

Appendix B

E-UTRA Band26 (824-849)

CONTENT

	Page
1 EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA.....	3
2 PEAK-TO-AVERAGE RATIO	13
2.1 FOR LTE	13
2.1.1 <i>Test Band = LTE band26.....</i>	13
3 MODULATION CHARACTERISTICS	19
3.1 FOR LTE	19
3.1.1 <i>Test Band = LTE band26.....</i>	19
4 BANDWIDTH	21
4.1 FOR LTE	22
4.1.1 <i>Test Band = LTE band26.....</i>	22
5 BAND EDGES COMPLIANCE	52
5.1 FOR LTE	52
5.1.1 <i>Test Band = LTE band26.....</i>	52
6 SPURIOUS EMISSION AT ANTENNA TERMINAL.....	60
6.1 FOR LTE	60
7 FIELD STRENGTH OF SPURIOUS RADIATION	66
7.1 FOR LTE	66
7.1.1 <i>Test Band = LTE band 26.....</i>	66
8 FREQUENCY STABILITY	68
8.1 FREQUENCY ERROR VS. VOLTAGE	68
8.2 FREQUENCY ERROR VS. TEMPERATURE	69

1 Effective (Isotropic) Radiated Power Output Data

Effective Radiated Power of Transmitter (ERP) for LTE BAND 26

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND26	LTE/TM1	1.4M	LCH	RB1#0	23.62	22.27	38.45	PASS
				RB1#2	23.73	21.58	38.45	PASS
				RB1#5	23.55	21.4	38.45	PASS
				RB3#0	23.56	21.41	38.45	PASS
				RB3#2	23.64	21.49	38.45	PASS
				RB3#3	23.77	21.62	38.45	PASS
				RB6#0	22.46	20.31	38.45	PASS
			MCH	RB1#0	23.48	21.33	38.45	PASS
				RB1#2	23.64	21.49	38.45	PASS
				RB1#5	23.47	21.32	38.45	PASS
				RB3#0	23.6	21.45	38.45	PASS
				RB3#2	23.59	21.44	38.45	PASS
				RB3#3	23.65	21.5	38.45	PASS
				RB6#0	22.6	20.45	38.45	PASS
			HCH	RB1#0	23.48	21.33	38.45	PASS
				RB1#2	23.46	21.31	38.45	PASS
				RB1#5	23.27	21.12	38.45	PASS
				RB3#0	23.41	21.26	38.45	PASS
				RB3#2	23.33	21.18	38.45	PASS
				RB3#3	23.38	21.23	38.45	PASS
				RB6#0	22.31	20.16	38.45	PASS



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

Report No.: SZEM180600492001

Page: 4 of 70

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND26	LTE/TM2	1.4M	LCH	RB1#0	21.8	20.45	38.45	PASS
				RB1#2	22.14	19.99	38.45	PASS
				RB1#5	21.76	19.61	38.45	PASS
				RB3#0	22.48	20.33	38.45	PASS
				RB3#2	22.51	20.36	38.45	PASS
				RB3#3	22.52	20.37	38.45	PASS
				RB6#0	21.42	19.27	38.45	PASS
			MCH	RB1#0	22.2	20.05	38.45	PASS
				RB1#2	22.2	20.05	38.45	PASS
				RB1#5	21.52	19.37	38.45	PASS
				RB3#0	22.43	20.28	38.45	PASS
				RB3#2	22.67	20.52	38.45	PASS
				RB3#3	22.58	20.43	38.45	PASS
				RB6#0	21.51	19.36	38.45	PASS
			HCH	RB1#0	21.73	19.58	38.45	PASS
				RB1#2	22.11	19.96	38.45	PASS
				RB1#5	21.26	19.11	38.45	PASS
				RB3#0	22.08	19.93	38.45	PASS
				RB3#2	22.09	19.94	38.45	PASS
				RB3#3	22.23	20.08	38.45	PASS
				RB6#0	21.19	19.04	38.45	PASS



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

Report No.: SZEM180600492001

Page: 5 of 70

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND26	LTE/TM1	3M	LCH	RB1#0	23.66	22.31	38.45	PASS
				RB1#7	23.45	21.3	38.45	PASS
				RB1#14	23.09	20.94	38.45	PASS
				RB8#0	22.47	20.32	38.45	PASS
				RB8#4	22.56	20.41	38.45	PASS
				RB8#7	22.33	20.18	38.45	PASS
				RB15#0	22.54	20.39	38.45	PASS
			MCH	RB1#0	23.36	21.21	38.45	PASS
				RB1#7	23.57	21.42	38.45	PASS
				RB1#14	23.37	21.22	38.45	PASS
				RB8#0	22.5	20.35	38.45	PASS
				RB8#4	22.53	20.38	38.45	PASS
				RB8#7	22.44	20.29	38.45	PASS
				RB15#0	22.49	20.34	38.45	PASS
			HCH	RB1#0	23.61	21.46	38.45	PASS
				RB1#7	23.45	21.3	38.45	PASS
				RB1#14	23.04	20.89	38.45	PASS
				RB8#0	22.39	20.24	38.45	PASS
				RB8#4	22.34	20.19	38.45	PASS
				RB8#7	22.28	20.13	38.45	PASS
				RB15#0	22.42	20.27	38.45	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND26	LTE/TM2	3M	LCH	RB1#0	22.11	20.76	38.45	PASS
				RB1#7	22.11	19.96	38.45	PASS
				RB1#14	22.05	19.9	38.45	PASS
				RB8#0	21.5	19.35	38.45	PASS
				RB8#4	21.61	19.46	38.45	PASS
				RB8#7	21.77	19.62	38.45	PASS
				RB15#0	21.7	19.55	38.45	PASS
			MCH	RB1#0	22.43	20.28	38.45	PASS
				RB1#7	22.13	19.98	38.45	PASS
				RB1#14	22.1	19.95	38.45	PASS
				RB8#0	21.66	19.51	38.45	PASS
				RB8#4	21.63	19.48	38.45	PASS
				RB8#7	21.57	19.42	38.45	PASS
				RB15#0	21.62	19.47	38.45	PASS
			HCH	RB1#0	22.28	20.13	38.45	PASS
				RB1#7	21.65	19.5	38.45	PASS
				RB1#14	21.79	19.64	38.45	PASS
				RB8#0	21.45	19.3	38.45	PASS
				RB8#4	21.31	19.16	38.45	PASS
				RB8#7	21.39	19.24	38.45	PASS
				RB15#0	21.28	19.13	38.45	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND26	LTE/TM1	5M	LCH	RB1#0	23.61	22.26	38.45	PASS
				RB1#13	23.55	21.4	38.45	PASS
				RB1#24	23.23	21.08	38.45	PASS
				RB12#0	22.56	20.41	38.45	PASS
				RB12#6	22.53	20.38	38.45	PASS
				RB12#13	22.37	20.22	38.45	PASS
				RB25#0	22.4	20.25	38.45	PASS
			MCH	RB1#0	23.58	21.43	38.45	PASS
				RB1#13	23.66	21.51	38.45	PASS
				RB1#24	23.44	21.29	38.45	PASS
				RB12#0	22.34	20.19	38.45	PASS
				RB12#6	22.48	20.33	38.45	PASS
				RB12#13	22.37	20.22	38.45	PASS
				RB25#0	22.54	20.39	38.45	PASS
			HCH	RB1#0	23.38	21.23	38.45	PASS
				RB1#13	23.63	21.48	38.45	PASS
				RB1#24	23.27	21.12	38.45	PASS
				RB12#0	22.34	20.19	38.45	PASS
				RB12#6	22.41	20.26	38.45	PASS
				RB12#13	22.27	20.12	38.45	PASS
				RB25#0	22.34	20.19	38.45	PASS



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

Report No.: SZEM180600492001

Page: 8 of 70

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND26	LTE/TM2	5M	LCH	RB1#0	22.29	20.94	38.45	PASS
				RB1#13	22.54	20.39	38.45	PASS
				RB1#24	21.74	19.59	38.45	PASS
				RB12#0	21.4	19.25	38.45	PASS
				RB12#6	21.42	19.27	38.45	PASS
				RB12#13	21.23	19.08	38.45	PASS
				RB25#0	21.52	19.37	38.45	PASS
			MCH	RB1#0	22.78	20.63	38.45	PASS
				RB1#13	22.03	19.88	38.45	PASS
				RB1#24	22.12	19.97	38.45	PASS
				RB12#0	21.36	19.21	38.45	PASS
				RB12#6	21.33	19.18	38.45	PASS
				RB12#13	21.14	18.99	38.45	PASS
				RB25#0	21.62	19.47	38.45	PASS
			HCH	RB1#0	21.97	19.82	38.45	PASS
				RB1#13	21.68	19.53	38.45	PASS
				RB1#24	21.16	19.01	38.45	PASS
				RB12#0	21.38	19.23	38.45	PASS
				RB12#6	21.25	19.1	38.45	PASS
				RB12#13	21.17	19.02	38.45	PASS
				RB25#0	21.47	19.32	38.45	PASS



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

Report No.: SZEM180600492001

Page: 9 of 70

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND26	LTE/TM1	10M	LCH	RB1#0	23.5	22.15	38.45	PASS
				RB1#24	23.54	21.39	38.45	PASS
				RB1#49	23.39	21.24	38.45	PASS
				RB25#0	22.52	20.37	38.45	PASS
				RB25#12	22.55	20.4	38.45	PASS
				RB25#25	22.53	20.38	38.45	PASS
				RB50#0	22.59	20.44	38.45	PASS
			MCH	RB1#0	23.6	21.45	38.45	PASS
				RB1#24	23.73	21.58	38.45	PASS
				RB1#49	23.38	21.23	38.45	PASS
				RB25#0	22.54	20.39	38.45	PASS
				RB25#12	22.58	20.43	38.45	PASS
				RB25#25	22.41	20.26	38.45	PASS
				RB50#0	22.49	20.34	38.45	PASS
			HCH	RB1#0	23.24	21.09	38.45	PASS
				RB1#24	23.47	21.32	38.45	PASS
				RB1#49	23.54	21.39	38.45	PASS
				RB25#0	22.56	20.41	38.45	PASS
				RB25#12	22.43	20.28	38.45	PASS
				RB25#25	22.37	20.22	38.45	PASS
				RB50#0	22.47	20.32	38.45	PASS



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

Report No.: SZEM180600492001
Page: 10 of 70

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND26	LTE/TM2	10M	LCH	RB1#0	22.16	20.81	38.45	PASS
				RB1#24	22.1	19.95	38.45	PASS
				RB1#49	22.06	19.91	38.45	PASS
				RB25#0	21.64	19.49	38.45	PASS
				RB25#12	21.57	19.42	38.45	PASS
				RB25#25	21.74	19.59	38.45	PASS
				RB50#0	21.82	19.67	38.45	PASS
			MCH	RB1#0	21.88	19.73	38.45	PASS
				RB1#24	22.03	19.88	38.45	PASS
				RB1#49	22.22	20.07	38.45	PASS
				RB25#0	21.6	19.45	38.45	PASS
				RB25#12	21.56	19.41	38.45	PASS
				RB25#25	21.51	19.36	38.45	PASS
				RB50#0	21.57	19.42	38.45	PASS
			HCH	RB1#0	22.17	20.02	38.45	PASS
				RB1#24	23	20.85	38.45	PASS
				RB1#49	22.21	20.06	38.45	PASS
				RB25#0	21.47	19.32	38.45	PASS
				RB25#12	21.72	19.57	38.45	PASS
				RB25#25	21.34	19.19	38.45	PASS
				RB50#0	21.46	19.31	38.45	PASS



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

Report No.: SZEM180600492001
Page: 11 of 70

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND26	LTE/TM1	15M	LCH	RB1#0	23.72	22.37	38.45	PASS
				RB1#38	23.64	21.49	38.45	PASS
				RB1#74	23.4	21.25	38.45	PASS
				RB36#0	22.56	20.41	38.45	PASS
				RB36#18	22.63	20.48	38.45	PASS
				RB36#39	22.5	20.35	38.45	PASS
				RB75#0	22.63	20.48	38.45	PASS
			MCH	RB1#0	23.51	21.36	38.45	PASS
				RB1#38	23.68	21.53	38.45	PASS
				RB1#74	23.5	21.35	38.45	PASS
				RB36#0	22.63	20.48	38.45	PASS
				RB36#18	22.53	20.38	38.45	PASS
				RB36#39	22.46	20.31	38.45	PASS
				RB75#0	22.46	20.31	38.45	PASS
			HCH	RB1#0	23.33	21.18	38.45	PASS
				RB1#38	23.59	21.44	38.45	PASS
				RB1#74	23.34	21.19	38.45	PASS
				RB36#0	22.61	20.46	38.45	PASS
				RB36#18	22.46	20.31	38.45	PASS
				RB36#39	22.53	20.38	38.45	PASS
				RB75#0	22.58	20.43	38.45	PASS

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
BAND26	LTE/TM2	15M	LCH	RB1#0	23.04	21.69	38.45	PASS
				RB1#38	23.05	20.9	38.45	PASS
				RB1#74	22.56	20.41	38.45	PASS
				RB36#0	21.49	19.34	38.45	PASS
				RB36#18	21.64	19.49	38.45	PASS
				RB36#39	21.48	19.33	38.45	PASS
				RB75#0	21.63	19.48	38.45	PASS
			MCH	RB1#0	22.2	20.05	38.45	PASS
				RB1#38	22.09	19.94	38.45	PASS
				RB1#74	22.02	19.87	38.45	PASS
				RB36#0	21.64	19.49	38.45	PASS
				RB36#18	21.53	19.38	38.45	PASS
				RB36#39	21.48	19.33	38.45	PASS
				RB75#0	21.58	19.43	38.45	PASS
			HCH	RB1#0	22.2	20.05	38.45	PASS
				RB1#38	22.27	20.12	38.45	PASS
				RB1#74	21.77	19.62	38.45	PASS
				RB36#0	21.65	19.5	38.45	PASS
				RB36#18	21.45	19.3	38.45	PASS
				RB36#39	21.47	19.32	38.45	PASS
				RB75#0	21.67	19.52	38.45	PASS

Note:

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

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

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 26	TM1/15M	LCH	5.28	13	PASS
		MCH	6.14	13	PASS
		HCH	5.19	13	PASS
	TM2/15M	LCH	6.06	13	PASS
		MCH	5.39	13	PASS
		HCH	6.20	13	PASS

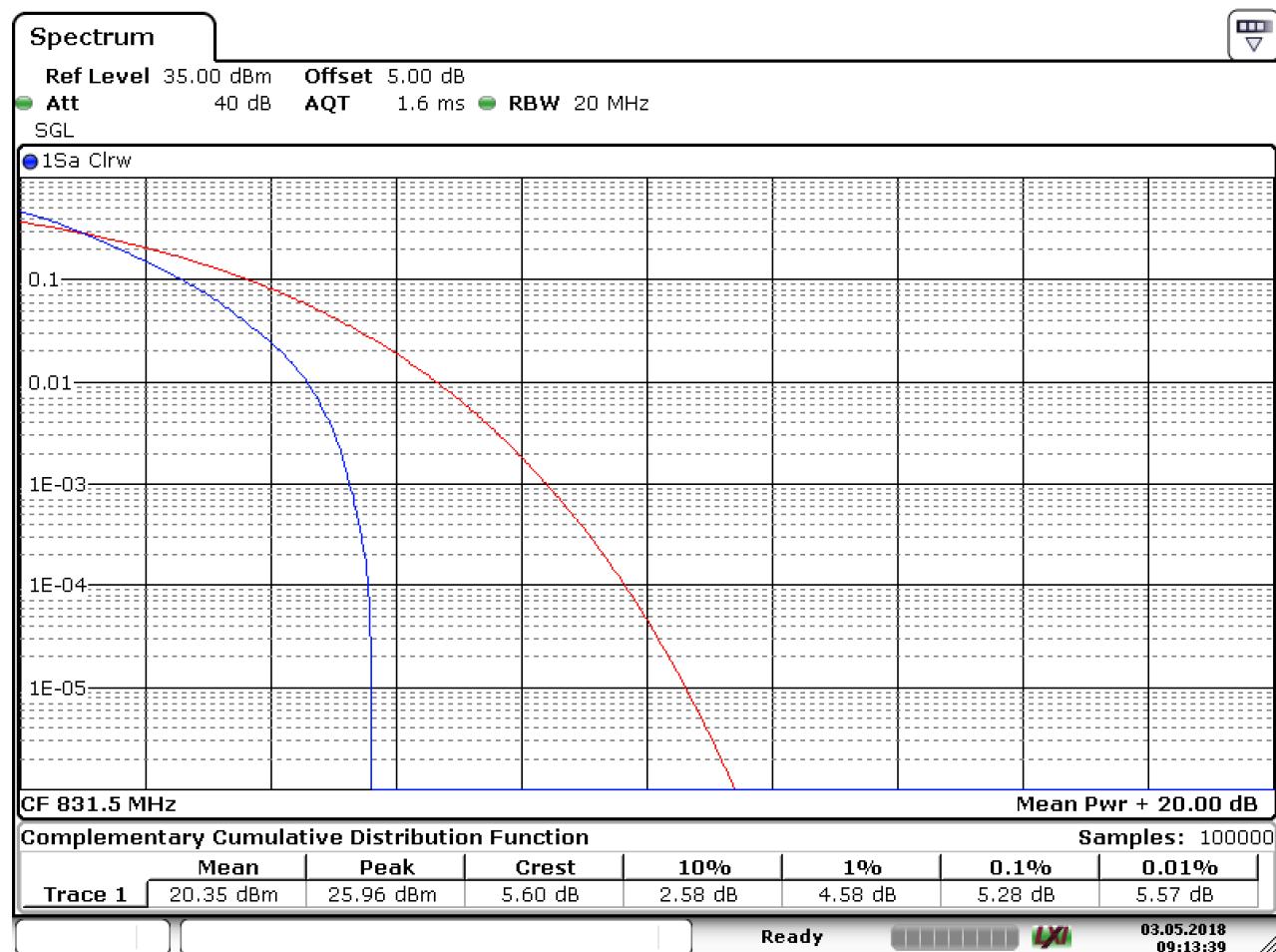
Part II - Test Plots

2.1 For LTE

2.1.1 Test Band = LTE band26

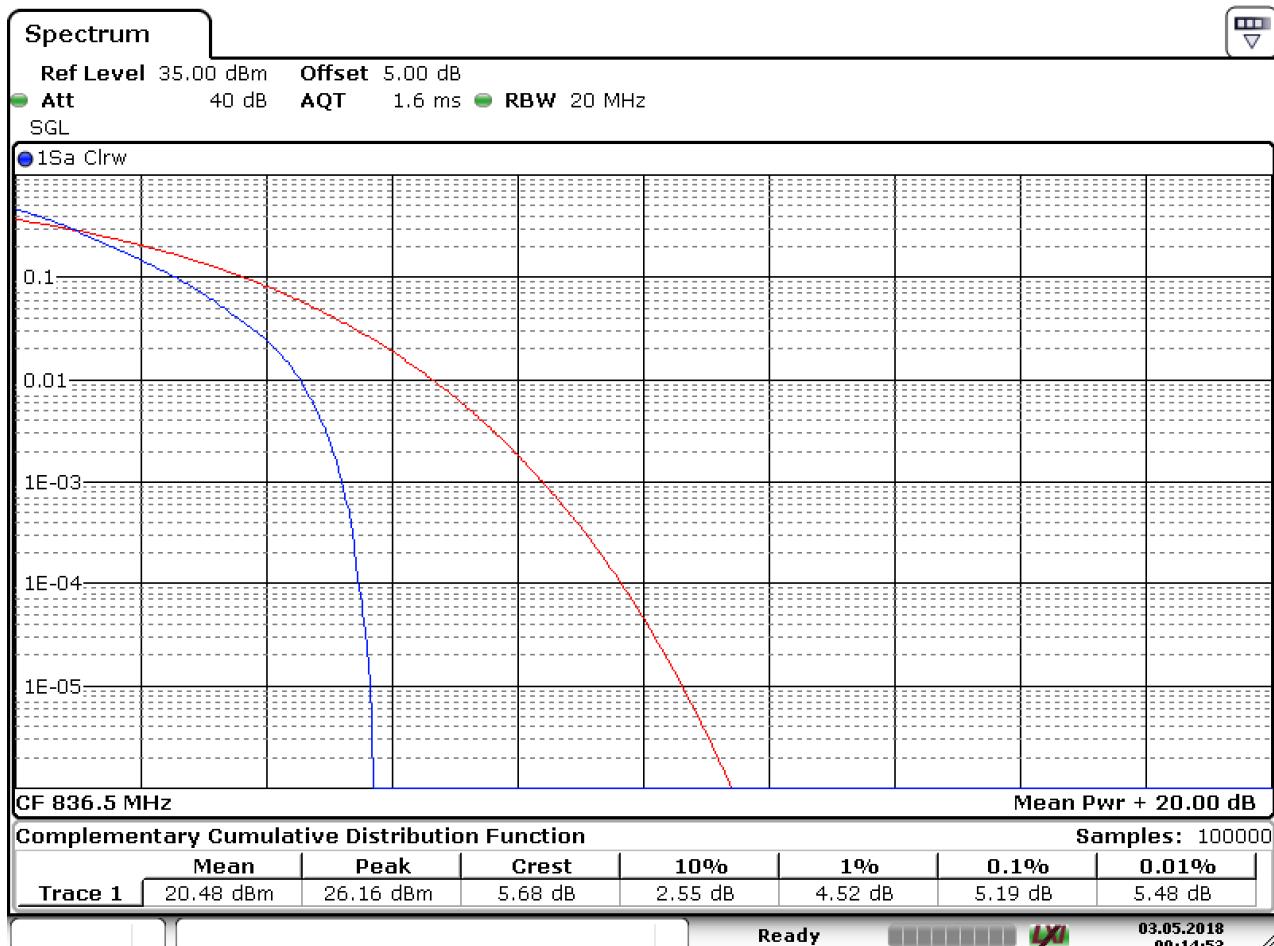
2.1.1.1 Test Mode = LTE/TM1.Bandwidth=15MHz

