

Report No.: SZEM180300241701

Page: 1 of 70

# Appendix B

E-UTRA Band26 (824-849)



Report No.: SZEM180300241701

Page: 2 of 70

#### CONTENT

		Page
1 E	FFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA	3
2 P	PEAK-TO-AVERAGE RATIO	13
2.1	For LTE	13
2.	2.1.1 Test Band = LTE band26	13
3 M	IODULATION CHARACTERISTICS	19
3.1	For LTE	19
3.	2.1.1 Test Band = LTE band26	
4 B	SANDWIDTH	21
4.1	For LTE	22
4.	.1.1 Test Band = LTE band26	22
5 B	SAND EDGES COMPLIANCE	52
5.1	For LTE	52
5.	i.1.1 Test Band = LTE band26	52
6 S	PURIOUS EMISSION AT ANTENNA TERMINAL	60
6.1	For LTE	60
7 FI	IELD STRENGTH OF SPURIOUS RADIATION	66
7.1	For LTE	66
7.	7.1.1 Test Band = LTE band 26	66
8 FI	REQUENCY STABILITY	68
8.1	FREQUENCY ERROR VS. VOLTAGE	68
8.2	FREQUENCY ERROR VS. TEMPERATURE	69



Report No.: SZEM180300241701

Page: 3 of 70

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

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

Effective Radiated Power of Transmitter (ERP) for LTE BAND 26  Test Test Test Test Test Test RP Measured ERP limit Variet								
Band(LTE)	Mode	Bandwidth	channel	Test RB	(dBm)	(dBm)	(dBm)	Verdict
				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
			LCH	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
		1.4M		RB1#0	23.48	21.33	38.45	PASS
	LTE/TM1			RB1#2	23.64	21.49	38.45	PASS
			MCH	RB1#5	23.47	21.32	38.45	PASS
BAND26				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
				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
			HCH	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



Report No.: SZEM180300241701

Page: 4 of 70

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				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
			LCH	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
		1.4M		RB1#0	22.2	20.05	38.45	PASS
	LTE/TM2			RB1#2	22.2	20.05	38.45	PASS
			MCH	RB1#5	21.52	19.37	38.45	PASS
BAND26				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
				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
			HCH	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



Report No.: SZEM180300241701

Page: 5 of 70

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				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
			LCH	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
	LTE/TM1	ЗМ		RB1#0	23.36	21.21	38.45	PASS
				RB1#7	23.57	21.42	38.45	PASS
			MCH	RB1#14	23.37	21.22	38.45	PASS
BAND26				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
				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
			HCH	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



Report No.: SZEM180300241701

Page: 6 of 70

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				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
			LCH	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
	LTE/TM2	ЗМ		RB1#0	22.43	20.28	38.45	PASS
				RB1#7	22.13	19.98	38.45	PASS
			МСН	RB1#14	22.1	19.95	38.45	PASS
BAND26				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
				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
			HCH	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



Report No.: SZEM180300241701

Page: 7 of 70

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				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
			LCH	RB12#0	22.56	20.41	38.45	PASS
				RB12#6	22.53	20.38	38.45	PASS
	LTE/TM1			RB12#13	22.37	20.22	38.45	PASS
				RB25#0	22.4	20.25	38.45	PASS
		5M		RB1#0	23.58	21.43	38.45	PASS
				RB1#13	23.66	21.51	38.45	PASS
			MCH	RB1#24	23.44	21.29	38.45	PASS
BAND26				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
				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
			НСН	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



Report No.: SZEM180300241701

Page: 8 of 70

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				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
			LCH	RB12#0	21.4	19.25	38.45	PASS
				RB12#6	21.42	19.27	38.45	PASS
	LTE/TM2			RB12#13	21.23	19.08	38.45	PASS
				RB25#0	21.52	19.37	38.45	PASS
		5M		RB1#0	22.78	20.63	38.45	PASS
				RB1#13	22.03	19.88	38.45	PASS
			MCH	RB1#24	22.12	19.97	38.45	PASS
BAND26				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
				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
			нсн	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



Report No.: SZEM180300241701

Page: 9 of 70

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				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
			LCH	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
	LTE/TM1			RB50#0	22.59	20.44	38.45	PASS
		10M		RB1#0	23.6	21.45	38.45	PASS
				RB1#24	23.73	21.58	38.45	PASS
			МСН	RB1#49	23.38	21.23	38.45	PASS
BAND26				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
				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
			HCH	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



Report No.: SZEM180300241701

Page: 10 of 70

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				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
			LCH	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
	LTE/TM2	10M		RB1#0	21.88	19.73	38.45	PASS
				RB1#24	22.03	19.88	38.45	PASS
			МСН	RB1#49	22.22	20.07	38.45	PASS
BAND26				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
				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
			HCH	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



Report No.: SZEM180300241701

Page: 11 of 70

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				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
			LCH	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
	LTE/TM1	15M		RB1#0	23.51	21.36	38.45	PASS
				RB1#38	23.68	21.53	38.45	PASS
			MCH	RB1#74	23.5	21.35	38.45	PASS
BAND26				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
				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
			НСН	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



Report No.: SZEM180300241701

Page: 12 of 70

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				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
			LCH	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
	LTE/TM2	15M		RB1#0	22.2	20.05	38.45	PASS
				RB1#38	22.09	19.94	38.45	PASS
			МСН	RB1#74	22.02	19.87	38.45	PASS
BAND26				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
				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
			НСН	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,

ERP [dBm] = SGP [dBm] - Cable Loss [dB] + Gain [dBd]

b: SGP=Signal Generator Level



Report No.: SZEM180300241701

Page: 13 of 70

### 2 Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
		LCH	5.28	13	PASS
	TM1/15M	MCH	6.14	13	PASS
Dand Of		HCH	5.19	13	PASS
Band 26		LCH	6.06	13	PASS
	TM2/15M	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



