13	21.18	23.18	33.00	PASS
				RB25#0	21.46	23.46	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 11 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM3	5M	LCH	RB1#0	22.53	24.53	33.00	PASS
				RB1#2	22.40	24.40	33.00	PASS
				RB1#5	22.32	24.32	33.00	PASS
				RB3#0	21.43	23.43	33.00	PASS
				RB3#2	21.54	23.54	33.00	PASS
				RB3#3	21.41	23.41	33.00	PASS
				RB6#0	21.52	23.52	33.00	PASS
			MCH	RB1#0	22.65	24.65	33.00	PASS
				RB1#2	22.43	24.43	33.00	PASS
				RB1#5	22.53	24.53	33.00	PASS
				RB3#0	21.56	23.56	33.00	PASS
				RB3#2	21.59	23.59	33.00	PASS
				RB3#3	21.51	23.51	33.00	PASS
				RB6#0	21.53	23.53	33.00	PASS
			HCH	RB1#0	22.44	24.44	33.00	PASS
				RB1#2	22.26	24.26	33.00	PASS
				RB1#5	21.81	23.81	33.00	PASS
				RB3#0	21.37	23.37	33.00	PASS
				RB3#2	21.32	23.32	33.00	PASS
				RB3#3	21.20	23.20	33.00	PASS
				RB6#0	21.39	23.39	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 12 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM1	10M	LCH	RB1#0	23.86	25.86	33.00	PASS
				RB1#25	23.48	25.48	33.00	PASS
				RB1#49	23.51	25.51	33.00	PASS
				RB25#0	22.7	24.70	33.00	PASS
				RB25#13	22.6	24.60	33.00	PASS
				RB25#25	22.65	24.65	33.00	PASS
				RB50#0	22.62	24.62	33.00	PASS
			MCH	RB1#0	23.79	25.79	33.00	PASS
				RB1#25	23.57	25.57	33.00	PASS
				RB1#49	23.42	25.42	33.00	PASS
				RB25#0	22.75	24.75	33.00	PASS
				RB25#13	22.65	24.65	33.00	PASS
				RB25#25	22.61	24.61	33.00	PASS
				RB50#0	22.69	24.69	33.00	PASS
			HCH	RB1#0	23.7	25.70	33.00	PASS
				RB1#25	23.36	25.36	33.00	PASS
				RB1#49	23.3	25.30	33.00	PASS
				RB25#0	22.74	24.74	33.00	PASS
				RB25#13	22.69	24.69	33.00	PASS
				RB25#25	22.62	24.62	33.00	PASS
				RB50#0	22.71	24.71	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 13 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM2	10M	LCH	RB1#0	22.94	24.94	33.00	PASS
				RB1#25	22.54	24.54	33.00	PASS
				RB1#49	22.5	24.50	33.00	PASS
				RB25#0	21.81	23.81	33.00	PASS
				RB25#13	21.63	23.63	33.00	PASS
				RB25#25	21.63	23.63	33.00	PASS
				RB50#0	21.67	23.67	33.00	PASS
			MCH	RB1#0	22.93	24.93	33.00	PASS
				RB1#25	22.68	24.68	33.00	PASS
				RB1#49	22.84	24.84	33.00	PASS
				RB25#0	21.79	23.79	33.00	PASS
				RB25#13	21.73	23.73	33.00	PASS
				RB25#25	21.67	23.67	33.00	PASS
				RB50#0	21.78	23.78	33.00	PASS
			HCH	RB1#0	23.05	25.05	33.00	PASS
				RB1#25	22.41	24.41	33.00	PASS
				RB1#49	22.89	24.89	33.00	PASS
				RB25#0	21.78	23.78	33.00	PASS
				RB25#13	21.57	23.57	33.00	PASS
				RB25#25	21.67	23.67	33.00	PASS
				RB50#0	21.76	23.76	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 14 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM3	10M	LCH	RB1#0	22.74	24.74	33.00	PASS
				RB1#2	22.36	24.36	33.00	PASS
				RB1#5	22.34	24.34	33.00	PASS
				RB3#0	21.42	23.42	33.00	PASS
				RB3#2	21.52	23.52	33.00	PASS
				RB3#3	21.55	23.55	33.00	PASS
				RB6#0	21.54	23.54	33.00	PASS
			MCH	RB1#0	22.70	24.70	33.00	PASS
				RB1#2	22.60	24.60	33.00	PASS
				RB1#5	22.63	24.63	33.00	PASS
				RB3#0	21.69	23.69	33.00	PASS
				RB3#2	21.63	23.63	33.00	PASS
				RB3#3	21.64	23.64	33.00	PASS
				RB6#0	21.65	23.65	33.00	PASS
			HCH	RB1#0	22.96	24.96	33.00	PASS
				RB1#2	22.72	24.72	33.00	PASS
				RB1#5	21.97	23.97	33.00	PASS
				RB3#0	21.69	23.69	33.00	PASS
				RB3#2	21.65	23.65	33.00	PASS
				RB3#3	21.52	23.52	33.00	PASS
				RB6#0	21.63	23.63	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 15 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM1	15M	LCH	RB1#0	23.63	25.63	33.00	PASS
				RB1#38	23.62	25.62	33.00	PASS
				RB1#74	23.4	25.40	33.00	PASS
				RB36#0	22.92	24.92	33.00	PASS
				RB36#18	22.78	24.78	33.00	PASS
				RB36#39	22.72	24.72	33.00	PASS
				RB75#0	22.93	24.93	33.00	PASS
			MCH	RB1#0	23.65	25.65	33.00	PASS
				RB1#38	23.57	25.57	33.00	PASS
				RB1#74	23.67	25.67	33.00	PASS
				RB36#0	22.97	24.97	33.00	PASS
				RB36#18	22.79	24.79	33.00	PASS
				RB36#39	22.76	24.76	33.00	PASS
				RB75#0	22.86	24.86	33.00	PASS
			HCH	RB1#0	23.5	25.50	33.00	PASS
				RB1#38	23.34	25.34	33.00	PASS
				RB1#74	23.51	25.51	33.00	PASS
				RB36#0	22.92	24.92	33.00	PASS
				RB36#18	22.77	24.77	33.00	PASS
				RB36#39	22.7	24.70	33.00	PASS
				RB75#0	22.95	24.95	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 16 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM2	15M	LCH	RB1#0	22.79	24.79	33.00	PASS
				RB1#38	22.1	24.10	33.00	PASS
				RB1#74	22.61	24.61	33.00	PASS
				RB36#0	21.29	23.29	33.00	PASS
				RB36#18	21.25	23.25	33.00	PASS
				RB36#39	21.22	23.22	33.00	PASS
				RB75#0	21.29	23.29	33.00	PASS
			MCH	RB1#0	22.93	24.93	33.00	PASS
				RB1#38	22.4	24.40	33.00	PASS
				RB1#74	22.46	24.46	33.00	PASS
				RB36#0	21.41	23.41	33.00	PASS
				RB36#18	21.23	23.23	33.00	PASS
				RB36#39	21.22	23.22	33.00	PASS
				RB75#0	21.32	23.32	33.00	PASS
			HCH	RB1#0	22.86	24.86	33.00	PASS
				RB1#38	22.31	24.31	33.00	PASS
				RB1#74	22.47	24.47	33.00	PASS
				RB36#0	21.45	23.45	33.00	PASS
				RB36#18	21.21	23.21	33.00	PASS
				RB36#39	21.28	23.28	33.00	PASS
				RB75#0	21.29	23.29	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 17 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM3	15M	LCH	RB1#0	22.58	24.58	33.00	PASS
				RB1#2	22.00	24.00	33.00	PASS
				RB1#5	22.26	24.26	33.00	PASS
				RB3#0	21.20	23.20	33.00	PASS
				RB3#2	21.21	23.21	33.00	PASS
				RB3#3	21.18	23.18	33.00	PASS
				RB6#0	21.28	23.28	33.00	PASS
			MCH	RB1#0	22.84	24.84	33.00	PASS
				RB1#2	22.22	24.22	33.00	PASS
				RB1#5	22.48	24.48	33.00	PASS
				RB3#0	21.26	23.26	33.00	PASS
				RB3#2	21.16	23.16	33.00	PASS
				RB3#3	21.15	23.15	33.00	PASS
				RB6#0	21.32	23.32	33.00	PASS
			HCH	RB1#0	23.01	25.01	33.00	PASS
				RB1#2	22.03	24.03	33.00	PASS
				RB1#5	22.01	24.01	33.00	PASS
				RB3#0	21.40	23.40	33.00	PASS
				RB3#2	21.05	23.05	33.00	PASS
				RB3#3	21.15	23.15	33.00	PASS
				RB6#0	21.26	23.26	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 18 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM1	20M	LCH	RB1#0	23.81	25.81	33.00	PASS
				RB1#50	23.51	25.51	33.00	PASS
				RB1#99	23.88	25.88	33.00	PASS
				RB50#0	23.1	25.10	33.00	PASS
				RB50#25	22.75	24.75	33.00	PASS
				RB50#50	23.01	25.01	33.00	PASS
				RB100#0	23.03	25.03	33.00	PASS
			MCH	RB1#0	23.67	25.67	33.00	PASS
				RB1#50	23.65	25.65	33.00	PASS
				RB1#99	23.75	25.75	33.00	PASS
				RB50#0	23.29	25.29	33.00	PASS
				RB50#25	22.77	24.77	33.00	PASS
				RB50#50	22.81	24.81	33.00	PASS
				RB100#0	22.95	24.95	33.00	PASS
			HCH	RB1#0	23.66	25.66	33.00	PASS
				RB1#50	23.52	25.52	33.00	PASS
				RB1#99	23.81	25.81	33.00	PASS
				RB50#0	23.08	25.08	33.00	PASS
				RB50#25	22.8	24.80	33.00	PASS
				RB50#50	22.77	24.77	33.00	PASS
				RB100#0	23.05	25.05	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 19 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM2	20M	LCH	RB1#0	23.16	25.16	33.00	PASS
				RB1#50	22.2	24.20	33.00	PASS
				RB1#99	22.53	24.53	33.00	PASS
				RB50#0	21.47	23.47	33.00	PASS
				RB50#25	21.22	23.22	33.00	PASS
				RB50#50	21.39	23.39	33.00	PASS
				RB100#0	21.31	23.31	33.00	PASS
			MCH	RB1#0	23.39	25.39	33.00	PASS
				RB1#50	22.37	24.37	33.00	PASS
				RB1#99	22.88	24.88	33.00	PASS
				RB50#0	21.46	23.46	33.00	PASS
				RB50#25	21.31	23.31	33.00	PASS
				RB50#50	21.42	23.42	33.00	PASS
				RB100#0	21.44	23.44	33.00	PASS
			HCH	RB1#0	23.36	25.36	33.00	PASS
				RB1#50	22.23	24.23	33.00	PASS
				RB1#99	22.57	24.57	33.00	PASS
				RB50#0	21.5	23.50	33.00	PASS
				RB50#25	21.21	23.21	33.00	PASS
				RB50#50	21.1	23.10	33.00	PASS
				RB100#0	21.36	23.36	33.00	PASS



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

Report No.: SZEM180500453501  
Page: 20 of 139

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND 25	LTE/TM3	20M	LCH	RB1#0	23.12	25.12	33.00	PASS
				RB1#2	21.97	23.97	33.00	PASS
				RB1#5	22.39	24.39	33.00	PASS
				RB3#0	21.38	23.38	33.00	PASS
				RB3#2	21.14	23.14	33.00	PASS
				RB3#3	21.22	23.22	33.00	PASS
				RB6#0	21.26	23.26	33.00	PASS
			MCH	RB1#0	22.97	24.97	33.00	PASS
				RB1#2	22.03	24.03	33.00	PASS
				RB1#5	22.45	24.45	33.00	PASS
				RB3#0	21.38	23.38	33.00	PASS
				RB3#2	21.20	23.20	33.00	PASS
				RB3#3	21.25	23.25	33.00	PASS
				RB6#0	21.37	23.37	33.00	PASS
			HCH	RB1#0	23.29	25.29	33.00	PASS
				RB1#2	22.93	24.93	33.00	PASS
				RB1#5	22.06	24.06	33.00	PASS
				RB3#0	21.43	23.43	33.00	PASS
				RB3#2	21.17	23.17	33.00	PASS
				RB3#3	21.14	23.14	33.00	PASS
				RB6#0	21.40	23.40	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 25	TM1/20M	LCH	4.46	13	PASS
		MCH	4.58	13	PASS
		HCH	4.46	13	PASS
	TM2/20M	LCH	5.54	13	PASS
		MCH	5.42	13	PASS
		HCH	5.57	13	PASS
	TM3/20M	LCH	5.59	13	PASS
		MCH	5.83	13	PASS
		HCH	5.77	13	PASS

### Part II - Test Plots

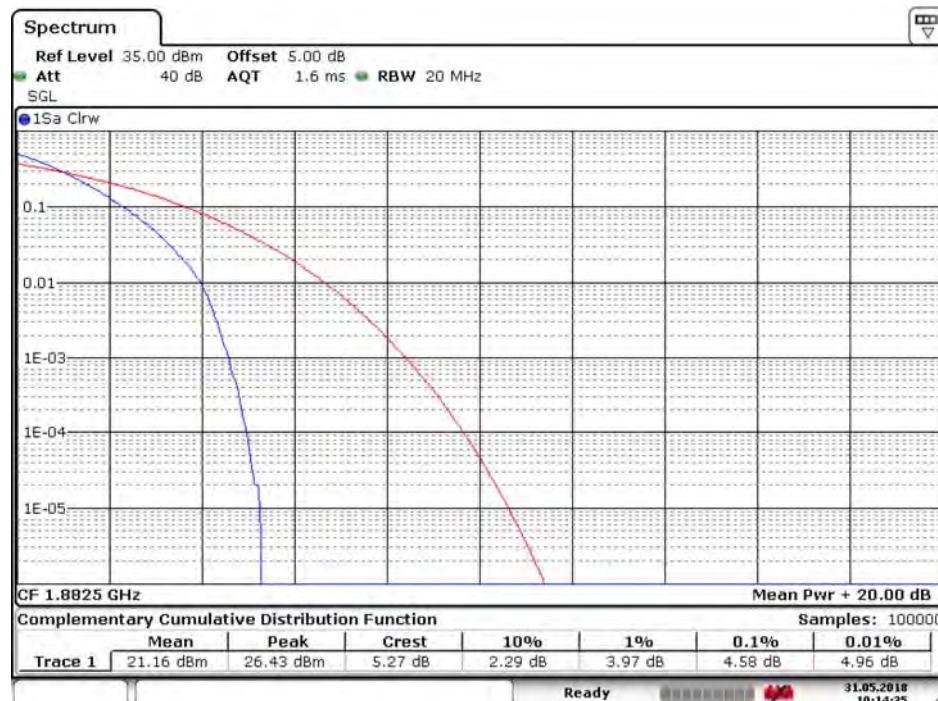
#### 2.1 For LTE

##### 2.1.1 Test Band = LTE BAND 25

###### 2.1.1.1 Test Mode = LTE/TM1.Bandwidth=20MHz

###### 2.1.1.1.1 Test Channel = LCH



**2.1.1.1.2 Test Channel = MCH**

Date: 31.MAY.2018 10:14:36

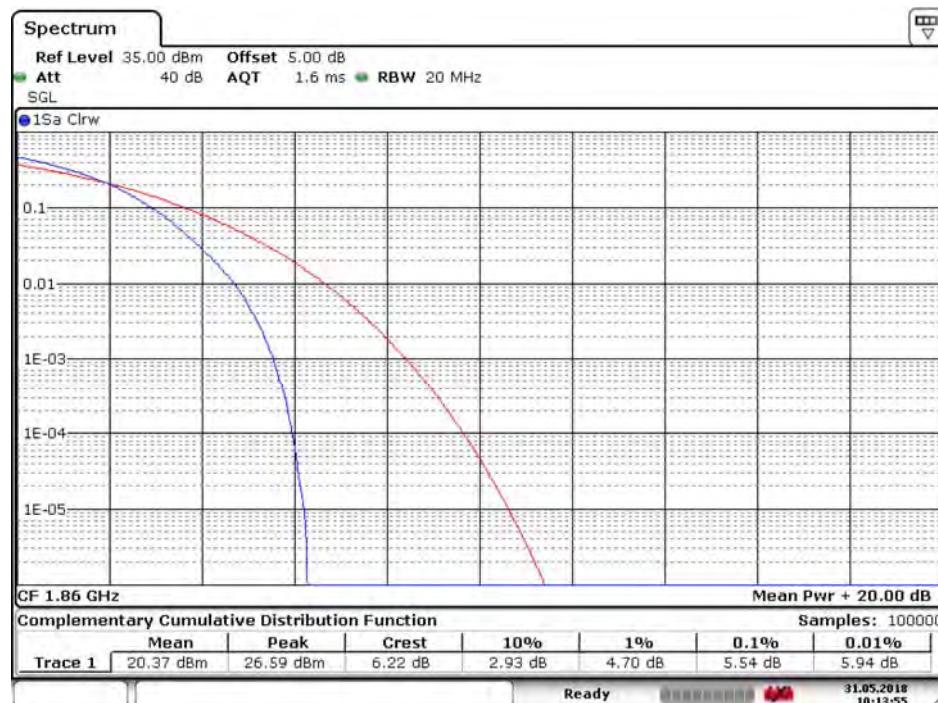
#### 2.1.1.1.3 Test Channel = HCH



Date: 31.MAY.2018 10:14:55

### 2.1.1.2 Test Mode = LTE/TM2.Bandwidth=20MHz

#### 2.1.1.2.1 Test Channel = LCH



Date: 31.MAY.2018 10:13:55

### 2.1.1.2.2 Test Channel = MCH



Date: 31.MAY.2018 10:14:17

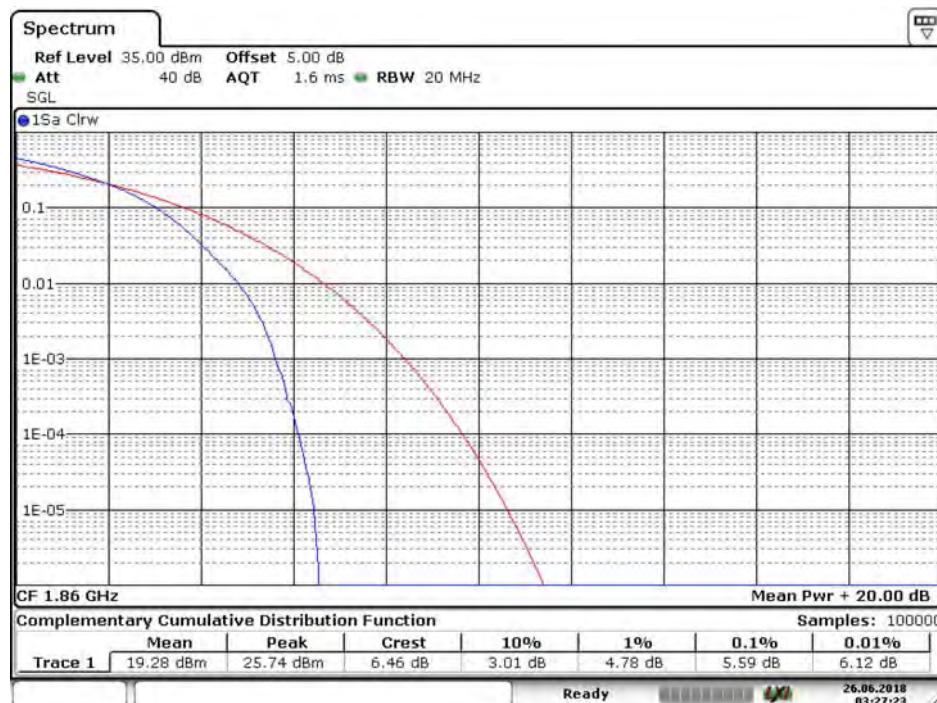
### 2.1.1.2.3 Test Channel = HCH



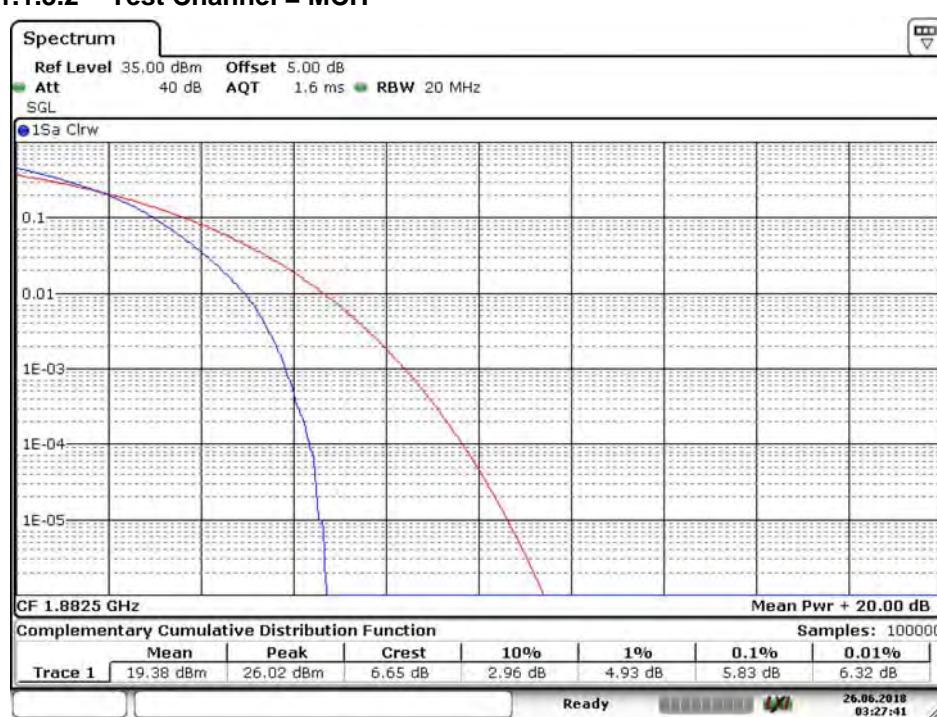
Date: 31.MAY.2018 10:15:13

### 2.1.1.3 Test Mode = LTE/TM3.Bandwidth=20MHz

#### 2.1.1.3.1 Test Channel = LCH



#### 2.1.1.3.2 Test Channel = MCH



### 2.1.1.3.3 Test Channel = HCH



Date: 26.JUN.2018 03:27:57

## 3 Modulation Characteristics

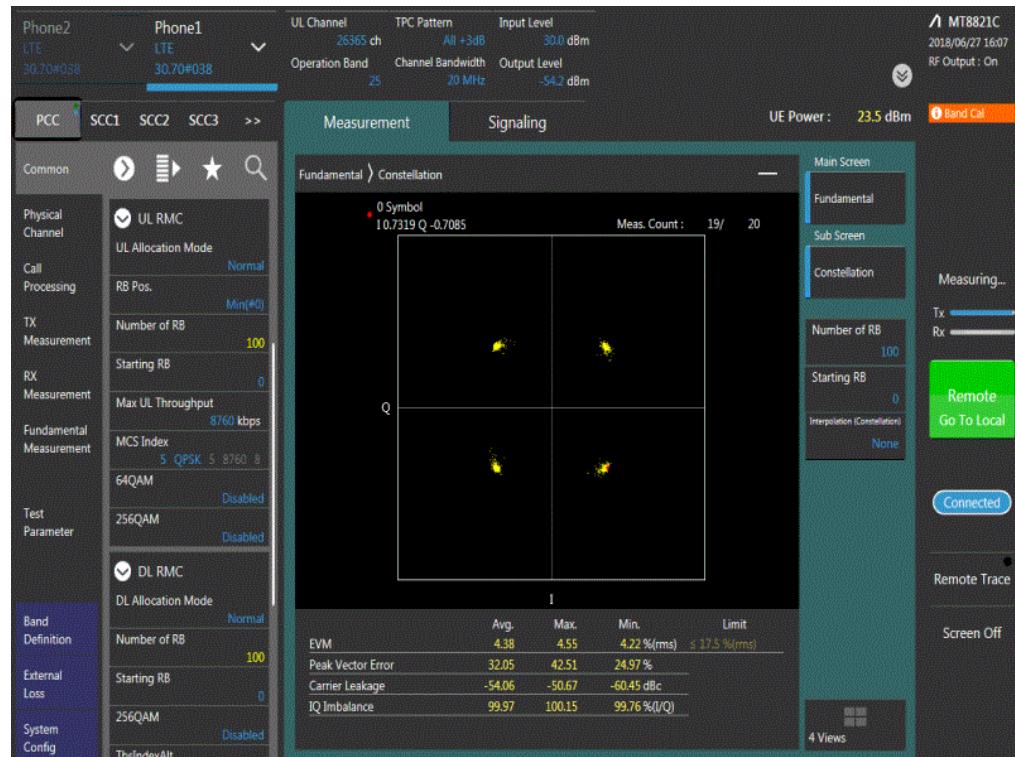
### Part I - Test Plots

#### 3.1 For LTE

##### 3.1.1 Test Band = LTE BAND 25

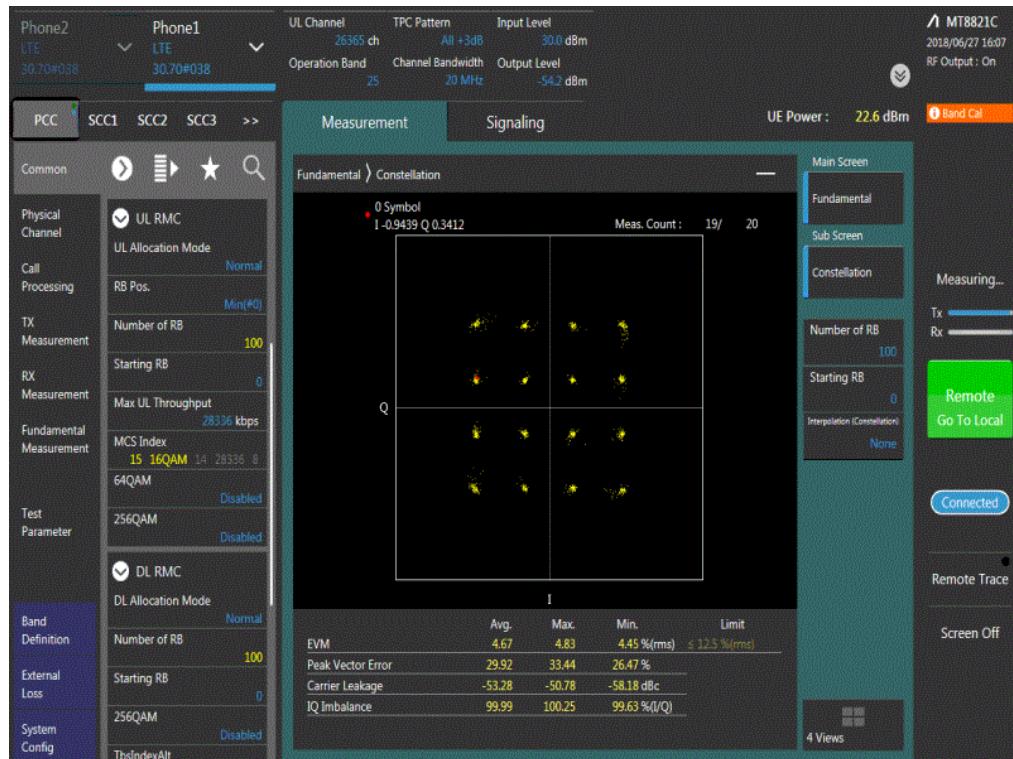
###### 3.1.1.1 Test Mode = LTE /TM1 20MHz

###### 3.1.1.1.1 Test Channel = MCH



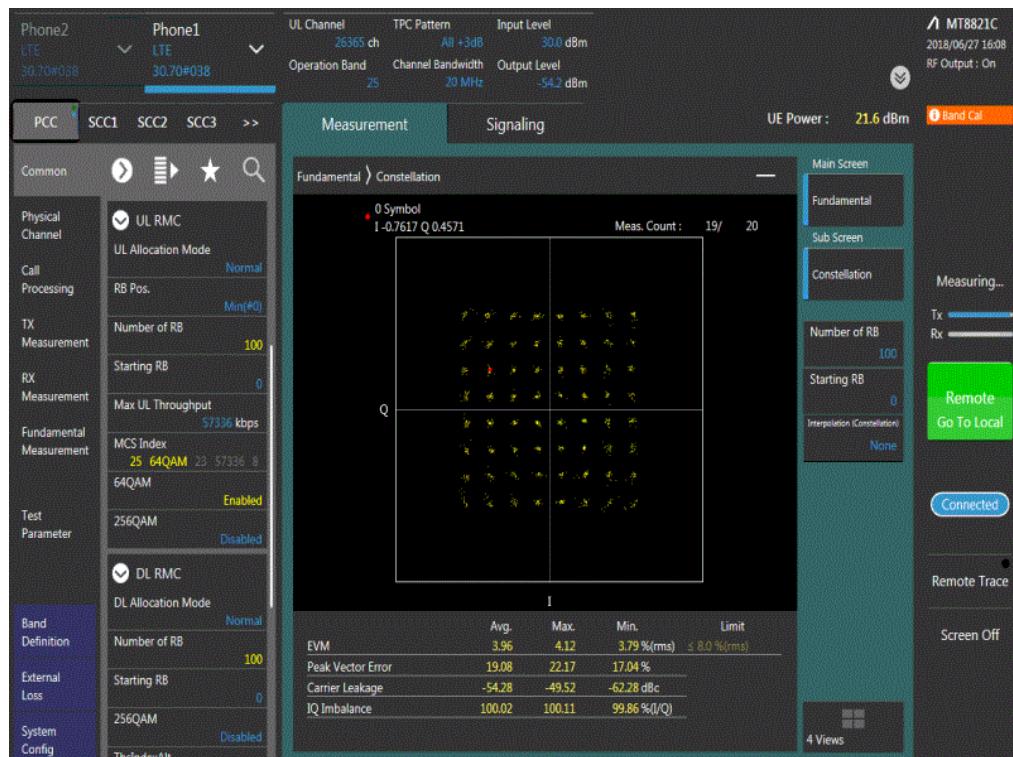
### 3.1.1.2 Test Mode = LTE /TM2 20MHz

#### 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 25	TM1/1.4MHz	LCH	1.10	1.25	PASS
		MCH	1.10	1.24	PASS
		HCH	1.10	1.26	PASS
	TM2/1.4MHz	LCH	1.09	1.23	PASS
		MCH	1.09	1.27	PASS
		HCH	1.10	1.26	PASS
	TM3/1.4MHz	LCH	1.09	1.24	PASS
		MCH	1.09	1.24	PASS
		HCH	1.09	1.25	PASS
	TM1/ 3MHz	LCH	2.69	2.94	PASS
		MCH	2.69	2.93	PASS
		HCH	2.69	2.95	PASS
	TM2/3MHz	LCH	2.68	2.92	PASS
		MCH	2.68	2.96	PASS
		HCH	2.69	2.94	PASS
	TM3/ 3MHz	LCH	2.68	2.92	PASS
		MCH	2.68	2.93	PASS
		HCH	2.68	2.92	PASS
	TM1/ 5MHz	LCH	4.47	4.86	PASS
		MCH	4.47	4.90	PASS
		HCH	4.49	4.94	PASS
	TM2/ 5MHz	LCH	4.47	4.89	PASS
		MCH	4.47	4.88	PASS
		HCH	4.48	4.88	PASS
	TM3/ 5MHz	LCH	4.47	4.84	PASS
		MCH	4.46	4.83	PASS
		HCH	4.47	4.88	PASS
	TM1/10MHz	LCH	8.93	9.63	PASS
		MCH	8.93	9.71	PASS
		HCH	8.91	9.59	PASS
	TM2/ 10MHz	LCH	8.93	9.59	PASS
		MCH	8.93	9.57	PASS
		HCH	8.91	9.53	PASS
	TM3/ 10MHz	LCH	8.93	9.61	PASS
		MCH	8.93	9.65	PASS
		HCH	8.91	9.61	PASS
	TM1/ 15MHz	LCH	13.46	14.68	PASS



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

Report No.: SZEM180500453501

Page: 32 of 139

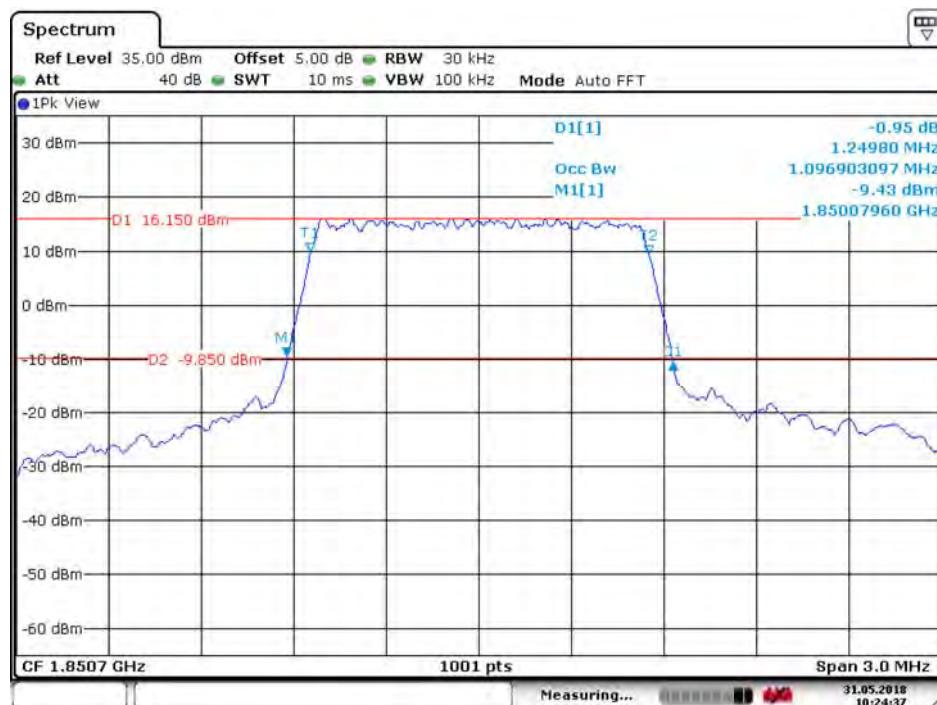
Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
TM2/ 15MHz		MCH	13.43	14.72	PASS
		HCH	13.40	14.63	PASS
		LCH	13.46	14.68	PASS
		MCH	13.46	14.75	PASS
		HCH	13.43	14.72	PASS
		LCH	13.42	14.59	PASS
		MCH	13.45	14.68	PASS
		HCH	13.39	14.62	PASS
		LCH	17.86	19.34	PASS
		MCH	17.90	19.26	PASS
		HCH	17.86	19.32	PASS
		LCH	17.86	19.22	PASS
		MCH	17.90	19.38	PASS
		HCH	17.86	19.20	PASS
		LCH	17.82	19.26	PASS
		MCH	17.86	19.34	PASS
		HCH	17.86	19.3	PASS

