

Report No.: SZEM171201298701

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# Appendix B

E-UTRA Band 66



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

Effective Isotropic Radiated Power of Transmitter (EIRP) for LTE BAND 66									
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict	
				RB1#0	23.1	24.60	30.00	PASS	
				RB1#2	23.04	24.54	30.00	PASS	
				RB1#5	23.08	24.58	30.00	PASS	
			LCH	RB3#0	23.05	24.55	30.00	PASS	
				RB3#2	22.96	24.46	30.00	PASS	
				RB3#3	22.89	24.39	30.00	PASS	
				RB6#0	22.16	23.66	30.00	PASS	
				RB1#0	23.24	24.74	30.00	PASS	
				RB1#2	23.21	24.71	30.00	PASS	
				RB1#5	23.32	24.82	30.00	PASS	
BAND66	LTE/TM1	1.4M	MCH	RB3#0	23.22	24.72	30.00	PASS	
				RB3#2	23.19	24.69	30.00	PASS	
				RB3#3	23.36	24.86	30.00	PASS	
				RB6#0	22.22	23.72	30.00	PASS	
				RB1#0	23.25	24.75	30.00	PASS	
				RB1#2	23.26	24.76	30.00	PASS	
				RB1#5	23.20	24.70	30.00	PASS	
			HCH	RB3#0	23.27	24.77	30.00	PASS	
				RB3#2	23.17	24.67	30.00	PASS	
				RB3#3	23.24	24.74	30.00	PASS	
				RB6#0	22.38	23.88	30.00	PASS	



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.42	23.92	30.00	PASS
				RB1#2	22.23	23.73	30.00	PASS
				RB1#5	22.33	23.83	30.00	PASS
			LCH	RB3#0	22.41	23.91	30.00	PASS
				RB3#2	22.21	23.71	30.00	PASS
				RB3#3	22.31	23.81	30.00	PASS
				RB6#0	21.25	22.75	30.00	PASS
				RB1#0	22.39	23.89	30.00	PASS
				RB1#2	22.34	23.84	30.00	PASS
				RB1#5	22.09	23.59	30.00	PASS
BAND66	LTE/TM2	E/TM2 1.4M	MCH	RB3#0	22.31	23.81	30.00	PASS
				RB3#2	22.27	23.77	30.00	PASS
				RB3#3	22.02	23.52	30.00	PASS
				RB6#0	21.30	22.80	30.00	PASS
				RB1#0	22.19	23.69	30.00	PASS
				RB1#2	22.19	23.69	30.00	PASS
				RB1#5	22.27	23.77	30.00	PASS
			HCH	RB3#0	22.13	23.63	30.00	PASS
				RB3#2	22.16	23.66	30.00	PASS
				RB3#3	22.22	23.72	30.00	PASS
				RB6#0	21.28	22.78	30.00	PASS



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		T	ı		Page:	5 01 /6	ı	
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	23.21	24.71	30.00	PASS
				RB1#7	23.11	24.61	30.00	PASS
				RB1#14	22.95	24.45	30.00	PASS
			LCH	RB8#0	22.28	23.78	30.00	PASS
				RB8#4	22.24	23.74	30.00	PASS
				RB8#7	22.12	23.62	30.00	PASS
				RB15#0	22.27	23.77	30.00	PASS
				RB1#0	23.28	24.78	30.00	PASS
			MCH	RB1#7	23.37	24.87	30.00	PASS
		TM1 3M		RB1#14	23.44	24.94	30.00	PASS
BAND66	LTE/TM1			RB8#0	22.36	23.86	30.00	PASS
				RB8#4	22.37	23.87	30.00	PASS
				RB8#7	22.45	23.95	30.00	PASS
				RB15#0	22.33	23.83	30.00	PASS
				RB1#0	23.36	24.86	30.00	PASS
				RB1#7	23.37	24.87	30.00	PASS
				RB1#14	23.43	24.93	30.00	PASS
			HCH	RB8#0	22.46	23.96	30.00	PASS
				RB8#4	22.29	23.79	30.00	PASS
				RB8#7	22.37	23.87	30.00	PASS
				RB15#0	22.39	23.89	30.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.46	23.96	30.00	PASS
				RB1#7	22.31	23.81	30.00	PASS
				RB1#14	22.36	23.86	30.00	PASS
			LCH	RB8#0	21.20	22.70	30.00	PASS
				RB8#4	21.14	22.64	30.00	PASS
				RB8#7	21.18	22.68	30.00	PASS
				RB15#0	21.29	22.79	30.00	PASS
				RB1#0	22.43	23.93	30.00	PASS
			MCH	RB1#7	22.41	23.91	30.00	PASS
				RB1#14	22.13	23.63	30.00	PASS
BAND66	LTE/TM2	2 3M		RB8#0	21.37	22.87	30.00	PASS
				RB8#4	21.31	22.81	30.00	PASS
				RB8#7	21.43	22.93	30.00	PASS
				RB15#0	21.39	22.89	30.00	PASS
				RB1#0	22.29	23.79	30.00	PASS
				RB1#7	22.23	23.73	30.00	PASS
				RB1#14	22.30	23.80	30.00	PASS
			HCH	RB8#0	21.32	22.82	30.00	PASS
				RB8#4	21.27	22.77	30.00	PASS
				RB8#7	21.37	22.87	30.00	PASS
				RB15#0	21.30	22.80	30.00	PASS



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		1			rage.	7 01 76	1	
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	23.20	24.70	30.00	PASS
				RB1#13	23.01	24.51	30.00	PASS
				RB1#24	23.01	24.51	30.00	PASS
			LCH	RB12#0	22.28	23.78	30.00	PASS
				RB12#6	22.21	23.71	30.00	PASS
				RB12#13	22.21	23.71	30.00	PASS
				RB25#0	22.22	23.72	30.00	PASS
				RB1#0	23.32	24.82	30.00	PASS
			МСН	RB1#13	23.33	24.83	30.00	PASS
		1 5M		RB1#24	23.39	24.89	30.00	PASS
BAND66	LTE/TM1			RB12#0	22.36	23.86	30.00	PASS
				RB12#6	22.40	23.90	30.00	PASS
				RB12#13	22.37	23.87	30.00	PASS
				RB25#0	22.39	23.89	30.00	PASS
				RB1#0	23.29	24.79	30.00	PASS
				RB1#13	23.38	24.88	30.00	PASS
				RB1#24	23.37	24.87	30.00	PASS
			НСН	RB12#0	22.38	23.88	30.00	PASS
				RB12#6	22.37	23.87	30.00	PASS
				RB12#13	22.39	23.89	30.00	PASS
				RB25#0	22.44	23.94	30.00	PASS



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		I			rage.	0 01 70	ı	1
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.37	23.87	30.00	PASS
				RB1#13	22.34	23.84	30.00	PASS
				RB1#24	22.44	23.94	30.00	PASS
			LCH	RB12#0	21.16	22.66	30.00	PASS
				RB12#6	21.09	22.59	30.00	PASS
				RB12#13	21.19	22.69	30.00	PASS
				RB25#0	21.21	22.71	30.00	PASS
				RB1#0	22.41	23.91	30.00	PASS
			мсн	RB1#13	22.42	23.92	30.00	PASS
				RB1#24	22.10	23.60	30.00	PASS
BAND66	LTE/TM2	TM2 5M		RB12#0	21.36	22.86	30.00	PASS
				RB12#6	21.37	22.87	30.00	PASS
				RB12#13	21.35	22.85	30.00	PASS
				RB25#0	21.38	22.88	30.00	PASS
				RB1#0	22.30	23.80	30.00	PASS
				RB1#13	22.28	23.78	30.00	PASS
				RB1#24	22.30	23.80	30.00	PASS
			HCH	RB12#0	21.31	22.81	30.00	PASS
				RB12#6	21.29	22.79	30.00	PASS
				RB12#13	21.45	22.95	30.00	PASS
				RB25#0	21.30	22.80	30.00	PASS



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		T	1		_	9 01 76	ı	
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	23.23	24.73	30.00	PASS
			channel         RB1#0         23.23           RB1#25         23.01           RB1#49         22.93           RB25#0         22.27           RB25#13         22.18           RB25#25         22.21           RB50#0         22.22           RB1#0         23.24           RB1#25         23.35           RB1#49         23.34           MCH         RB25#0         22.32           RB25#13         22.39           RB25#25         22.35           RB50#0         22.31           RB1#0         23.35           RB1#0         23.35           RB1#0         23.35           RB1#0         23.35           RB1#0         23.35	23.01	24.51	30.00	PASS	
				RB1#49	22.93	24.43	30.00	PASS
			LCH	RB25#0	22.27	23.77	30.00	PASS
				RB25#13	22.18	23.68	30.00	PASS
				RB25#25	22.21	23.71	30.00	PASS
				RB50#0	22.22	23.72	30.00	PASS
				RB1#0	23.24	24.74	30.00	PASS
			MCH	RB1#25	23.35	24.85	30.00	PASS
				RB1#49	23.34	24.84	30.00	PASS
BAND66	LTE/TM1	10M		RB25#0	22.32	23.82	30.00	PASS
				RB25#13	22.39	23.89	30.00	PASS
				RB25#25	22.35	23.85	30.00	PASS
				RB50#0	22.31	23.81	30.00	PASS
				RB1#0	23.35	24.85	30.00	PASS
				RB1#25	23.34	24.84	30.00	PASS
				RB1#49	23.37	24.87	30.00	PASS
			НСН	RB25#0	22.44	23.94	30.00	PASS
				RB25#13	22.37	23.87	30.00	PASS
				RB25#25	22.36	23.86	30.00	PASS
				RB50#0	22.33	23.83	30.00	PASS



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Test	Test	Test	Test		Measured	EIRP	limit	
Band(LTE)	Mode	Bandwidth	channel	Test RB	(dBm)	(dBm)	(dBm)	Verdict
				RB1#0	22.37	23.87	30.00	PASS
				RB1#25	22.33	23.83	30.00	PASS
				RB1#49	22.38	23.88	30.00	PASS
			LCH	RB25#0	21.19	22.69	30.00	PASS
				RB25#13	21.11	22.61	30.00	PASS
				RB25#25	21.22	22.72	30.00	PASS
				RB50#0	21.23	22.73	30.00	PASS
				RB1#0	22.39	23.89	30.00	PASS
			МСН	RB1#25	22.35	23.85	30.00	PASS
		10M		RB1#49	22.12	23.62	30.00	PASS
BAND66	LTE/TM2			RB25#0	21.32	22.82	30.00	PASS
				RB25#13	21.34	22.84	30.00	PASS
				RB25#25	21.42	22.92	30.00	PASS
				RB50#0	21.34	22.84	30.00	PASS
				RB1#0	22.37	23.87	30.00	PASS
				RB1#25	22.30	23.80	30.00	PASS
				RB1#49	22.27	23.77	30.00	PASS
			HCH	RB25#0	21.41	22.91	30.00	PASS
				RB25#13	21.28	22.78	30.00	PASS
				RB25#25	21.43	22.93	30.00	PASS
				RB50#0	21.35	22.85	30.00	PASS



