

Report No.: SZEM170300261304 Page: 1 of 176

Appendix B

E-UTRA Band 4

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-enDocument.aspx. Attention is drawn to the limitation of liability, indemnification 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 form 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 30 days only.



Report No.: SZEM170300261304 Page: 2 of 176

CONTENT

1	EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA	3
2	PEAK-TO-AVERAGE RATIO	15
	2.1 For LTE	16
	2.1.1 Test Band = LTE band4	16
3	MODULATION CHARACTERISTICS	22
	3.1 For LTE	22
	3.1.1 Test Band = LTE band4	22
4	BANDWIDTH	34
	4.1 For LTE	35
	4.1.1 Test Band = LTE band4	35
5	BAND EDGES COMPLIANCE	71
	5.1 For LTE	
	5.1.1 Test Band = LTE band4	
6	SPURIOUS EMISSION AT ANTENNA TERMINAL	119
	6.1 For LTE	119
	6.1.1 Test Band = LTE band4	119
7	FIELD STRENGTH OF SPURIOUS RADIATION	173
	7.1 For LTE	173
	7.1.1 Test Band = LTE band4	173
8	FREQUENCY STABILITY	174
	8.1 FREQUENCY ERROR VS. VOLTAGE	174
	8.2 FREQUENCY ERROR VS. TEMPERATURE	175



Report No.: SZEM170300261304 Page: 3 of 176

1 Effective (Isotropic) Radiated Power Output Data

Effective Isotropic Radiated Power of Transmitter (EIRP) for LTE BAND 4

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	23.45	24.48	30.00	PASS
				RB1#2	23.60	24.63	30.00	PASS
				RB1#5	23.51	24.54	30.00	PASS
			LCH	RB3#0	23.47	24.50	30.00	PASS
				RB3#2	23.70	24.73	30.00	PASS
				RB3#3	23.42	24.45	30.00	PASS
				RB6#0	22.49	23.52	30.00	PASS
				RB1#0	23.47	24.50	30.00	PASS
				RB1#2	23.74	24.77	30.00	PASS
				RB1#5	23.28	24.31	30.00	PASS
BAND4	LTE/TM1	1.4M	МСН	RB3#0	23.46	24.49	30.00	PASS
				RB3#2	23.45	24.48	30.00	PASS
				RB3#3	23.31	24.34	30.00	PASS
				RB6#0	22.33	23.36	30.00	PASS
				RB1#0	23.42	24.45	30.00	PASS
				RB1#2	23.48	24.51	30.00	PASS
				RB1#5	23.31	24.34	30.00	PASS
			НСН	RB3#0	23.38	24.41	30.00	PASS
				RB3#2	23.39	24.42	30.00	PASS
				RB3#3	23.33	24.36	30.00	PASS
				RB6#0	22.43	23.46	30.00	PASS

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-enDocument.aspx. Attention is drawn to the limitation of liability, indemnification 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 30 days only.



Report No.: SZEM170300261304 Page: 4 of 176

					Page:	4 Of 1 <i>1</i>		1
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.60	23.63	30.00	PASS
				RB1#2	22.85	23.88	30.00	PASS
				RB1#5	22.88	23.91	30.00	PASS
			LCH	RB3#0	22.76	23.79	30.00	PASS
				RB3#2	22.84	23.87	30.00	PASS
				RB3#3	22.89	23.92	30.00	PASS
				RB6#0	21.36	22.39	30.00	PASS
				RB1#0	22.83	23.86	30.00	PASS
				RB1#2	22.84	23.87	30.00	PASS
				RB1#5	22.66	23.69	30.00	PASS
BAND4	LTE/TM2	1.4M	MCH	RB3#0	22.48	23.51	30.00	PASS
				RB3#2	22.48	23.51	30.00	PASS
				RB3#3	22.44	23.47	30.00	PASS
				RB6#0	21.24	22.27	30.00	PASS
				RB1#0	22.57	23.60	30.00	PASS
				RB1#2	22.56	23.59	30.00	PASS
				RB1#5	22.65	23.68	30.00	PASS
			НСН	RB3#0	22.62	23.65	30.00	PASS
				RB3#2	22.53	23.56	30.00	PASS
				RB3#3	22.63	23.66	30.00	PASS
				RB6#0	21.15	22.18	30.00	PASS