Report No.: SZEM180300241701

Page: 14 of 70

#### 2.1.1.1.2 Test Channel = MCH



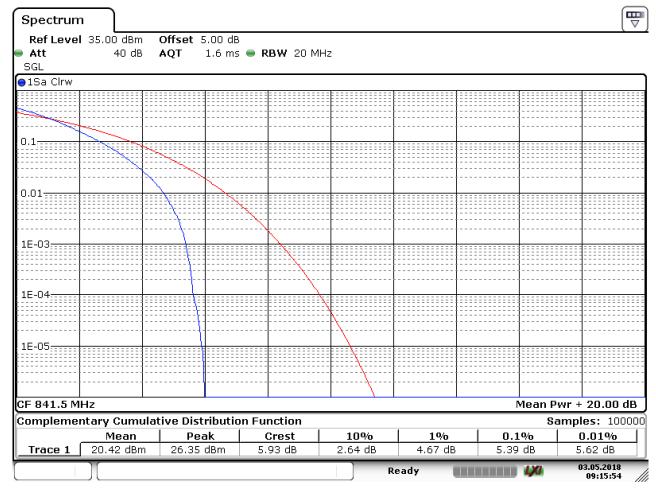
Date: 3.MAY.2018 09:14:53



Report No.: SZEM180300241701

Page: 15 of 70

#### 2.1.1.1.3 Test Channel = HCH



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

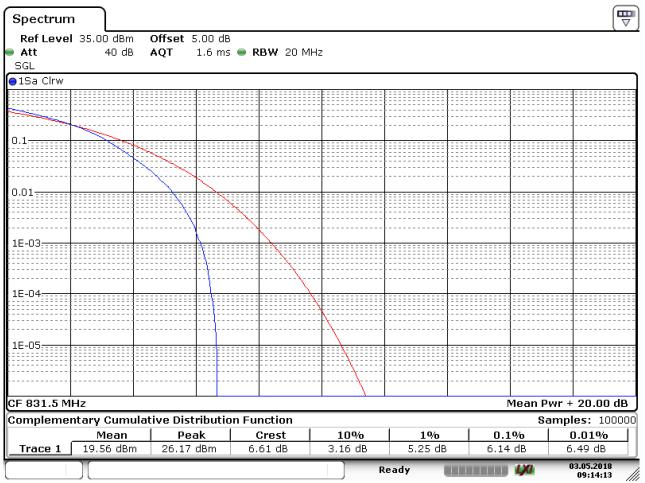


Report No.: SZEM180300241701

Page: 16 of 70

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

#### 2.1.1.2.1 Test Channel = LCH



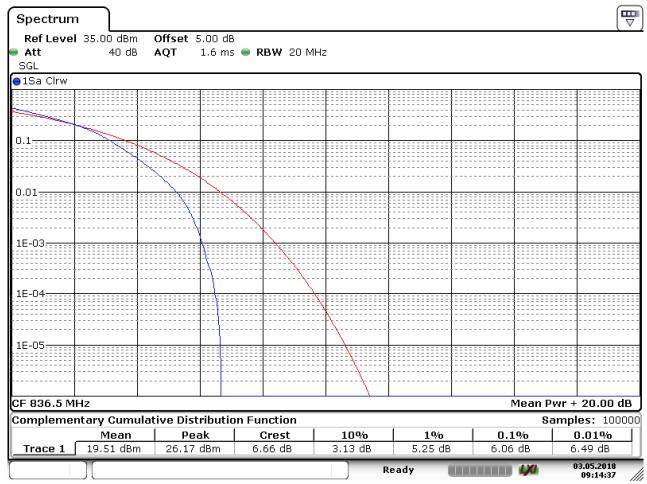
Date: 3.MAY.2018 09:14:13



Report No.: SZEM180300241701

Page: 17 of 70

#### 2.1.1.2.2 Test Channel = MCH



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



Report No.: SZEM180300241701

Page: 18 of 70

#### 2.1.1.2.3 Test Channel = HCH



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



Report No.: SZEM180300241701

Page: 19 of 70

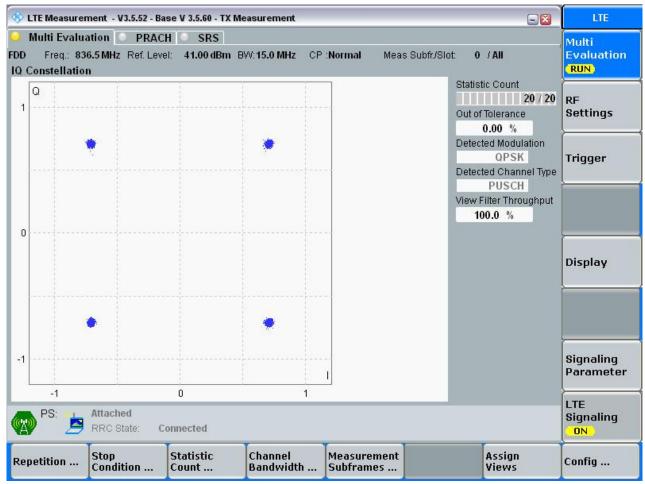
#### 3 Modulation Characteristics

#### 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



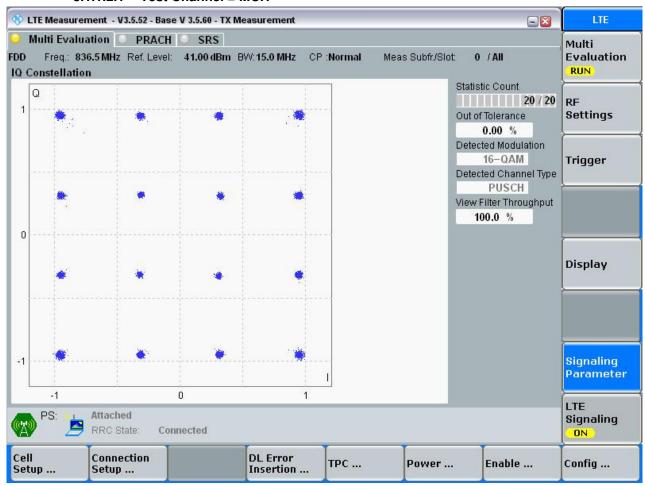


Report No.: SZEM180300241701

Page: 20 of 70

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

#### 3.1.1.2.1 Test Channel = MCH





Report No.: SZEM180300241701

Page: 21 of 70

#### 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



Report No.: SZEM180300241701

Page: 22 of 70

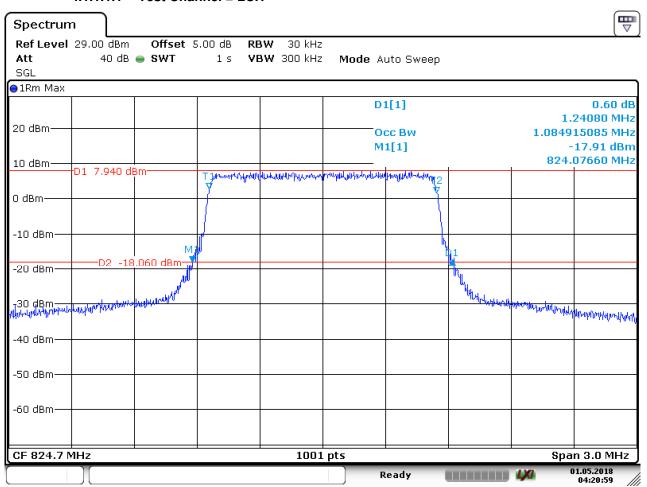
