

Report No.: SZEM170100023101

Page: 1 of 175

# Appendix B

Test Data for SZEM170100023101



Report No.: SZEM170100023101

Page: 2 of 175

#### CONTENT

		Page
1	EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA	3
2	PEAK-TO-AVERAGE RATIO	15
2	2.1 For LTE	16
	2.1.1 Test Band = LTE band 41	16
3	MODULATION CHARACTERISTICS	25
3	3.1 For LTE	25
	3.1.1 Test Band = LTE band 41	25
4	BANDWIDTH	37
4	l.1 For LTE	39
	4.1.1 Test Band = LTE band41	39
5	BAND EDGES COMPLIANCE	75
	5.1.1 Test Band = LTE band 41	75
6	SPURIOUS EMISSION AT ANTENNA TERMINAL	123
6	6.1 FOR LTE	123
	6.1.1 Test Band = LTE band 41	123
7	FIELD STRENGTH OF SPURIOUS RADIATION	171
7	7.1 FOR LTE	171
	7.1.1 Test Band = LTEband41	171
8	FREQUENCY STABILITY	172
8	3.1 FREQUENCY ERROR VS. VOLTAGE	172
8	3.2 FREQUENCY ERROR VS. TEMPERATURE	173



Report No.: SZEM170100023101

Page: 3 of 175

### 1 Effective (Isotropic) Radiated Power Output Data

Effective Isotropic Radiated Power of Transmitter (EIRP) for LTE BAND41

		c Radiated Po		nsmitter (EIRF				
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	17.20	21.80	33.00	PASS
				RB1#13	17.23	21.83	33.00	PASS
				RB1#24	17.14	21.74	33.00	PASS
			LCH	RB12#0	17.29	21.89	33.00	PASS
				RB12#6	17.33	21.93	33.00	PASS
				RB12#13	17.21	21.81	33.00	PASS
				RB25#0	17.29	21.89	33.00	PASS
				RB1#0	17.14	21.74	33.00	PASS
				RB1#13	17.15	21.75	33.00	PASS
				RB1#24	17.01	21.61	33.00	PASS
BAND41	LTE/TM1	5M	MCH	RB12#0	17.13	21.73	33.00	PASS
				RB12#6	17.17	21.77	33.00	PASS
				RB12#13	17.12	21.72	33.00	PASS
				RB25#0	17.20	21.80	33.00	PASS
				RB1#0	16.97	21.57	33.00	PASS
				RB1#13	16.97	21.57	33.00	PASS
				RB1#24	16.82	21.42	33.00	PASS
			НСН	RB12#0	16.94	21.54	33.00	PASS
				RB12#6	16.96	21.56	33.00	PASS
				RB12#13	16.87	21.47	33.00	PASS
				RB25#0	17.01	21.61	33.00	PASS



Report No.: SZEM170100023101

Page: 4 of 175

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	17.36	21.96	33.00	PASS
				RB1#13	17.34	21.94	33.00	PASS
				RB1#24	17.34	21.94	33.00	PASS
			LCH	RB12#0	17.32	21.92	33.00	PASS
				RB12#6	17.31	21.91	33.00	PASS
				RB12#13	17.32	21.92	33.00	PASS
				RB25#0	17.33	21.93	33.00	PASS
				RB1#0	17.28	21.88	33.00	PASS
				RB1#13	17.32	21.92	33.00	PASS
				RB1#24	17.22	21.82	33.00	PASS
BAND41	LTE/TM2	5M	MCH	RB12#0	17.21	21.81	33.00	PASS
				RB12#6	17.32	21.92	33.00	PASS
				RB12#13	17.13	21.73	33.00	PASS
				RB25#0	17.23	21.83	33.00	PASS
				RB1#0	17.12	21.72	33.00	PASS
				RB1#13	17.14	21.74	33.00	PASS
				RB1#24	17.04	21.64	33.00	PASS
			HCH	RB12#0	17.03	21.63	33.00	PASS
				RB12#6	17.02	21.62	33.00	PASS
				RB12#13	16.95	21.55	33.00	PASS
				RB25#0	17.03	21.63	33.00	PASS



Report No.: SZEM170100023101

Page: 5 of 175

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	17.74	22.34	33.00	PASS
				RB1#13	17.77	22.37	33.00	PASS
				RB1#24	17.71	22.31	33.00	PASS
			LCH	RB12#0	17.41	22.01	33.00	PASS
				RB12#6	17.34	21.94	33.00	PASS
				RB12#13	17.26	21.86	33.00	PASS
				RB25#0	17.16	21.76	33.00	PASS
				RB1#0	17.31	21.91	33.00	PASS
				RB1#13	17.38	21.98	33.00	PASS
				RB1#24	17.27	21.87	33.00	PASS
BAND41	LTE/TM3	5M	MCH	RB12#0	17.30	21.90	33.00	PASS
				RB12#6	17.32	21.92	33.00	PASS
				RB12#13	17.21	21.81	33.00	PASS
				RB25#0	17.26	21.86	33.00	PASS
				RB1#0	17.43	22.03	33.00	PASS
				RB1#13	17.39	21.99	33.00	PASS
				RB1#24	17.32	21.92	33.00	PASS
			HCH	RB12#0	17.06	21.66	33.00	PASS
				RB12#6	17.05	21.65	33.00	PASS
				RB12#13	17.03	21.63	33.00	PASS
				RB25#0	16.99	21.59	33.00	PASS



Report No.: SZEM170100023101

Page: 6 of 175

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	17.26	21.86	33.00	PASS
				RB1#25	17.16	21.76	33.00	PASS
				RB1#49	17.07	21.67	33.00	PASS
			LCH	RB25#0	17.38	21.98	33.00	PASS
				RB25#13	17.37	21.97	33.00	PASS
				RB25#25	17.29	21.89	33.00	PASS
				RB50#0	17.33	21.93	33.00	PASS
				RB1#0	17.22	21.82	33.00	PASS
				RB1#25	17.05	21.65	33.00	PASS
				RB1#49	17.04	21.64	33.00	PASS
BAND41	LTE/TM1	10M	MCH	RB25#0	17.18	21.78	33.00	PASS
				RB25#13	17.24	21.84	33.00	PASS
				RB25#25	17.17	21.77	33.00	PASS
				RB50#0	17.17	21.77	33.00	PASS
				RB1#0	17.03	21.63	33.00	PASS
				RB1#25	16.89	21.49	33.00	PASS
				RB1#49	16.89	21.49	33.00	PASS
			HCH	RB25#0	17.03	21.63	33.00	PASS
				RB25#13	17.04	21.64	33.00	PASS
				RB25#25	16.93	21.53	33.00	PASS
				RB50#0	17.02	21.62	33.00	PASS



Report No.: SZEM170100023101

Page: 7 of 175

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	17.45	22.05	33.00	PASS
				RB1#25	17.38	21.98	33.00	PASS
				RB1#49	17.37	21.97	33.00	PASS
			LCH	RB25#0	17.34	21.94	33.00	PASS
				RB25#13	17.35	21.95	33.00	PASS
				RB25#25	17.31	21.91	33.00	PASS
				RB50#0	17.30	21.90	33.00	PASS
				RB1#0	17.41	22.01	33.00	PASS
				RB1#25	17.23	21.83	33.00	PASS
				RB1#49	17.21	21.81	33.00	PASS
BAND41	LTE/TM2	10M	МСН	RB25#0	17.27	21.87	33.00	PASS
				RB25#13	17.23	21.83	33.00	PASS
				RB25#25	17.16	21.76	33.00	PASS
				RB50#0	17.21	21.81	33.00	PASS
				RB1#0	17.24	21.84	33.00	PASS
				RB1#25	17.16	21.76	33.00	PASS
				RB1#49	17.09	21.69	33.00	PASS
			HCH	RB25#0	17.05	21.65	33.00	PASS
				RB25#13	17.03	21.63	33.00	PASS
				RB25#25	16.92	21.52	33.00	PASS
				RB50#0	17.01	21.61	33.00	PASS



Report No.: SZEM170100023101

Page: 8 of 175

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	17.78	22.38	33.00	PASS
				RB1#25	17.68	22.28	33.00	PASS
				RB1#49	17.66	22.26	33.00	PASS
			LCH	RB25#0	17.26	21.86	33.00	PASS
				RB25#13	17.17	21.77	33.00	PASS
				RB25#25	17.23	21.83	33.00	PASS
				RB50#0	17.21	21.81	33.00	PASS
				RB1#0	17.19	21.79	33.00	PASS
				RB1#25	17.07	21.67	33.00	PASS
				RB1#49	17.00	21.60	33.00	PASS
BAND41	LTE/TM3	10M	MCH	RB25#0	17.31	21.91	33.00	PASS
				RB25#13	17.25	21.85	33.00	PASS
				RB25#25	17.21	21.81	33.00	PASS
				RB50#0	17.22	21.82	33.00	PASS
				RB1#0	17.37	21.97	33.00	PASS
				RB1#25	17.24	21.84	33.00	PASS
				RB1#49	17.21	21.81	33.00	PASS
			HCH	RB25#0	17.07	21.67	33.00	PASS
				RB25#13	17.07	21.67	33.00	PASS
				RB25#25	16.97	21.57	33.00	PASS
				RB50#0	17.09	21.69	33.00	PASS



Report No.: SZEM170100023101

Page: 9 of 175

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	17.22	21.82	33.00	PASS
				RB1#38	17.04	21.64	33.00	PASS
				RB1#74	16.98	21.58	33.00	PASS
			LCH	RB36#0	17.28	21.88	33.00	PASS
				RB36#18	17.22	21.82	33.00	PASS
				RB36#39	17.15	21.75	33.00	PASS
				RB75#0	17.13	21.73	33.00	PASS
				RB1#0	17.30	21.90	33.00	PASS
				RB1#38	17.13	21.73	33.00	PASS
				RB1#74	17.04	21.64	33.00	PASS
BAND41	LTE/TM1	15M	MCH	RB36#0	17.24	21.84	33.00	PASS
				RB36#18	17.13	21.73	33.00	PASS
				RB36#39	17.10	21.70	33.00	PASS
				RB75#0	17.16	21.76	33.00	PASS
				RB1#0	17.08	21.68	33.00	PASS
				RB1#38	16.90	21.50	33.00	PASS
				RB1#74	16.82	21.42	33.00	PASS
			HCH	RB36#0	17.00	21.60	33.00	PASS
				RB36#18	16.97	21.57	33.00	PASS
				RB36#39	16.84	21.44	33.00	PASS
				RB75#0	16.95	21.55	33.00	PASS



Report No.: SZEM170100023101

Page: 10 of 175

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	17.42	22.02	33.00	PASS
				RB1#38	17.21	21.81	33.00	PASS
				RB1#74	17.23	21.83	33.00	PASS
			LCH	RB36#0	17.23	21.83	33.00	PASS
				RB36#18	17.21	21.81	33.00	PASS
				RB36#39	17.12	21.72	33.00	PASS
				RB75#0	17.18	21.78	33.00	PASS
				RB1#0	17.42	22.02	33.00	PASS
				RB1#38	17.27	21.87	33.00	PASS
				RB1#74	17.18	21.78	33.00	PASS
BAND41	LTE/TM2	15M	MCH	RB36#0	17.20	21.80	33.00	PASS
				RB36#18	17.13	21.73	33.00	PASS
				RB36#39	17.13	21.73	33.00	PASS
				RB75#0	17.19	21.79	33.00	PASS
				RB1#0	17.25	21.85	33.00	PASS
				RB1#38	17.03	21.63	33.00	PASS
				RB1#74	16.93	21.53	33.00	PASS
			HCH	RB36#0	16.99	21.59	33.00	PASS
				RB36#18	16.91	21.51	33.00	PASS
				RB36#39	16.79	21.39	33.00	PASS
				RB75#0	16.92	21.52	33.00	PASS



Report No.: SZEM170100023101

Page: 11 of 175

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	17.74	22.34	33.00	PASS
				RB1#38	17.58	22.18	33.00	PASS
				RB1#74	17.59	22.19	33.00	PASS
			LCH	RB36#0	17.26	21.86	33.00	PASS
				RB36#18	17.25	21.85	33.00	PASS
				RB36#39	17.08	21.68	33.00	PASS
				RB75#0	17.12	21.72	33.00	PASS
				RB1#0	17.21	21.81	33.00	PASS
				RB1#38	17.06	21.66	33.00	PASS
				RB1#74	17.03	21.63	33.00	PASS
BAND41	LTE/TM3	15M	MCH	RB36#0	17.26	21.86	33.00	PASS
				RB36#18	17.28	21.88	33.00	PASS
				RB36#39	17.18	21.78	33.00	PASS
				RB75#0	17.19	21.79	33.00	PASS
				RB1#0	17.32	21.92	33.00	PASS
				RB1#38	17.13	21.73	33.00	PASS
				RB1#74	17.00	21.60	33.00	PASS
			HCH	RB36#0	17.05	21.65	33.00	PASS
				RB36#18	17.08	21.68	33.00	PASS
				RB36#39	16.97	21.57	33.00	PASS
				RB75#0	17.07	21.67	33.00	PASS



Report No.: SZEM170100023101

Page: 12 of 175

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	17.28	21.88	33.00	PASS
				RB1#50	17.02	21.62	33.00	PASS
				RB1#99	17.03	21.63	33.00	PASS
			LCH	RB50#0	17.12	21.72	33.00	PASS
				RB50#25	17.11	21.71	33.00	PASS
				RB50#50	17.01	21.61	33.00	PASS
				RB100#0	17.01	21.61	33.00	PASS
				RB1#0	17.48	22.08	33.00	PASS
				RB1#50	17.29	21.89	33.00	PASS
				RB1#99	17.12	21.72	33.00	PASS
BAND41	LTE/TM1	20M	MCH	RB50#0	17.28	21.88	33.00	PASS
				RB50#25	17.23	21.83	33.00	PASS
				RB50#50	17.14	21.74	33.00	PASS
				RB100#0	17.19	21.79	33.00	PASS
				RB1#0	17.25	21.85	33.00	PASS
				RB1#50	17.01	21.61	33.00	PASS
				RB1#99	17.02	21.62	33.00	PASS
			HCH	RB50#0	17.08	21.68	33.00	PASS
				RB50#25	17.01	21.61	33.00	PASS
				RB50#50	17.02	21.62	33.00	PASS
				RB100#0	17.01	21.61	33.00	PASS



Report No.: SZEM170100023101

Page: 13 of 175

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	17.58	22.18	33.00	PASS
				RB1#50	17.33	21.93	33.00	PASS
				RB1#99	17.25	21.85	33.00	PASS
			LCH	RB50#0	17.16	21.76	33.00	PASS
				RB50#25	17.14	21.74	33.00	PASS
				RB50#50	17.03	21.63	33.00	PASS
				RB100#0	17.07	21.67	33.00	PASS
				RB1#0	17.59	22.19	33.00	PASS
				RB1#50	17.38	21.98	33.00	PASS
				RB1#99	17.17	21.77	33.00	PASS
BAND41	LTE/TM2	20M	MCH	RB50#0	17.29	21.89	33.00	PASS
				RB50#25	17.22	21.82	33.00	PASS
				RB50#50	17.16	21.76	33.00	PASS
				RB100#0	17.20	21.80	33.00	PASS
				RB1#0	17.57	22.17	33.00	PASS
				RB1#50	17.36	21.96	33.00	PASS
				RB1#99	17.22	21.82	33.00	PASS
			HCH	RB50#0	17.13	21.73	33.00	PASS
				RB50#25	17.07	21.67	33.00	PASS
				RB50#50	17.02	21.62	33.00	PASS
				RB100#0	17.00	21.60	33.00	PASS



Report No.: SZEM170100023101

Page: 14 of 175

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
BAND41	LTE/TM3	20M	LCH	RB1#0	17.35	21.95	33.00	PASS
				RB1#50	17.22	21.82	33.00	PASS
				RB1#99	17.23	21.83	33.00	PASS
				RB50#0	17.18	21.78	33.00	PASS
				RB50#25	17.10	21.70	33.00	PASS
				RB50#50	17.04	21.64	33.00	PASS
				RB100#0	17.07	21.67	33.00	PASS
			МСН	RB1#0	17.91	22.51	33.00	PASS
				RB1#50	17.73	22.33	33.00	PASS
				RB1#99	17.68	22.28	33.00	PASS
				RB50#0	17.29	21.89	33.00	PASS
				RB50#25	17.17	21.77	33.00	PASS
				RB50#50	17.10	21.70	33.00	PASS
				RB100#0	17.14	21.74	33.00	PASS
			НСН	RB1#0	17.68	22.28	33.00	PASS
				RB1#50	17.45	22.05	33.00	PASS
				RB1#99	17.34	21.94	33.00	PASS
				RB50#0	17.21	21.81	33.00	PASS
				RB50#25	17.12	21.72	33.00	PASS
				RB50#50	17.06	21.66	33.00	PASS
				RB100#0	17.09	21.69	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,

EIRP [dBm] = SGP [dBm] - Cable Loss [dB] + Gain [dBi]

b: SGP=Signal Generator Level

c: RBW > emission bandwidth, VBW > 3 x RBW.

Detector: RMS



Report No.: SZEM170100023101

Page: 15 of 175

### 2 Peak-to-Average Ratio

#### Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
	TM1/20M	LCH	5.07	13	PASS
		MCH	4.87	13	PASS
		HCH	4.93	13	PASS
	TM2/20M	LCH	5.68	13	PASS
Band 41		MCH	5.62	13	PASS
		HCH	5.94	13	PASS
	TM3/20M	LCH	6.12	13	PASS
		MCH	6.12	13	PASS
		HCH	6.46	13	PASS