Report No.: SZEM170300261304 Page: 5 of 176

	[[1		Page:	5 Of 1/		1
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	23.61	24.64	30.00	PASS
				RB1#7	23.67	24.70	30.00	PASS
				RB1#14	23.34	24.37	30.00	PASS
			LCH	RB8#0	22.61	23.64	30.00	PASS
				RB8#4	22.56	23.59	30.00	PASS
				RB8#7	22.60	23.63	30.00	PASS
				RB15#0	22.57	23.60	30.00	PASS
				RB1#0	23.47	24.50	30.00	PASS
BAND4				RB1#7	23.46	24.49	30.00	PASS
				RB1#14	23.43	24.46	30.00	PASS
	LTE/TM1	3M	MCH	RB8#0	22.48	23.51	30.00	PASS
				RB8#4	22.42	23.45	30.00	PASS
				RB8#7	22.46	23.49	30.00	PASS
				RB15#0	22.43	23.46	30.00	PASS
				RB1#0	23.52	24.55	30.00	PASS
				RB1#7	23.59	24.62	30.00	PASS
				RB1#14	23.49	24.52	30.00	PASS
			НСН	RB8#0	22.44	23.47	30.00	PASS
				RB8#4	22.43	23.46	30.00	PASS
				RB8#7	22.46	23.49	30.00	PASS
				RB15#0	22.43	23.46	30.00	PASS



Report No.: SZEM170300261304 Page: 6 of 176

Page: 6 of 1/6							1	
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.71	23.74	30.00	PASS
				RB1#7	22.74	23.77	30.00	PASS
				RB1#14	22.63	23.66	30.00	PASS
			LCH	RB8#0	21.64	22.67	30.00	PASS
				RB8#4	21.70	22.73	30.00	PASS
				RB8#7	21.73	22.76	30.00	PASS
				RB15#0	21.64	22.67	30.00	PASS
				RB1#0	22.78	23.81	30.00	PASS
BAND4				RB1#7	22.61	23.64	30.00	PASS
				RB1#14	23.34	24.37	30.00	PASS
	LTE/TM2	ЗM	MCH	RB8#0	21.60	22.63	30.00	PASS
				RB8#4	21.54	22.57	30.00	PASS
				RB8#7	21.51	22.54	30.00	PASS
				RB15#0	21.52	22.55	30.00	PASS
				RB1#0	22.76	23.79	30.00	PASS
				RB1#7	22.23	23.26	30.00	PASS
				RB1#14	22.71	23.74	30.00	PASS
			НСН	RB8#0	21.66	22.69	30.00	PASS
				RB8#4	21.59	22.62	30.00	PASS
				RB8#7	21.61	22.64	30.00	PASS
				RB15#0	21.55	22.58	30.00	PASS



Report No.: SZEM170300261304 Page: 7 of 176

	[1			Page:	7 of 17	0	I
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	23.51	24.54	30.00	PASS
				RB1#13	23.48	24.51	30.00	PASS
				RB1#24	23.39	24.42	30.00	PASS
			LCH	RB12#0	22.45	23.48	30.00	PASS
				RB12#6	22.44	23.47	30.00	PASS
				RB12#13	22.47	23.50	30.00	PASS
				RB25#0	22.51	23.54	30.00	PASS
				RB1#0	23.48	24.51	30.00	PASS
BAND4				RB1#13	23.25	24.28	30.00	PASS
				RB1#24	23.30	24.33	30.00	PASS
	LTE/TM1	5M	MCH	RB12#0	22.47	23.50	30.00	PASS
				RB12#6	22.42	23.45	30.00	PASS
				RB12#13	22.43	23.46	30.00	PASS
				RB25#0	22.47	23.50	30.00	PASS
				RB1#0	23.54	24.57	30.00	PASS
				RB1#13	23.21	24.24	30.00	PASS
				RB1#24	23.13	24.16	30.00	PASS
			НСН	RB12#0	22.56	23.59	30.00	PASS
				RB12#6	22.31	23.34	30.00	PASS
				RB12#13	22.35	23.38	30.00	PASS
				RB25#0	22.45	23.48	30.00	PASS