Part II -Test Plots

#### 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

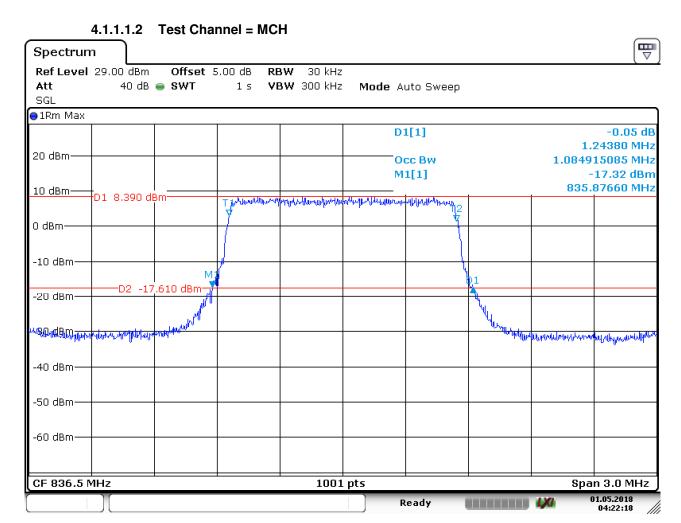


Date: 1.MAY.2018 04:21:00



Report No.: SZEM180300241701

Page: 23 of 70



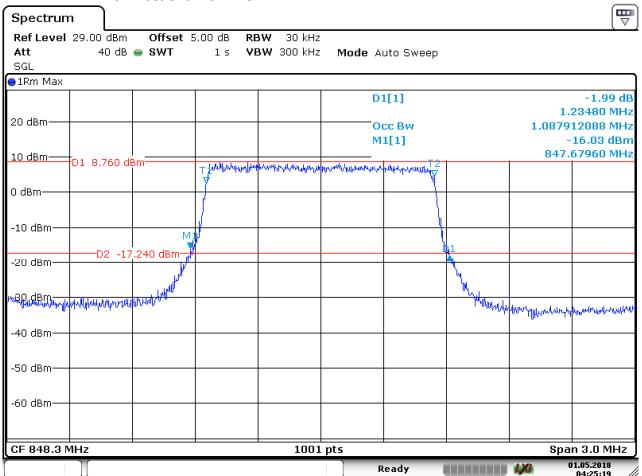
Date: 1.MAY.2018 04:22:18



Report No.: SZEM180300241701

Page: 24 of 70

#### 4.1.1.1.3 Test Channel = HCH



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

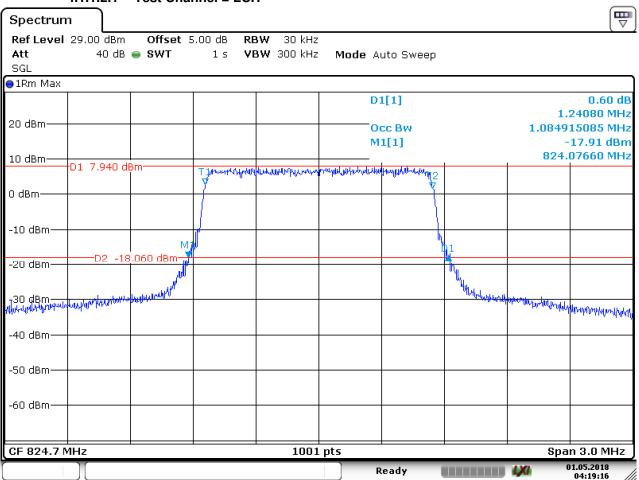


Report No.: SZEM180300241701

Page: 25 of 70

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

#### 4.1.1.2.1 Test Channel = LCH

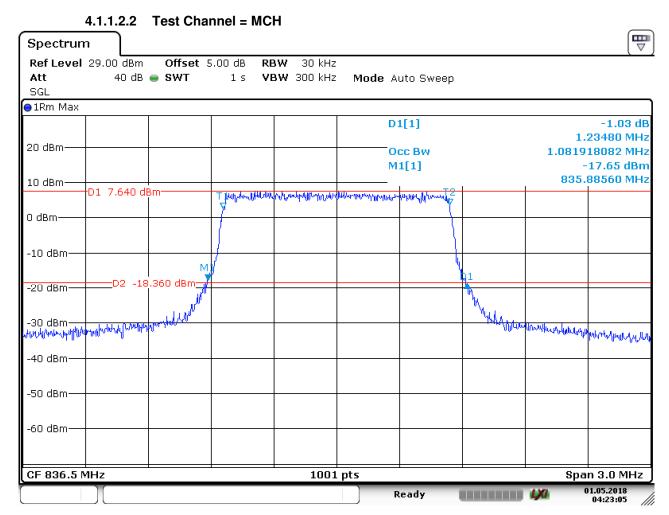


Date: 1.MAY.2018 04:19:16



Report No.: SZEM180300241701

Page: 26 of 70



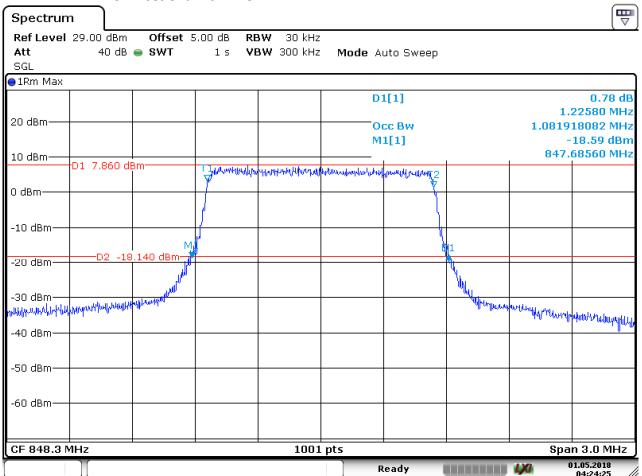
Date: 1.MAY.2018 04:23:05



Report No.: SZEM180300241701

Page: 27 of 70

#### 4.1.1.2.3 Test Channel = HCH



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

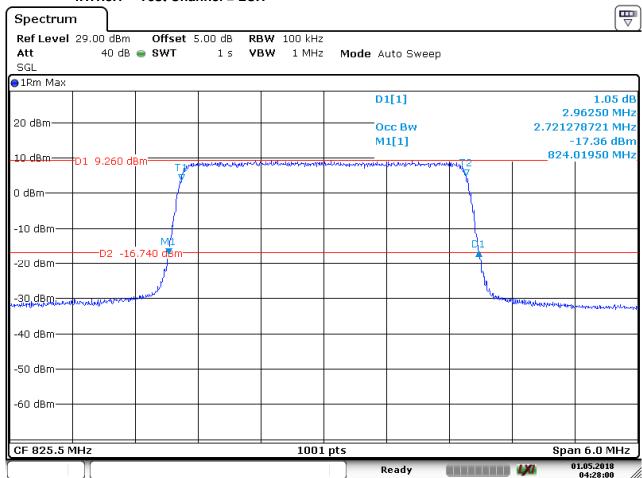


Report No.: SZEM180300241701

Page: 28 of 70

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

#### 4.1.1.3.1 Test Channel = LCH

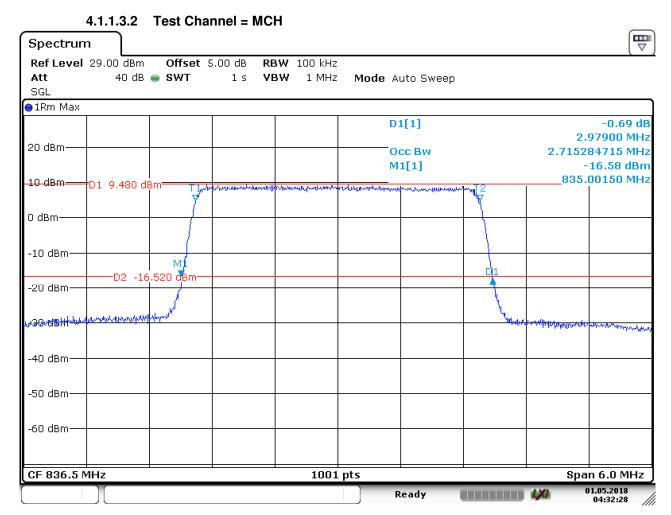


Date: 1.MAY.2018 04:28:01



Report No.: SZEM180300241701

Page: 29 of 70



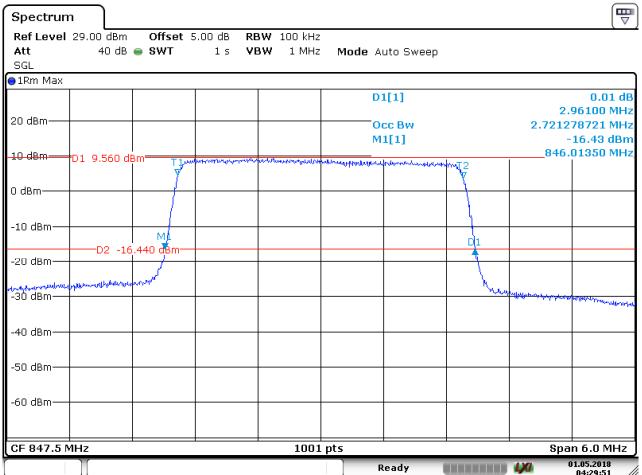
Date: 1.MAY.2018 04:32:28



Report No.: SZEM180300241701

Page: 30 of 70