2.1.1.1.1 Test Channel = LCH



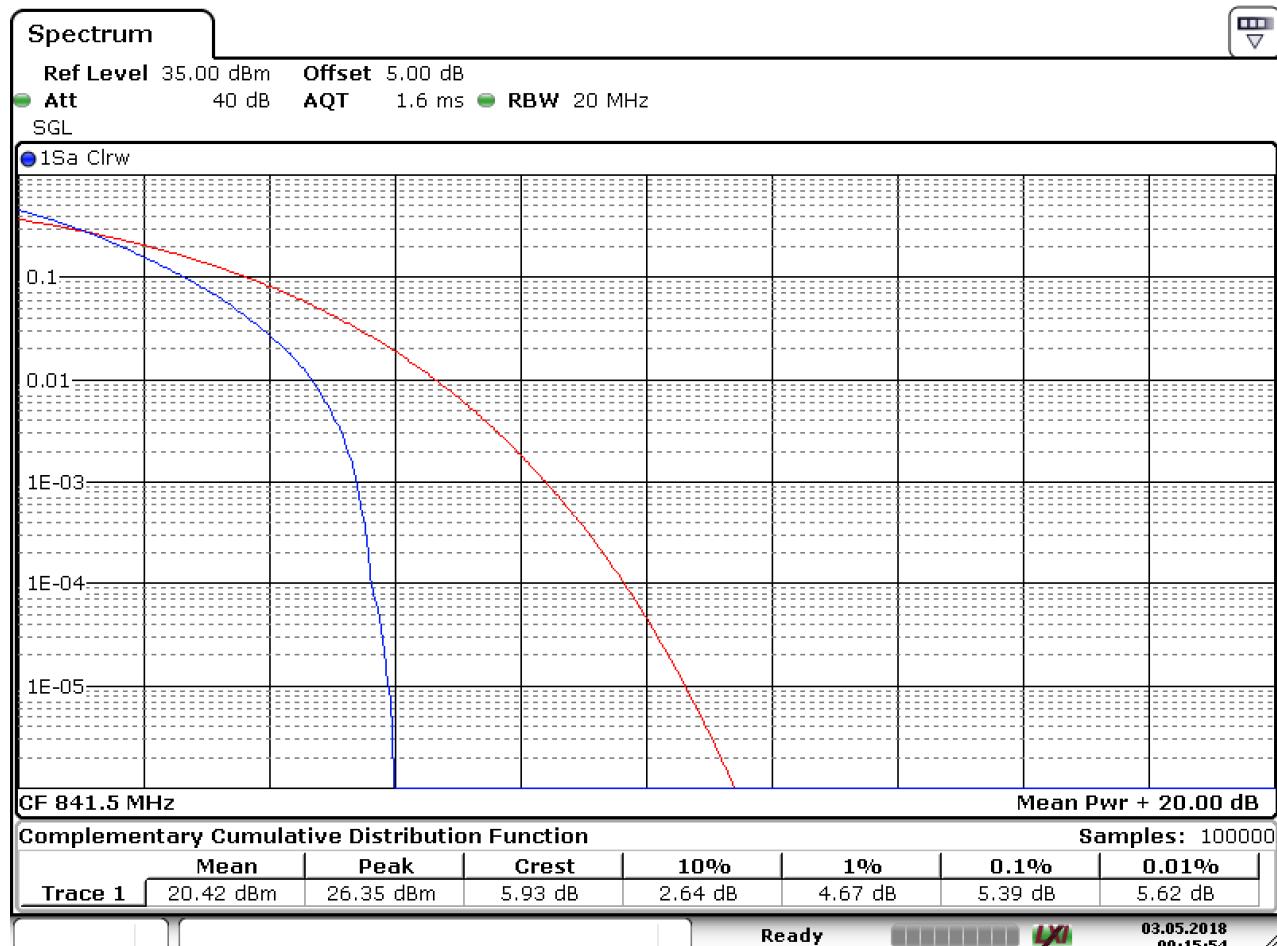
Date: 3.MAY.2018 09:13:40

2.1.1.1.2 Test Channel = MCH



Date: 3.MAY.2018 09:14:53

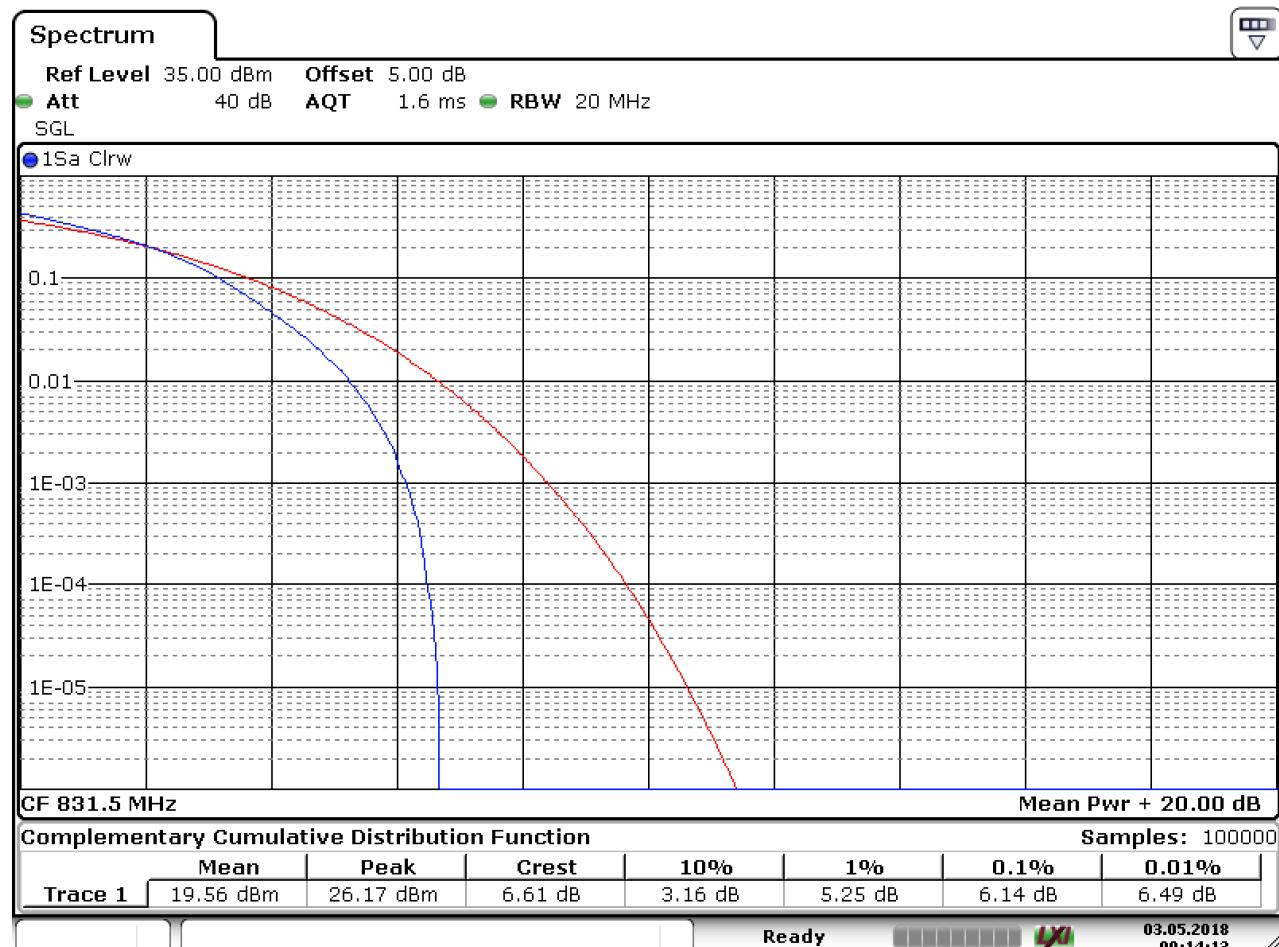
2.1.1.1.3 Test Channel = HCH



Date: 3.MAY.2018 09:15:55

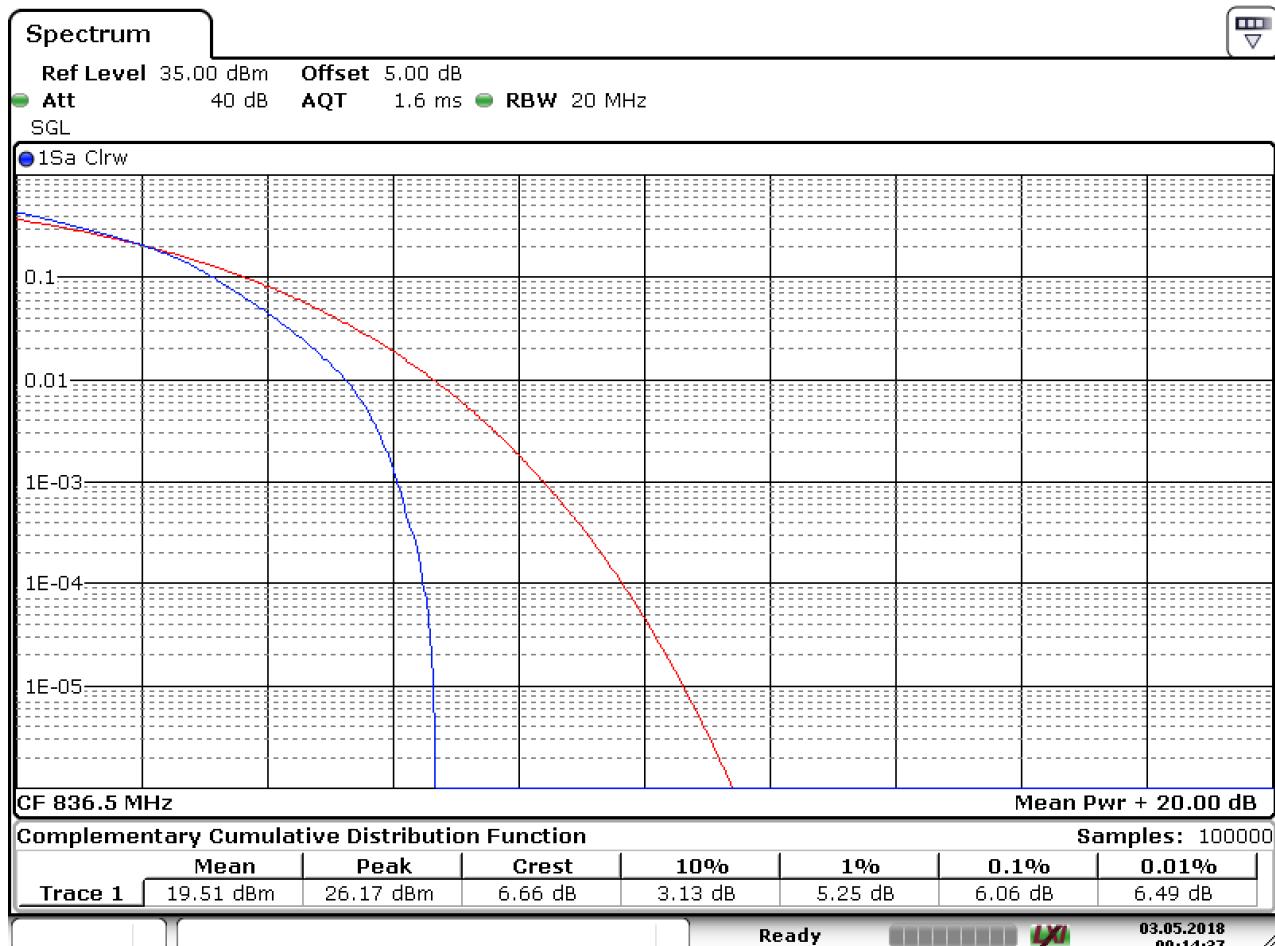
2.1.1.2 Test Mode = LTE/TM2.Bandwidth=15MHz

2.1.1.2.1 Test Channel = LCH

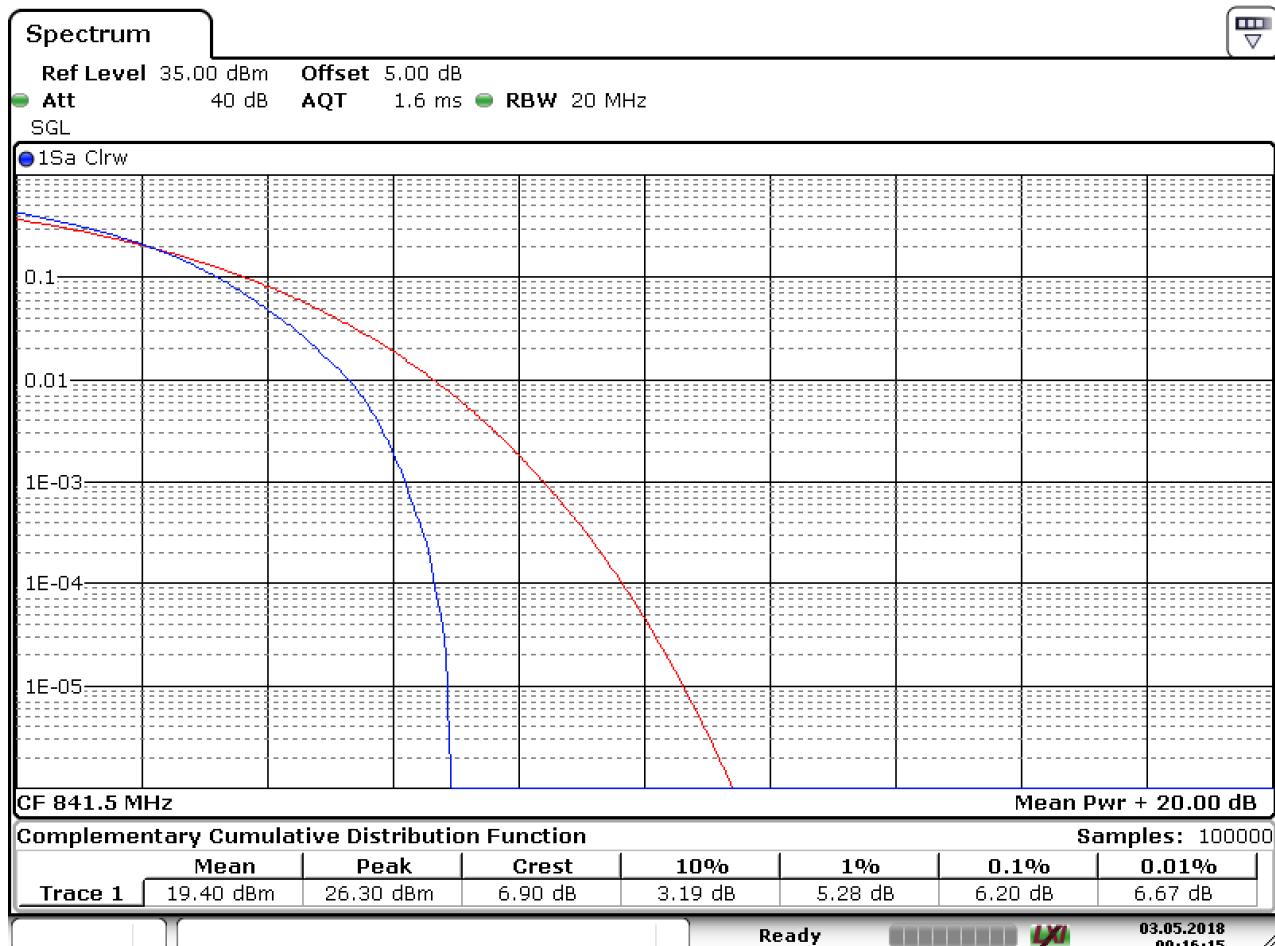


Date: 3.MAY.2018 09:14:13

2.1.1.2.2 Test Channel = MCH



Date: 3.MAY.2018 09:14:37

2.1.1.2.3 Test Channel = HCH

Date: 3.MAY.2018 09:16:16

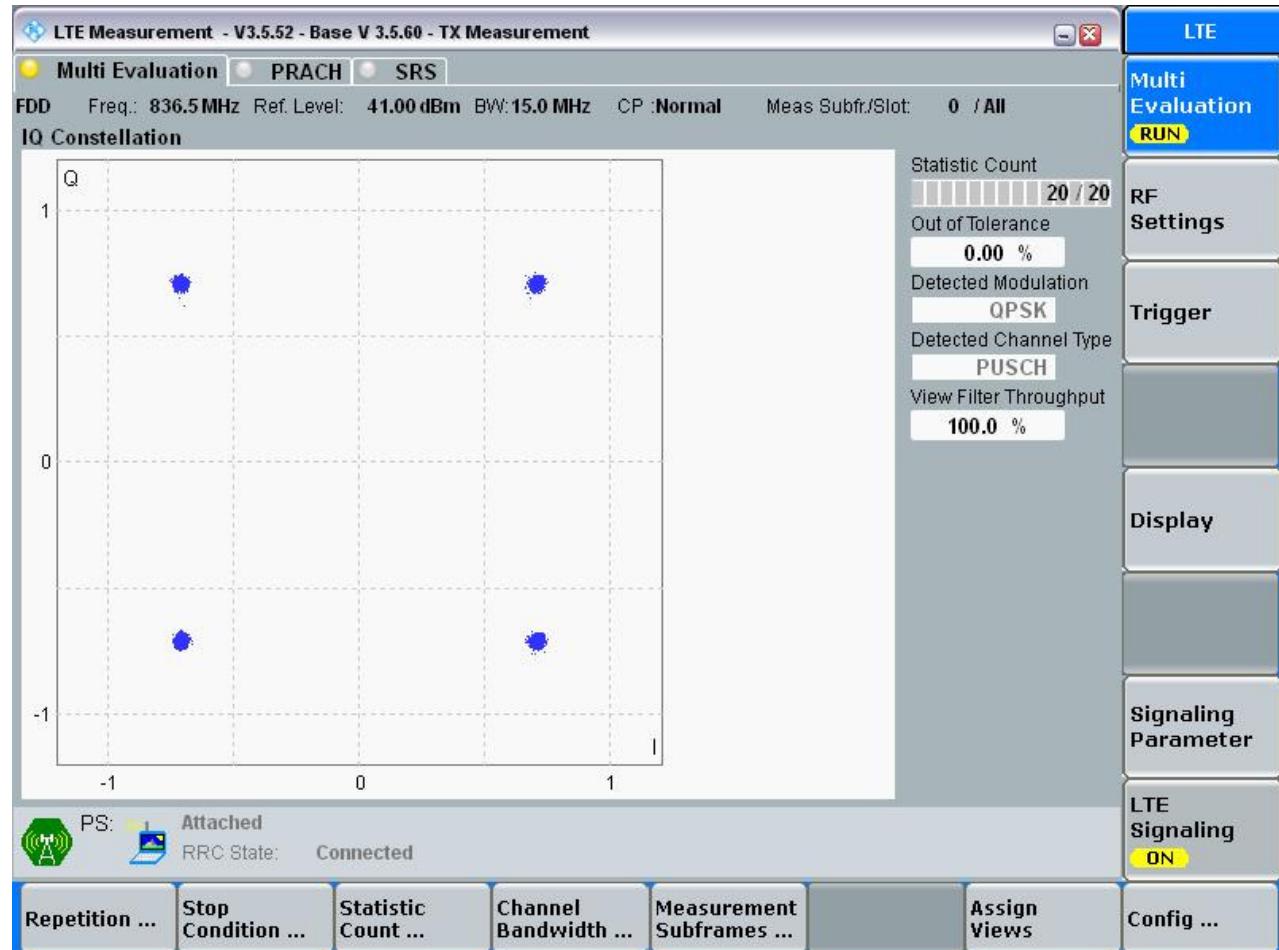
3 Modulation Characteristics

3.1 For LTE

3.1.1 Test Band = LTE band26

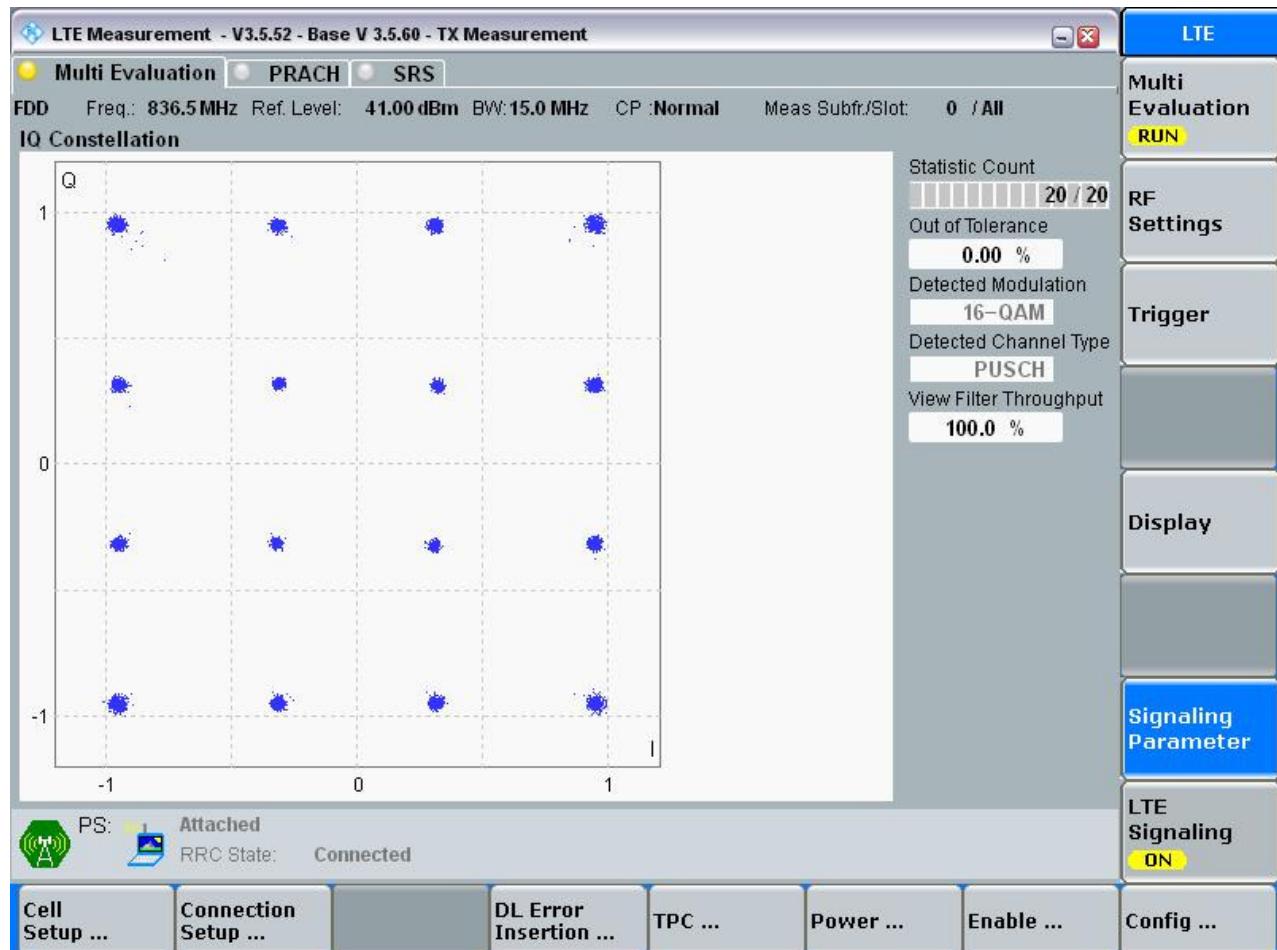
3.1.1.1 Test Mode = LTE /TM1 15MHz

3.1.1.1.1 Test Channel = MCH



3.1.1.2 Test Mode = LTE /TM2 15MHz

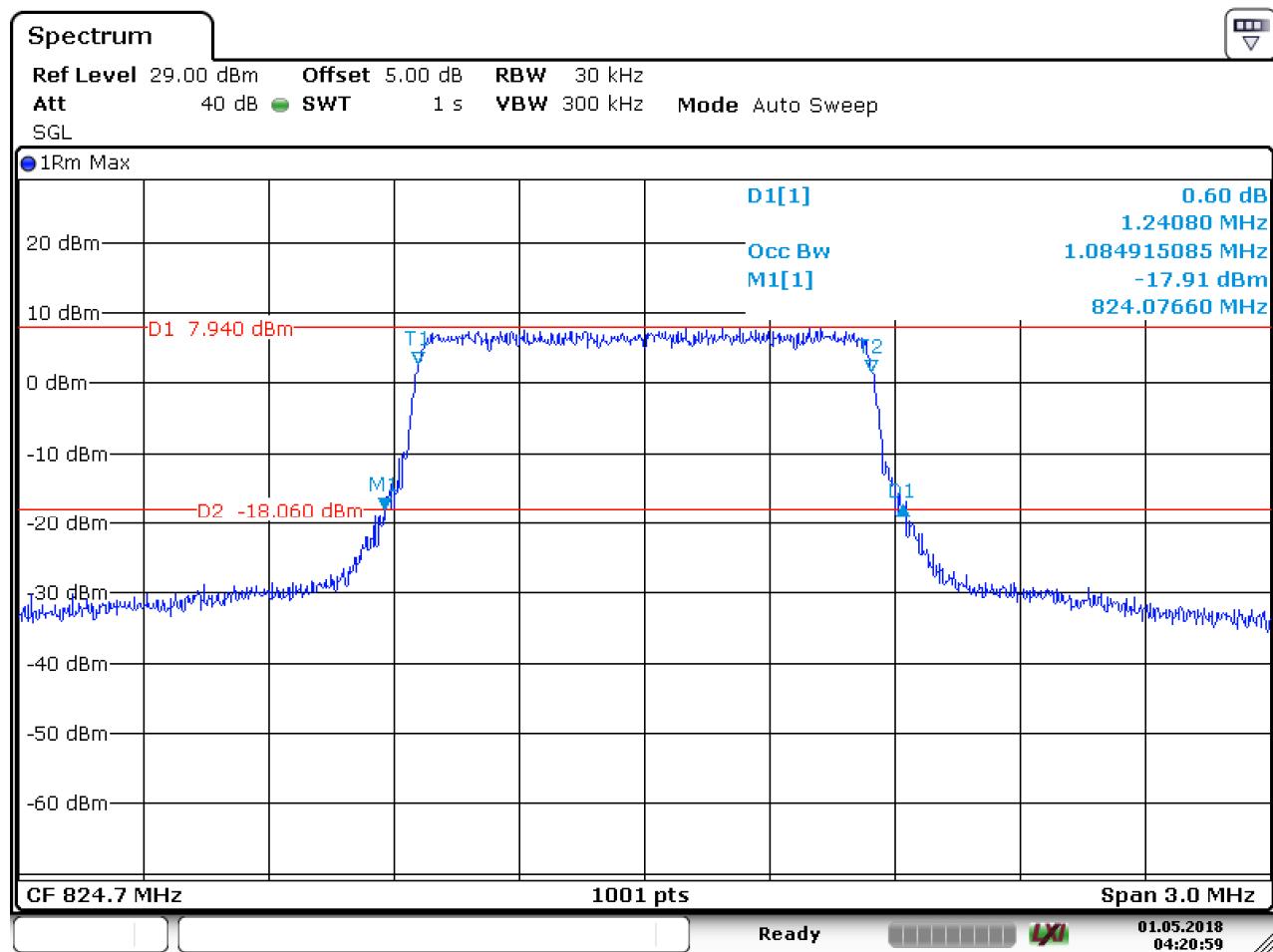
3.1.1.2.1 Test Channel = MCH



4 Bandwidth

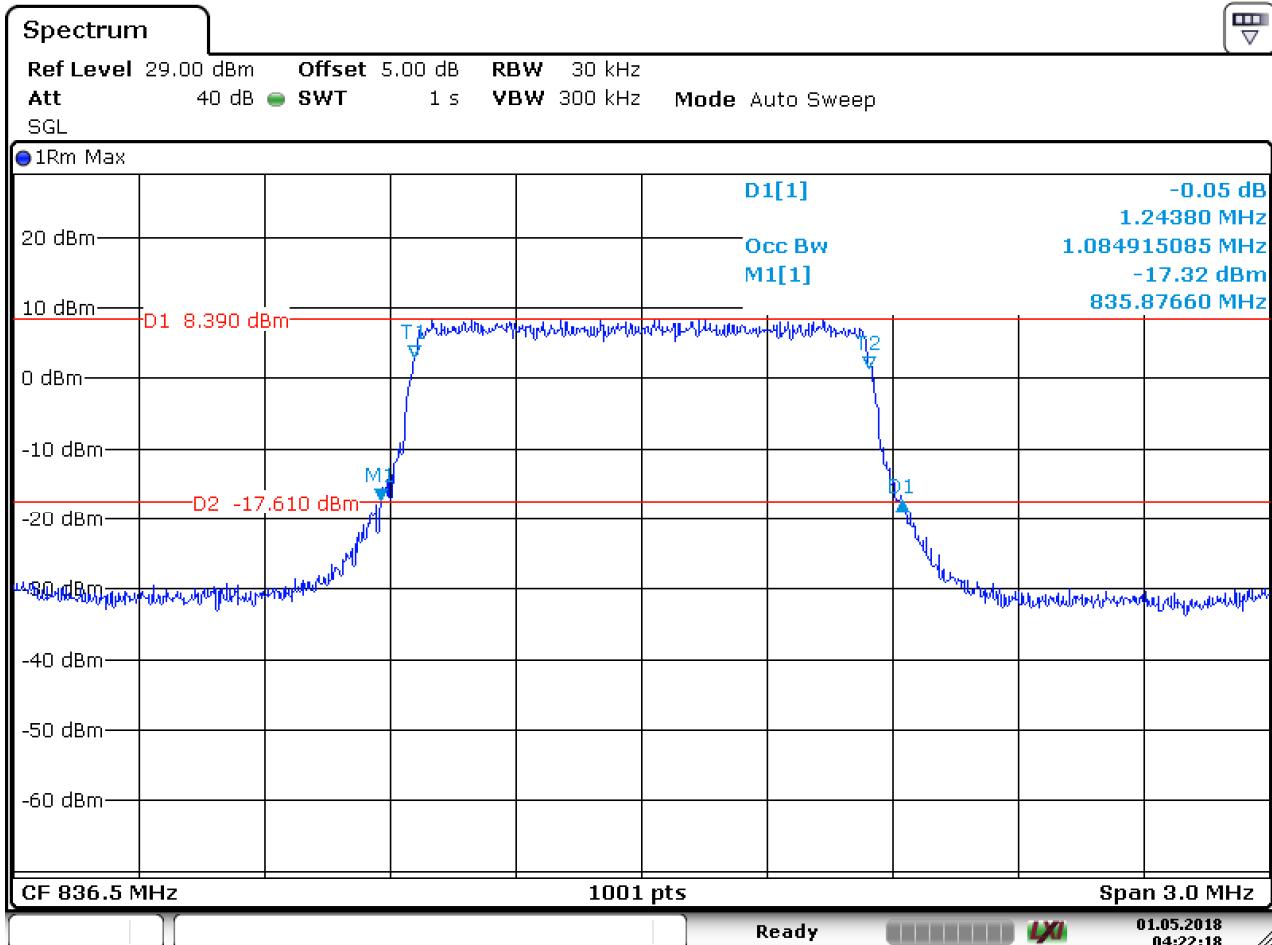
Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
Band 26	TM1/1.4MHz	LCH	1.08	1.24	PASS
		MCH	1.08	1.24	PASS
		HCH	1.09	1.23	PASS
	TM2/1.4MHz	LCH	1.08	1.24	PASS
		MCH	1.08	1.23	PASS
		HCH	1.08	1.22	PASS
	TM1/3MHz	LCH	2.72	2.96	PASS
		MCH	2.71	2.98	PASS
		HCH	2.72	2.96	PASS
	TM2/3MHz	LCH	2.72	2.96	PASS
		MCH	2.72	2.96	PASS
		HCH	2.71	2.96	PASS
	TM1/5MHz	LCH	4.48	4.81	PASS
		MCH	4.49	4.83	PASS
		HCH	4.47	4.81	PASS
	TM2/5MHz	LCH	4.50	4.80	PASS
		MCH	4.49	4.80	PASS
		HCH	4.47	4.81	PASS
	TM1/10MHz	LCH	8.93	9.51	PASS
		MCH	8.93	9.50	PASS
		HCH	8.93	9.49	PASS
	TM2/10MHz	LCH	8.93	9.53	PASS
		MCH	8.93	9.50	PASS
		HCH	8.93	9.49	PASS
	TM1/15MHz	LCH	13.40	14.22	PASS
		MCH	13.40	14.21	PASS
		HCH	13.43	14.24	PASS
	TM2/15MHz	LCH	13.40	14.25	PASS
		MCH	13.40	14.22	PASS
		HCH	13.40	14.27	PASS