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Test	Test	Test	Test	T DD	Measured	EIRP	limit	\/!!
Band(LTE)	Mode	Bandwidth	channel	Test RB	(dBm)	(dBm)	(dBm)	Verdict
				RB1#0	23.23	24.73	30.00	PASS
				RB1#38	23.01	24.51	30.00	PASS
				RB1#74	22.93	24.43	30.00	PASS
			LCH	RB36#0	22.27	23.77	30.00	PASS
				RB36#18	22.18	23.68	30.00	PASS
				RB36#39	22.21	23.71	30.00	PASS
				RB75#0	22.22	23.72	30.00	PASS
				RB1#0	23.24	24.74	30.00	PASS
			МСН	RB1#38	23.35	24.85	30.00	PASS
				RB1#74	23.34	24.84	30.00	PASS
BAND66	LTE/TM1	15M		RB36#0	22.32	23.82	30.00	PASS
				RB36#18	22.39	23.89	30.00	PASS
				RB36#39	22.35	23.85	30.00	PASS
				RB75#0	22.31	23.81	30.00	PASS
				RB1#0	23.35	24.85	30.00	PASS
				RB1#38	23.34	24.84	30.00	PASS
				RB1#74	23.37	24.87	30.00	PASS
			HCH	RB36#0	22.44	23.94	30.00	PASS
				RB36#18	22.37	23.87	30.00	PASS
				RB36#39	22.36	23.86	30.00	PASS
				RB75#0	22.33	23.83	30.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.37	23.87	30.00	PASS
				RB1#38	22.33	23.83	30.00	PASS
				RB1#74	22.38	23.88	30.00	PASS
			LCH	RB36#0	21.19	22.69	30.00	PASS
				RB36#18	21.11	22.61	30.00	PASS
				RB36#39	21.22	22.72	30.00	PASS
				RB75#0	21.23	22.73	30.00	PASS
				RB1#0	22.39	23.89	30.00	PASS
			МСН	RB1#38	22.35	23.85	30.00	PASS
		2 15M		RB1#74	22.12	23.62	30.00	PASS
BAND66	LTE/TM2			RB36#0	21.32	22.82	30.00	PASS
				RB36#18	21.34	22.84	30.00	PASS
				RB36#39	21.42	22.92	30.00	PASS
				RB75#0	21.34	22.84	30.00	PASS
				RB1#0	22.37	23.87	30.00	PASS
				RB1#38	22.30	23.80	30.00	PASS
				RB1#74	22.27	23.77	30.00	PASS
			HCH	RB36#0	21.41	22.91	30.00	PASS
				RB36#18	21.28	22.78	30.00	PASS
				RB36#39	21.43	22.93	30.00	PASS
				RB75#0	21.35	22.85	30.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	23.06	24.56	30.00	PASS
				RB1#50	23.30	24.80	30.00	PASS
				RB1#99	23.11	24.61	30.00	PASS
			LCH	RB50#0	22.18	23.68	30.00	PASS
				RB50#25	22.16	23.66	30.00	PASS
				RB50#50	22.14	23.64	30.00	PASS
				RB100#0	22.13	23.63	30.00	PASS
				RB1#0	23.32	24.82	30.00	PASS
			MCH	RB1#50	23.40	24.90	30.00	PASS
		20M		RB1#99	23.30	24.80	30.00	PASS
BAND66	LTE/TM1			RB50#0	22.33	23.83	30.00	PASS
				RB50#25	22.25	23.75	30.00	PASS
				RB50#50	22.28	23.78	30.00	PASS
				RB100#0	22.31	23.81	30.00	PASS
				RB1#0	23.24	24.74	30.00	PASS
				RB1#50	23.37	24.87	30.00	PASS
				RB1#99	23.22	24.72	30.00	PASS
		НСН	RB50#0	22.24	23.74	30.00	PASS	
				RB50#25	22.15	23.65	30.00	PASS
				RB50#50	22.23	23.73	30.00	PASS
				RB100#0	22.21	23.71	30.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
			LCH	RB1#0	22.11	23.61	30.00	PASS
				RB1#50	22.02	23.52	30.00	PASS
				RB1#99	22.03	23.53	30.00	PASS
				RB50#0	21.03	22.53	30.00	PASS
				RB50#25	20.97	22.47	30.00	PASS
				RB50#50	21.06	22.56	30.00	PASS
				RB100#0	21.09	22.59	30.00	PASS
				RB1#0	21.72	23.22	30.00	PASS
				RB1#50	22.01	23.51	30.00	PASS
				RB1#99	21.84	23.34	30.00	PASS
BAND66	LTE/TM2	20M	MCH	RB50#0	21.32	22.82	30.00	PASS
				RB50#25	21.31	22.81	30.00	PASS
				RB50#50	21.34	22.84	30.00	PASS
				RB100#0	21.21	22.71	30.00	PASS
			нсн	RB1#0	22.32	23.82	30.00	PASS
				RB1#50	22.10	23.60	30.00	PASS
				RB1#99	22.36	23.86	30.00	PASS
				RB50#0	21.07	22.57	30.00	PASS
				RB50#25	21.06	22.56	30.00	PASS
				RB50#50	21.17	22.67	30.00	PASS
				RB100#0	21.14	22.64	30.00	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 >  $3 \times RBW$ .

Detector: RMS



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### 2 Peak-to-Average Ratio

#### Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
	TM1/20M	LCH	4.38	13	PASS
		MCH	4.32	13	PASS
Dand 66		HCH	4.35	13	PASS
Band 66	TM2/20M	LCH	5.42	13	PASS
		MCH	5.39	13	PASS
		HCH	5.36	13	PASS



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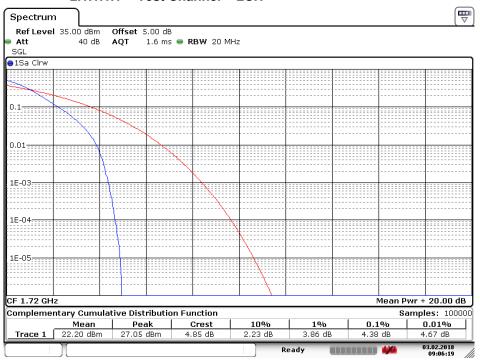
#### Part II - Test Plots

#### 2.1 For LTE

#### 2.1.1 Test Band = LTE band66

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

#### 2.1.1.1.1 Test Channel = LCH



Date: 3.FEB.2018 09:06:20



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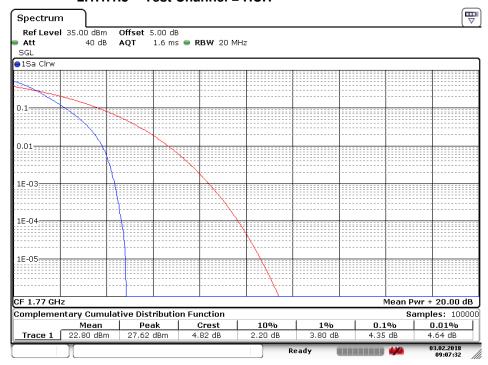
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#### 2.1.1.1.2 Test Channel = MCH



Date: 3.FEB.2018 09:07:11

#### 2.1.1.1.3 Test Channel = HCH



Date: 3.FEB.2018 09:07:33

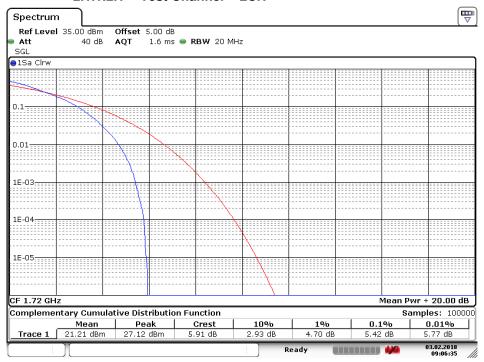


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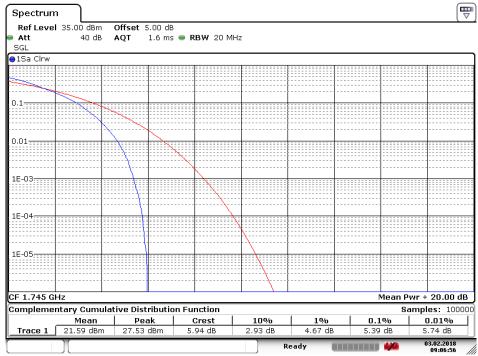
#### 2.1.1.2 Test Mode = LTE/TM2.Bandwidth=20MHz

#### 2.1.1.2.1 Test Channel = LCH



Date: 3.FEB.2018 09:06:35

#### 2.1.1.2.2 Test Channel = MCH



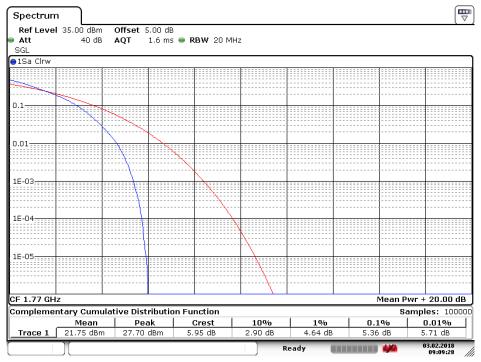
Date: 3.FEB.2018 09:06:56



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#### 2.1.1.2.3 Test Channel = HCH



Date: 3.FEB.2018 09:09:29



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### 3 Modulation Characteristics

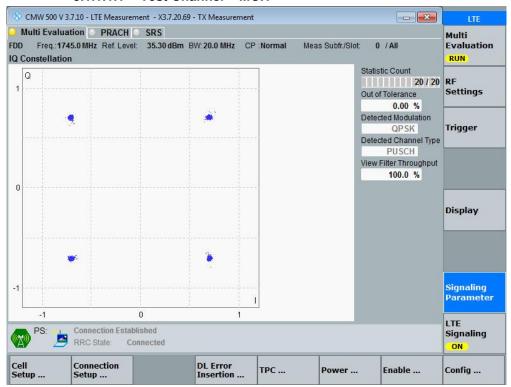
Part I - Test Plots

#### 3.1 For LTE

#### 3.1.1 Test Band = LTE band66

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

3.1.1.1.1 Test Channel = MCH



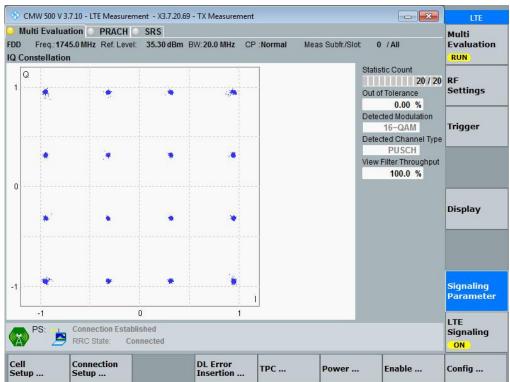


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### 3.1.1.2 Test Mode = LTE /TM2 20MHz