## 4.1 For LTE

### 4.1.1 Test Band = LTE BAND 25

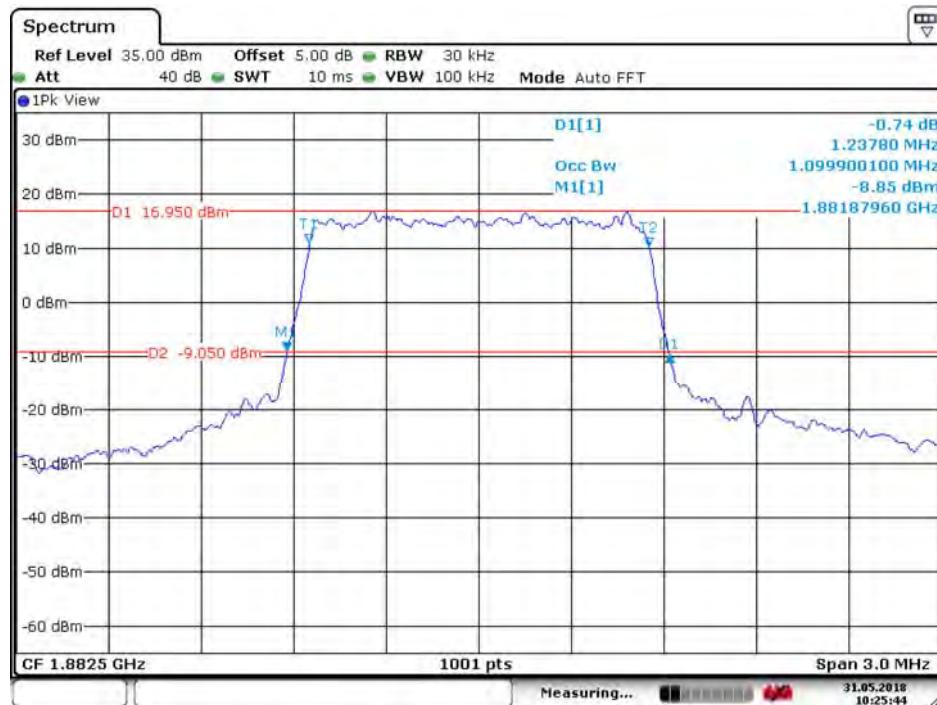
#### 4.1.1.1 Test Mode = LTE/TM1 1.4MHz

##### 4.1.1.1.1 Test Channel = LCH



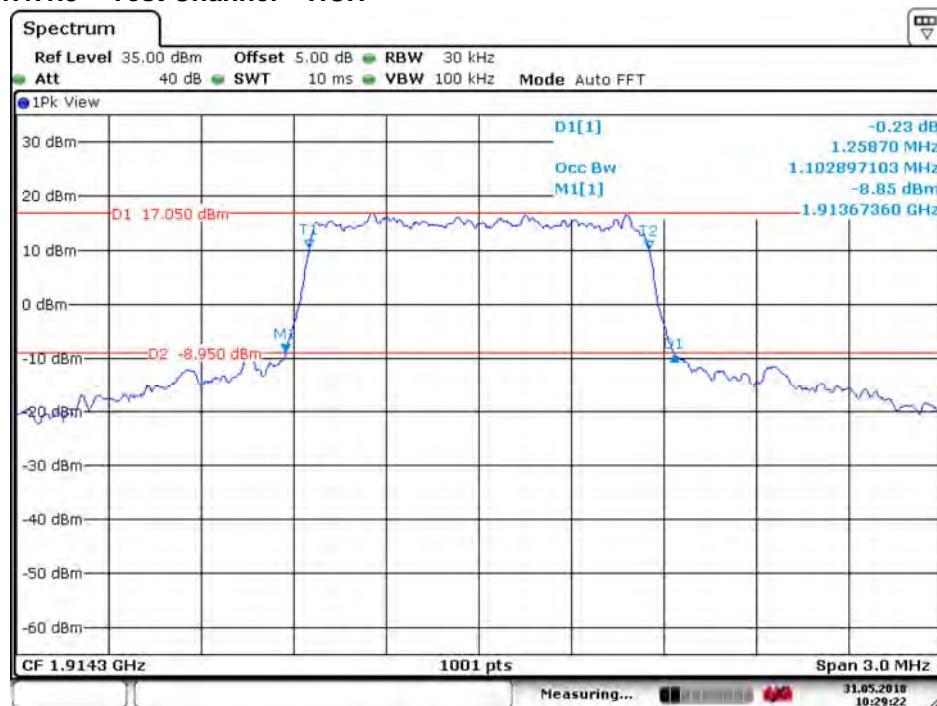
Date: 31.MAY.2018 10:24:37

## 4.1.1.1.2 Test Channel = MCH



Date: 31.MAY.2018 10:25:44

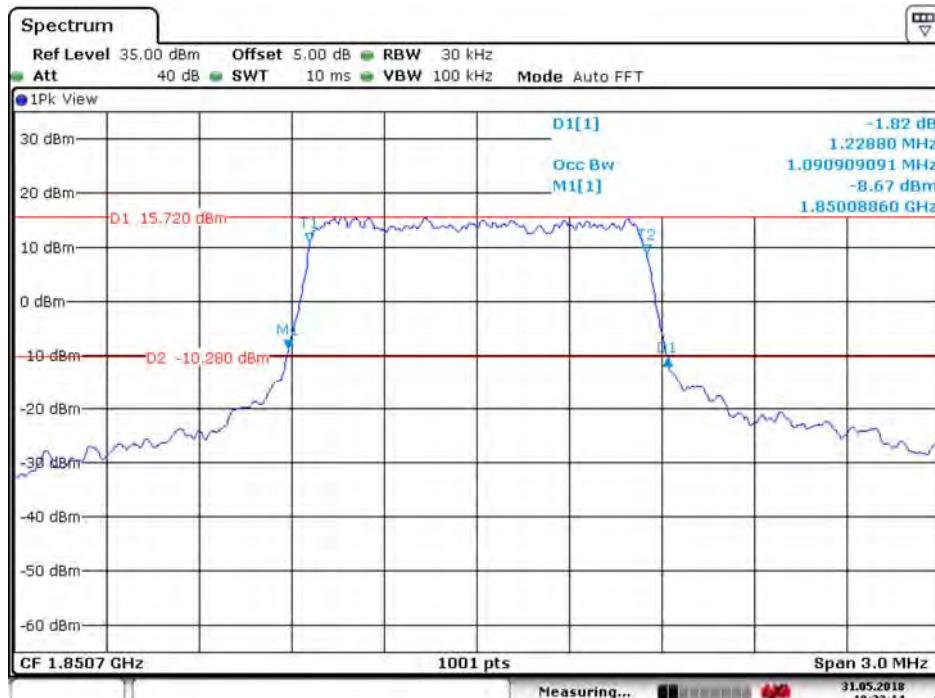
## 4.1.1.1.3 Test Channel = HCH



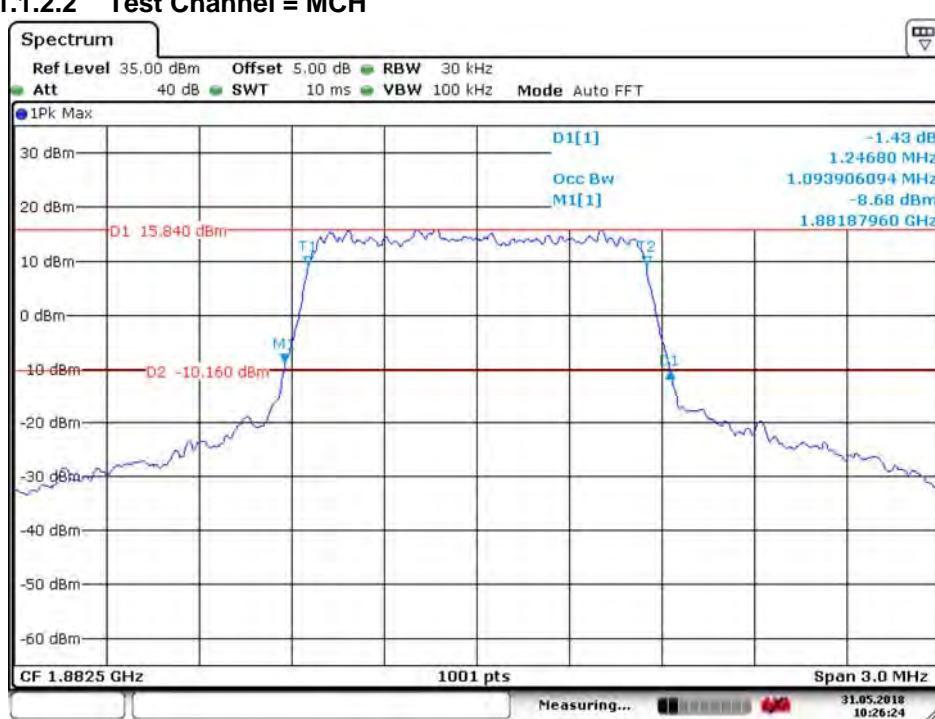
Date: 31.MAY.2018 10:29:22

#### 4.1.1.2 Test Mode = LTE/TM2 1.4MHz

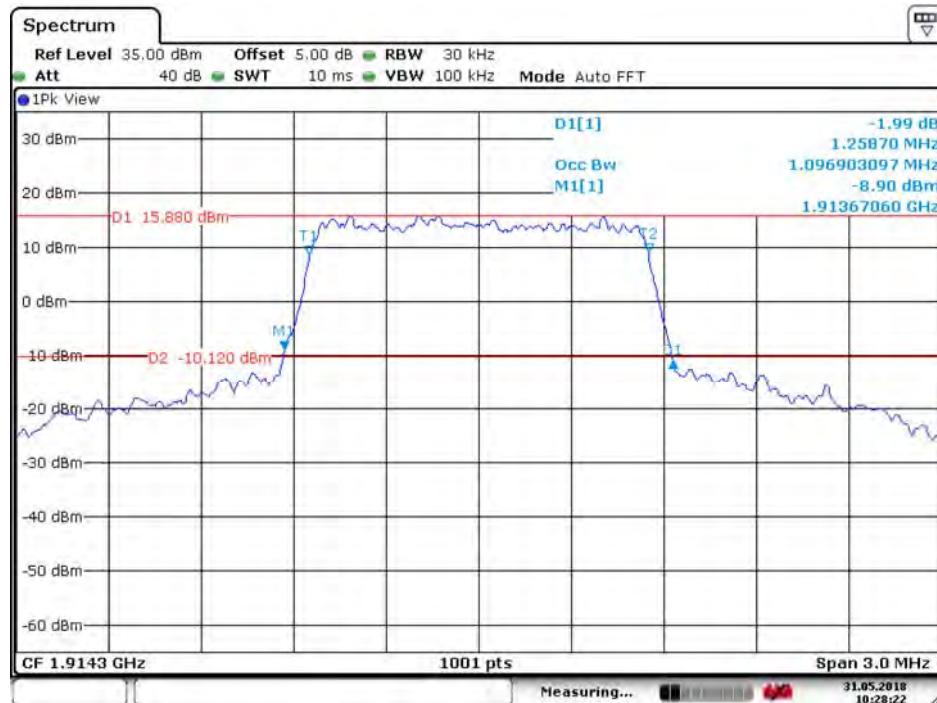
##### 4.1.1.2.1 Test Channel = LCH



##### 4.1.1.2.2 Test Channel = MCH



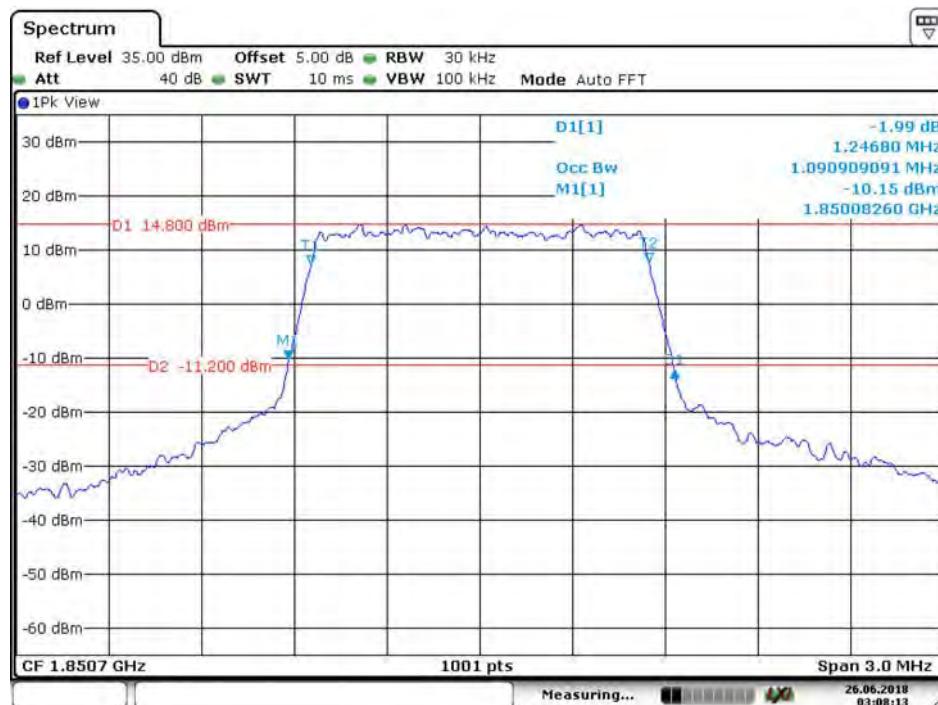
#### 4.1.1.2.3 Test Channel = HCH



Date: 31.MAY.2018 10:28:23

#### 4.1.1.3 Test Mode = LTE/TM3 1.4MHz

##### 4.1.1.3.1 Test Channel = LCH



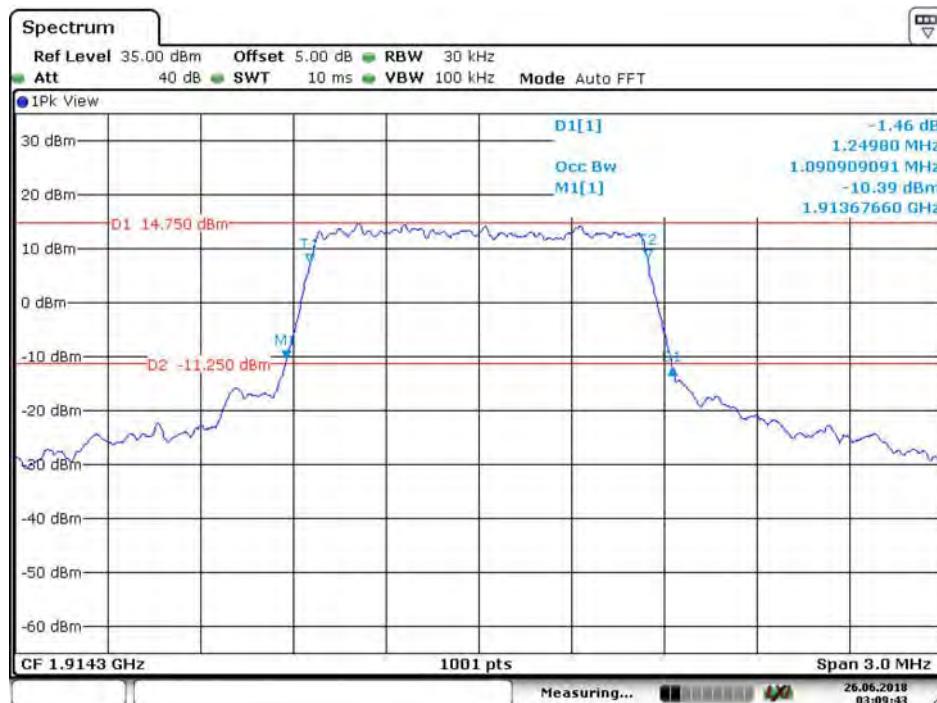
Date: 26 JUN.2018 03:08:13

##### 4.1.1.3.2 Test Channel = MCH



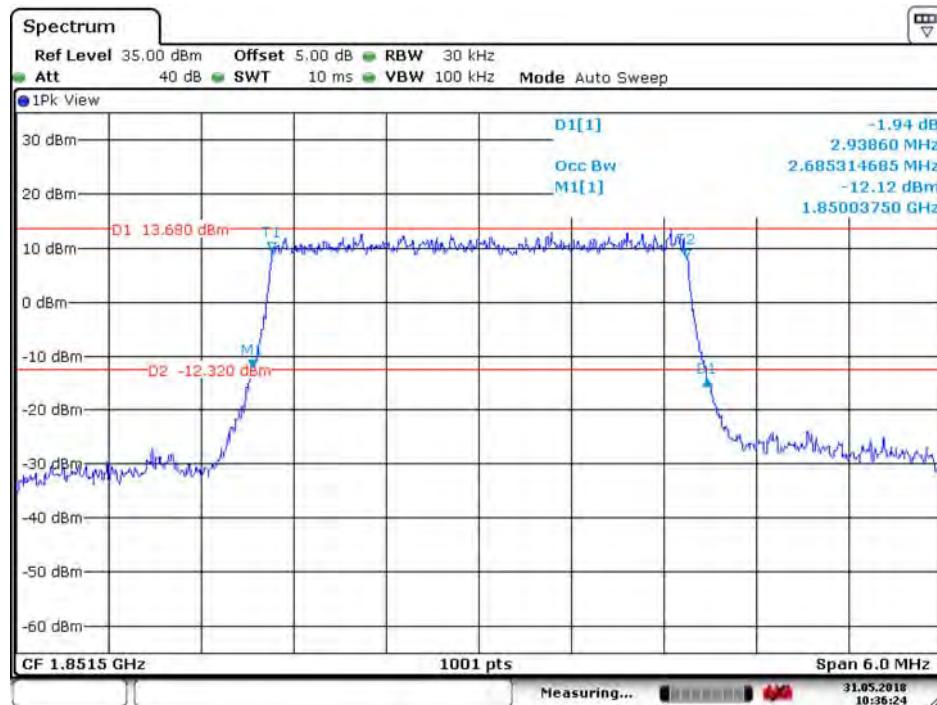
Date: 26 JUN.2018 03:09:04

#### 4.1.1.3.3 Test Channel = HCH



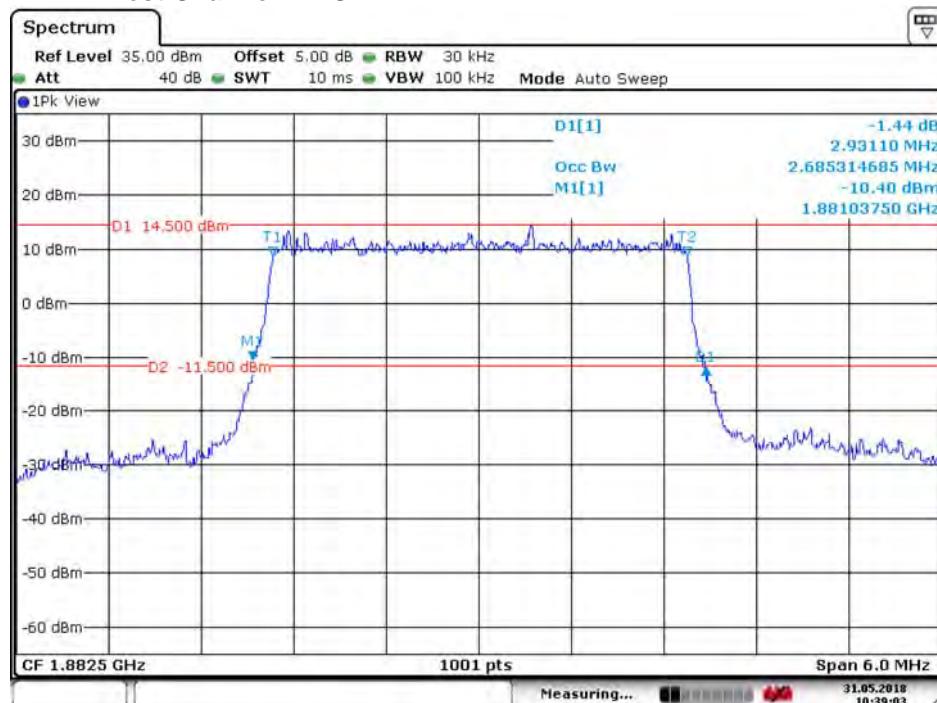
#### 4.1.1.4 Test Mode = LTE/TM1 3MHz

##### 4.1.1.4.1 Test Channel = LCH



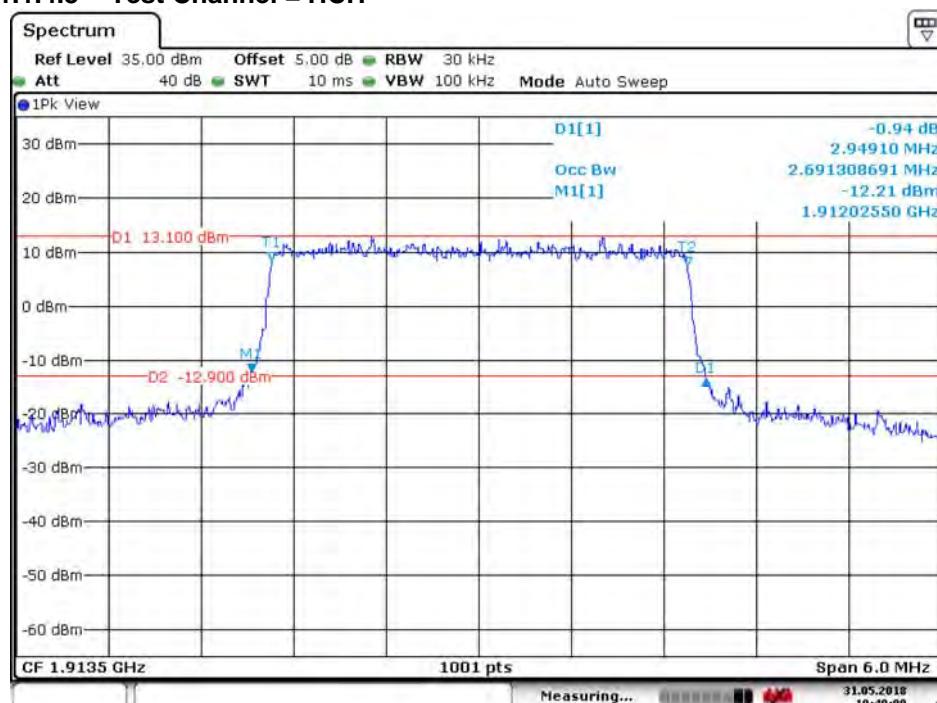
Date: 31.MAY.2018 10:36:25

## 4.1.1.4.2 Test Channel = MCH



Date: 31.MAY.2018 10:39:03

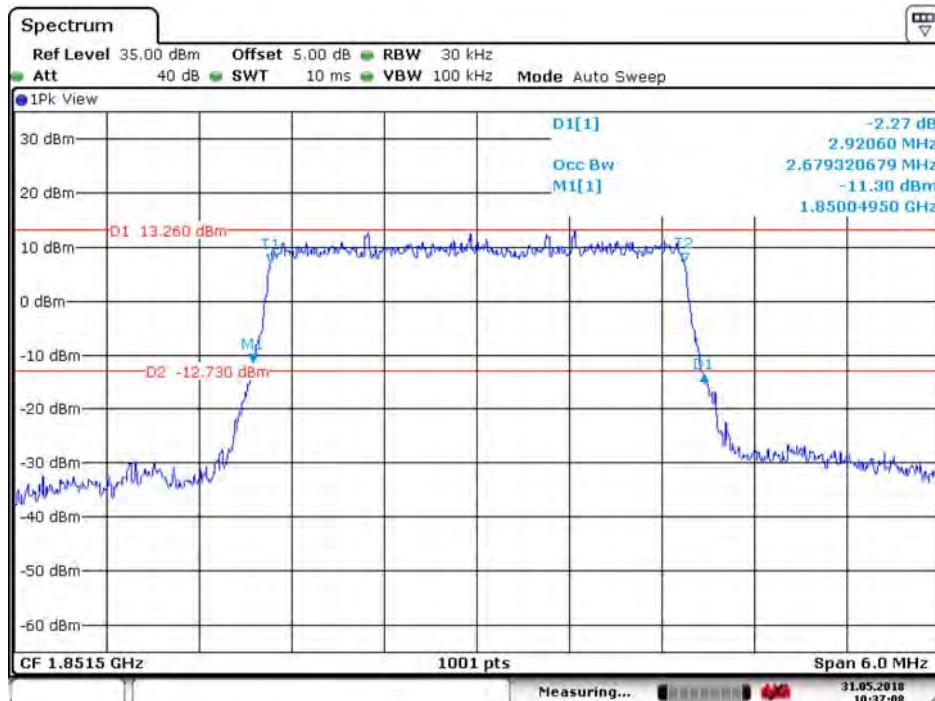
## 4.1.1.4.3 Test Channel = HCH



Date: 31.MAY.2018 10:40:01

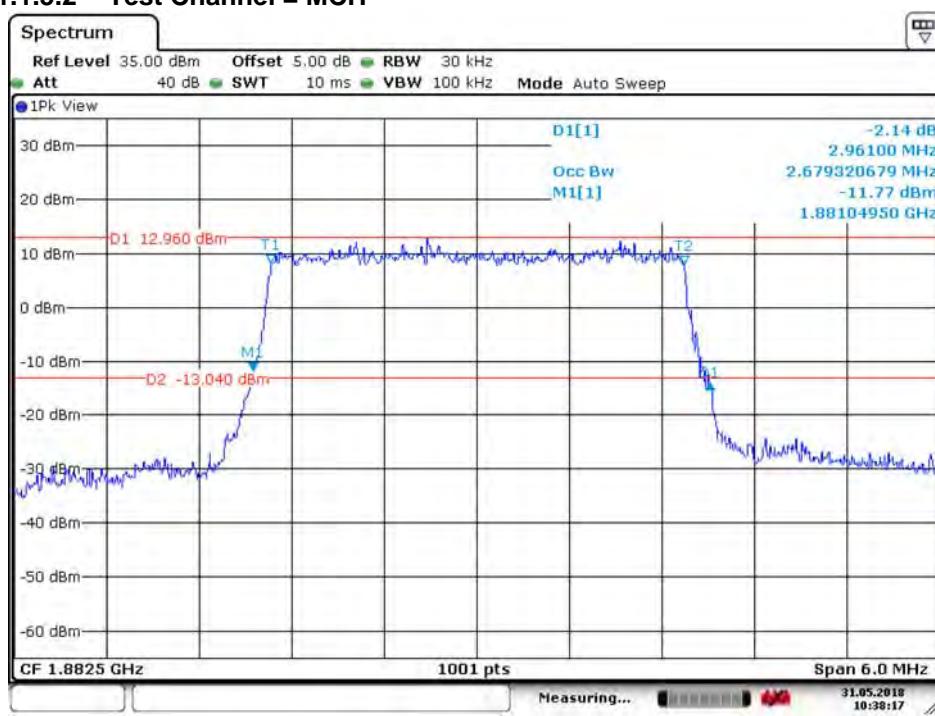
#### 4.1.1.5 Test Mode = LTE/TM2 3MHz

##### 4.1.1.5.1 Test Channel = LCH



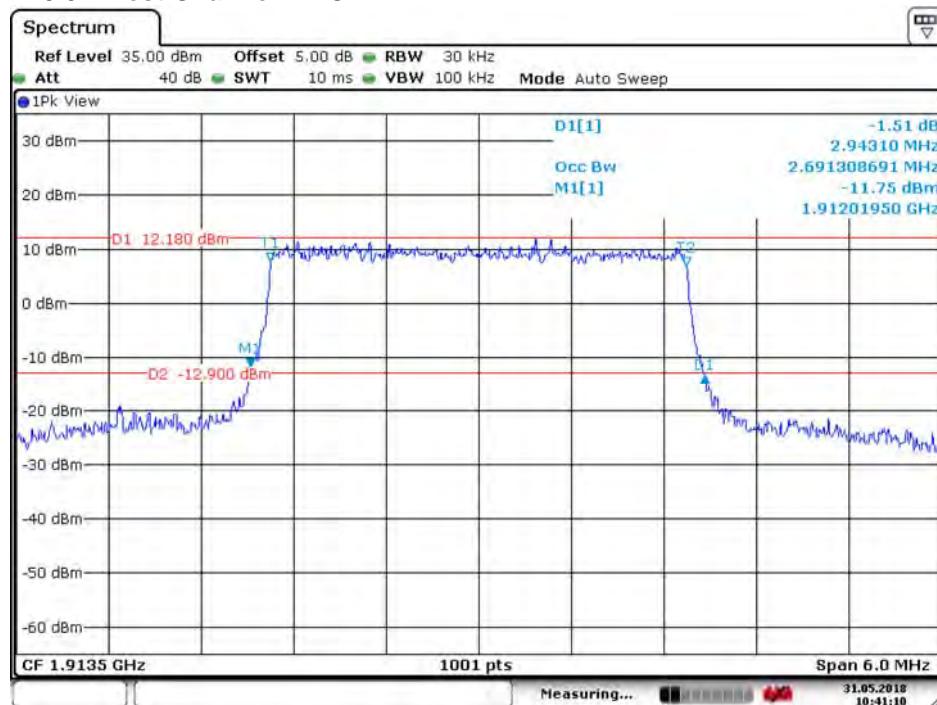
Date: 31.MAY.2018 10:37:08

##### 4.1.1.5.2 Test Channel = MCH



Date: 31.MAY.2018 10:38:17

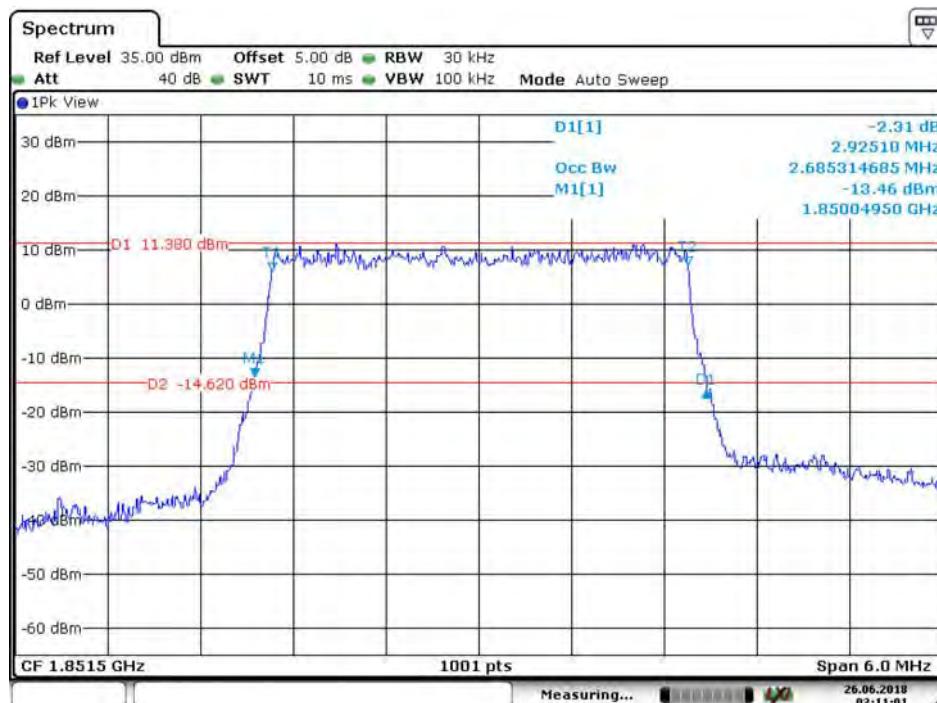
#### 4.1.1.5.3 Test Channel = HCH



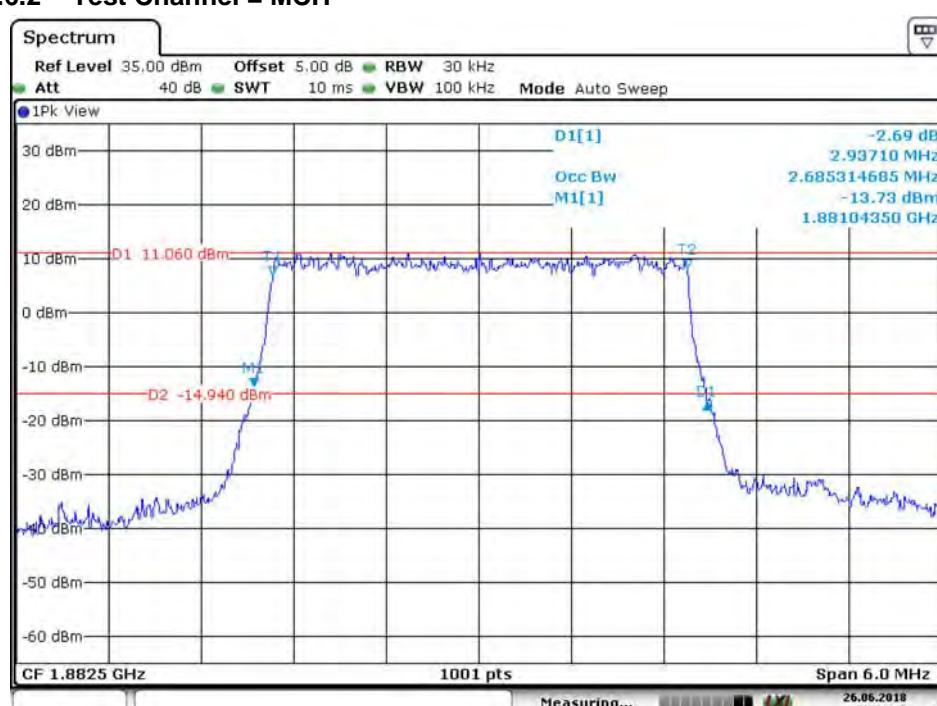
Date: 31.MAY.2018 10:41:11

#### 4.1.1.6 Test Mode = LTE/TM3 3MHz

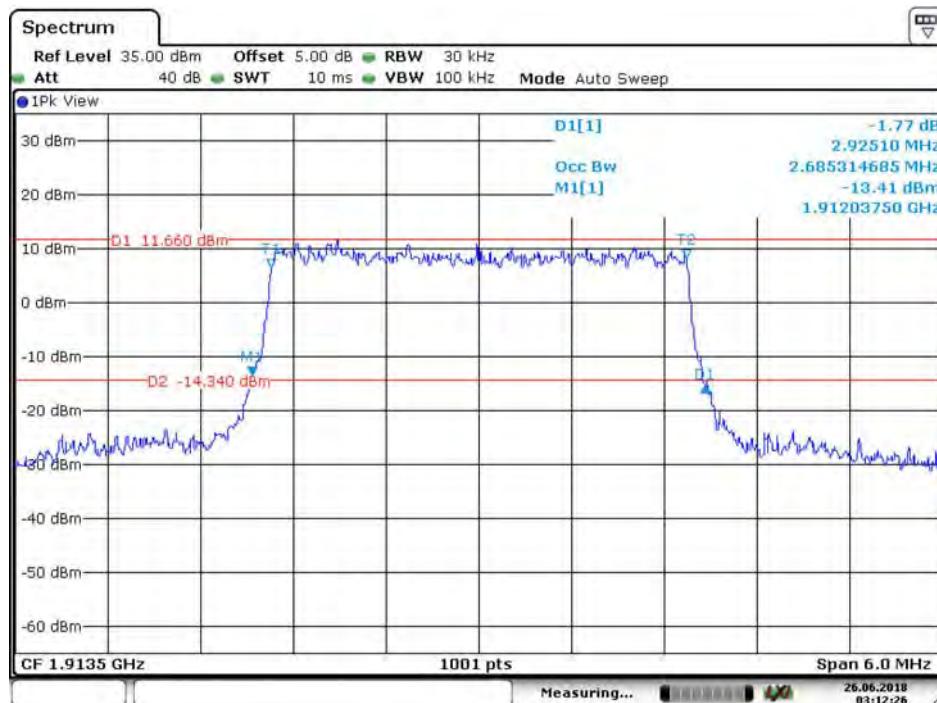
##### 4.1.1.6.1 Test Channel = LCH



##### 4.1.1.6.2 Test Channel = MCH



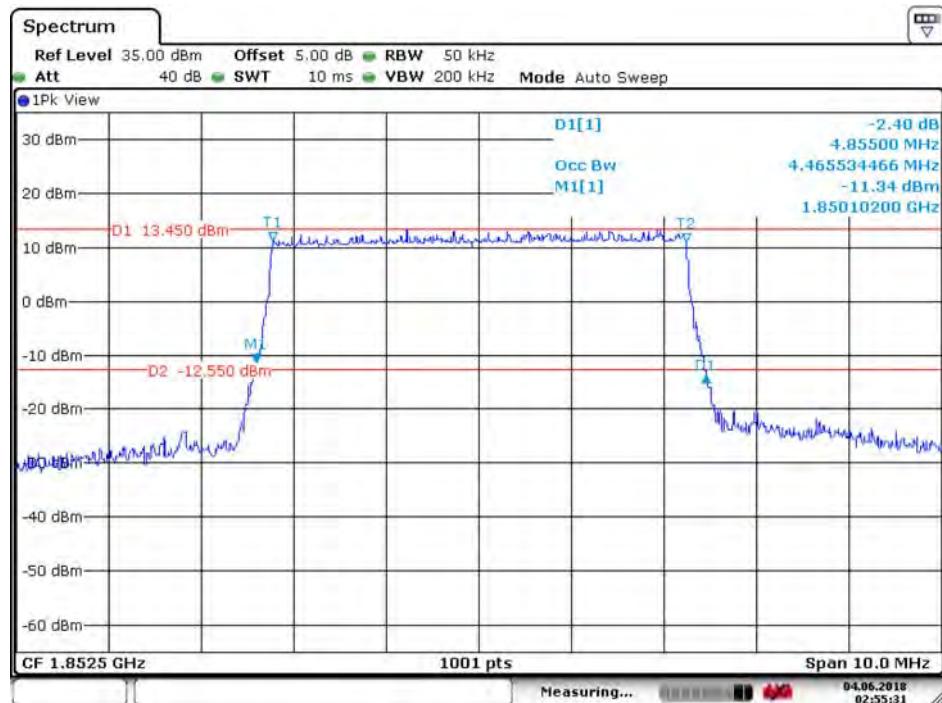
#### 4.1.1.6.3 Test Channel = HCH



Date: 26 JUN 2018 03:12:27

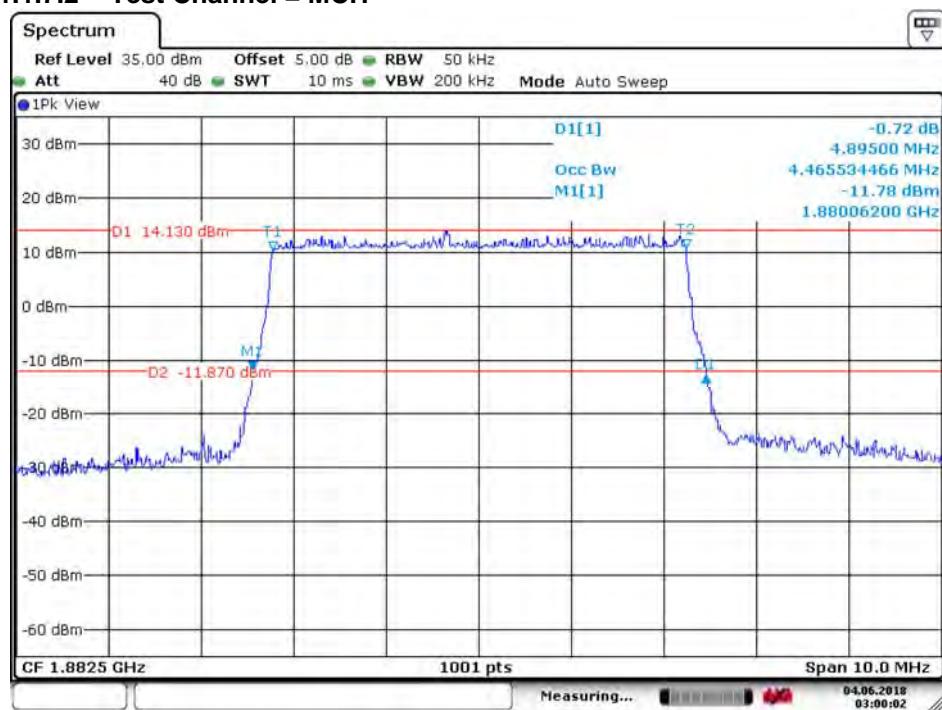