Report No.: SZEM170100023101

Page: 16 of 175

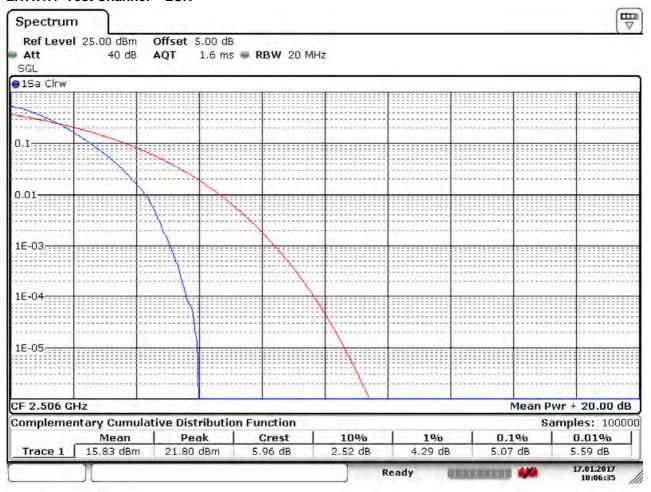
Part II - Test Plots

#### 2.1 For LTE

#### 2.1.1 Test Band = LTE band 41

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

#### 2.1.1.1.1 Test Channel = LCH



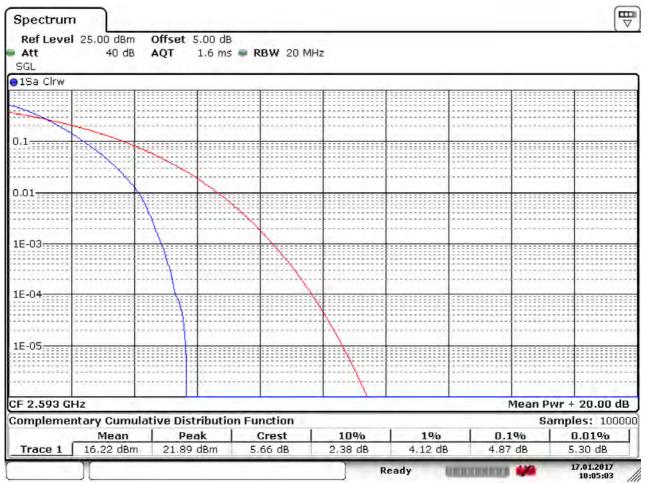
Date: 17.JAN.2017 10:06:35



Report No.: SZEM170100023101

Page: 17 of 175

#### 2.1.1.1.2 Test Channel = MCH



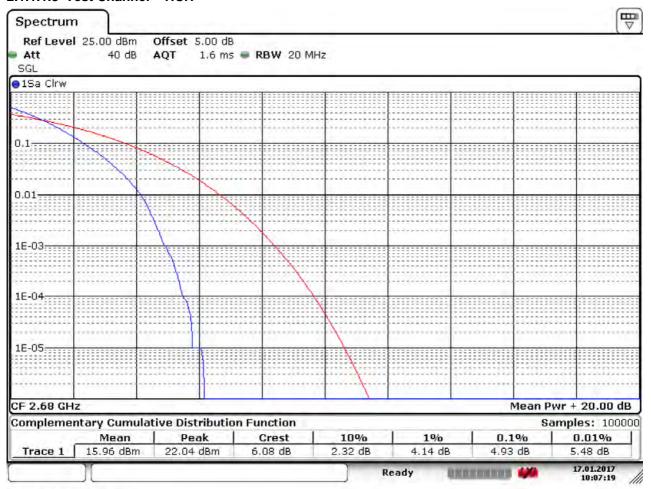
Date: 17.JAN.2017 10:05:03



Report No.: SZEM170100023101

Page: 18 of 175

#### 2.1.1.1.3 Test Channel = HCH



Date: 17. JAN. 2017 10:07:20

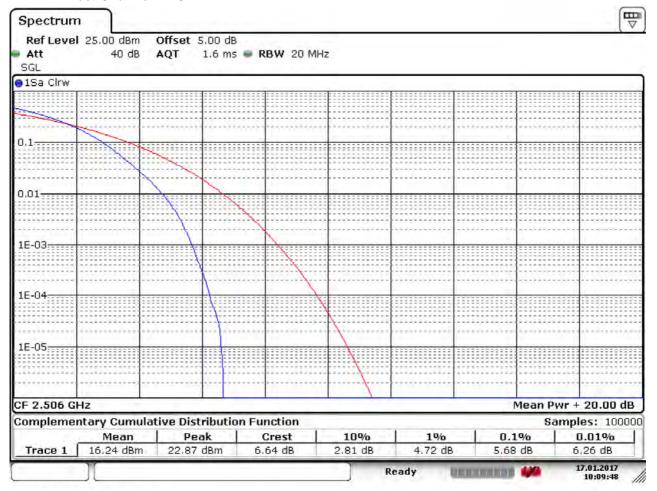


Report No.: SZEM170100023101

Page: 19 of 175

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

#### 2.1.1.2.1 Test Channel = LCH



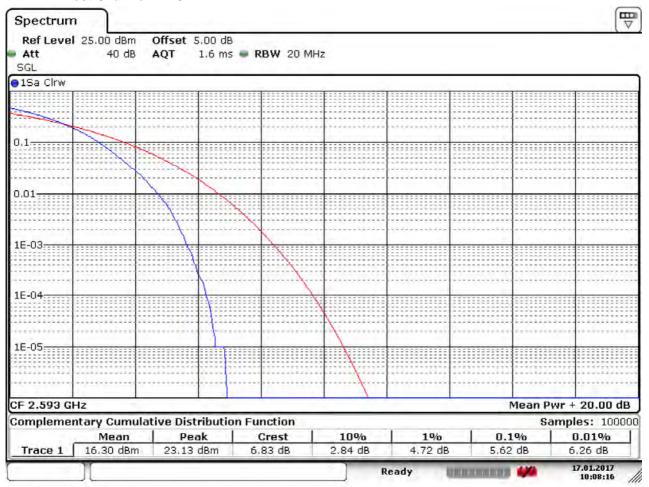
Date: 17.JAN.2017 10:09:49



Report No.: SZEM170100023101

Page: 20 of 175

#### 2.1.1.2.2 Test Channel = MCH



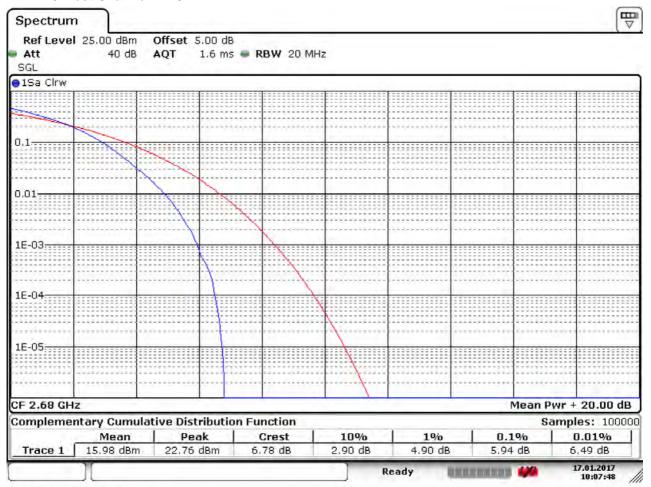
Date: 17. JAN. 2017 10:08:17



Report No.: SZEM170100023101

Page: 21 of 175

#### 2.1.1.2.3 Test Channel = HCH



Date: 17. JAN. 2017 10:07:49

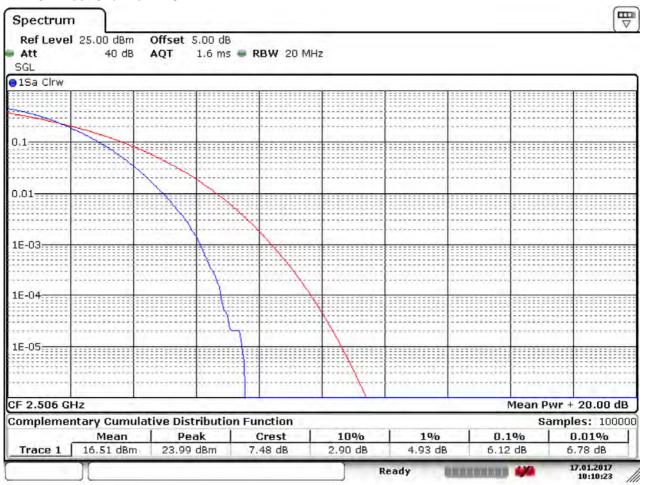


Report No.: SZEM170100023101

Page: 22 of 175

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

#### 2.1.1.3.1 Test Channel = LCH



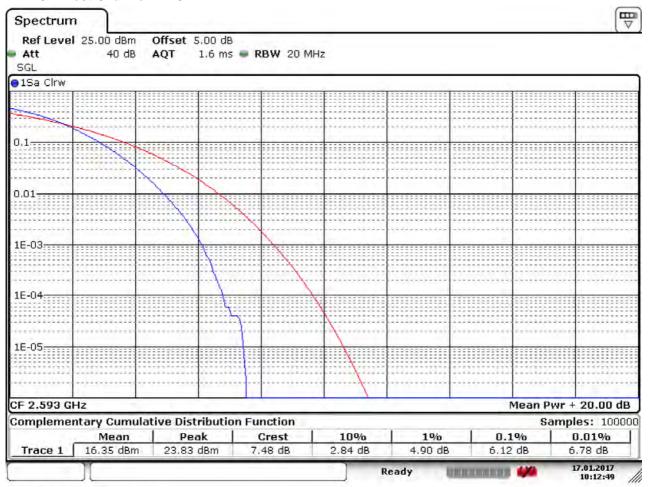
Date: 17.JAN.2017 10:10:23



Report No.: SZEM170100023101

Page: 23 of 175

#### 2.1.1.3.2 Test Channel = MCH



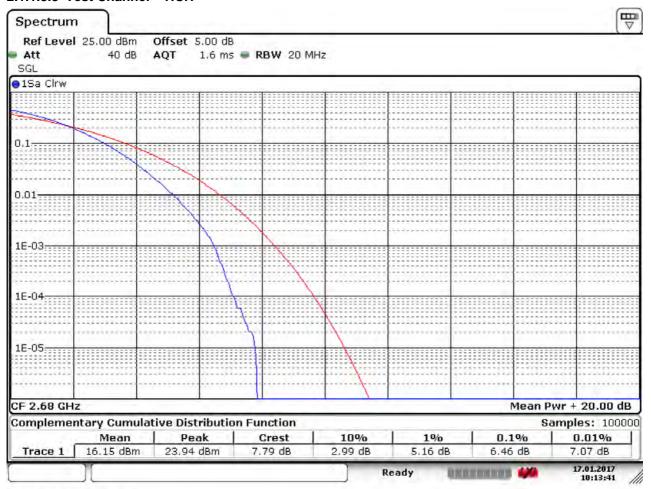
Date: 17. JAN. 2017 10:12:49



Report No.: SZEM170100023101

Page: 24 of 175

#### 2.1.1.3.3 Test Channel = HCH



Date: 17.JAN.2017 10:13:41



Report No.: SZEM170100023101

Page: 25 of 175

### 3 Modulation Characteristics

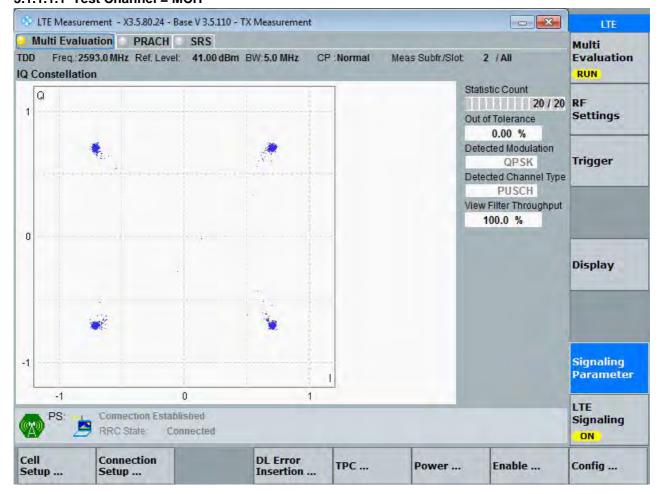
Part I - Test Plots

#### 3.1 For LTE

3.1.1 Test Band = LTE band 41

3.1.1.1 Test Mode = LTE /TM1 5MHz

3.1.1.1.1 Test Channel = MCH



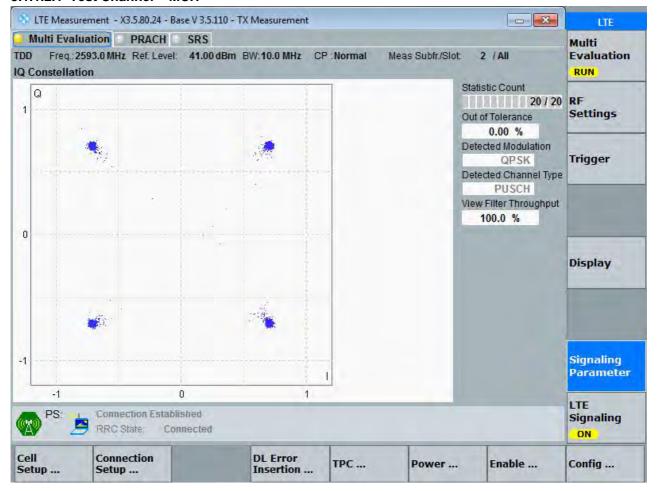


Report No.: SZEM170100023101

Page: 26 of 175

#### 3.1.1.2 Test Mode = LTE /TM1 10MHz

#### 3.1.1.2.1 Test Channel = MCH



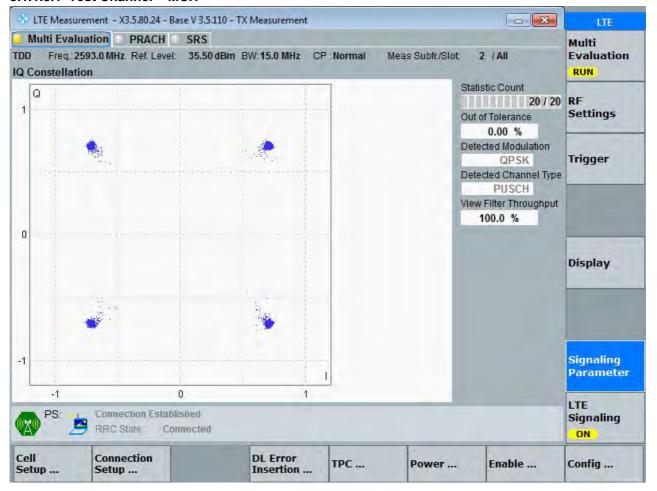


Report No.: SZEM170100023101

Page: 27 of 175

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

#### 3.1.1.3.1 Test Channel = MCH



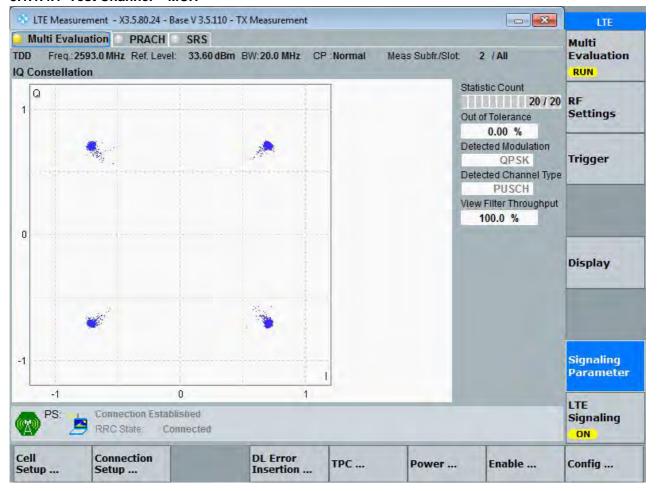


Report No.: SZEM170100023101

Page: 28 of 175

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

#### 3.1.1.4.1 Test Channel = MCH



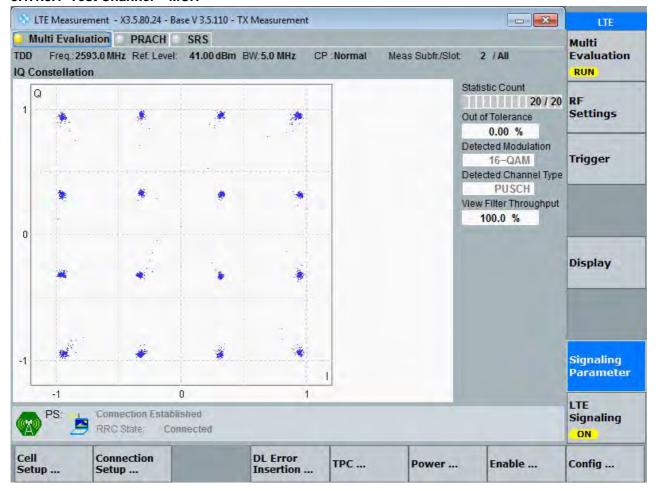


Report No.: SZEM170100023101

Page: 29 of 175

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

#### 3.1.1.5.1 Test Channel = MCH



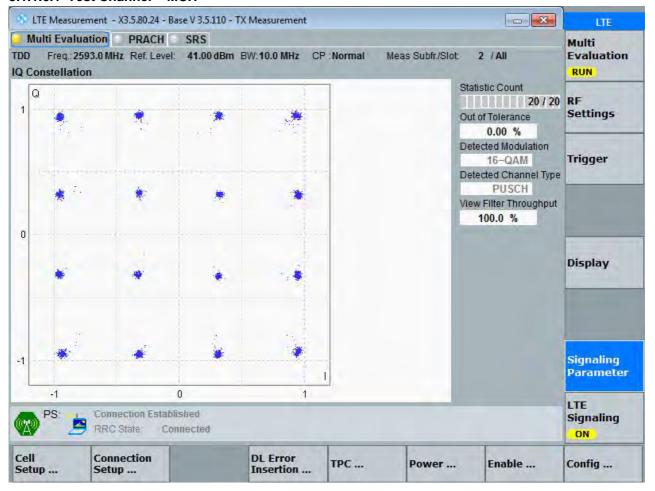


Report No.: SZEM170100023101

Page: 30 of 175

#### 3.1.1.6 Test Mode = LTE /TM2 10MHz

#### 3.1.1.6.1 Test Channel = MCH



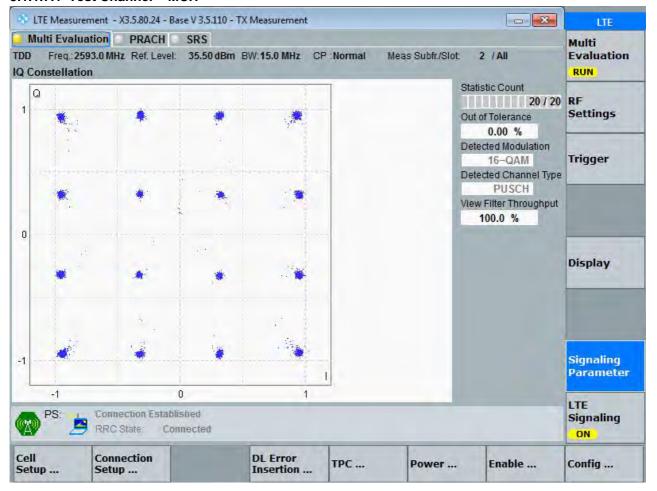


Report No.: SZEM170100023101

Page: 31 of 175

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

#### 3.1.1.7.1 Test Channel = MCH



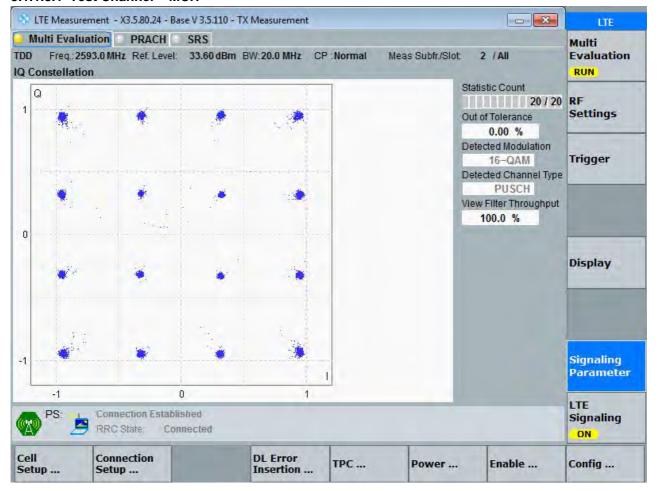


Report No.: SZEM170100023101

Page: 32 of 175

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

#### 3.1.1.8.1 Test Channel = MCH



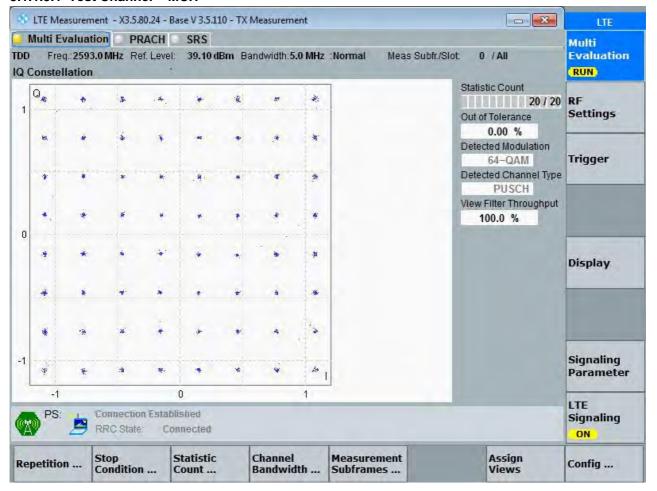


Report No.: SZEM170100023101

Page: 33 of 175

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

#### 3.1.1.9.1 Test Channel = MCH



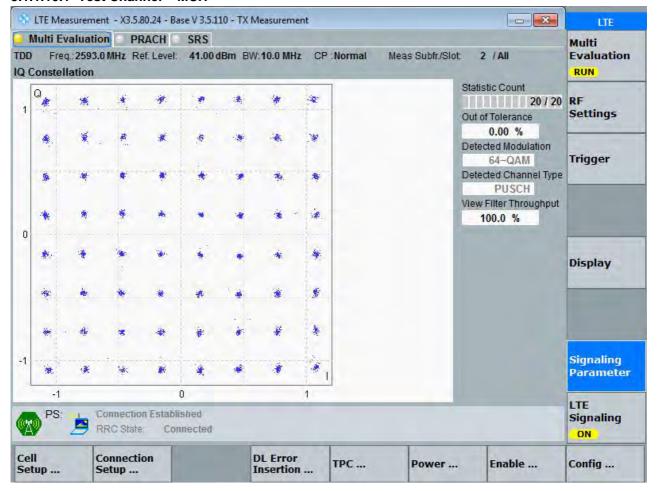


Report No.: SZEM170100023101

Page: 34 of 175

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

#### 3.1.1.10.1 Test Channel = MCH



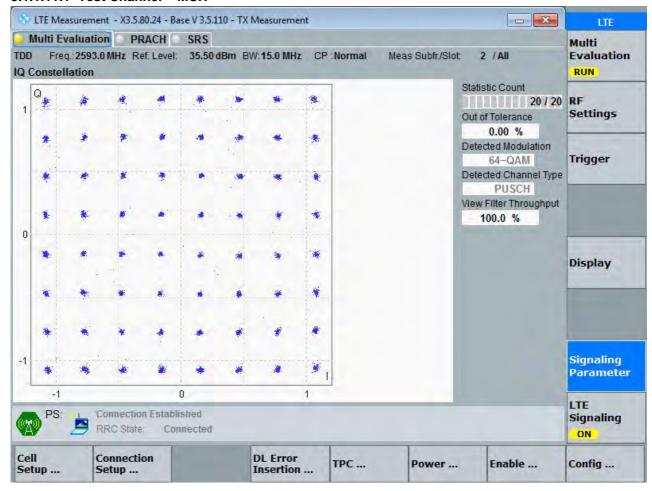


Report No.: SZEM170100023101

Page: 35 of 175

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

#### 3.1.1.11.1 Test Channel = MCH



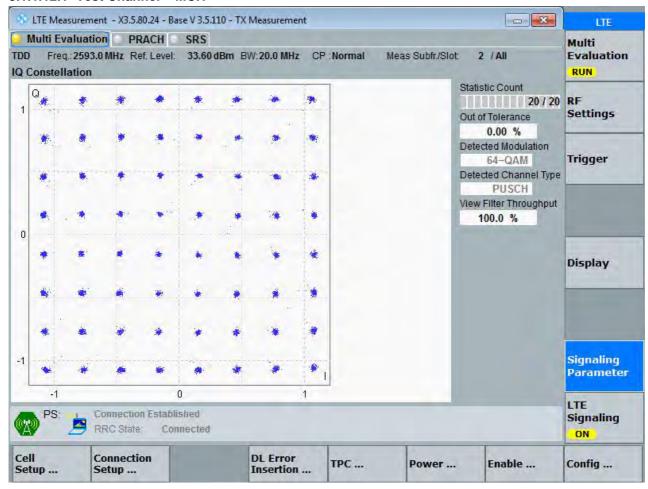


Report No.: SZEM170100023101

Page: 36 of 175

#### 3.1.1.12 Test Mode = LTE /TM3 20MHz

#### 3.1.1.12.1 Test Channel = MCH





Report No.: SZEM170100023101

Page: 37 of 175

#### 4 Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
	TM1/5MHz	LCH	4.48	4.85	PASS
		MCH	4.48	4.90	PASS
		HCH	4.48	4.89	PASS
	TM2/5MHz	LCH	4.48	4.88	PASS
		MCH	4.47	4.89	PASS
		HCH	4.47	4.88	PASS
	TM3/5MHz	LCH	4.47	4.88	PASS
		MCH	4.48	4.89	PASS
		HCH	4.47	4.87	PASS
	TM1/10MHz	LCH	8.95	9.61	PASS
		MCH	8.93	9.71	PASS
		HCH	8.93	9.69	PASS
	TM2/10MHz	LCH	8.93	9.65	PASS
		MCH	8.93	9.53	PASS
		HCH	8.91	9.53	PASS
Band 41	TM3/10MHz	LCH	8.95	9.71	PASS
		MCH	8.95	9.57	PASS
		HCH	8.93	9.65	PASS
	TM1/15MHz	LCH	13.46	14.67	PASS
		MCH	13.43	14.72	PASS
		HCH	13.40	14.69	PASS
	TM2/15MHz	LCH	13.46	14.70	PASS
		MCH	13.49	14.75	PASS
		HCH	13.49	14.75	PASS
	TM3/15MHz	LCH	13.43	14.58	PASS
		MCH	13.49	14.69	PASS
		HCH	13.46	14.75	PASS
	TM1/20MHz	LCH	17.86	19.38	PASS
		MCH	17.82	19.26	PASS
		HCH	17.90	19.22	PASS



Report No.: SZEM170100023101

Page: 38 of 175

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
Band 41	TM2/20MHz	LCH	17.86	19.34	PASS
		MCH	17.86	19.38	PASS
		HCH	17.86	19.38	PASS
	TM3/20MHz	LCH	17.86	19.42	PASS
		MCH	17.90	19.38	PASS
		HCH	17.82	19.34	PASS



Report No.: SZEM170100023101

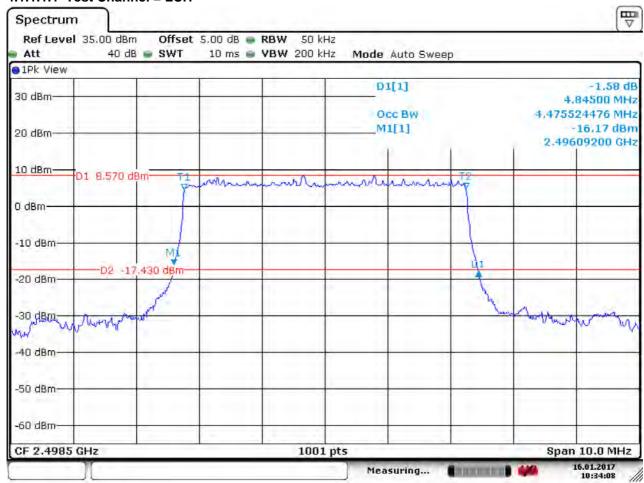
Page: 39 of 175

#### 4.1 For LTE

#### 4.1.1 Test Band = LTE band41

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

#### 4.1.1.1.1 Test Channel = LCH

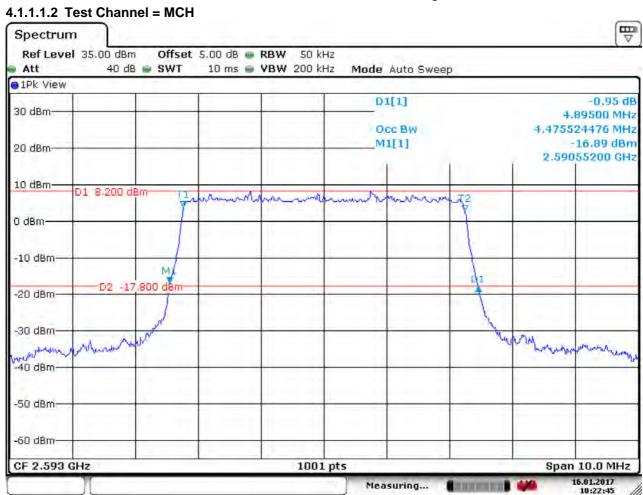


Date: 16.JAN.2017 10:34:08



Report No.: SZEM170100023101

Page: 40 of 175



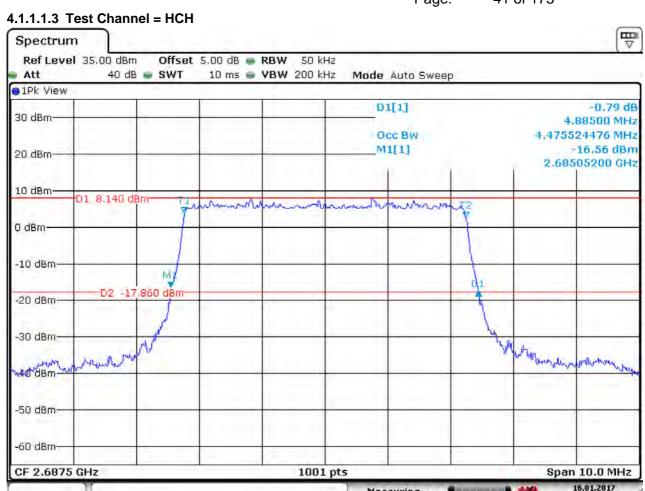
Date: 16.JAN.2017 10:22:46



Report No.: SZEM170100023101

10:36:04

Page: 41 of 175



Measuring...