#### 3.1.1.2.1 Test Channel = MCH





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#### 4 Bandwidth

#### Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
		LCH	1.10	1.33	PASS
	TM1/1.4MHz	MCH	1.09	1.26	PASS
		HCH	1.10	1.30	PASS
		LCH	1.10	1.30	PASS
	TM2/1.4MHz	MCH	1.10	1.29	PASS
		HCH	1.09	1.27	PASS
		LCH	2.69	2.97	PASS
	TM1/3MHz	MCH	2.69	2.93	PASS
		HCH	2.68	2.93	PASS
		LCH	2.68	2.92	PASS
	TM2/3MHz	MCH	2.69	2.91	PASS
		HCH	2.69	2.94	PASS
		LCH	4.48	4.93	PASS
	TM1/5MHz	MCH	4.48	4.91	PASS
		HCH	4.48	4.96	PASS
		LCH	4.46	4.91	PASS
	TM2/ 5MHz	MCH	4.47	4.96	PASS
		HCH	4.49	4.94	PASS
Band 66		LCH	8.91	9.69	PASS
	TM1/10MHz	MCH	8.91	9.67	PASS
		HCH	8.93	9.63	PASS
		LCH	8.91	9.73	PASS
	TM2/ 10MHz	MCH	8.91	9.61	PASS
		HCH	8.91	9.65	PASS
		LCH	13.43	14.72	PASS
	TM1/ 15MHz	MCH	13.46	14.78	PASS
		HCH	13.47	14.78	PASS
		LCH	13.43	14.66	PASS
	TM2/ 15MHz	MCH	13.40	14.63	PASS
		HCH	13.46	14.72	PASS
		LCH	17.86	19.18	PASS
	TM1/20MHz	MCH	17.86	19.34	PASS
		HCH	17.90	19.30	PASS
		LCH	17.86	19.46	PASS
	TM2/ 20MHz	MCH	17.86	19.38	PASS
		HCH	17.86	19.22	PASS



Report No.: SZEM171201298701

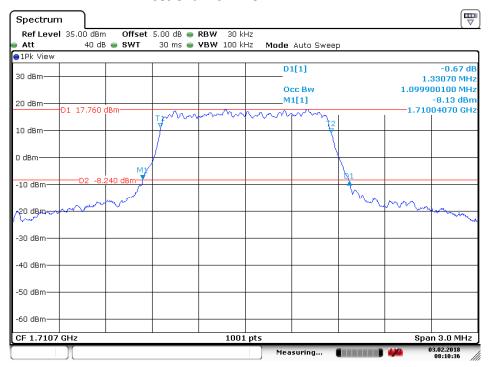
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#### 4.1 For LTE

#### 4.1.1 Test Band = LTE band66

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

#### 4.1.1.1.1 Test Channel = LCH



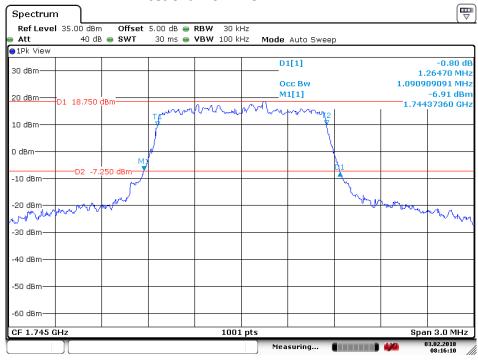
Date: 3.FEB.2018 08:10:37



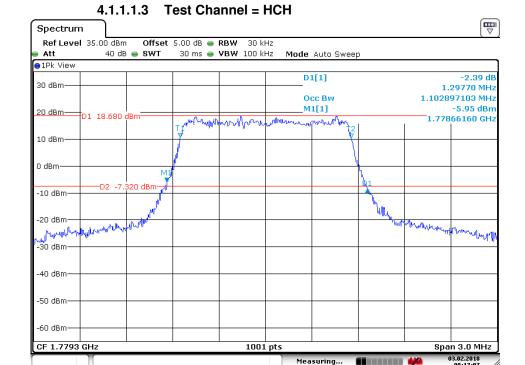
Report No.: SZEM171201298701

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#### 4.1.1.1.2 Test Channel = MCH



Date: 3.FEB.2018 08:16:10



Date: 3.FEB.2018 08:17:08

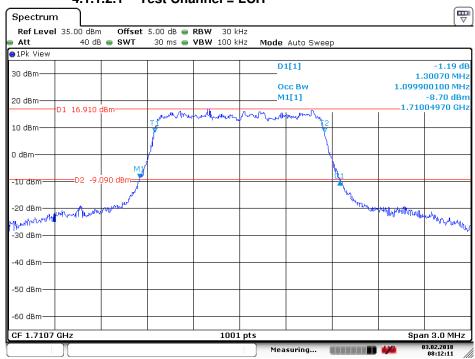


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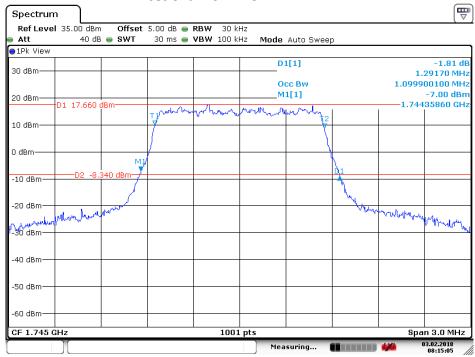
#### 4.1.1.2 Test Mode = LTE/TM2 1.4MHz

#### 4.1.1.2.1 Test Channel = LCH



Date: 3.FEB.2018 08:12:11

#### 4.1.1.2.2 Test Channel = MCH



Date: 3.FEB.2018 08:15:06

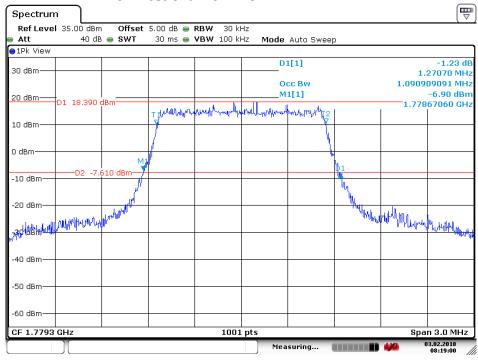
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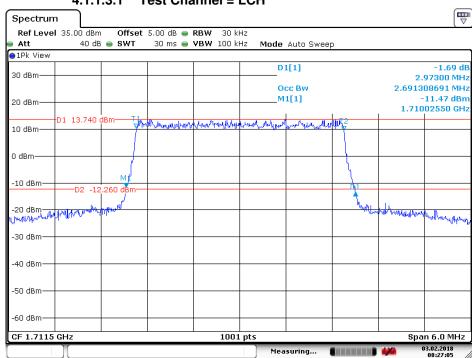




Date: 3.FEB.2018 08:19:01

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

#### 4.1.1.3.1 Test Channel = LCH



Date: 3.FEB.2018 08:27:05

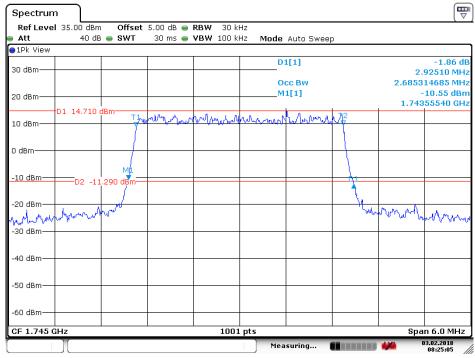
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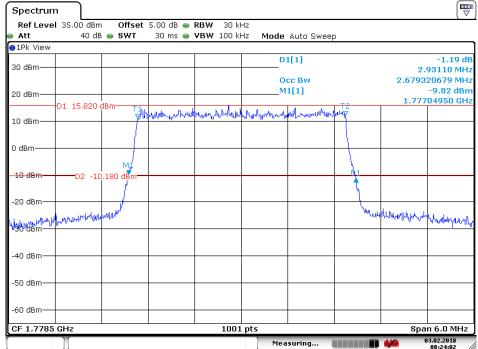
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#### 4.1.1.3.2 Test Channel = MCH



Date: 3.FEB.2018 08:25:05





Date: 3.FEB.2018 08:24:02

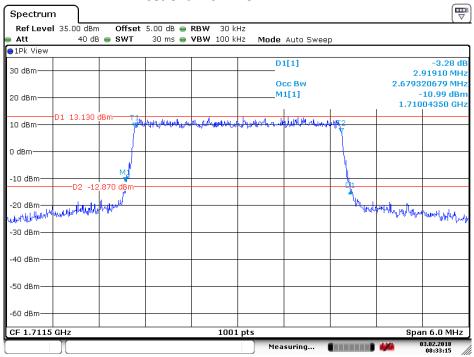


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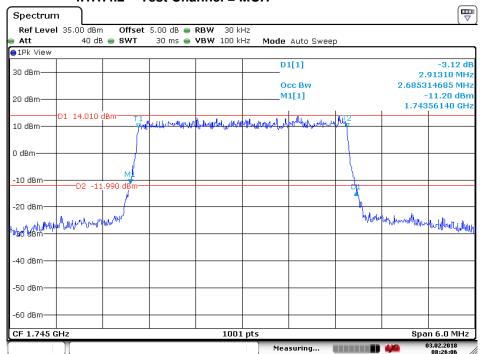
#### 4.1.1.4 Test Mode = LTE/TM2 3MHz

#### 4.1.1.4.1 Test Channel = LCH



Date: 3.FEB.2018 08:33:16

#### 4.1.1.4.2 Test Channel = MCH



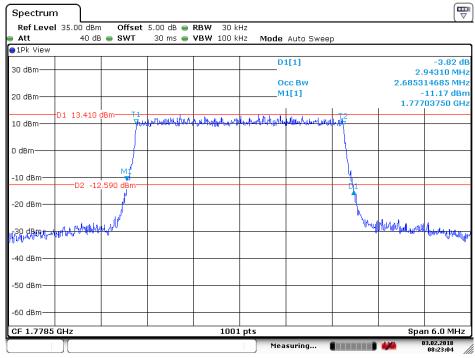
Date: 3.FEB.2018 08:26:07



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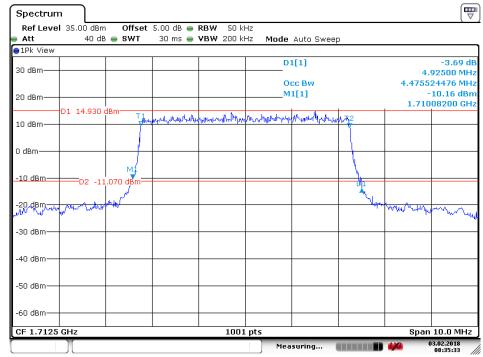
#### 4.1.1.4.3 Test Channel = HCH



Date: 3.FEB.2018 08:23:05

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

#### 4.1.1.5.1 Test Channel = LCH



Date: 3.FEB.2018 08:35:34

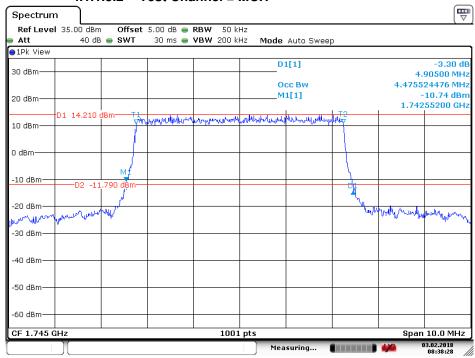
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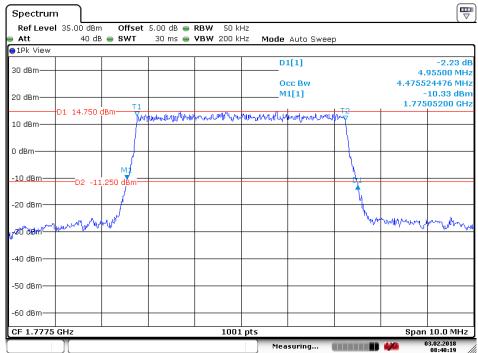
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#### 4.1.1.5.2 Test Channel = MCH