#### 4.1.1.7 Test Mode = LTE/TM1 5MHz

##### 4.1.1.7.1 Test Channel = LCH



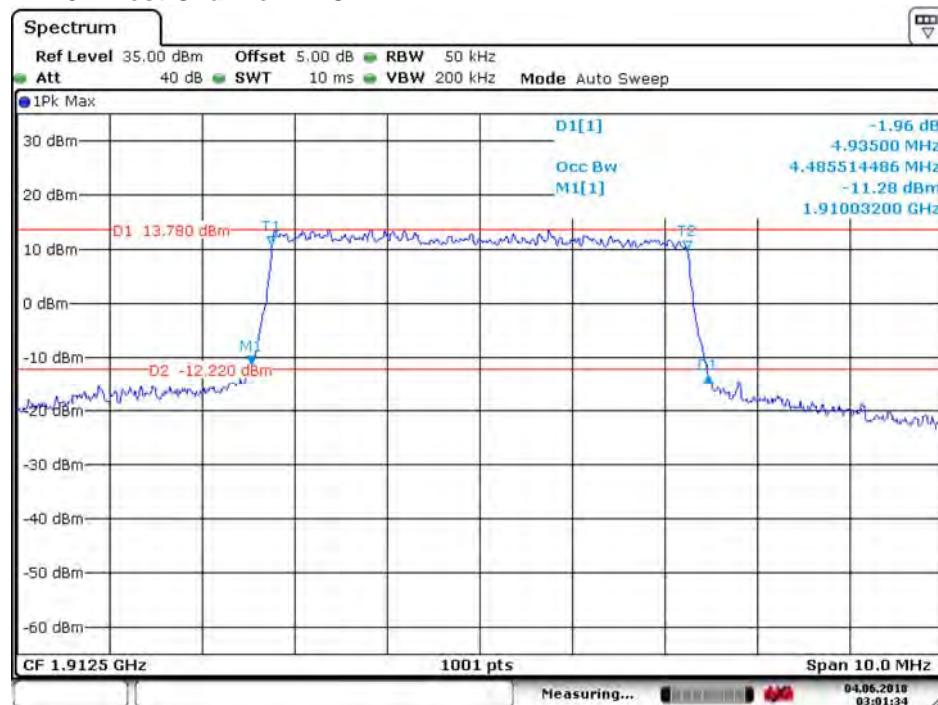
Date: 4.JUN 2018 02:55:32

##### 4.1.1.7.2 Test Channel = MCH



Date: 4.JUN 2018 03:00:03

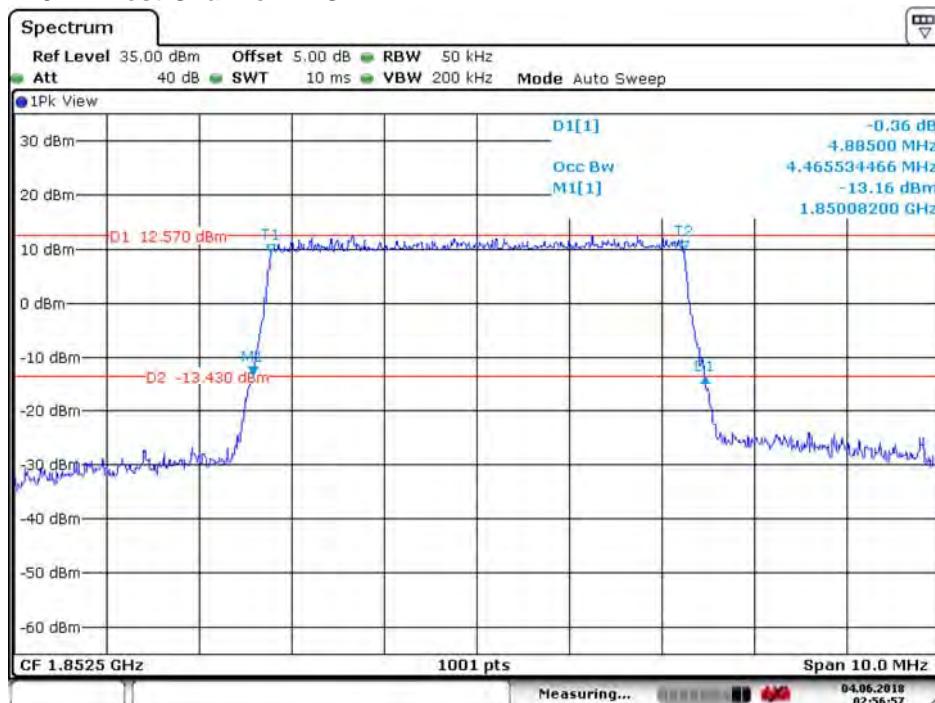
#### 4.1.1.7.3 Test Channel = HCH



Date: 4.JUN.2018 03:01:34

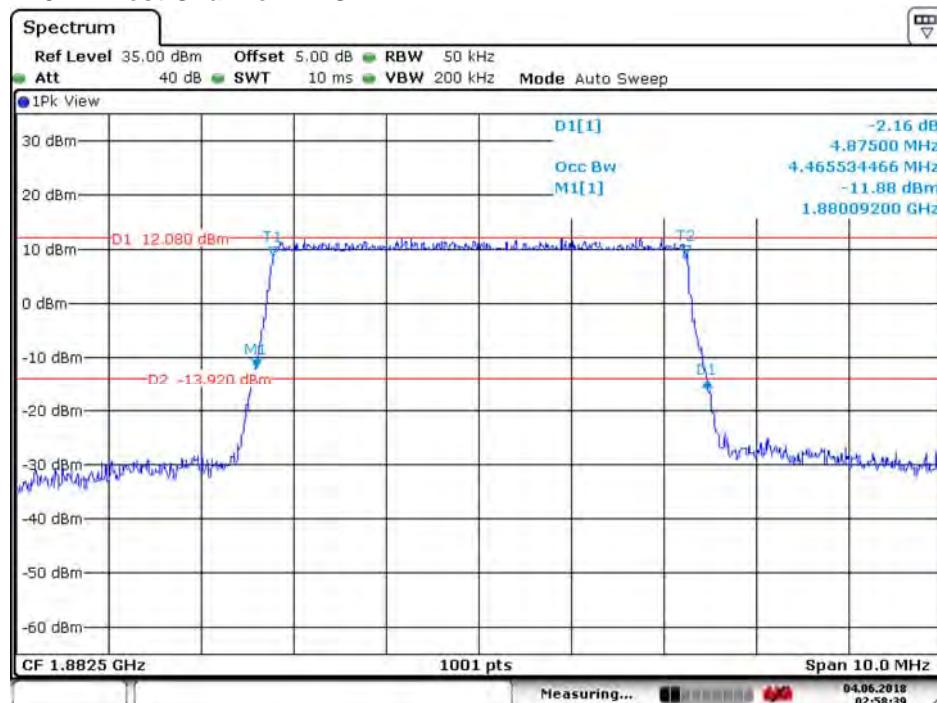
#### 4.1.1.8 Test Mode = LTE/TM2 5MHz

##### 4.1.1.8.1 Test Channel = LCH



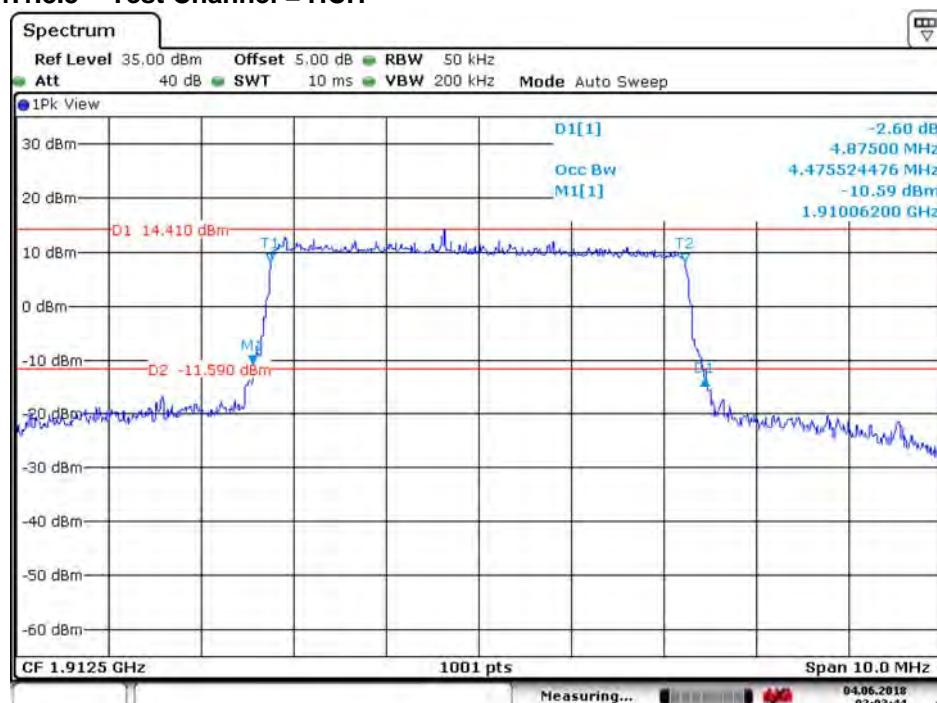
Date: 4.JUN.2018 02:56:57

## 4.1.1.8.2 Test Channel = MCH



Date: 4.JUN.2018 02:58:40

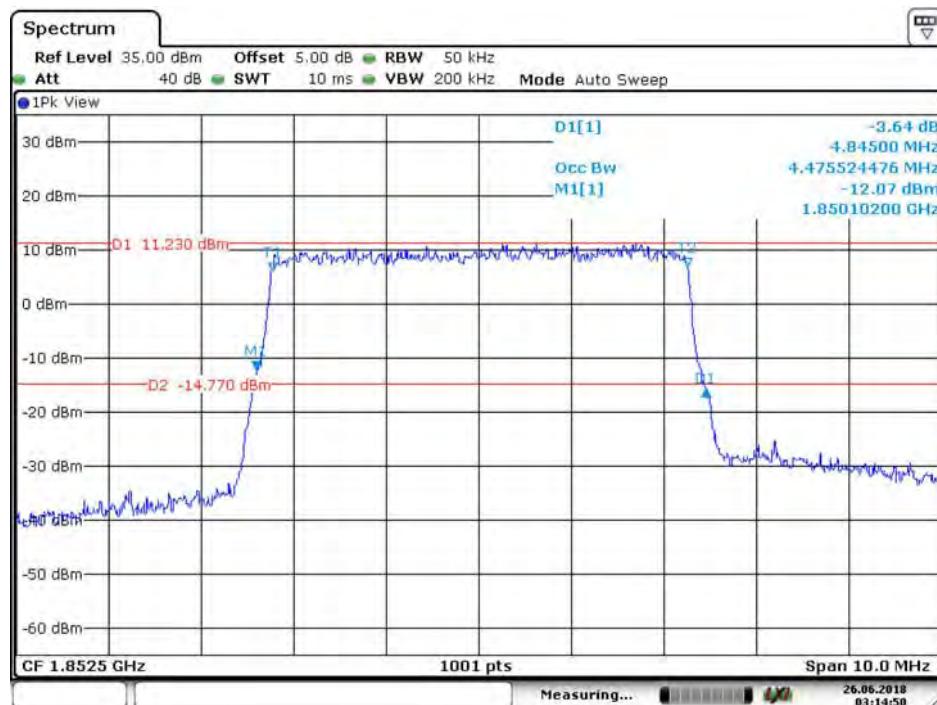
## 4.1.1.8.3 Test Channel = HCH



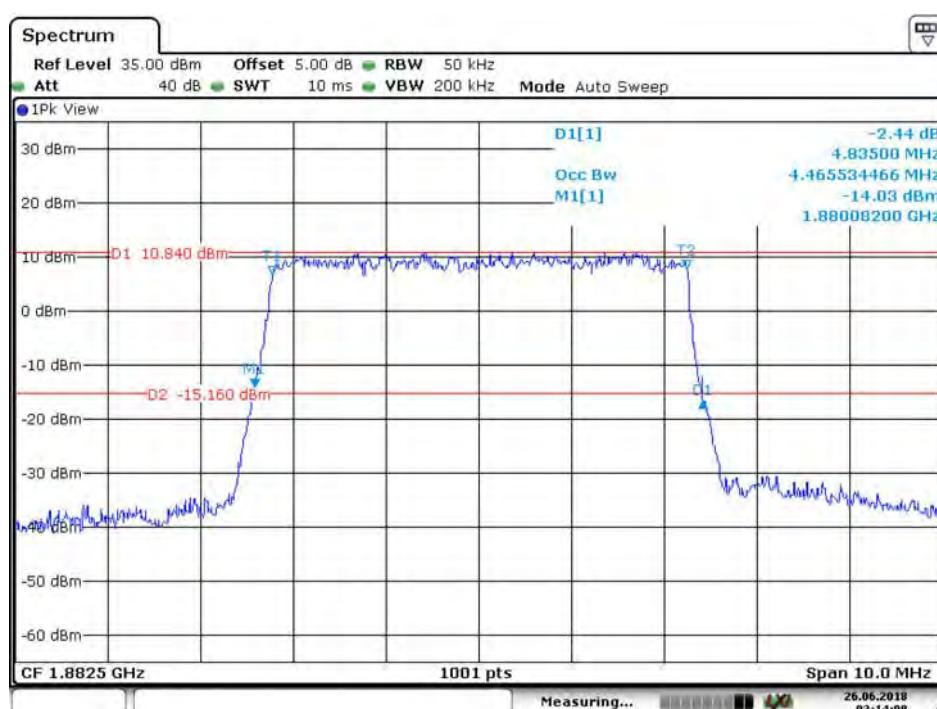
Date: 4.JUN.2018 03:03:44

#### 4.1.1.9 Test Mode = LTE/TM3 5MHz

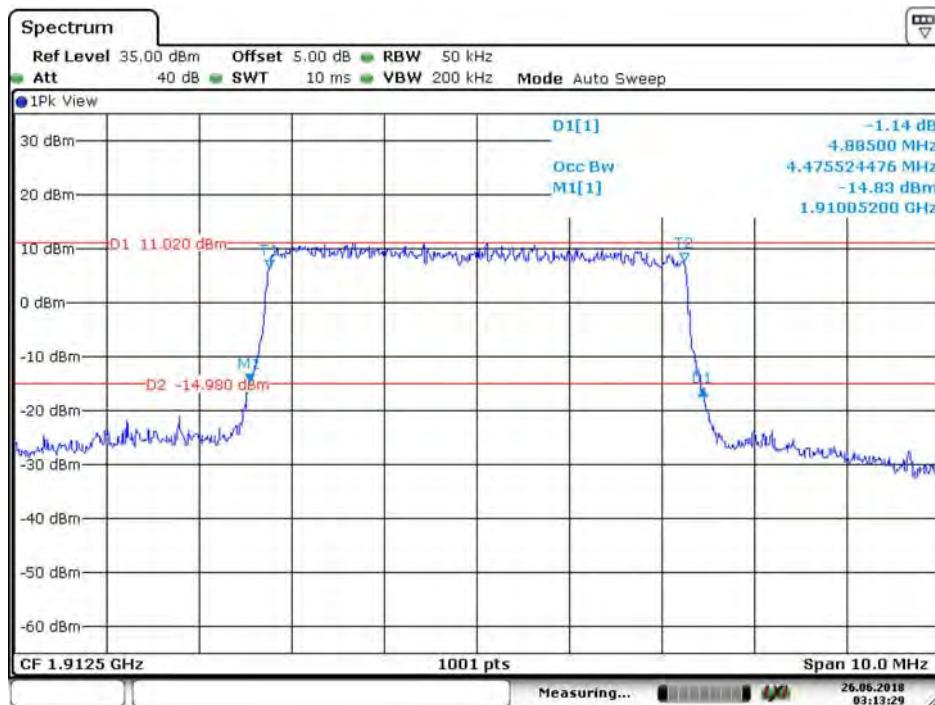
##### 4.1.1.9.1 Test Channel = LCH



##### 4.1.1.9.2 Test Channel = MCH



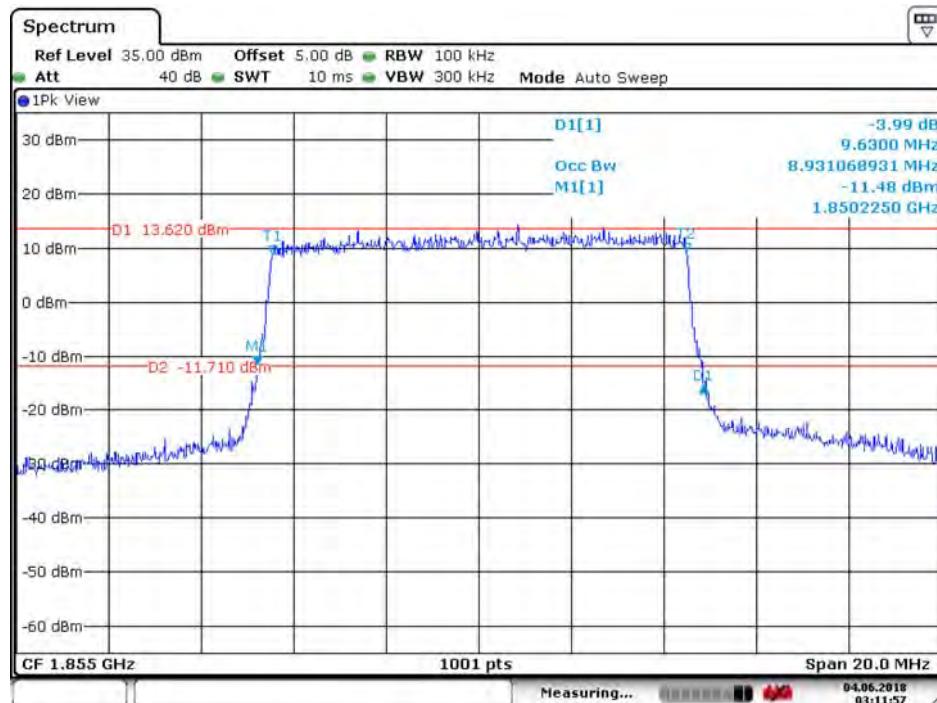
#### 4.1.1.9.3 Test Channel = HCH



Date: 26 JUN.2018 03:13:29

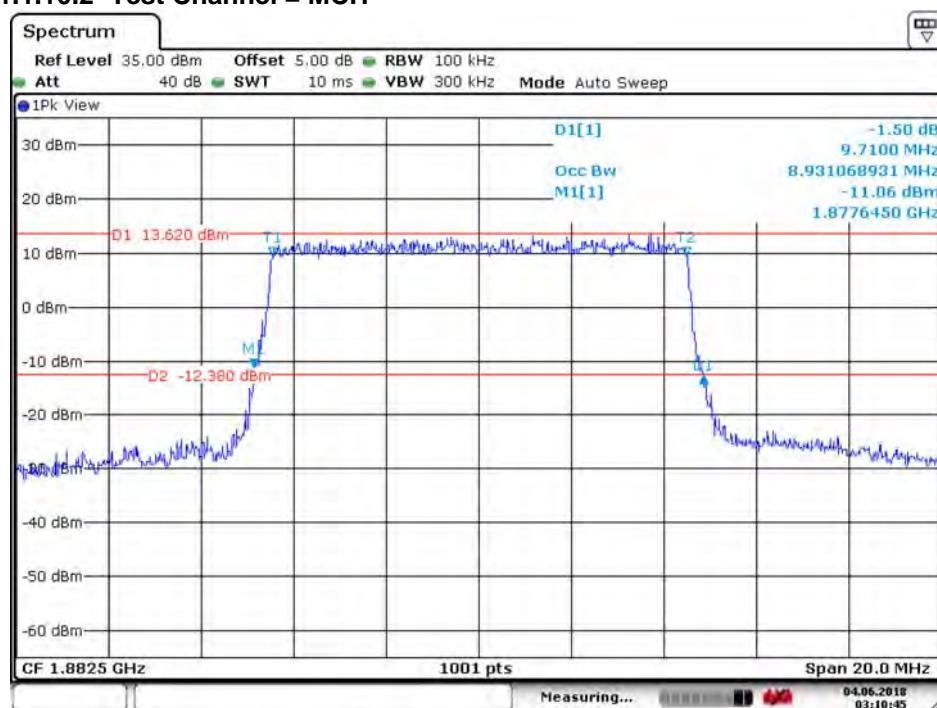
## 4.1.1.10 Test Mode = LTE/TM1 10MHz

## 4.1.1.10.1 Test Channel = LCH



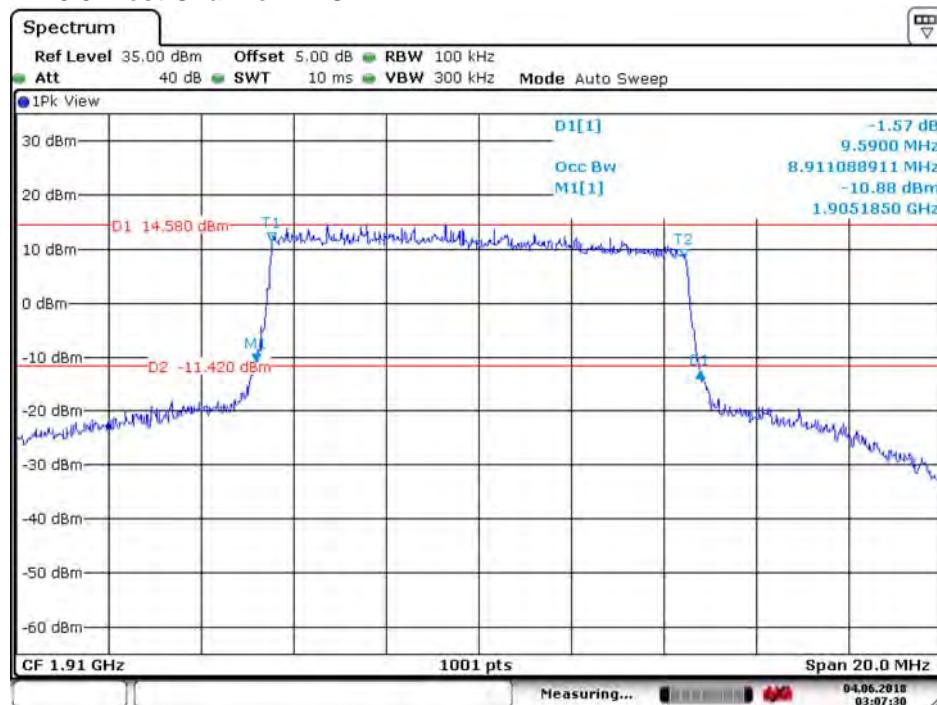
Date: 4.JUN 2018 03:11:57

## 4.1.1.10.2 Test Channel = MCH

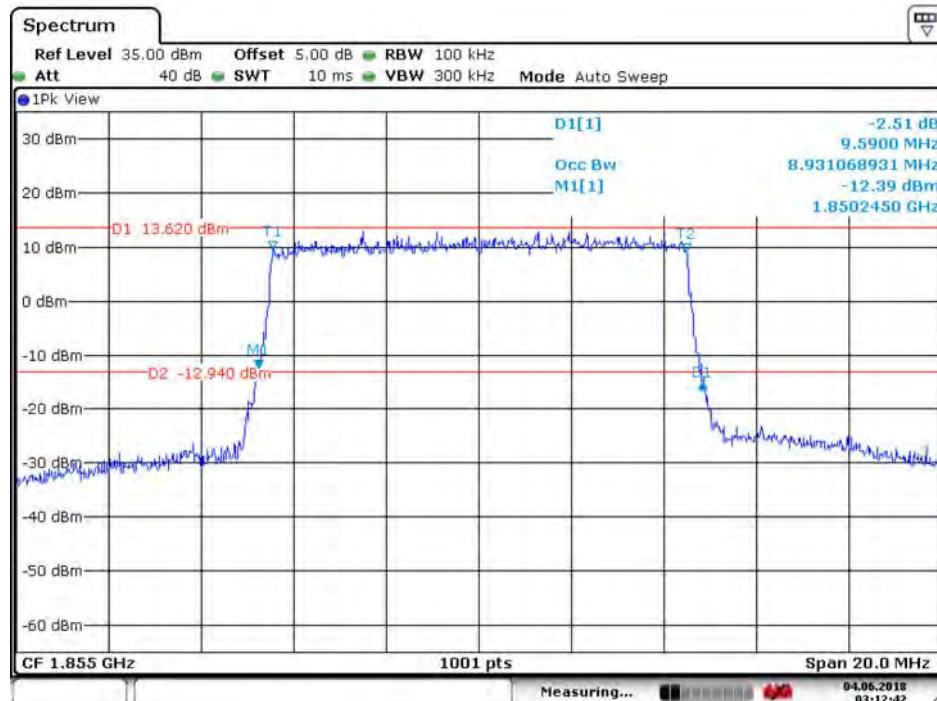


Date: 4.JUN 2018 03:10:45

#### 4.1.1.10.3 Test Channel = HCH

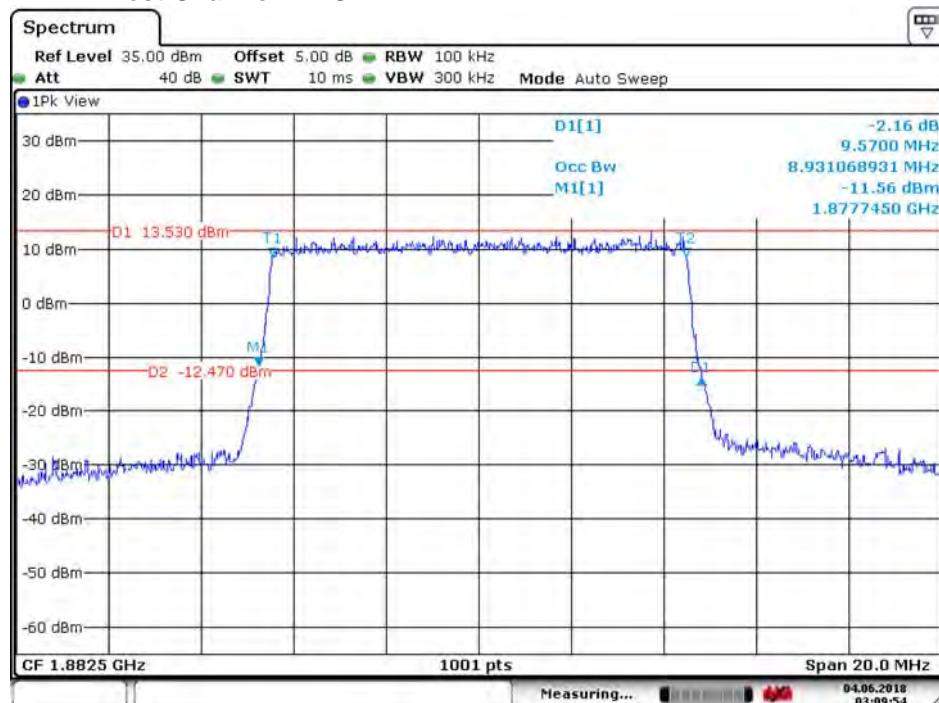


Date: 4.JUN 2018 03:07:31

**4.1.1.11 Test Mode = LTE/TM2 10MHz****4.1.1.11.1 Test Channel = LCH**

Date: 4.JUN.2018 03:12:42

## 4.1.1.11.2 Test Channel = MCH



Date: 4.JUN 2018 03:09:55

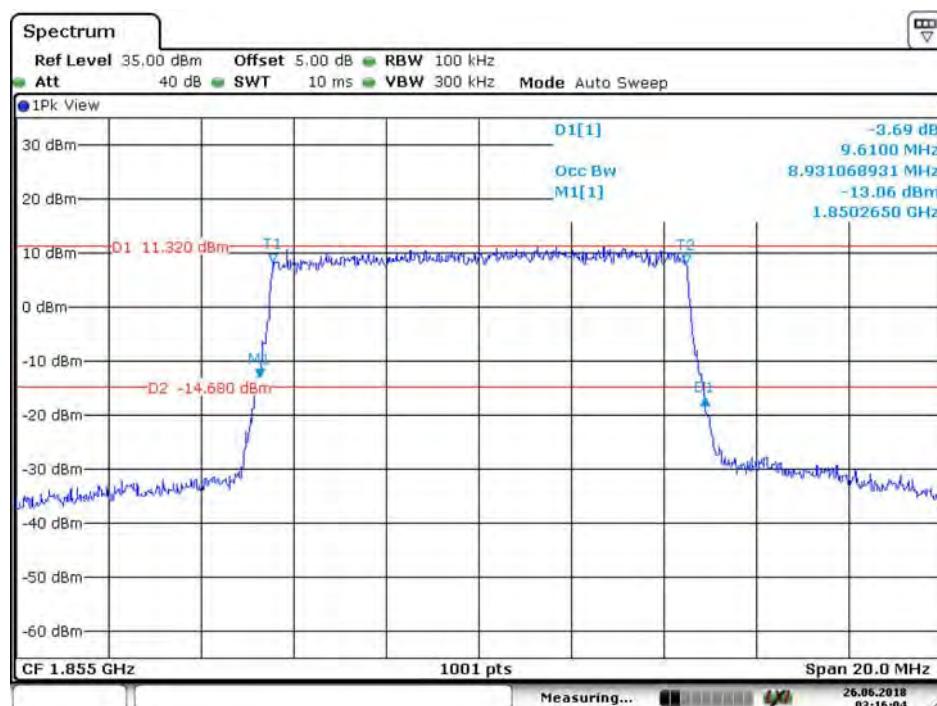
## 4.1.1.11.3 Test Channel = HCH



Date: 4.JUN 2018 03:08:25

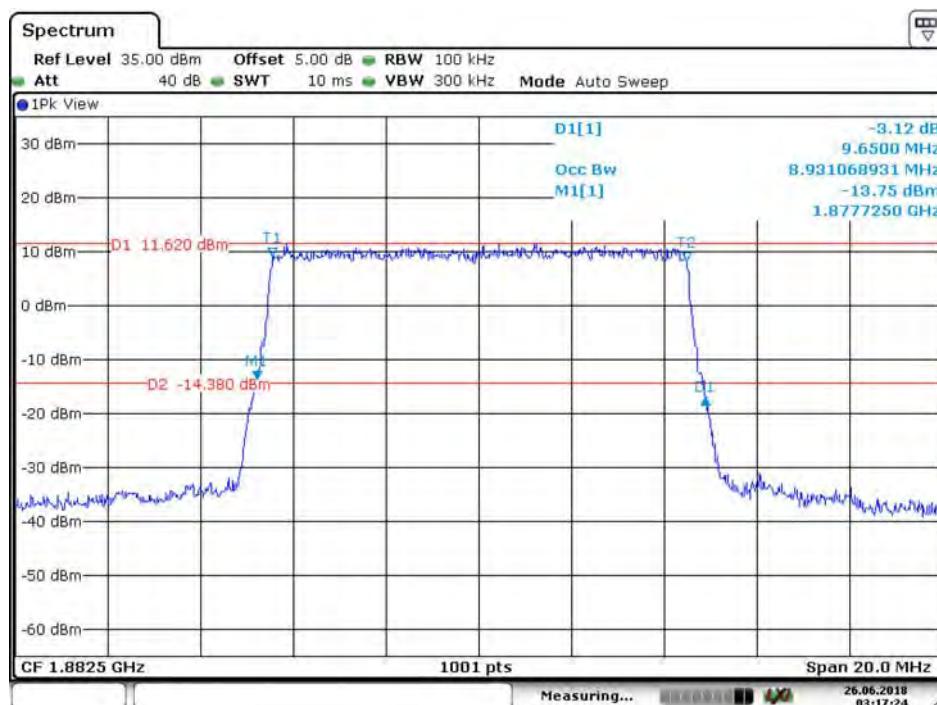
#### 4.1.1.12 Test Mode = LTE/TM3 10MHz

##### 4.1.1.12.1 Test Channel = LCH

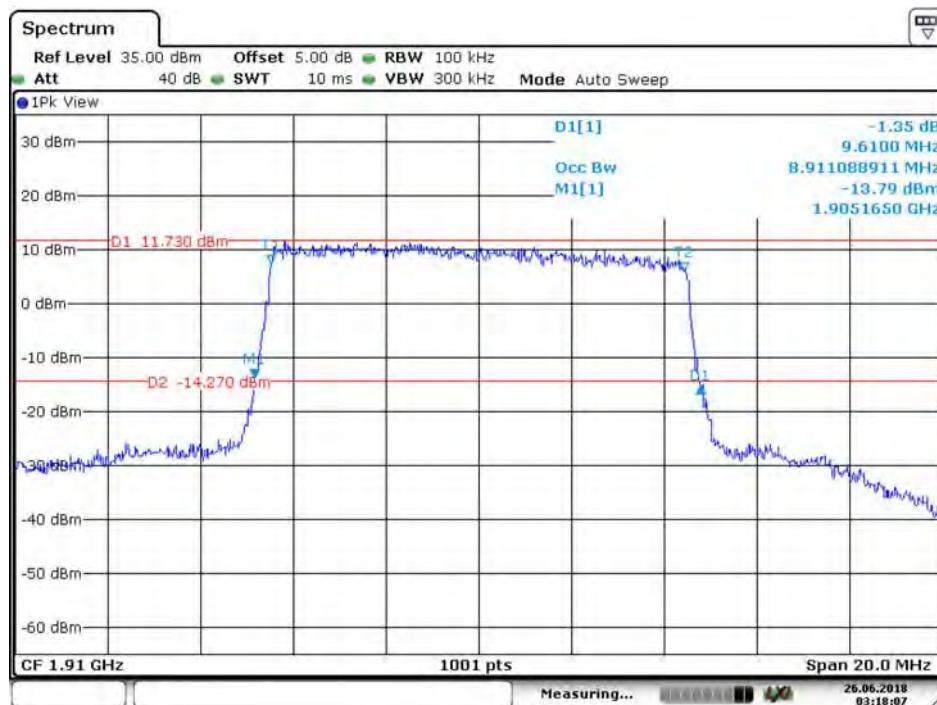


Date: 26.JUN.2018 03:16:04

##### 4.1.1.12.2 Test Channel = MCH

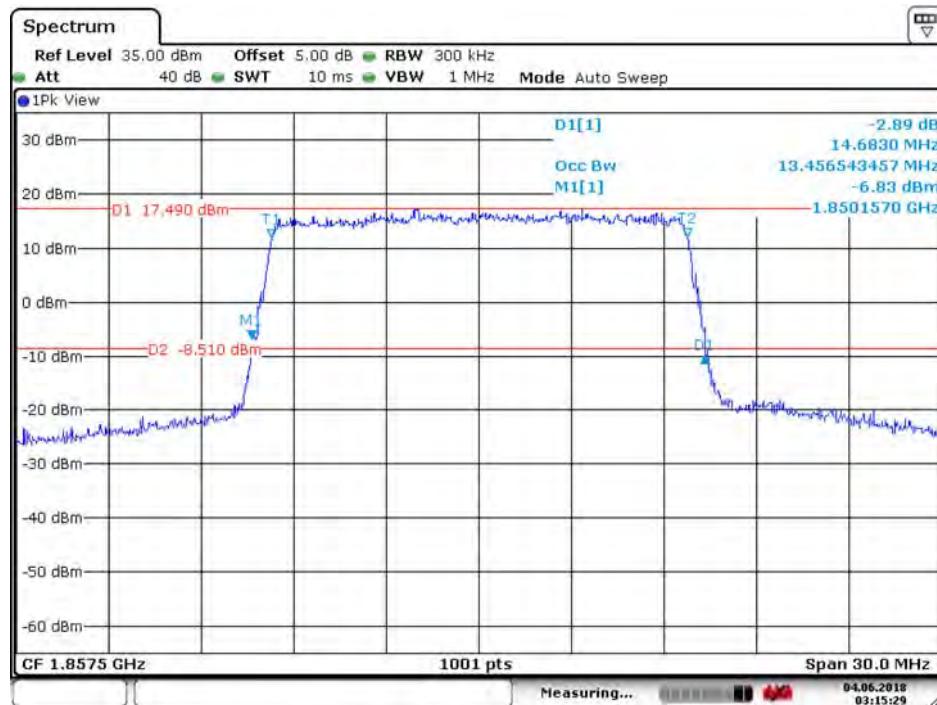


Date: 26.JUN.2018 03:17:25

**4.1.1.12.3 Test Channel = HCH**

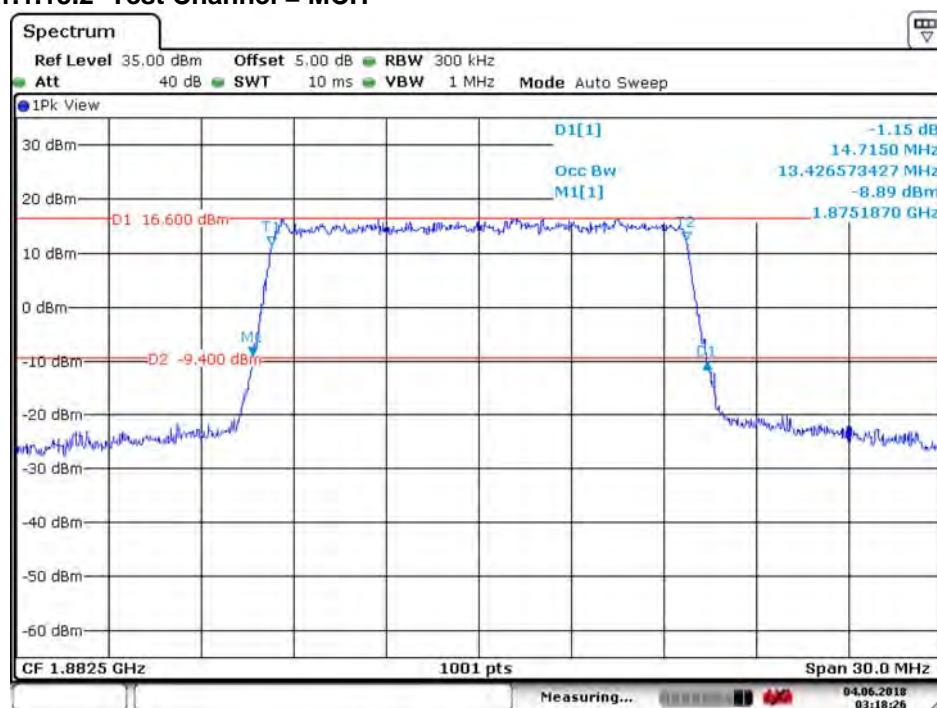