Date: 16.JAN.2017 10:36:05

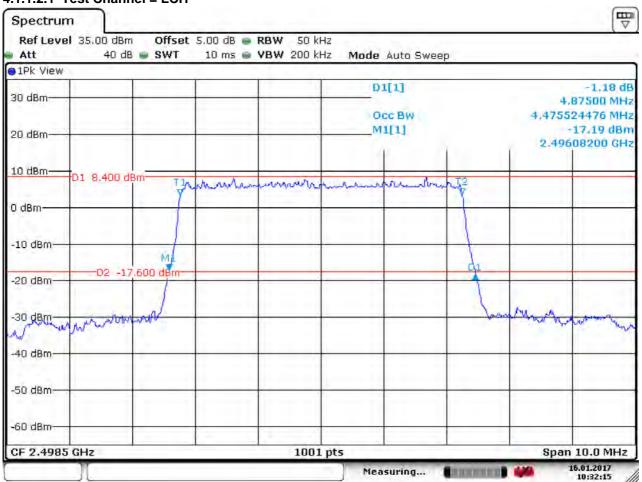


Report No.: SZEM170100023101

Page: 42 of 175

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

#### 4.1.1.2.1 Test Channel = LCH

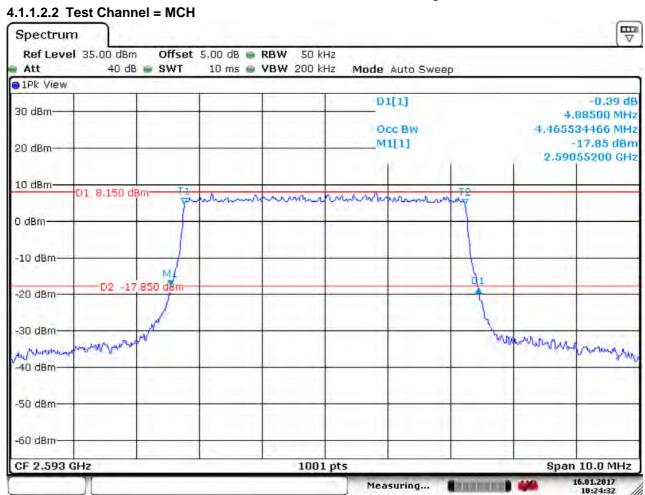


Date: 16.JAN.2017 10:32:15



Report No.: SZEM170100023101

Page: 43 of 175



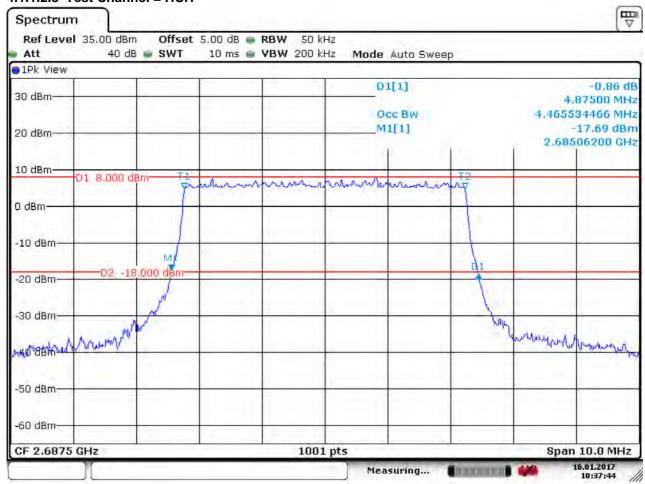
Date: 16.JAN.2017 10:24:32



Report No.: SZEM170100023101

Page: 44 of 175

#### 4.1.1.2.3 Test Channel = HCH



Date: 16.JAN.2017 10:37:44

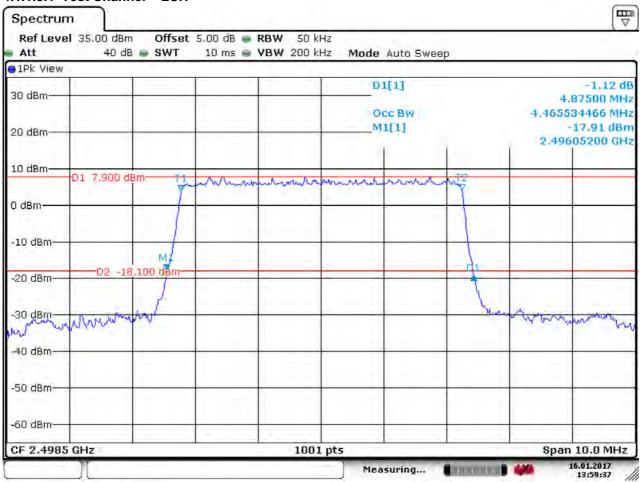


Report No.: SZEM170100023101

Page: 45 of 175

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

#### 4.1.1.3.1 Test Channel = LCH

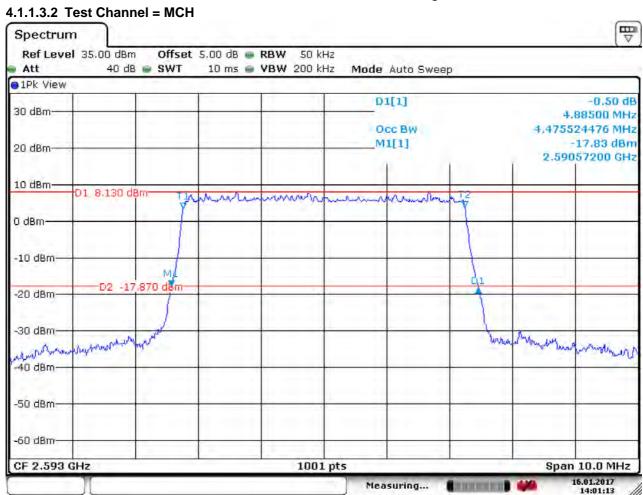


Date: 16.JAN.2017 13:59:37



Report No.: SZEM170100023101

Page: 46 of 175



Date: 16.JAN.2017 14:01:14

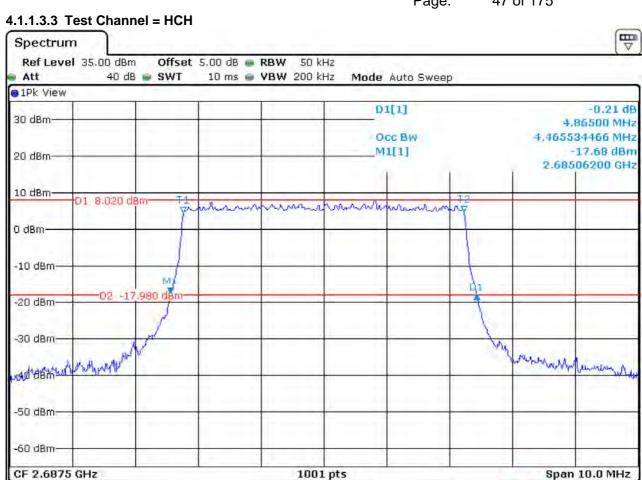


Report No.: SZEM170100023101

16.01.2017

14:03:53

Page: 47 of 175



Measuring...