Date: 3.FEB.2018 08:38:28

#### 4.1.1.5.3 Test Channel = HCH



Date: 3.FEB.2018 08:40:19

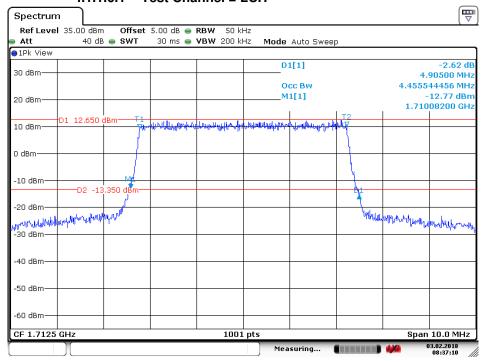


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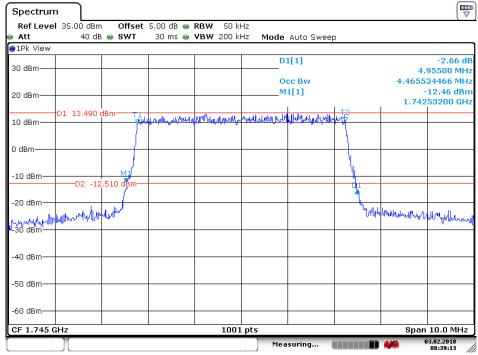
#### 4.1.1.6 Test Mode = LTE/TM2 5MHz

#### 4.1.1.6.1 Test Channel = LCH



Date: 3.FEB.2018 08:37:11





Date: 3.FEB.2018 08:39:13

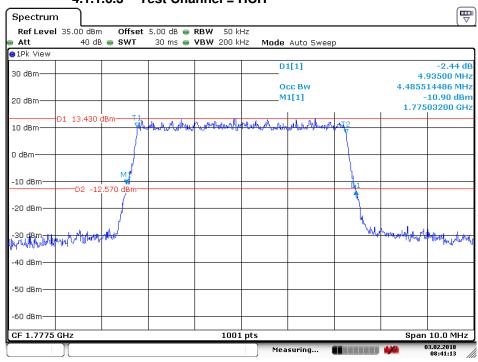
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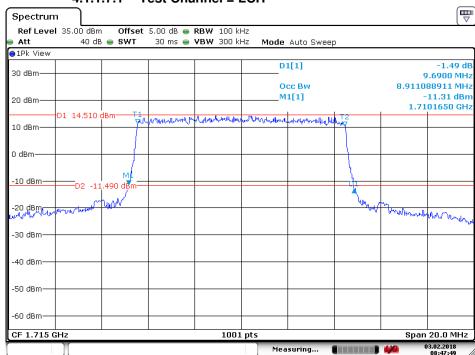




Date: 3.FEB.2018 08:41:13

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

#### 4.1.1.7.1 Test Channel = LCH



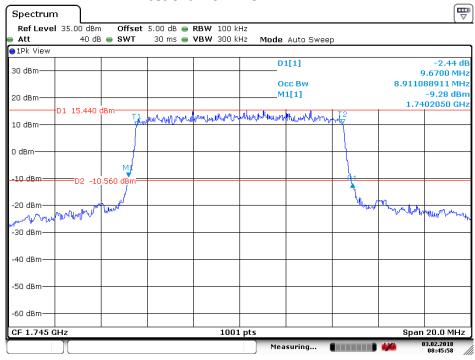
Date: 3.FEB.2018 08:47:50



Report No.: SZEM171201298701

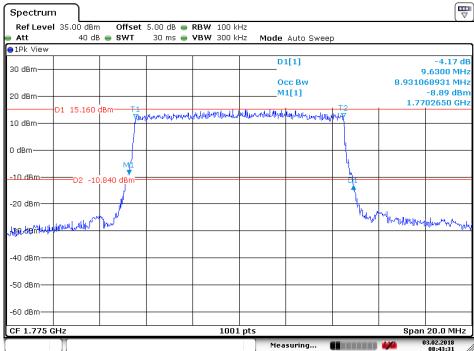
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#### 4.1.1.7.2 Test Channel = MCH



Date: 3.FEB.2018 08:45:58





Date: 3.FEB.2018 08:43:31

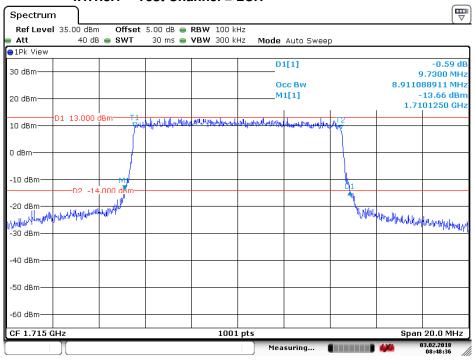


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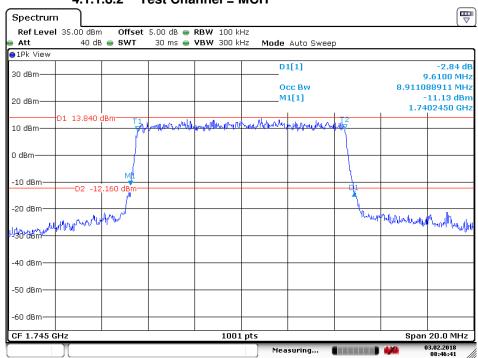
#### 4.1.1.8 Test Mode = LTE/TM2 10MHz

#### 4.1.1.8.1 Test Channel = LCH



Date: 3.FEB.2018 08:48:36





Date: 3.FEB.2018 08:46:41

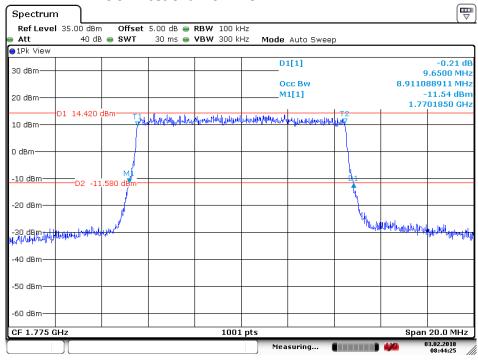
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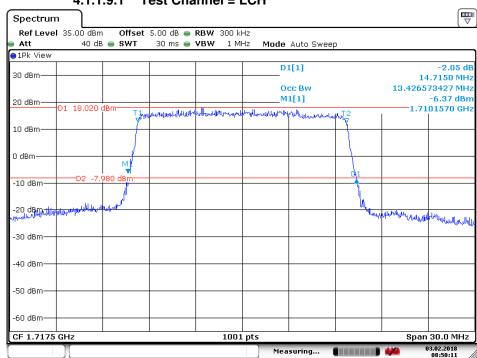
#### 4.1.1.8.3 Test Channel = HCH



Date: 3.FEB.2018 08:44:26

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

#### 4.1.1.9.1 Test Channel = LCH



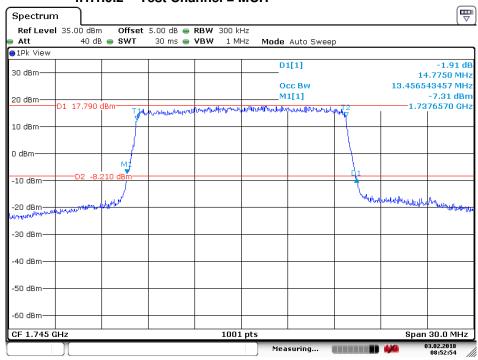
Date: 3.FEB.2018 08:50:11



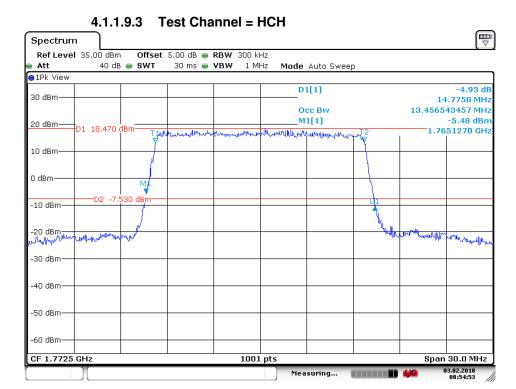
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#### 4.1.1.9.2 Test Channel = MCH



Date: 3.FEB.2018 08:52:55



Date: 3.FEB.2018 08:54:54

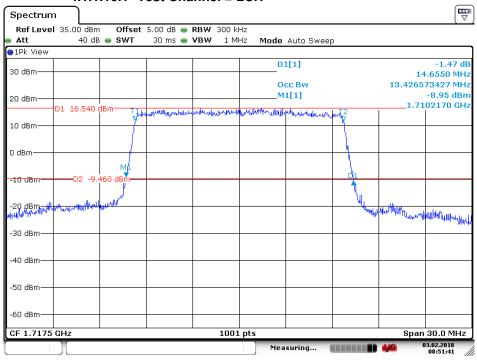


Report No.: SZEM171201298701

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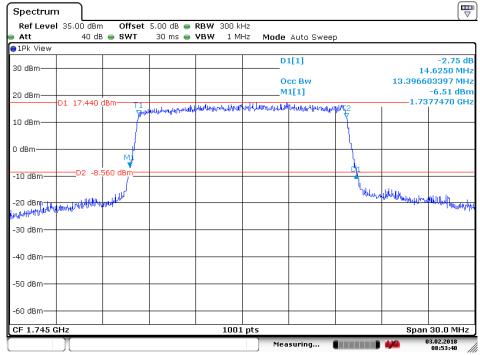
#### 4.1.1.10 Test Mode = LTE/TM2 15MHz

#### 4.1.1.10.1 Test Channel = LCH



Date: 3.FEB.2018 08:51:42





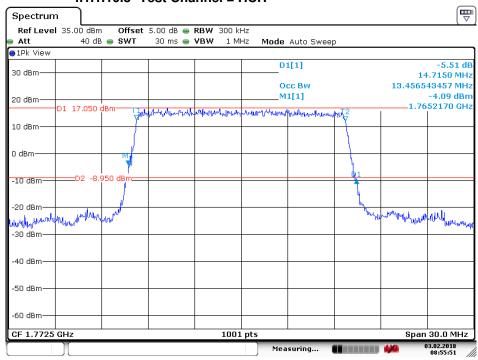
Date: 3.FEB.2018 08:53:41



Report No.: SZEM171201298701

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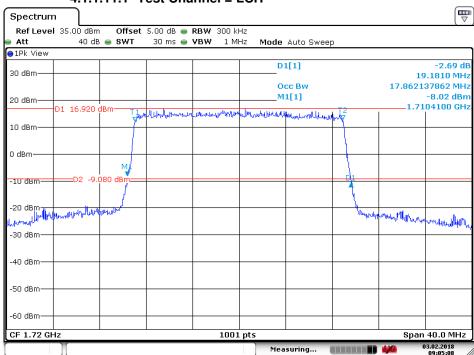
### 4.1.1.10.3 Test Channel = HCH