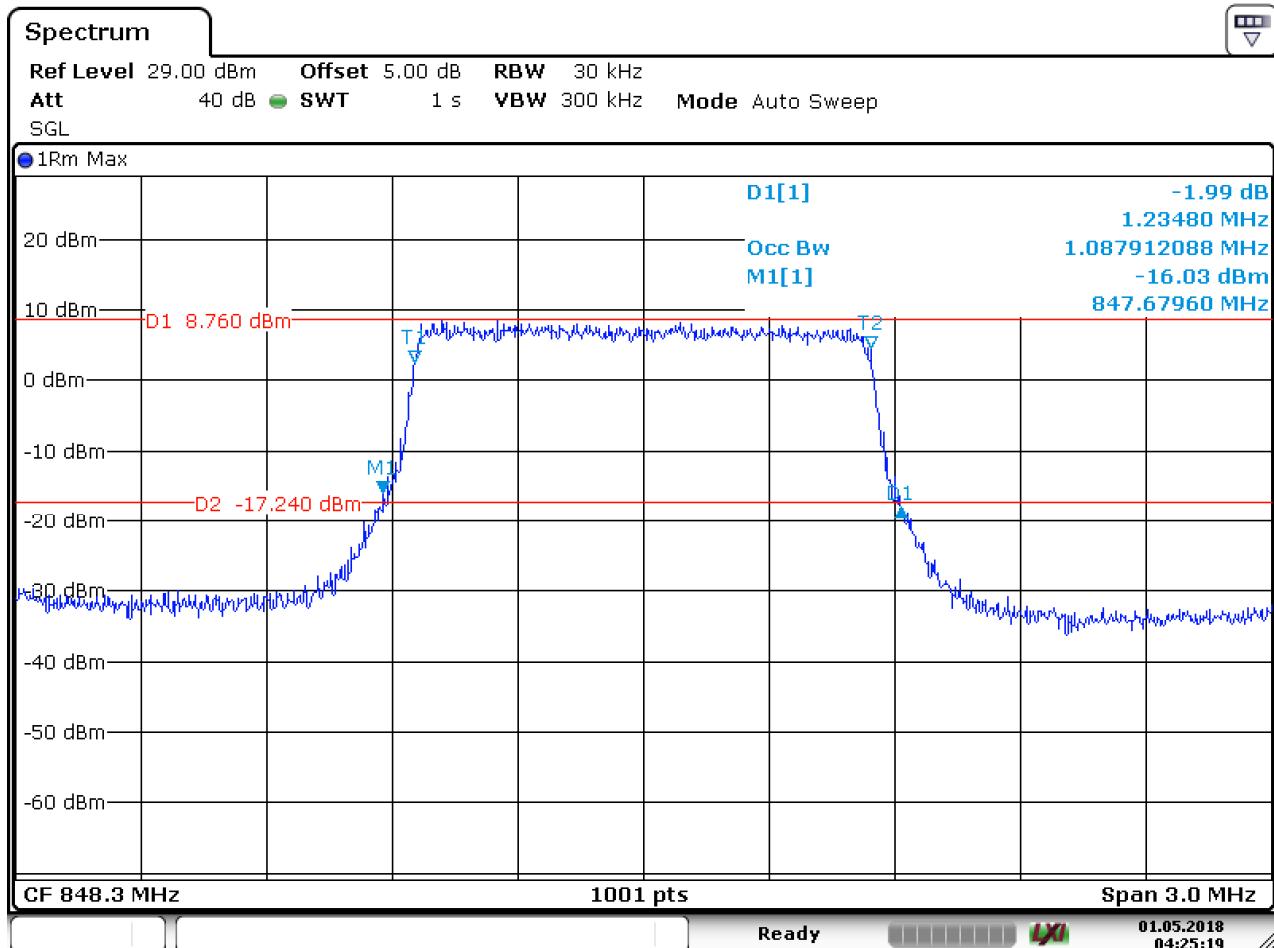
Part II –Test Plots**4.1 For LTE****4.1.1 Test Band = LTE band26****4.1.1.1 Test Mode = LTE/TM1 1.4MHz****4.1.1.1.1 Test Channel = LCH**