Date: 16.JAN.2017 14:03:54

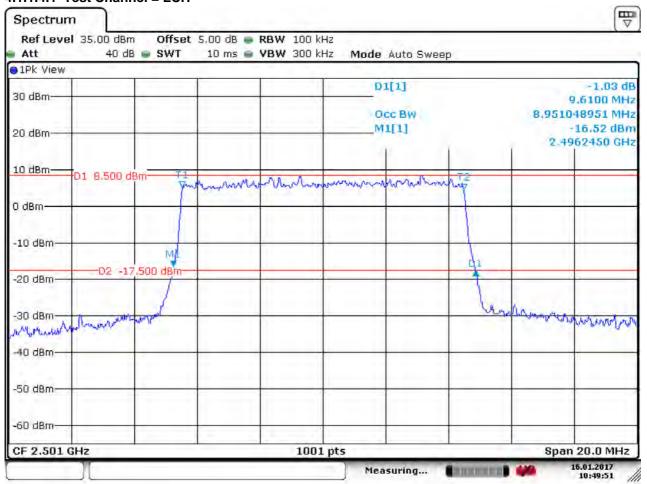


Report No.: SZEM170100023101

Page: 48 of 175

#### 4.1.1.4 Test Mode = LTE/TM1 10MHz

#### 4.1.1.4.1 Test Channel = LCH



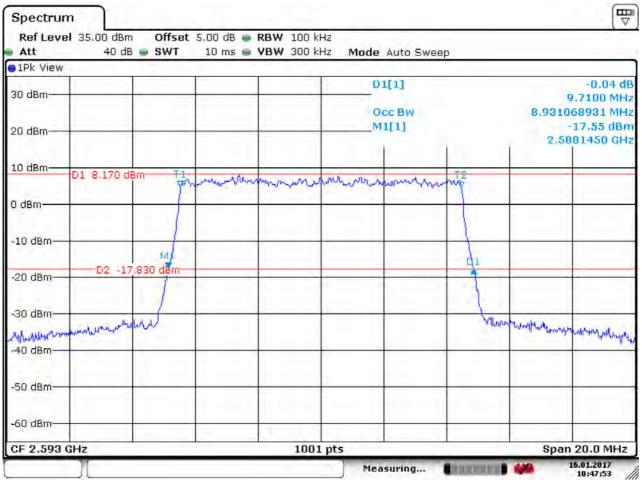
Date: 16.JAN.2017 10:49:51



Report No.: SZEM170100023101

Page: 49 of 175

#### 4.1.1.4.2 Test Channel = MCH

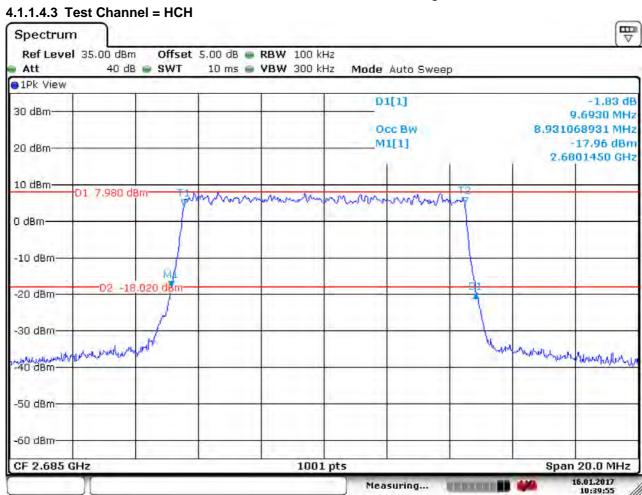


Date: 16.JAN.2017 10:47:53



Report No.: SZEM170100023101

Page: 50 of 175



Date: 16.JAN.2017 10:39:56

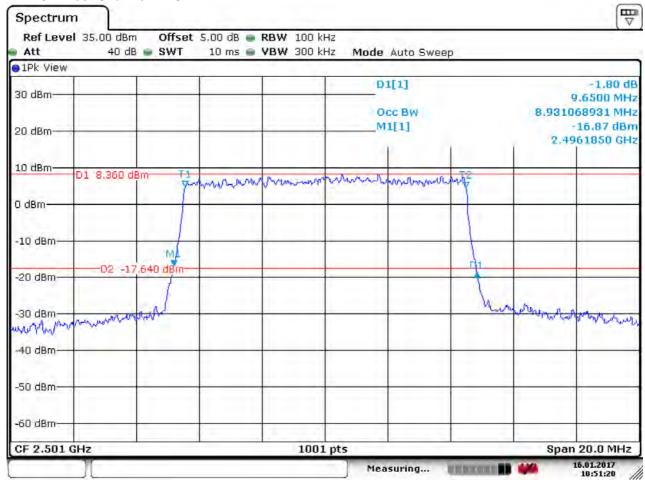


Report No.: SZEM170100023101

Page: 51 of 175

#### 4.1.1.5 Test Mode = LTE/TM2 10MHz

#### 4.1.1.5.1 Test Channel = LCH

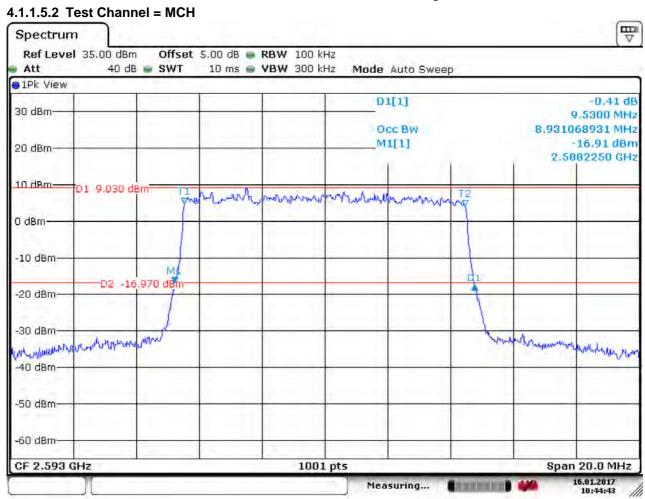


Date: 16.JAN.2017 10:51:21



Report No.: SZEM170100023101

Page: 52 of 175

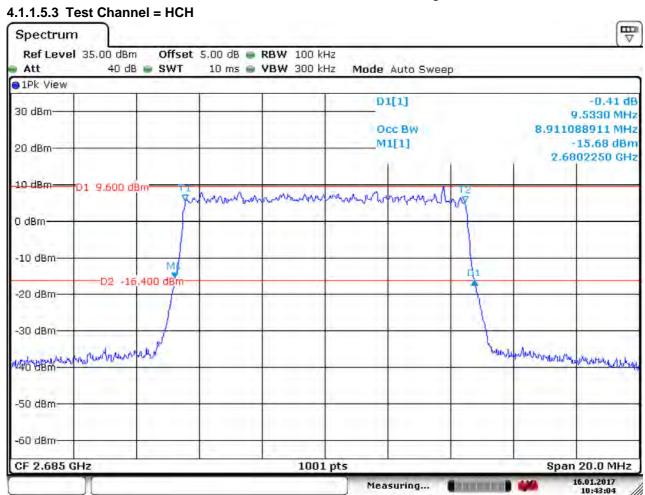


Date: 16.JAN.2017 10:44:44



Report No.: SZEM170100023101

Page: 53 of 175



Date: 16.JAN.2017 10:43:04

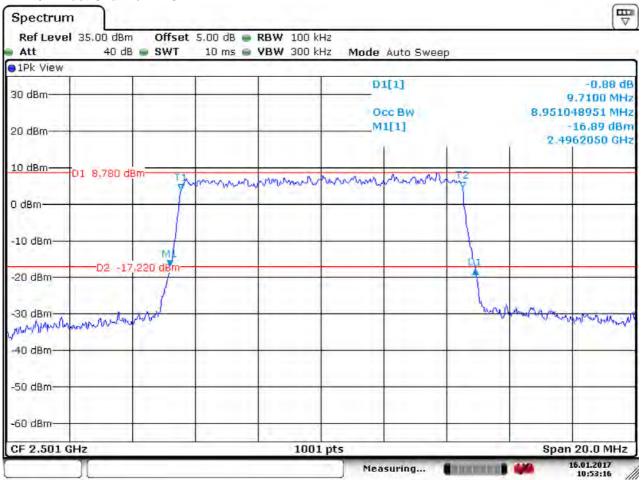


Report No.: SZEM170100023101

Page: 54 of 175

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

#### 4.1.1.6.1 Test Channel = LCH

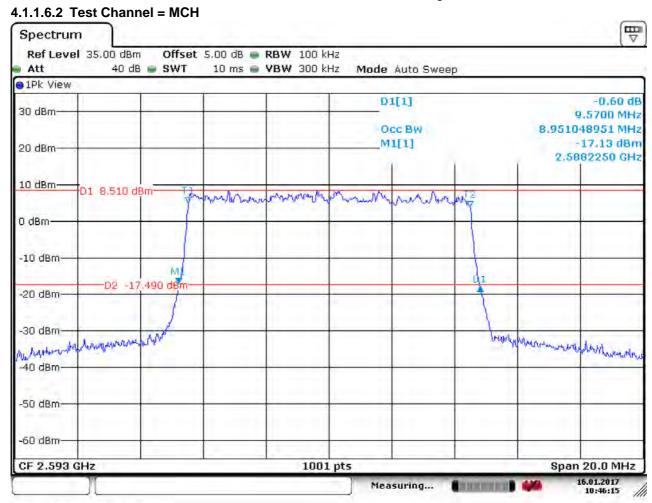


Date: 16.JAN.2017 10:53:17



Report No.: SZEM170100023101

Page: 55 of 175

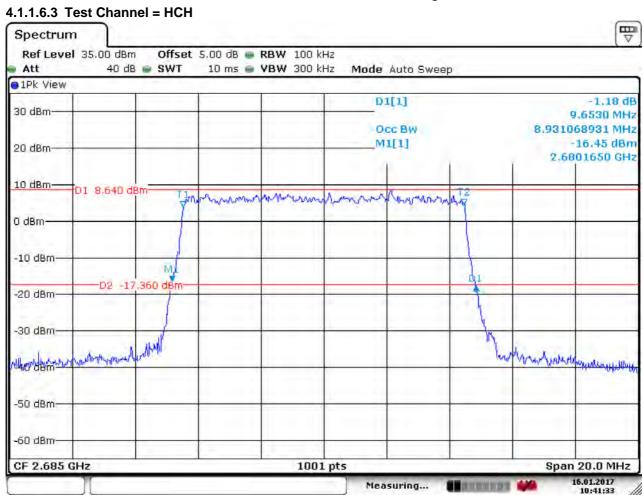


Date: 16.JAN.2017 10:46:15



Report No.: SZEM170100023101

Page: 56 of 175



Date: 16.JAN.2017 10:41:33

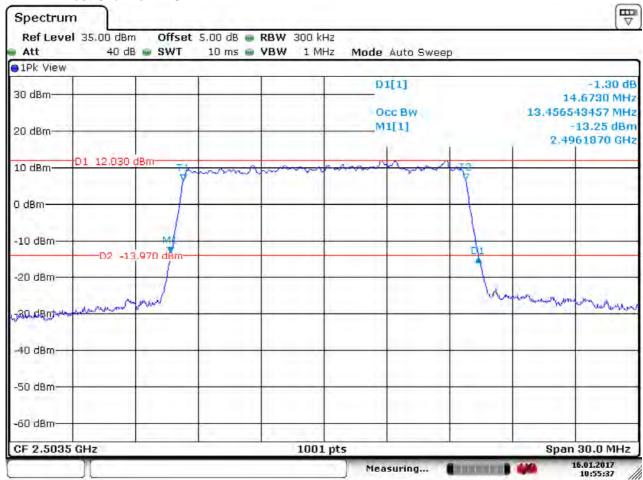


Report No.: SZEM170100023101

Page: 57 of 175

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

#### 4.1.1.7.1 Test Channel = LCH

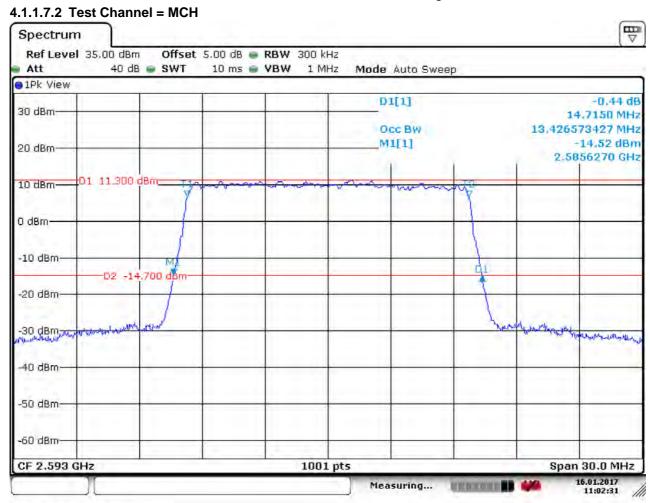


Date: 16.JAN.2017 10:55:38



Report No.: SZEM170100023101

Page: 58 of 175

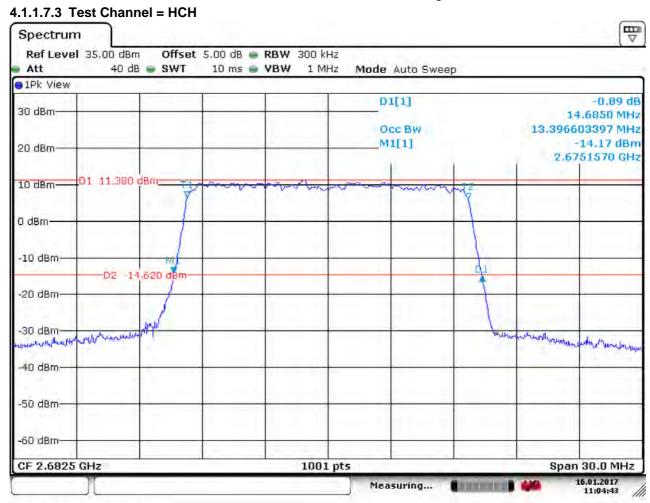


Date: 16.JAN.2017 11:02:32



Report No.: SZEM170100023101

Page: 59 of 175



Date: 16.JAN.2017 11:04:43

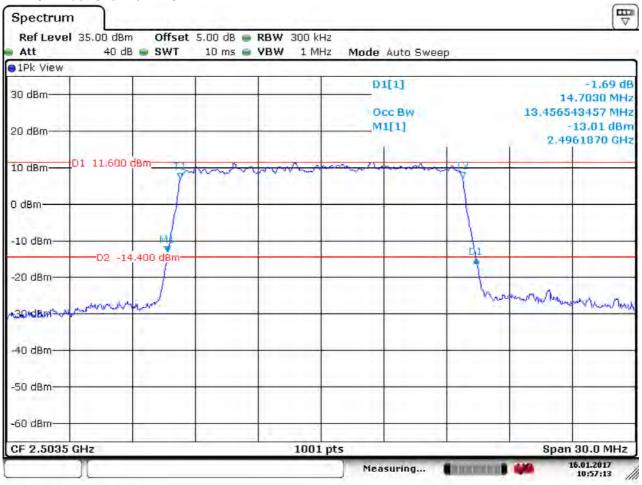


Report No.: SZEM170100023101

Page: 60 of 175

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

#### 4.1.1.8.1 Test Channel = LCH

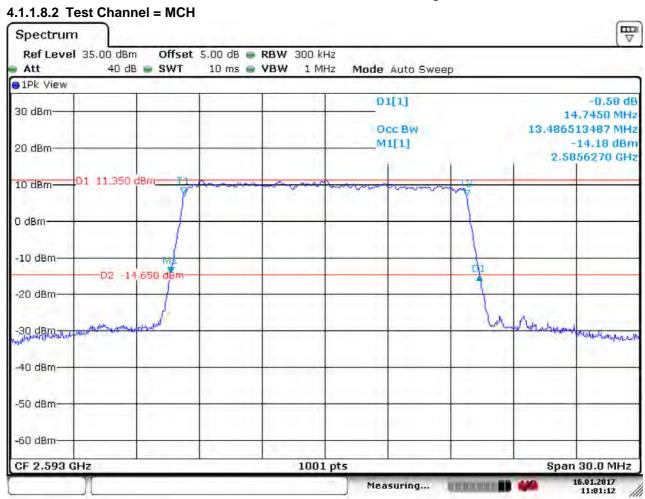


Date: 16.JAN.2017 10:57:13



Report No.: SZEM170100023101

Page: 61 of 175



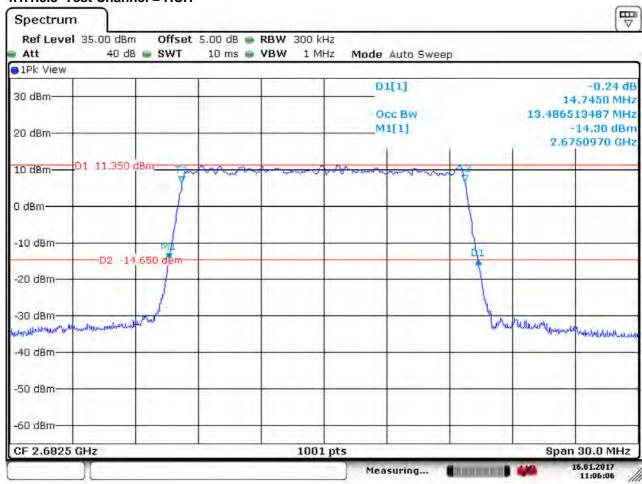
Date: 16.JAN.2017 11:01:13



Report No.: SZEM170100023101

Page: 62 of 175

#### 4.1.1.8.3 Test Channel = HCH



Date: 16.JAN.2017 11:06:07

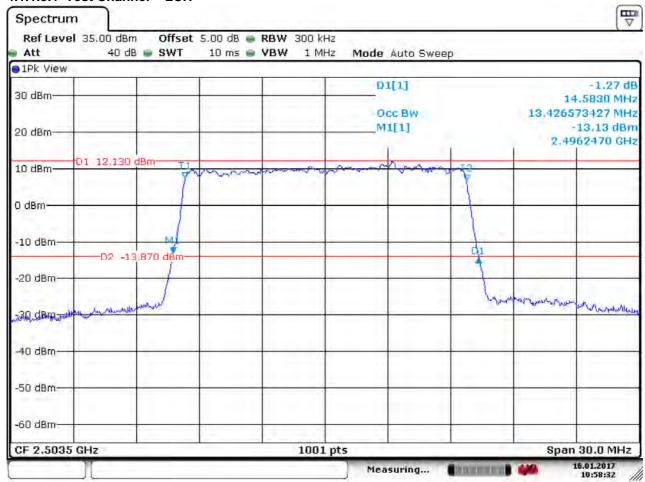


Report No.: SZEM170100023101

Page: 63 of 175

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

#### 4.1.1.9.1 Test Channel = LCH

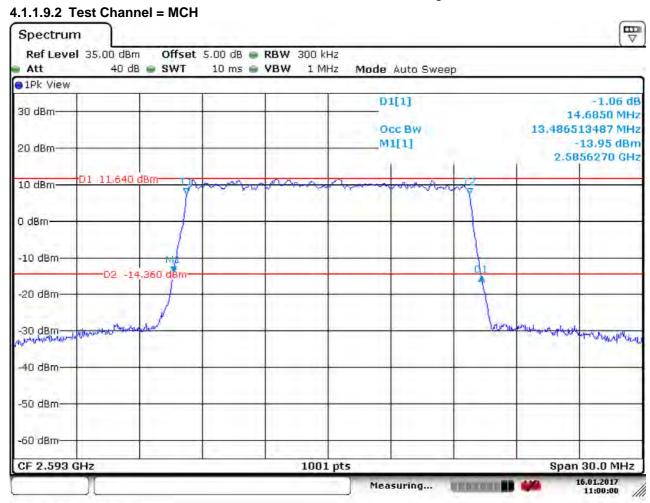


Date: 16.JAN.2017 10:58:32



Report No.: SZEM170100023101

Page: 64 of 175

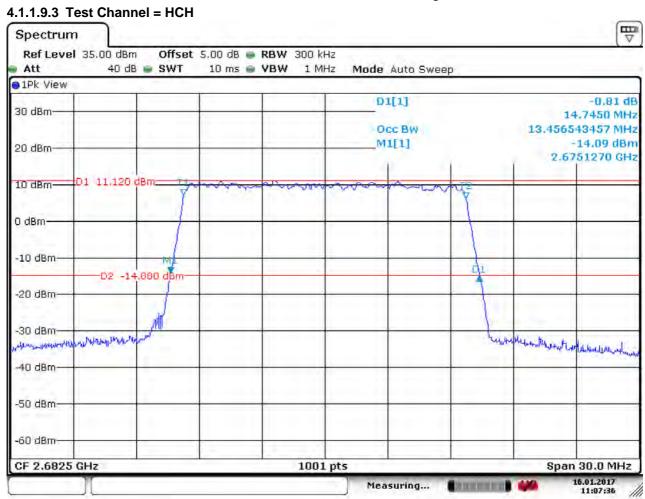


Date: 16.JAN.2017 11:00:01



Report No.: SZEM170100023101

Page: 65 of 175



Date: 16.JAN.2017 11:07:37

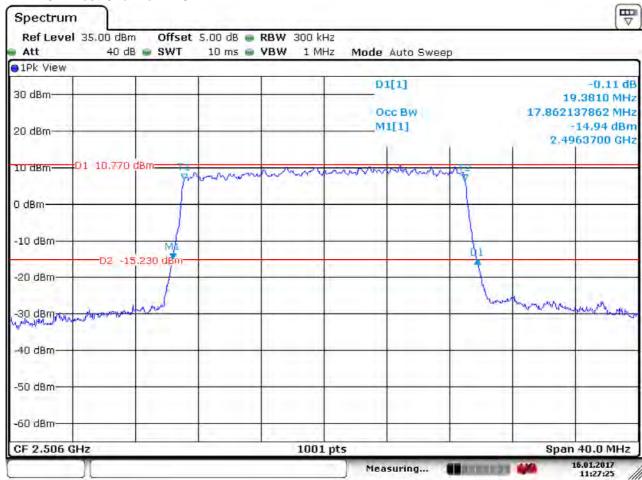


Report No.: SZEM170100023101

Page: 66 of 175

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

#### 4.1.1.10.1 Test Channel = LCH

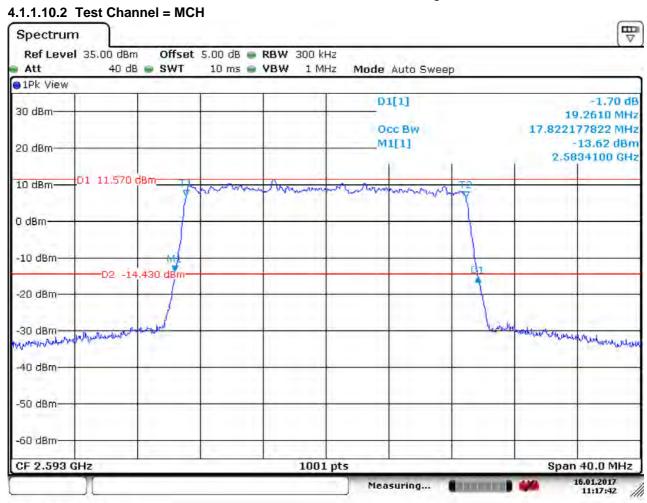


Date: 16.JAN.2017 11:27:25



Report No.: SZEM170100023101

Page: 67 of 175

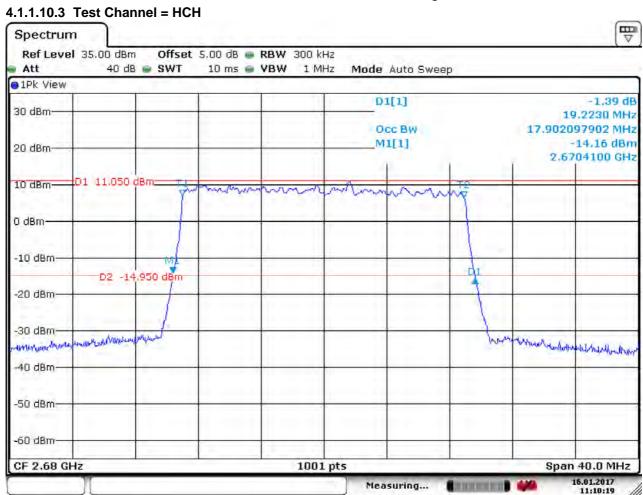


Date: 16.JAN.2017 11:17:42



Report No.: SZEM170100023101

Page: 68 of 175



Date: 16.JAN.2017 11:10:19

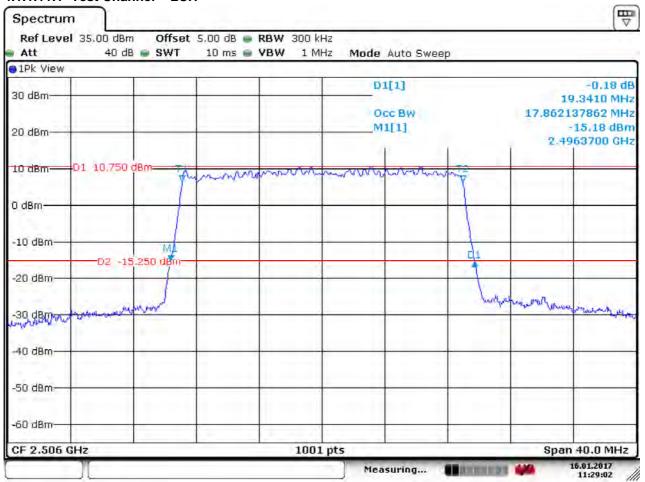


Report No.: SZEM170100023101

Page: 69 of 175

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

#### 4.1.1.11.1 Test Channel = LCH

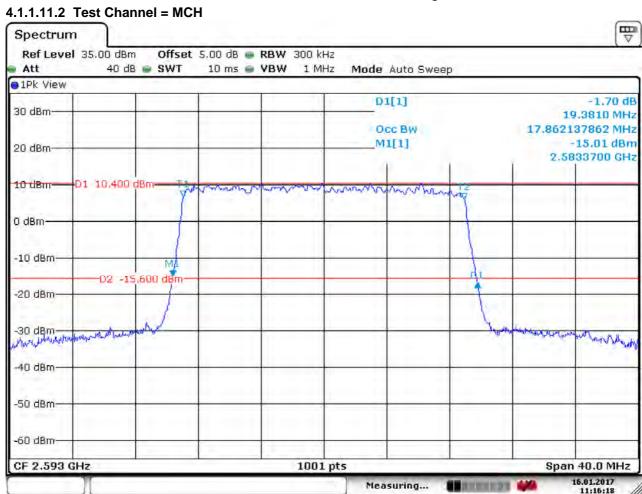


Date: 16.JAN.2017 11:29:03



Report No.: SZEM170100023101

Page: 70 of 175

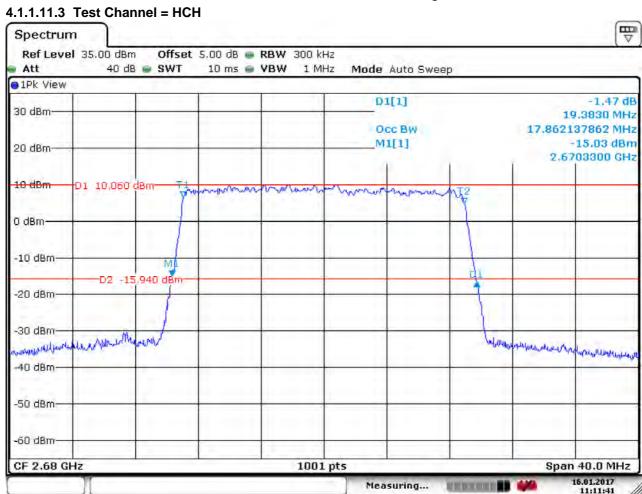


Date: 16.JAN.2017 11:16:18



Report No.: SZEM170100023101

Page: 71 of 175



Date: 16.JAN.2017 11:11:42

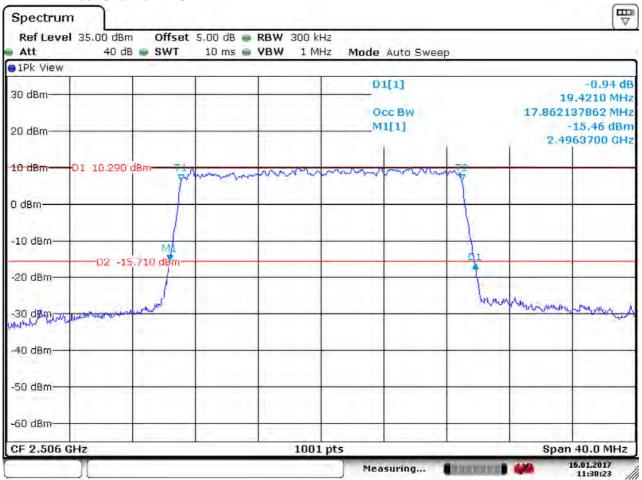


Report No.: SZEM170100023101

Page: 72 of 175

#### 4.1.1.12 Test Mode = LTE/TM3 20MHz

#### 4.1.1.12.1 Test Channel = LCH

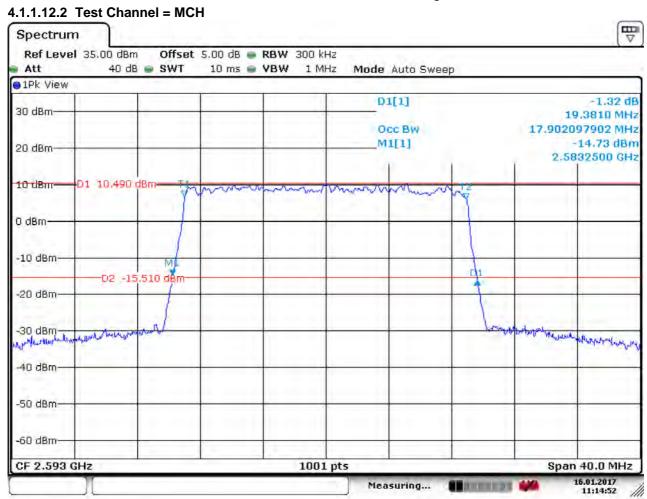


Date: 16.JAN.2017 11:30:24



Report No.: SZEM170100023101

Page: 73 of 175

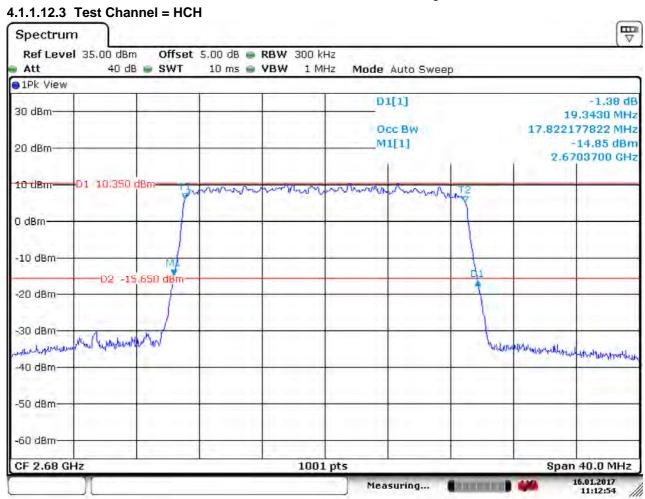


Date: 16.JAN.2017 11:14:53



Report No.: SZEM170100023101

Page: 74 of 175



Date: 16.JAN.2017 11:12:54



Report No.: SZEM170100023101

Page: 75 of 175

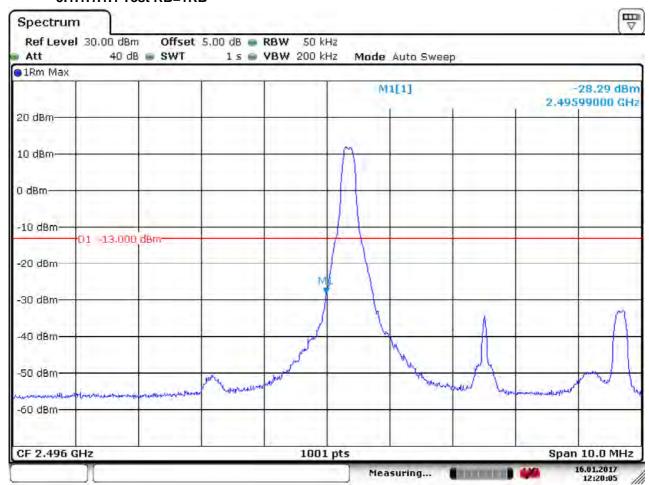
### 5 Band Edges Compliance

5.1.1 Test Band = LTE band 41

5.1.1.1 Test Mode = LTE/TM1 5MHz

**5.1.1.1.1 Test Channel = LCH** 

5.1.1.1.1 Test RB=1RB



Date: 16.JAN.2017 12:20:06

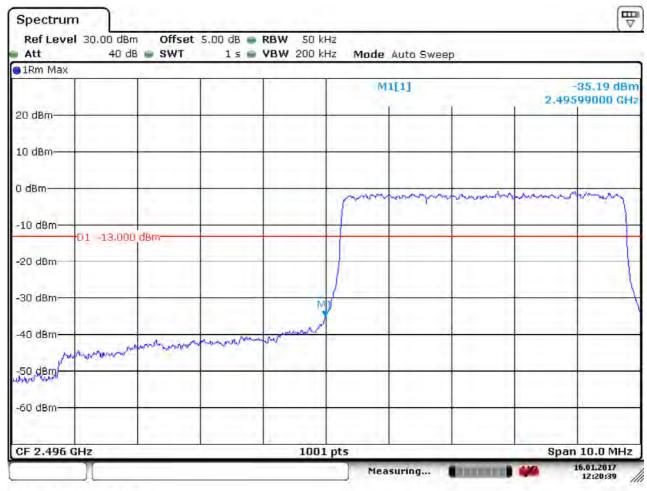
<sup>&</sup>quot;This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> and conditions.htm</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="https://www.sgs.com/terms">www.sgs.com/terms</a> e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only."