Date: 3.FEB.2018 08:55:52

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

### 4.1.1.11.1 Test Channel = LCH



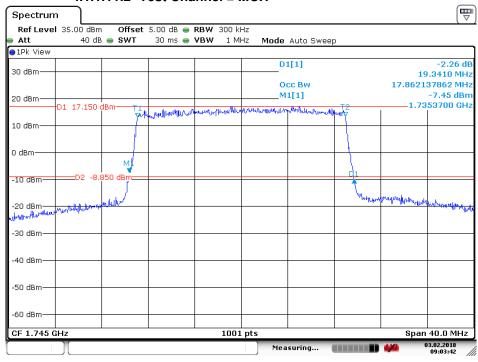
Date: 3.FEB.2018 09:05:08



Report No.: SZEM171201298701

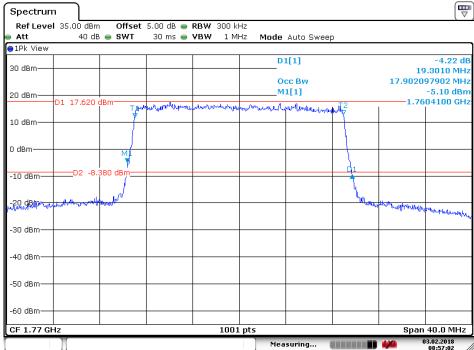
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#### 4.1.1.11.2 Test Channel = MCH



Date: 3.FEB.2018 09:03:42





Date: 3.FEB.2018 08:57:02

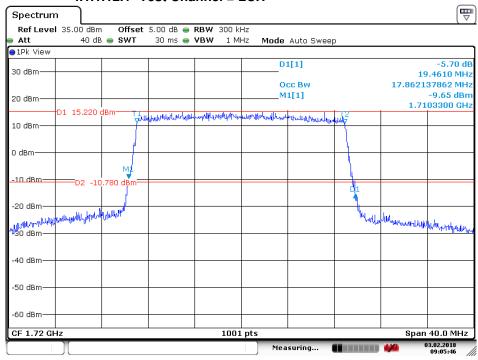


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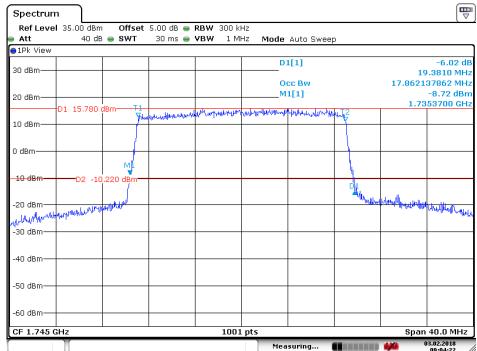
#### 4.1.1.12 Test Mode = LTE/TM2 20MHz

#### 4.1.1.12.1 Test Channel = LCH



Date: 3.FEB.2018 09:05:46





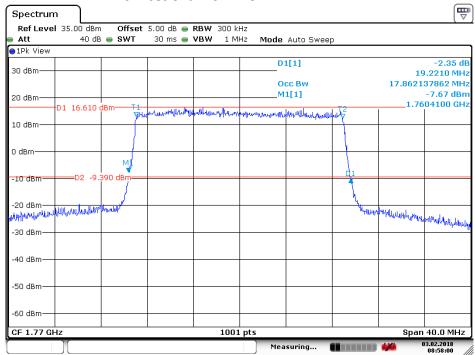
Date: 3.FEB.2018 09:04:23



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#### 4.1.1.12.3 Test Channel = HCH



Date: 3.FEB.2018 08:58:00



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### 5 Band Edges Compliance

Part I -

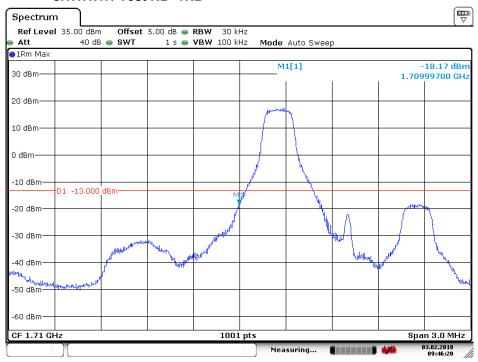
### 5.1 For LTE

#### 5.1.1 Test Band = LTE band66

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

**5.1.1.1.1** Test Channel = LCH

#### 5.1.1.1.1.1 Test RB=1RB



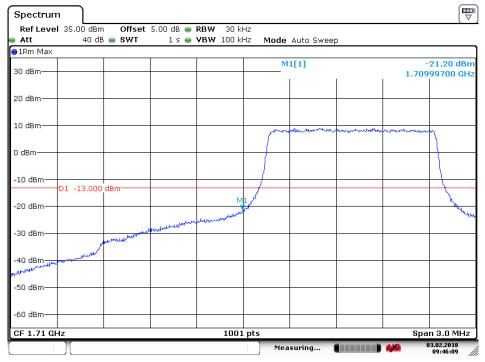
Date: 3.FEB.2018 09:46:20



Report No.: SZEM171201298701

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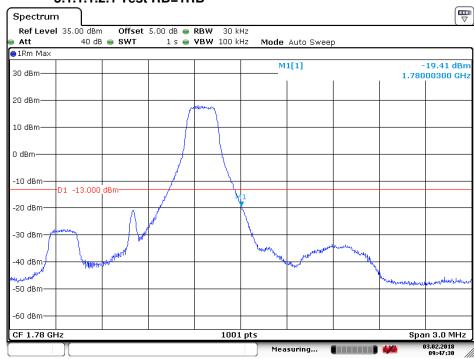
#### 5.1.1.1.1.2 Test RB=6RB



Date: 3.FEB.2018 09:46:09

#### 5.1.1.1.2 Test Channel = HCH

#### 5.1.1.1.2.1 Test RB=1RB



Date: 3.FEB.2018 09:47:30



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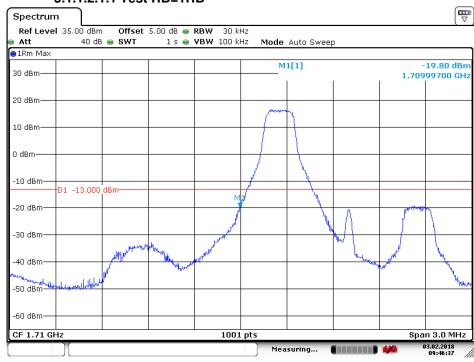
#### 5.1.1.1.2.2 Test RB=6RB



Date: 3.FEB.2018 09:47:51

### 5.1.1.2 Test Mode = LTE/TM2 1.4MHz 5.1.1.2.1 Test Channel = LCH

#### 5.1.1.2.1.1 Test RB=1RB



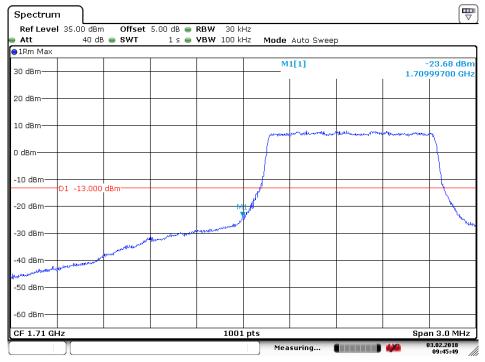
Date: 3.FEB.2018 09:46:37



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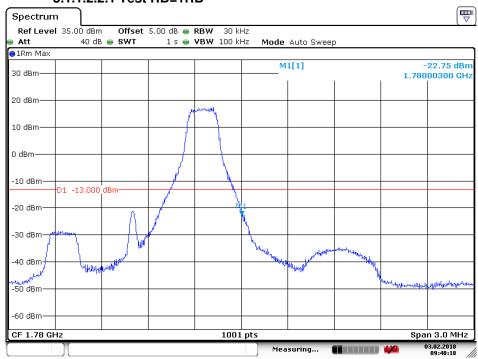
#### 5.1.1.2.1.2 Test RB=6RB



Date: 3.FEB.2018 09:45:50

#### 5.1.1.2.2 Test Channel = HCH

#### 5.1.1.2.2.1 Test RB=1RB



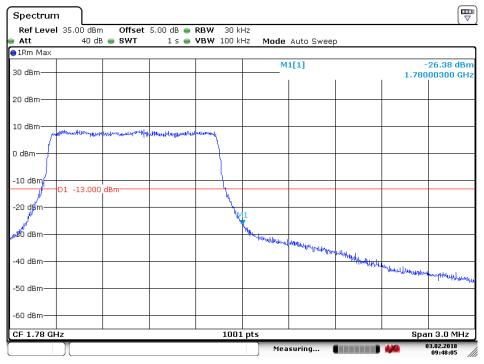
Date: 3.FEB.2018 09:48:19



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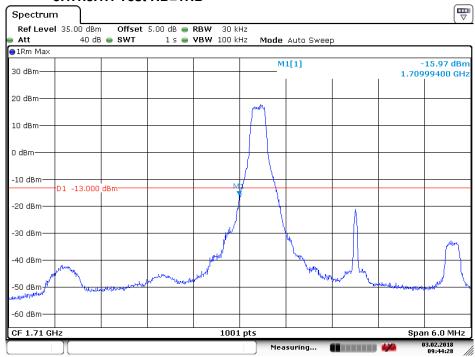
#### 5.1.1.2.2.2 Test RB=6RB



Date: 3.FEB.2018 09:48:06

### 5.1.1.3 Test Mode = LTE/TM1 3MHz 5.1.1.3.1 Test Channel = LCH

#### 5.1.1.3.1.1 Test RB=1RB



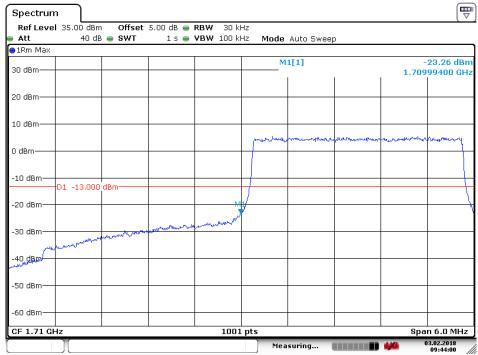
Date: 3.FEB.2018 09:44:29



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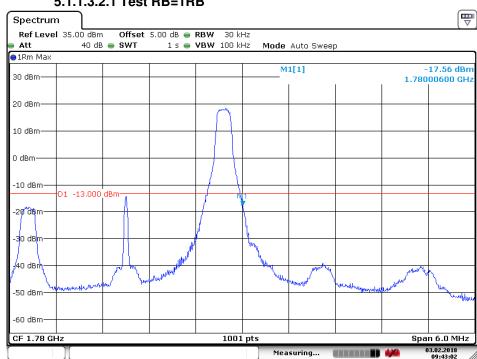
#### 5.1.1.3.1.2 Test RB=15RB



Date: 3.FEB.2018 09:44:00

#### 5.1.1.3.2 Test Channel = HCH

#### 5.1.1.3.2.1 Test RB=1RB



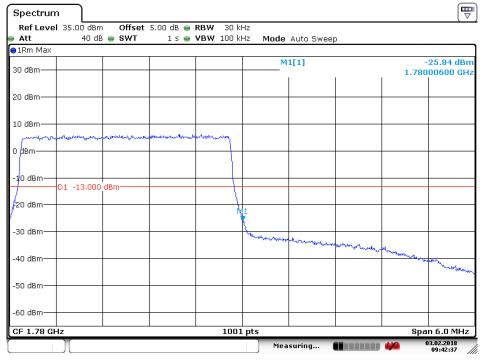
Date: 3.FEB.2018 09:43:02



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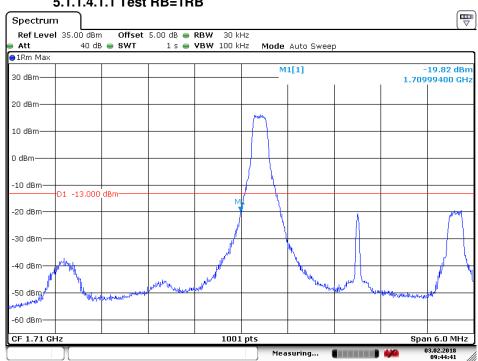
#### 5.1.1.3.2.2 Test RB=15RB