Date: 1.MAY.2018 04:21:00

4.1.1.1.2 Test Channel = MCH



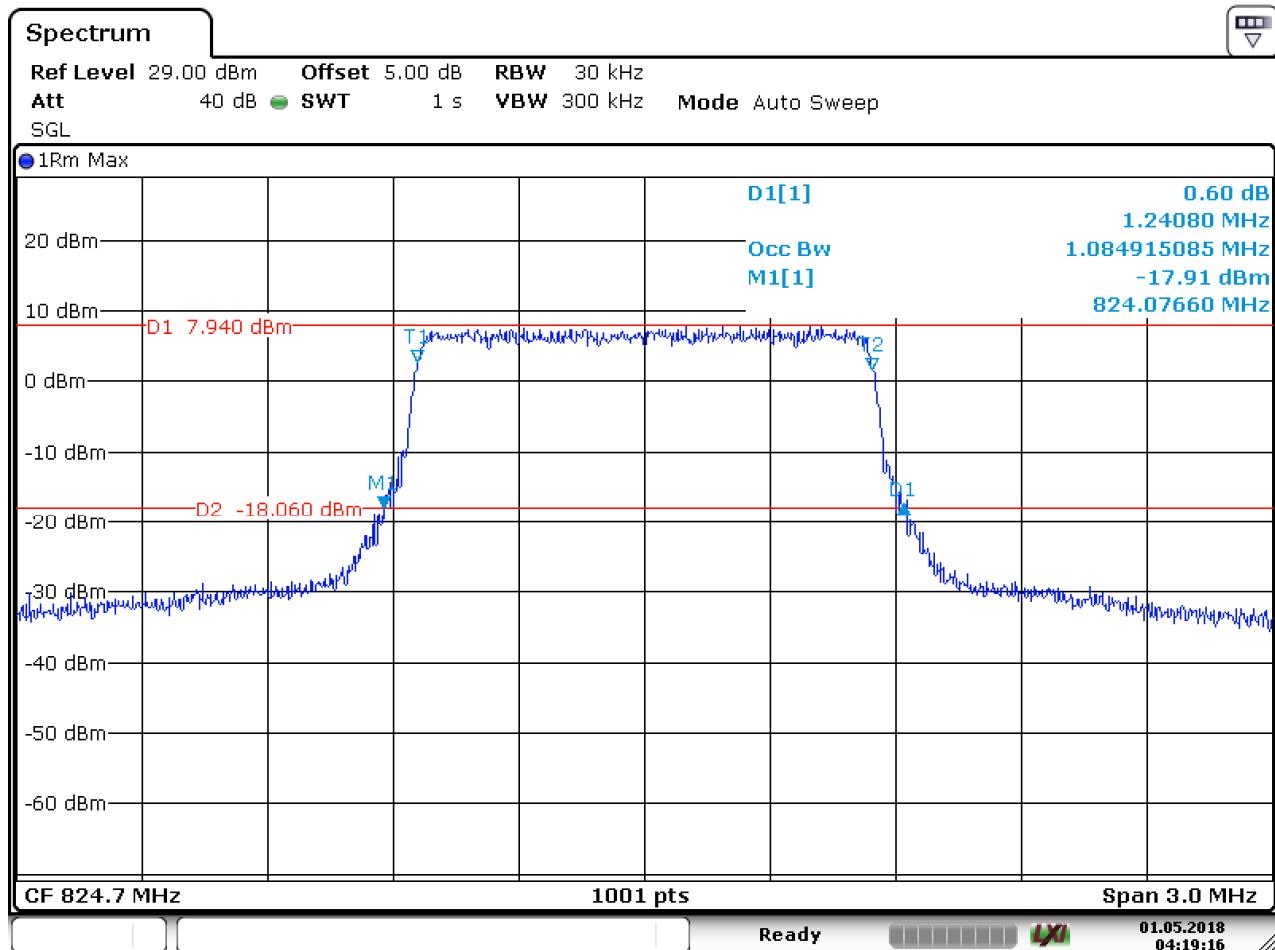
Date: 1.MAY.2018 04:22:18

4.1.1.1.3 Test Channel = HCH

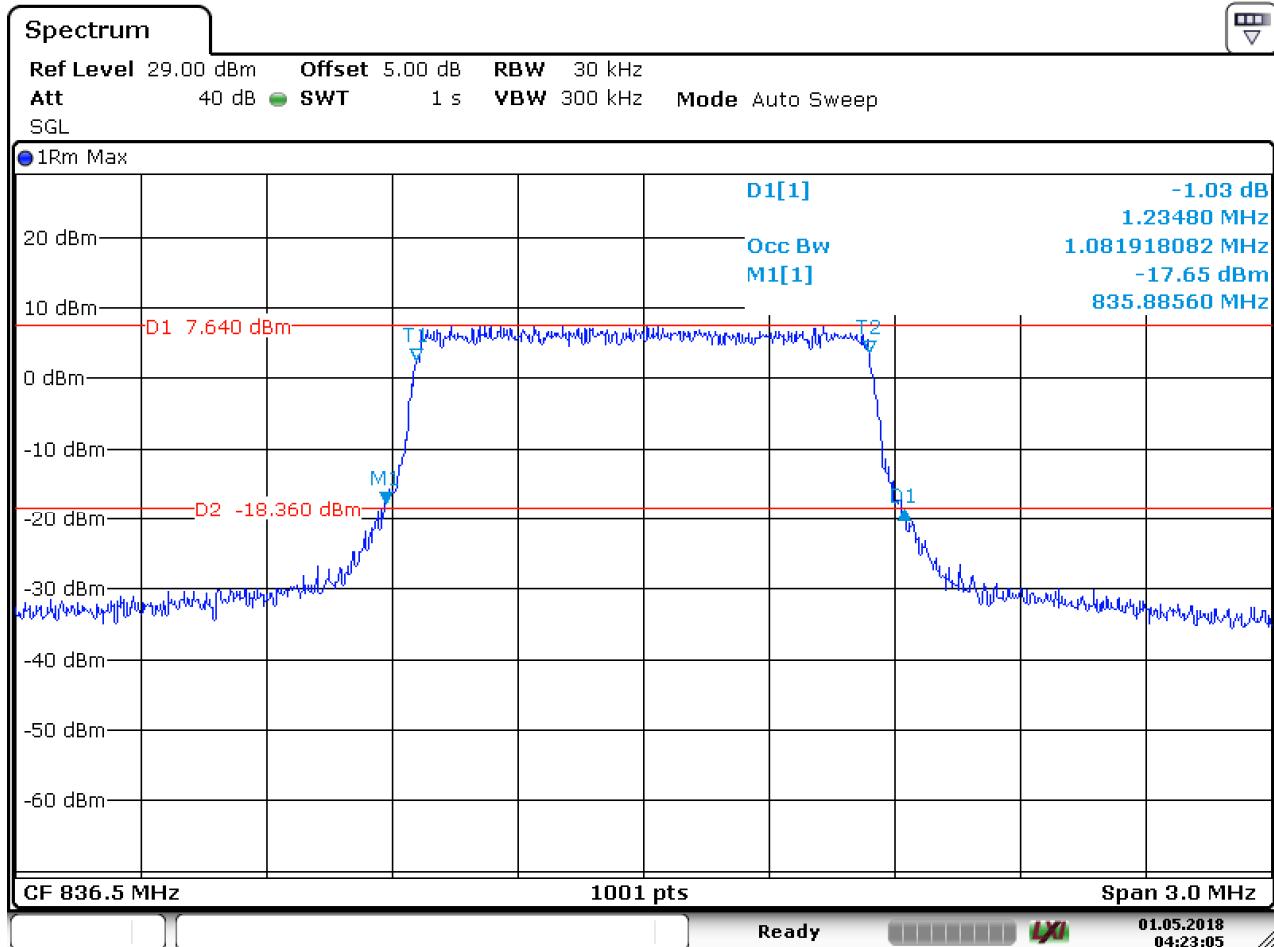
Date: 1.MAY.2018 04:25:19

4.1.1.2 Test Mode = LTE/TM2 1.4MHz

4.1.1.2.1 Test Channel = LCH

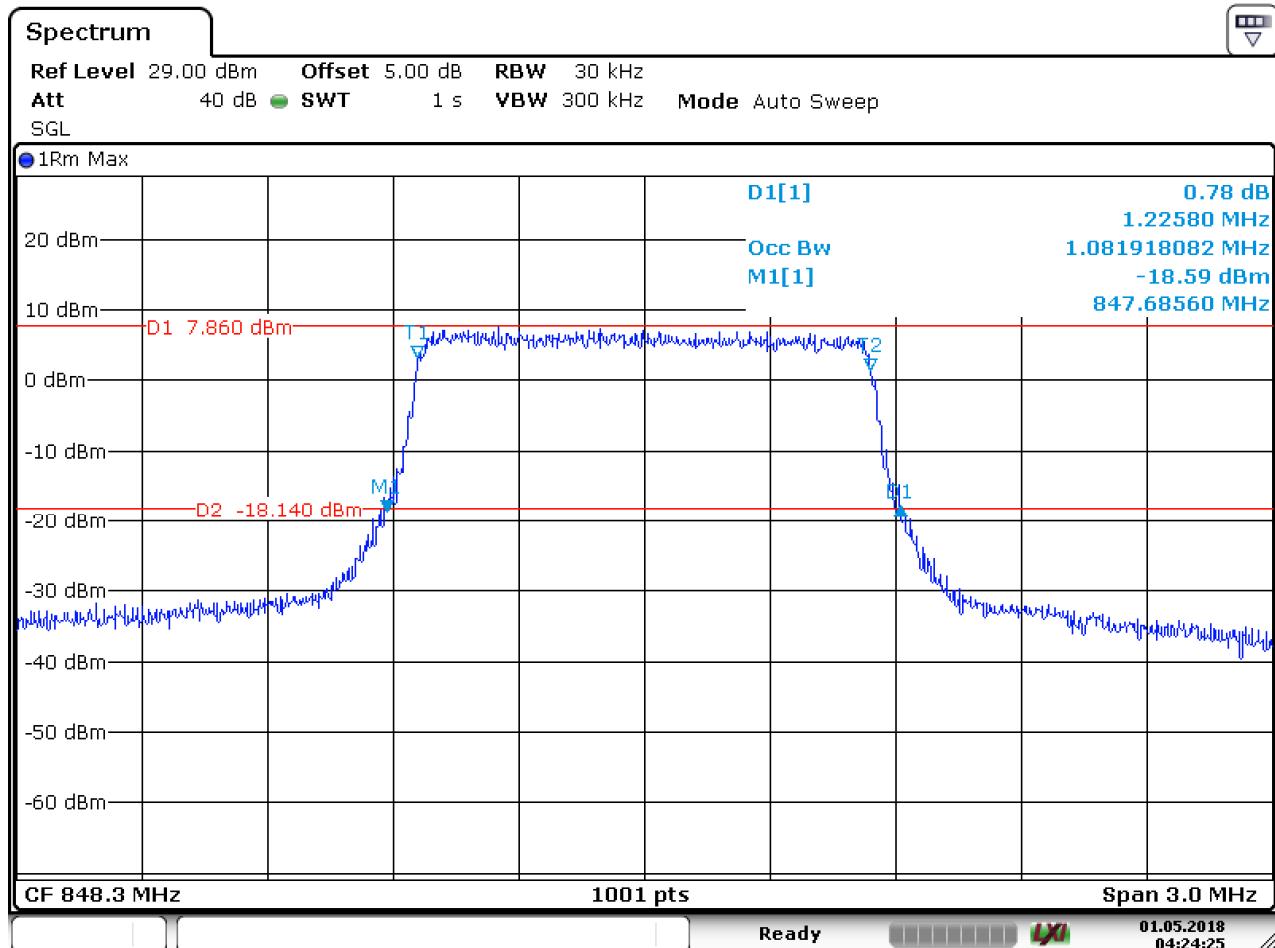


Date: 1.MAY.2018 04:19:16

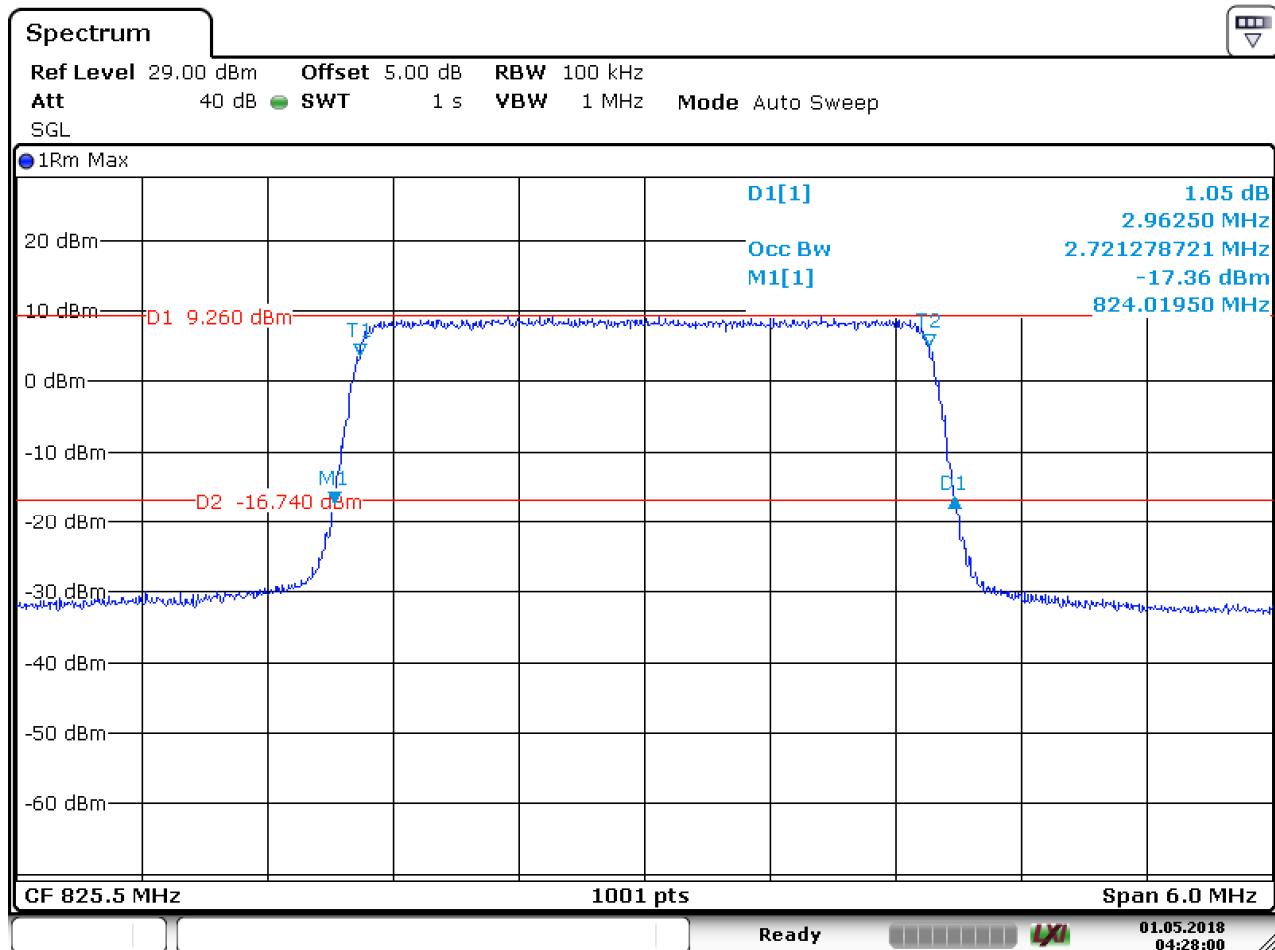
4.1.1.2.2 Test Channel = MCH

Date: 1.MAY.2018 04:23:05

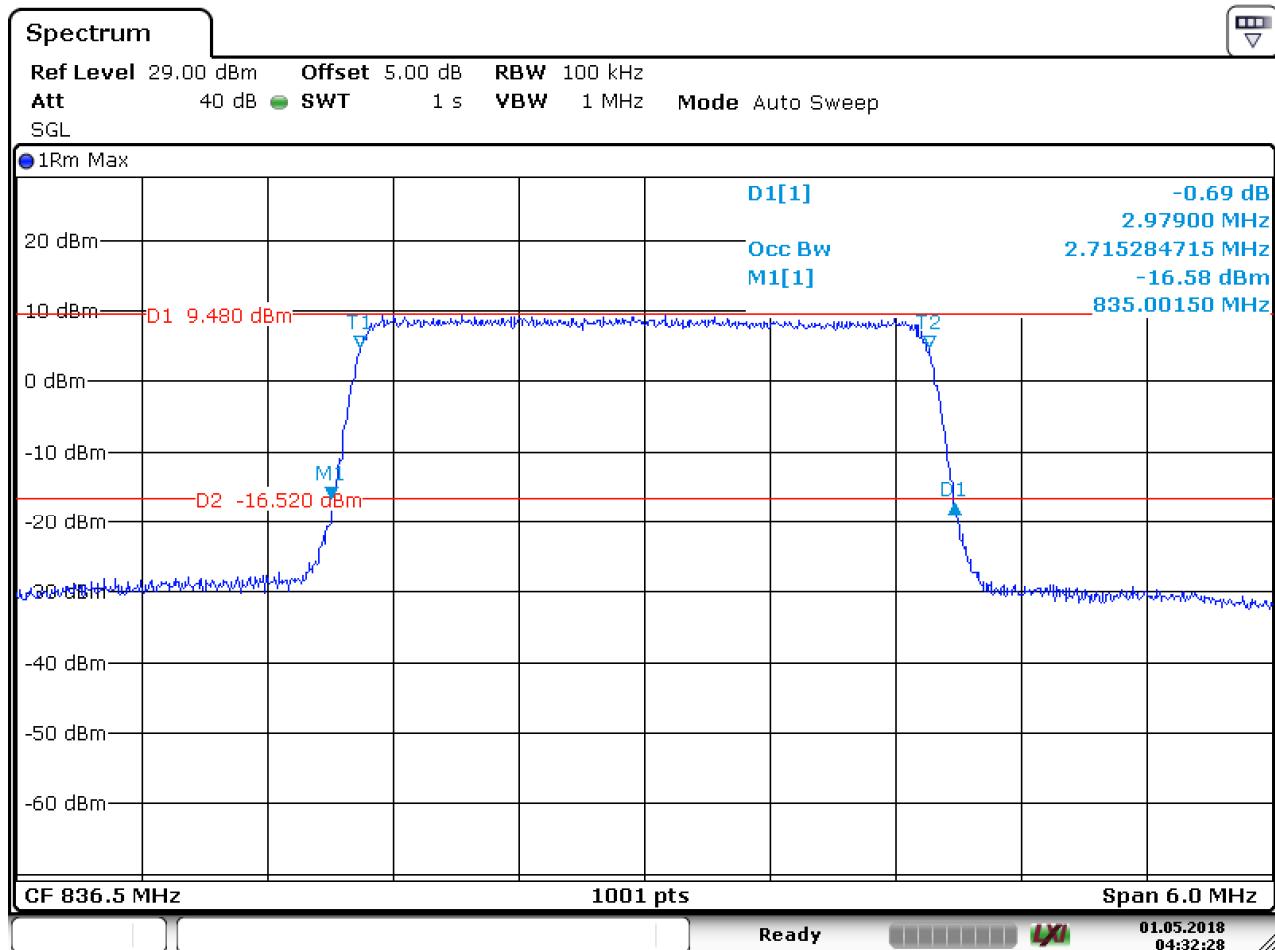
4.1.1.2.3 Test Channel = HCH



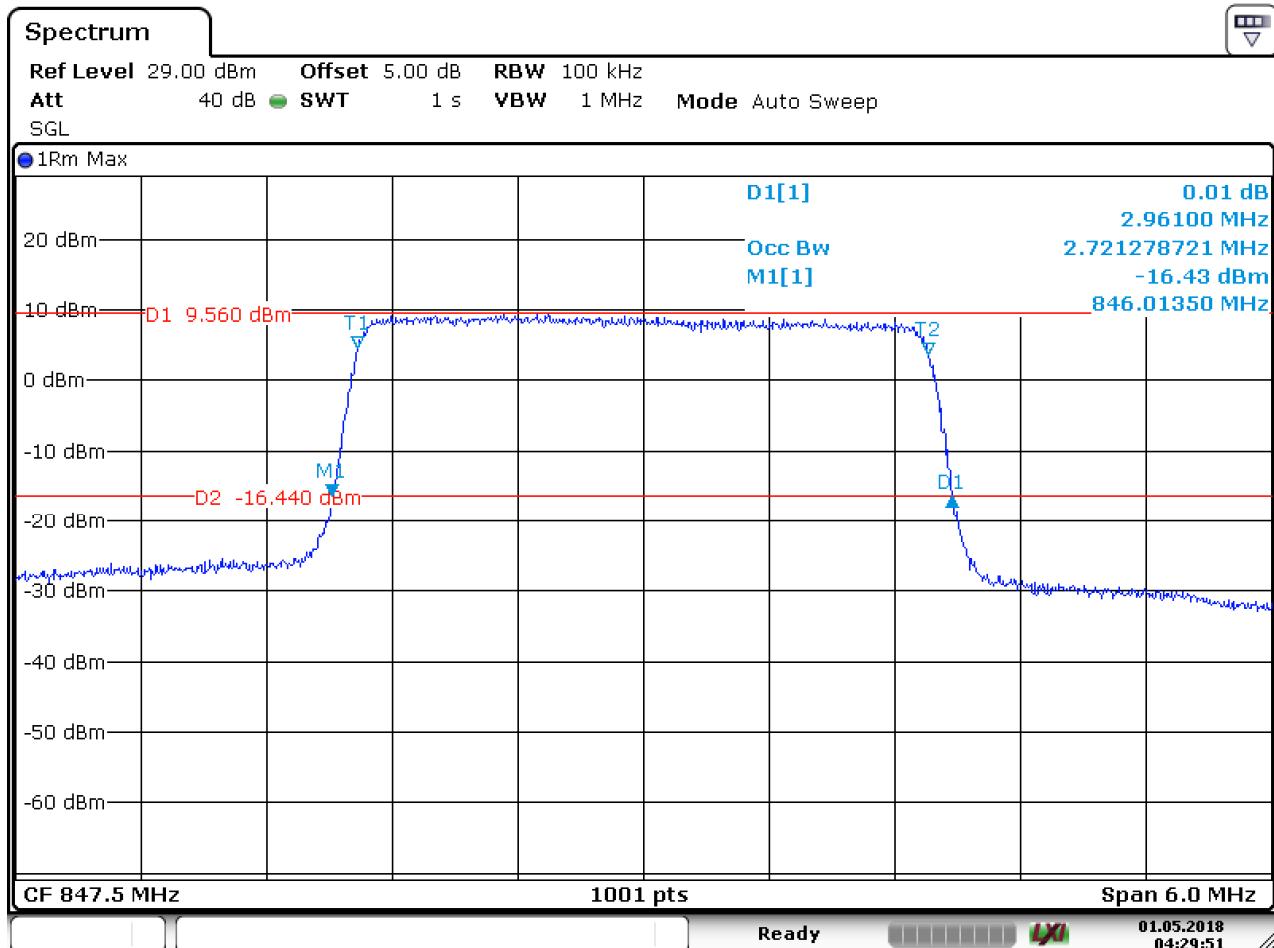
Date: 1.MAY.2018 04:24:25

4.1.1.3 Test Mode = LTE/TM1 3MHz**4.1.1.3.1 Test Channel = LCH**

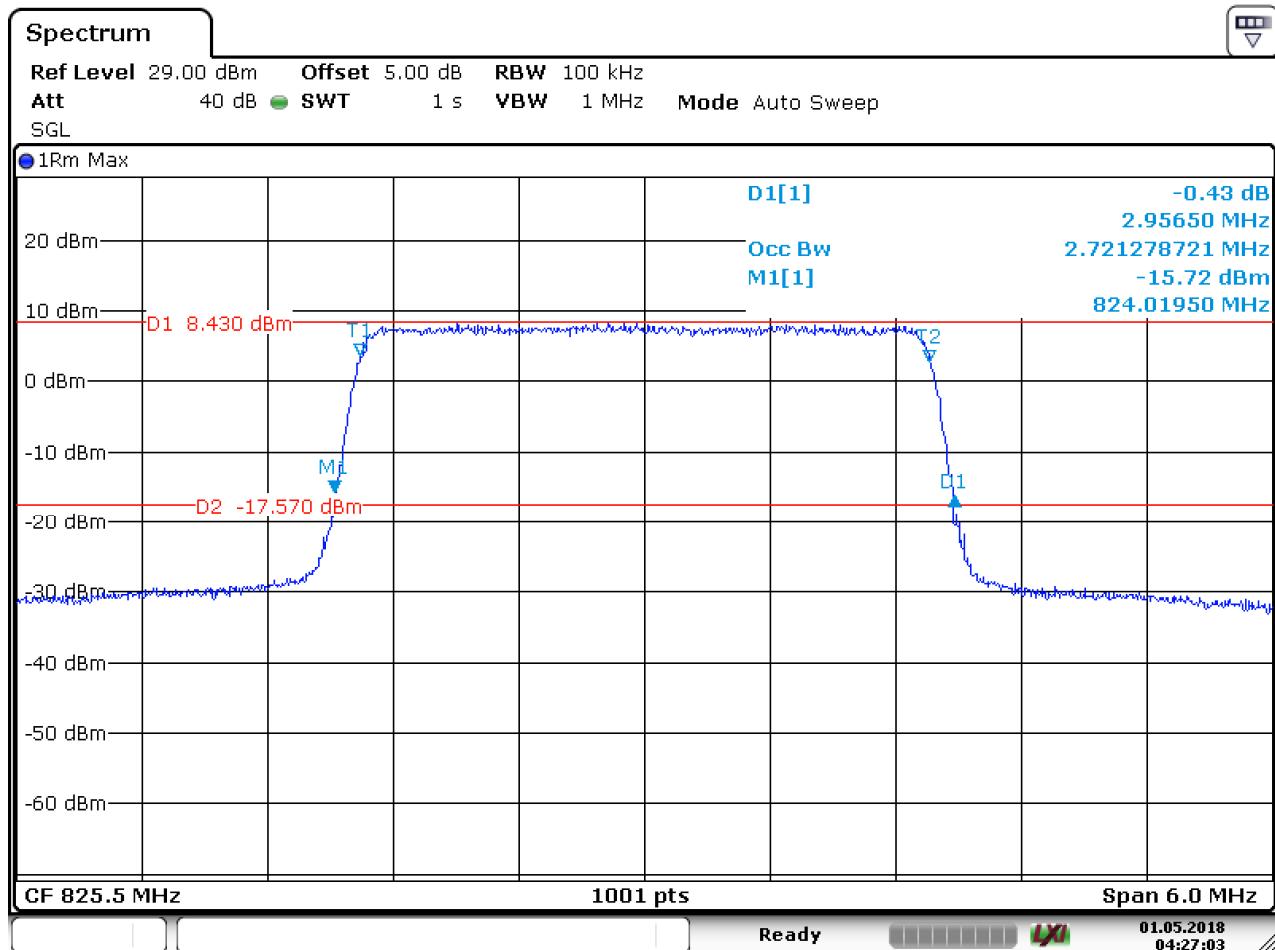
Date: 1.MAY.2018 04:28:01

4.1.1.3.2 Test Channel = MCH

Date: 1.MAY.2018 04:32:28

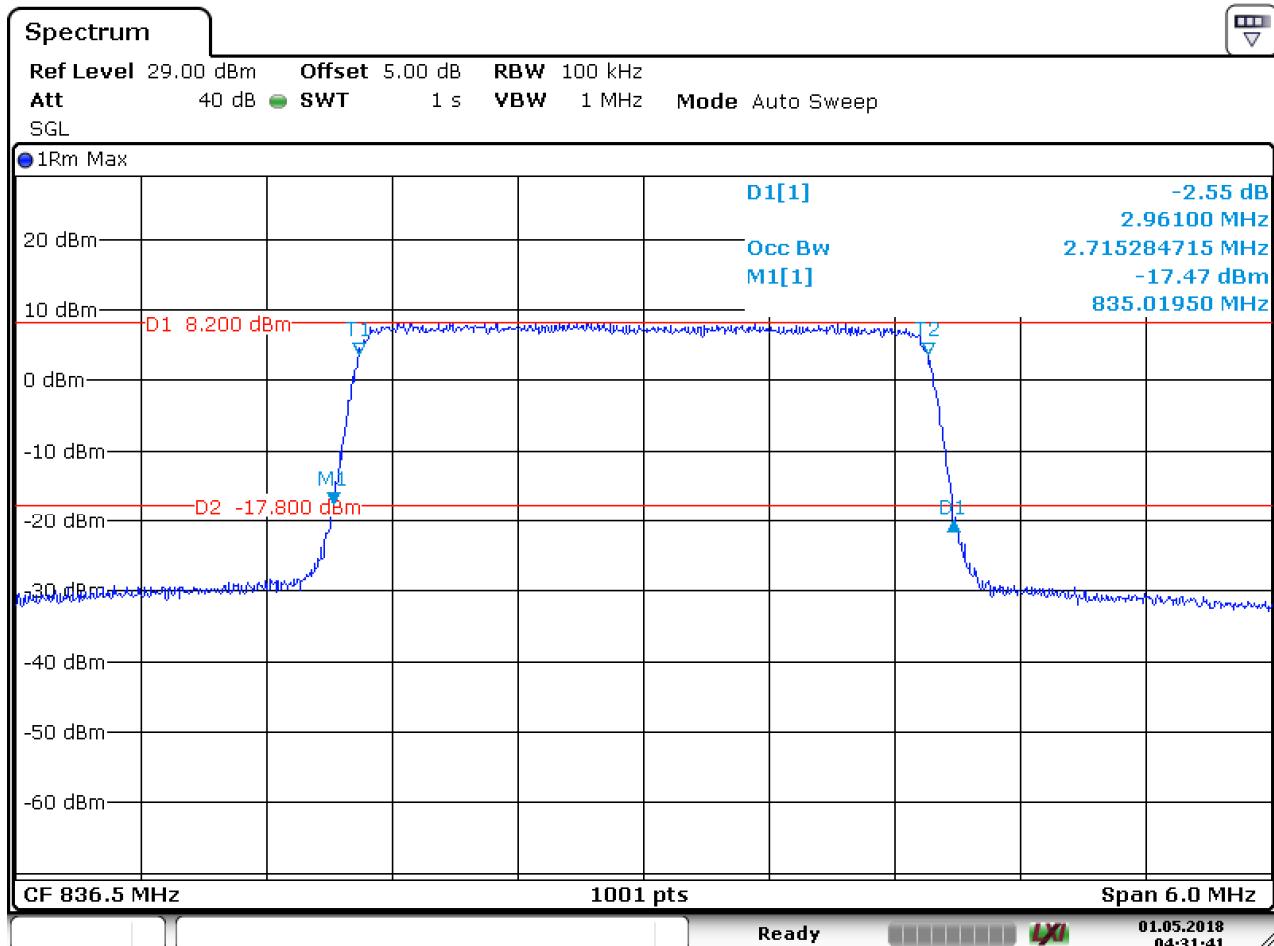
4.1.1.3.3 Test Channel = HCH

Date: 1.MAY.2018 04:29:51

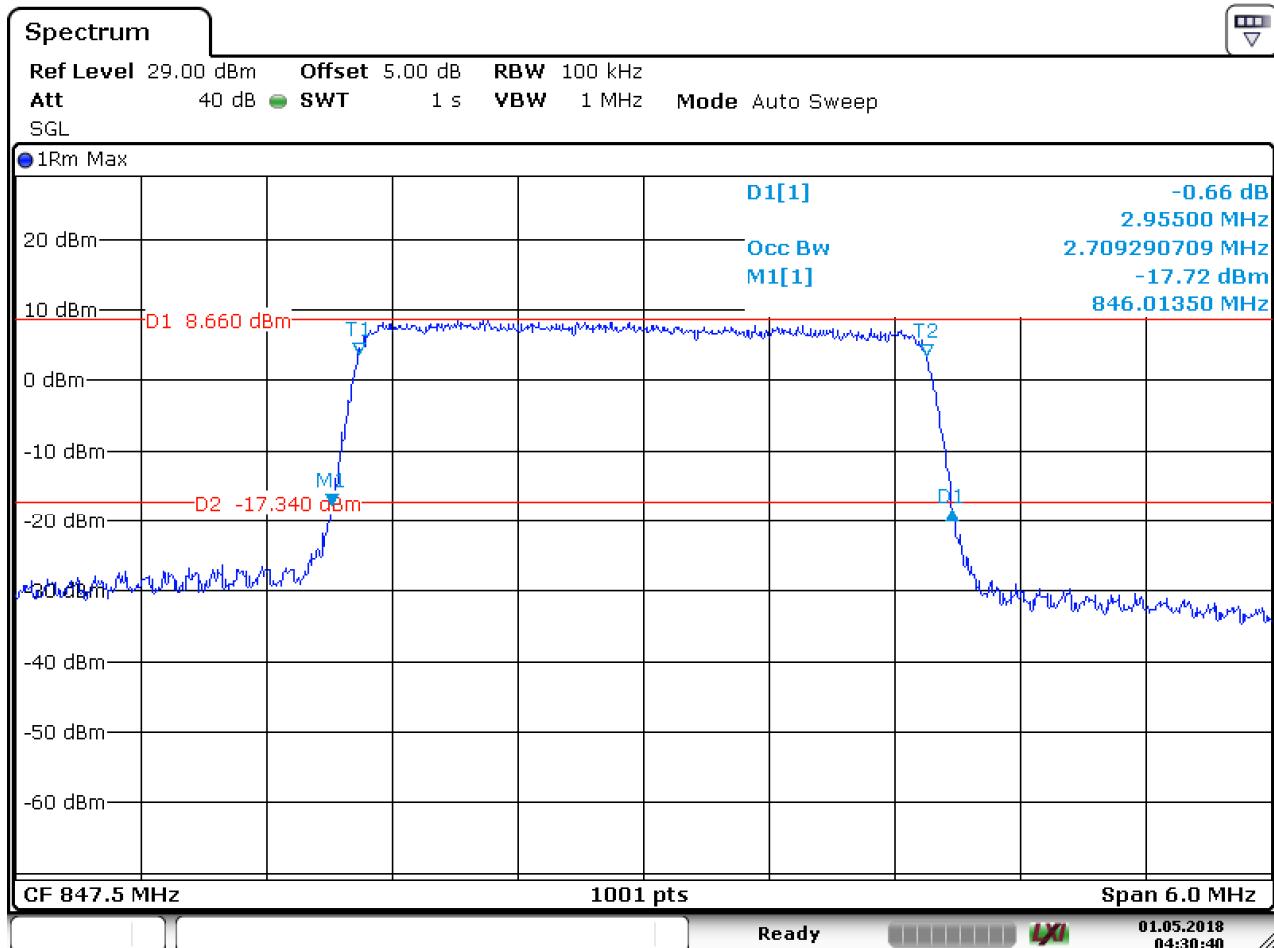
4.1.1.4 Test Mode = LTE/TM2 3MHz**4.1.1.4.1 Test Channel = LCH**

Date: 1.MAY.2018 04:27:04

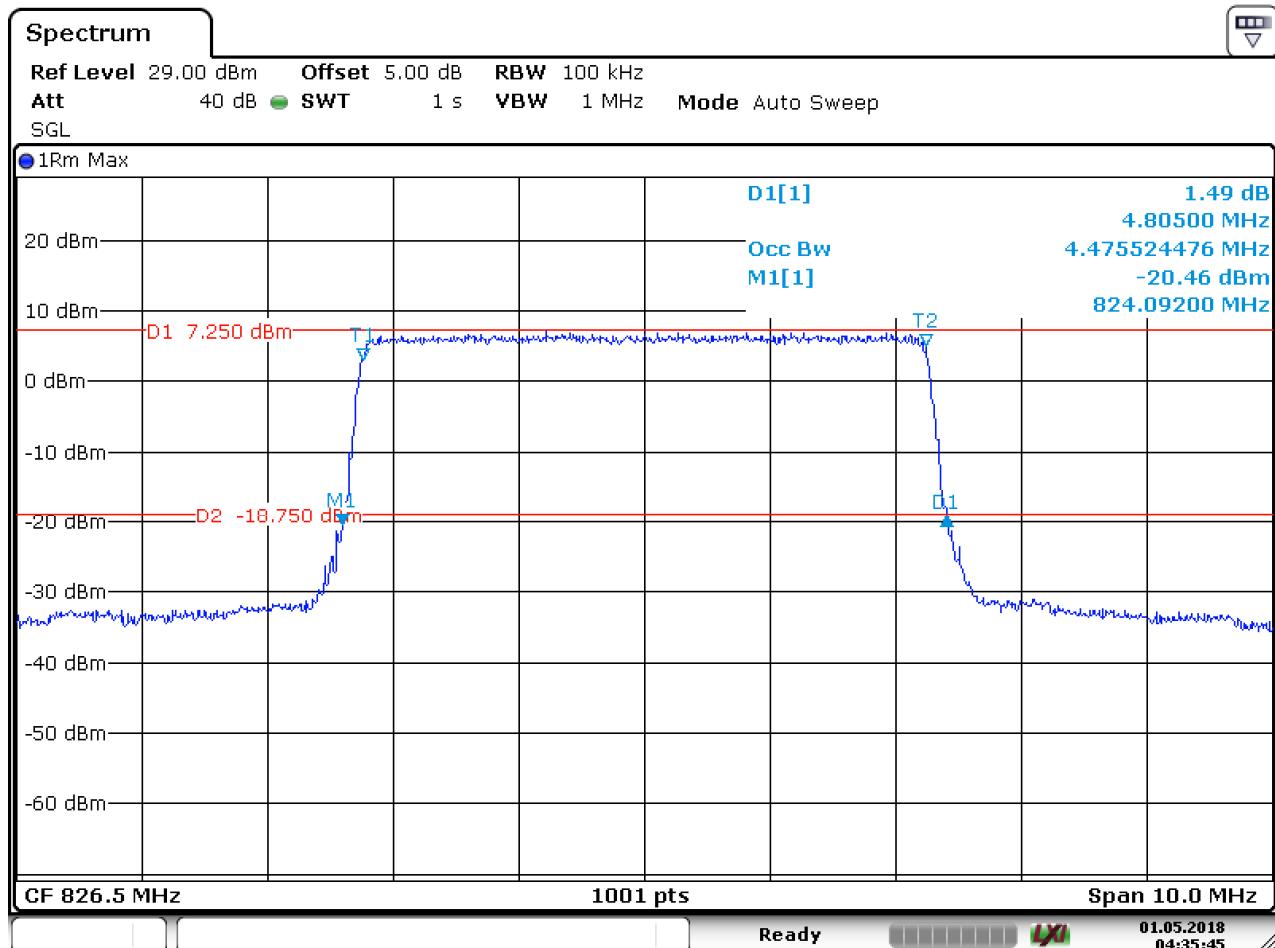
4.1.1.4.2 Test Channel = MCH



Date: 1.MAY.2018 04:31:41

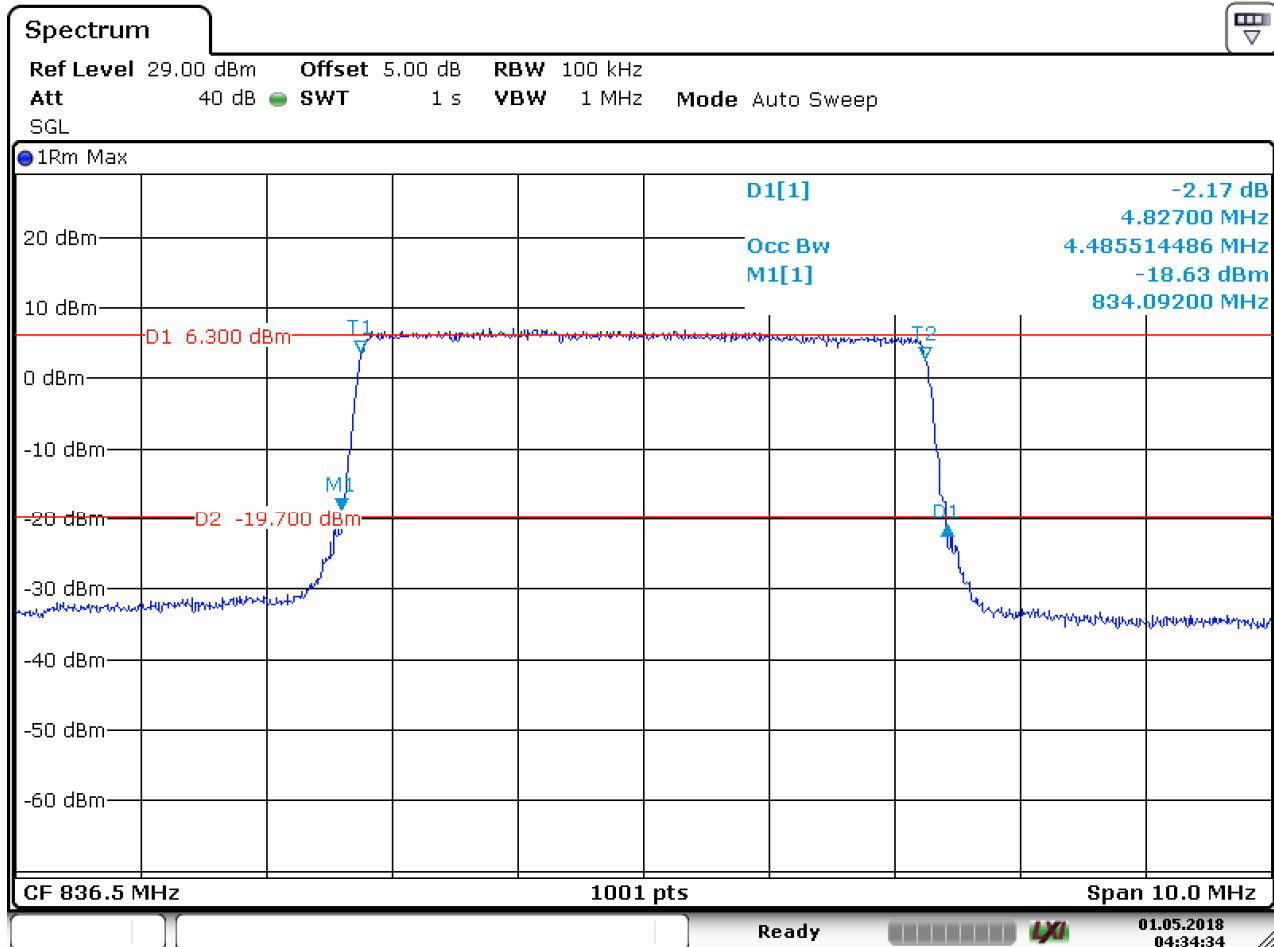
4.1.1.4.3 Test Channel = HCH

Date: 1.MAY.2018 04:30:41

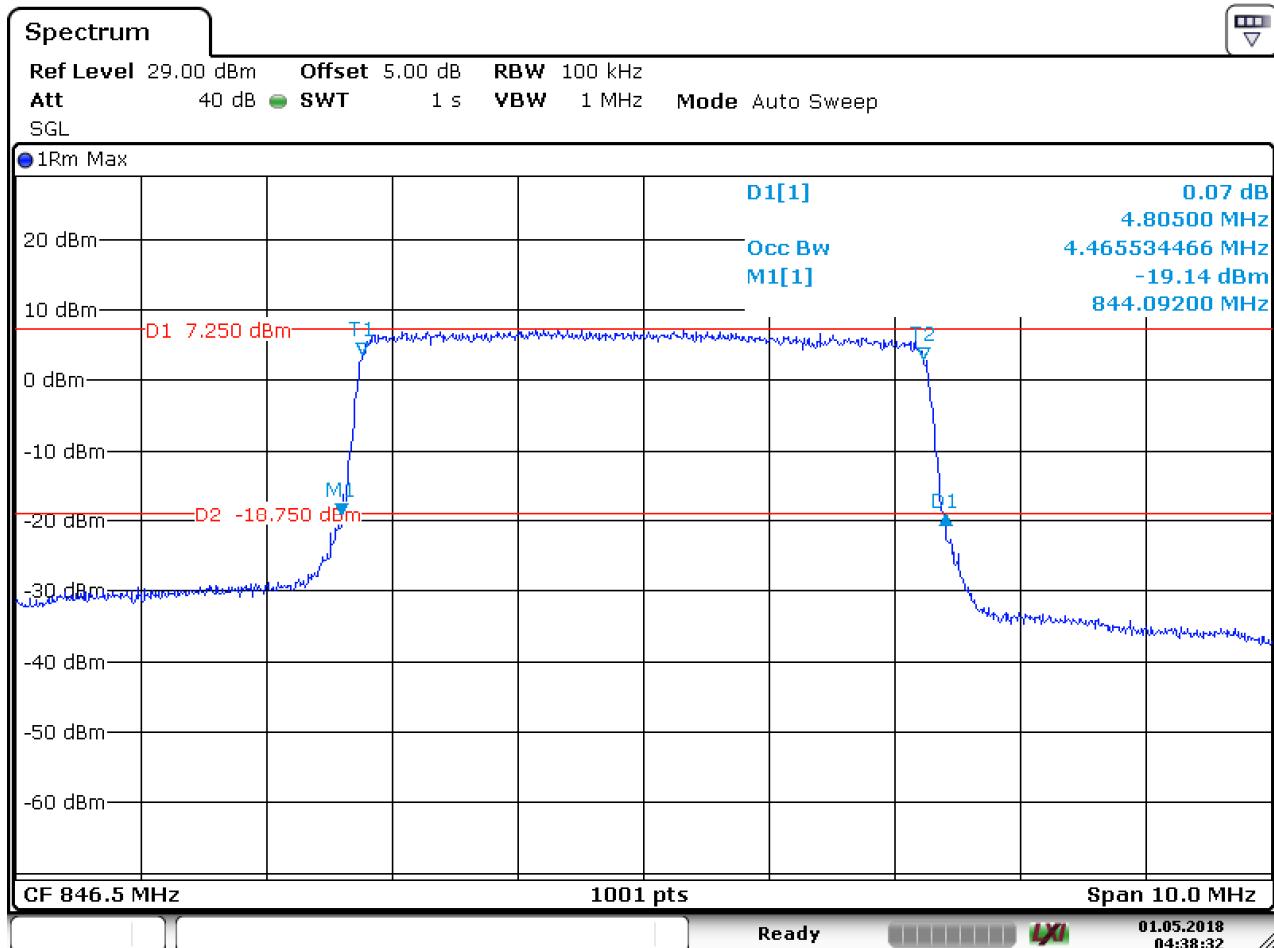
4.1.1.5 Test Mode = LTE/TM1 5MHz**4.1.1.5.1 Test Channel = LCH**