#### 4.1.1.3.3 Test Channel = HCH



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

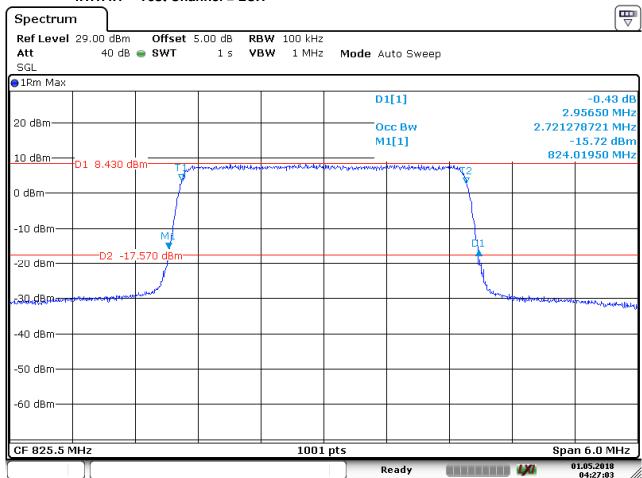


Report No.: SZEM180300241701

Page: 31 of 70

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

#### 4.1.1.4.1 Test Channel = LCH



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



Report No.: SZEM180300241701

Page: 32 of 70

#### 4.1.1.4.2 Test Channel = MCH



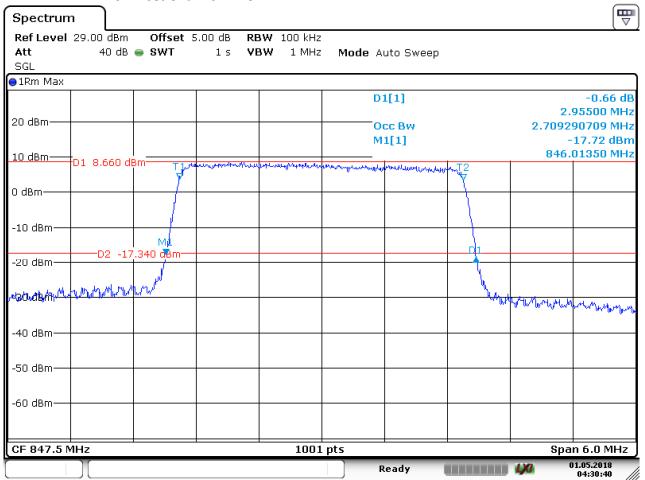
Date: 1.MAY.2018 04:31:41



Report No.: SZEM180300241701

Page: 33 of 70

#### 4.1.1.4.3 Test Channel = HCH



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

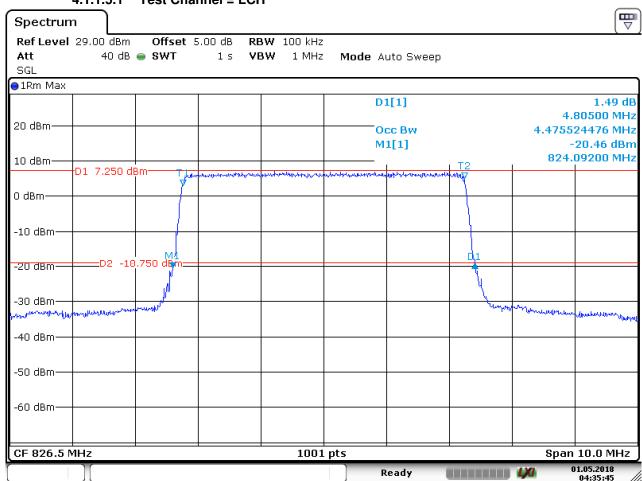


Report No.: SZEM180300241701

Page: 34 of 70

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

#### 4.1.1.5.1 Test Channel = LCH

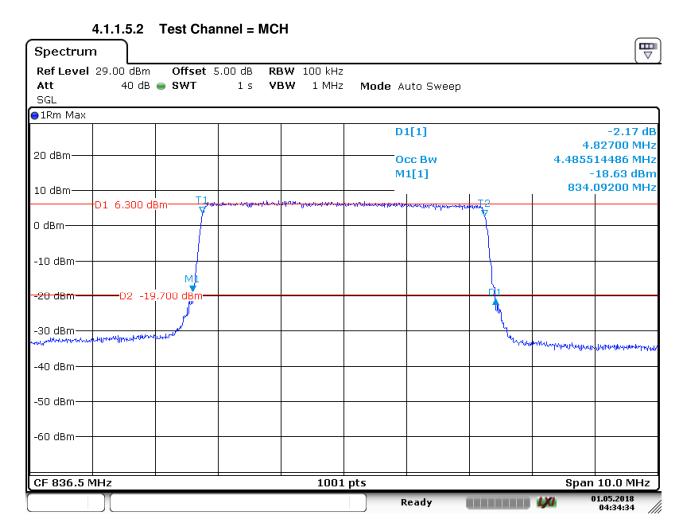


Date: 1.MAY.2018 04:35:46



Report No.: SZEM180300241701

Page: 35 of 70

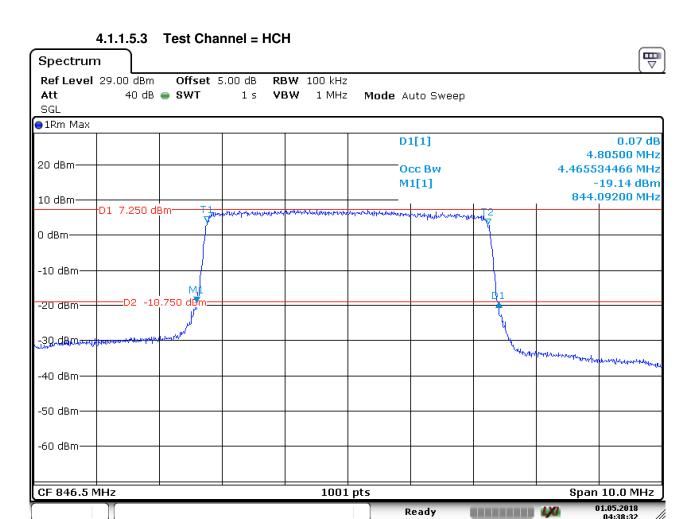


Date: 1.MAY.2018 04:34:35



Report No.: SZEM180300241701

Page: 36 of 70



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

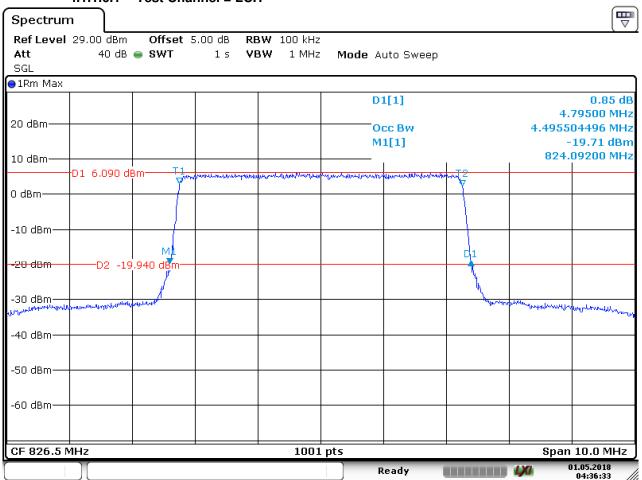


Report No.: SZEM180300241701

Page: 37 of 70

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

#### 4.1.1.6.1 Test Channel = LCH



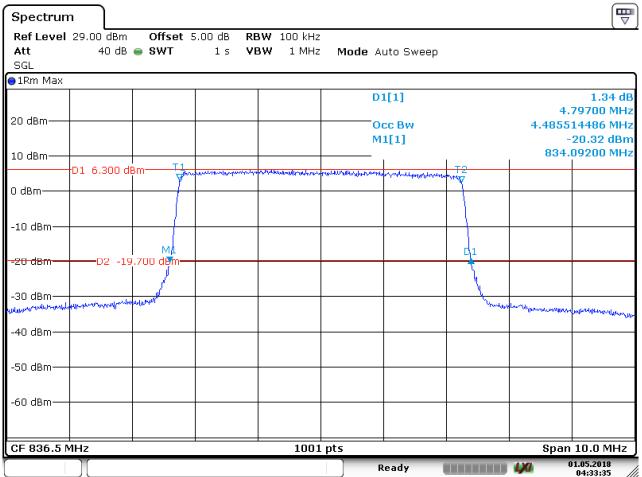
Date: 1.MAY.2018 04:36:34



Report No.: SZEM180300241701

Page: 38 of 70