## 4.1.1.13 Test Mode = LTE/TM1 15MHz

## 4.1.1.13.1 Test Channel = LCH



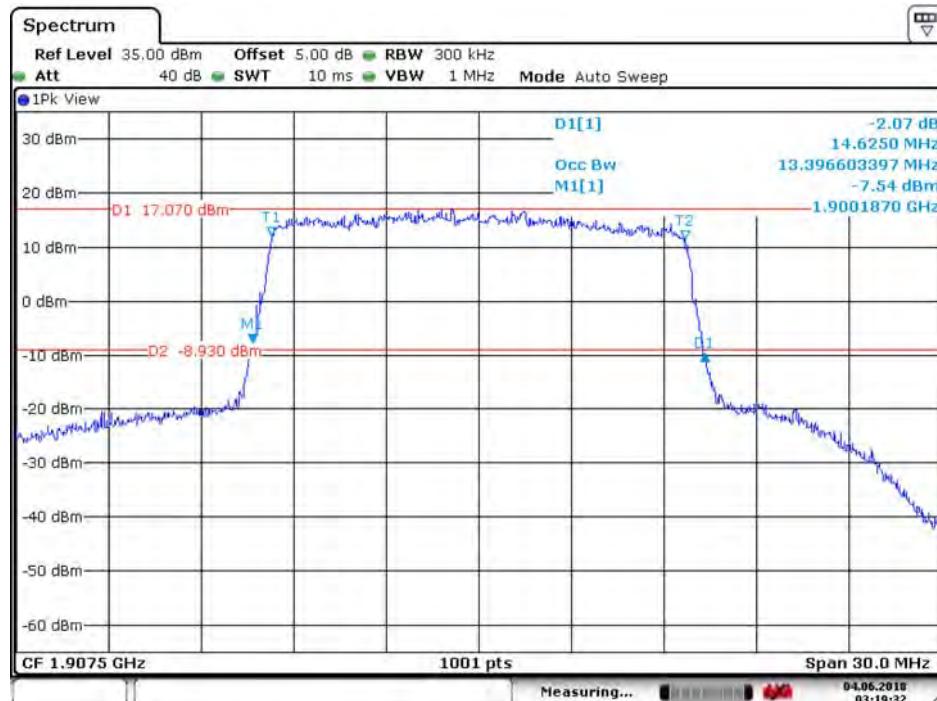
Date: 4.JUN 2018 03:15:30

## 4.1.1.13.2 Test Channel = MCH



Date: 4.JUN 2018 03:18:27

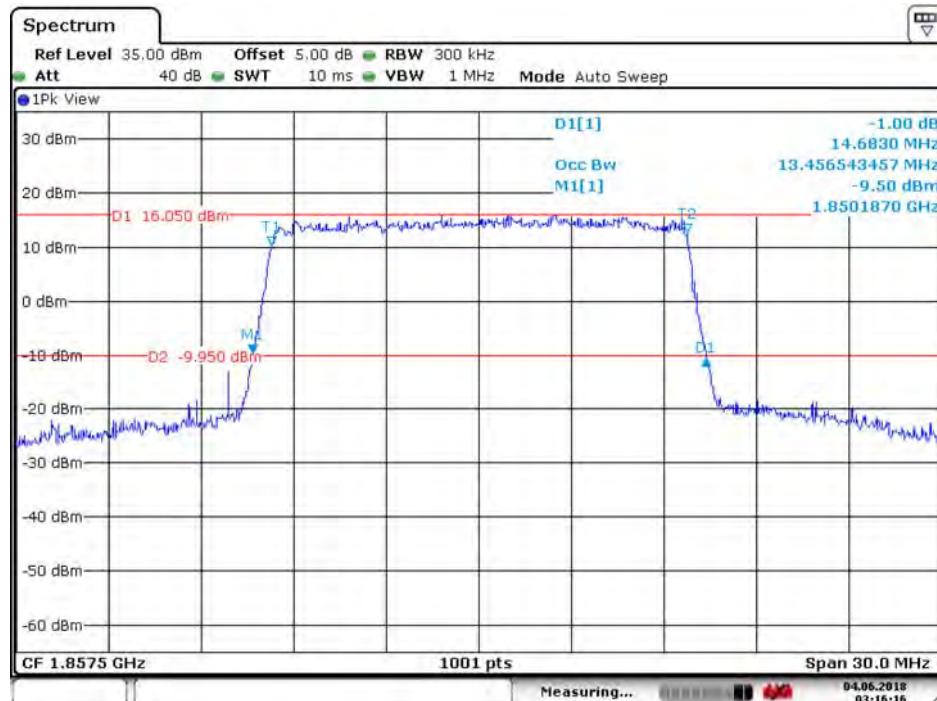
#### 4.1.1.13.3 Test Channel = HCH



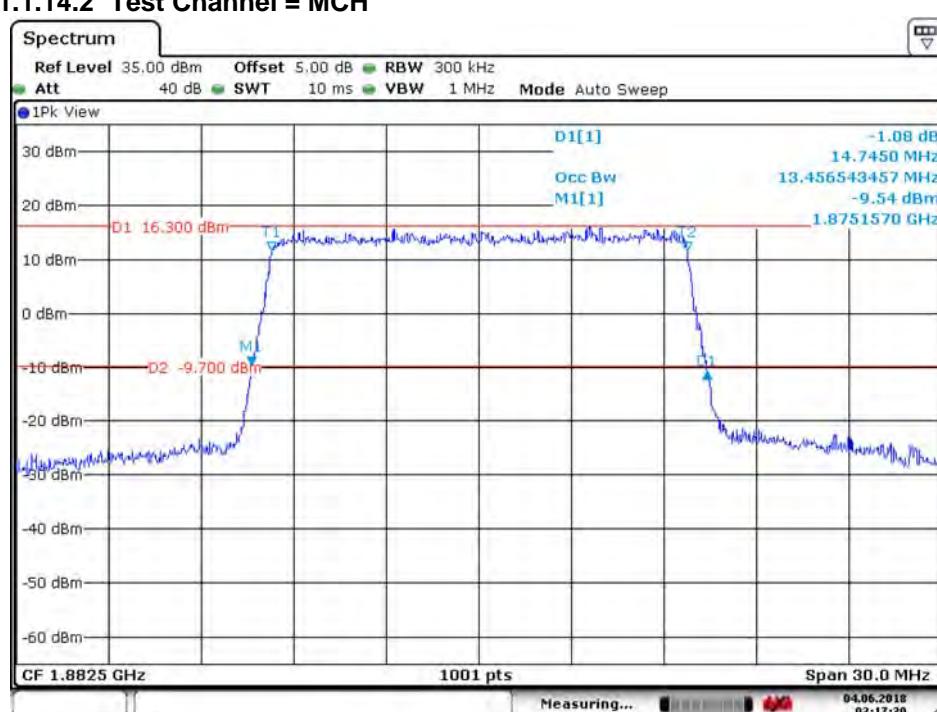
Date: 4.JUN.2018 03:19:32

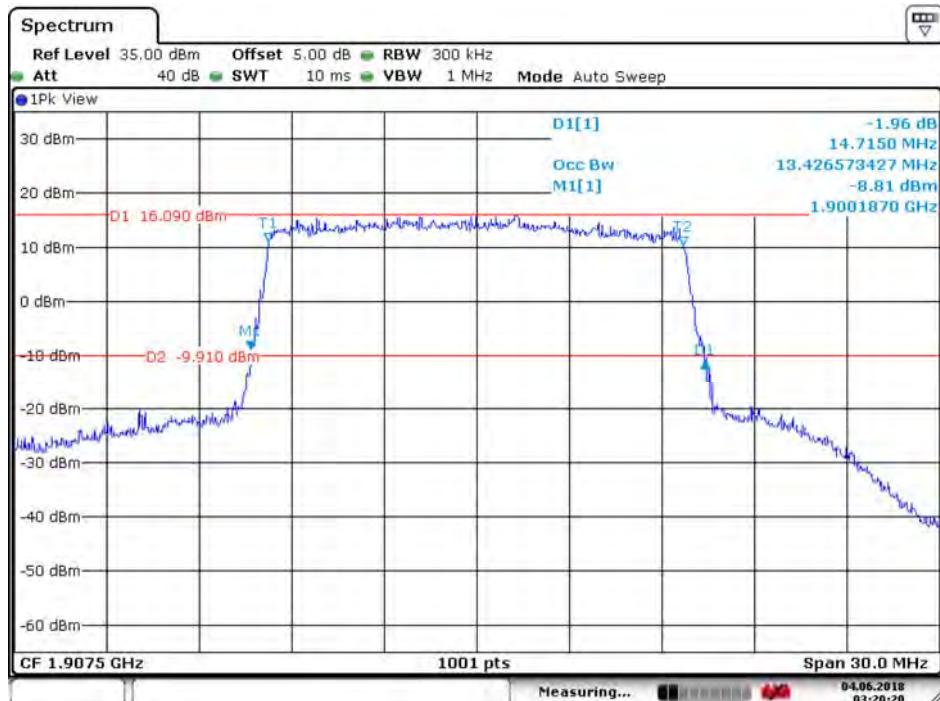
#### 4.1.1.14 Test Mode = LTE/TM2 15MHz

##### 4.1.1.14.1 Test Channel = LCH



##### 4.1.1.14.2 Test Channel = MCH

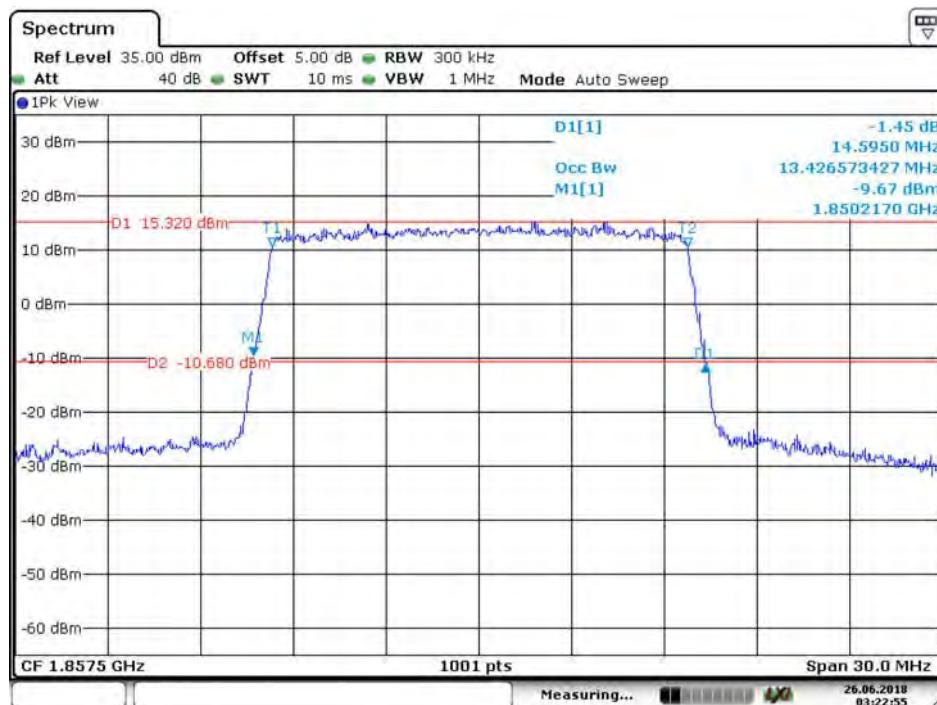


**4.1.1.14.3 Test Channel = HCH**

Date: 4.JUN.2018 03:20:21

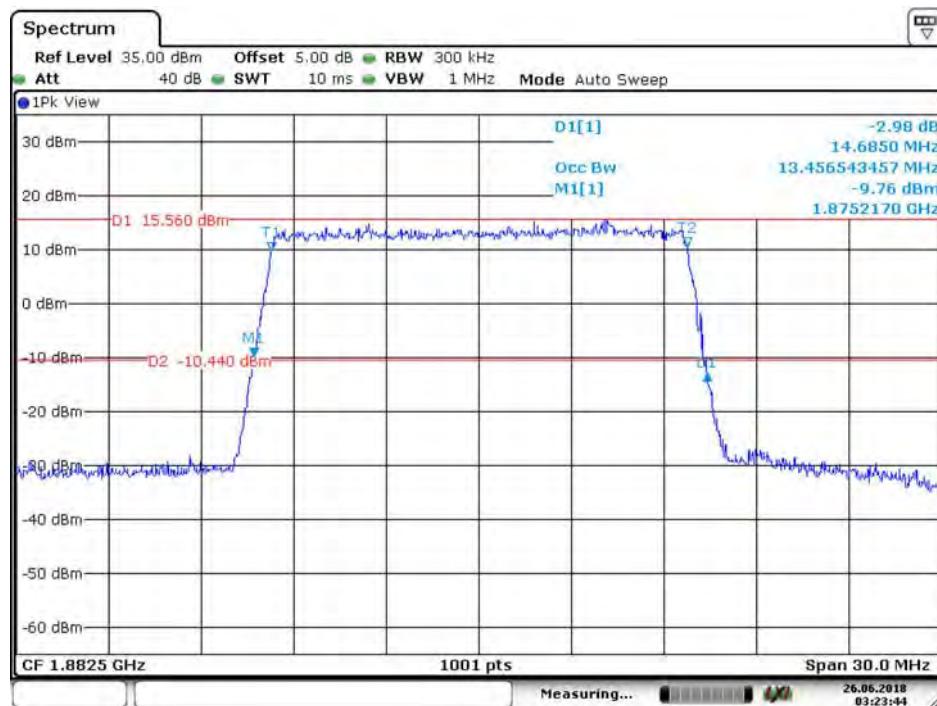
#### 4.1.1.15 Test Mode = LTE/TM3 15MHz

##### 4.1.1.15.1 Test Channel = LCH



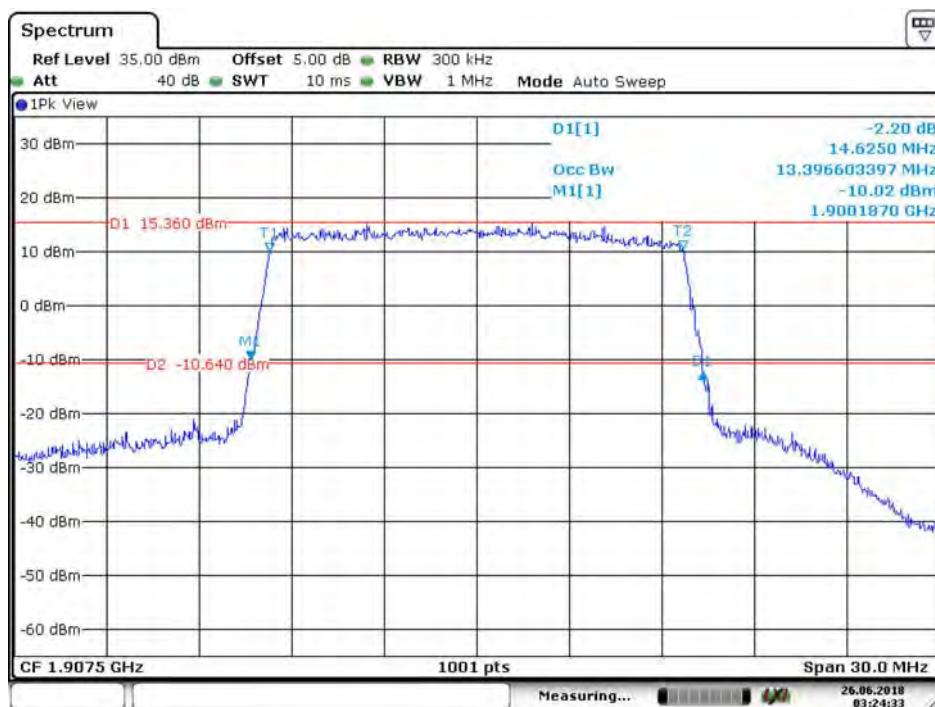
Date: 26 JUN.2018 03:22:56

##### 4.1.1.15.2 Test Channel = MCH



Date: 26 JUN.2018 03:23:44

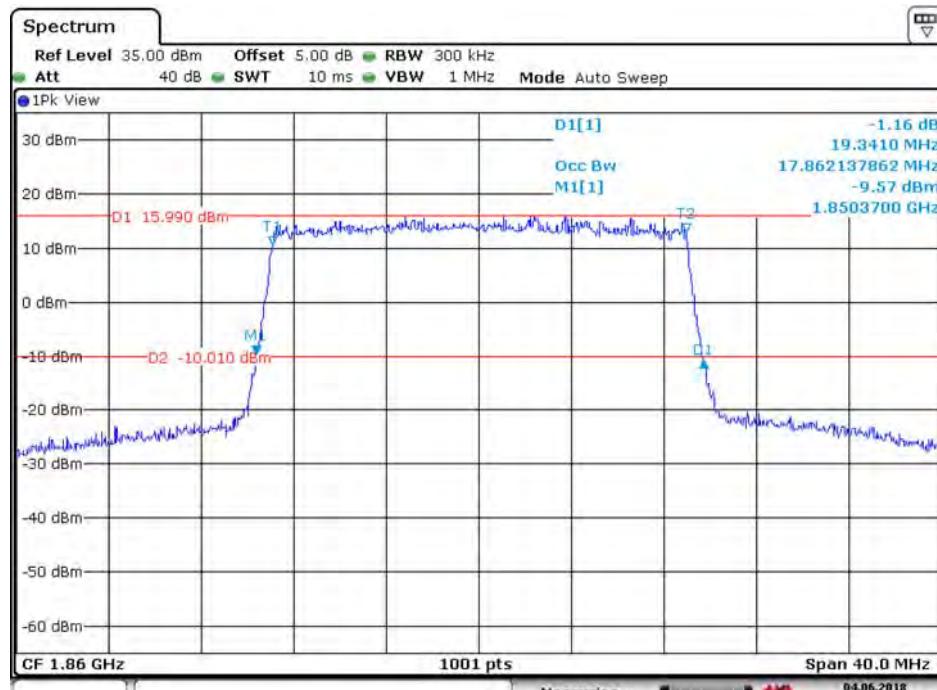
#### 4.1.1.15.3 Test Channel = HCH



Date: 26.JUN.2018 03:24:33

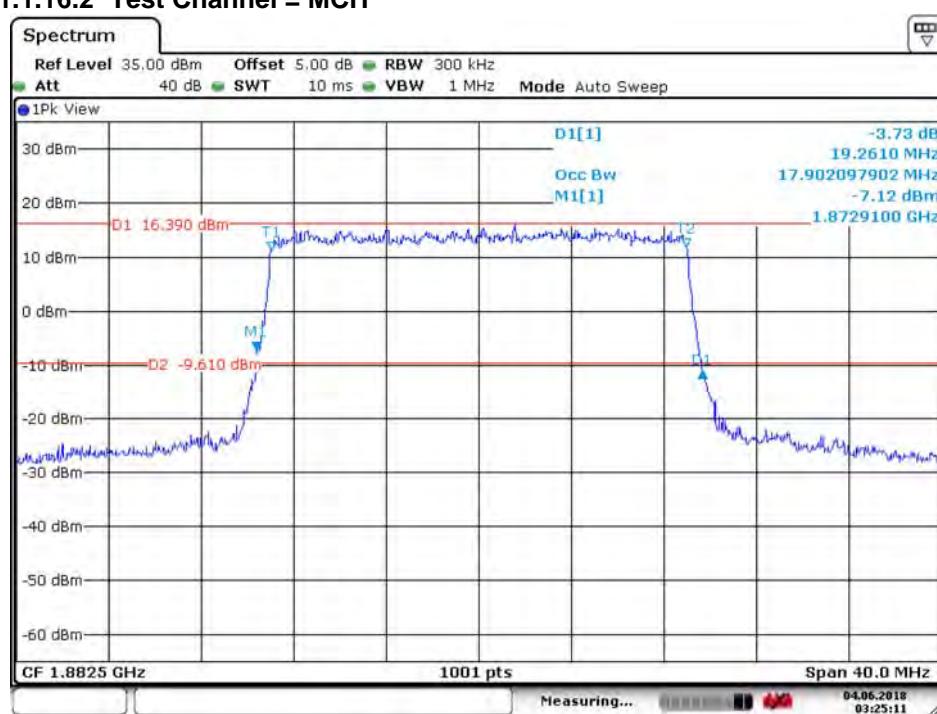
#### 4.1.1.16 Test Mode = LTE/TM1 20MHz

##### 4.1.1.16.1 Test Channel = LCH



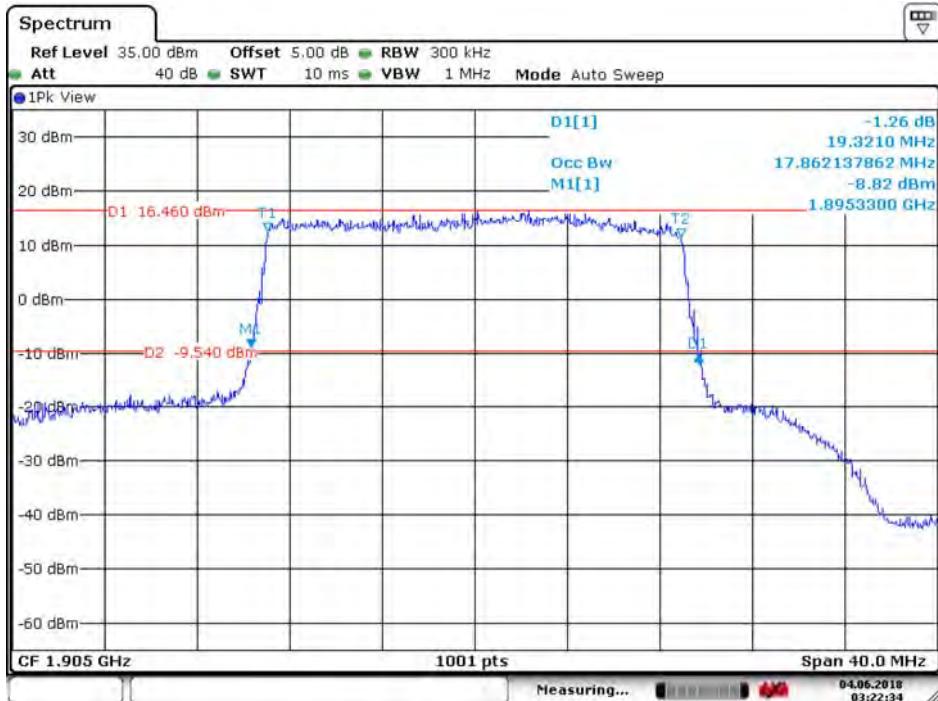
Date: 4.JUN 2018 03:26:00

##### 4.1.1.16.2 Test Channel = MCH



Date: 4.JUN 2018 03:25:11

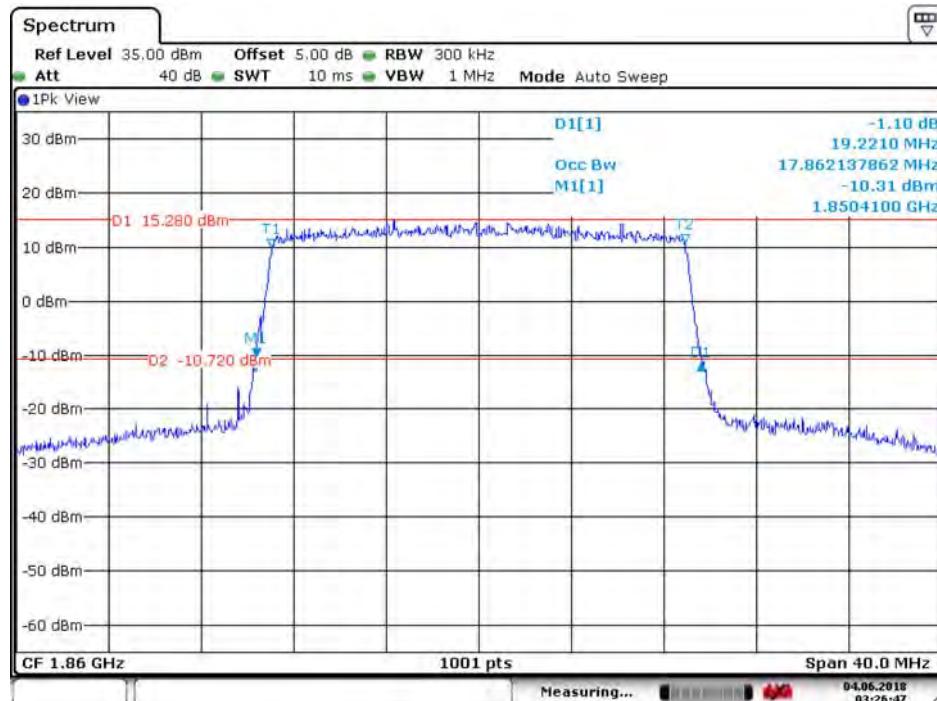
#### 4.1.1.16.3 Test Channel = HCH



Date: 4 JUN 2018 03:22:34

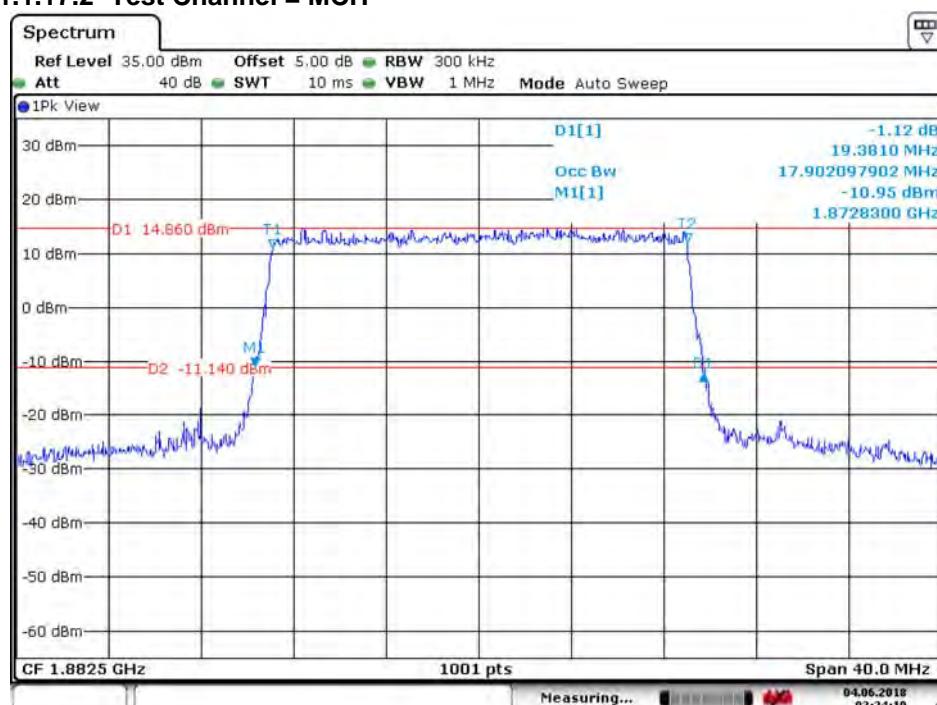
## 4.1.1.17 Test Mode = LTE/TM2 20MHz

## 4.1.1.17.1 Test Channel = LCH



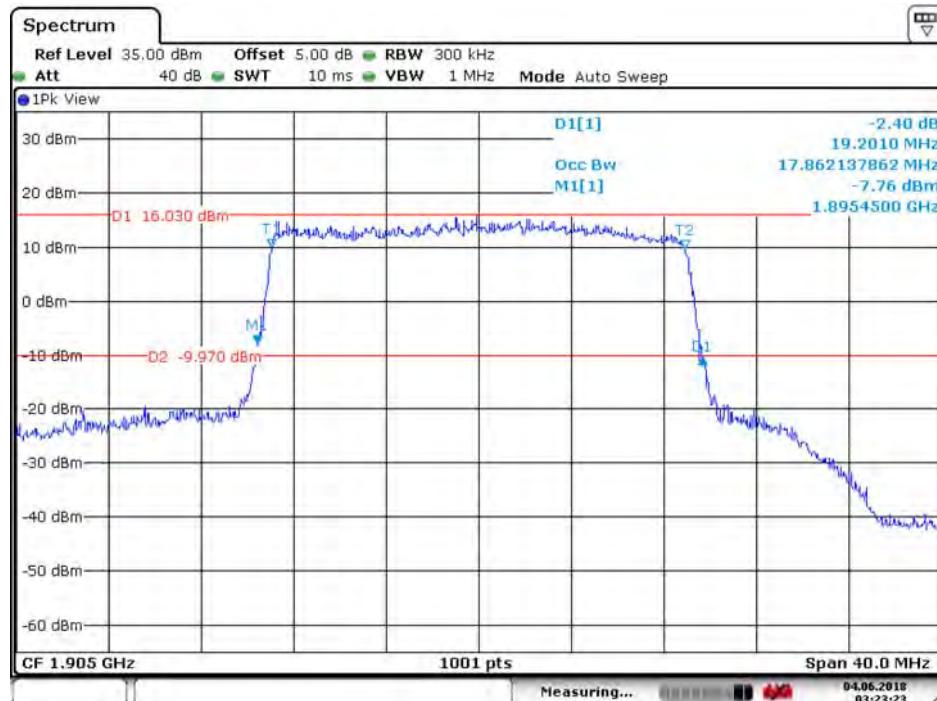
Date: 4.JUN.2018 03:26:47

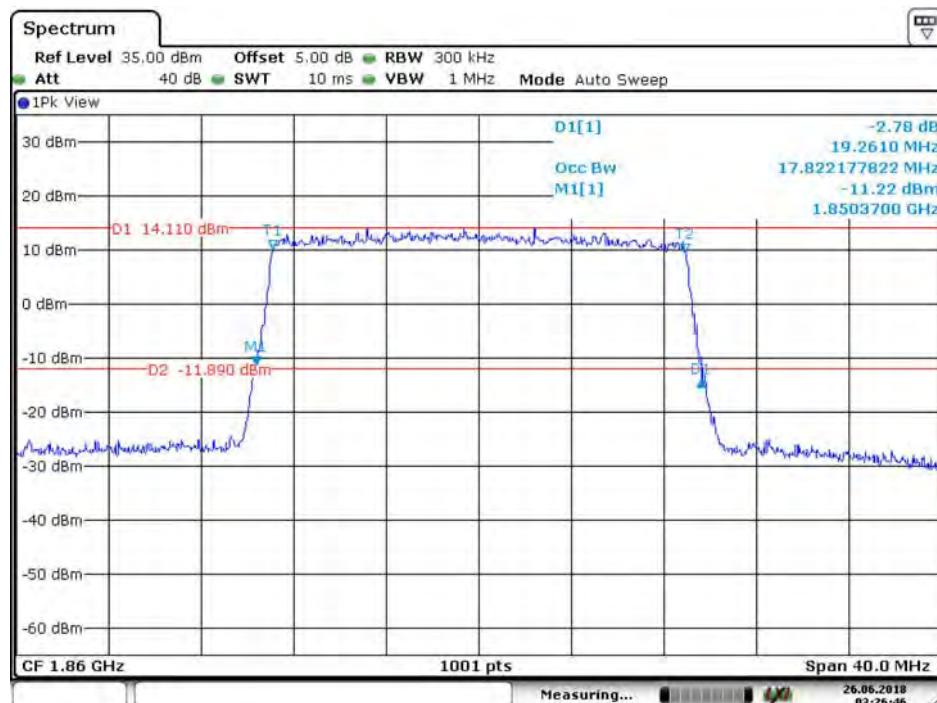
## 4.1.1.17.2 Test Channel = MCH



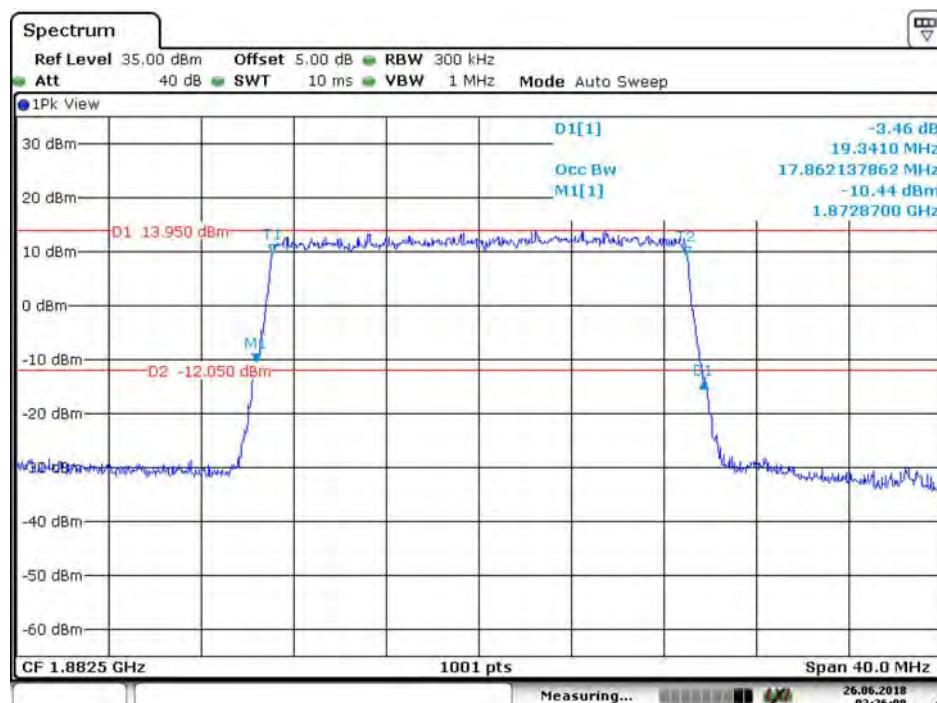
Date: 4.JUN.2018 03:24:20

#### 4.1.1.17.3 Test Channel = HCH

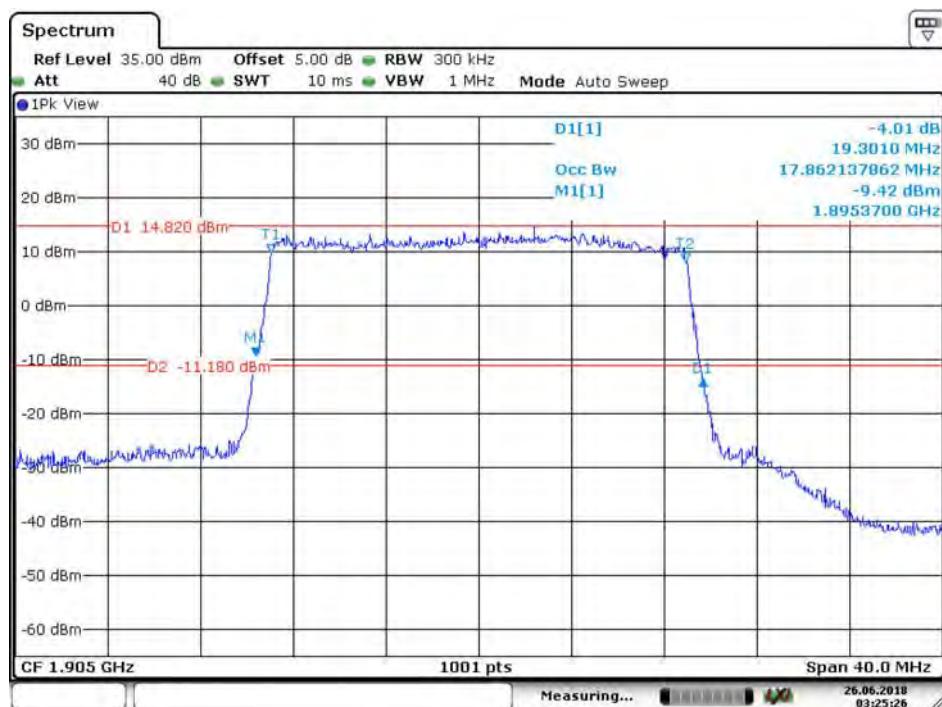


**4.1.1.18 Test Mode = LTE/TM3 20MHz****4.1.1.18.1 Test Channel = LCH**

Date: 26.JUN.2018 03:26:47

**4.1.1.18.2 Test Channel = MCH**

Date: 26.JUN.2018 03:26:08

**4.1.1.18.3 Test Channel = HCH**

## 5 Band Edges Compliance

### 5.1 For LTE

#### 5.1.1 Test Band = LTE BAND 25

##### 5.1.1.1 Test Mode = LTE/TM1 1.4MHz

###### 5.1.1.1.1 Test Channel = LCH

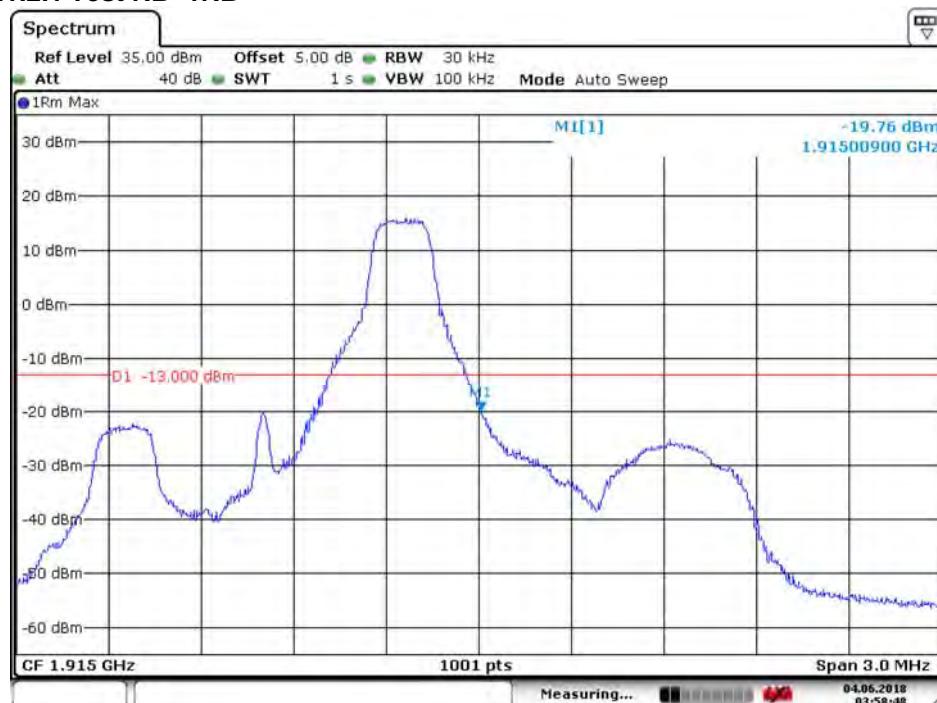