Date: 1.MAY.2018 04:35:46

01.05.2018
04:35:45

4.1.1.5.2 Test Channel = MCH

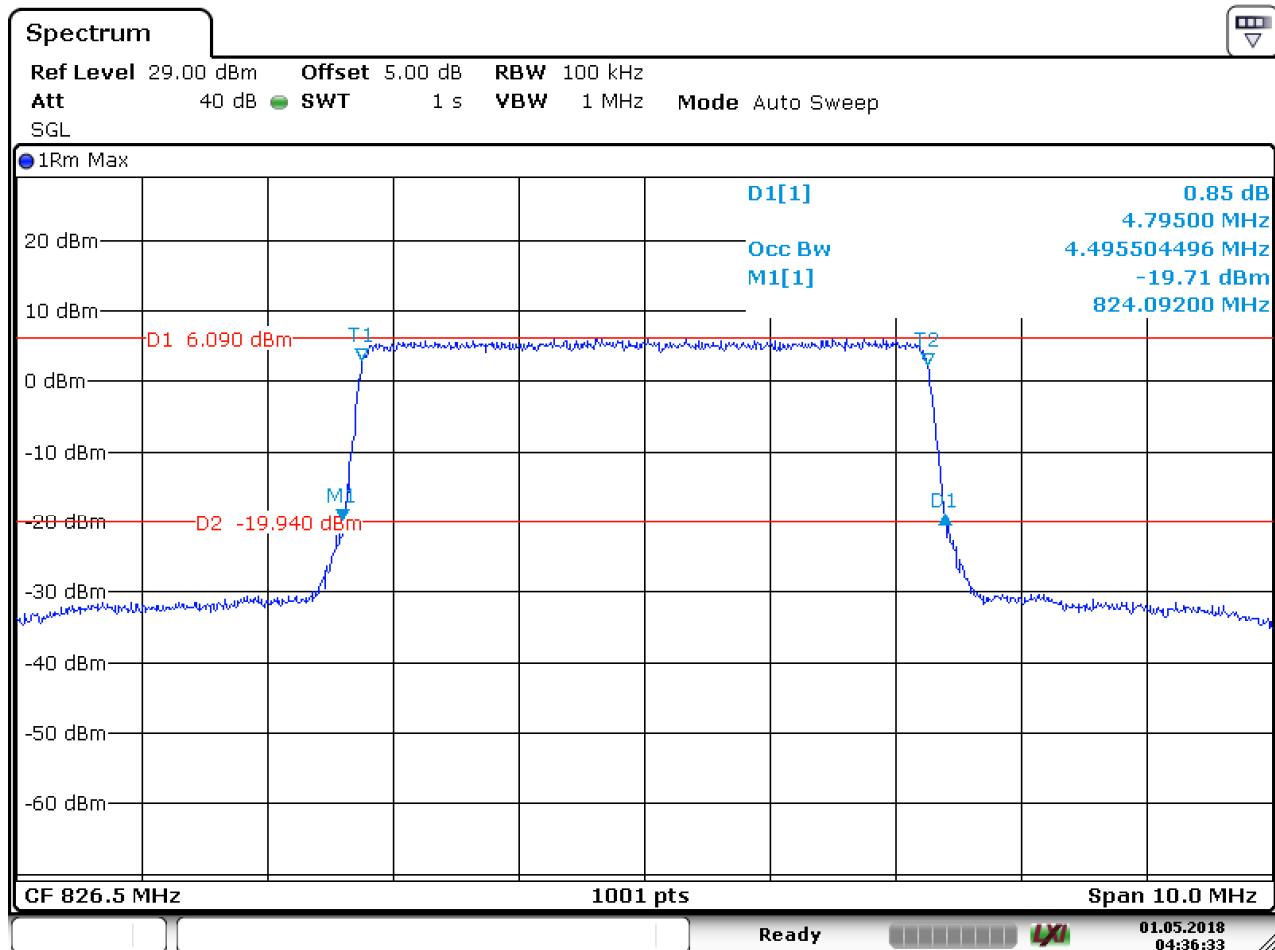
Date: 1.MAY.2018 04:34:35

4.1.1.5.3 Test Channel = HCH

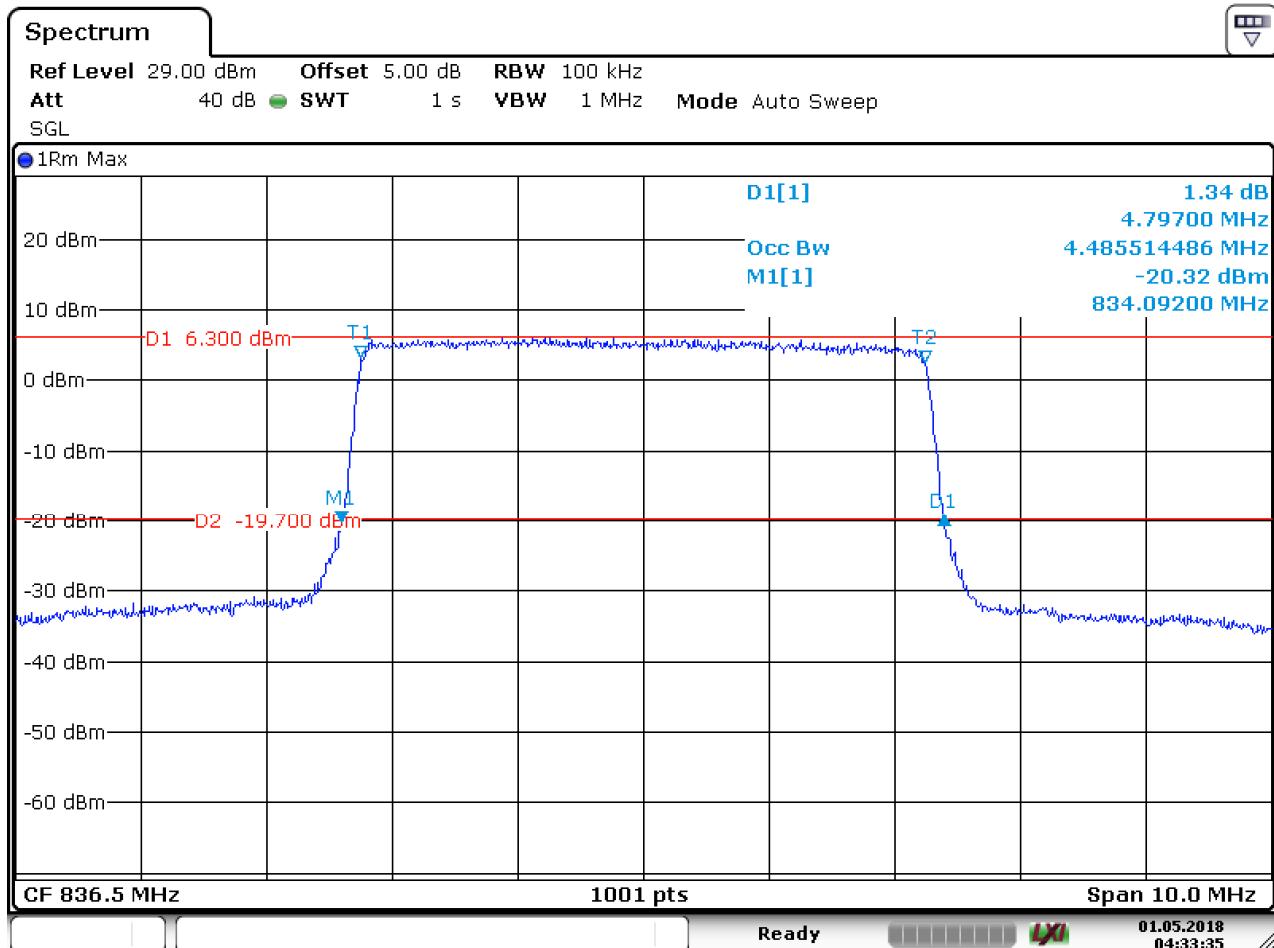
Date: 1.MAY.2018 04:38:32

4.1.1.6 Test Mode = LTE/TM2 5MHz

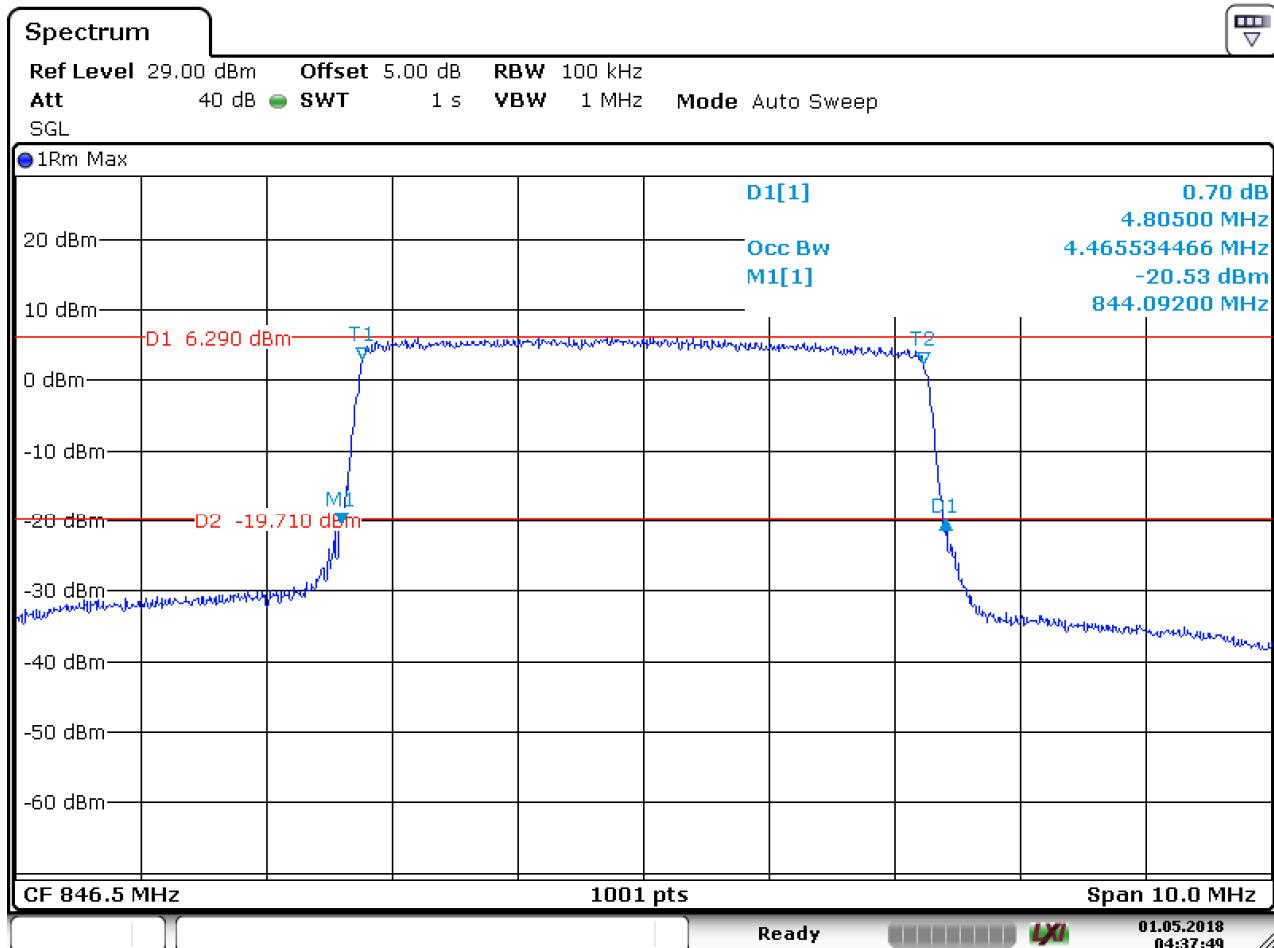
4.1.1.6.1 Test Channel = LCH



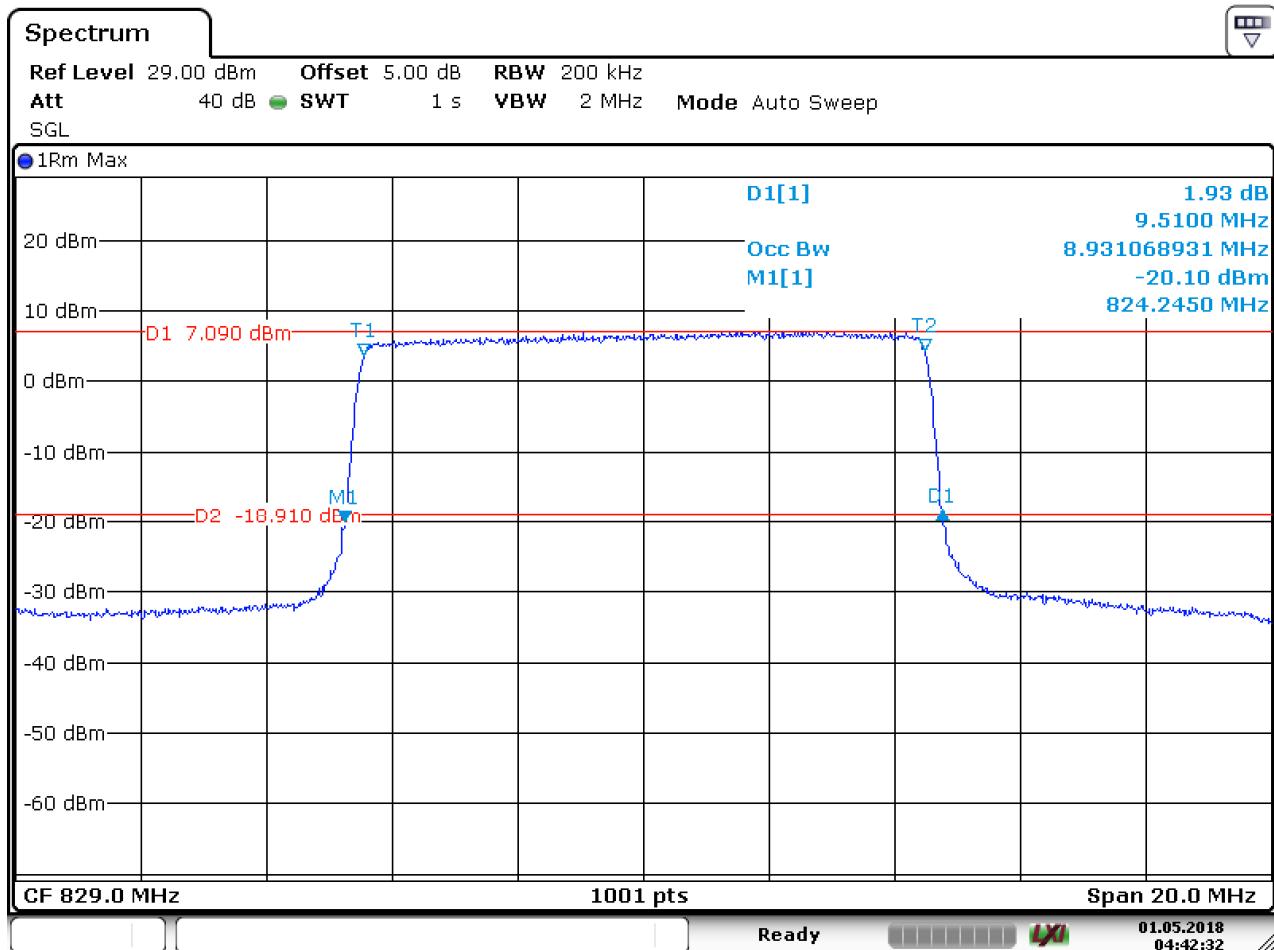
Date: 1.MAY.2018 04:36:34

4.1.1.6.2 Test Channel = MCH

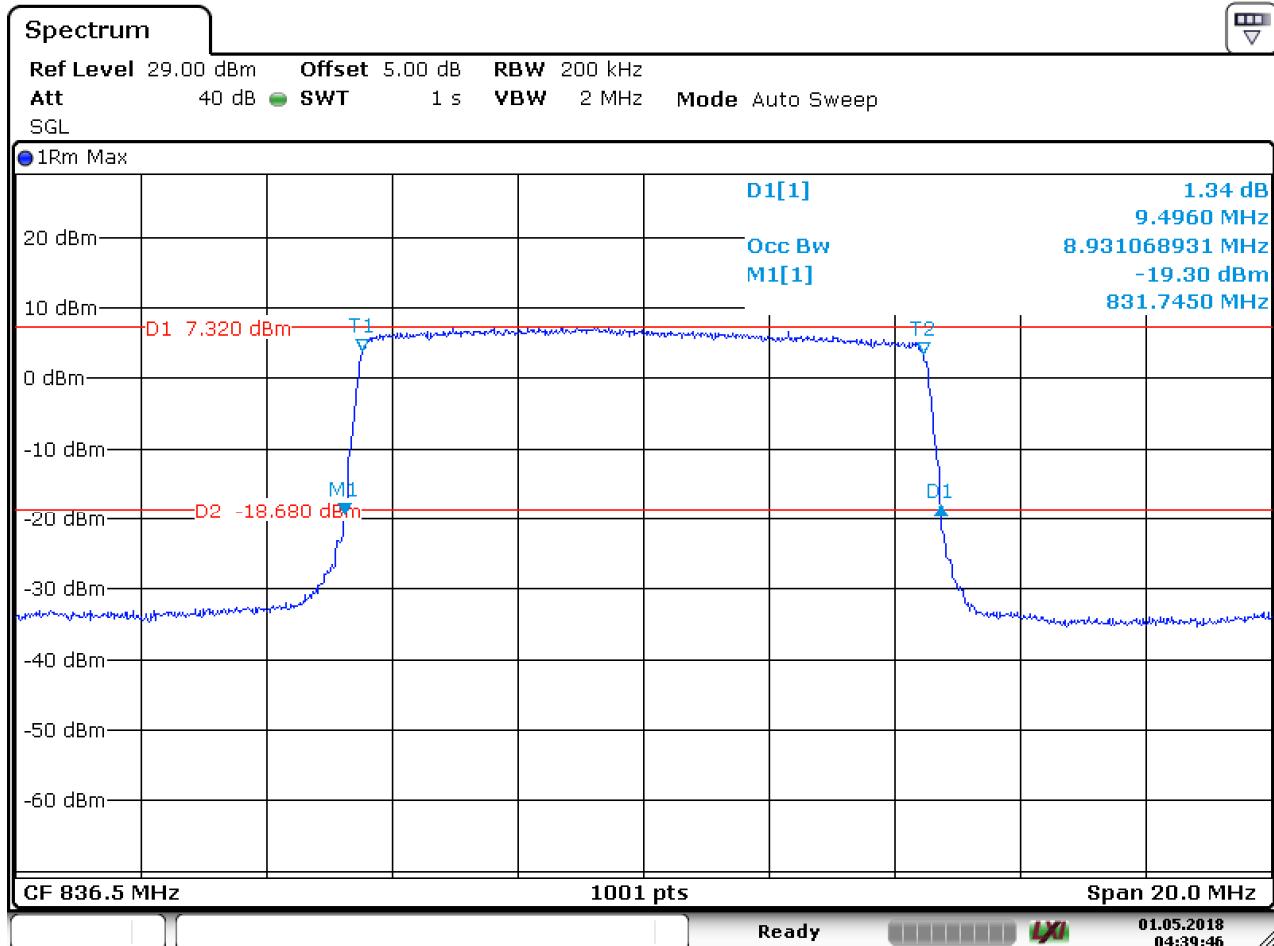
Date: 1.MAY.2018 04:33:35

4.1.1.6.3 Test Channel = HCH

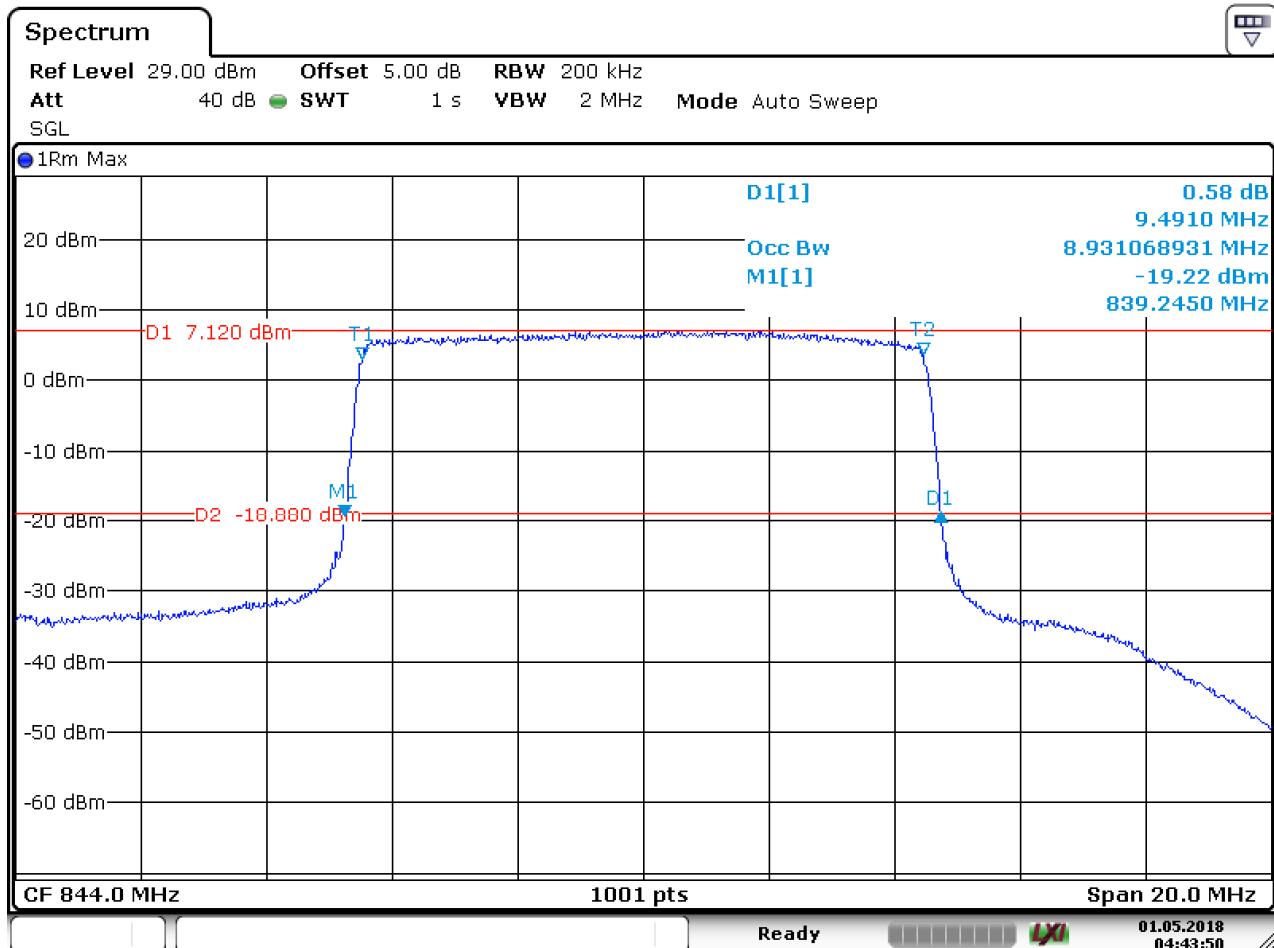
Date: 1.MAY.2018 04:37:50

4.1.1.7 Test Mode = LTE/TM1 10MHz**4.1.1.7.1 Test Channel = LCH**

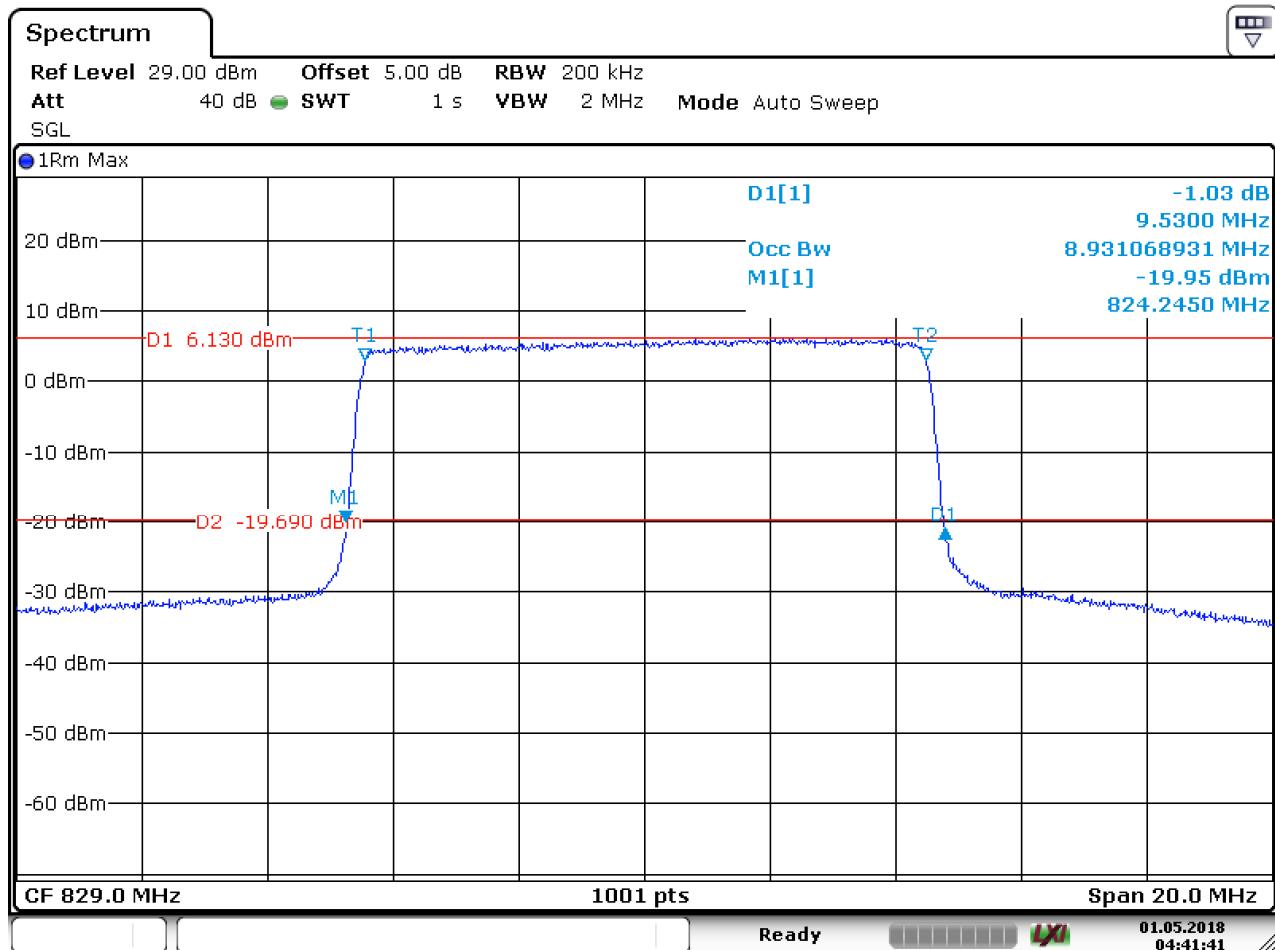
Date: 1.MAY.2018 04:42:33

4.1.1.7.2 Test Channel = MCH


Date: 1.MAY.2018 04:39:46

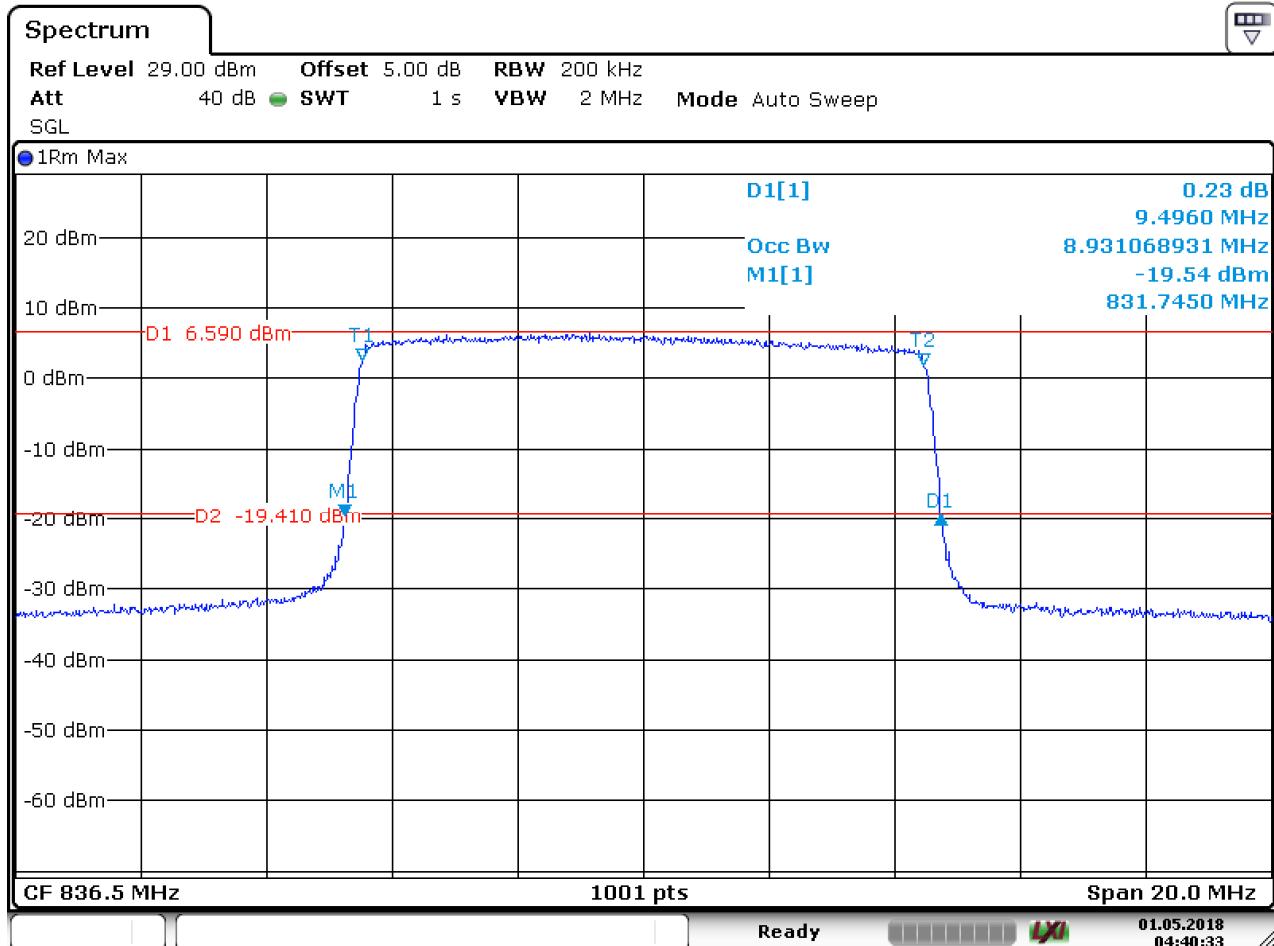
4.1.1.7.3 Test Channel = HCH

Date: 1.MAY.2018 04:43:51

4.1.1.8 Test Mode = LTE/TM2 10MHz**4.1.1.8.1 Test Channel = LCH**

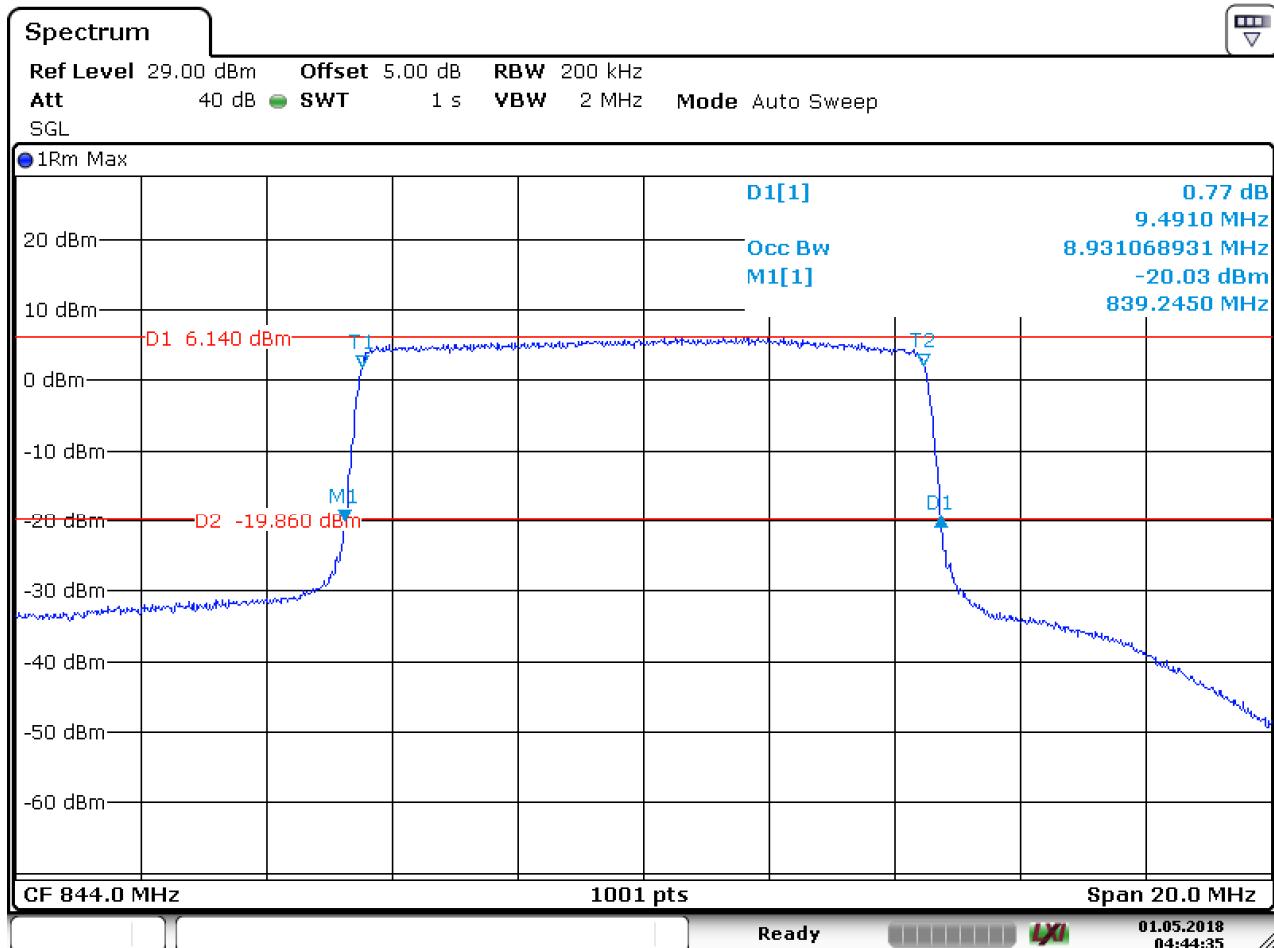
Date: 1.MAY.2018 04:41:41