Date: 3.FEB.2018 09:42:37

### 5.1.1.4 Test Mode = LTE/TM2 3MHz 5.1.1.4.1 Test Channel = LCH

#### 5.1.1.4.1.1 Test RB=1RB



Date: 3.FEB.2018 09:44:42

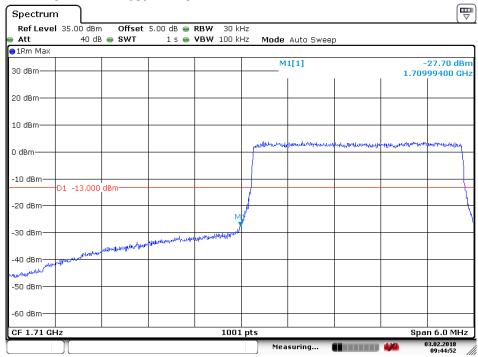
"This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sqs.com/en/Terms-and-Conditions.aspx and, Instruction of leading the Company subject to Its General Conditions for Electronic Potential and English and Conditions for Electronic Potential and English and Conditions for Electronic Potential at <a href="http://www.sgs.com/en/lerms-and-Conditions/Terms-an



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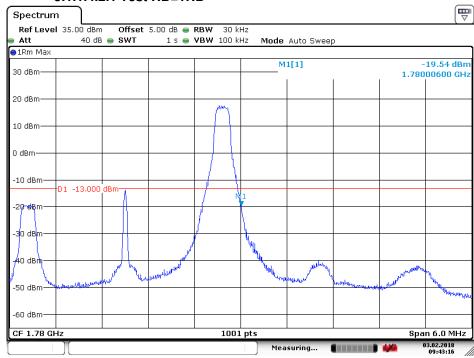
#### 5.1.1.4.1.2 Test RB=15RB



Date: 3.FEB.2018 09:44:53

#### 5.1.1.4.2 Test Channel = HCH

#### 5.1.1.4.2.1 Test RB=1RB



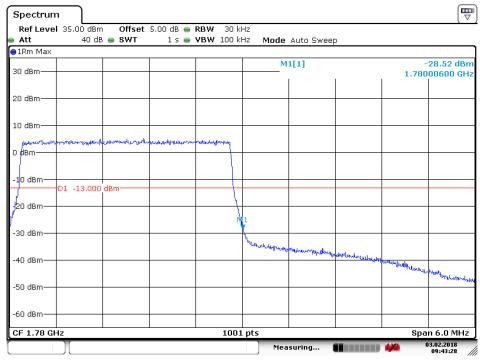
Date: 3.FEB.2018 09:43:16



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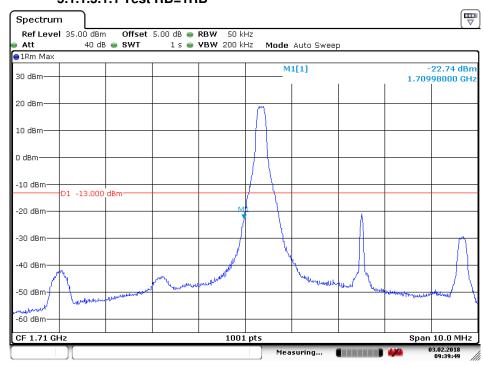
### 5.1.1.4.3 Test RB=15RB



Date: 3.FEB.2018 09:43:29

### 5.1.1.5 Test Mode = LTE/TM1 5MHz 5.1.1.5.1 Test Channel = LCH

### 5.1.1.5.1.1 Test RB=1RB



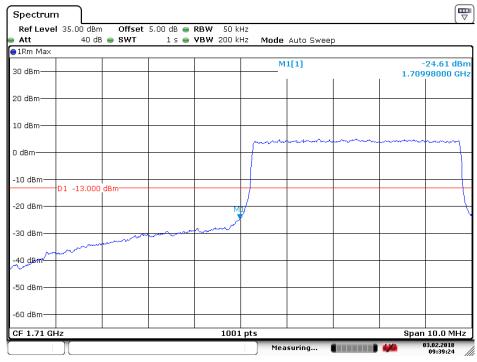
Date: 3.FEB.2018 09:39:49



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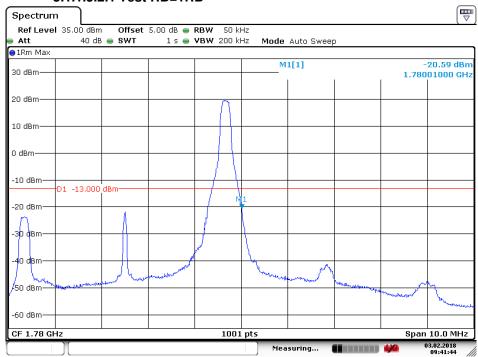
#### 5.1.1.5.1.2 Test RB=25RB



Date: 3.FEB.2018 09:39:24

#### 5.1.1.5.2 Test Channel = HCH

#### 5.1.1.5.2.1 Test RB=1RB



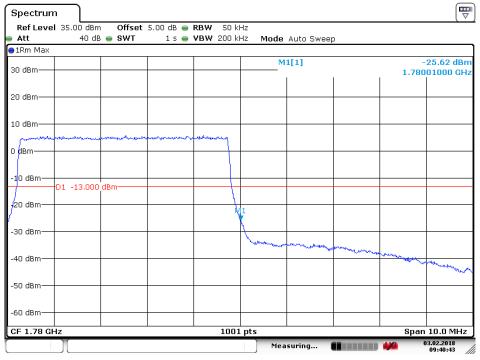
Date: 3.FEB.2018 09:41:44



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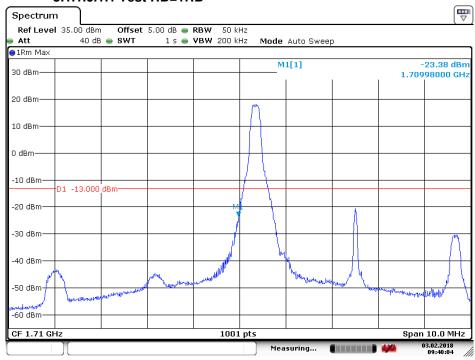
#### 5.1.1.5.2.2 Test RB=25RB



Date: 3.FEB.2018 09:40:43

### 5.1.1.6 Test Mode = LTE/TM2 5MHz 5.1.1.6.1 Test Channel = LCH

#### 5.1.1.6.1.1 Test RB=1RB



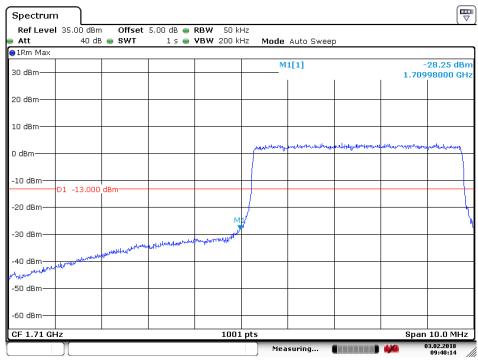
Date: 3.FEB.2018 09:40:05



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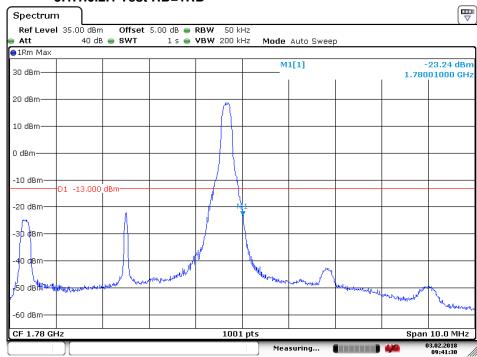
#### 5.1.1.6.1.2 Test RB=25RB



Date: 3.FEB.2018 09:40:14

#### 5.1.1.6.2 Test Channel = HCH

#### 5.1.1.6.2.1 Test RB=1RB



Date: 3.FEB.2018 09:41:30



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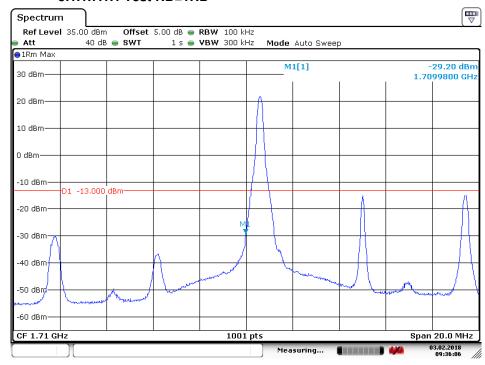
#### 5.1.1.6.2.2 Test RB=25RB



Date: 3.FEB.2018 09:41:17

### 5.1.1.7 Test Mode = LTE/TM1 10MHz 5.1.1.7.1 Test Channel = LCH

#### 5.1.1.7.1.1 Test RB=1RB



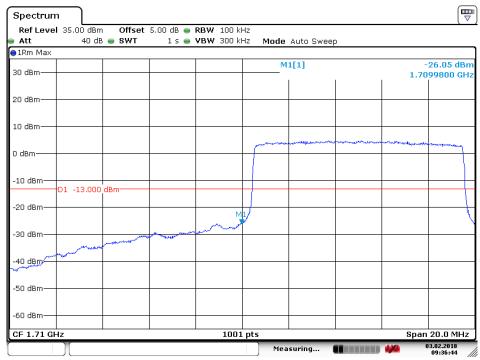
Date: 3.FEB.2018 09:36:07



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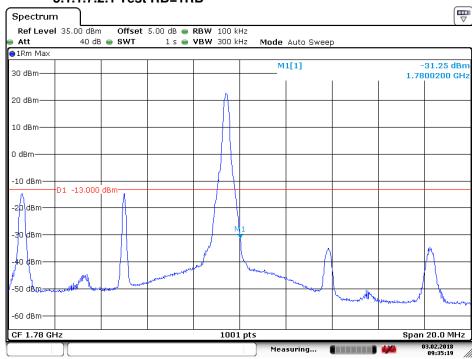
#### 5.1.1.7.1.2 Test RB=50RB



Date: 3.FEB.2018 09:36:44

#### 5.1.1.7.2 Test Channel = HCH

#### 5.1.1.7.2.1 Test RB=1RB



Date: 3.FEB.2018 09:35:20



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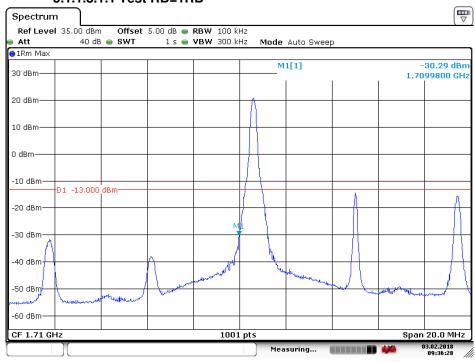
#### 5.1.1.7.2.2 Test RB=50RB