Report No.: SZEM170100023101

Page: 76 of 175

#### 5.1.1.1.1.2 Test RB=25RB



Date: 16.JAN.2017 12:20:39

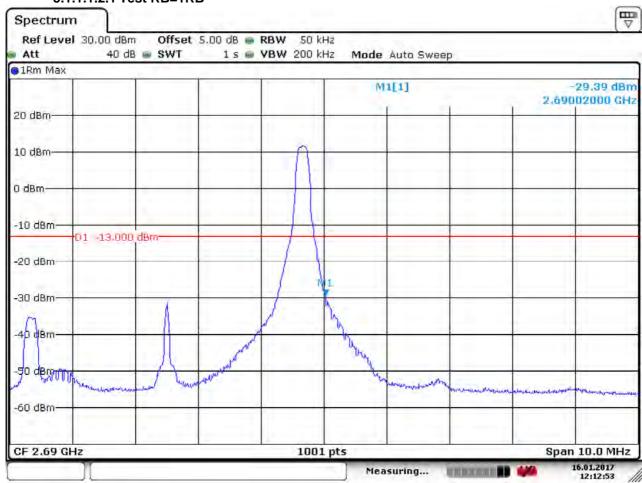


Report No.: SZEM170100023101

Page: 77 of 175

#### 5.1.1.1.2 Test Channel = HCH

#### 5.1.1.1.2.1 Test RB=1RB

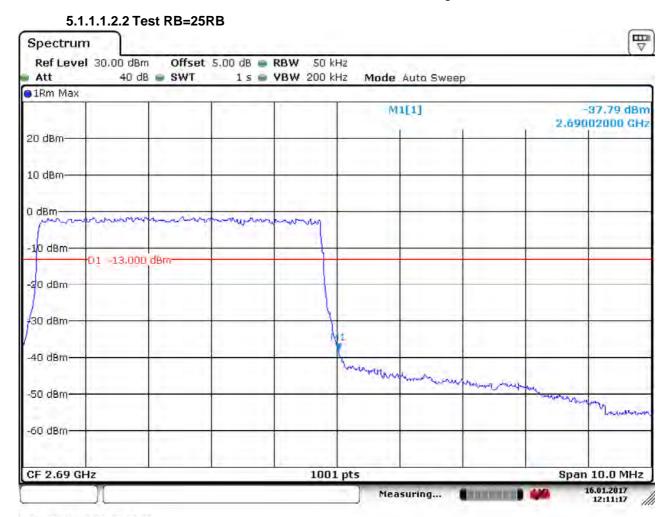


Date: 16.JAN.2017 12:12:54



Report No.: SZEM170100023101

Page: 78 of 175



Date: 16.JAN.2017 12:11:17



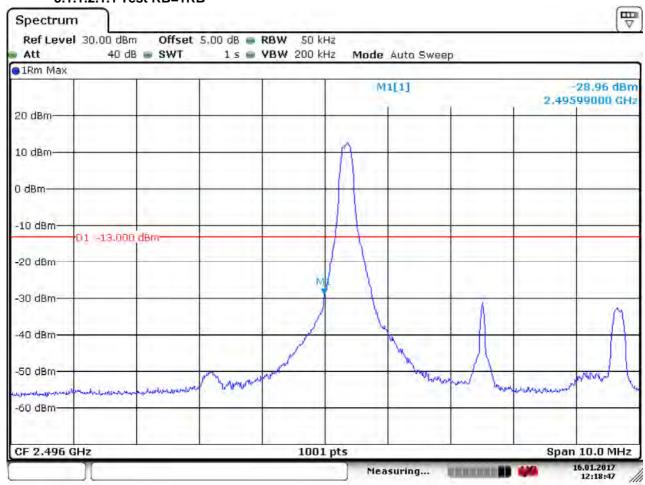
Report No.: SZEM170100023101

Page: 79 of 175

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

#### 5.1.1.2.1 Test Channel = LCH

#### 5.1.1.2.1.1 Test RB=1RB



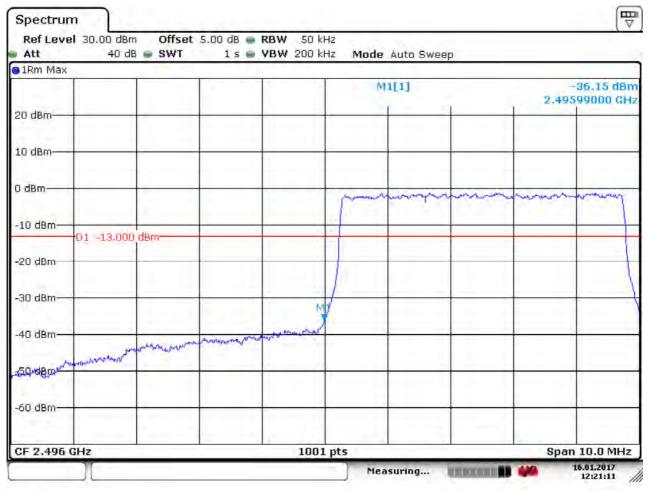
Date: 16.JAN.2017 12:18:48



Report No.: SZEM170100023101

Page: 80 of 175

#### 5.1.1.2.1.2 Test RB=25RB



Date: 16.JAN.2017 12:21:11

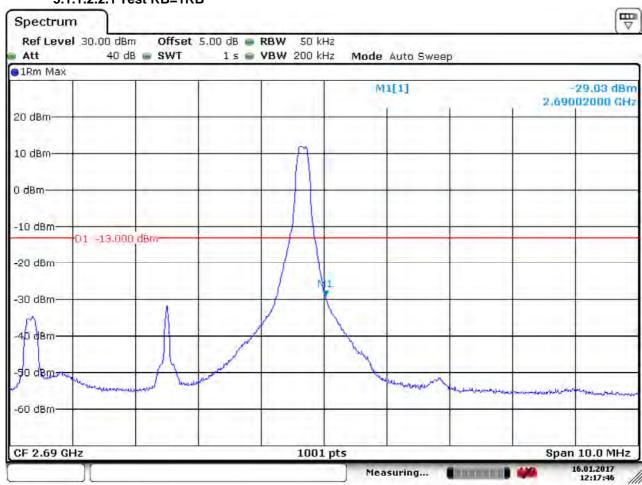


Report No.: SZEM170100023101

Page: 81 of 175

### 5.1.1.2.2 Test Channel = HCH

### 5.1.1.2.2.1 Test RB=1RB



Date: 16.JAN.2017 12:17:47



Report No.: SZEM170100023101

Page: 82 of 175

#### 5.1.1.2.2.2 Test RB=25RB



Date: 16.JAN.2017 12:07:41



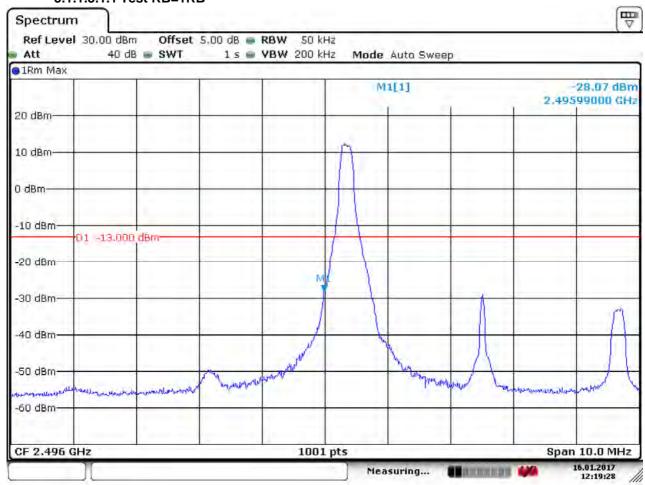
Report No.: SZEM170100023101

Page: 83 of 175

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

#### 5.1.1.3.1 Test Channel = LCH

#### 5.1.1.3.1.1 Test RB=1RB



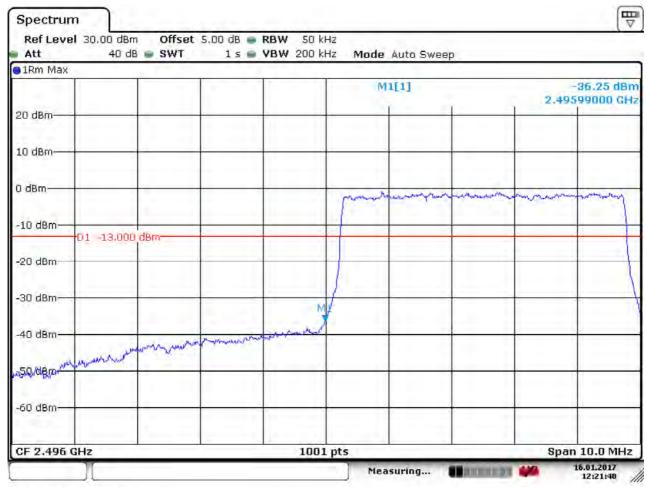
Date: 16.JAN.2017 12:19:29



Report No.: SZEM170100023101

Page: 84 of 175

#### 5.1.1.3.1.2 Test RB=25RB



Date: 16.JAN.2017 12:21:40

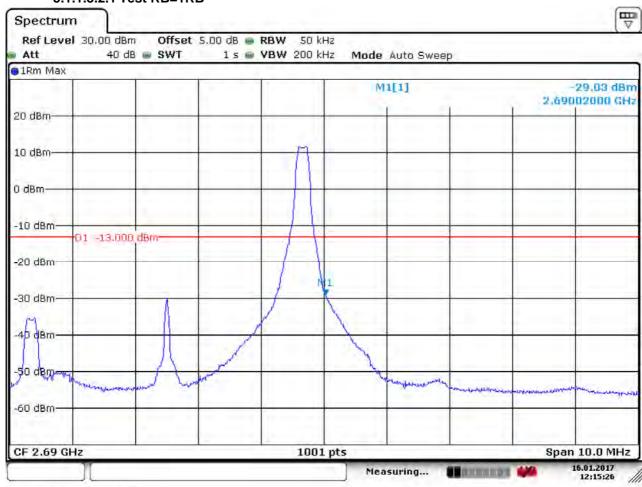


Report No.: SZEM170100023101

Page: 85 of 175

### 5.1.1.3.2 Test Channel = HCH

### 5.1.1.3.2.1 Test RB=1RB



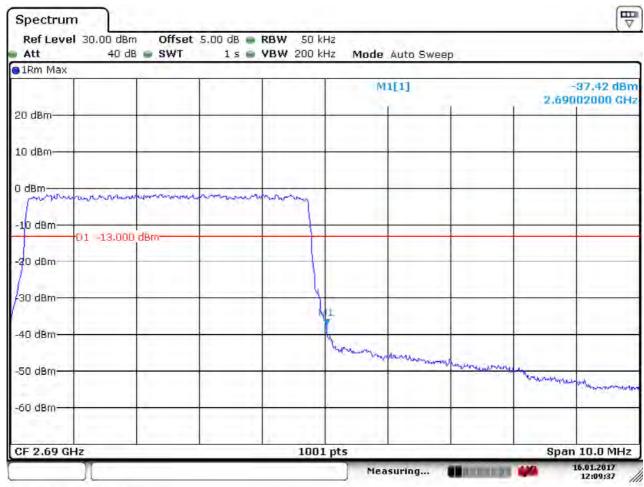
Date: 16.JAN.2017 12:15:26



Report No.: SZEM170100023101

Page: 86 of 175

#### 5.1.1.3.2.2 Test RB=25RB



Date: 16.JAN.2017 12:09:37



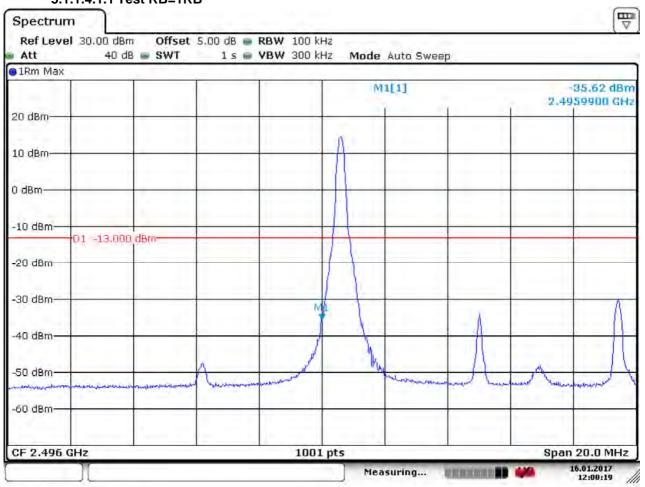
Report No.: SZEM170100023101

Page: 87 of 175

### 5.1.1.4 Test Mode = LTE/TM1 10MHz

#### 5.1.1.4.1 Test Channel = LCH

#### 5.1.1.4.1.1 Test RB=1RB

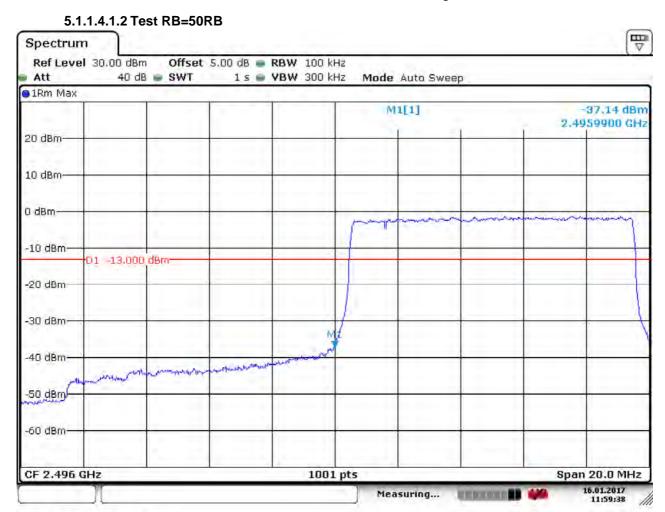


Date: 16.JAN.2017 12:00:19



Report No.: SZEM170100023101

Page: 88 of 175



Date: 16.JAN.2017 11:59:39

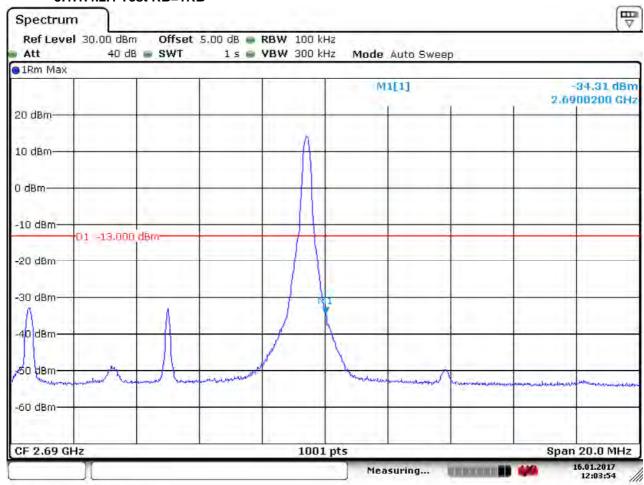


Report No.: SZEM170100023101

Page: 89 of 175

### 5.1.1.4.2 Test Channel = HCH

### 5.1.1.4.2.1 Test RB=1RB

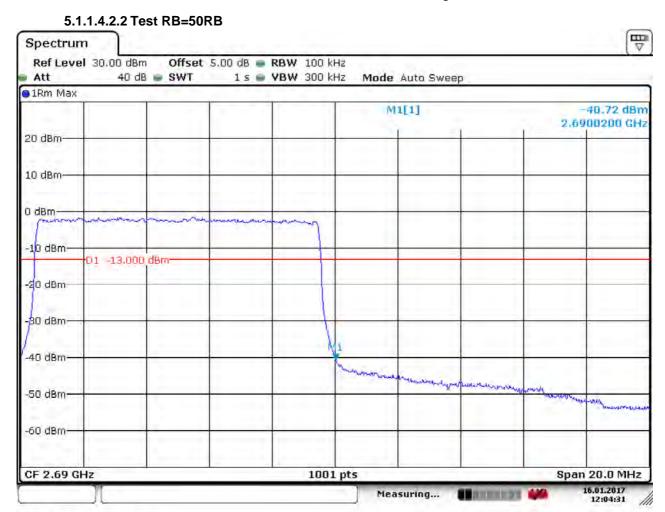


Date: 16.JAN.2017 12:03:54



Report No.: SZEM170100023101

Page: 90 of 175



Date: 16.JAN.2017 12:04:32



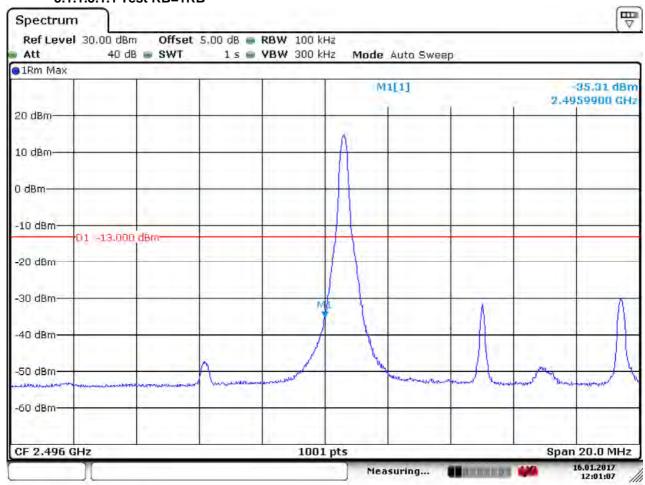
Report No.: SZEM170100023101

Page: 91 of 175

### 5.1.1.5 Test Mode = LTE/TM2 10MHz

#### 5.1.1.5.1 Test Channel = LCH

#### 5.1.1.5.1.1 Test RB=1RB

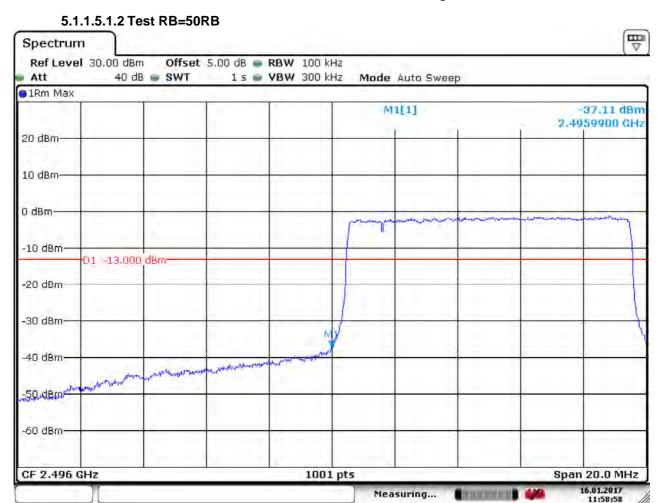


Date: 16.JAN.2017 12:01:07



Report No.: SZEM170100023101

Page: 92 of 175



Date: 16.JAN.2017 11:58:59

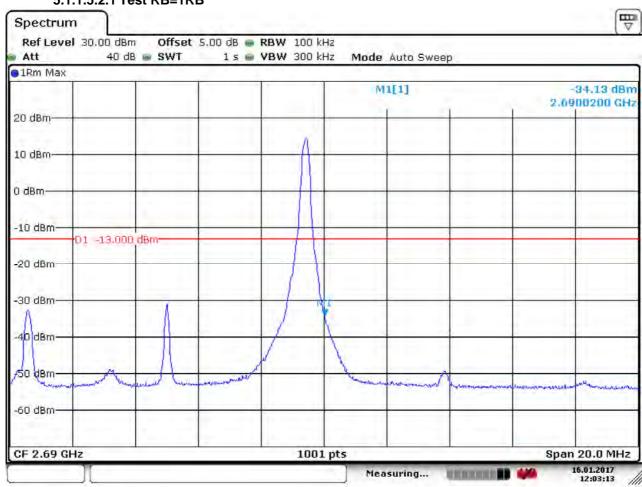


Report No.: SZEM170100023101

Page: 93 of 175

### 5.1.1.5.2 Test Channel = HCH

### 5.1.1.5.2.1 Test RB=1RB



Date: 16.JAN.2017 12:03:14



Report No.: SZEM170100023101

Page: 94 of 175

### 5.1.1.5.3 Test RB=50RB



Date: 16.JAN.2017 12:05:05



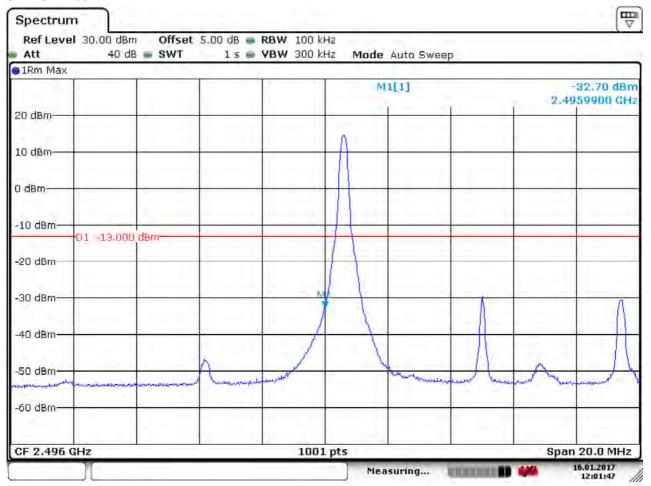
Report No.: SZEM170100023101

Page: 95 of 175

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

#### 5.1.1.6.1 Test Channel = LCH

### 5.1.1.6.2 Test RB=1RB



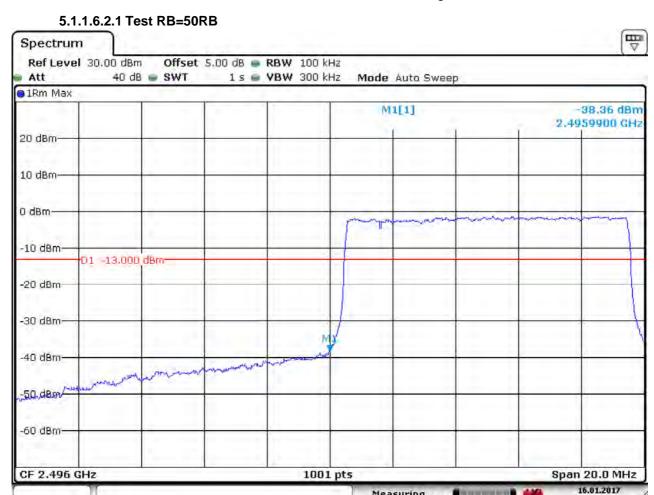
Date: 16.JAN.2017 12:01:48



Report No.: SZEM170100023101

11:58:18

Page: 96 of 175



Measuring...