4.1.1.8.2 Test Channel = MCH

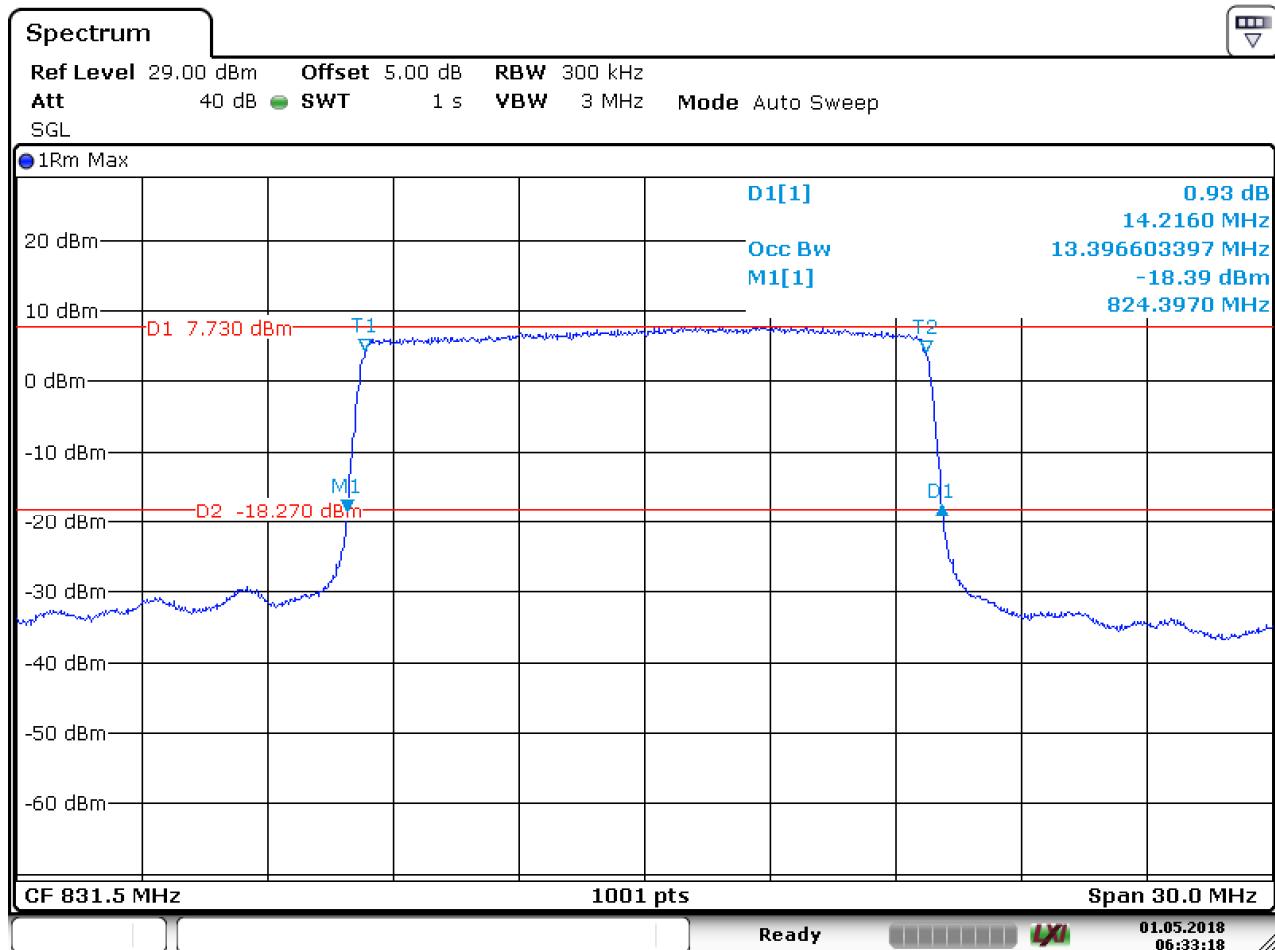


Date: 1.MAY.2018 04:40:34

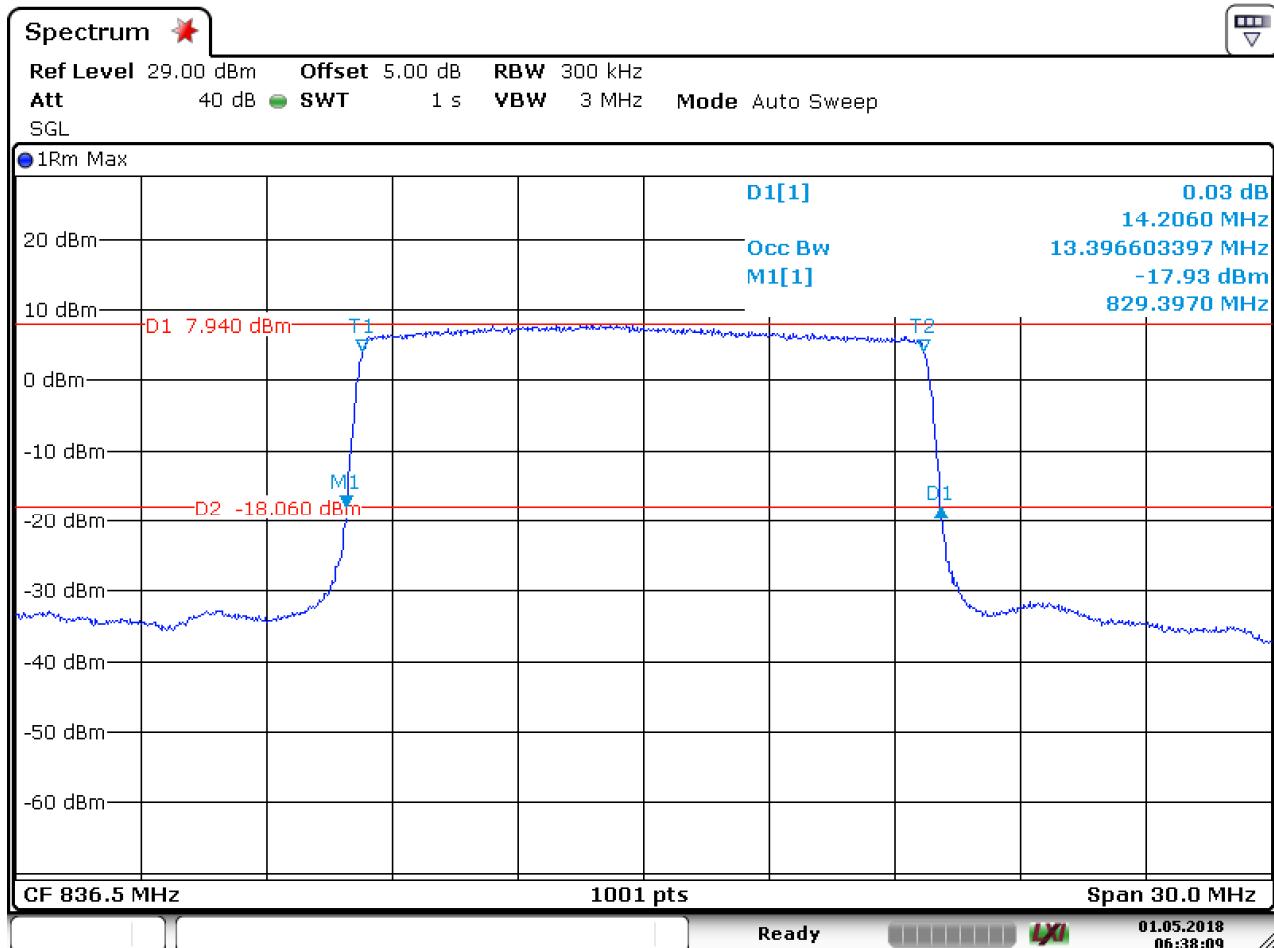
4.1.1.8.3 Test Channel = HCH



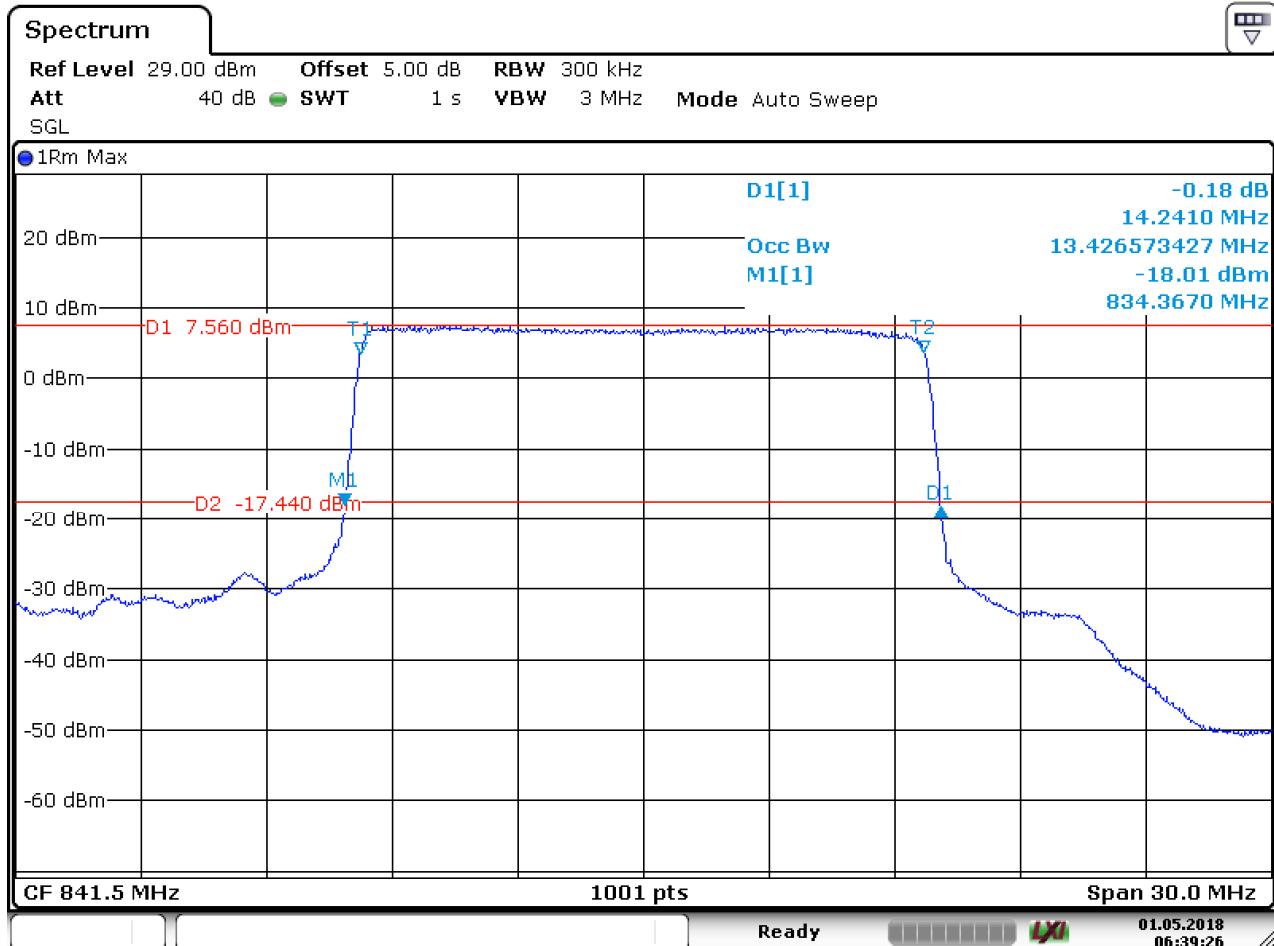
Date: 1.MAY.2018 04:44:35

4.1.1.9 Test Mode = LTE/TM1 15MHz**4.1.1.9.1 Test Channel = LCH**

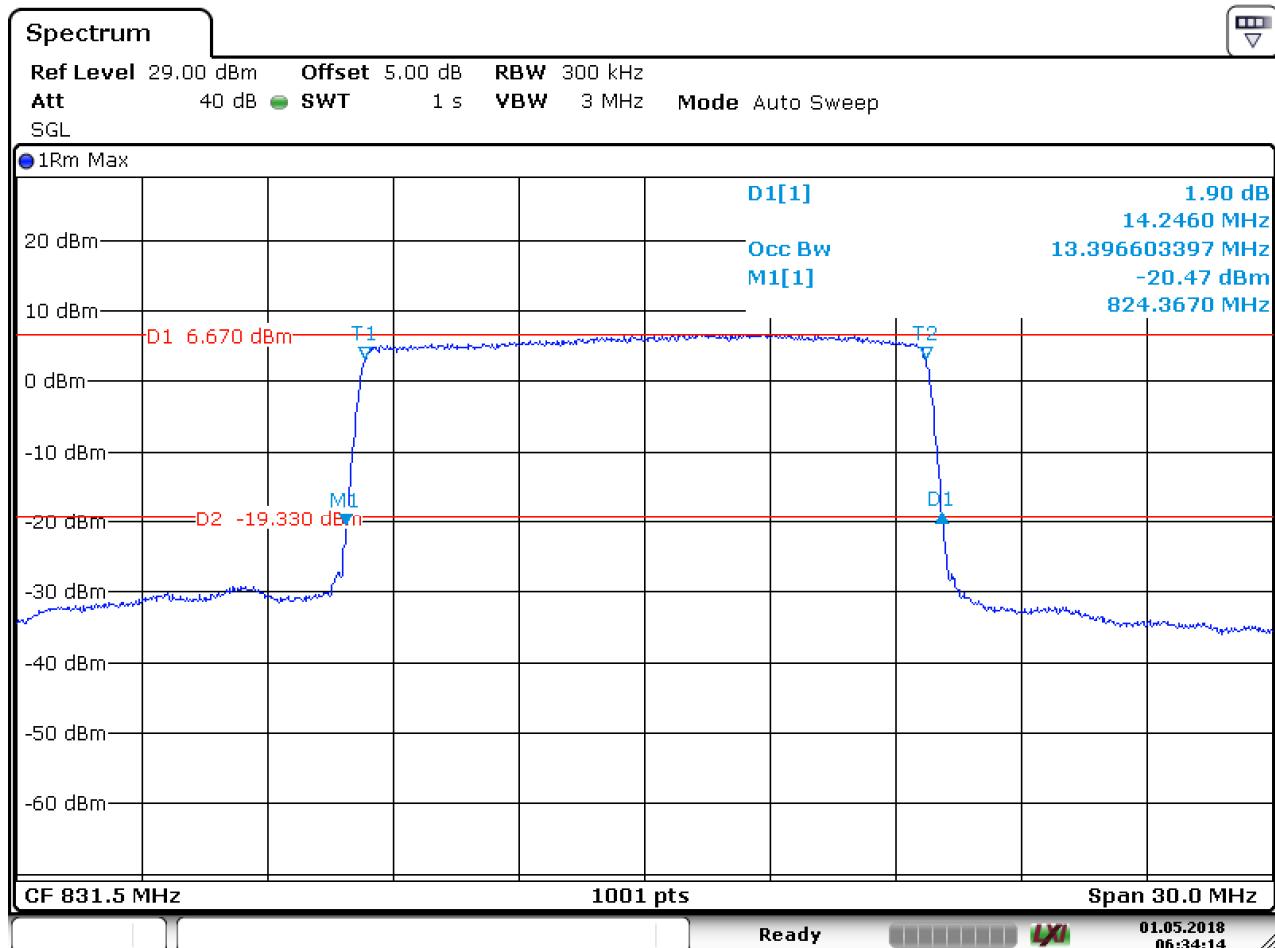
Date: 1.MAY.2018 06:33:18

4.1.1.9.2 Test Channel = MCH

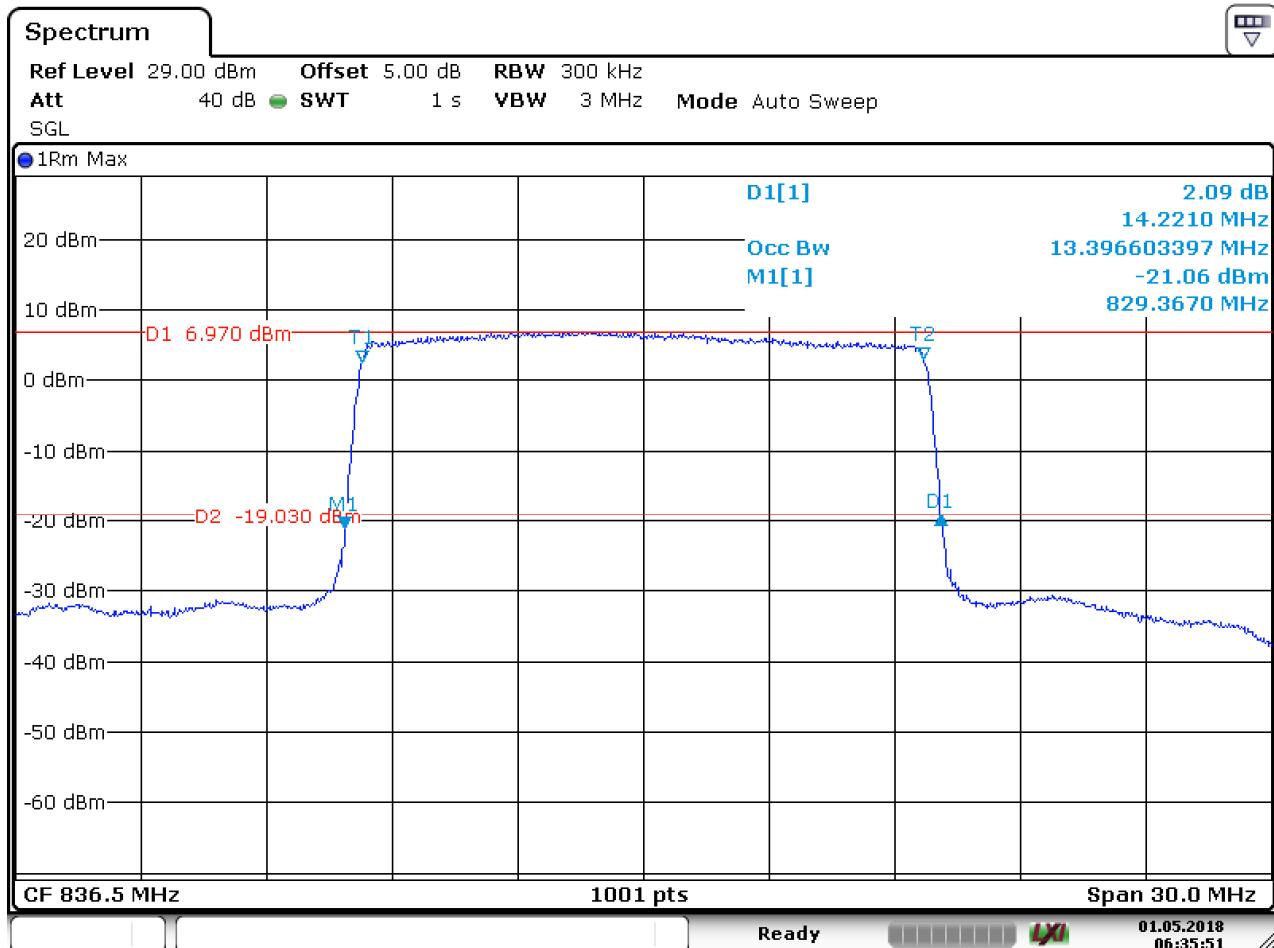
Date: 1.MAY.2018 06:38:10

4.1.1.9.3 Test Channel = HCH

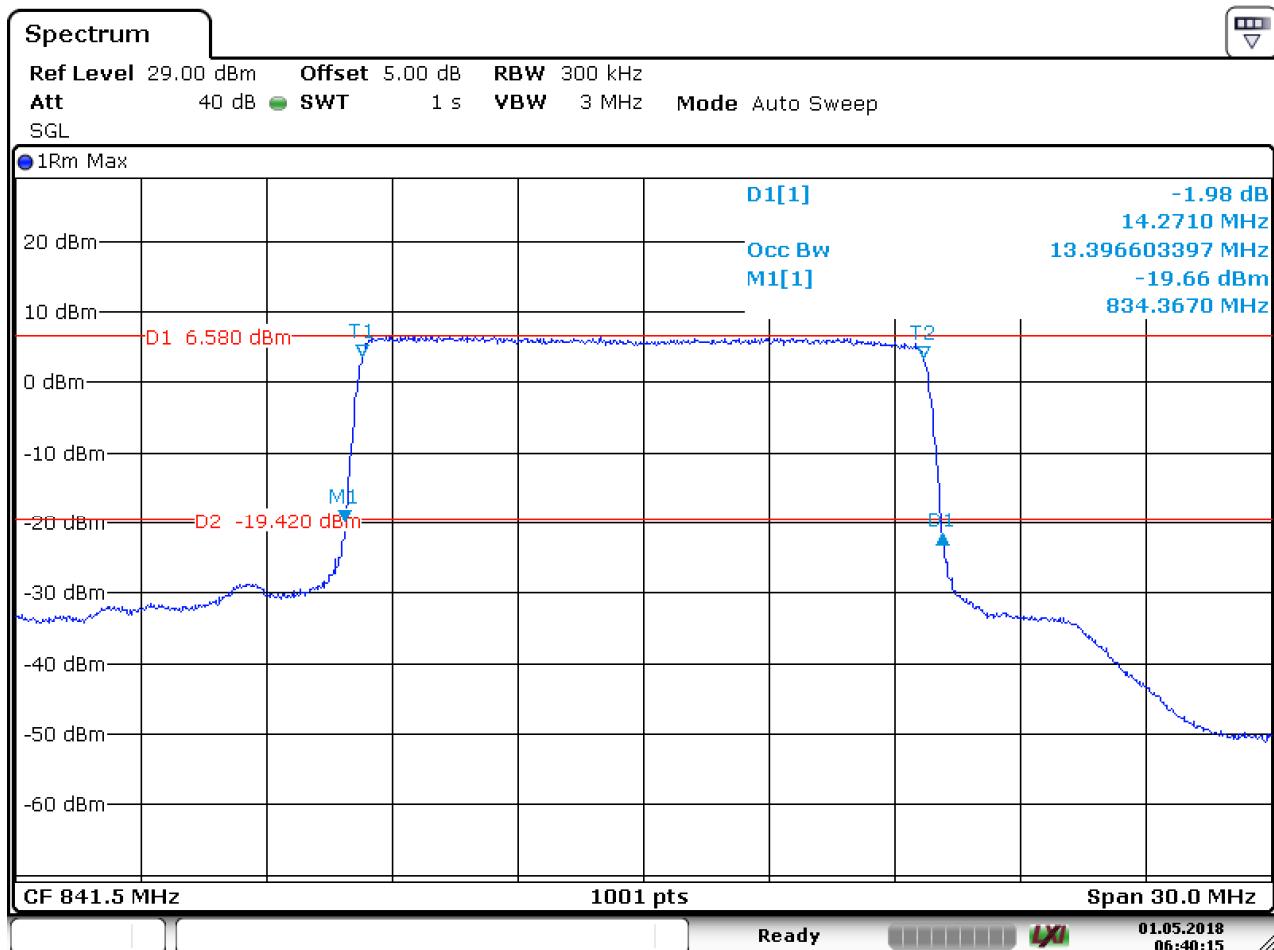
Date: 1.MAY.2018 06:39:27

4.1.1.10 Test Mode = LTE/TM2 15MHz**4.1.1.10.1 Test Channel = LCH**

Date: 1.MAY.2018 06:34:14

4.1.1.10.2 Test Channel = MCH

Date: 1.MAY.2018 06:35:52

4.1.1.10.3 Test Channel = HCH

Date: 1.MAY.2018 06:40:15

5 Band Edges Compliance

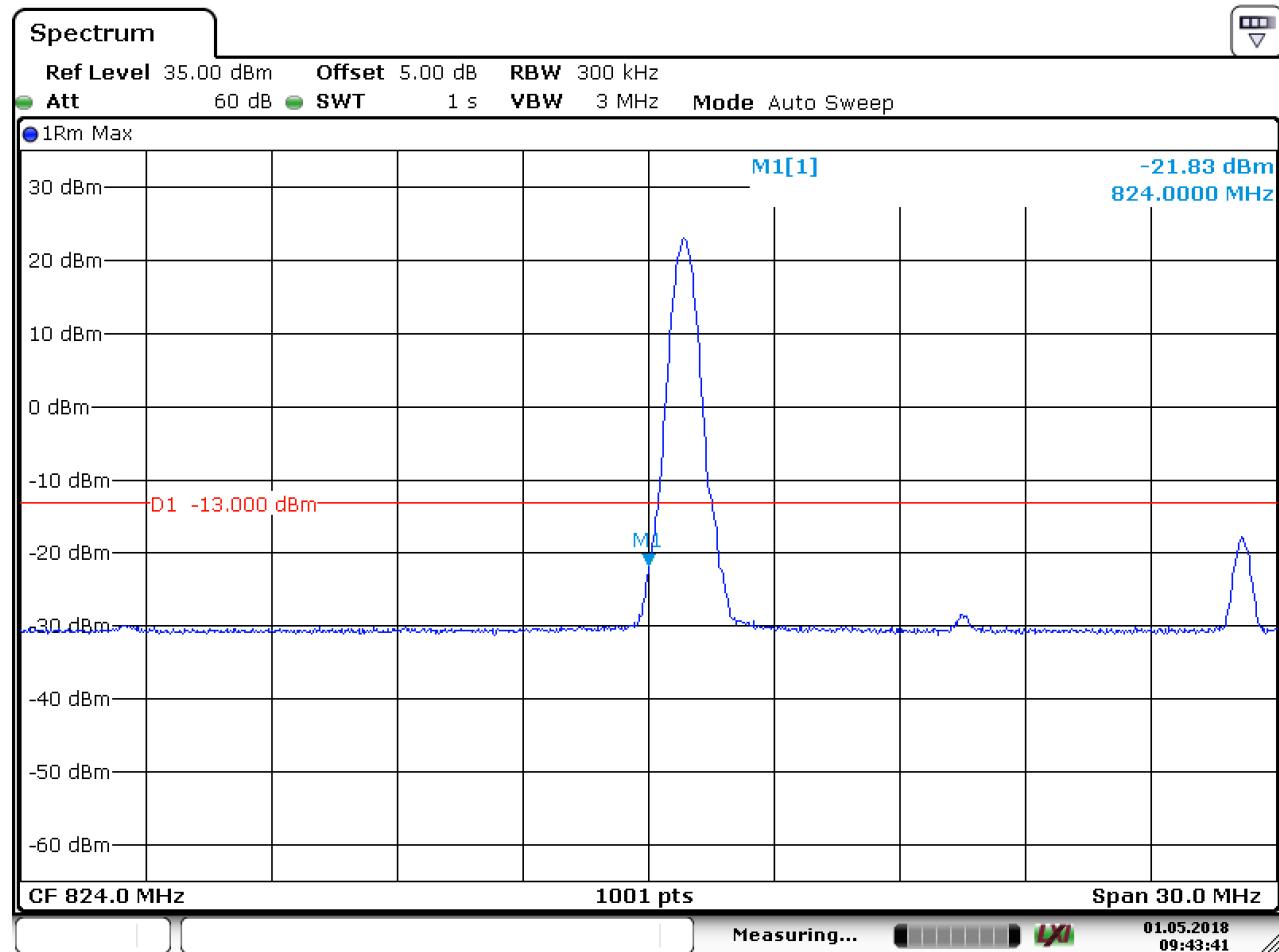
5.1 For LTE

5.1.1 Test Band = LTE band26

5.1.1.1 Test Mode = LTE/TM1 15MHz

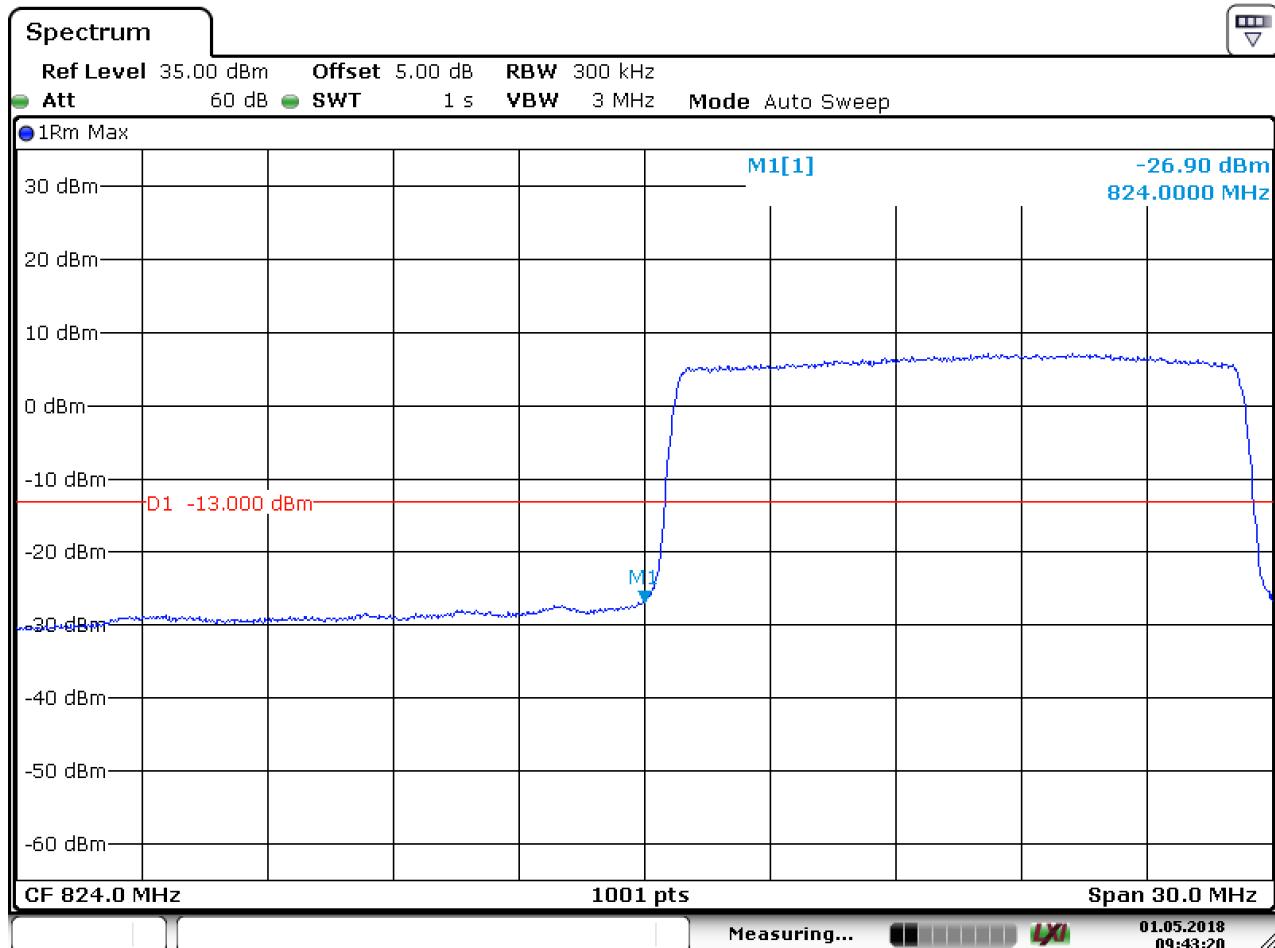
5.1.1.1.1 Test Channel = LCH

5.1.1.1.1.1 Test RB=1RB#0

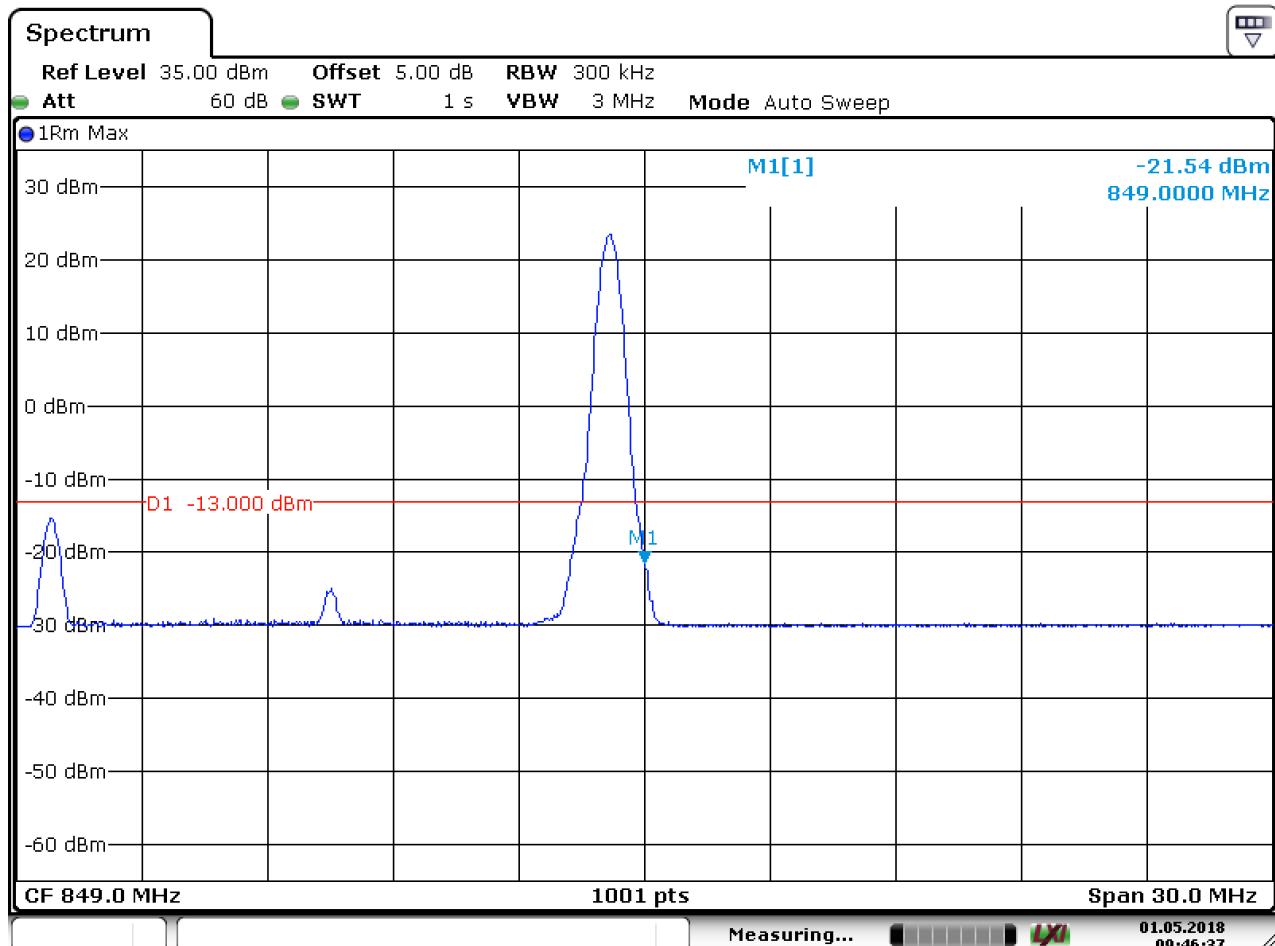