Date: 3.FEB.2018 09:33:08

### 5.1.1.8 Test Mode = LTE/TM2 10MHz 5.1.1.8.1 Test Channel = LCH

#### 5.1.1.8.1.1 Test RB=1RB



Date: 3.FEB.2018 09:36:29



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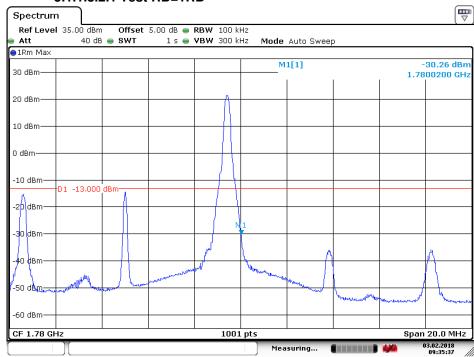
#### 5.1.1.8.1.2 Test RB=50RB



Date: 3.FEB.2018 09:36:59

#### 5.1.1.8.2 Test Channel = HCH

#### 5.1.1.8.2.1 Test RB=1RB



Date: 3.FEB.2018 09:35:37



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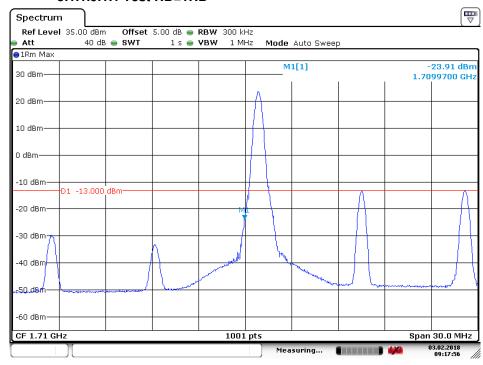
#### 5.1.1.8.2.2 Test RB=50RB



Date: 3.FEB.2018 09:34:48

### 5.1.1.9 Test Mode = LTE/TM1 15MHz 5.1.1.9.1 Test Channel = LCH

#### 5.1.1.9.1.1 Test RB=1RB



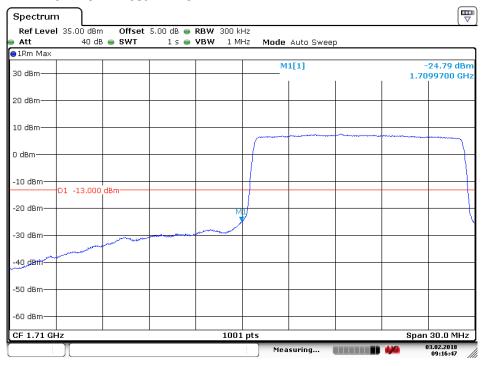
Date: 3.FEB.2018 09:17:57



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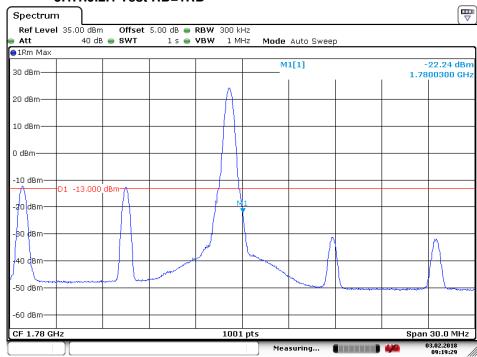
#### 5.1.1.9.1.2 Test RB=75RB



Date: 3.FEB.2018 09:16:48

#### 5.1.1.9.2 Test Channel = HCH

#### 5.1.1.9.2.1 Test RB=1RB



Date: 3.FEB.2018 09:19:29



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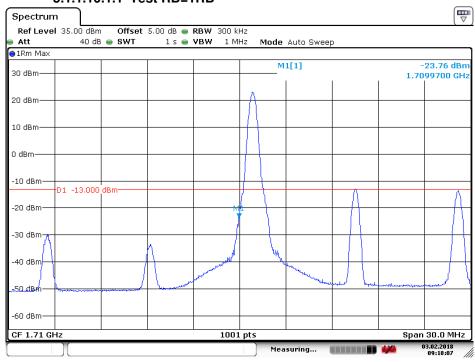
#### 5.1.1.9.2.2 Test RB=75RB



Date: 3.FEB.2018 09:19:01

### 5.1.1.10 Test Mode = LTE/TM2 15MHz 5.1.1.10.1 Test Channel = LCH

#### 5.1.1.10.1.1 Test RB=1RB



Date: 3.FEB.2018 09:18:08



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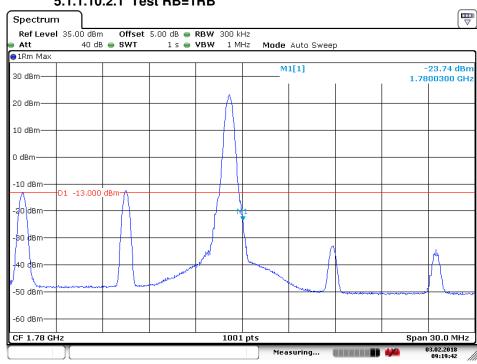
#### 5.1.1.10.1.2 Test RB=75RB



Date: 3.FEB.2018 09:18:21

#### 5.1.1.10.2 Test Channel = HCH

#### 5.1.1.10.2.1 Test RB=1RB



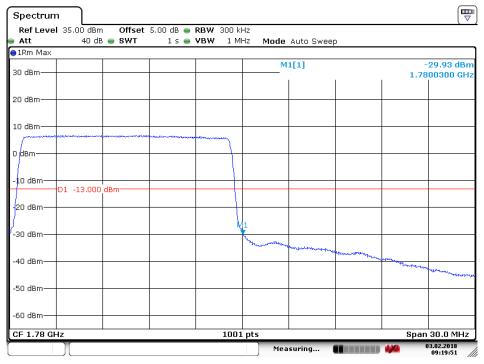
Date: 3.FEB.2018 09:19:42



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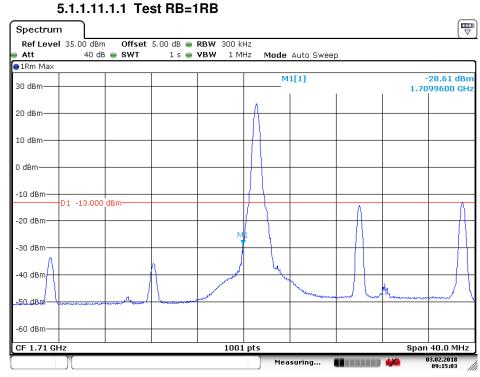
#### 5.1.1.10.2.2 Test RB=75RB



Date: 3.FEB.2018 09:19:51

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

### 5.1.1.11.1 Test Channel = LCH



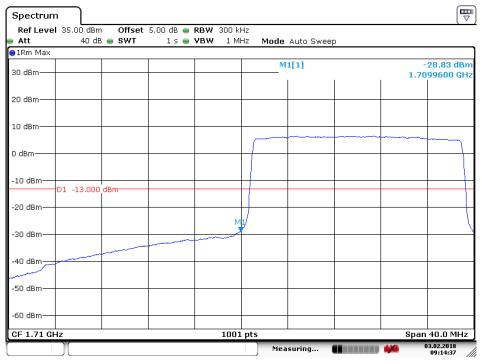
Date: 3.FEB.2018 09:15:04



Report No.: SZEM171201298701

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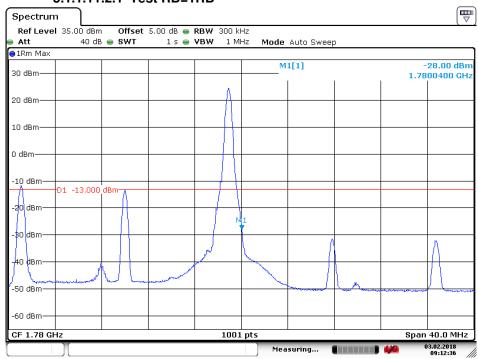
#### 5.1.1.11.1.2 Test RB=100RB



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

#### 5.1.1.11.2 Test Channel = HCH

#### 5.1.1.11.2.1 Test RB=1RB



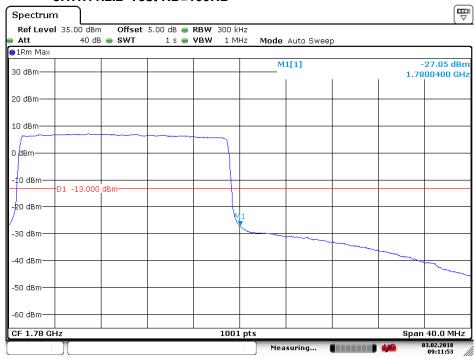
Date: 3.FEB.2018 09:12:37



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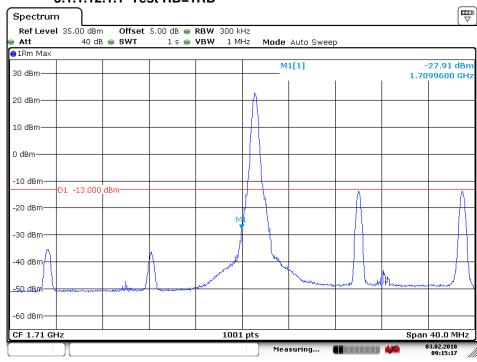
#### 5.1.1.11.2.2 Test RB=100RB



Date: 3.FEB.2018 09:11:53

### 5.1.1.12 Test Mode = LTE/TM2 20MHz 5.1.1.12.1 Test Channel = LCH

#### 5.1.1.12.1.1 Test RB=1RB



Date: 3.FEB.2018 09:15:17



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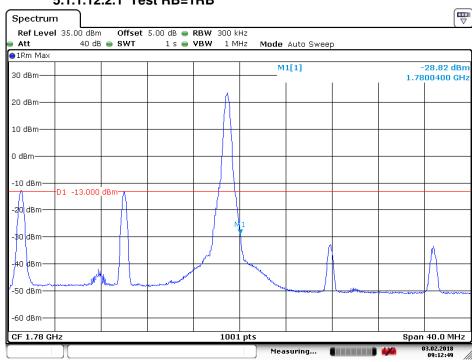
#### 5.1.1.12.1.2 Test RB=100RB



Date: 3.FEB.2018 09:15:32

#### 5.1.1.12.2 Test Channel = HCH

#### 5.1.1.12.2.1 Test RB=1RB



Date: 3.FEB.2018 09:12:49



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#### 5.1.1.12.2.2 Test RB=100RB



Date: 3.FEB.2018 09:13:01



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### 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).