###### 5.1.1.1.1.1 Test RB=1RB



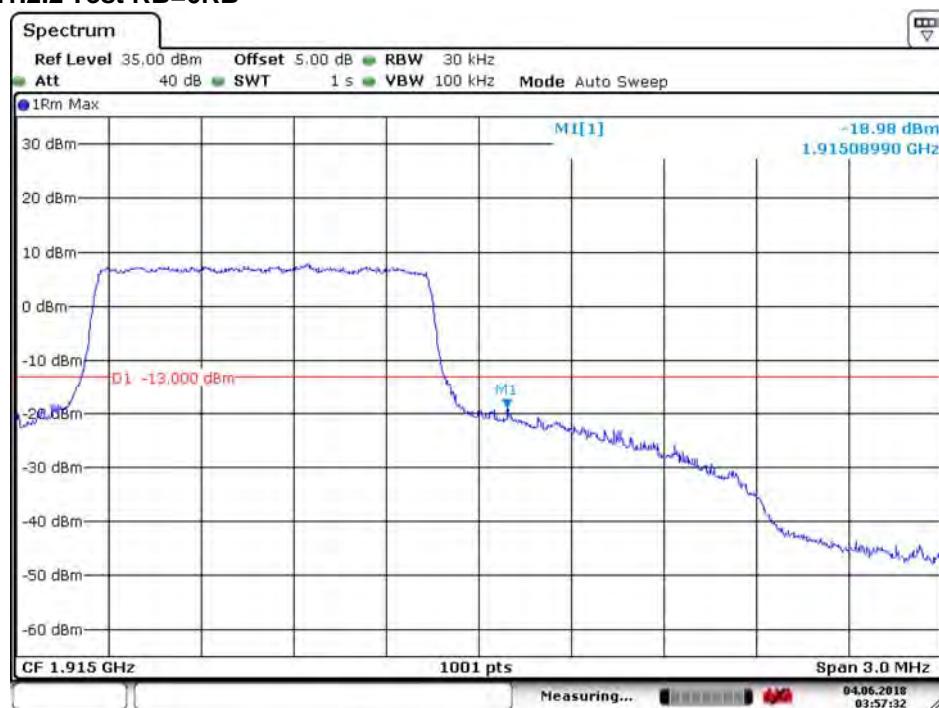
Date: 4.JUN.2018 03:59:26

**5.1.1.1.1.2 Test RB=6RB**

Date: 4.JUN.2018 04:01:04

**5.1.1.1.2 Test Channel = HCH****5.1.1.1.2.1 Test RB=1RB**

Date: 4.JUN.2018 03:58:48

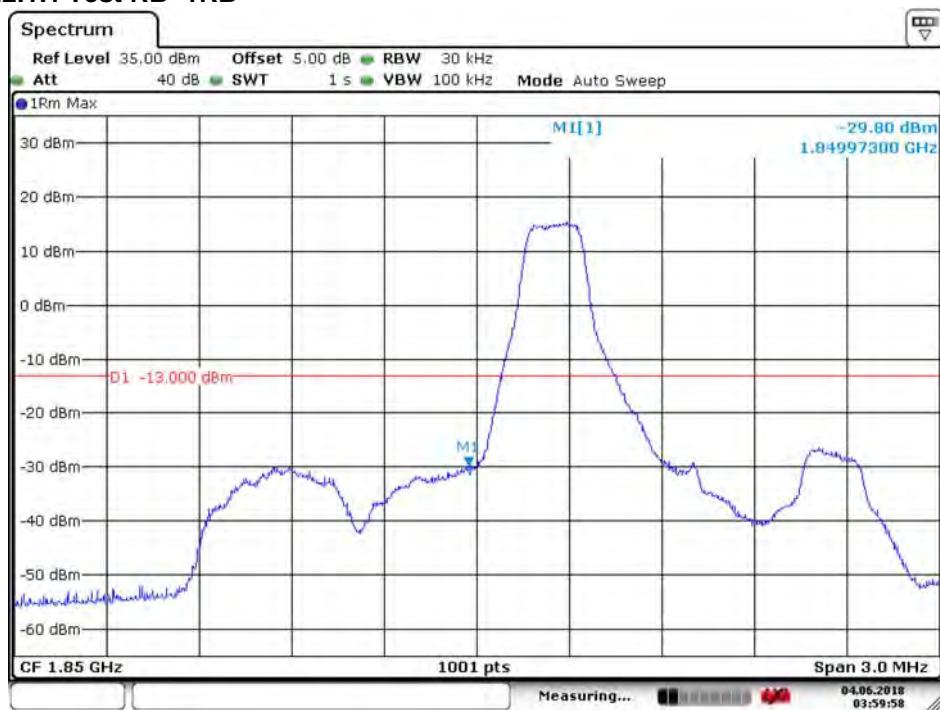
**5.1.1.1.2.2 Test RB=6RB**

Date: 4.JUN.2018 03:57:32

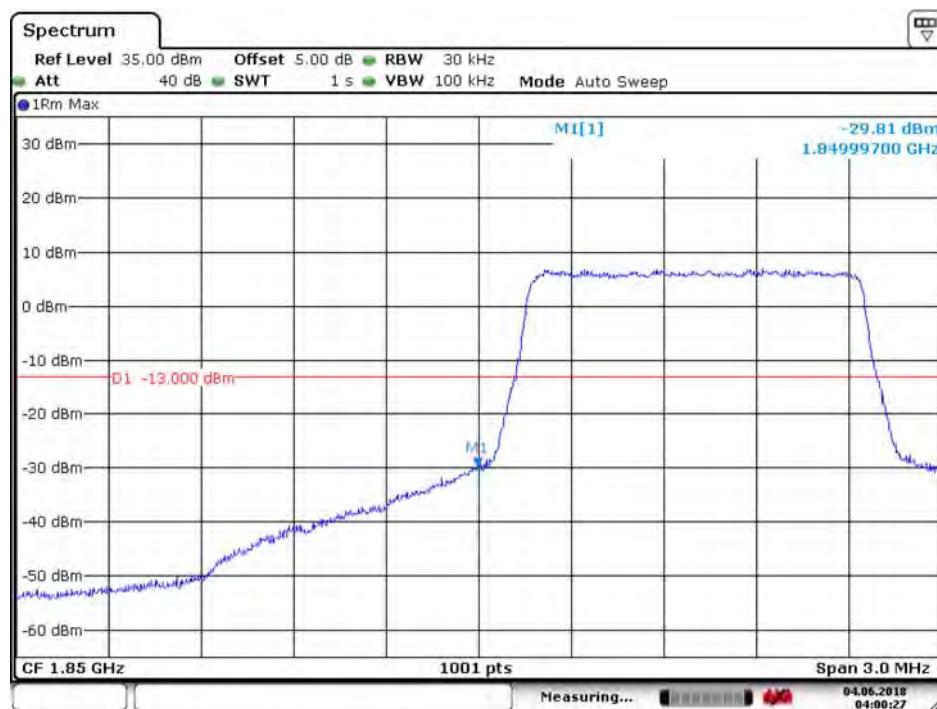
5.1.1.2 Test Mode = LTE/TM2 1.4MHz

5.1.1.2.1 Test Channel = LCH

5.1.1.2.1.1 Test RB=1RB



Date: 4.JUN.2018 03:59:58

**5.1.1.2.1.2 Test RB=6RB**

Date: 4.JUN.2018 04:00:28

#### 5.1.1.2.2 Test Channel = HCH

##### 5.1.1.2.2.1 Test RB=1RB



Date: 4.JUN.2018 03:58:26

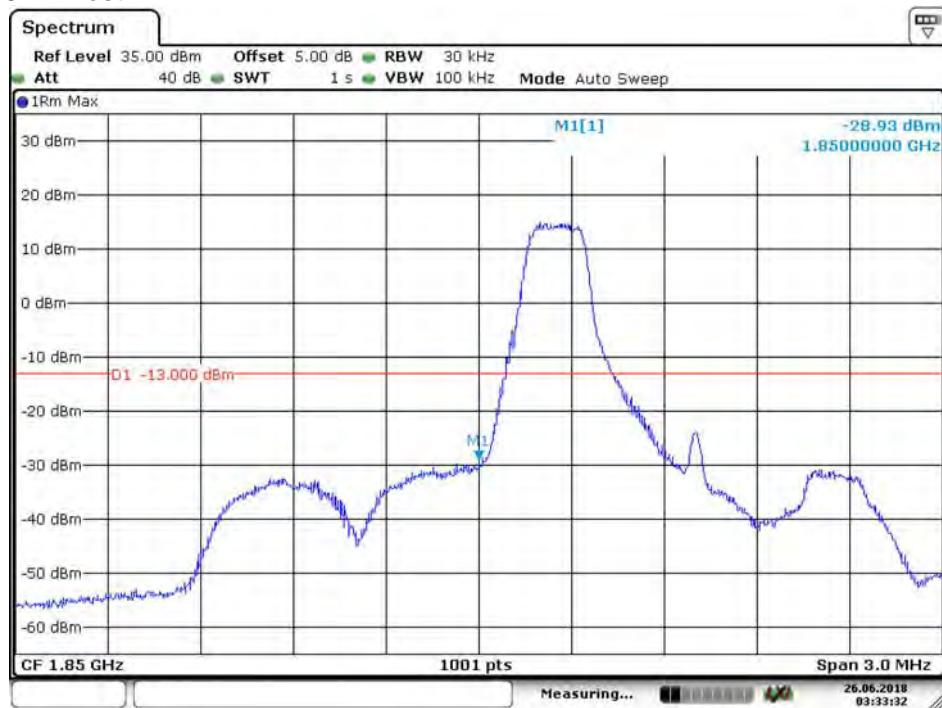
**5.1.1.2.2.2 Test RB=6RB**

Date: 4.JUN.2018 03:58:01

### 5.1.1.3 Test Mode = LTE/TM3 1.4MHz

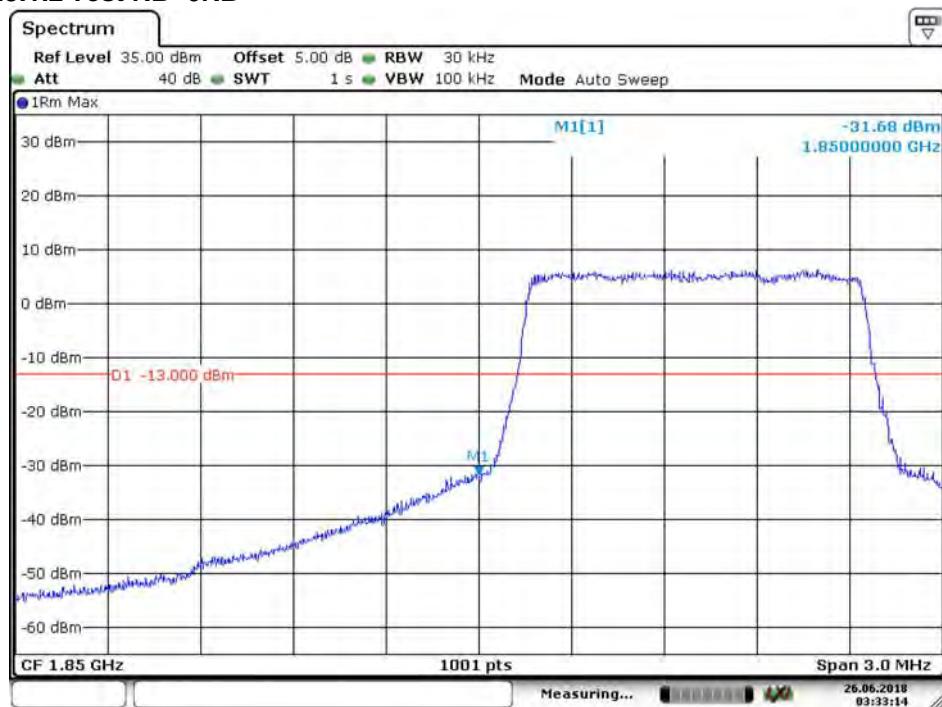
#### 5.1.1.3.1 Test Channel = LCH

##### 5.1.1.3.1.1 Test RB=1RB



Date: 26 JUN.2018 03:33:32

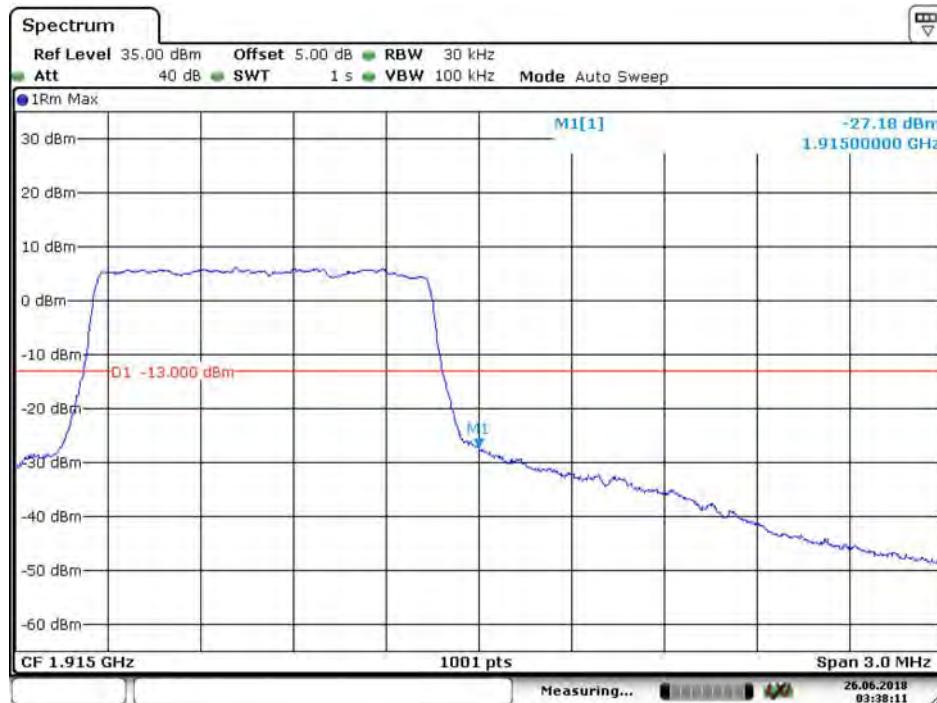
##### 5.1.1.3.1.2 Test RB=6RB



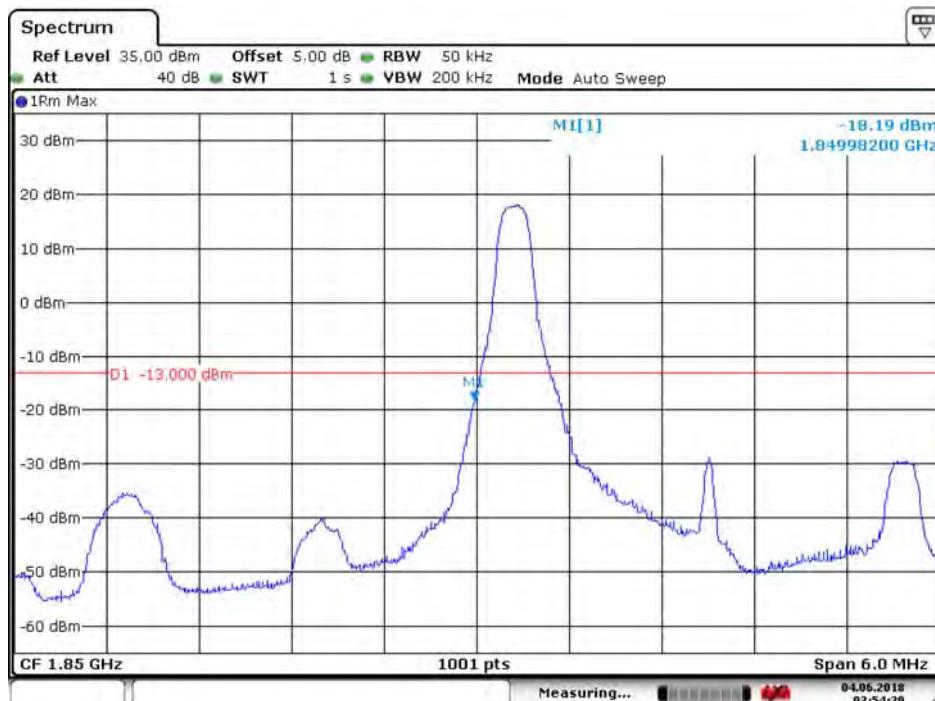
Date: 26 JUN.2018 03:33:14

**5.1.1.3.2 Test Channel = HCH****5.1.1.3.2.1 Test RB=1RB**

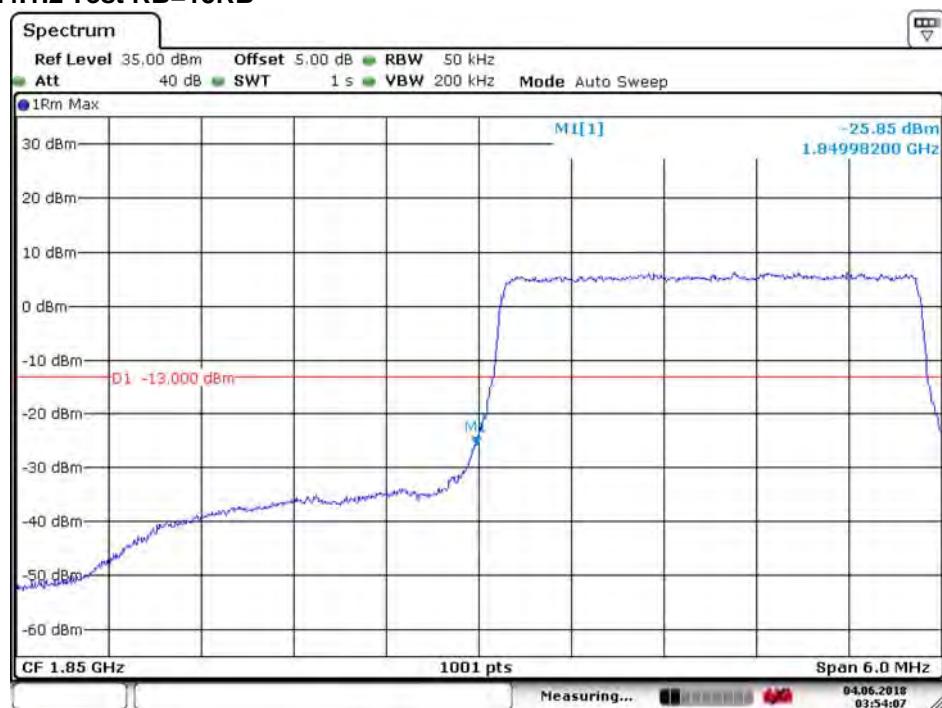
Date: 26 JUN.2018 03:34:04

**5.1.1.3.2.2 Test RB=6RB**

Date: 26 JUN.2018 03:38:11

**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**

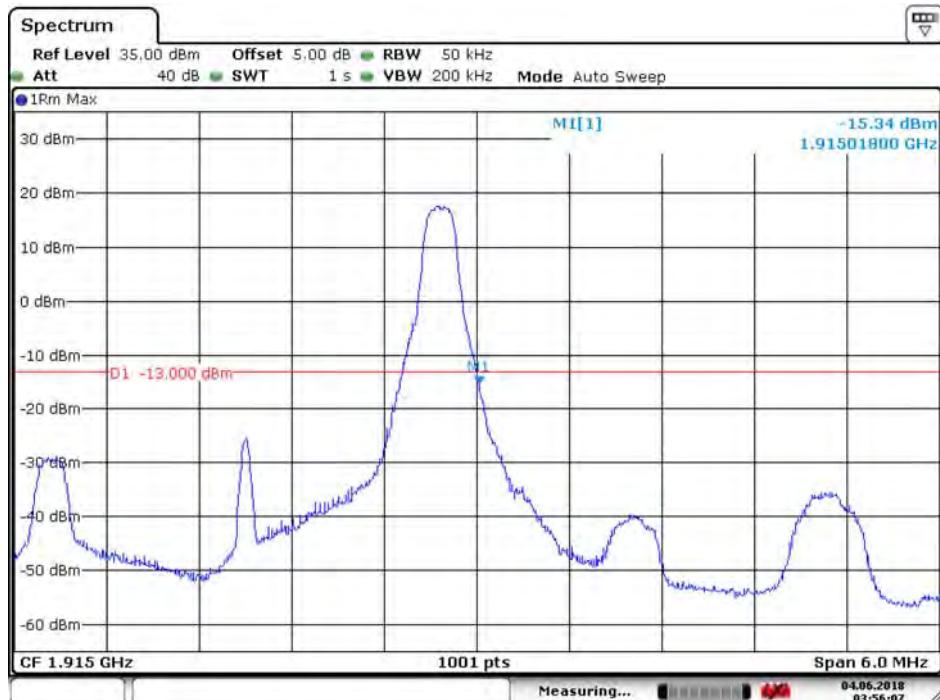
Date: 4.JUN.2018 03:54:30

**5.1.1.4.1.2 Test RB=15RB**

Date: 4.JUN.2018 03:54:08

#### 5.1.1.4.2 Test Channel = HCH

##### 5.1.1.4.2.1 Test RB=1RB



Date: 4.JUN.2018 03:56:07

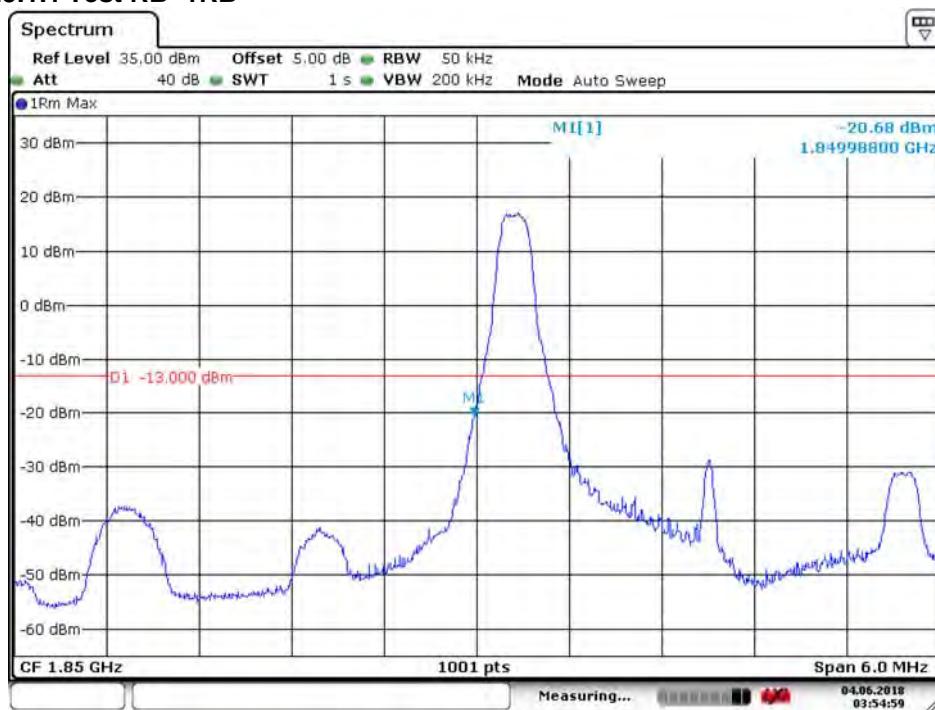
**5.1.1.4.2.2 Test RB=15RB**

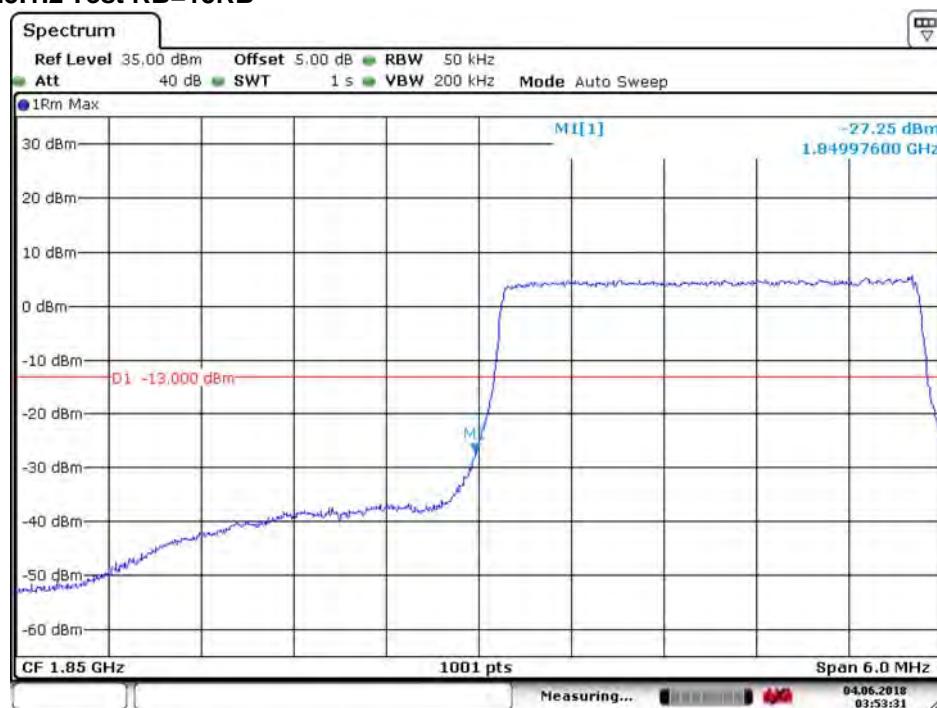
Date: 4.JUN.2018 03:56:26

### 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



**5.1.1.5.1.2 Test RB=15RB**

Date: 4.JUN.2018 03:53:31

#### 5.1.1.5.2 Test Channel = HCH

##### 5.1.1.5.2.1 Test RB=1RB

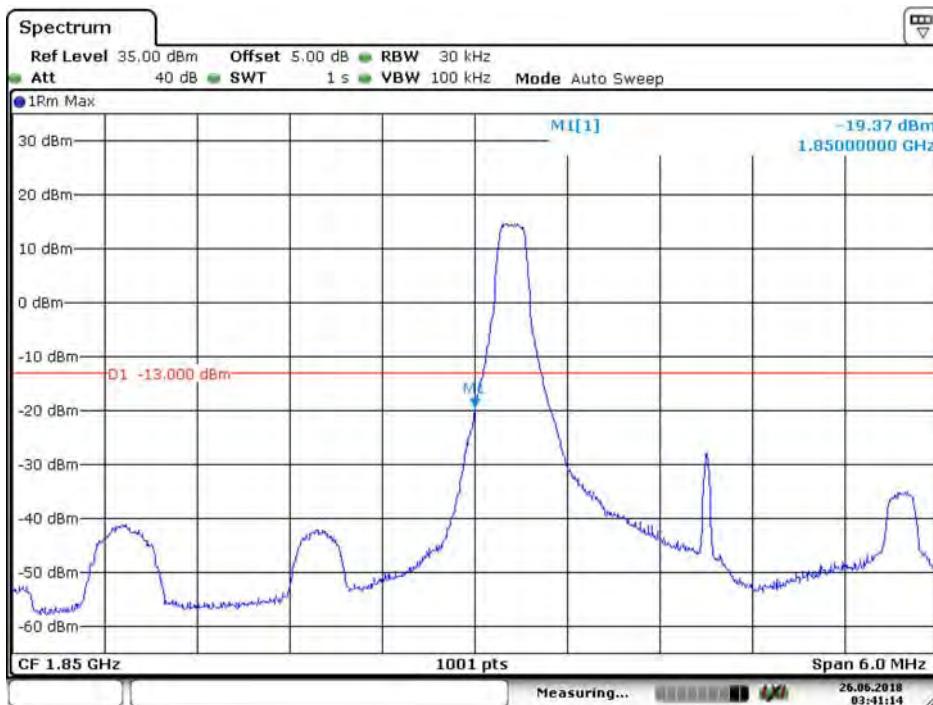


Date: 4.JUN.2018 03:55:50

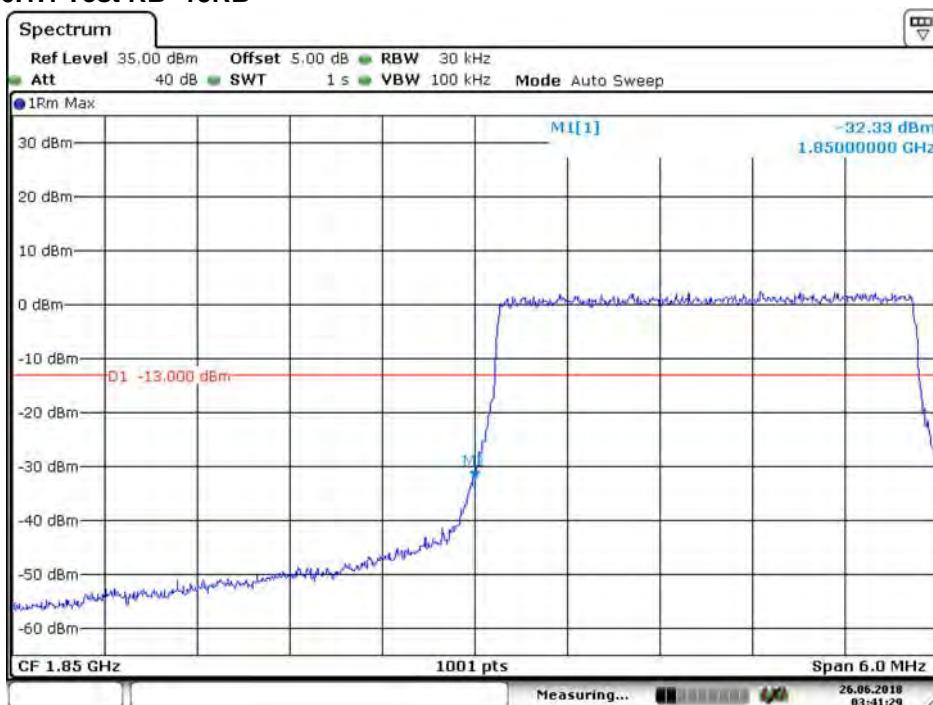
### 5.1.1.5.2.2 Test RB=15RB



Date: 4.JUN.2018 03:56:43