Date: 1.MAY.2018 09:43:41

5.1.1.1.1.2 Test RB=75RB#0

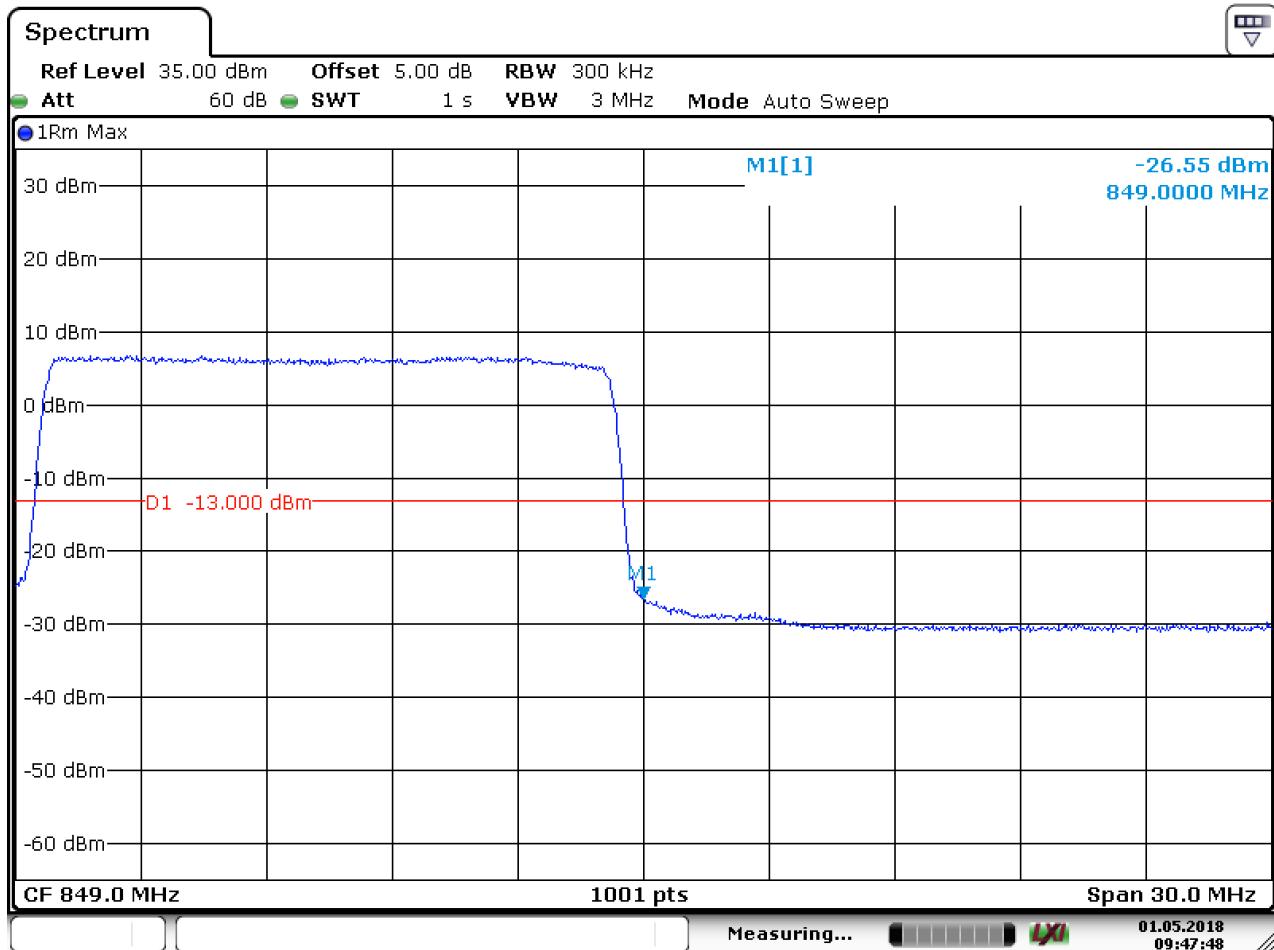


Date: 1.MAY.2018 09:43:21

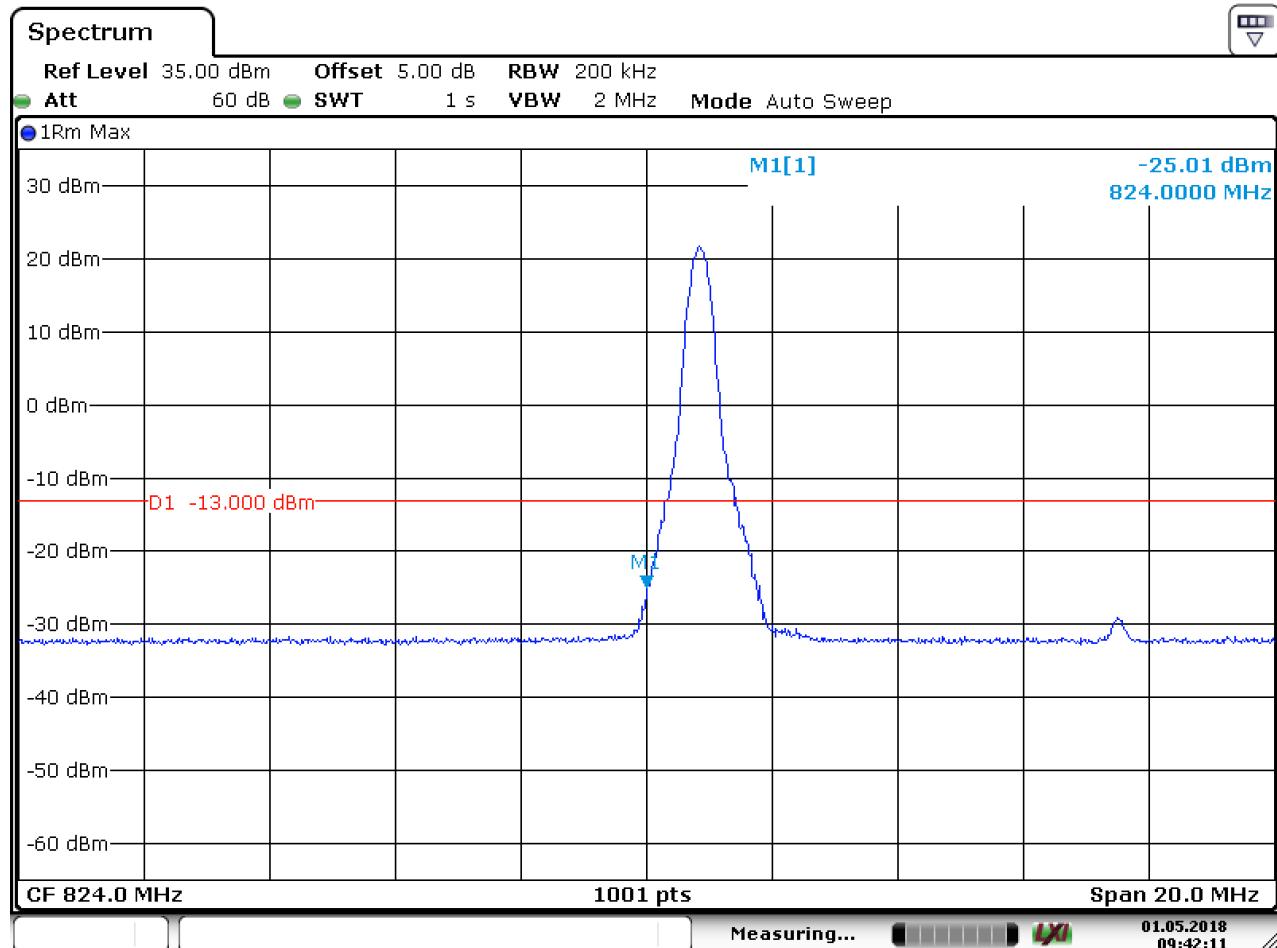
5.1.1.1.2 Test Channel = HCH**5.1.1.1.2.1 Test RB=1RB#74**

Date: 1.MAY.2018 09:46:37

5.1.1.1.2.2 Test RB=75RB#0

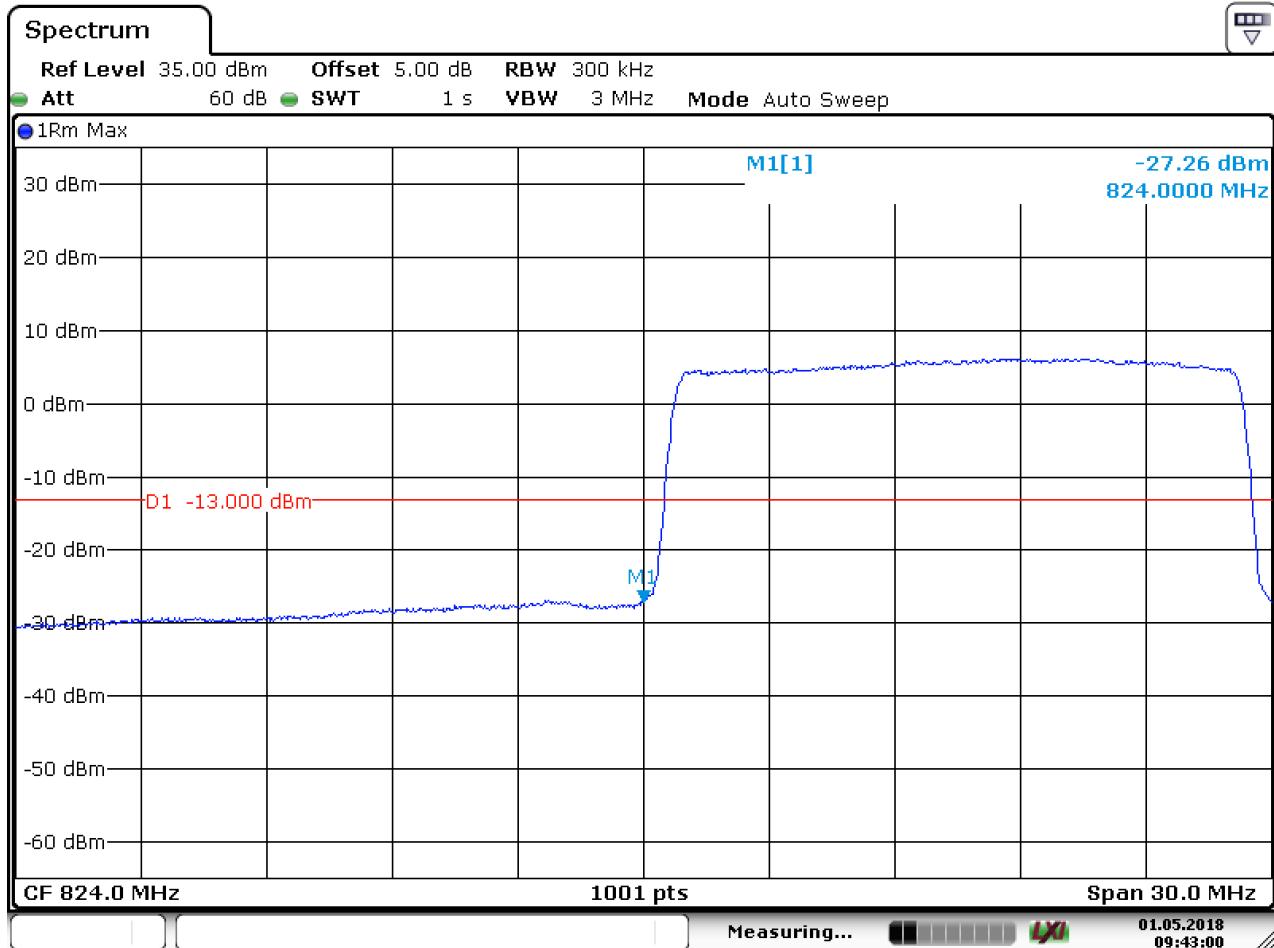


Date: 1.MAY.2018 09:47:48

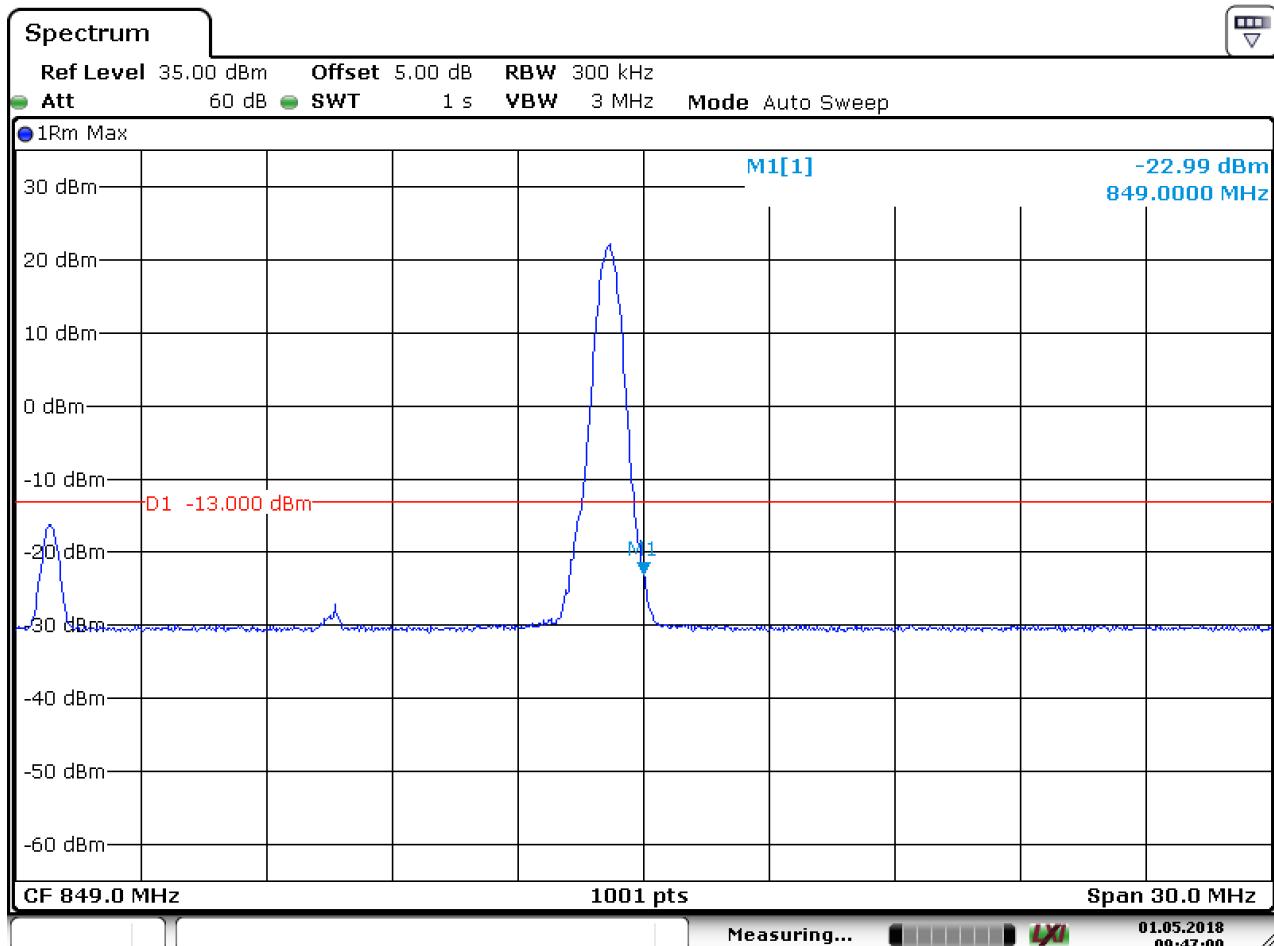
5.1.1.2 Test Mode = LTE/TM2 15MHz**5.1.1.2.1 Test Channel = LCH****5.1.1.2.1.1 Test RB=1RB#0**

Date: 1.MAY.2018 09:42:12

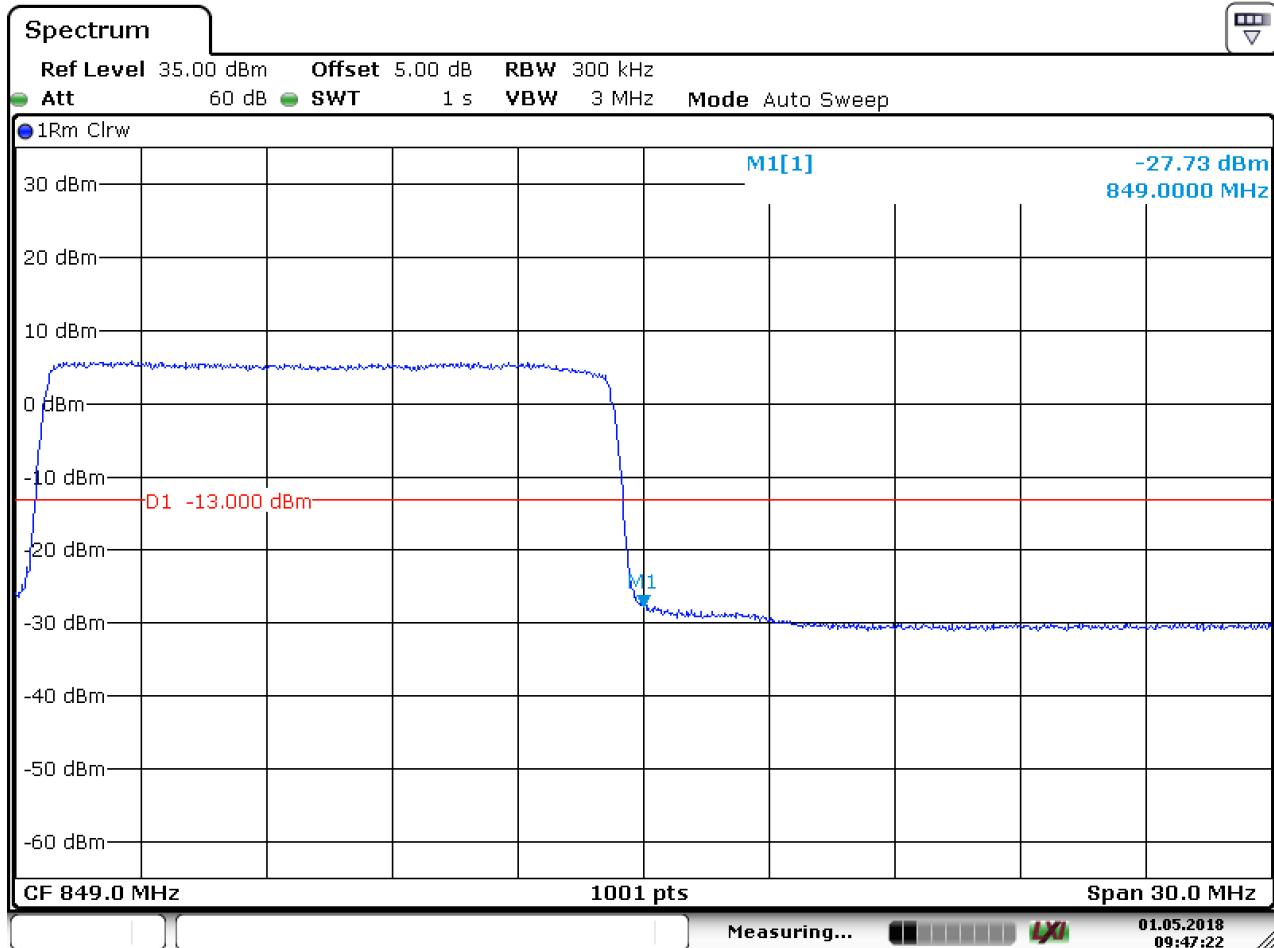
01.05.2018
09:42:11

5.1.1.2.1.2 Test RB=75RB#0

Date: 1.MAY.2018 09:43:01

5.1.1.2.2 Test Channel = HCH**5.1.1.2.2.1 Test RB=1RB#74**

Date: 1.MAY.2018 09:47:00

5.1.1.2.2.2 Test RB=75RB#0

Date: 1.MAY.2018 09:47:22

6 Spurious Emission at Antenna Terminal

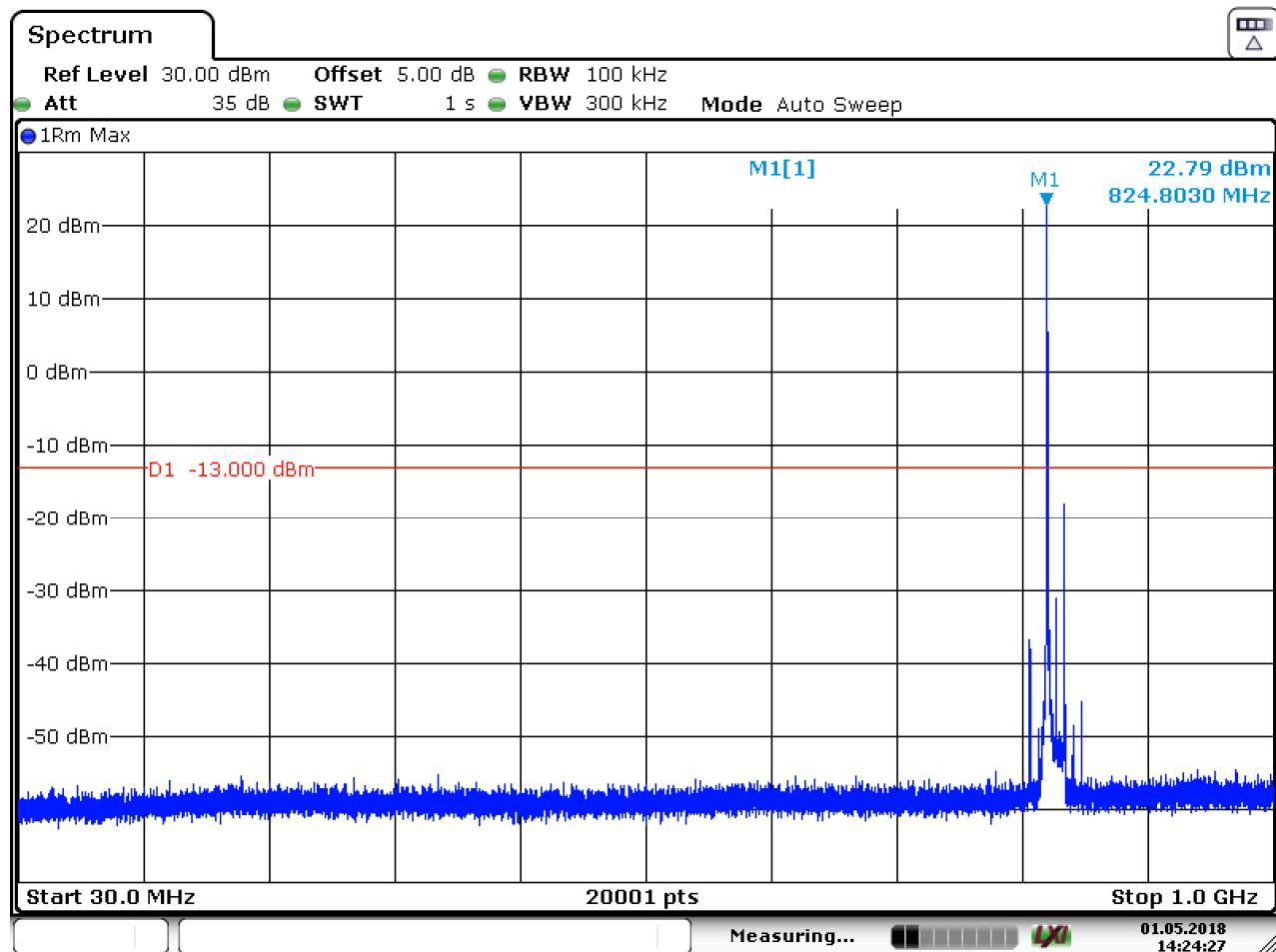
NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< \text{RBW}/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points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