Date: 16.JAN.2017 11:58:19

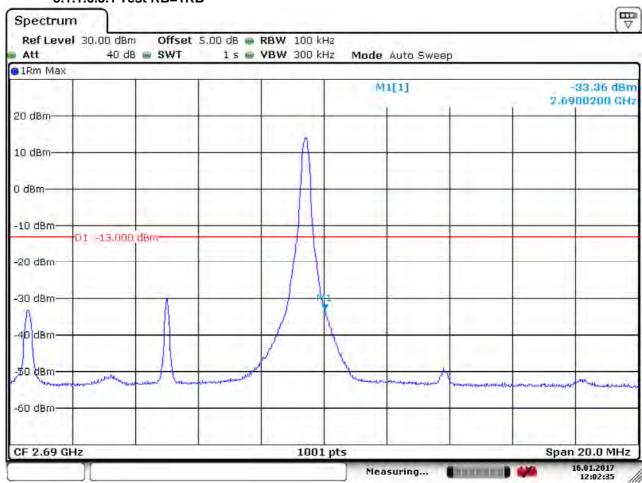


Report No.: SZEM170100023101

Page: 97 of 175

### 5.1.1.6.3 Test Channel = HCH

### 5.1.1.6.3.1 Test RB=1RB

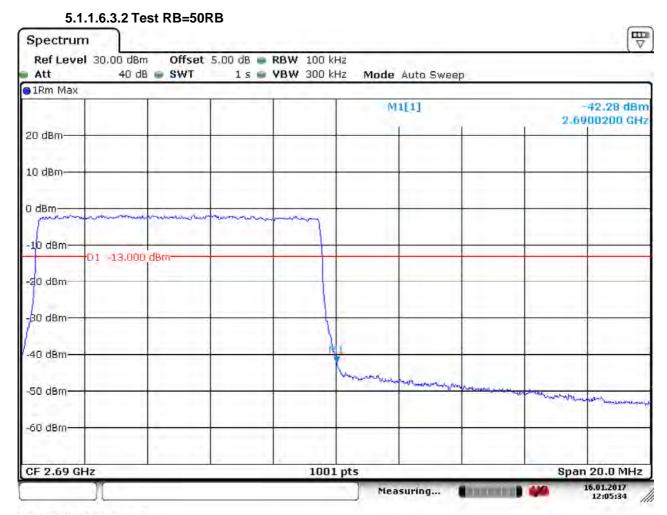


Date: 16.JAN.2017 12:02:35



Report No.: SZEM170100023101

Page: 98 of 175



Date: 16.JAN.2017 12:05:35



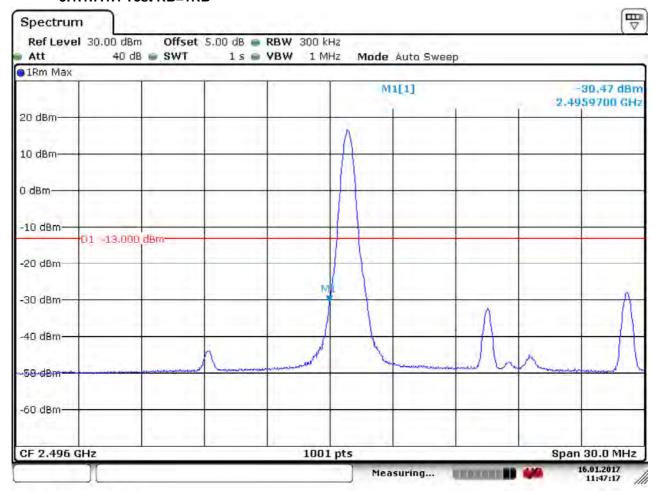
Report No.: SZEM170100023101

Page: 99 of 175

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

#### 5.1.1.7.1 Test Channel = LCH

#### 5.1.1.7.1.1 Test RB=1RB



Date: 16.JAN.2017 11:47:18



Report No.: SZEM170100023101

Page: 100 of 175

#### 5.1.1.7.1.2 Test RB=75RB



Date: 16.JAN.2017 11:48:15

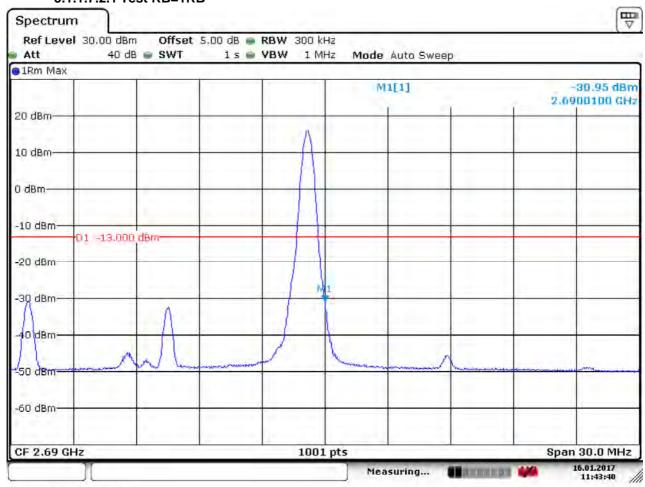


Report No.: SZEM170100023101

Page: 101 of 175

### 5.1.1.7.2 Test Channel = HCH

### 5.1.1.7.2.1 Test RB=1RB

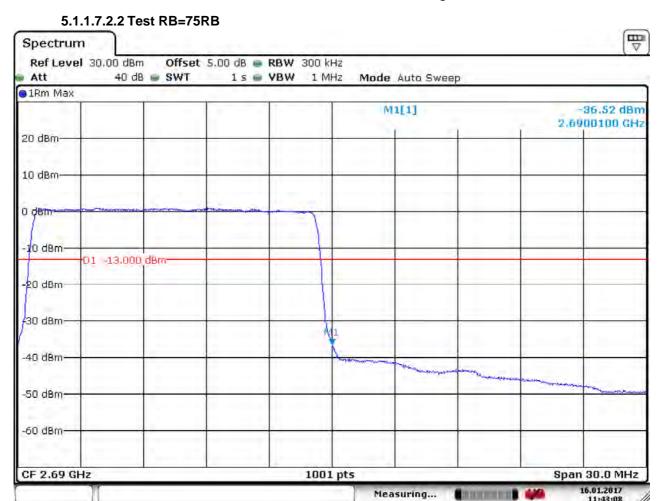


Date: 16.JAN.2017 11:43:41



Report No.: SZEM170100023101

Page: 102 of 175



Date: 16.JAN.2017 11:43:08



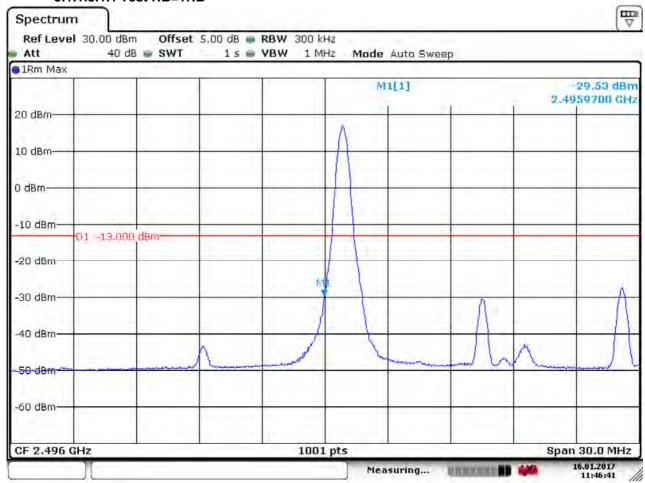
Report No.: SZEM170100023101

Page: 103 of 175

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

#### 5.1.1.8.1 Test Channel = LCH

#### 5.1.1.8.1.1 Test RB=1RB



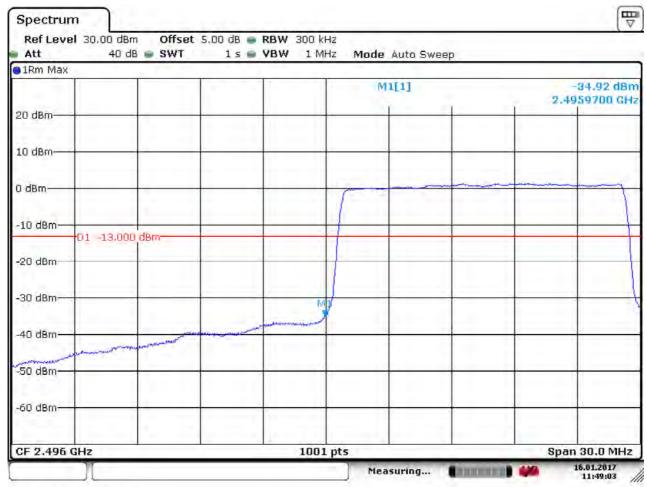
Date: 16.JAN.2017 11:46:41



Report No.: SZEM170100023101

Page: 104 of 175

#### 5.1.1.8.1.2 Test RB=75RB



Date: 16.JAN.2017 11:49:03

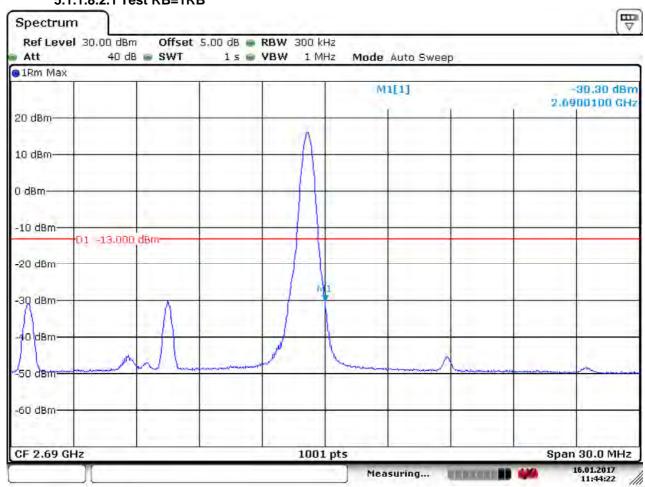


Report No.: SZEM170100023101

Page: 105 of 175

### 5.1.1.8.2 Test Channel = HCH

### 5.1.1.8.2.1 Test RB=1RB



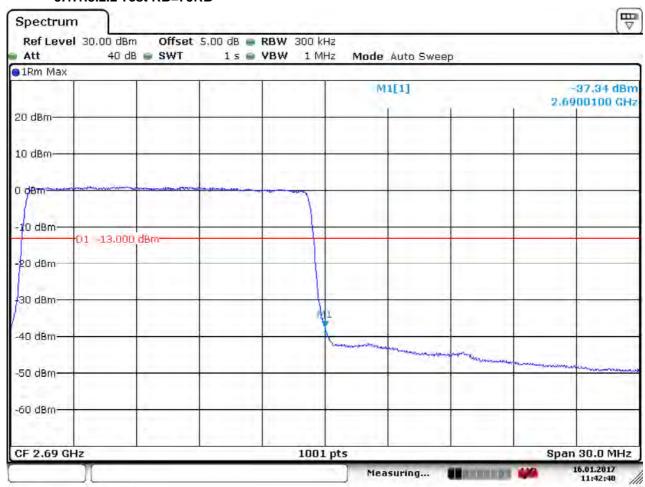
Date: 16.JAN.2017 11:44:22



Report No.: SZEM170100023101

Page: 106 of 175

### 5.1.1.8.2.2 Test RB=75RB



Date: 16.JAN.2017 11:42:40



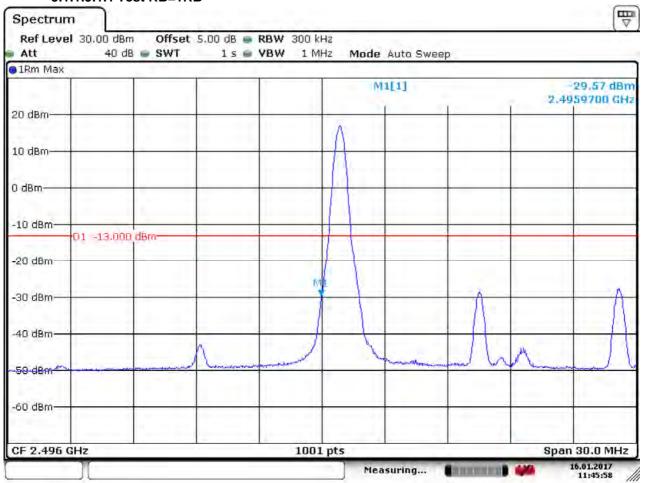
Report No.: SZEM170100023101

Page: 107 of 175

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

#### 5.1.1.9.1 Test Channel = LCH

#### 5.1.1.9.1.1 Test RB=1RB



Date: 16.JAN.2017 11:45:58



Report No.: SZEM170100023101

Page: 108 of 175

#### 5.1.1.9.1.2 Test RB=75RB



Date: 16.JAN.2017 11:49:53

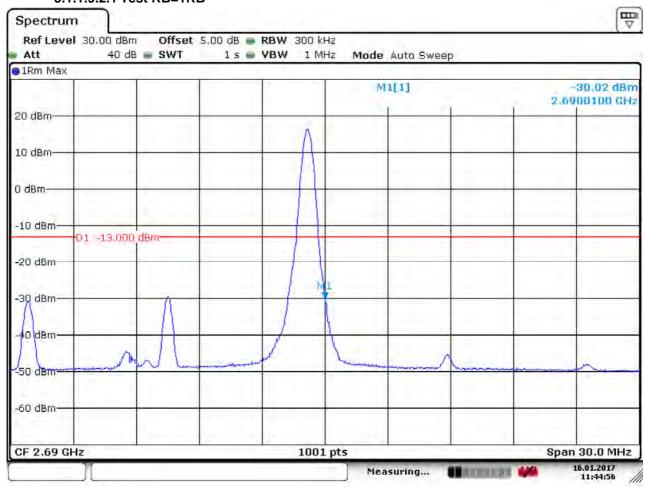


Report No.: SZEM170100023101

Page: 109 of 175

## 5.1.1.9.2 Test Channel = HCH

## 5.1.1.9.2.1 Test RB=1RB



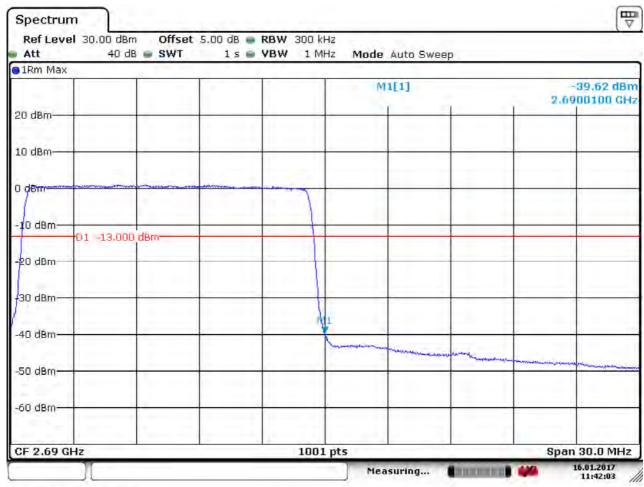
Date: 16.JAN.2017 11:44:57



Report No.: SZEM170100023101

Page: 110 of 175

### 5.1.1.9.2.2 Test RB=75RB



Date: 16.JAN.2017 11:42:03



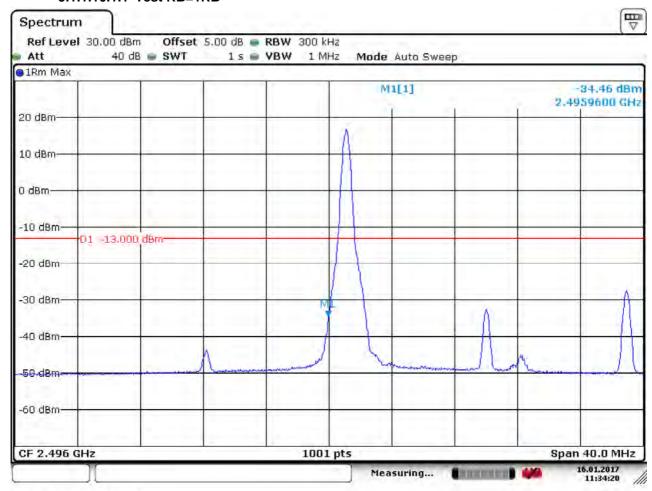
Report No.: SZEM170100023101

Page: 111 of 175

## 5.1.1.10 Test Mode = LTE/TM1 20MHz

### 5.1.1.10.1 Test Channel = LCH

### 5.1.1.10.1.1 Test RB=1RB



Date: 16.JAN.2017 11:34:21



Report No.: SZEM170100023101

Page: 112 of 175

### 5.1.1.10.1.2 Test RB=100RB



Date: 16.JAN.2017 11:33:51

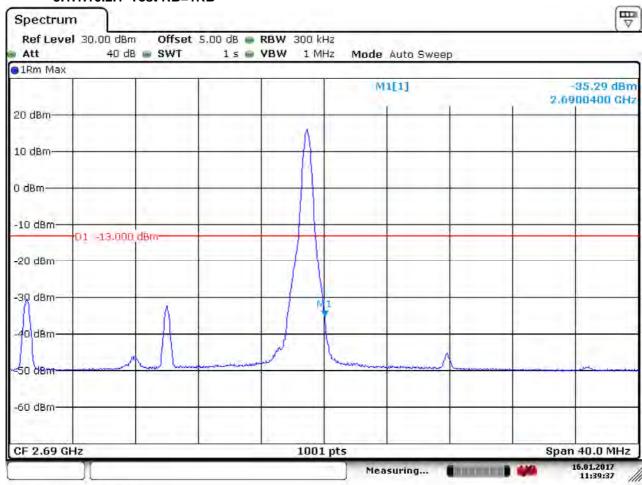


Report No.: SZEM170100023101

Page: 113 of 175

### 5.1.1.10.2 Test Channel = HCH

## 5.1.1.10.2.1 Test RB=1RB

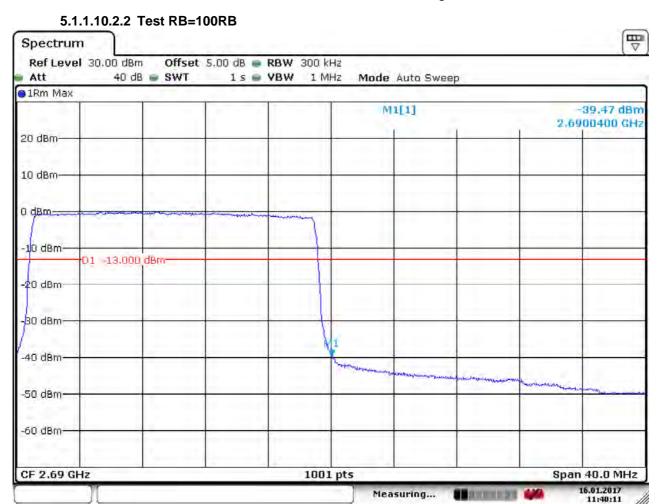


Date: 16.JAN.2017 11:39:37



Report No.: SZEM170100023101

Page: 114 of 175



Date: 16.JAN.2017 11:40:12



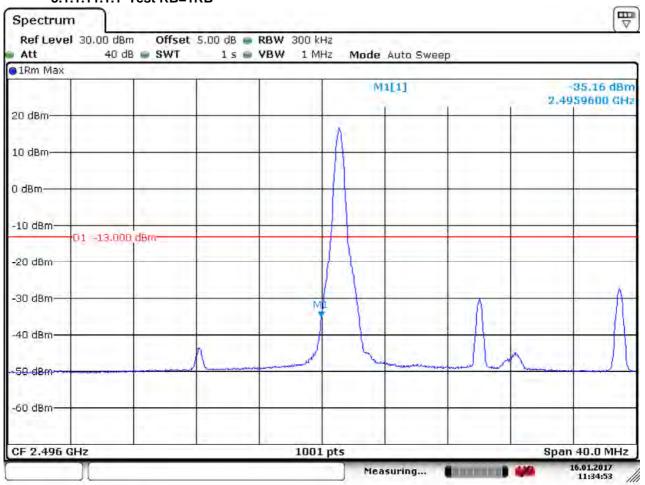
Report No.: SZEM170100023101

Page: 115 of 175

## 5.1.1.11 Test Mode = LTE/TM2 20MHz

### 5.1.1.11.1 Test Channel = LCH

### 5.1.1.11.1.1 Test RB=1RB



Date: 16.JAN.2017 11:34:54



Report No.: SZEM170100023101

Page: 116 of 175

### 5.1.1.11.1.2 Test RB=100RB



Date: 16.JAN.2017 11:33:26

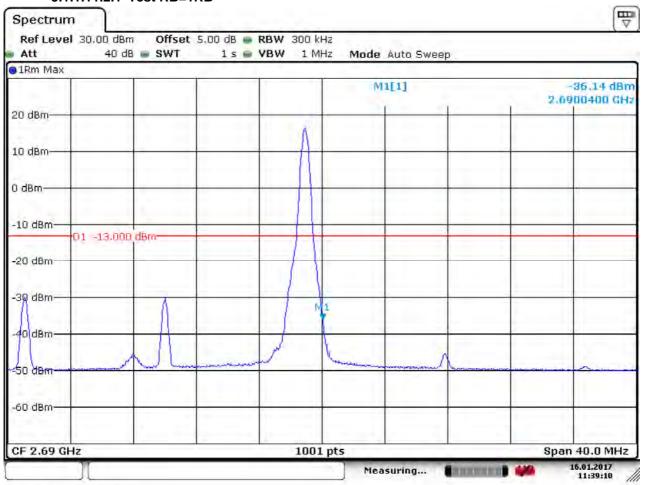


Report No.: SZEM170100023101

Page: 117 of 175

### 5.1.1.11.2 Test Channel = HCH

## 5.1.1.11.2.1 Test RB=1RB



Date: 16.JAN.2017 11:39:11



Report No.: SZEM170100023101

Page: 118 of 175

### 5.1.1.11.2.2 Test RB=100RB



Date: 16.JAN.2017 11:40:41



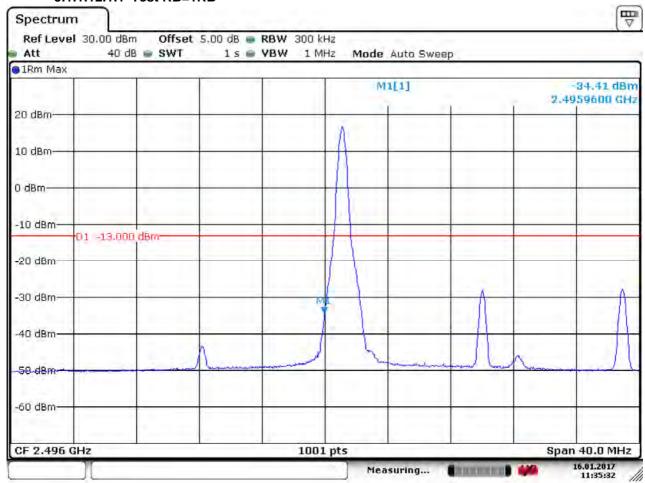
Report No.: SZEM170100023101

Page: 119 of 175

### 5.1.1.12 Test Mode = LTE/TM3 20MHz

### 5.1.1.12.1 Test Channel = LCH

### 5.1.1.12.1.1 Test RB=1RB



Date: 16.JAN.2017 11:35:33



Report No.: SZEM170100023101

Page: 120 of 175

### 5.1.1.12.1.2 Test RB=100RB



Date: 16.JAN.2017 11:32:14

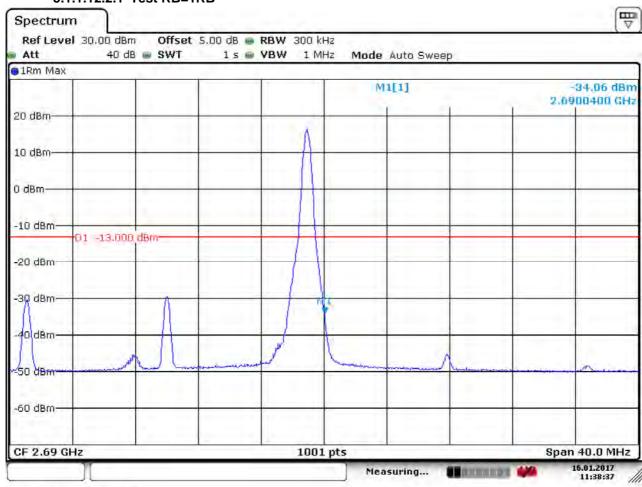


Report No.: SZEM170100023101

Page: 121 of 175

### 5.1.1.12.2 Test Channel = HCH

## 5.1.1.12.2.1 Test RB=1RB



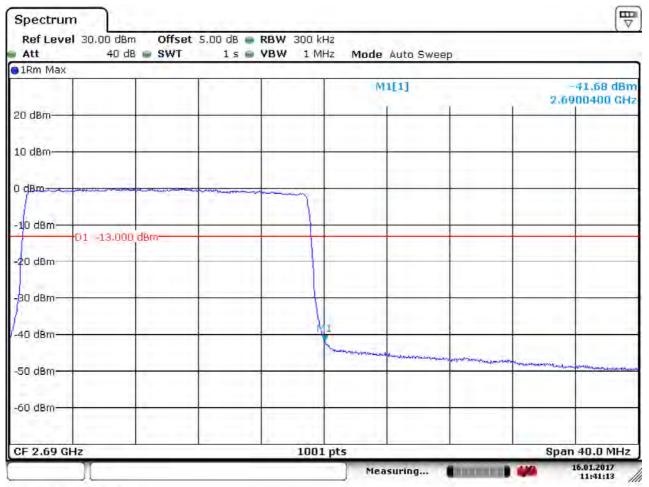
Date: 16.JAN.2017 11:38:38



Report No.: SZEM170100023101

Page: 122 of 175

### 5.1.1.12.2.2 Test RB=100RB



Date: 16.JAN.2017 11:41:14



Report No.: SZEM170100023101

Page: 123 of 175

## 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 = 4 \* (Span / RBW) with k = 4 \* (Span / RBW)

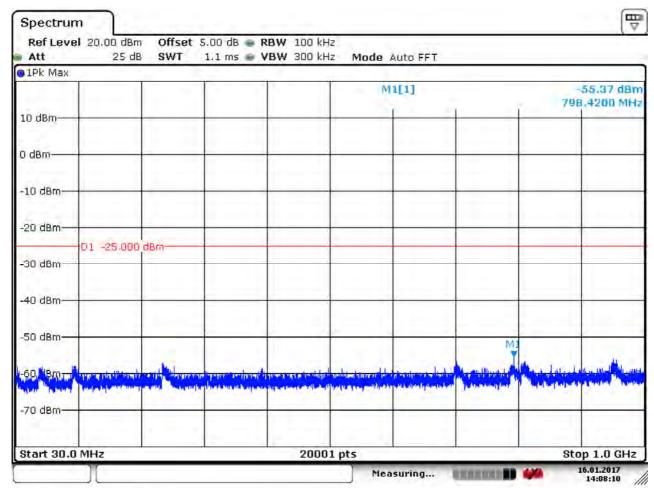
Part I - Test Plots

## 6.1 For LTE

## 6.1.1 Test Band = LTE band 41

## 6.1.1.1 Test Mode = LTE / TM1 5MHz RB1#0

### 6.1.1.1.1 Test Channel = LCH

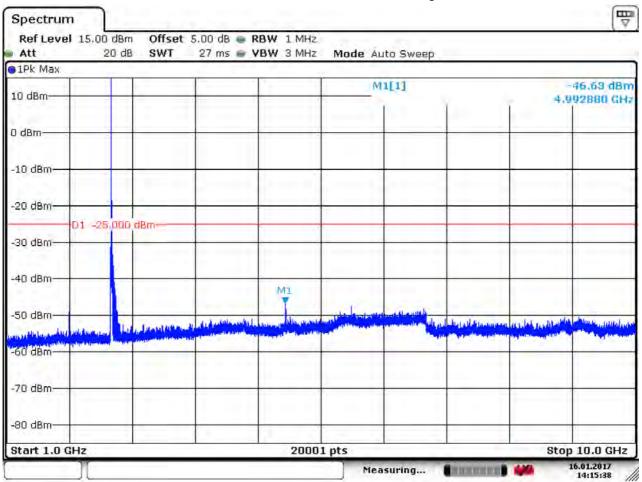


Date: 16.JAN.2017 14:08:10



Report No.: SZEM170100023101

Page: 124 of 175

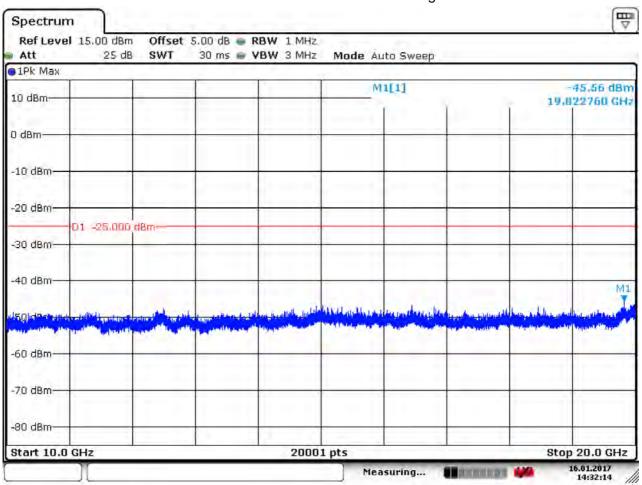


Date: 16.JAN.2017 14:15:39



Report No.: SZEM170100023101

Page: 125 of 175

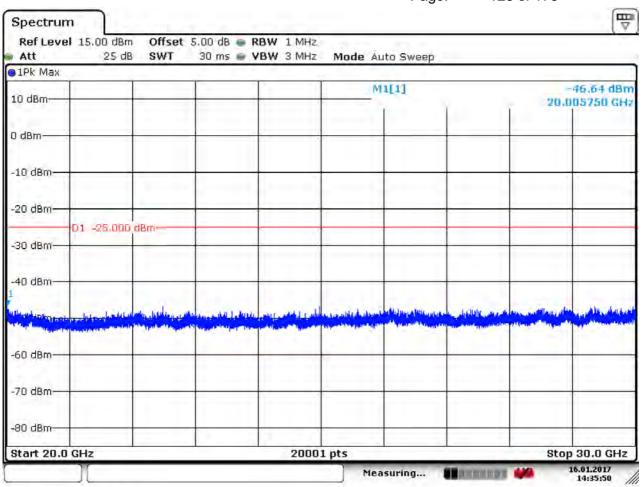


Date: 16.JAN.2017 14:32:15



Report No.: SZEM170100023101

Page: 126 of 175



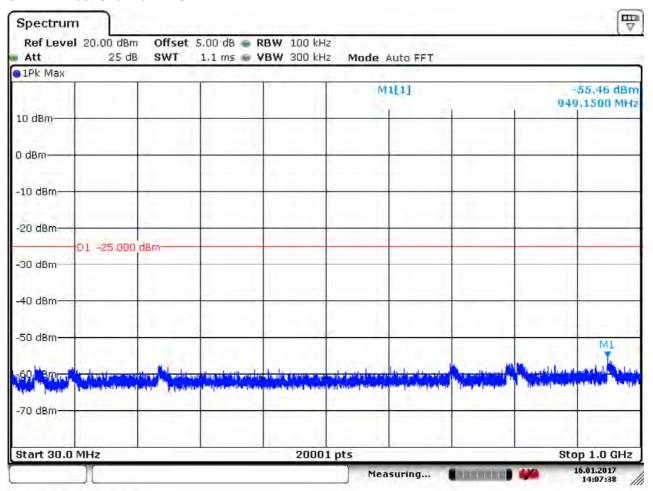
Date: 16.JAN.2017 14:35:51



Report No.: SZEM170100023101

Page: 127 of 175

### 6.1.1.1.2 Test Channel = MCH

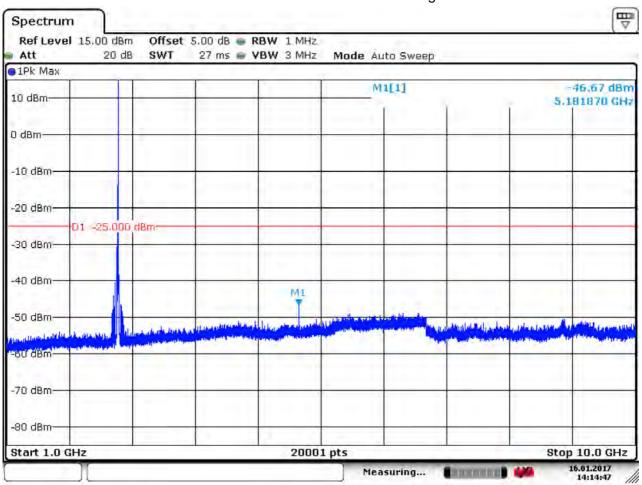


Date: 16.JAN.2017 14:07:38



Report No.: SZEM170100023101

Page: 128 of 175

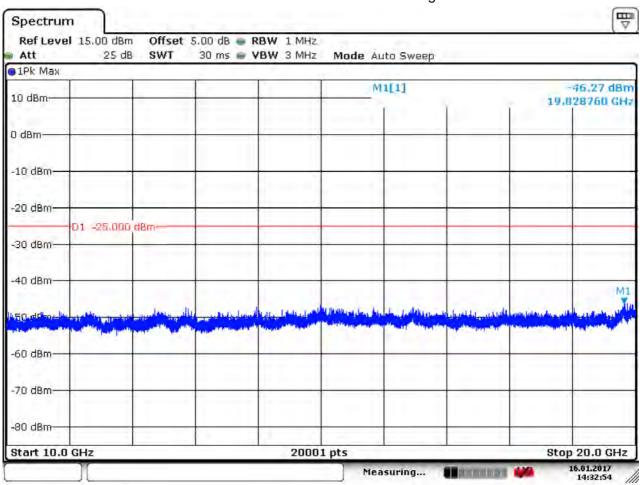


Date: 16.JAN.2017 14:14:48



Report No.: SZEM170100023101

Page: 129 of 175