**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**

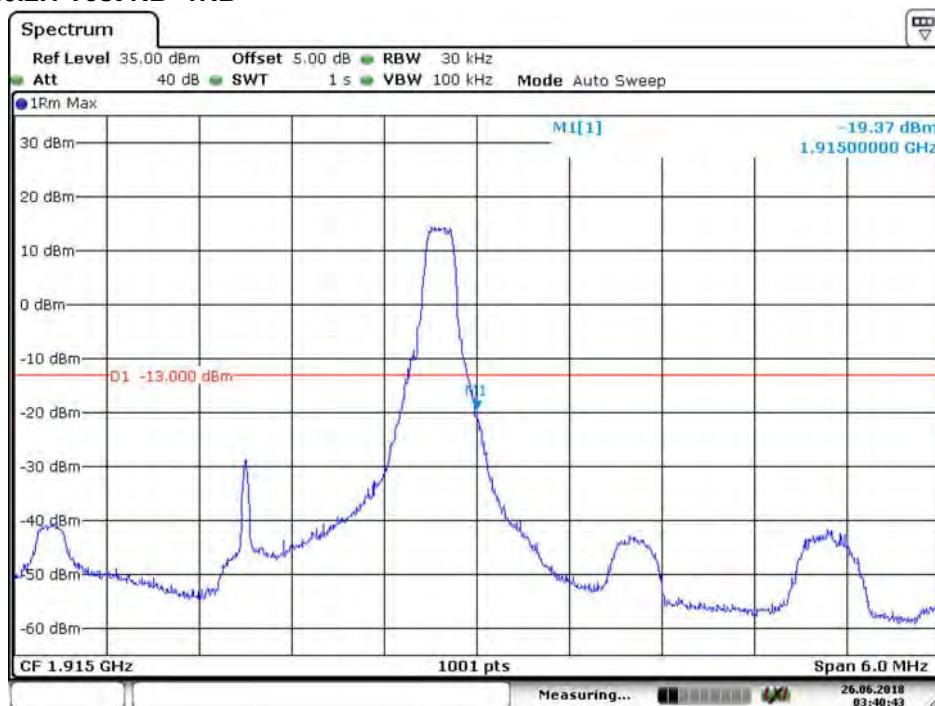
Date: 26.JUN.2018 03:41:15

**5.1.1.6.1.1 Test RB=15RB**

Date: 26.JUN.2018 03:41:30

### 5.1.1.6.2 Test Channel = HCH

#### 5.1.1.6.2.1 Test RB=1RB



Date: 26.JUN.2018 03:40:43

#### 5.1.1.6.2.2 Test RB=15RB

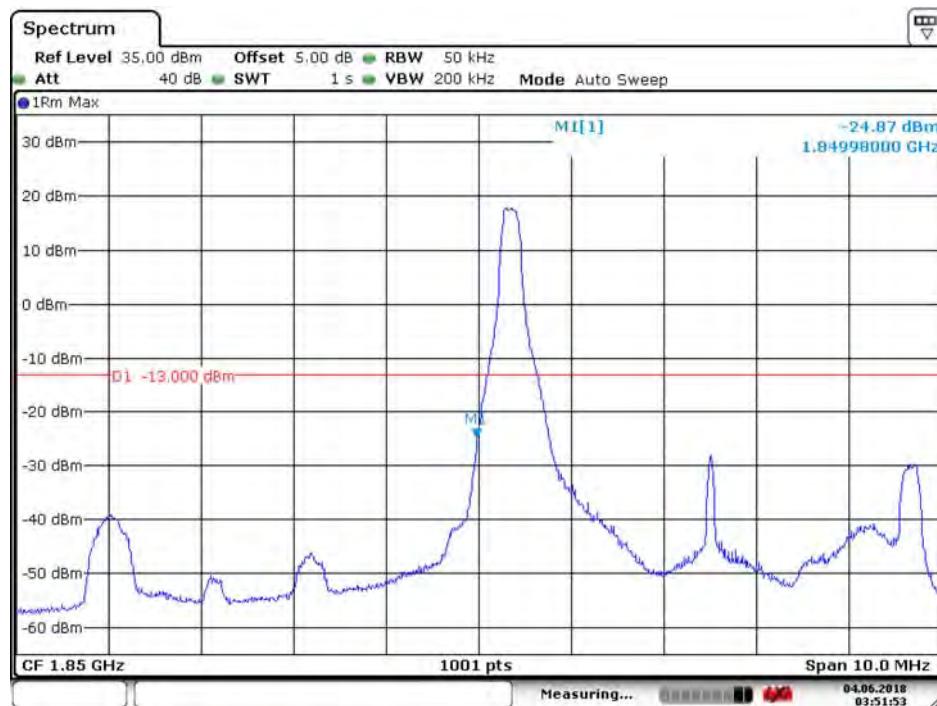


Date: 26.JUN.2018 03:40:18

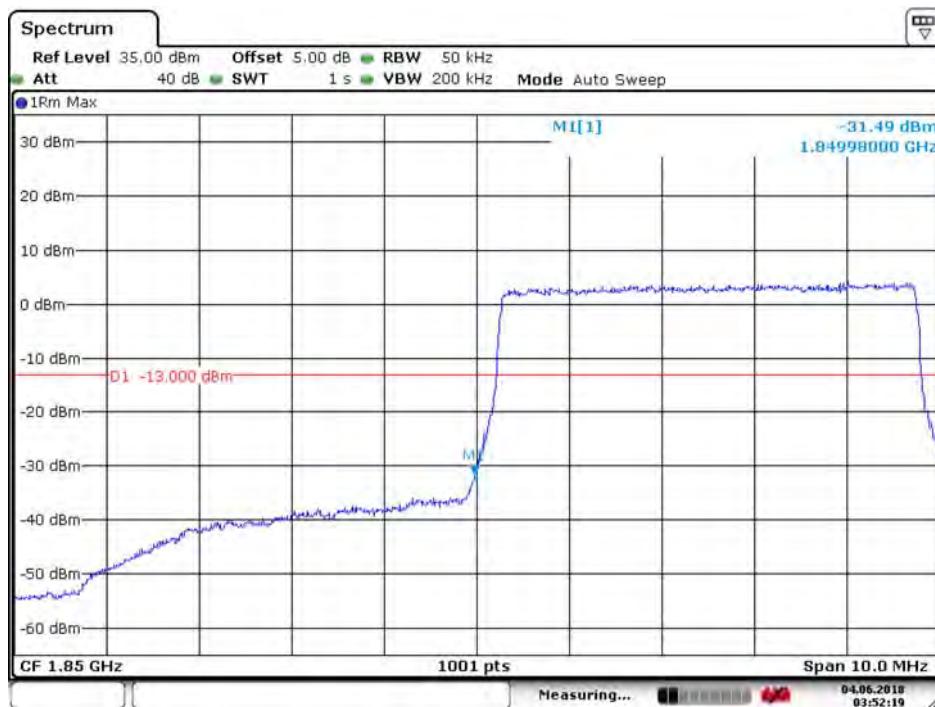
### 5.1.1.7 Test Mode = LTE/TM1 5MHz

#### 5.1.1.7.1 Test Channel = LCH

##### 5.1.1.7.1.1 Test RB=1RB



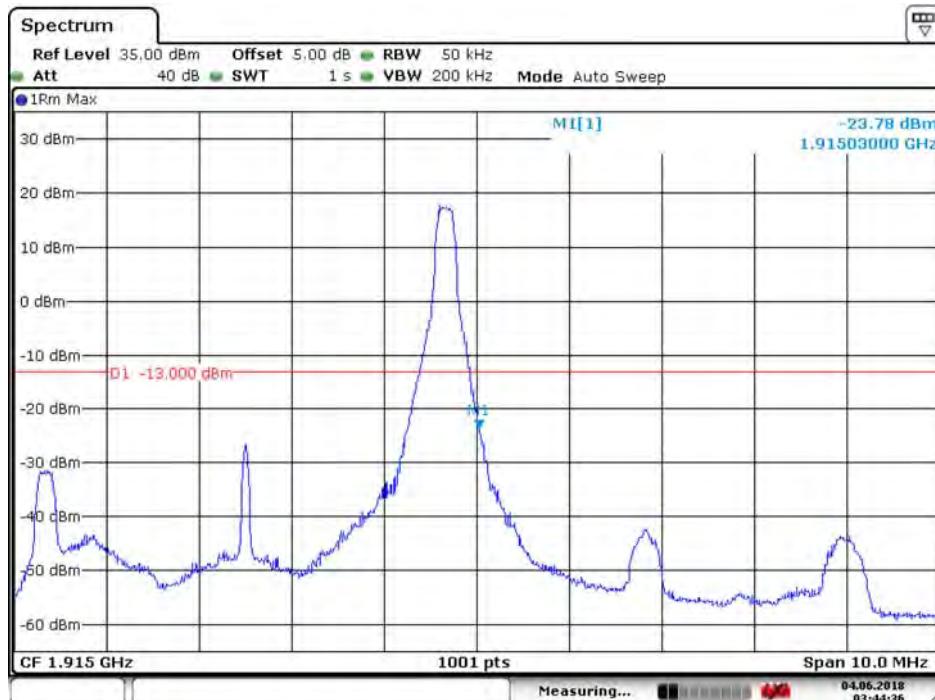
Date: 4.JUN.2018 03:51:54

**5.1.1.7.1.2 Test RB=25RB**

Date: 4.JUN.2018 03:52:18

#### 5.1.1.7.2 Test Channel = HCH

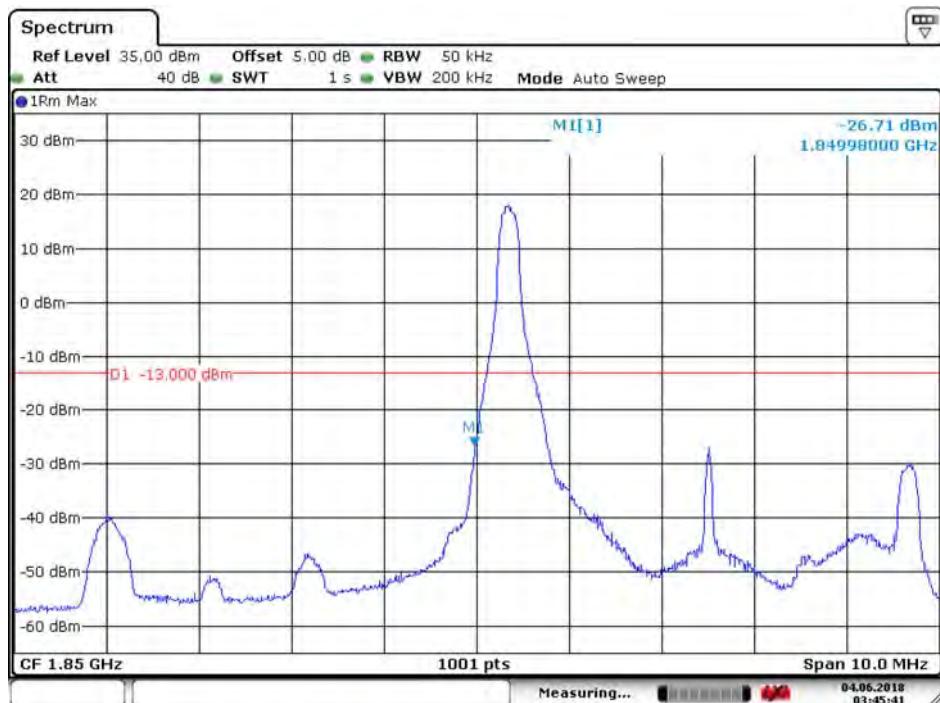
##### 5.1.1.7.2.1 Test RB=1RB



Date: 4.JUN.2018 03:44:37

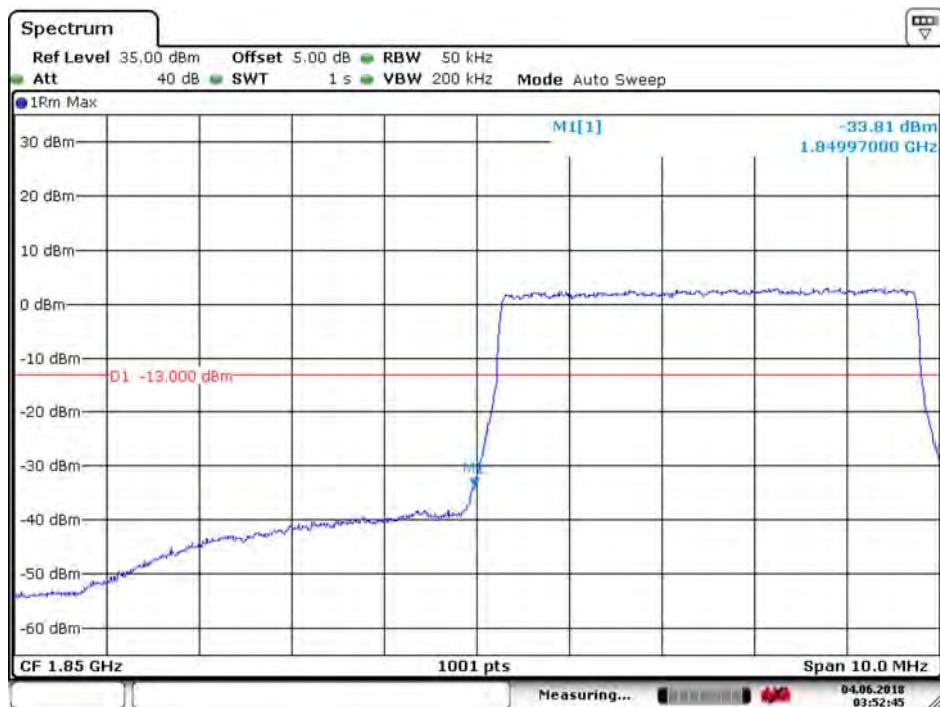
**5.1.1.7.2.2 Test RB=25RB**

Date: 4.JUN.2018 03:44:16

**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: 4.JUN.2018 03:45:41

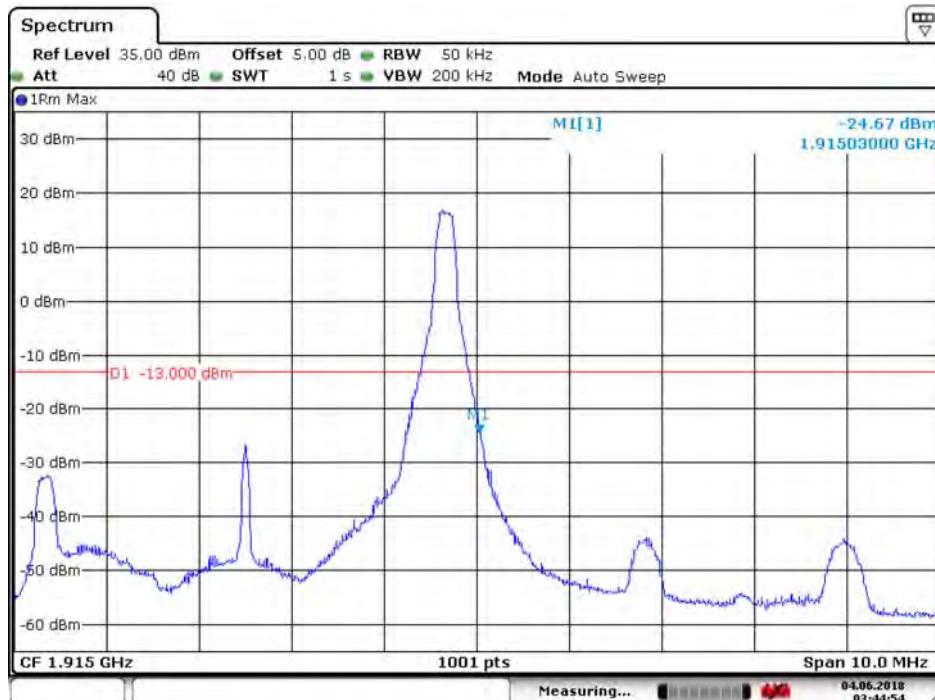
#### 5.1.1.8.1.2 Test RB=25RB



Date: 4.JUN.2018 03:52:45

#### 5.1.1.8.2 Test Channel = HCH

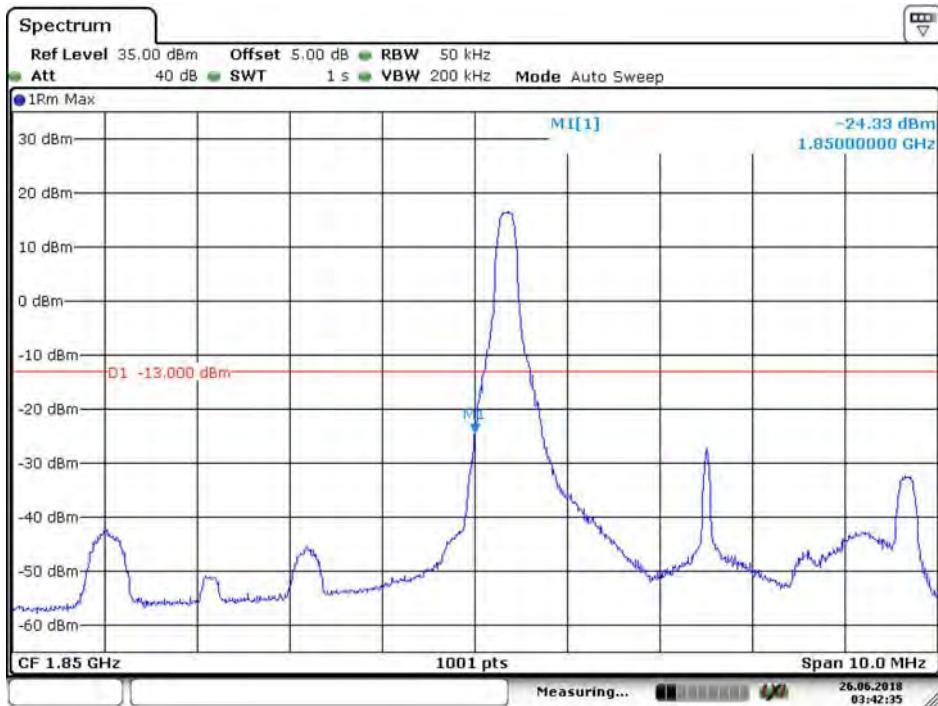
##### 5.1.1.8.2.1 Test RB=1RB



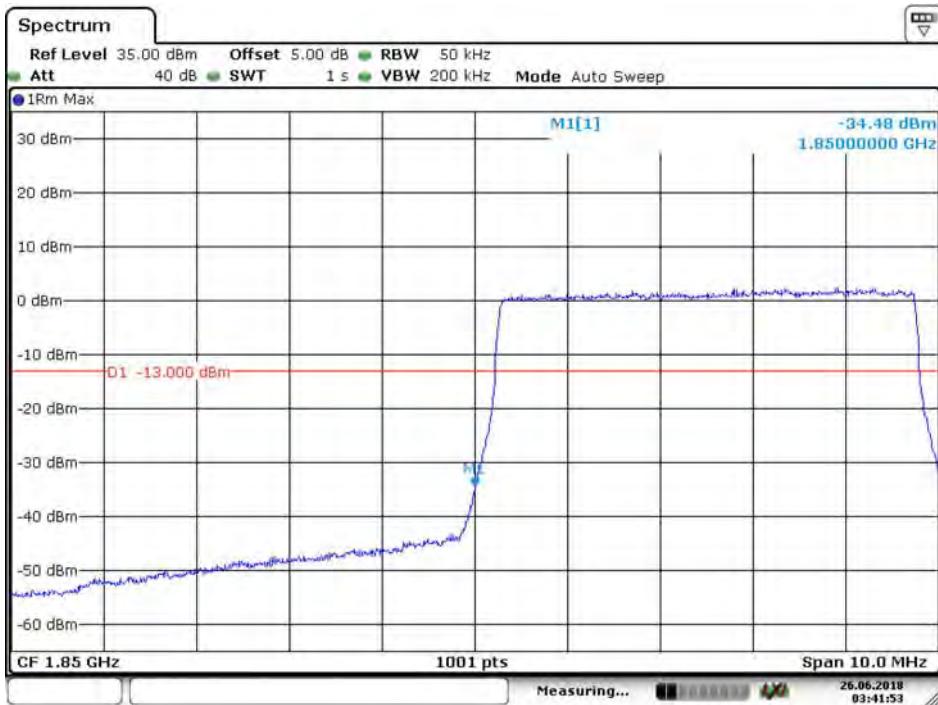
Date: 4.JUN.2018 03:44:55

**5.1.1.8.2.2 Test RB=25RB**

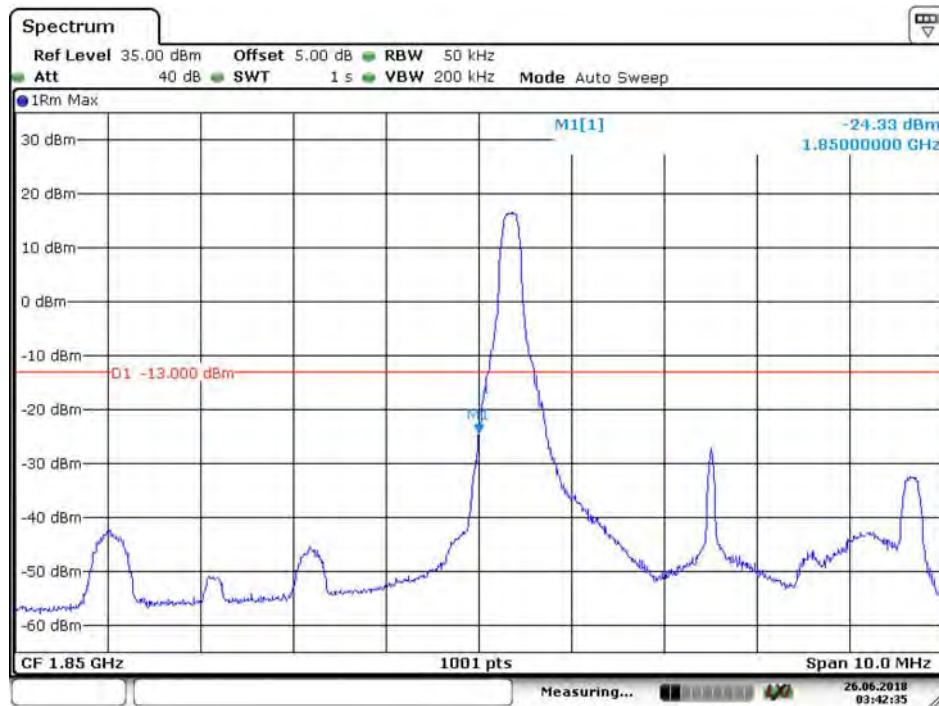
Date: 4.JUN.2018 03:43:44

**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**

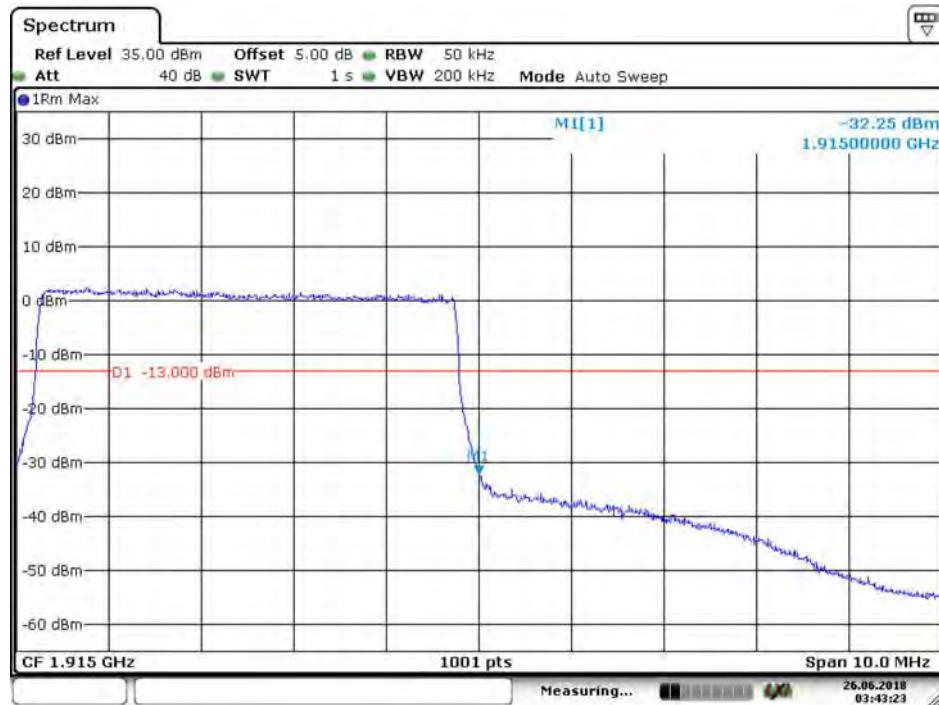
Date: 26.JUN.2018 03:42:36

**5.1.1.9.1.2 Test RB=25RB**

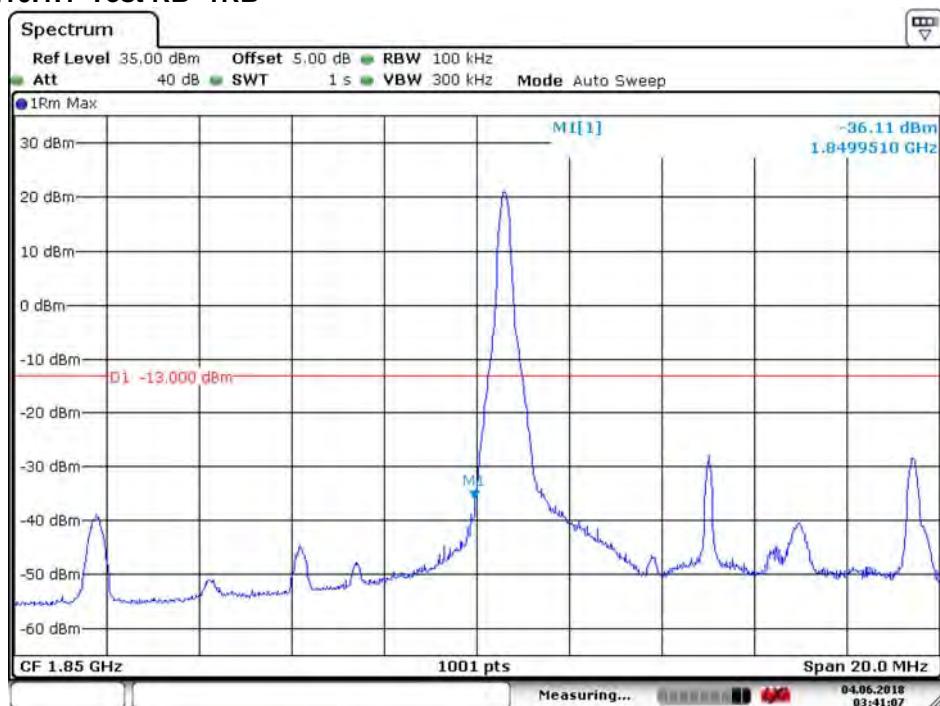
Date: 26.JUN.2018 03:41:53

**5.1.1.9.2 Test Channel = HCH****5.1.1.9.2.1 Test RB=1RB**

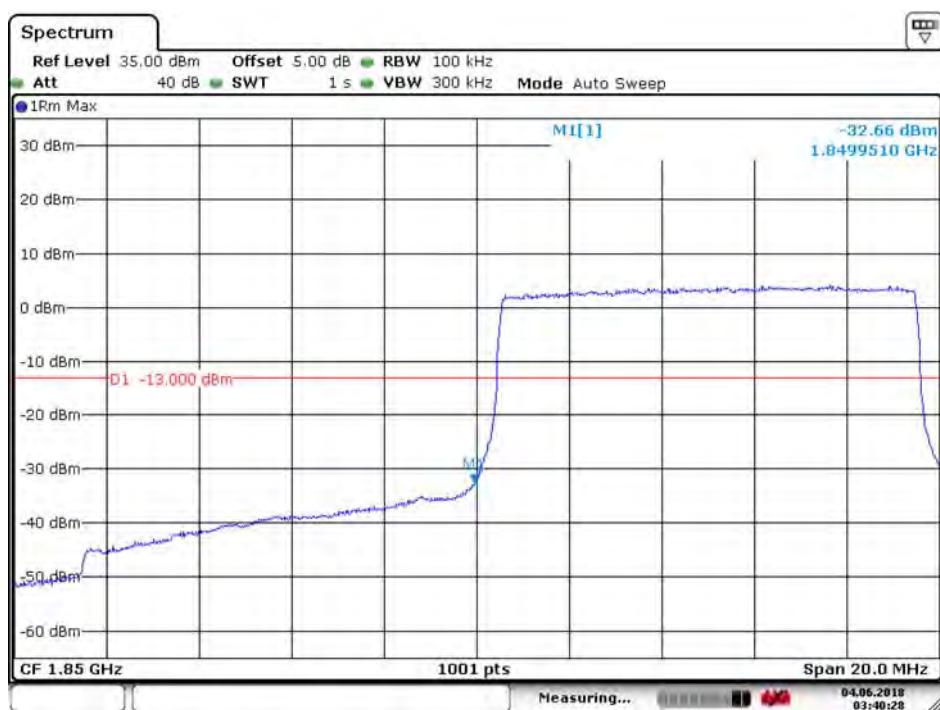
Date: 26 JUN.2018 03:42:36

**5.1.1.9.2.2 Test RB=25RB**

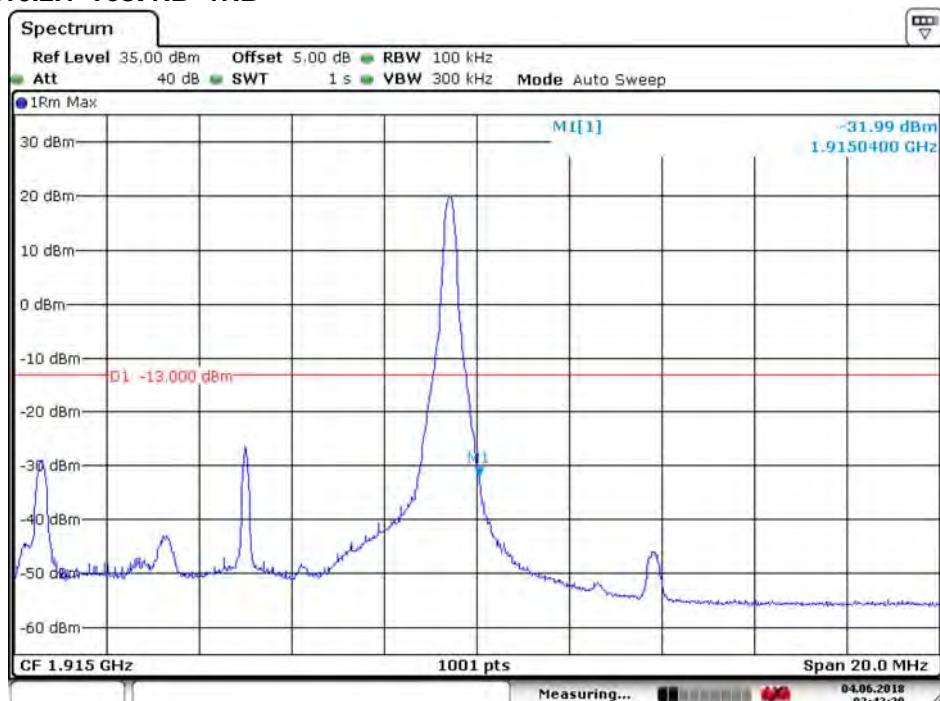
Date: 26 JUN.2018 03:43:23

**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: 4.JUN.2018 03:41:07

**5.1.1.10.1.2 Test RB=50RB**

Date: 4.JUN.2018 03:40:28

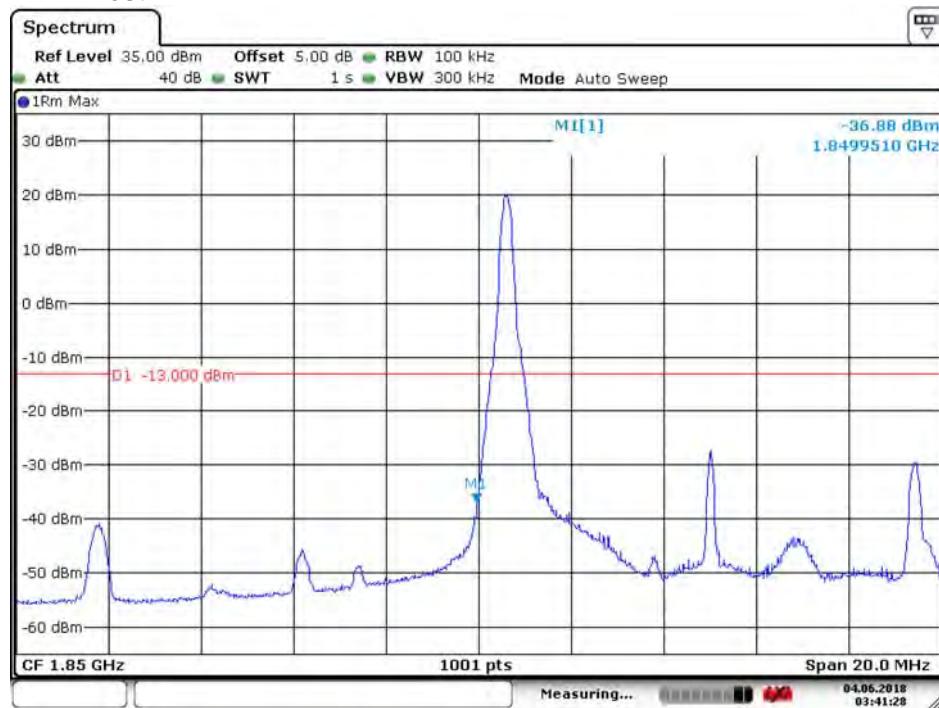
**5.1.1.10.2 Test Channel = HCH****5.1.1.10.2.1 Test RB=1RB**