#### 4.1.1.6.2 Test Channel = MCH

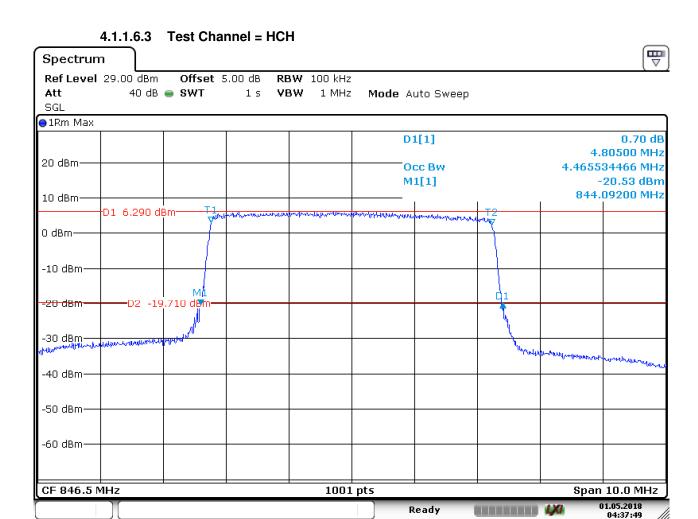


Date: 1.MAY.2018 04:33:35



Report No.: SZEM180300241701

Page: 39 of 70



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

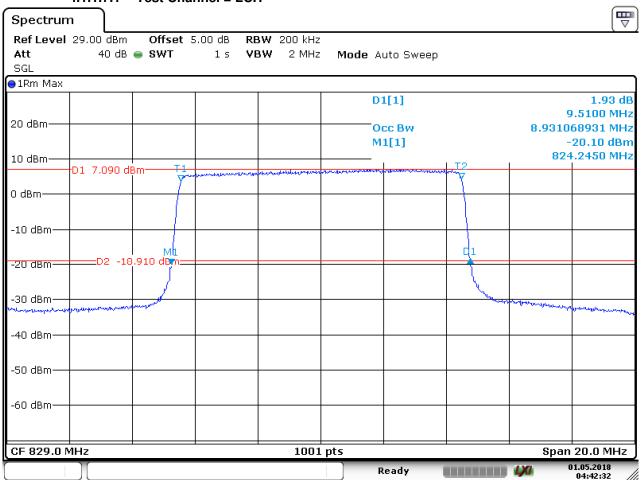


Report No.: SZEM180300241701

Page: 40 of 70

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

#### 4.1.1.7.1 Test Channel = LCH



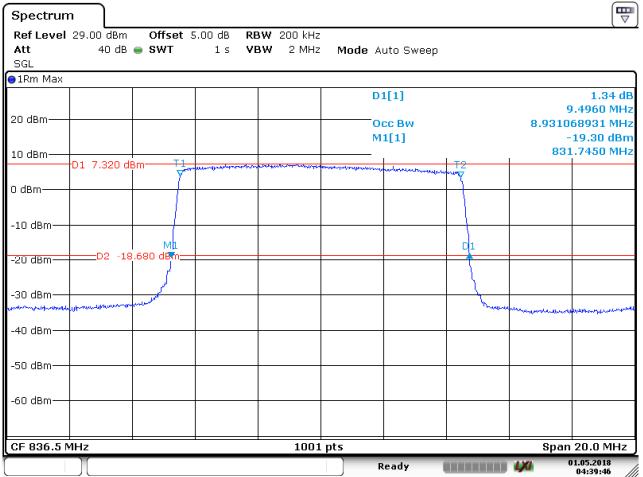
Date: 1.MAY.2018 04:42:33



Report No.: SZEM180300241701

Page: 41 of 70

#### 4.1.1.7.2 Test Channel = MCH



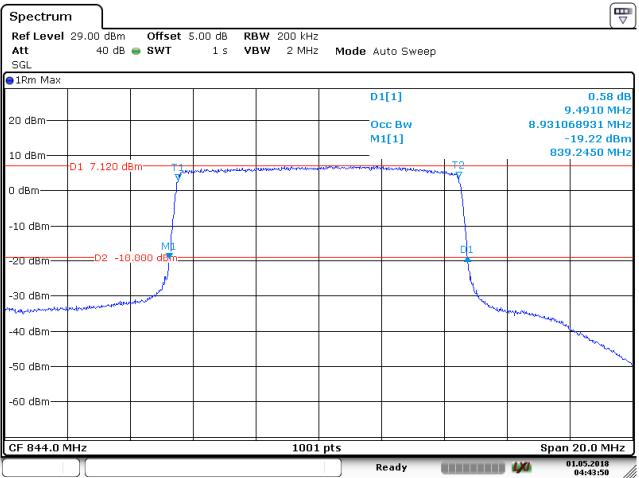
Date: 1.MAY.2018 04:39:46



Report No.: SZEM180300241701

Page: 42 of 70

#### 4.1.1.7.3 Test Channel = HCH



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

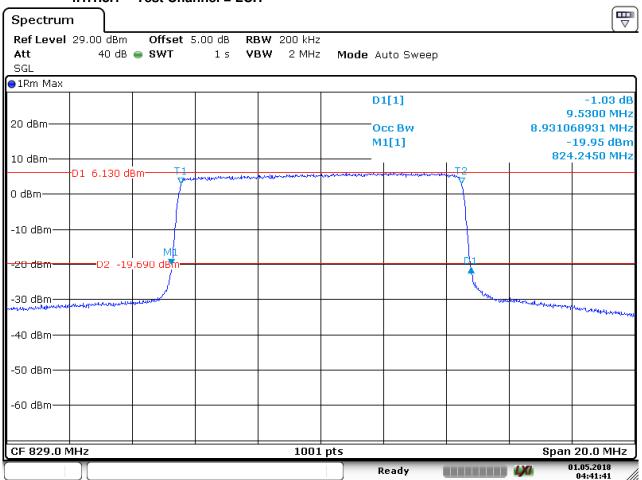


Report No.: SZEM180300241701

Page: 43 of 70

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

#### 4.1.1.8.1 Test Channel = LCH



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



Report No.: SZEM180300241701

Page: 44 of 70

#### 4.1.1.8.2 Test Channel = MCH



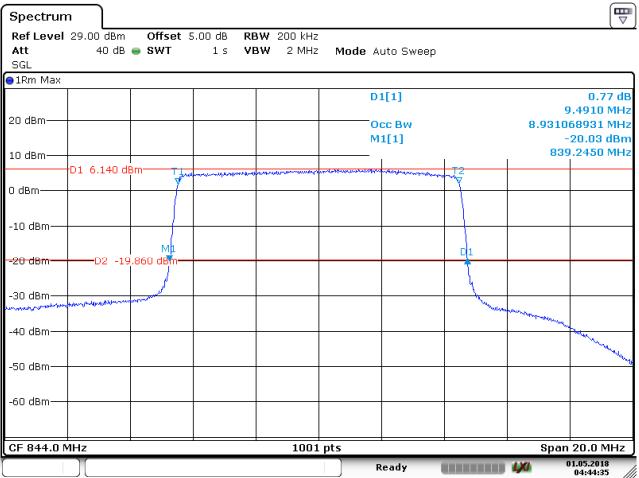
Date: 1.MAY.2018 04:40:34



Report No.: SZEM180300241701

Page: 45 of 70

#### 4.1.1.8.3 Test Channel = HCH



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

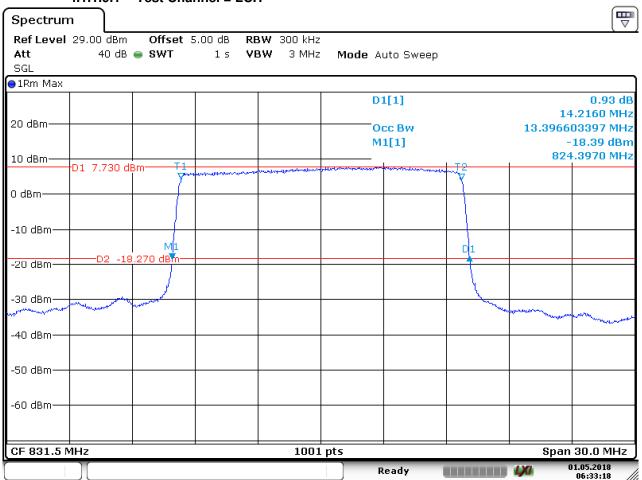


Report No.: SZEM180300241701

Page: 46 of 70