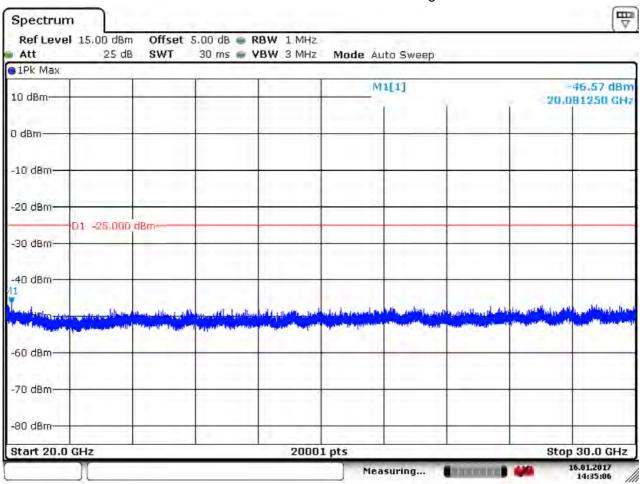


Date: 16.JAN.2017 14:32:55



Report No.: SZEM170100023101

Page: 130 of 175



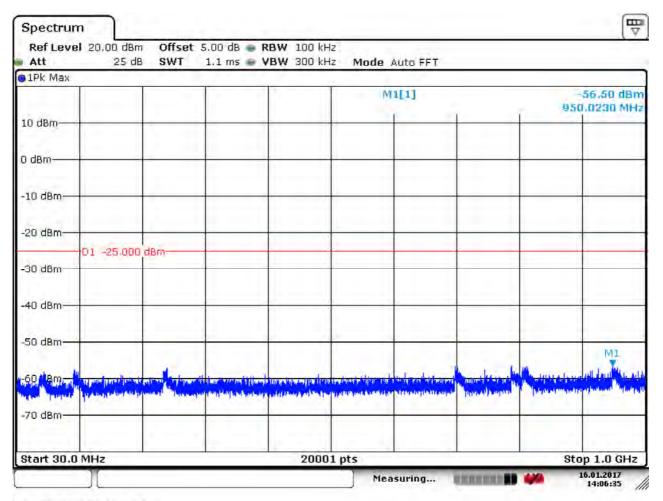
Date: 16.JAN.2017 14:35:06



Report No.: SZEM170100023101

Page: 131 of 175

### 6.1.1.1.3 Test Channel = HCH

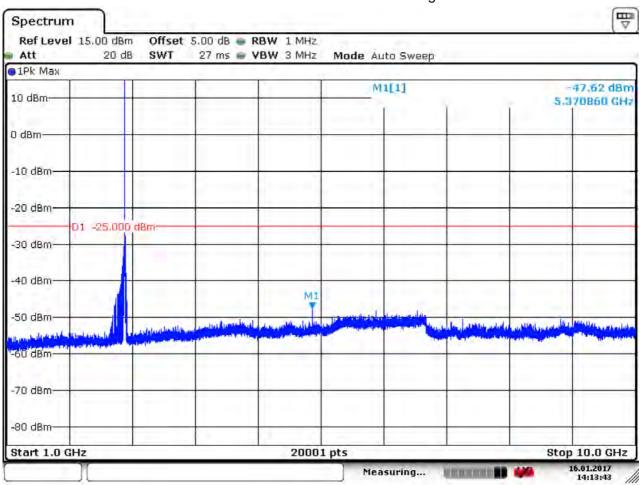


Date: 16.JAN.2017 14:06:34



Report No.: SZEM170100023101

Page: 132 of 175

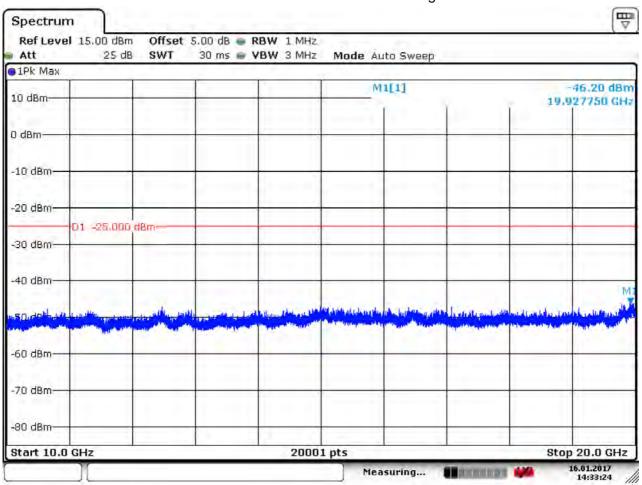


Date: 16.JAN.2017 14:13:43



Report No.: SZEM170100023101

Page: 133 of 175

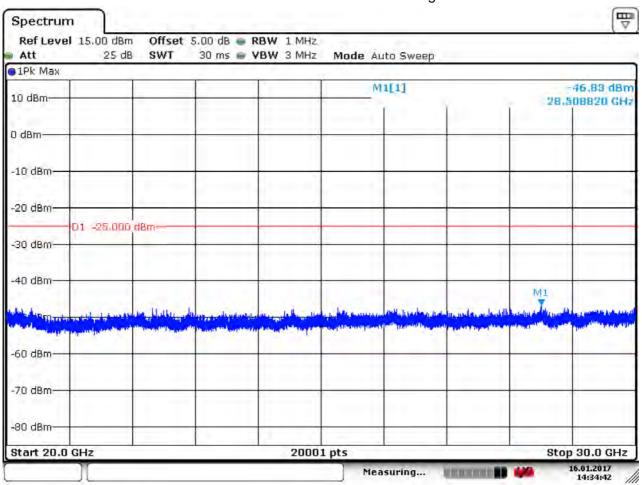


Date: 16.JAN.2017 14:33:25



Report No.: SZEM170100023101

Page: 134 of 175



Date: 16.JAN.2017 14:34:42

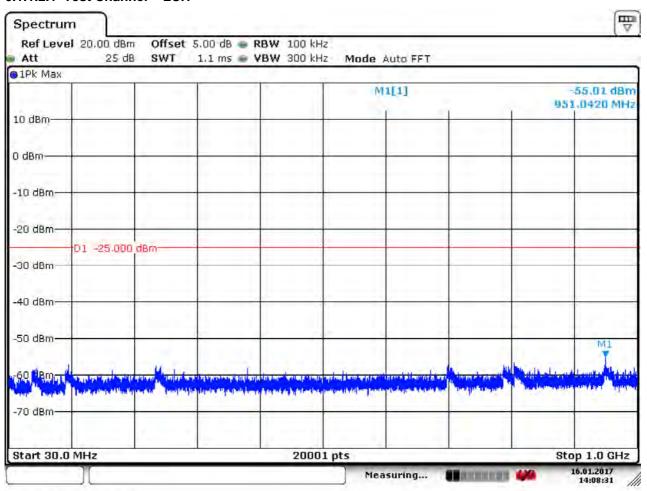


Report No.: SZEM170100023101

Page: 135 of 175

## 6.1.1.2 Test Mode = LTE / TM1 10MHz RB1#0

### 6.1.1.2.1 Test Channel = LCH

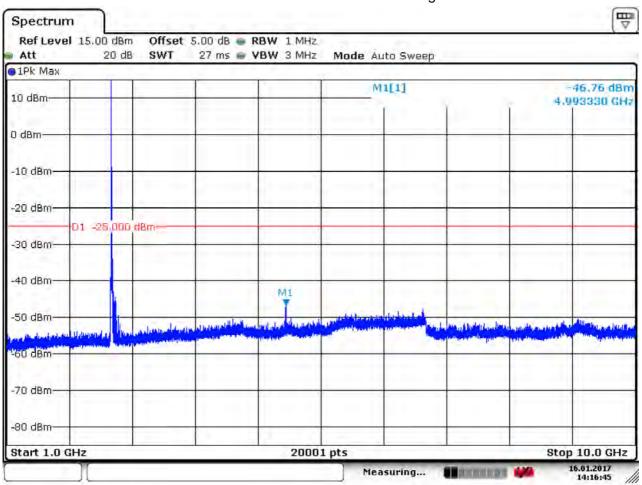


Date: 16.JAN.2017 14:08:32



Report No.: SZEM170100023101

Page: 136 of 175

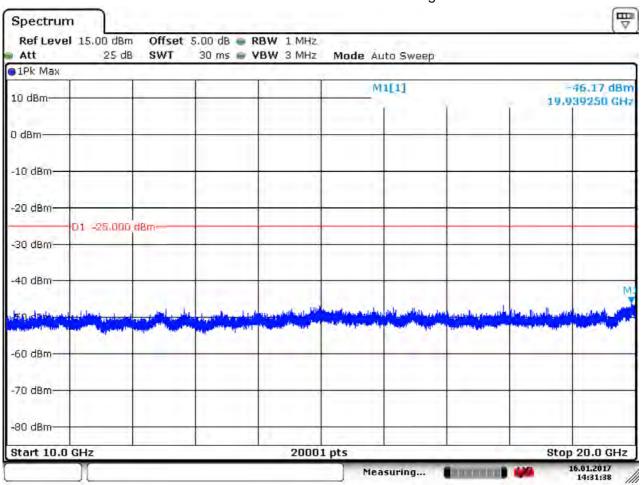


Date: 16.JAN.2017 14:16:45



Report No.: SZEM170100023101

Page: 137 of 175

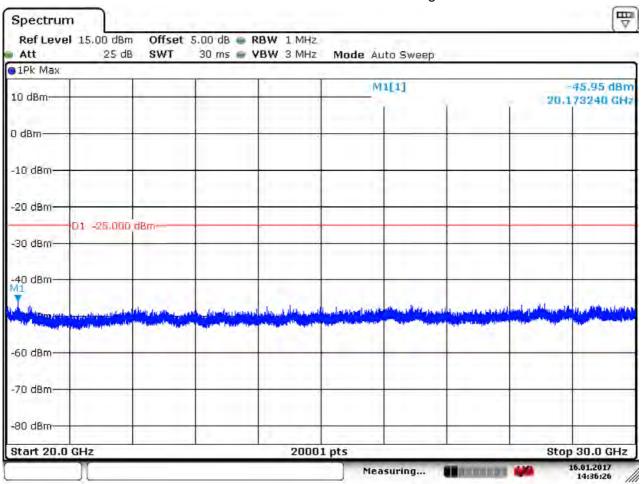


Date: 16.JAN.2017 14:31:39



Report No.: SZEM170100023101

Page: 138 of 175



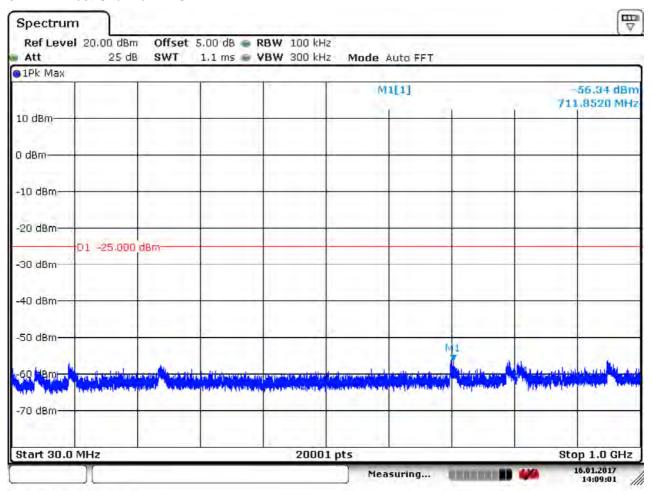
Date: 16.JAN.2017 14:36:27



Report No.: SZEM170100023101

Page: 139 of 175

### 6.1.1.2.2 Test Channel = MCH

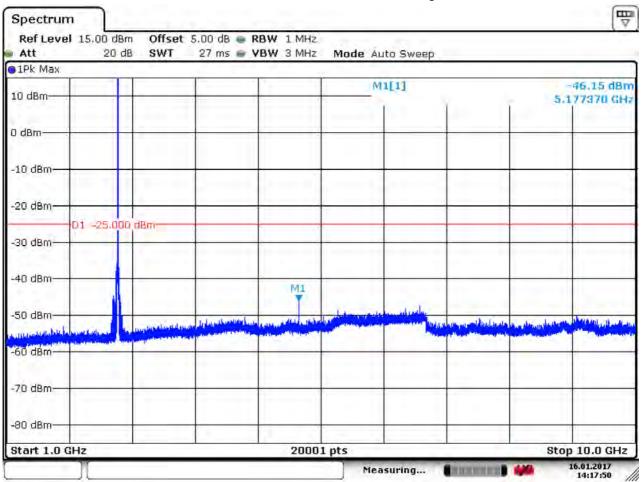


Date: 16.JAN.2017 14:09:01



Report No.: SZEM170100023101

Page: 140 of 175

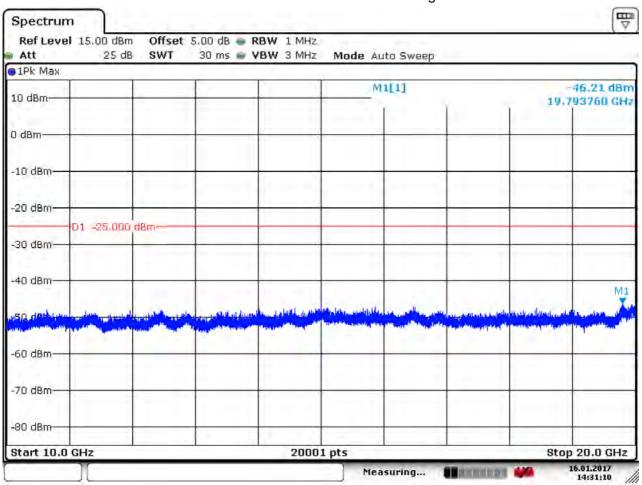


Date: 16.JAN.2017 14:17:51



Report No.: SZEM170100023101

Page: 141 of 175

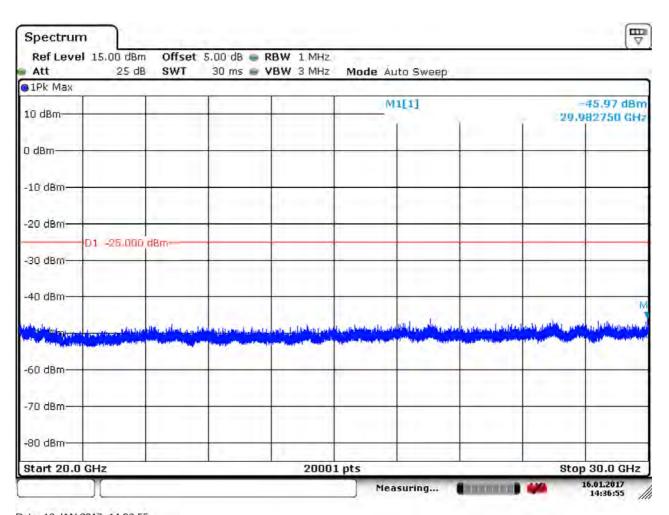


Date: 16.JAN.2017 14:31:11



Report No.: SZEM170100023101

Page: 142 of 175



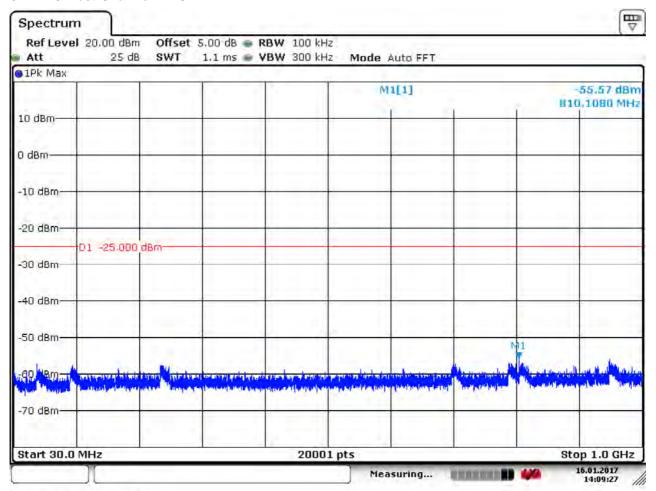
Date: 16.JAN.2017 14:36:55



Report No.: SZEM170100023101

Page: 143 of 175

### 6.1.1.2.3 Test Channel = HCH

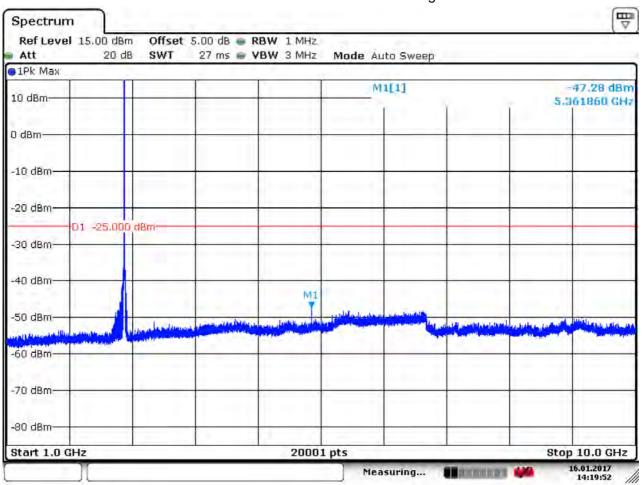


Date: 16.JAN.2017 14:09:28



Report No.: SZEM170100023101

Page: 144 of 175

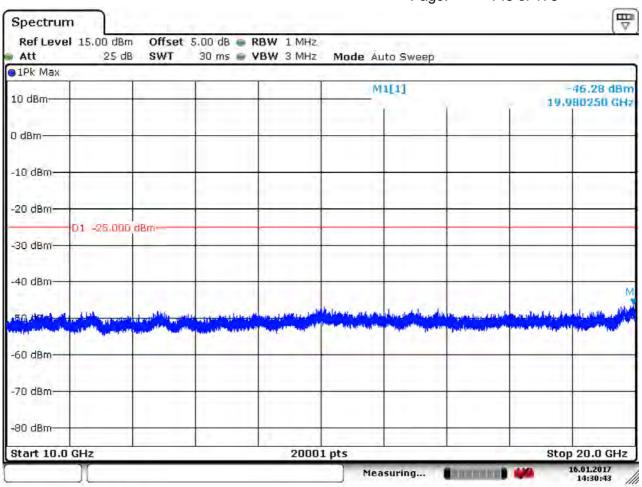


Date: 16.JAN.2017 14:19:52



Report No.: SZEM170100023101

Page: 145 of 175

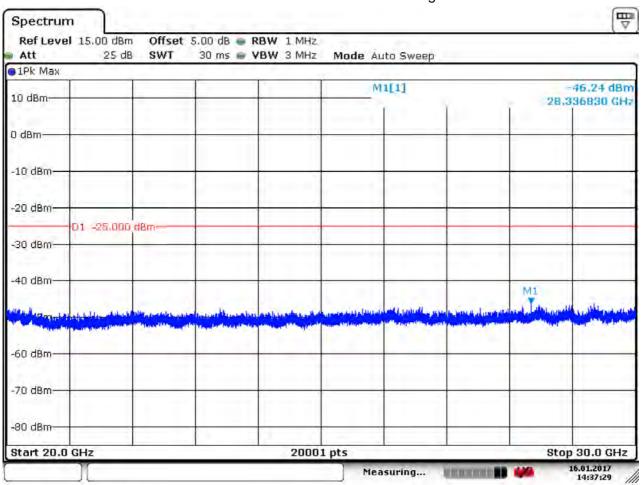


Date: 16.JAN.2017 14:30:43



Report No.: SZEM170100023101

Page: 146 of 175



Date: 16.JAN.2017 14:37:29

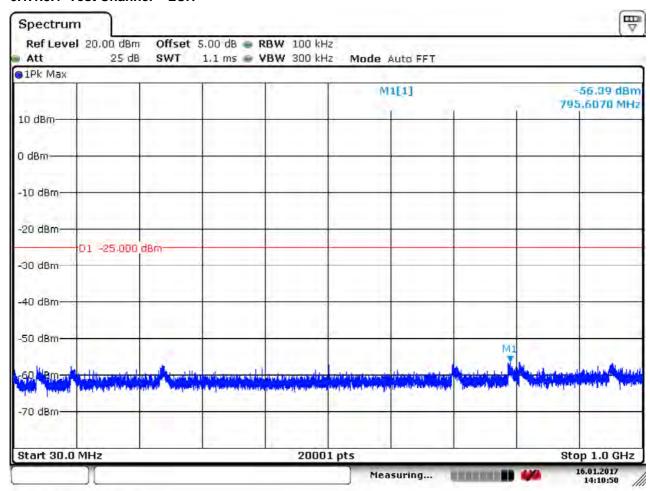


Report No.: SZEM170100023101

Page: 147 of 175

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

#### 6.1.1.3.1 Test Channel = LCH

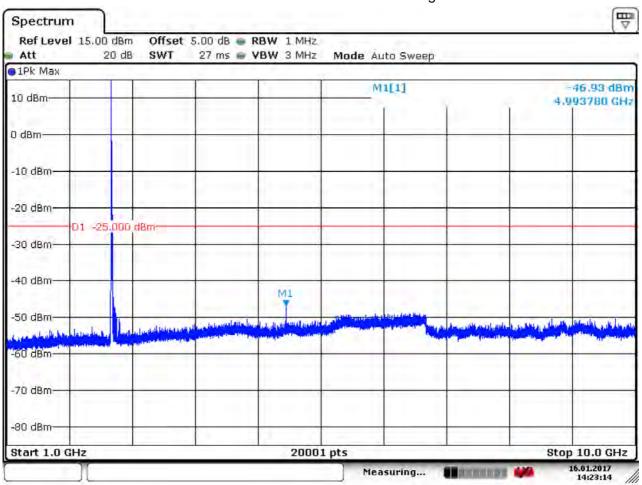


Date: 16.JAN.2017 14:10:51



Report No.: SZEM170100023101

Page: 148 of 175

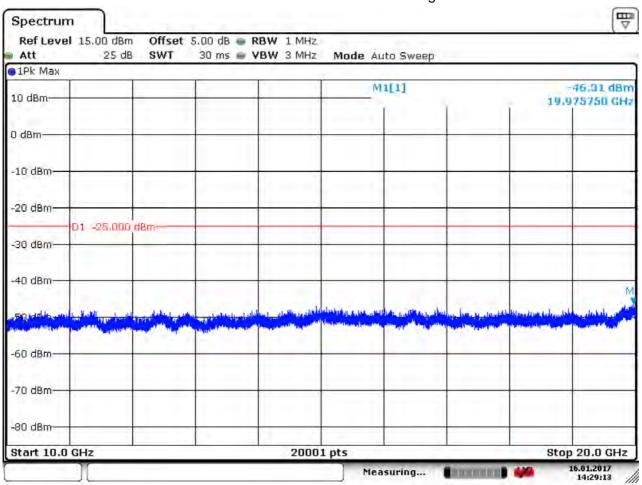


Date: 16.JAN.2017 14:23:15



Report No.: SZEM170100023101

Page: 149 of 175

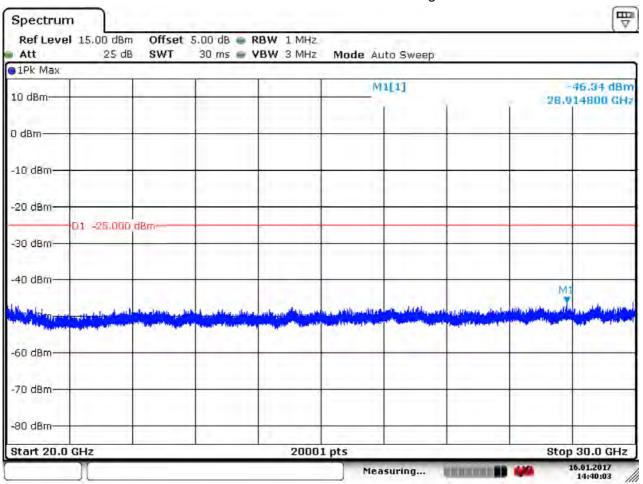


Date: 16.JAN.2017 14:29:14



Report No.: SZEM170100023101

Page: 150 of 175



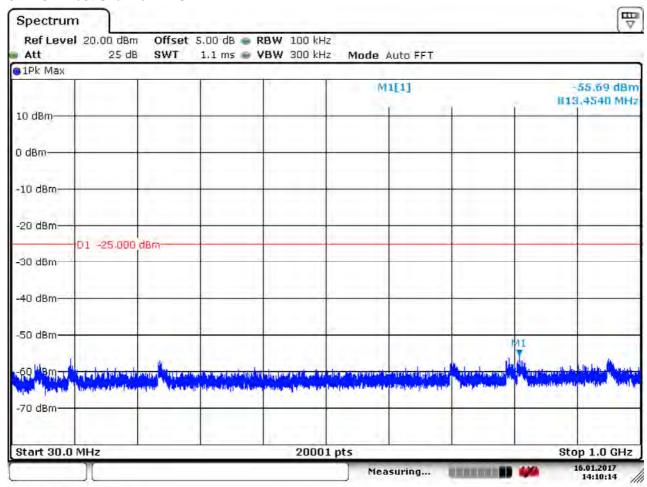
Date: 16.JAN.2017 14:40:04



Report No.: SZEM170100023101

Page: 151 of 175

#### 6.1.1.3.2 Test Channel = MCH

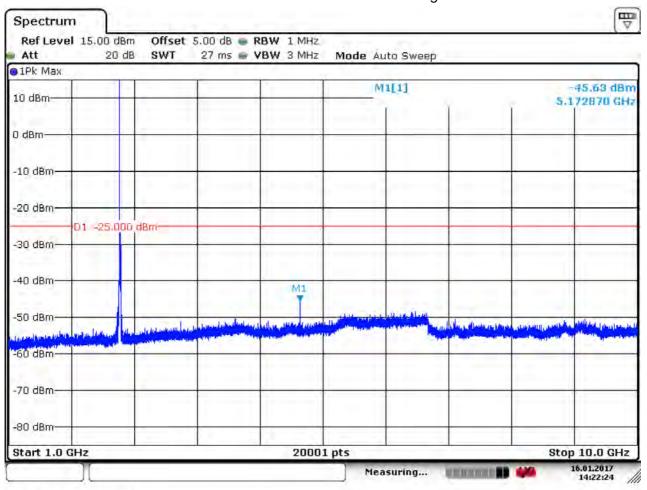


Date: 16.JAN.2017 14:10:14



Report No.: SZEM170100023101

Page: 152 of 175

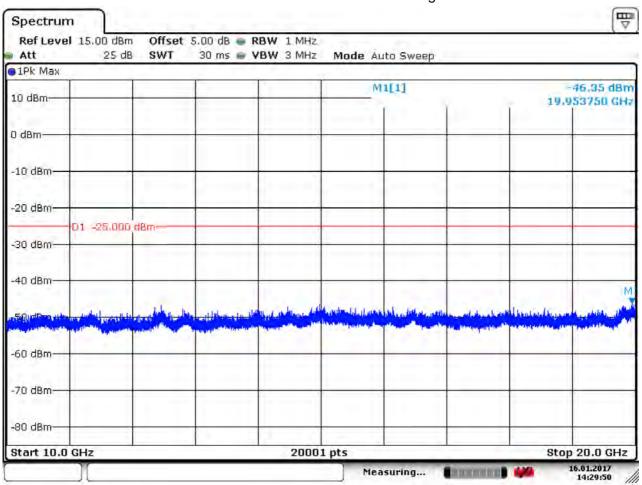


Date: 16.JAN.2017 14:22:24



Report No.: SZEM170100023101

Page: 153 of 175

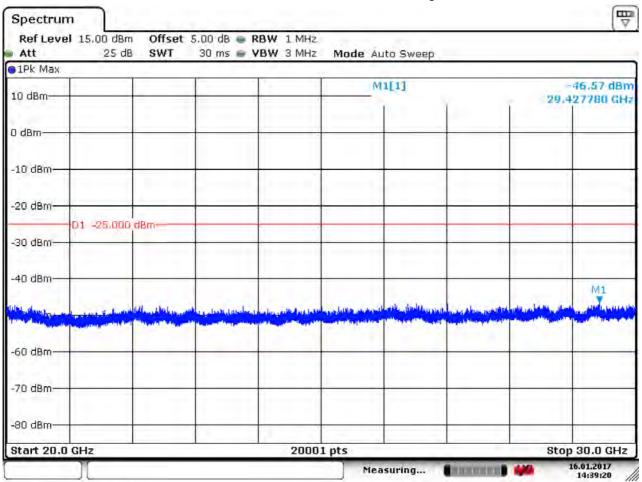


Date: 16.JAN.2017 14:29:50



Report No.: SZEM170100023101

Page: 154 of 175



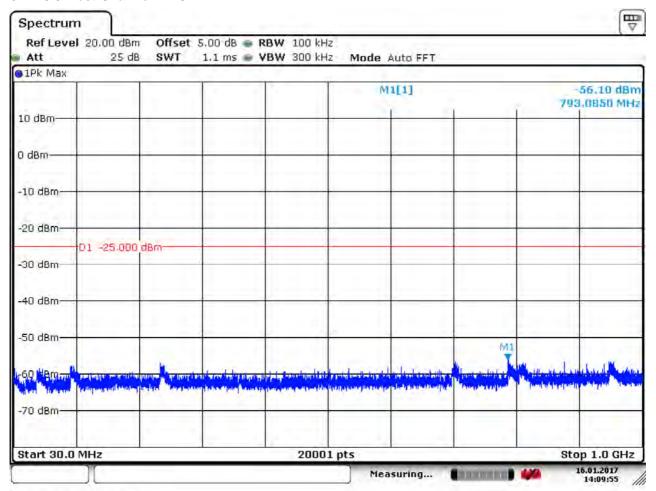
Date: 16.JAN.2017 14:39:20



Report No.: SZEM170100023101

Page: 155 of 175

#### 6.1.1.3.3 Test Channel = HCH

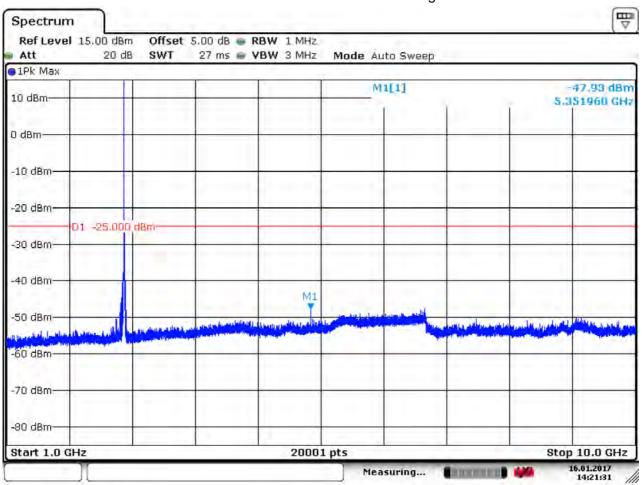


Date: 16.JAN.2017 14:09:55



Report No.: SZEM170100023101

Page: 156 of 175

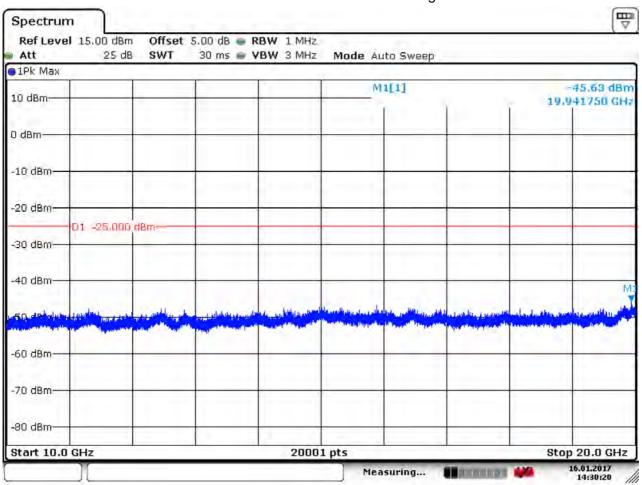


Date: 16.JAN.2017 14:21:31



Report No.: SZEM170100023101

Page: 157 of 175

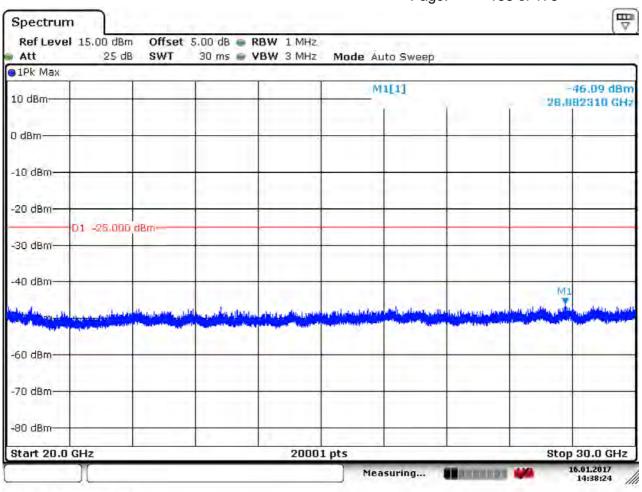


Date: 16.JAN.2017 14:30:20



Report No.: SZEM170100023101

Page: 158 of 175



Date: 16.JAN.2017 14:38:24

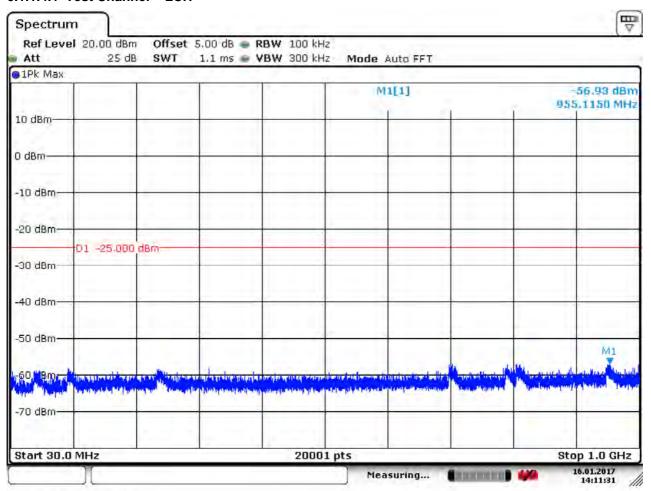


Report No.: SZEM170100023101

Page: 159 of 175

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

#### 6.1.1.4.1 Test Channel = LCH

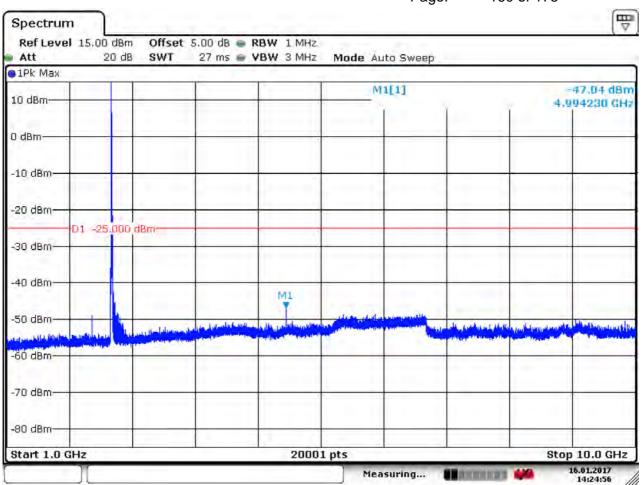


Date: 16.JAN.2017 14:11:31



Report No.: SZEM170100023101

Page: 160 of 175

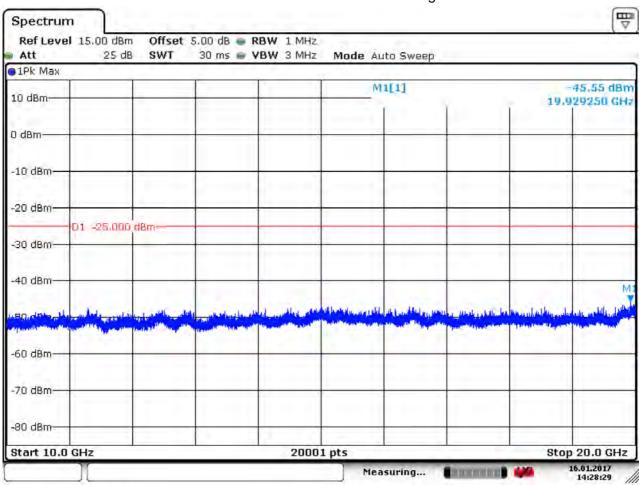


Date: 16.JAN.2017 14:24:57



Report No.: SZEM170100023101

Page: 161 of 175

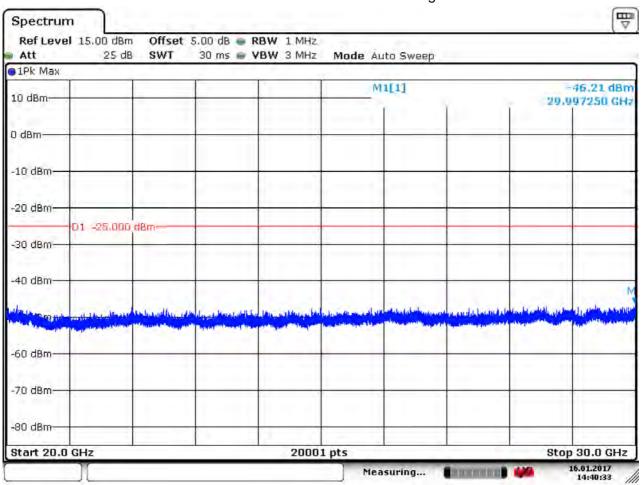


Date: 16.JAN.2017 14:28:29



Report No.: SZEM170100023101

Page: 162 of 175



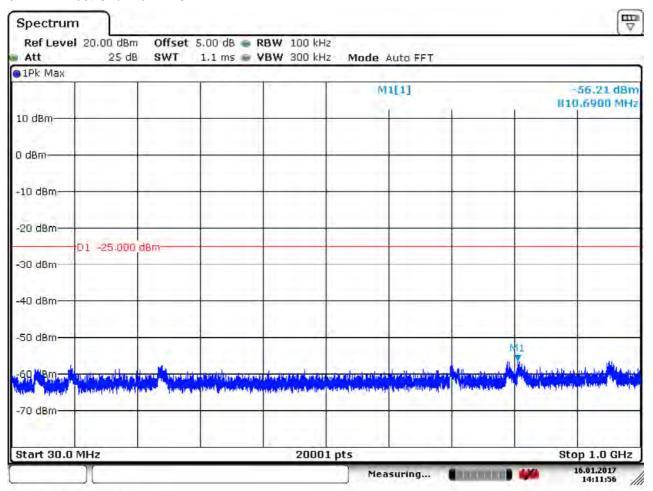
Date: 16.JAN.2017 14:40:33



Report No.: SZEM170100023101

Page: 163 of 175

#### 6.1.1.4.2 Test Channel = MCH

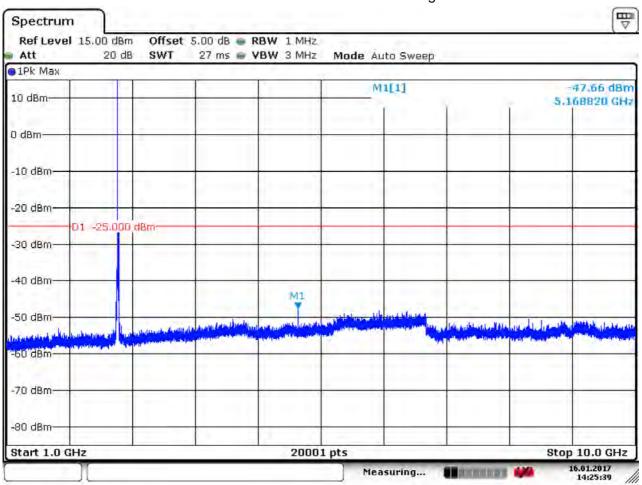


Date: 16.JAN.2017 14:11:57



Report No.: SZEM170100023101

Page: 164 of 175

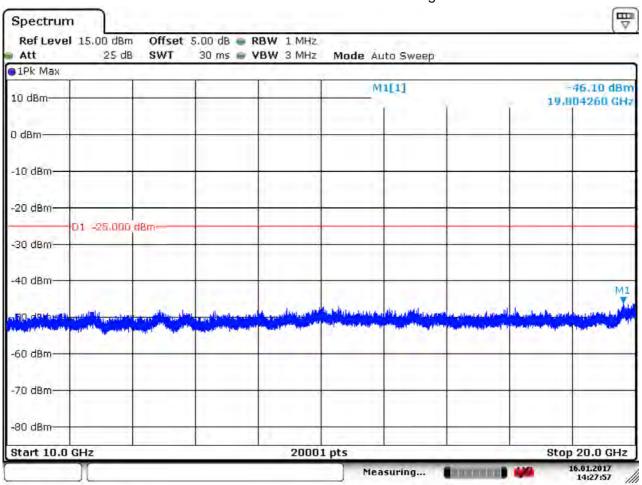


Date: 16.JAN.2017 14:25:39



Report No.: SZEM170100023101

Page: 165 of 175

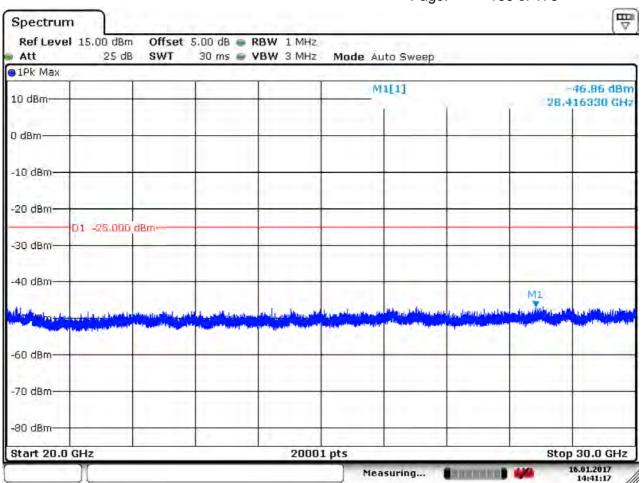


Date: 16.JAN.2017 14:27:58



Report No.: SZEM170100023101

Page: 166 of 175



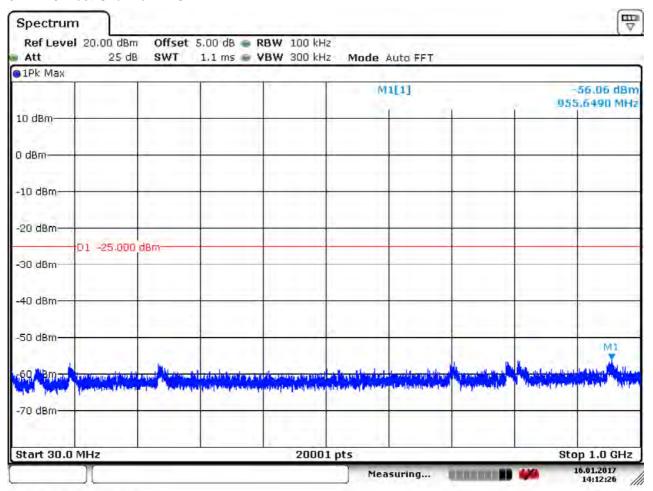
Date: 16.JAN.2017 14:41:18



Report No.: SZEM170100023101

Page: 167 of 175

#### 6.1.1.4.3 Test Channel = HCH

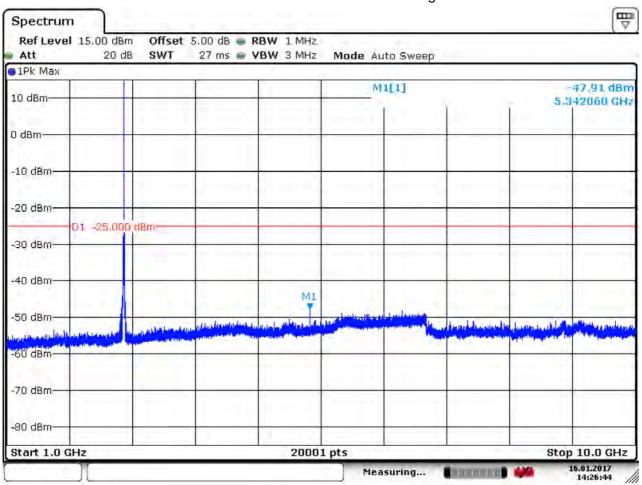


Date: 16.JAN.2017 14:12:27



Report No.: SZEM170100023101

Page: 168 of 175

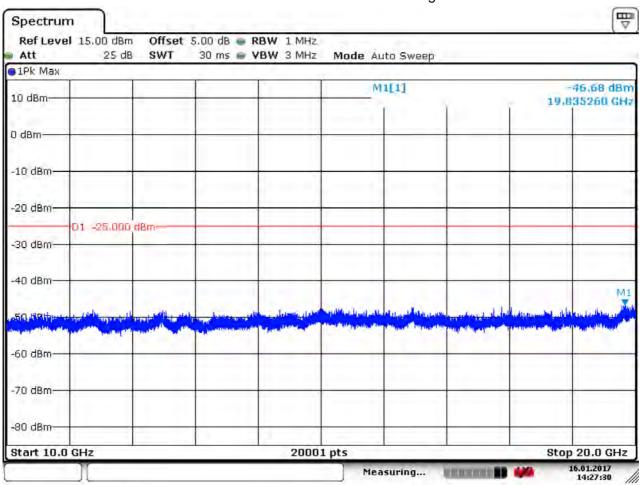


Date: 16.JAN.2017 14:26:44



Report No.: SZEM170100023101

Page: 169 of 175

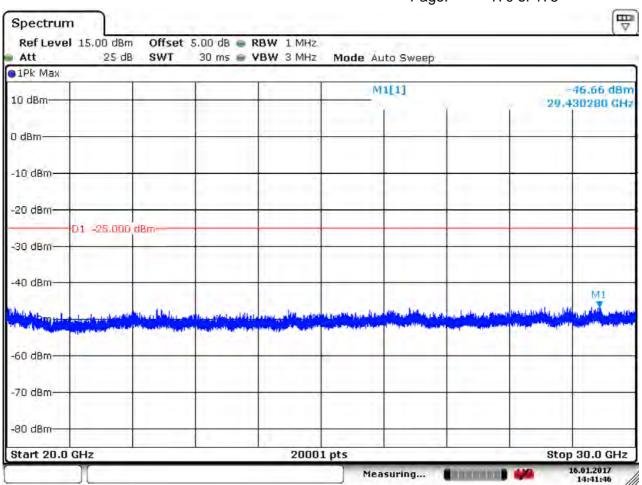


Date: 16.JAN.2017 14:27:30



Report No.: SZEM170100023101