Date: 4.JUN.2018 03:42:29

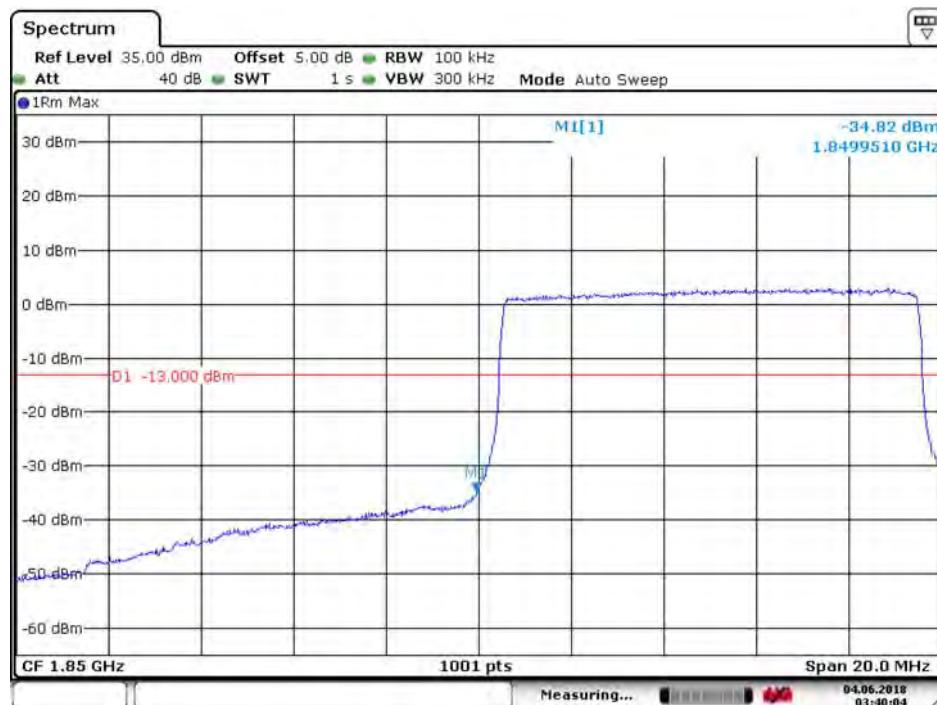
#### 5.1.1.10.2.2 Test RB=50RB



Date: 4.JUN.2018 03:42:50

**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**

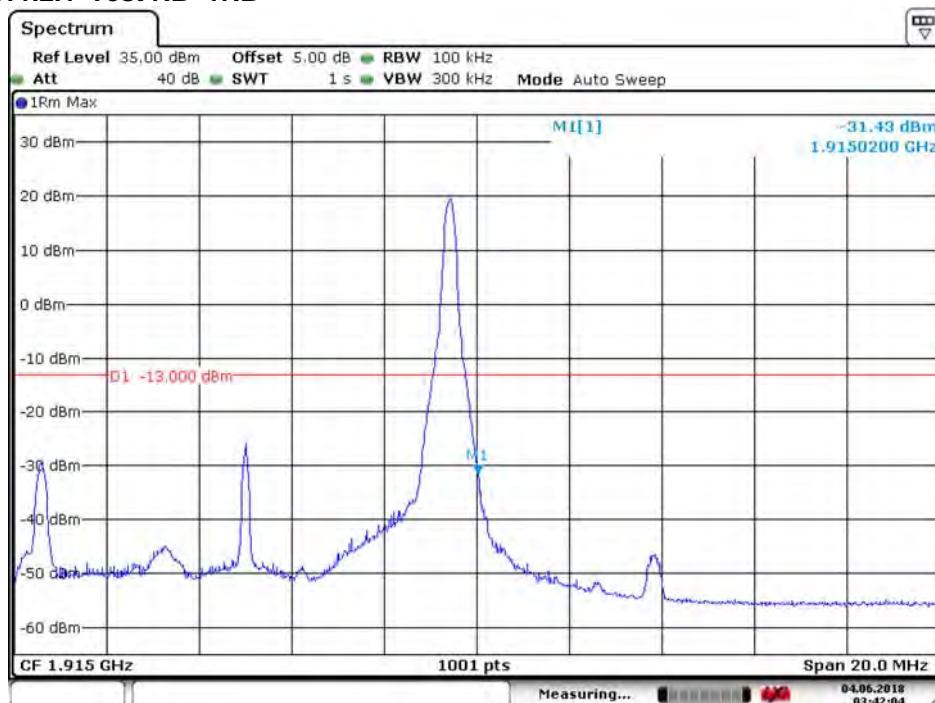
Date: 4.JUN.2018 03:41:27

**5.1.1.11.1.2 Test RB=50RB**

Date: 4.JUN.2018 03:40:05

#### 5.1.1.11.2 Test Channel = HCH

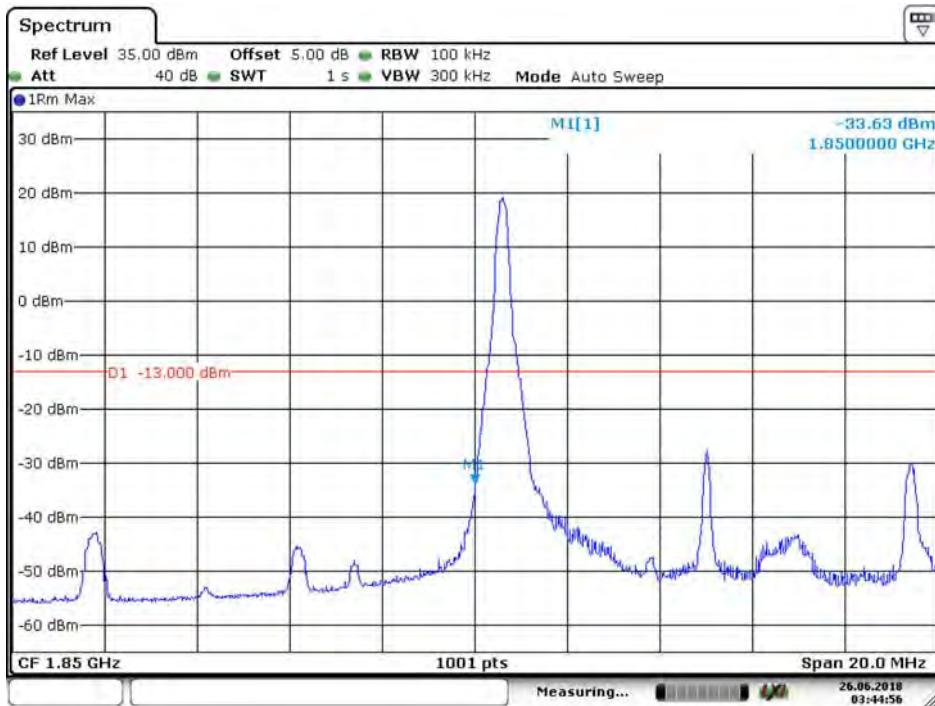
##### 5.1.1.11.2.1 Test RB=1RB



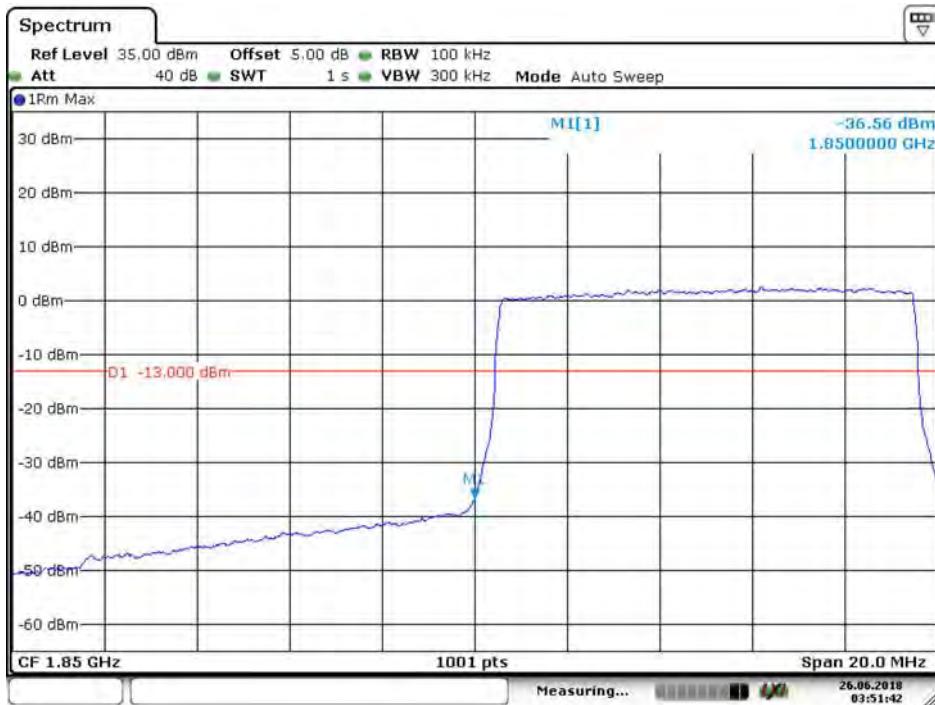
Date: 4.JUN.2018 03:42:05

**5.1.1.11.2.2 Test RB=50RB**

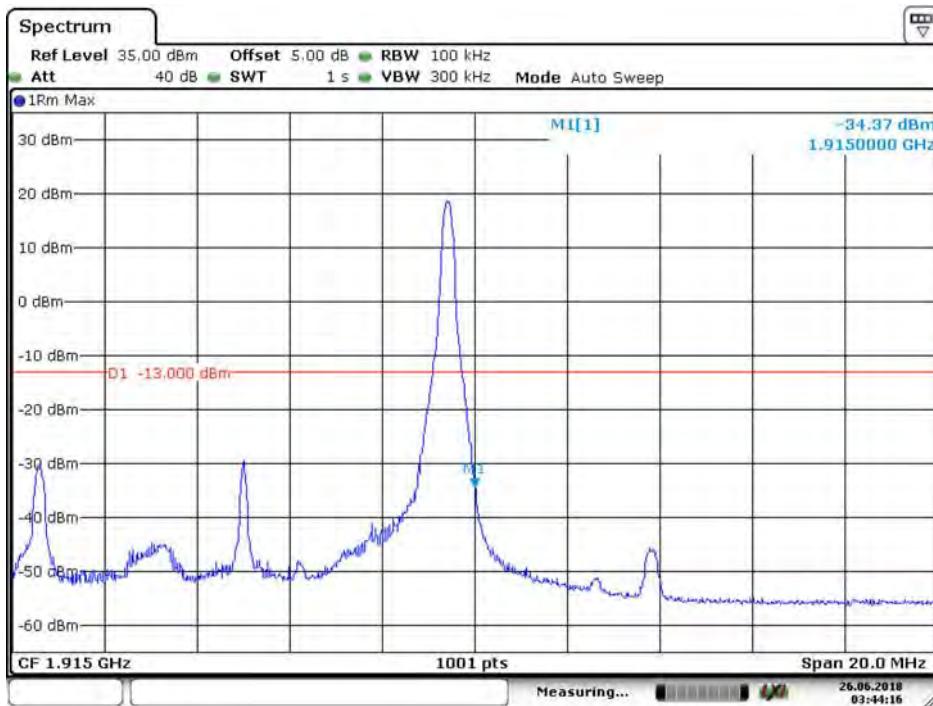
Date: 4.JUN.2018 03:43:06

**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 03:44:56

**5.1.1.12.1.2 Test RB=50RB**

Date: 26.JUN.2018 03:51:42

**5.1.1.12.2 Test Channel = HCH****5.1.1.12.2.1 Test RB=1RB**

Date: 26.JUN.2018 03:44:16

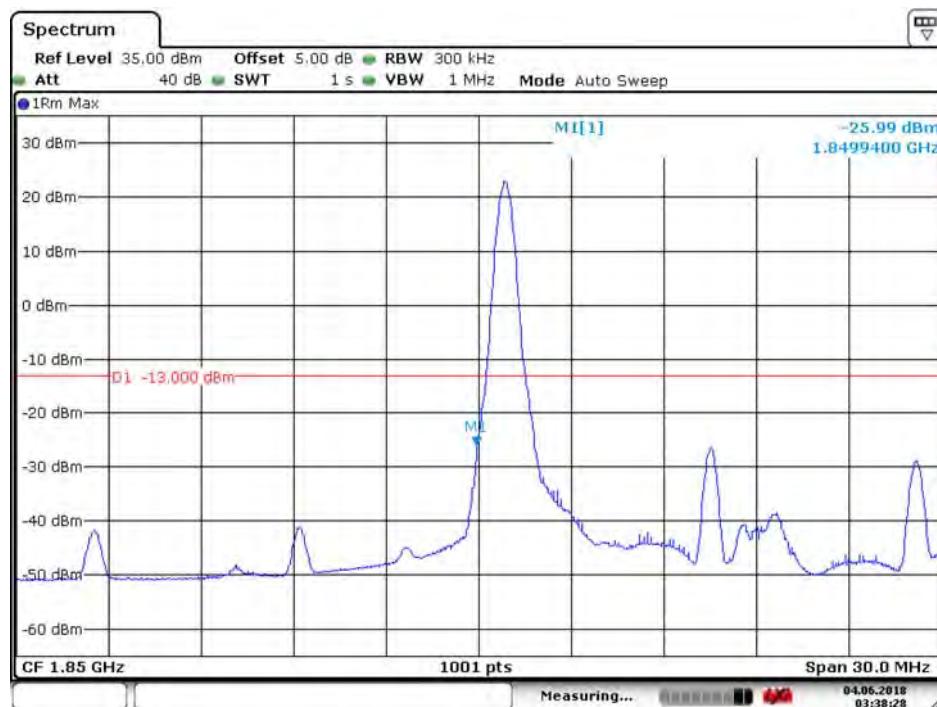
**5.1.1.12.2.2 Test RB=50RB**

Date: 26.JUN.2018 03:43:52

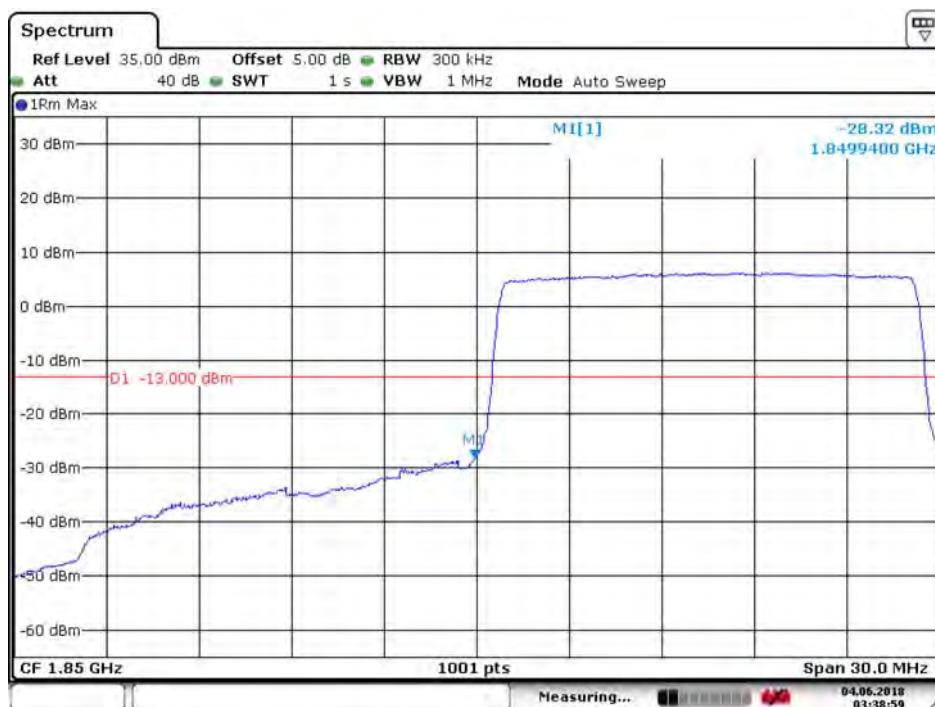
### 5.1.1.13 Test Mode = LTE/TM1 15MHz

#### 5.1.1.13.1 Test Channel = LCH

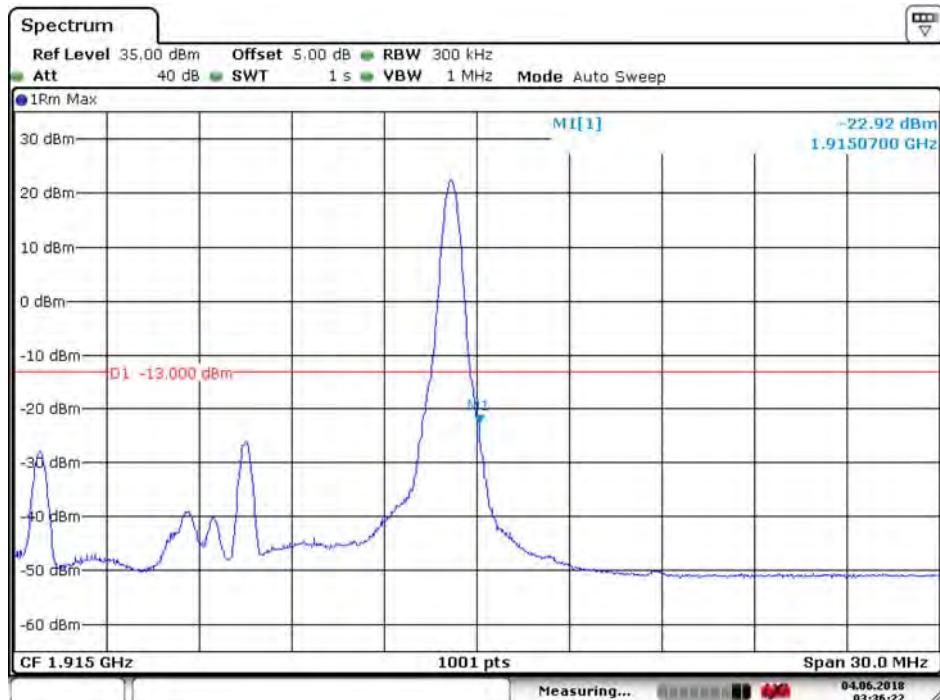
##### 5.1.1.13.1.1 Test RB=1RB



Date: 4.JUN.2018 03:38:28

**5.1.1.13.1.2 Test RB=75RB**

Date: 4.JUN.2018 03:38:59

**5.1.1.13.2 test Channel = HCH****5.1.1.13.2.1 Test RB=1RB**

Date: 4.JUN.2018 03:36:23

5.1.1.13.2.2 Test RB=75RB

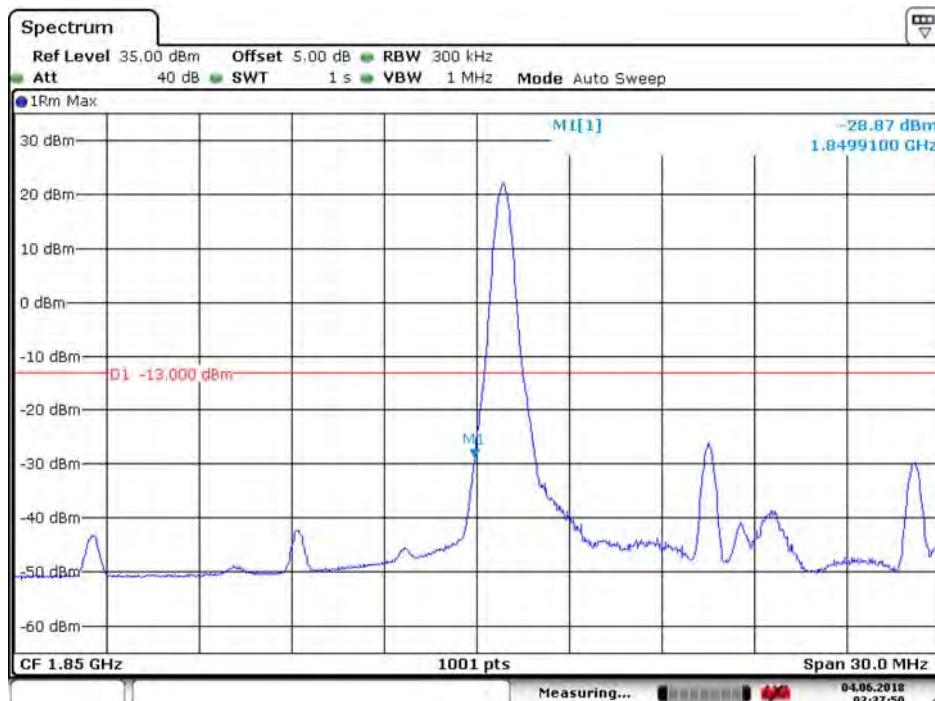


Date: 4.JUN 2018 03:35:56

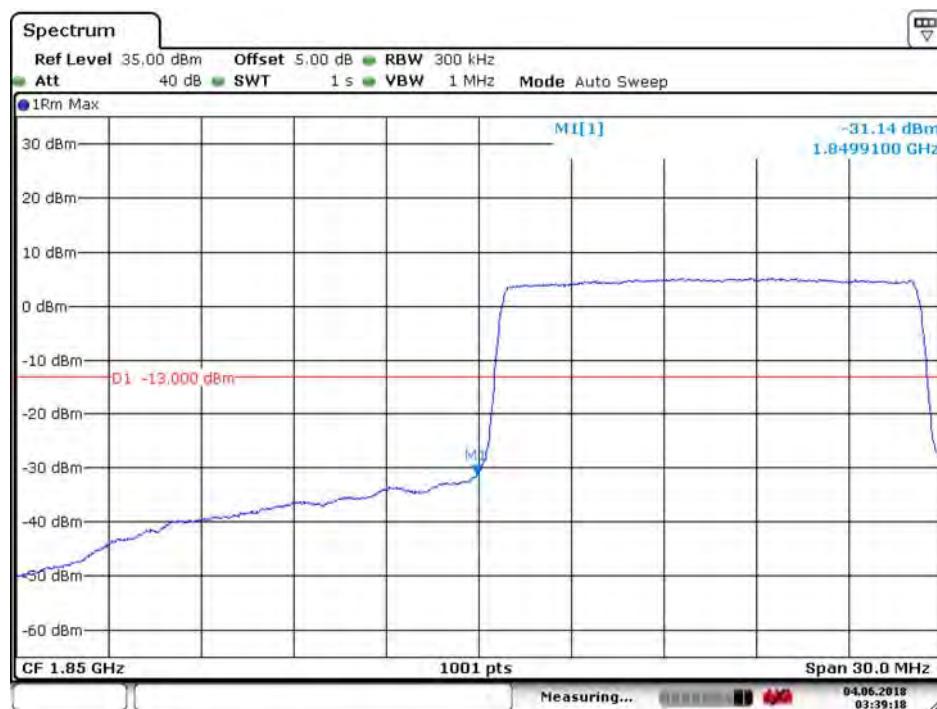
**5.1.1.14 Test Mode = LTE/TM2 15MHz**

**5.1.1.14.1 Test Channel = LCH**

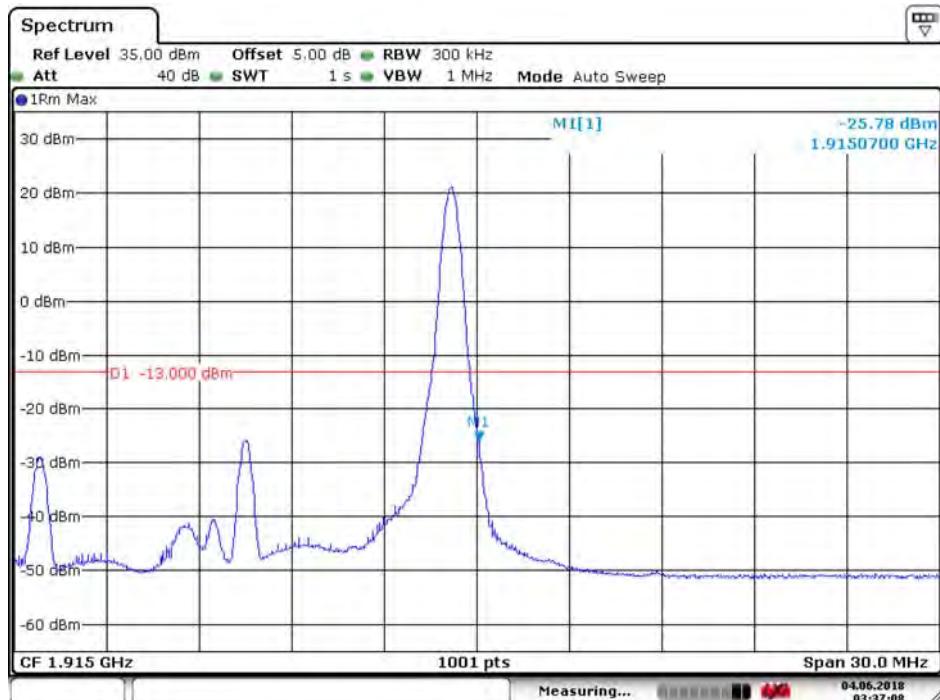
**5.1.1.14.1.1 Test RB=1RB**



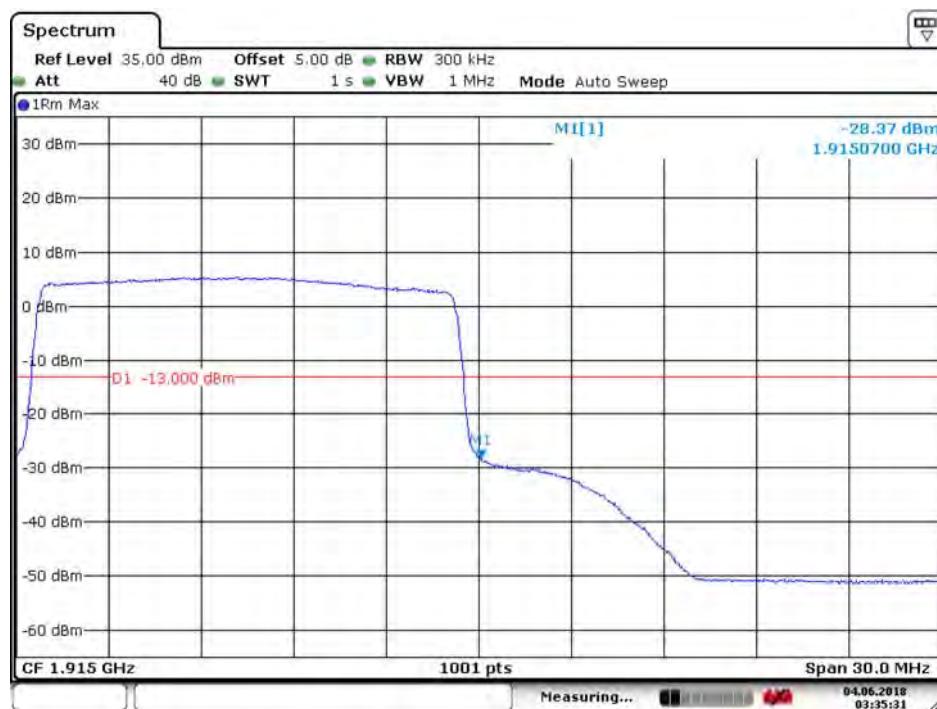
Date: 4.JUN.2018 03:37:50

**5.1.1.14.1.2 Test RB=75RB**

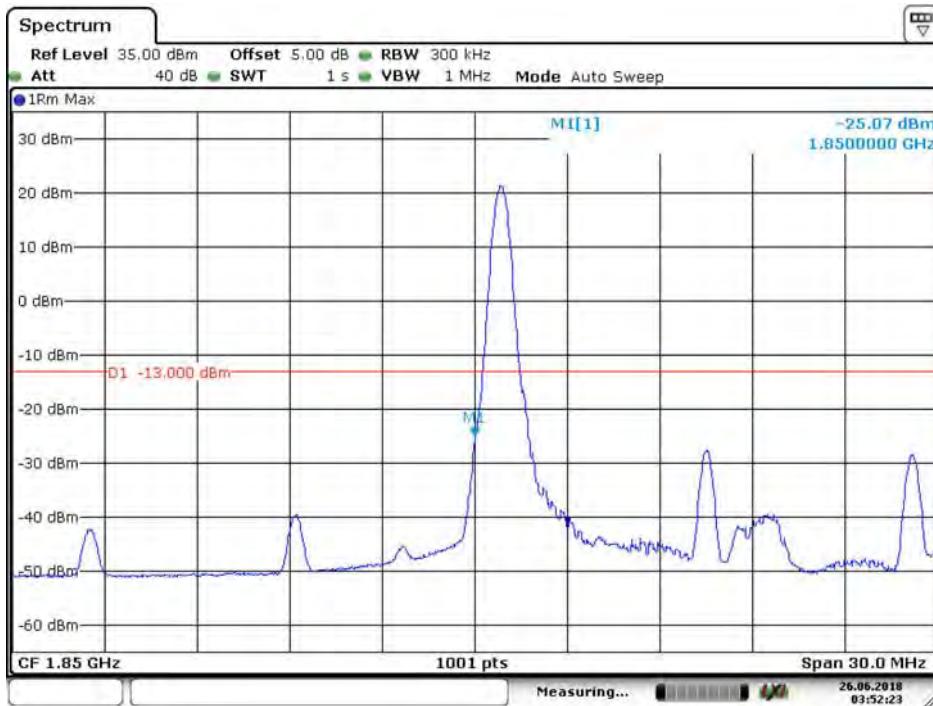
Date: 4.JUN.2018 03:39:18

**5.1.1.14.2 Test Channel = HCH****5.1.1.14.2.1 Test RB=1RB**

Date: 4.JUN.2018 03:37:09

**5.1.1.14.2.2 Test RB=75RB**

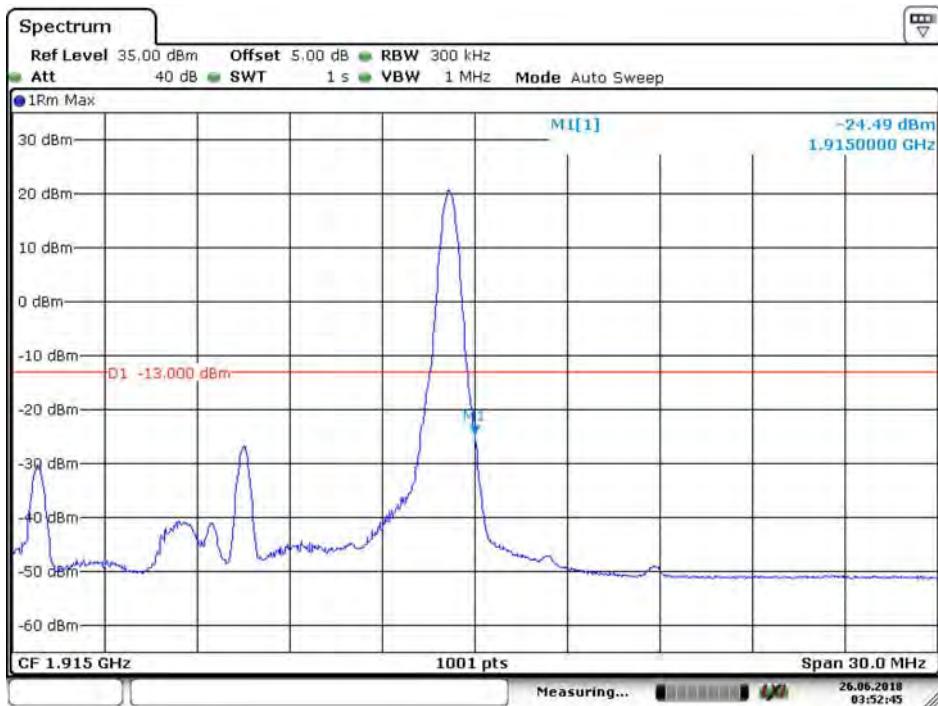
Date: 4.JUN.2018 03:35:31

**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 03:52:24

**5.1.1.15.1.2 Test RB=75RB**

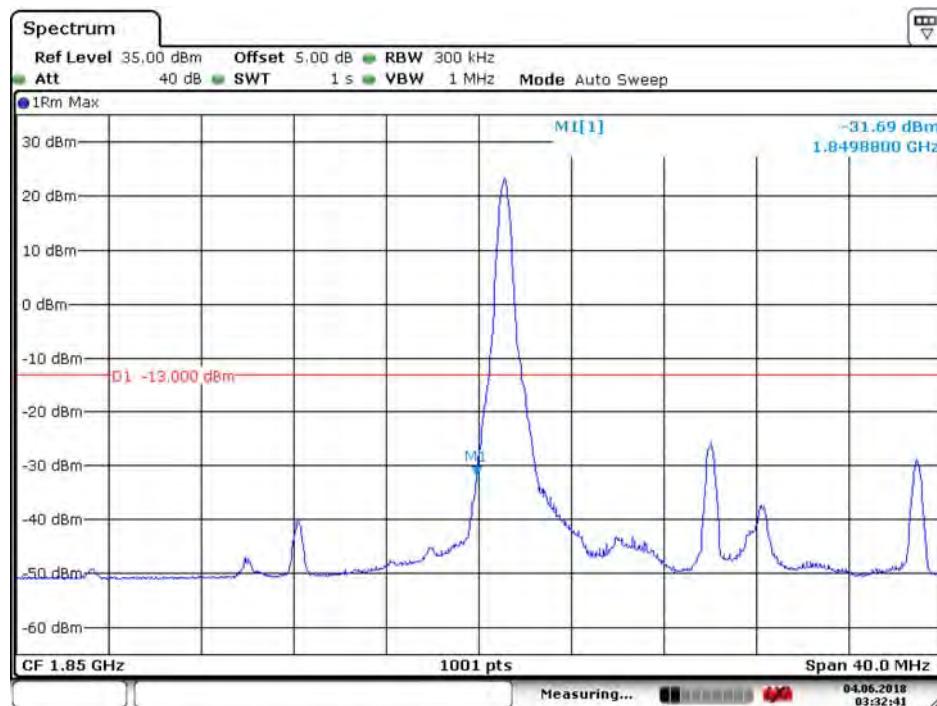
Date: 26.JUN.2018 03:52:02

**5.1.1.15.2 Test Channel = HCH****5.1.1.15.2.1 Test RB=1RB**

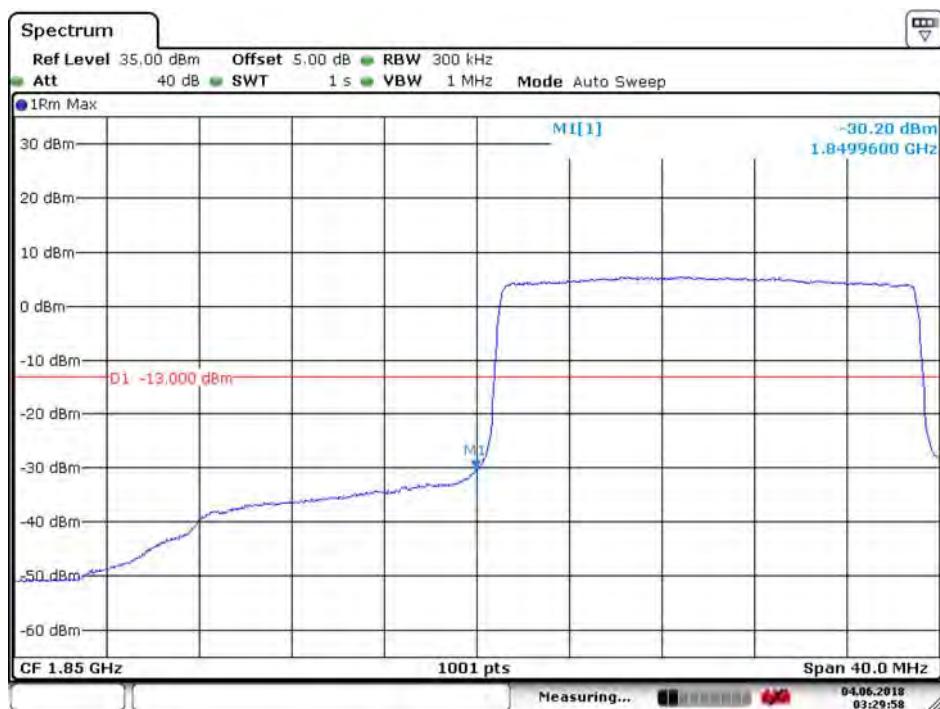
Date: 26.JUN.2018 03:52:45

**5.1.1.15.2.2 Test RB=75RB**

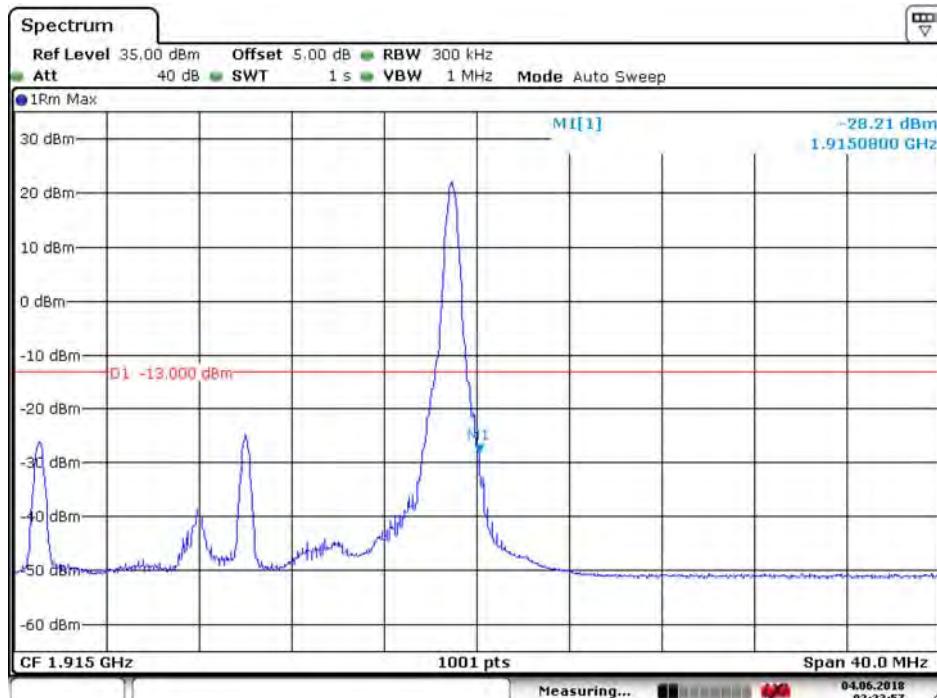
Date: 26.JUN.2018 03:52:59

**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: 4.JUN.2018 03:32:42

**5.1.1.16.1.2 Test RB=100RB**

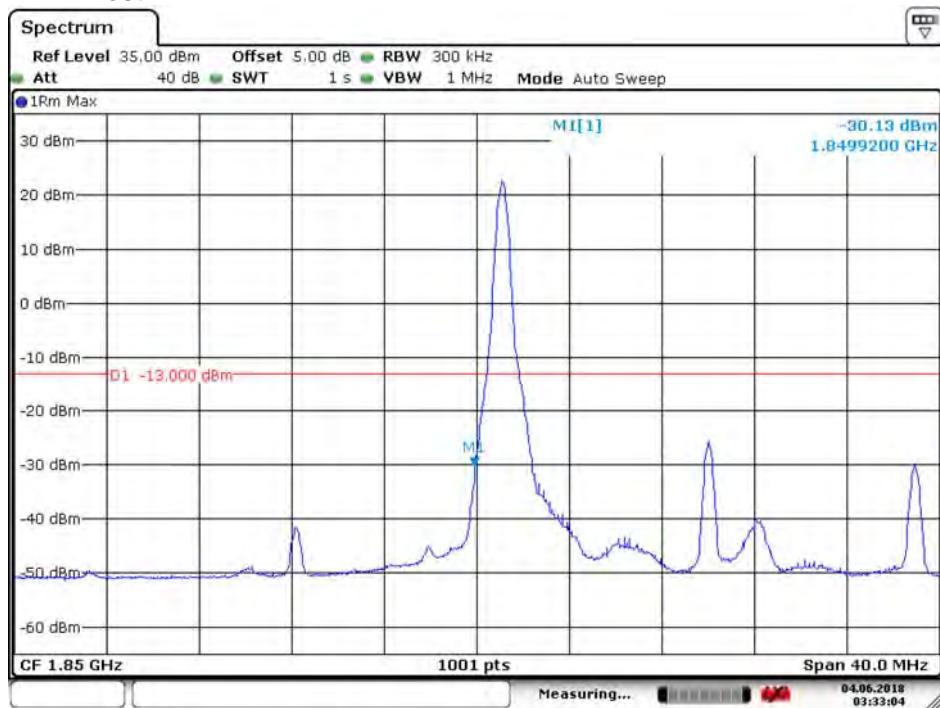
Date: 4.JUN.2018 03:29:59

**5.1.1.16.2 Test Channel = HCH****5.1.1.16.2.1 Test RB=1RB**

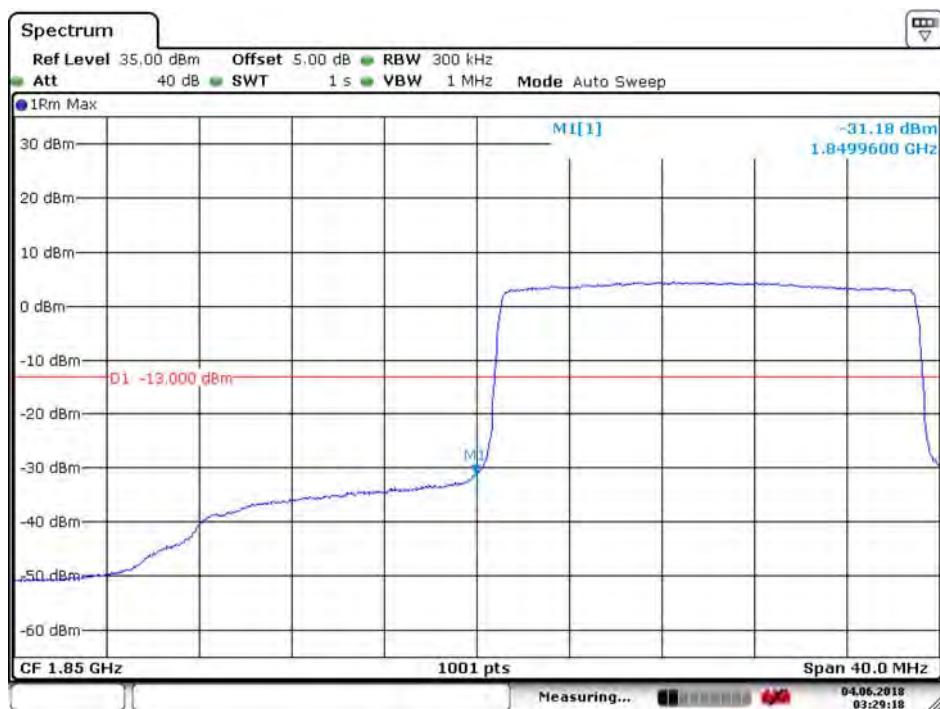
Date: 4.JUN.2018 03:33:58

**5.1.1.16.2.2 Test RB=100RB**

Date: 4.JUN.2018 03:34:24

**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**

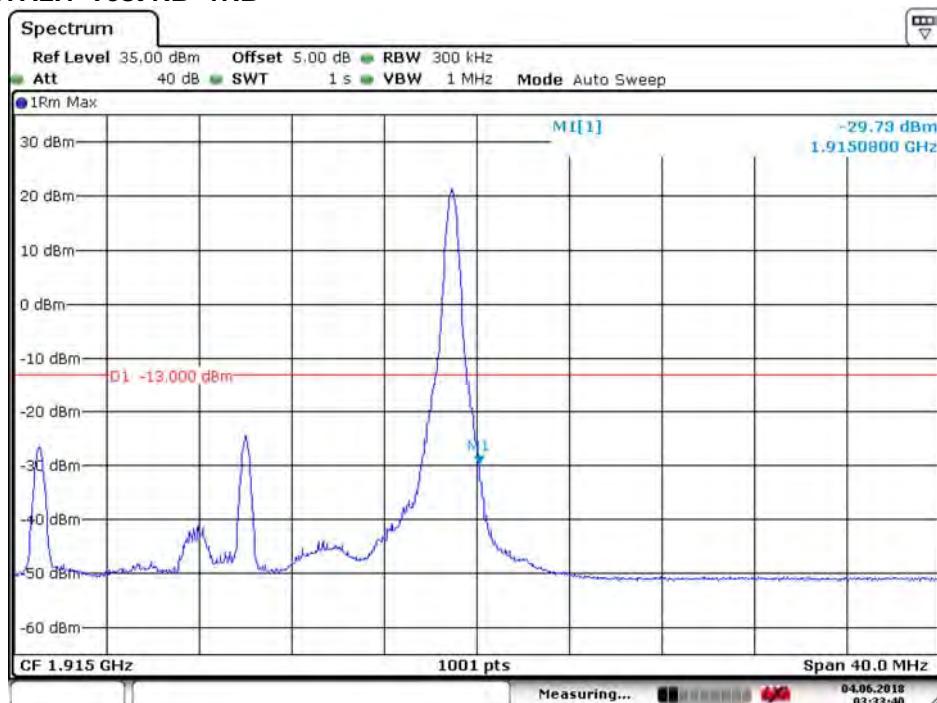
Date: 4.JUN.2018 03:33:04

**5.1.1.17.1.2 Test RB=100RB**

Date: 4.JUN.2018 03:29:19

#### 5.1.1.17.2 Test Channel = HCH

##### 5.1.1.17.2.1 Test RB=1RB



Date: 4.JUN.2018 03:33:41

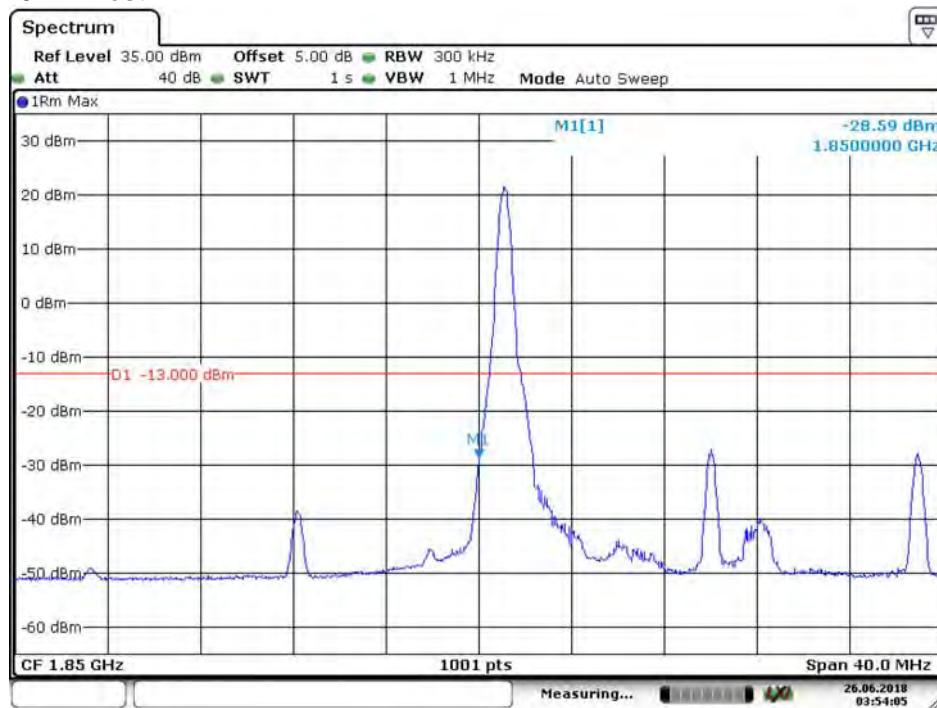
**5.1.1.17.2.2 Test RB=100RB**

Date: 4.JUN.2018 03:34:43

### 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

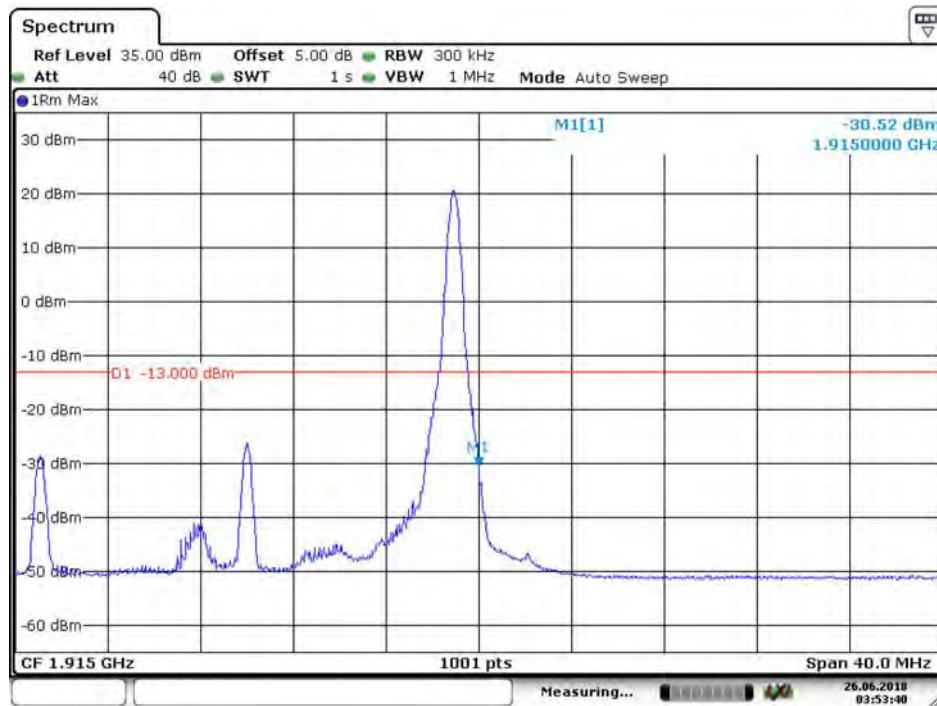


Date: 26.JUN.2018 03:54:05

##### 5.1.1.18.1.2 Test RB=100RB



Date: 26.JUN.2018 03:54:17

**5.1.1.18.2 Test Channel = HCH****5.1.1.18.2.1 Test RB=1RB**

Date: 26 JUN.2018 03:53:41

**5.1.1.18.2.2 Test RB=100RB**

Date: 26 JUN.2018 03:53:18

## 6 Spurious Emission at Antenna Terminal

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

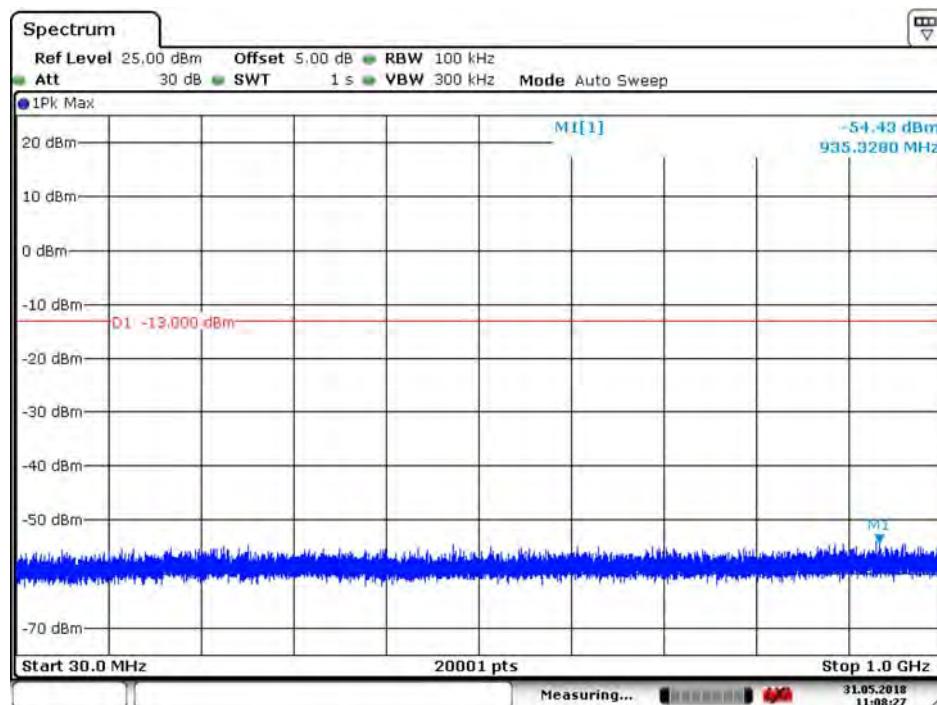
Part I - Test Plots

### 6.1 For LTE

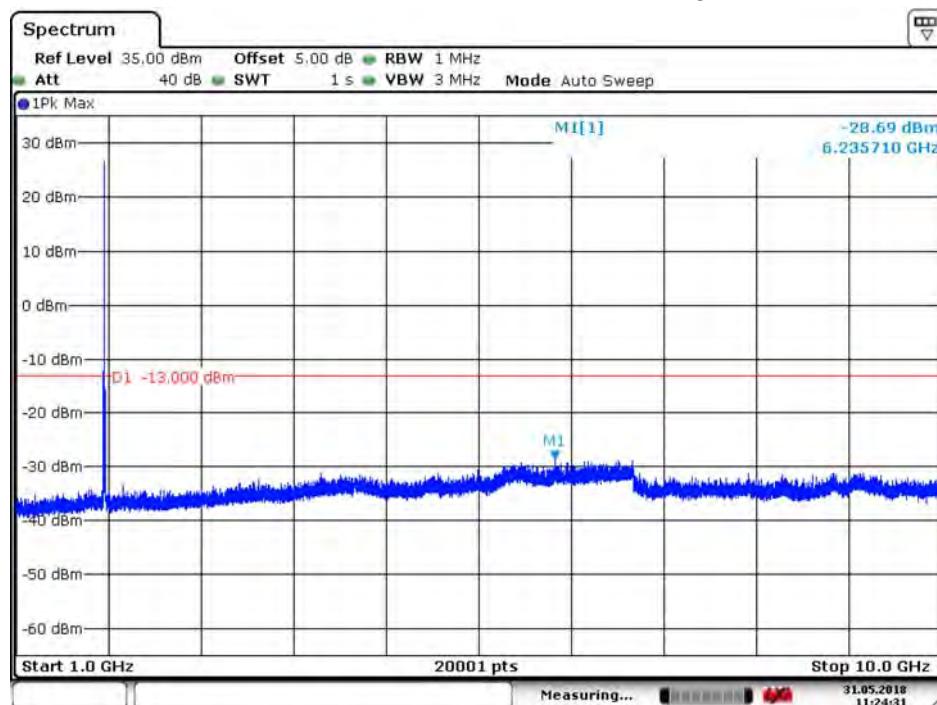
#### 6.1.1 Test Band = LTE BAND 25

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

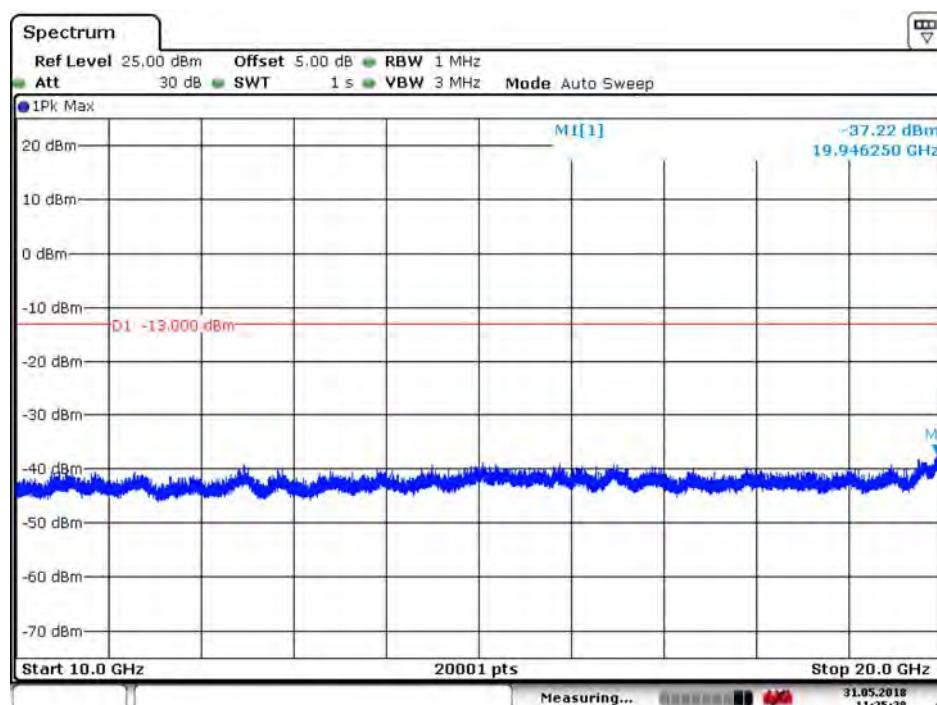
###### 6.1.1.1.1 Test Channel = LCH



Date: 31.MAY.2018 11:08:27

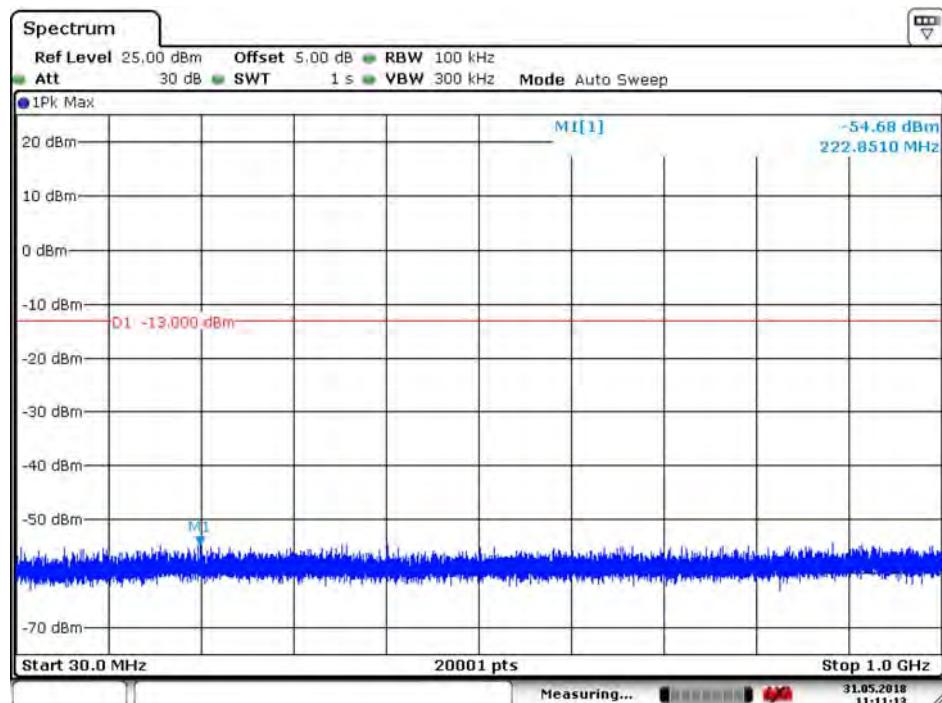
Report No.: SZEM180500453501  
 Page: 129 of 139


Date: 31.MAY.2018 11:24:32

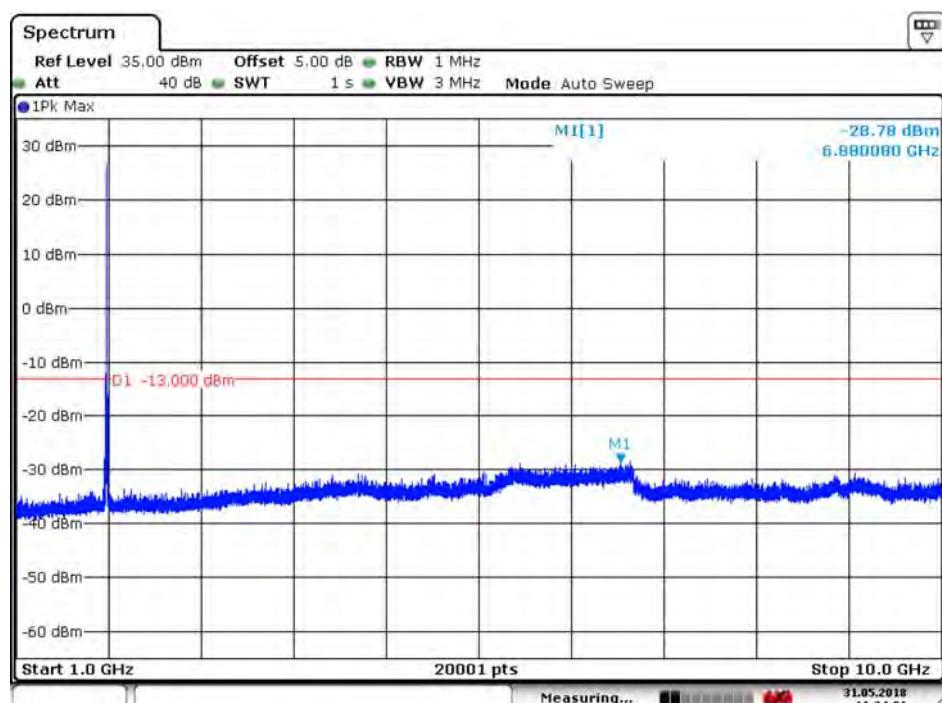


Date: 31.MAY.2018 11:25:39

#### 6.1.1.1.2 Test Channel = MCH

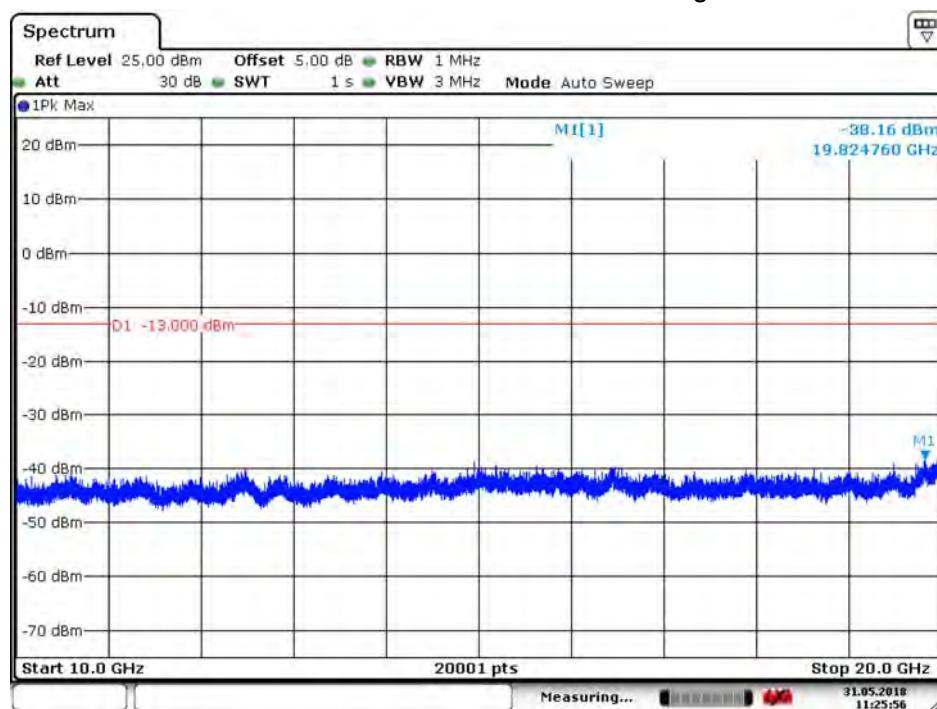


Date: 31.MAY.2018 11:11:14



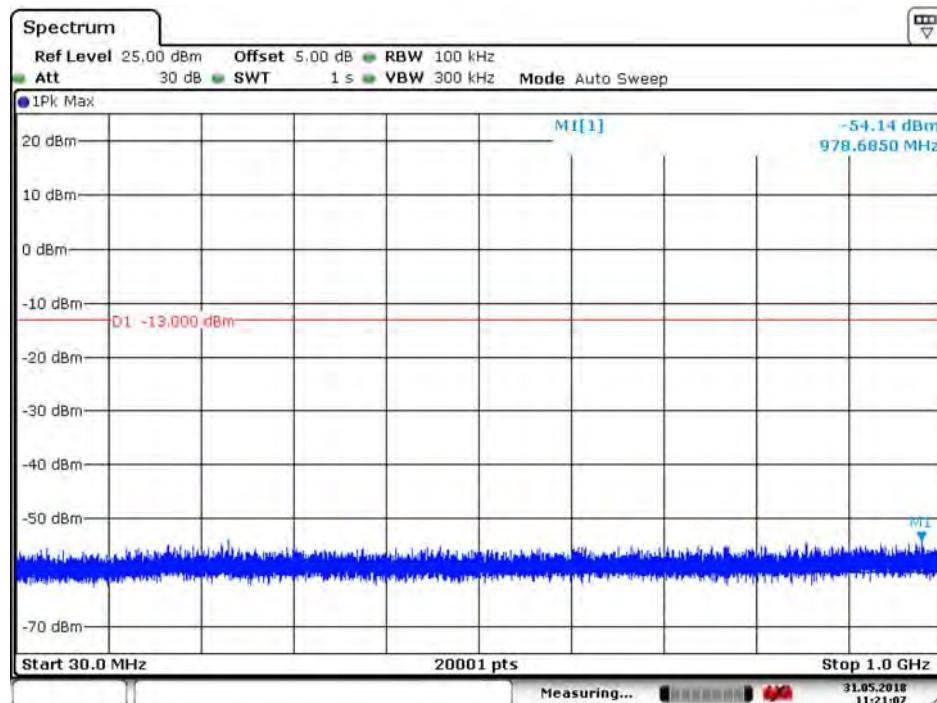
Date: 31.MAY.2018 11:24:01

Report No.: SDEM180500453501  
Page: 131 of 139

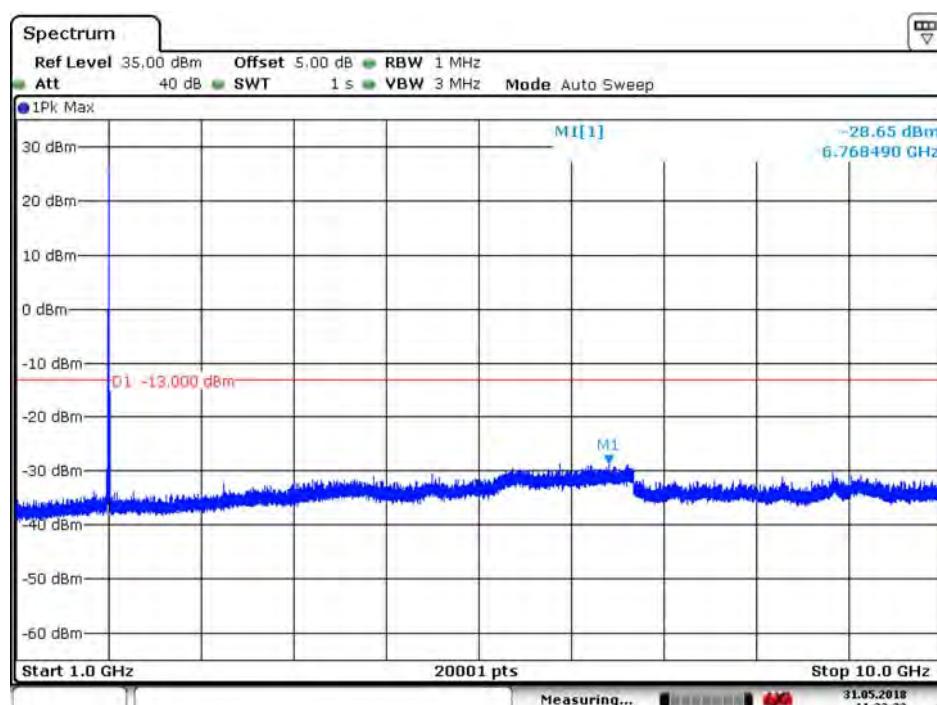


Date: 31.MAY.2018 11:25:57

#### 6.1.1.1.3 Test Channel = HCH

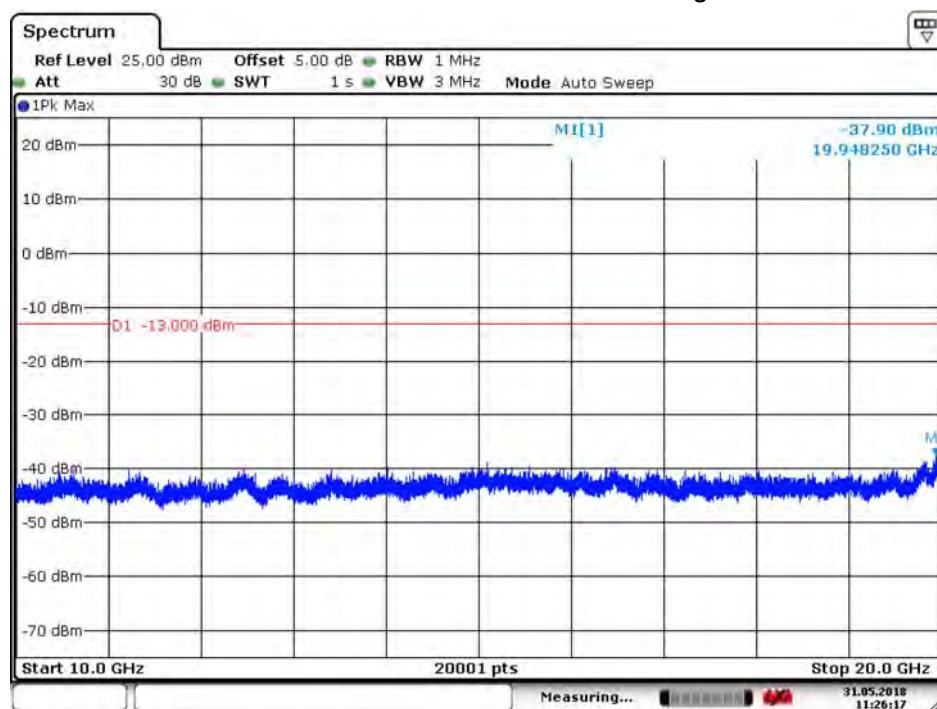


Date: 31.MAY.2018 11:21:08



Date: 31.MAY.2018 11:23:24

Report No.: SZEM180500453501  
Page: 133 of 139



Date: 31.MAY.2018 11:26:17

## 7 Field Strength of Spurious Radiation

### 7.1 For LTE

#### 7.1.1 Test Band = LTE BAND 25

##### 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
75.600000	-79.30	-13.00	66.30	Vertical
181.450000	-80.34	-13.00	67.34	Vertical
509.445833	-81.80	-13.00	68.80	Vertical
3702.000000	-65.99	-13.00	52.99	Vertical
3879.775000	-65.45	-13.00	52.45	Vertical