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

#### 4.1.1.9.1 Test Channel = LCH



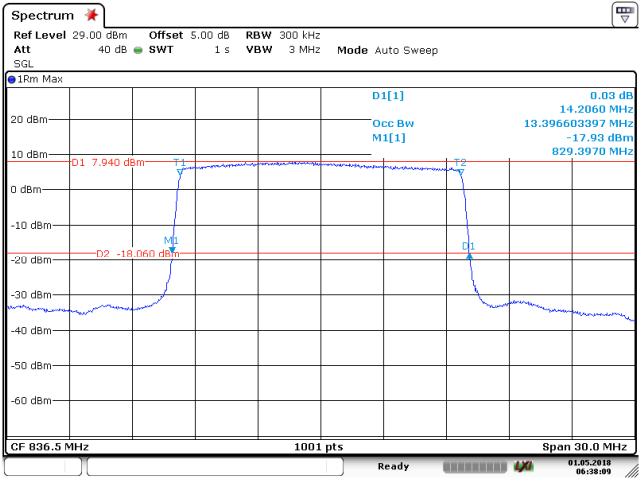
Date: 1.MAY.2018 06:33:18



Report No.: SZEM180300241701

Page: 47 of 70

#### 4.1.1.9.2 Test Channel = MCH



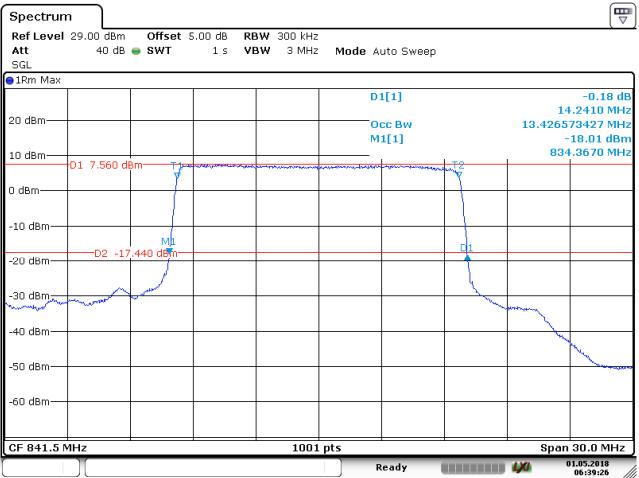
Date: 1.MAY.2018 06:38:10



Report No.: SZEM180300241701

Page: 48 of 70

#### 4.1.1.9.3 Test Channel = HCH



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

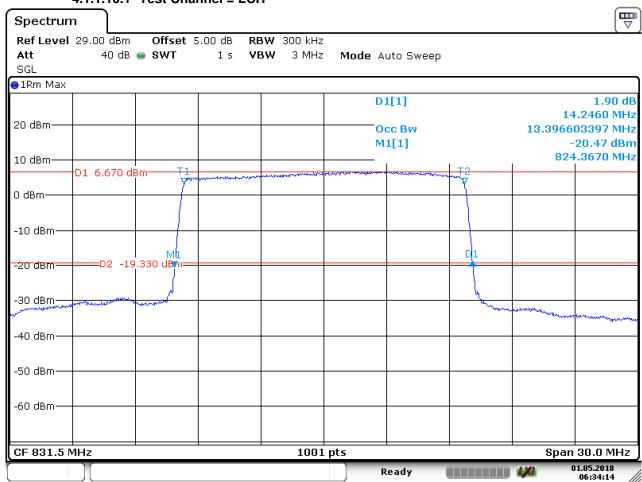


Report No.: SZEM180300241701

Page: 49 of 70

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

#### 4.1.1.10.1 Test Channel = LCH



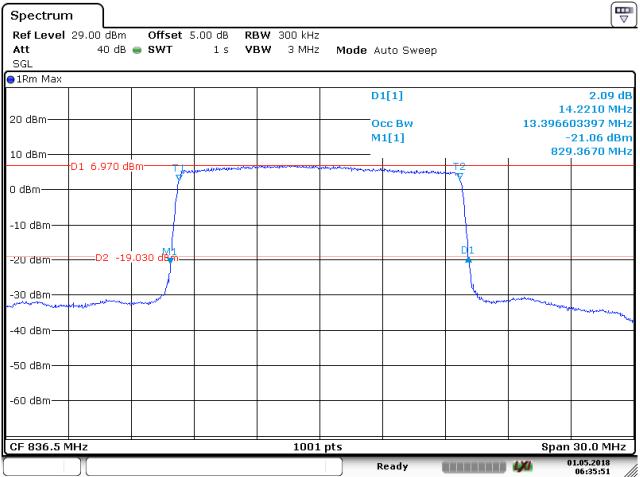
Date: 1.MAY.2018 06:34:14



Report No.: SZEM180300241701

Page: 50 of 70

#### 4.1.1.10.2 Test Channel = MCH



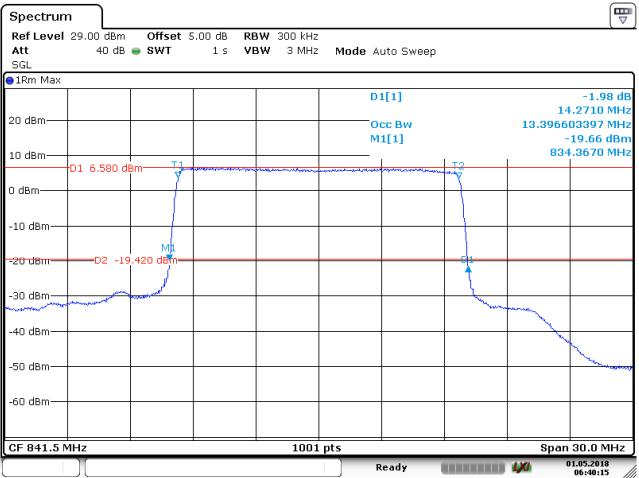
Date: 1.MAY.2018 06:35:52



Report No.: SZEM180300241701

Page: 51 of 70

#### 4.1.1.10.3 Test Channel = HCH



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



Report No.: SZEM180300241701

Page: 52 of 70

### 5 Band Edges Compliance

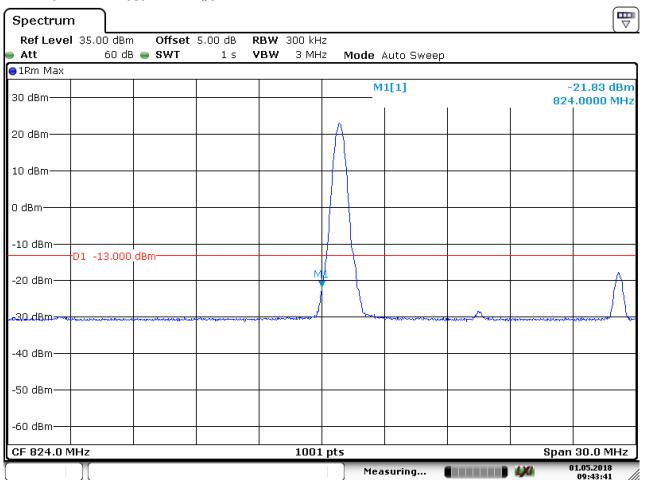
### 5.1 For LTE

#### 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 Test RB=1RB#0



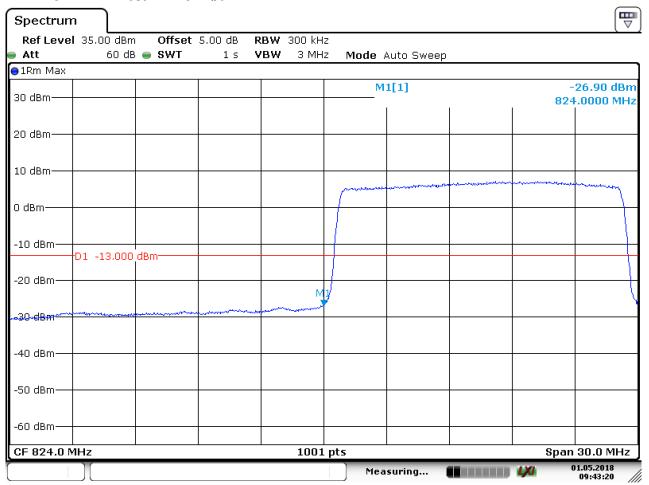
Date: 1.MAY.2018 09:43:41



Report No.: SZEM180300241701

Page: 53 of 70

#### 5.1.1.1.1.2 Test RB=75RB#0



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