Page: 170 of 175



Date: 16.JAN.2017 14:41:46



Report No.: SZEM170100023101

Page: 171 of 175

#### 7 Field Strength of Spurious Radiation

Part I - Test Plots

#### 7.1 For LTE

#### 7.1.1 Test Band = LTEband41

#### 7.1.1.1.1 Test Channel = LCH

7.1.1.1.1 Test chamier – Een								
Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization				
2864.000	-50.28	-25.00	-25.28	Vertical				
4852.500	-67.42	-25.00	-25.00 -42.42 V					
10605.000	-64.32	-25.00	-39.32	Vertical				
2864.000	-56.49	-25.00	-31.49	Horizontal				
4950.000	-67.08	-25.00	-42.08	Horizontal				
10605.000	-64.36	-25.00	-39.36	Horizontal				

#### Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1199.000	-66.00	-25.00	-41.00	Vertical
2744.000	-57.40	-25.00	-25.00 -32.40	
5730.000	-66.96	-25.00	-41.96	Vertical
1100.000	-66.49	-25.00	-41.49	Horizontal
2680.000	-57.37	-25.00	-32.37	Horizontal
5145.000	-67.04	-25.00	-42.04	Horizontal

#### 7.1.1.1.2 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1353.000	-67.62	-25.00	-25.00 -42.62	
2456.000	-57.64	-25.00	-25.00 -32.64	
4267.500	-67.56	-25.00	-42.56	Vertical
1375.000	-67.43	-25.00	-42.43	Horizontal
4462.500	-67.91	-25.00	-42.91	Horizontal
6120.000	-66.00	-25.00	-41.00	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.



Report No.: SZEM170100023101

Page: 172 of 175

#### 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
				VL	4.21	0.00168	PASS
		LCH	TN	VN	6.59	0.00263	PASS
				VH	4.05	0.00162	PASS
				VL	3.35	0.00129	PASS
	LTE/TM1 20MHz	MCH	TN	VN	-1.58	-0.00061	PASS
				VH	-1.21	-0.00047	PASS
				VL	-6.84	-0.00255	PASS
		HCH	TN	VN	-6.53	-0.00255 -0.00244 -0.00070 -0.00055 0.00158 -0.00164 0.00196 -0.00071 -0.00095 -0.00244	PASS
				VH	-1.88	-0.00070	PASS
				VL	-1.38	-0.00055	PASS
		LCH	TN	VN	3.97	0.00158	PASS
				VH	-4.11	-0.00164	PASS
				VL	5.08	0.00196	PASS
LTE	LTE/TM2 20MHz	MCH	TN	VN	-1.83	-0.00071	PASS
Band 41				VH	-2.47		PASS
				VL	-6.54	-0.00244	PASS
		HCH	TN	VN	6.37	0.00238	PASS
				VH	4.32	0.00162 0.00129 -0.00061 -0.00047 -0.00255 -0.00244 -0.00070 -0.00055 0.00158 -0.00164 0.00196 -0.00071 -0.00095 -0.00244	PASS
				VL	0.17	0.00007	PASS
		LCH	TN	VN	-1.87	-0.00074	PASS
				VH	0.67	0.00027	PASS
				VL	-2.56	-0.00099	PASS
	LTE/TM3 20MHz	MCH	TN	VN	4.09	0.00158	PASS
				VH	2.35	0.00091	PASS
		HCH TN		VL	6.62	0.00247	PASS
			TN	VN	1.74	0.00065	PASS
				VH	2.68	0.00100	PASS



Report No.: SZEM170100023101

Page: 173 of 175

#### 8.2 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
				-30	0.65	0.00026	PASS	
				-20	5.53	0.00220	PASS	
				-10	1.08	0.00043	PASS	
				0	-2.04	-0.00082	PASS	
		LCH	VN	10	-4.36	-0.00174	PASS	
				20	-4.38	-0.00175	PASS	
				30	5.93	0.00237	PASS	
				40	-4.82	-0.00192	PASS	
				50	-4.18	-0.00167	PASS	
				-30	-6.23	-0.00240	PASS	
				-20	-1.93	-0.00075	PASS	
				-10	3.48	0.00134	PASS	
LTE				0	3.65	0.00141	PASS	
Band 41	LTE/TM1 20MHz	MCH	VN	10	-3.32	0.00141 -0.00128 0.00107	PASS	
Dallu 41				20	2.76		PASS	
				30	3.38	0.00131	PASS	
				40	2.19	0.00084	PASS	
				50	0.07	0.00003	PASS	
				-30	-1.90	rated [ppm]  0.00026  0.00220  0.00043  -0.00082  -0.00174  -0.00175  0.00237  -0.00192  -0.00167  -0.00240  -0.00075  0.00134  0.00141  -0.00128  0.00107  0.00131  0.00084	PASS	
				-20	-1.05	-0.00039	PASS	
				-10	3.76	0.00140	PASS	
				0	5.83	0.00218	PASS	
		HCH	VN	10	3.56	0.00133	PASS	
				20	3.87	0.00144	PASS	
				30	-1.71	-0.00064	PASS	
				40	-6.57	-0.00245	PASS	
					50	-6.30	-0.00235	PASS



Report No.: SZEM170100023101

Page: 174 of 175

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
				-30	-1.67	-0.00067	PASS
				-20	0.85	0.00034	PASS
				-10	-2.61	-0.00104	PASS
				0	0.41	0.00017	PASS
		LCH	VN	10	2.17	0.00087	PASS
				20	3.44	0.00137	PASS
				30	6.68	0.00266	PASS
				40	2.20	0.00088	PASS
				50	0.00	0.00000	PASS
				-30	-2.26	-0.00087	PASS
				-20	-3.94	-0.00152	PASS
				-10	-0.30	-0.00012	PASS
LTE				0	-5.90	-0.00228	PASS
Band 41	LTE/TM2 20MHz	MCH	VN	10	-4.66	-0.00180 0.00222	PASS
Dallu 41				20	5.74		PASS
				30	-5.22	-0.00201	PASS
				40	-1.97	-0.00076	PASS
				50	-0.52	-0.00020	PASS
				-30	6.82	rated [ppm] -0.00067 0.00034 -0.00104 0.00017 0.00087 0.00137 0.00266 0.00088 0.00000 -0.00087 -0.00152 -0.00012 -0.00228 -0.00180 0.00222 -0.00201 -0.00076	PASS
				-20	2.10		PASS
				-10	-4.30	-0.00160	PASS
				0	6.35	0.00237	PASS
		HCH	VN	10	-1.72	-0.00064	PASS
				20	-4.98	-0.00186	PASS
				30	1.53	0.00057	PASS
				40	-4.68	-0.00174	PASS
				50	-5.85	-0.00218	PASS



Report No.: SZEM170100023101

Page: 175 of 175

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
				-30	5.63	0.00225	PASS
				-20	0.97	0.00039	PASS
				-10	-2.62	-0.00105	PASS
				0	2.65	0.00106	PASS
		LCH	VN	10	0.47	0.00019	PASS
				20	0.54	0.00022	PASS
				30	5.28	0.00211	PASS
				40	1.65	0.00066	PASS
				50	3.16	0.00126	PASS
				-30	-3.37	-0.00130	PASS
				-20	-6.24	-0.00241	PASS
			-	-10	1.98	0.00076	PASS
LTE				0	1.51	0.00058	PASS
Band 41	LTE/TM3 20MHz	MCH	VN	10	2.51	0.00097	PASS
Danu 41				20	0.69	0.00097	PASS
				30	-5.71	-0.00220	PASS
				40	-3.41	-0.00132	PASS
				50	-4.86	-0.00187	PASS
				-30	6.24	rated [ppm]  0.00225  0.00039  -0.00105  0.00106  0.00019  0.00022  0.00211  0.00066  0.00126  -0.00130  -0.00241  0.00076  0.00058  0.00097  0.00026  -0.00220  -0.00132	PASS
				-20	2.17	0.00081	PASS
				-10	-5.32	-0.00199	PASS
				0	-6.54	-0.00244	PASS
		HCH	VN	10	3.26	0.00122	PASS
				20	-6.69	-0.00250	PASS
				30	1.41	0.00053	PASS
				40	3.90	0.00146	PASS
				50	-5.41	-0.00202	PASS

The End