5552.875000	-65.72	-13.00	52.72	Vertical
56.950000	-78.42	-13.00	65.42	Horizontal
180.500000	-71.80	-13.00	58.80	Horizontal
623.800000	-79.60	-13.00	66.60	Horizontal
3702.000000	-59.07	-13.00	46.07	Horizontal
3879.775000	-61.28	-13.00	48.28	Horizontal
7191.200000	-64.63	-13.00	51.63	Horizontal

###### 7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
72.750000	-80.84	-13.00	67.84	Vertical
181.500000	-80.19	-13.00	67.19	Vertical
510.408333	-81.49	-13.00	68.49	Vertical
3764.725000	-65.00	-13.00	52.00	Vertical
3924.625000	-65.39	-13.00	52.39	Vertical
5620.800000	-64.76	-13.00	51.76	Vertical
62.550000	-77.95	-13.00	64.95	Horizontal
183.350000	-70.98	-13.00	57.98	Horizontal
623.662500	-79.92	-13.00	66.92	Horizontal
3747.175000	-62.56	-13.00	49.56	Horizontal
3924.950000	-61.80	-13.00	48.80	Horizontal
6299.400000	-65.51	-13.00	52.51	Horizontal



**7.1.1.1.3 Test Channel = HCH**

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
75.600000	-79.47	-13.00	66.47	Vertical
181.500000	-80.75	-13.00	67.75	Vertical
509.262500	-81.71	-13.00	68.71	Vertical
3809.900000	-64.50	-13.00	51.50	Vertical
3969.800000	-65.10	-13.00	52.10	Vertical
5688.075000	-64.62	-13.00	51.62	Vertical
56.400000	-77.92	-13.00	64.92	Horizontal
182.400000	-71.66	-13.00	58.66	Horizontal
622.837500	-80.35	-13.00	67.35	Horizontal
3791.700000	-63.32	-13.00	50.32	Horizontal
3792.025000	-62.40	-13.00	49.40	Horizontal
6482.050000	-64.87	-13.00	51.87	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 25	LTE/TM1 20MHz	LCH	TN	VL	-9.33	-0.00502	PASS
				VN	7.00	0.00376	PASS
				VH	-3.61	-0.00194	PASS
		MCH	TN	VL	8.96	0.00476	PASS
				VN	6.50	0.00345	PASS
				VH	-1.74	-0.00093	PASS
		HCH	TN	VL	-7.51	-0.00394	PASS
				VN	1.59	0.00084	PASS
				VH	9.10	0.00478	PASS
	LTE/TM2 20MHz	LCH	TN	VL	8.86	0.00476	PASS
				VN	-5.28	-0.00284	PASS
				VH	4.72	0.00254	PASS
		MCH	TN	VL	0.52	0.00028	PASS
				VN	-2.54	-0.00135	PASS
				VH	0.54	0.00029	PASS
		HCH	TN	VL	3.79	0.00199	PASS
				VN	3.69	0.00194	PASS
				VH	7.91	0.00415	PASS
	LTE/TM3 20MHz	LCH	TN	VL	-9.01	-0.004845	PASS
				VN	-6.63	-0.003562	PASS
				VH	-6.06	-0.003257	PASS
		MCH	TN	VL	5.73	0.003045	PASS
				VN	0.63	0.000334	PASS
				VH	-4.03	-0.002141	PASS
		HCH	TN	VL	3.07	0.001614	PASS
				VN	6.57	0.003449	PASS
				VH	2.17	0.001138	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
LTEBAND 25	LTE/TM1 20MHz	LCH	VN	-30	-7.53	-0.00405	PASS
				-20	4.87	0.00262	PASS
				-10	-2.01	-0.00108	PASS
				0	2.82	0.00152	PASS
				10	0.49	0.00026	PASS
				20	3.67	0.00198	PASS
				30	6.07	0.00326	PASS
				40	-7.17	-0.00386	PASS
				50	7.33	0.00394	PASS
		MCH	VN	-30	-5.63	-0.00299	PASS
				-20	9.69	0.00515	PASS
				-10	5.86	0.00311	PASS
				0	-7.24	-0.00385	PASS
				10	3.92	0.00208	PASS
				20	-4.10	-0.00218	PASS
				30	9.58	0.00509	PASS
				40	-5.42	-0.00288	PASS
				50	0.02	0.00001	PASS
		HCH	VN	-30	-0.76	-0.00040	PASS
				-20	8.02	0.00421	PASS
				-10	3.18	0.00167	PASS
				0	9.86	0.00518	PASS
				10	9.86	0.00518	PASS
				20	-0.33	-0.00017	PASS
				30	5.69	0.00299	PASS
				40	7.28	0.00382	PASS
				50	4.65	0.00244	PASS



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

Report No.: SZEM180500453501  
Page: 138 of 139

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEBAND 25	LTE/TM2 20MHz	LCH	VN	-30	-5.17	-0.00278	PASS
				-20	-9.78	-0.00526	PASS
				-10	2.45	0.00132	PASS
				0	-6.61	-0.00355	PASS
				10	-1.13	-0.00061	PASS
				20	0.78	0.00042	PASS
				30	-4.56	-0.00245	PASS
				40	2.81	0.00151	PASS
				50	-4.71	-0.00253	PASS
		MCH	VN	-30	4.22	0.00224	PASS
				-20	-3.76	-0.00200	PASS
				-10	4.60	0.00244	PASS
				0	1.17	0.00062	PASS
				10	1.12	0.00060	PASS
				20	6.98	0.00371	PASS
				30	-9.27	-0.00493	PASS
				40	3.83	0.00203	PASS
				50	2.62	0.00139	PASS
		HCH	VN	-30	9.77	0.00513	PASS
				-20	5.00	0.00263	PASS
				-10	5.22	0.00274	PASS
				0	6.57	0.00345	PASS
				10	-8.73	-0.00458	PASS
				20	-4.29	-0.00225	PASS
				30	1.09	0.00057	PASS
				40	-4.62	-0.00242	PASS
				50	-0.26	-0.00014	PASS



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

Report No.: SZEM180500453501  
Page: 139 of 139

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTEBAND 25	LTE/TM3 20MHz	LCH	VN	-30	-7.66	-0.004118	PASS
				-20	-4.92	-0.002645	PASS
				-10	6.98	0.003753	PASS
				0	-6.61	-0.003556	PASS
				10	3.65	0.001964	PASS
				20	-0.80	-0.000431	PASS
				30	-6.19	-0.003330	PASS
				40	-0.10	-0.000052	PASS
				50	3.49	0.001876	PASS
		MCH	VN	-30	-8.23	-0.004372	PASS
				-20	6.70	0.003560	PASS
				-10	-3.39	-0.001802	PASS
				0	7.70	0.004092	PASS
				10	-7.88	-0.004187	PASS
				20	5.58	0.002962	PASS
				30	-3.12	-0.001659	PASS
				40	0.47	0.000252	PASS
				50	-4.12	-0.002190	PASS
		HCH	VN	-30	6.43	0.003375	PASS
				-20	-5.37	-0.002819	PASS
				-10	8.00	0.004199	PASS
				0	-2.39	-0.001253	PASS
				10	-5.87	-0.003079	PASS
				20	-3.49	-0.001834	PASS
				30	1.53	0.000806	PASS
				40	-3.52	-0.001848	PASS
				50	-2.45	-0.001288	PASS

---

The End