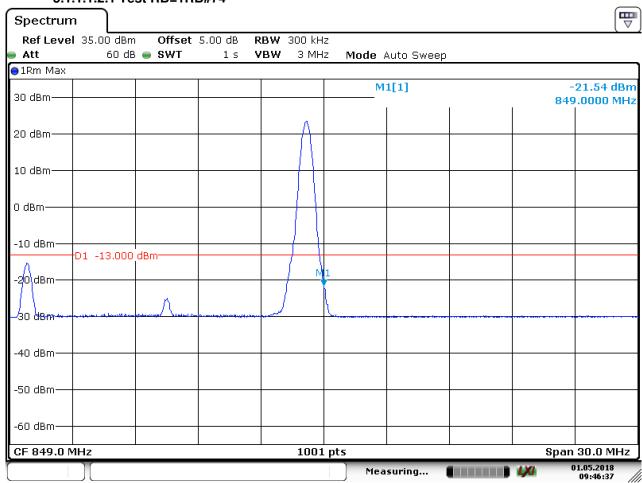


Report No.: SZEM180300241701

Page: 54 of 70

#### **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



Report No.: SZEM180300241701

Page: 55 of 70

#### 5.1.1.1.2.2 Test RB=75RB#0



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

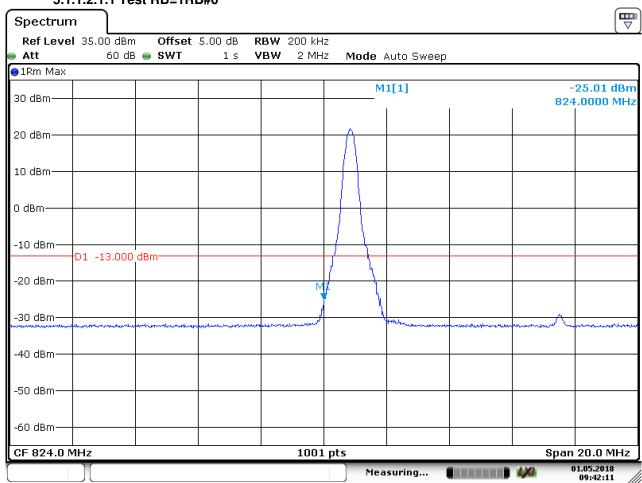


Report No.: SZEM180300241701

Page: 56 of 70

### 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



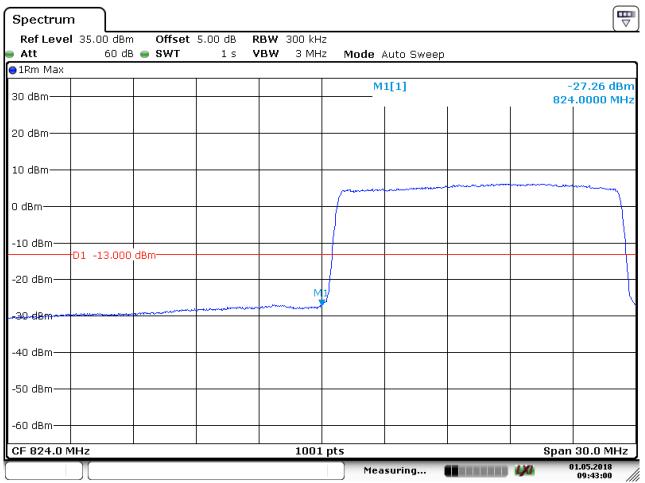
Date: 1.MAY.2018 09:42:12



Report No.: SZEM180300241701

Page: 57 of 70

#### 5.1.1.2.1.2 Test RB=75RB#0



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

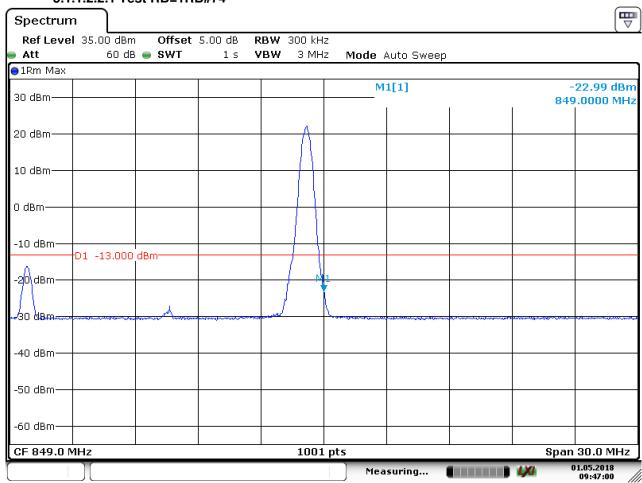


Report No.: SZEM180300241701

Page: 58 of 70

#### 5.1.1.2.2 Test Channel = HCH

#### 5.1.1.2.2.1 Test RB=1RB#74



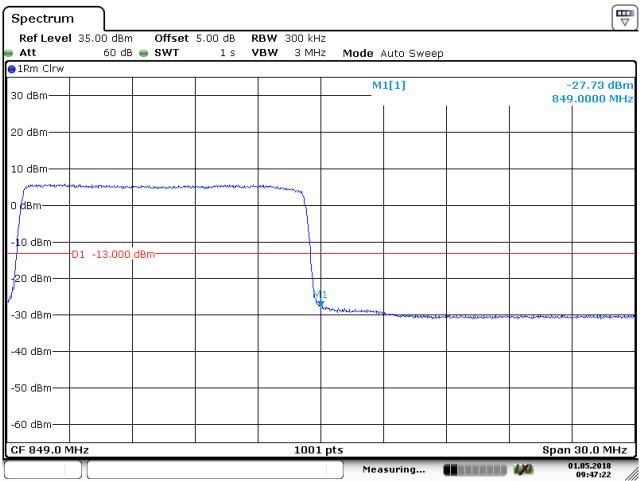
Date: 1.MAY.2018 09:47:00



Report No.: SZEM180300241701

Page: 59 of 70

#### 5.1.1.2.2.2 Test RB=75RB#0



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



Report No.: SZEM180300241701

Page: 60 of 70

### 6 Spurious Emission at Antenna Terminal

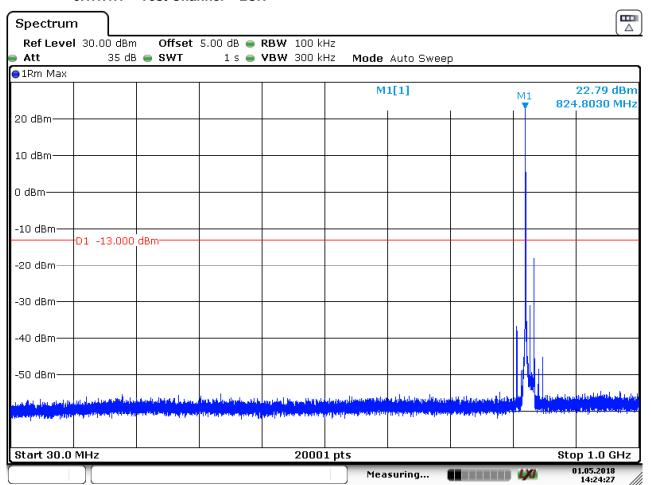
NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of < RBW/2 so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = k \*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