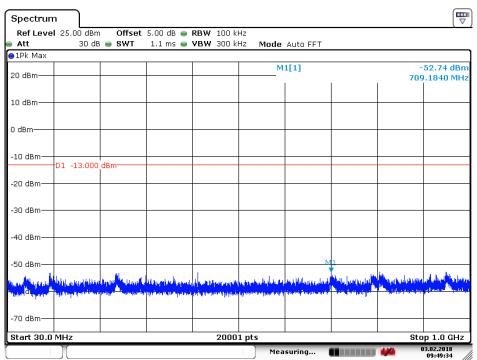
Part I - Test Plots

#### 6.1 For LTE

#### 6.1.1 Test Band = LTE band66

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

#### 6.1.1.1.1 Test Channel = LCH

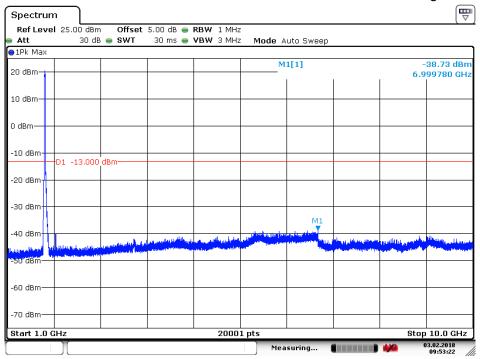


Date: 3.FEB.2018 09:49:35

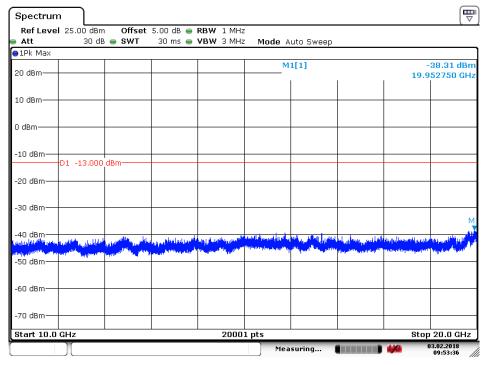


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Date: 3.FEB.2018 09:53:22



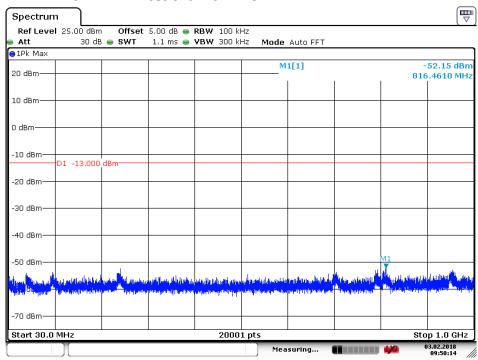
Date: 3.FEB.2018 09:53:36



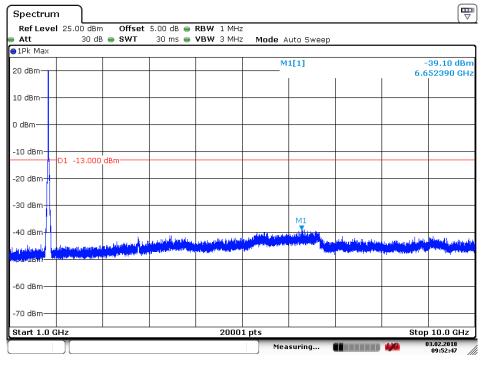
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#### 6.1.1.1.2 Test Channel = MCH



Date: 3.FEB.2018 09:50:15

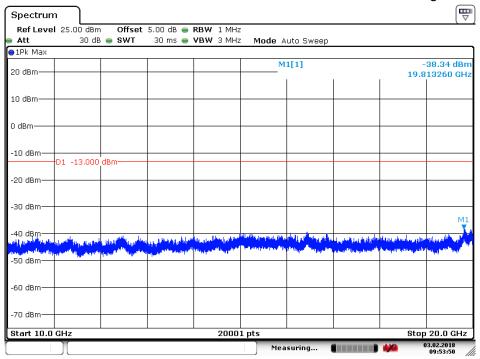


Date: 3.FEB.2018 09:52:47



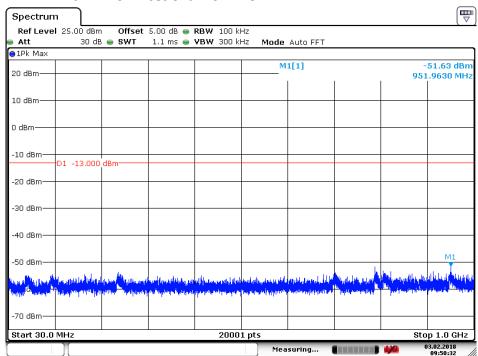
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Date: 3.FEB.2018 09:53:51

#### 6.1.1.1.3 Test Channel = HCH

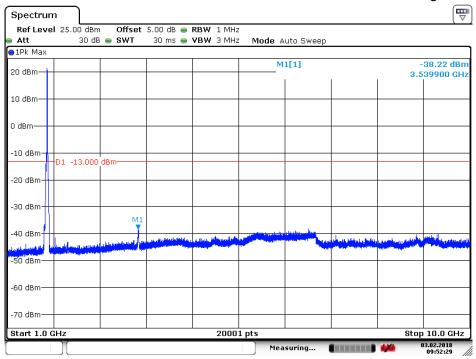


Date: 3.FEB.2018 09:50:33

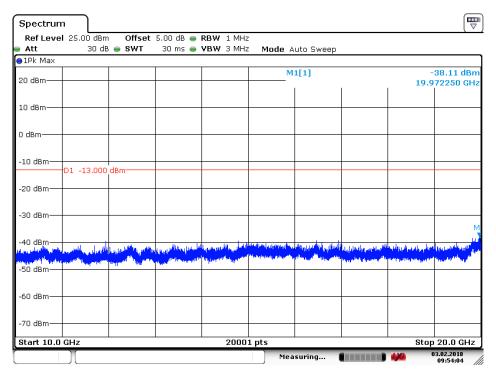


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Date: 3.FEB.2018 09:52:30



Date: 3.FEB.2018 09:54:05



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### 7 Field Strength of Spurious Radiation

### 7.1 For LTE

#### 7.1.1 Test Band = LTE band66

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

#### 7.1.1.1.1 Test Channel = LCH

/.1.1.1.1	rest Channel = LC	<u> </u>		
Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1136.000000	-67.31	-13.00	54.31	Vertical
2581.000000	-58.46	-13.00	45.46	Vertical
4021.150000	-67.82	-13.00	54.82	Vertical
5501.525000	-66.72	-13.00	53.72	Vertical
7041.700000	-64.84	-13.00	51.84	Vertical
7950.075000	-64.11	-13.00	51.11	Vertical
1105.000000	-67.05	-13.00	54.05	Horizontal
2469.500000	-59.24	-13.00	46.24	Horizontal
3732.875000	-68.60	-13.00	55.60	Horizontal
4336.400000	-67.10	-13.00	54.10	Horizontal
6053.050000	-65.20	-13.00	52.20	Horizontal
7239.950000	-65.07	-13.00	52.07	Horizontal

#### 7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1127.000000	-67.07	-13.00	54.07	Vertical
1623.500000	-65.60	-13.00	52.60	Vertical
2552.500000	-58.86	-13.00	45.86	Vertical
4012.050000	-67.79	-13.00	54.79	Vertical
4992.900000	-67.17	-13.00	54.17	Vertical
6030.300000	-65.23	-13.00	52.23	Vertical
1127.000000	-67.47	-13.00	54.47	Horizontal
2367.000000	-59.24	-13.00	46.24	Horizontal
2681.500000	-57.72	-13.00	44.72	Horizontal
4096.550000	-67.81	-13.00	54.81	Horizontal
5123.550000	-66.64	-13.00	53.64	Horizontal
6258.450000	-65.56	-13.00	52.56	Horizontal



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#### 7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1259.500000	-66.50	-13.00	53.50	Vertical
1575.000000	-66.35	-13.00	53.35	Vertical
2613.000000	-58.13	-13.00	45.13	Vertical
4097.525000	-67.45	-13.00	54.45	Vertical
6016.325000	-65.59	-13.00	52.59	Vertical
9520.150000	-64.41	-13.00	51.41	Vertical
1258.000000	-67.47	-13.00	54.47	Horizontal
1490.000000	-66.24	-13.00	53.24	Horizontal
2469.500000	-59.25	-13.00	46.25	Horizontal
4232.725000	-67.00	-13.00	54.00	Horizontal
5222.675000	-66.66	-13.00	53.66	Horizontal
6477.825000	-65.18	-13.00	52.18	Horizontal

#### NOTE:

1) The disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.



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### 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	-4.03	-0.00234	PASS
				VN	1.46	0.00085	PASS
				VH	-3.73	-0.00217	PASS
				VL	1.49	0.00085	PASS
	LTE/TM1 20MHz	MCH	TN	VN	-2.84	-0.00163	PASS
				VH	2.63	0.00151	PASS
		НСН	TN	VL	-6.56	-0.00371	PASS
				VN	-5.17	-0.00292	PASS
LTEband66				VH	-0.79	-0.00045	PASS
LIEDANGO	LTE/TM2 20MHz	LCH	TN	VL	2.09	0.00122	PASS
				VN	-0.32	-0.00019	PASS
				VH	4.38	0.00255	PASS
		MCH	TN	VL	-2.83	-0.00162	PASS
				VN	1.43	0.00082	PASS
				VH	-3.54	-0.00203	PASS
		НСН		VL	3.23	0.00182	PASS
			TN	VN	1.45	0.00082	PASS
				VH	-4.05	-0.00229	PASS



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### 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	-5.20	-0.00302	PASS
				-20	-1.34	-0.00078	PASS
				-10	2.38	0.00138	PASS
				0	4.75	0.00276	PASS
		LCH	VN	10	1.65	0.00096	PASS
				20	4.11	0.00239	PASS
				30	-0.31	-0.00018	PASS
				40	-5.14	-0.00299	PASS
				50	2.59	0.00151	PASS
		МСН	VN	-30	-7.80	-0.00447	PASS
	LTE/TM1 20MHz			-20	-5.95	-0.00341	PASS
				-10	-7.49	-0.00429	PASS
				0	-5.62	-0.00322	PASS
LTEband66				10	-4.04	-0.00232	PASS
				20	-1.94	-0.00111	PASS
				30	-5.66	-0.00324	PASS
				40	-4.62	-0.00265	PASS
				50	-6.92	-0.00397	PASS
				-30	3.54	0.00200	PASS
				-20	-1.49	-0.00084	PASS
				-10	1.53	0.00086	PASS
				0	-2.83	-0.00160	PASS
		НСН	VN	10	2.60	0.00147	PASS
				20	-0.57	-0.00032	PASS
				30	-2.66	-0.00150	PASS
				40	-5.43	-0.00307	PASS
				50	-6.90	-0.00390	PASS



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Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
				-30	-2.50	-0.00145	PASS
				-20	-2.45	-0.00142	PASS
				-10	3.38	0.00197	PASS
				0	2.64	0.00153	PASS
		LCH	VN	10	1.60	0.00093	PASS
				20	-0.23	-0.00013	PASS
				30	-4.44	-0.00258	PASS
				40	5.34	0.00310	PASS
				50	2.79	0.00162	PASS
	LTE/TM2 20MHz	МСН		-30	-3.80	-0.00218	PASS
			VN	-20	-5.38	-0.00308	PASS
				-10	-7.29	-0.00418	PASS
				0	-4.32	-0.00248	PASS
LTEband66				10	-0.34	-0.00019	PASS
				20	1.74	0.00100	PASS
				30	-3.64	-0.00209	PASS
				40	-2.62	-0.00150	PASS
				50 -3.91 -	-0.00224	PASS	
				-30	1.34	0.00076	PASS
				-20	-2.55	-0.00144	PASS
				-10	1.59	0.00090	PASS
		НСН		0	-3.73	-0.00211	PASS
			VN	10	2.88	0.00163	PASS
				20	-1.47	-0.00083	PASS
			ļ	30	-2.59	-0.00146	PASS
				40	-4.33	-0.00245	PASS
				50	-5.60	-0.00316	PASS

The End