Part I - Test Plots

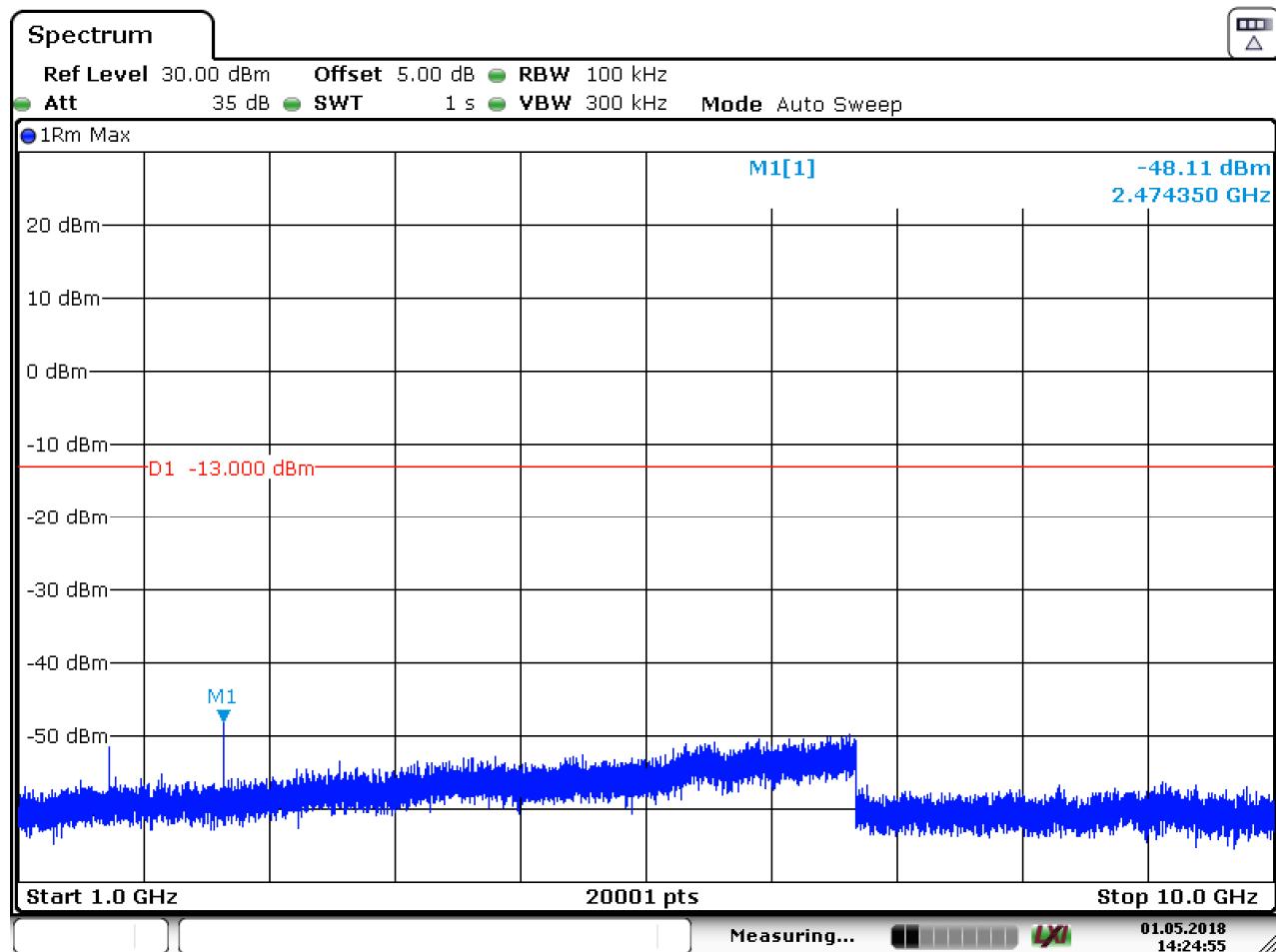
6.1 For LTE

6.1.1.1 Test Mode = LTE / TM1 15MHz RB1#0

6.1.1.1.1 Test Channel = LCH

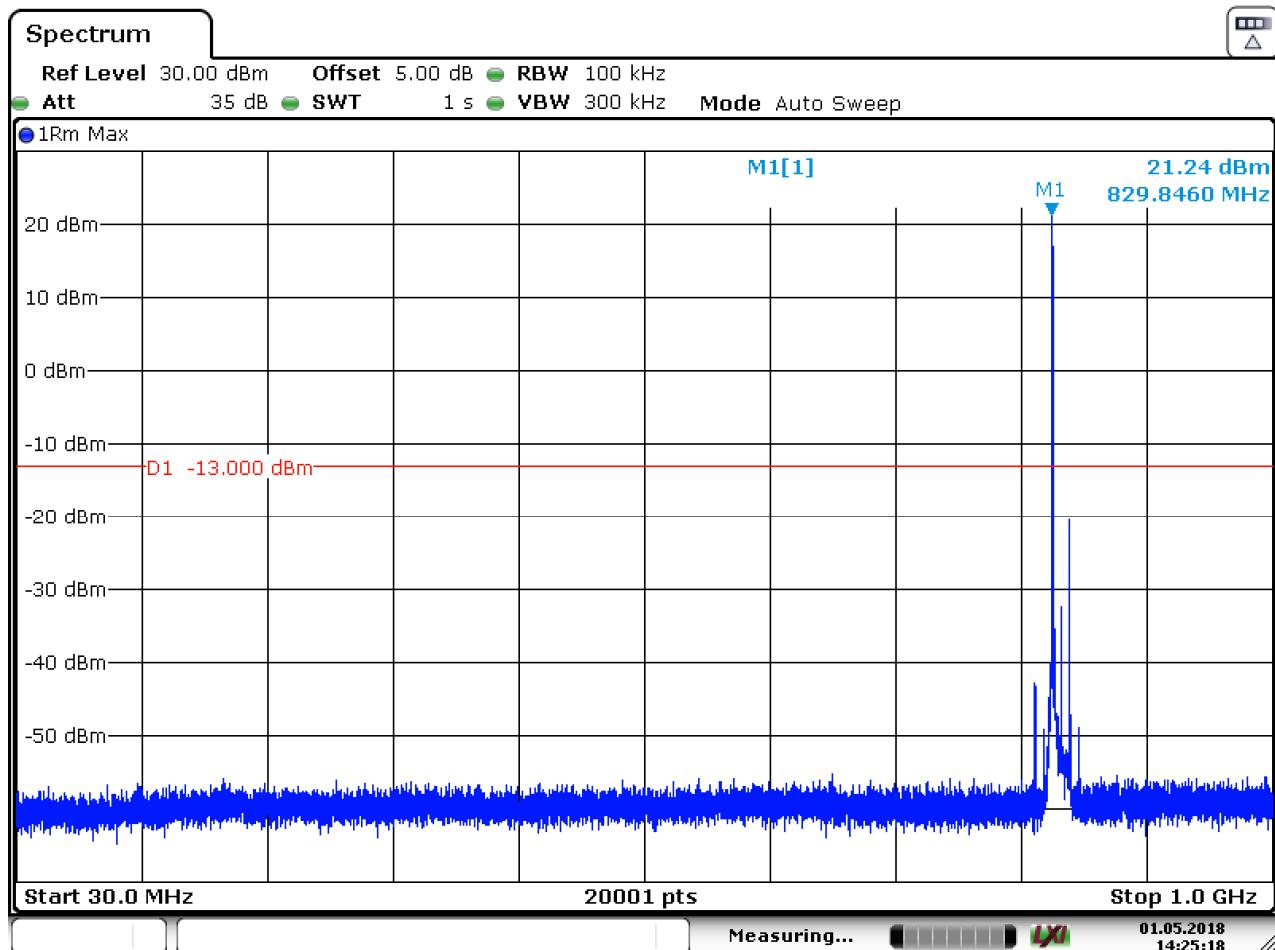


Date: 1.MAY.2018 14:24:28

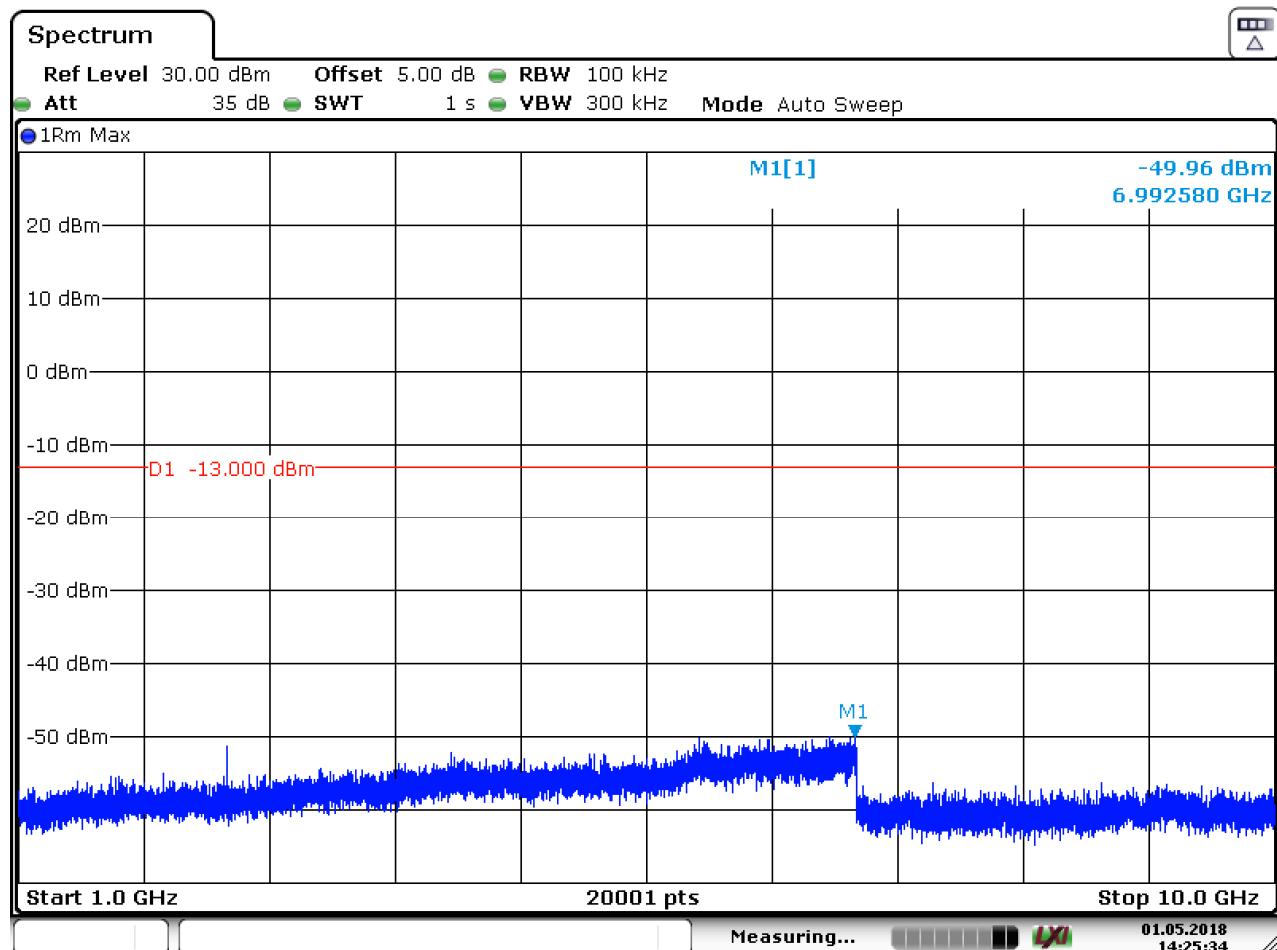


Date: 1.MAY.2018 14:24:55

6.1.1.1.2 Test Channel = MCH

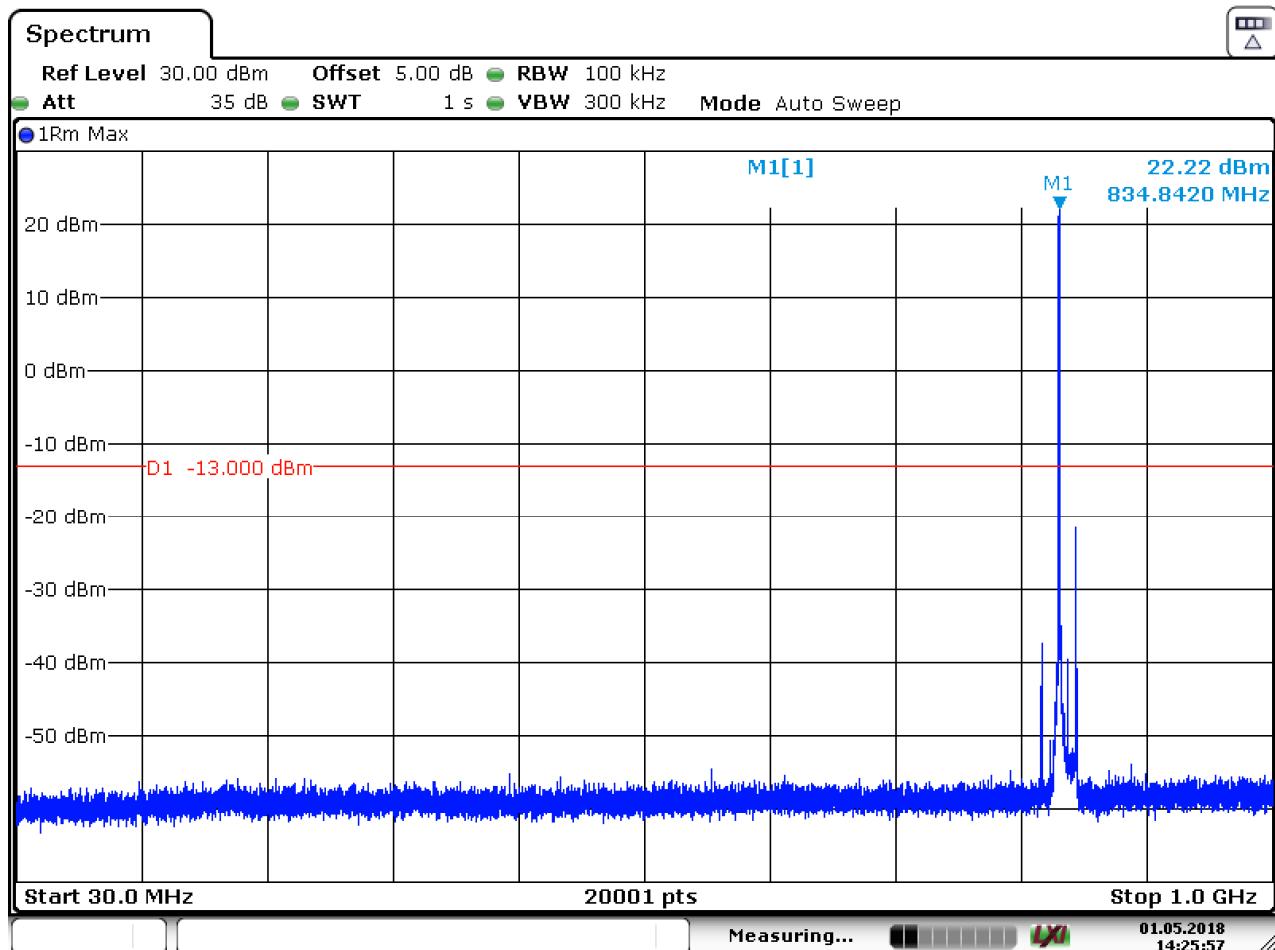


Date: 1.MAY.2018 14:25:18

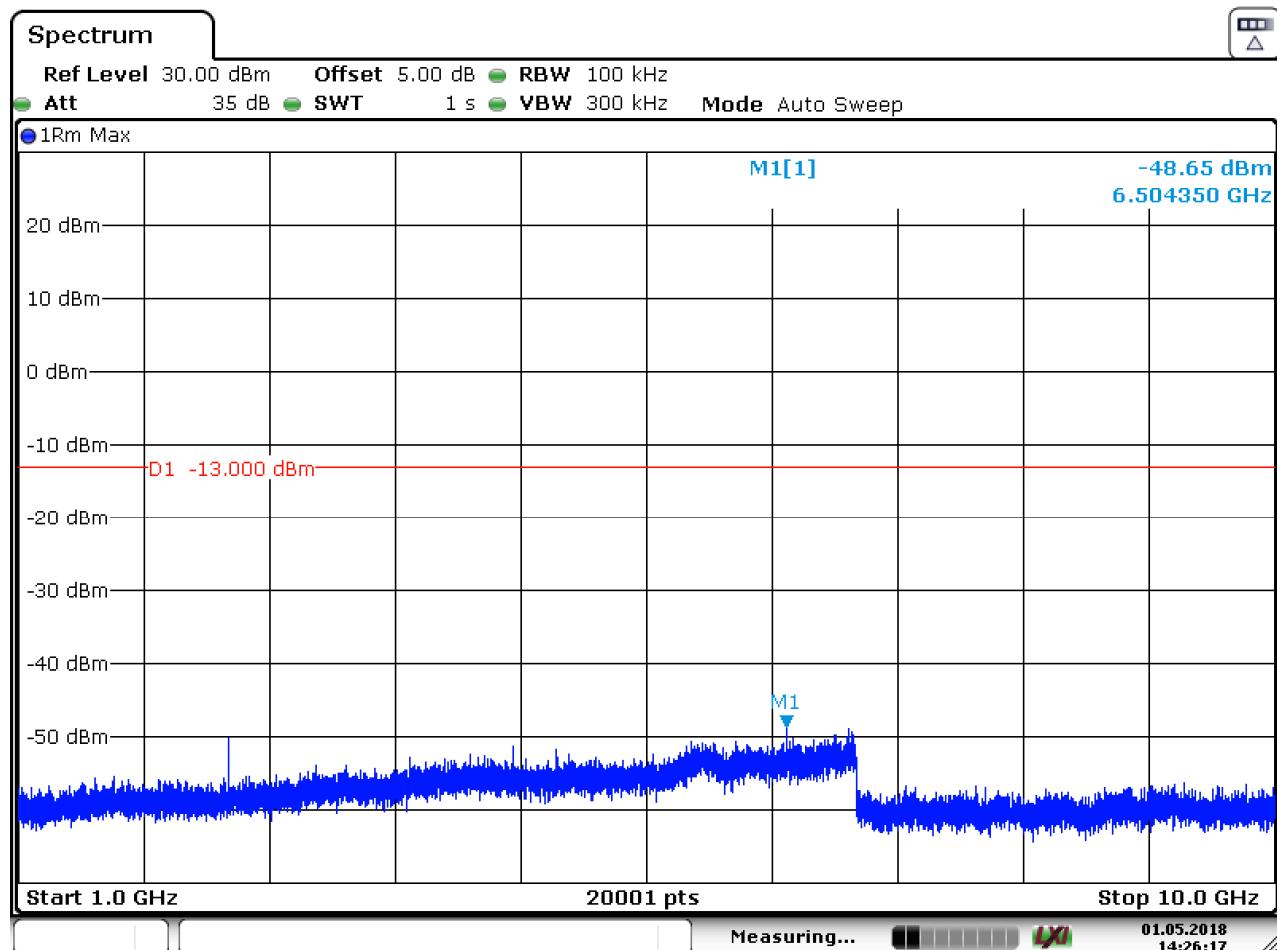


Date: 1.MAY.2018 14:25:35

6.1.1.1.3 Test Channel = HCH



Date: 1.MAY.2018 14:25:57



Date: 1.MAY.2018 14:26:17

7 Field Strength of Spurious Radiation

7.1 For LTE

7.1.1 Test Band = LTE band 26

7.1.1.1 Test Mode =LTE/TM1 15MHz RB1#0

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
72.793333	-77.26	-13.00	64.26	Vertical
144.006667	-69.45	-13.00	56.45	Vertical
1649.500000	-58.74	-13.00	45.74	Vertical
2474.500000	-54.79	-13.00	41.79	Vertical
3299.000000	-66.17	-13.00	53.17	Vertical
9072.950000	-62.38	-13.00	49.38	Vertical
63.273333	-78.51	-13.00	65.51	Horizontal
144.006667	-75.93	-13.00	62.93	Horizontal
1649.500000	-61.39	-13.00	48.39	Horizontal
2474.500000	-57.38	-13.00	44.38	Horizontal
3299.000000	-67.68	-13.00	54.68	Horizontal
9072.950000	-57.44	-13.00	44.44	Horizontal

7.1.1.1.1.1 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
72.186667	-77.08	-13.00	64.08	Vertical
144.006667	-69.71	-13.00	56.71	Vertical
1659.500000	-54.75	-13.00	41.75	Vertical
2489.500000	-50.91	-13.00	37.91	Vertical
3319.150000	-65.18	-13.00	52.18	Vertical
4978.925000	-66.15	-13.00	53.15	Vertical
62.993333	-78.25	-13.00	65.25	Horizontal
144.006667	-75.81	-13.00	62.81	Horizontal
1659.500000	-58.66	-13.00	45.66	Horizontal
2489.500000	-56.20	-13.00	43.20	Horizontal
3319.150000	-66.81	-13.00	53.81	Horizontal
9128.200000	-59.96	-13.00	46.96	Horizontal

7.1.1.1.1 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
73.306667	-77.09	-13.00	64.09	Vertical
143.960000	-70.17	-13.00	57.17	Vertical
1669.500000	-54.85	-13.00	41.85	Vertical
2504.500000	-49.79	-13.00	36.79	Vertical
3339.300000	-64.46	-13.00	51.46	Vertical
5008.825000	-65.56	-13.00	52.56	Vertical
63.553333	-77.89	-13.00	64.89	Horizontal
144.006667	-75.69	-13.00	62.69	Horizontal
1669.500000	-59.82	-13.00	46.82	Horizontal
2504.500000	-54.92	-13.00	41.92	Horizontal
3339.300000	-65.81	-13.00	52.81	Horizontal
9183.125000	-61.19	-13.00	48.19	Horizontal

NOTE:

- 1) All modes are tested, but the data presented above is the worst case. 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
LTE band26	LTE/TM1 15MHz	LCH	TN	VL	-7.06	-0.00849	PASS
				VN	-6.57	-0.00790	PASS
				VH	5.00	0.00602	PASS
		MCH	TN	VL	-0.35	-0.00042	PASS
				VN	-3.89	-0.00465	PASS
				VH	-9.67	-0.01156	PASS
		HCH	TN	VL	7.72	0.00918	PASS
				VN	-9.96	-0.01184	PASS
				VH	-0.13	-0.00015	PASS
	LTE/TM2 15MHz	LCH	TN	VL	-9.22	-0.01109	PASS
				VN	-3.02	-0.00364	PASS
				VH	-6.50	-0.00782	PASS
		MCH	TN	VL	-2.61	-0.00312	PASS
				VN	-7.90	-0.00944	PASS
				VH	-3.53	-0.00422	PASS
		HCH	TN	VL	1.37	0.00163	PASS
				VN	-1.86	-0.00221	PASS
				VH	-2.84	-0.00338	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 band26	LTE/TM1 15MHz	LCH	VN	-30	7.03	0.00846	PASS
				-20	5.48	0.00659	PASS
				-10	2.17	0.00261	PASS
				0	-4.43	-0.00532	PASS
				10	-6.93	-0.00834	PASS
				20	5.18	0.00623	PASS
				30	-4.94	-0.00594	PASS
				40	1.86	0.00224	PASS
				50	4.45	0.00536	PASS
		MCH	VN	-30	-4.55	-0.00543	PASS
				-20	0.47	0.00056	PASS
				-10	-3.77	-0.00450	PASS
				0	-0.28	-0.00034	PASS
				10	7.62	0.00911	PASS
				20	3.19	0.00381	PASS
				30	-1.52	-0.00182	PASS
				40	-9.06	-0.01083	PASS
				50	8.25	0.00986	PASS
		HCH	VN	-30	2.75	0.00327	PASS
				-20	-8.74	-0.01039	PASS
				-10	0.49	0.00058	PASS
				0	2.76	0.00328	PASS
				10	-0.58	-0.00070	PASS
				20	3.20	0.00381	PASS
				30	9.15	0.01087	PASS
				40	-9.49	-0.01128	PASS
				50	-9.31	-0.01106	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE band26	LTE/TM2 15MHz	LCH	VN	-30	2.33	0.00280	PASS
				-20	5.47	0.00658	PASS
				-10	6.02	0.00724	PASS
				0	1.13	0.00136	PASS
				10	6.37	0.00766	PASS
				20	-3.92	-0.00472	PASS
				30	9.11	0.01096	PASS
				40	-7.53	-0.00905	PASS
				50	1.68	0.00202	PASS
		MCH	VN	-30	-8.39	-0.01004	PASS
				-20	-3.27	-0.00391	PASS
				-10	-6.31	-0.00755	PASS
				0	-1.99	-0.00238	PASS
				10	-5.91	-0.00706	PASS
				20	8.02	0.00959	PASS
				30	9.57	0.01144	PASS
				40	-8.15	-0.00974	PASS
				50	2.72	0.00325	PASS
		HCH	VN	-30	-8.33	-0.00990	PASS
				-20	5.79	0.00688	PASS
				-10	9.94	0.01182	PASS
				0	-1.66	-0.00197	PASS
				10	4.52	0.00537	PASS
				20	-8.22	-0.00977	PASS
				30	-1.03	-0.00122	PASS
				40	1.01	0.00120	PASS
				50	-0.16	-0.00019	PASS

The End