Part I - Test Plots

#### 6.1 For LTE

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

#### 6.1.1.1.1 Test Channel = LCH

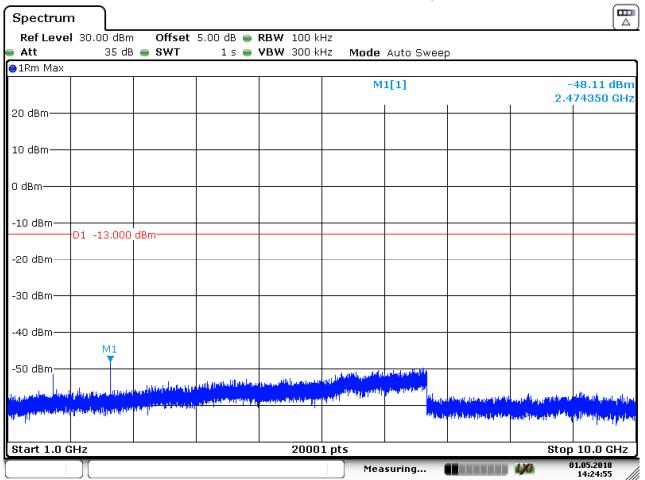


Date: 1.MAY.2018 14:24:28



Report No.: SZEM180300241701

Page: 61 of 70



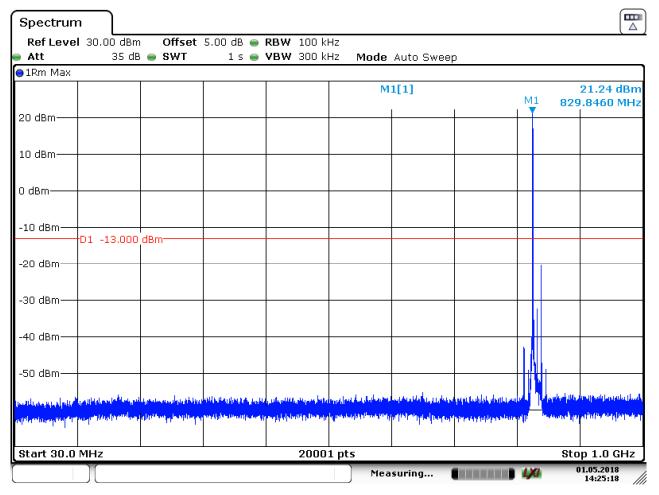
Date: 1.MAY.2018 14:24:55



Report No.: SZEM180300241701

Page: 62 of 70

#### 6.1.1.1.2 Test Channel = MCH

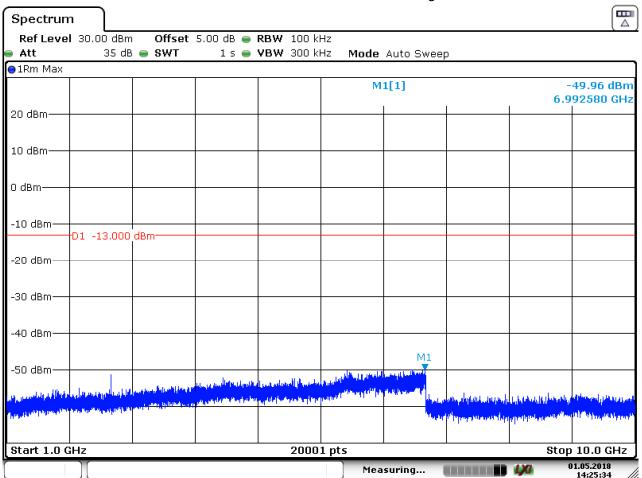


Date: 1.MAY.2018 14:25:18



Report No.: SZEM180300241701

Page: 63 of 70



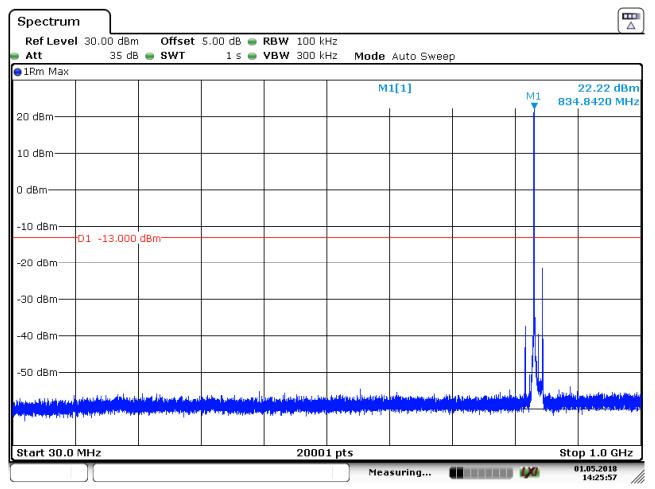
Date: 1.MAY.2018 14:25:35



Report No.: SZEM180300241701

Page: 64 of 70

#### 6.1.1.1.3 Test Channel = HCH

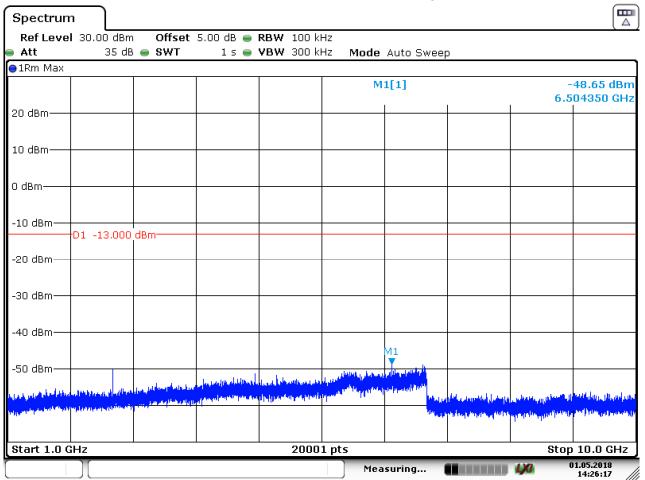


Date: 1.MAY.2018 14:25:57



Report No.: SZEM180300241701

Page: 65 of 70



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



Report No.: SZEM180300241701

Page: 66 of 70

### 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

7.1.1.1.1	163t Chamber - EC	* •		
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 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



Report No.: SZEM180300241701

Page: 67 of 70

#### 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.



Report No.: SZEM180300241701

Page: 68 of 70

### 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
		LCH	TN	VL	-7.06	-0.00849	PASS
				VN	-6.57	-0.00790	PASS
				VH	5.00	0.00602	PASS
				VL	-0.35	-0.00042	PASS
	LTE/TM1 15MHz	MCH	TN	VN	-3.89	-0.00465	PASS
	TOWN 12			VH	-9.67	-0.01156	PASS
		НСН	TN	VL	7.72	0.00918	PASS
				VN	-9.96	-0.01184	PASS
LTE				VH	-0.13	-0.00015	PASS
band26	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
		НСН		VL	1.37	0.00163	PASS
			TN	VN	-1.86	-0.00221	PASS
				VH	-2.84	-0.00338	PASS



Report No.: SZEM180300241701

Page: 69 of 70

### 8.2 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			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
		LCH		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
	LTE/TM1 15MHz	МСН		-30	-4.55	-0.00543	PASS
			VN	-20	0.47	0.00056	PASS
				-10	-3.77	-0.00450	PASS
				0	-0.28	-0.00034	PASS
LTE band26				10	7.62	0.00911	PASS
Dandzo				20	3.19	0.00381	PASS
				30	-1.52	-0.00182	PASS
				40	-9.06	-0.01083	PASS
				50	8.25	0.00986	PASS
				-30	2.75	0.00327	PASS
				-20	-8.74	-0.01039	PASS
				-10	0.49	0.00058	PASS
				0	2.76	0.00328	PASS
		НСН	VN	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



Report No.: SZEM180300241701

Page: 70 of 70

		Fage. 70 01 70					
Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			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
		LCH		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
	LTE/TM2 15MHz			-30	-8.39	-0.01004	PASS
		MCH	VN	-20	-3.27	-0.00391	PASS
				-10	-6.31	-0.00755	PASS
				0	-1.99	-0.00238	PASS
LTE band26				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
				-30	-8.33	-0.00990	PASS
				-20	5.79	0.00688	PASS
				-10	9.94	0.01182	PASS
				0	-1.66	-0.00197	PASS
		HCH	VN	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