Report No.: SZEM170300261304 Page: 8 of 176

			1		Page:	8 of 1 <i>1</i>	0	1
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.84	23.87	30.00	PASS
				RB1#13	22.24	23.27	30.00	PASS
				RB1#24	22.70	23.73	30.00	PASS
			LCH	RB12#0	21.43	22.46	30.00	PASS
				RB12#6	21.31	22.34	30.00	PASS
				RB12#13	21.35	22.38	30.00	PASS
				RB25#0	21.54	22.57	30.00	PASS
				RB1#0	22.73	23.76	30.00	PASS
				RB1#13	22.63	23.66	30.00	PASS
BAND4				RB1#24	22.54	23.57	30.00	PASS
	LTE/TM2	5M	МСН	RB12#0	21.4	22.43	30.00	PASS
				RB12#6	21.34	22.37	30.00	PASS
				RB12#13	21.21	22.24	30.00	PASS
				RB25#0	21.47	22.50	30.00	PASS
				RB1#0	22.57	23.60	30.00	PASS
				RB1#13	22.14	23.17	30.00	PASS
				RB1#24	22.51	23.54	30.00	PASS
			НСН	RB12#0	21.38	22.41	30.00	PASS
				RB12#6	21.35	22.38	30.00	PASS
				RB12#13	21.32	22.35	30.00	PASS
				RB25#0	21.40	22.43	30.00	PASS



Report No.: SZEM170300261304 Page: 9 of 176

		[Page:	9 of 1/	0	I
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	23.70	24.73	30.00	PASS
				RB1#25	23.47	24.50	30.00	PASS
				RB1#49	23.47	24.50	30.00	PASS
			LCH	RB25#0	22.54	23.57	30.00	PASS
				RB25#13	22.52	23.55	30.00	PASS
				RB25#25	22.62	23.65	30.00	PASS
				RB50#0	22.59	23.62	30.00	PASS
				RB1#0	23.54	24.57	30.00	PASS
				RB1#25	23.41	24.44	30.00	PASS
				RB1#49	23.43	24.46	30.00	PASS
BAND4	LTE/TM1	10M	МСН	RB25#0	22.59	23.62	30.00	PASS
				RB25#13	22.42	23.45	30.00	PASS
				RB25#25	22.44	23.47	30.00	PASS
				RB50#0	22.58	23.61	30.00	PASS
				RB1#0	23.58	24.61	30.00	PASS
				RB1#25	23.48	24.51	30.00	PASS
				RB1#49	23.36	24.39	30.00	PASS
			НСН	RB25#0	22.55	23.58	30.00	PASS
				RB25#13	22.51	23.54	30.00	PASS
				RB25#25	22.37	23.40	30.00	PASS
				RB50#0	22.56	23.59	30.00	PASS



Report No.: SZEM170300261304 Page: 10 of 176

Page: 10 of 176						·		
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.84	23.87	30.00	PASS
				RB1#25	22.78	23.81	30.00	PASS
				RB1#49	22.31	23.34	30.00	PASS
			LCH	RB25#0	21.42	22.45	30.00	PASS
				RB25#13	21.38	22.41	30.00	PASS
				RB25#25	21.41	22.44	30.00	PASS
				RB50#0	21.56	22.59	30.00	PASS
				RB1#0	22.76	23.79	30.00	PASS
				RB1#25	22.76	23.79	30.00	PASS
				RB1#49	22.55	23.58	30.00	PASS
BAND4	LTE/TM2	10M	МСН	RB25#0	21.60	22.63	30.00	PASS
				RB25#13	21.44	22.47	30.00	PASS
				RB25#25	21.32	22.35	30.00	PASS
				RB50#0	21.36	22.39	30.00	PASS
				RB1#0	22.81	23.84	30.00	PASS
				RB1#25	22.78	23.81	30.00	PASS
				RB1#49	22.72	23.75	30.00	PASS
			НСН	RB25#0	21.67	22.70	30.00	PASS
				RB25#13	21.44	22.47	30.00	PASS
				RB25#25	21.39	22.42	30.00	PASS
				RB50#0	21.30	22.33	30.00	PASS



Report No.: SZEM170300261304 Page: 11 of 176

Page: 11 of 1/6							[]	
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	23.89	24.92	30.00	PASS
				RB1#38	23.49	24.52	30.00	PASS
				RB1#74	23.78	24.81	30.00	PASS
			LCH	RB36#0	22.64	23.67	30.00	PASS
				RB36#18	22.46	23.49	30.00	PASS
				RB36#39	22.46	23.49	30.00	PASS
				RB75#0	22.60	23.63	30.00	PASS
				RB1#0	24.04	25.07	30.00	PASS
				RB1#38	23.35	24.38	30.00	PASS
BAND4				RB1#74	23.57	24.60	30.00	PASS
	LTE/TM1	15M	MCH	RB36#0	22.53	23.56	30.00	PASS
				RB36#18	22.48	23.51	30.00	PASS
				RB36#39	22.43	23.46	30.00	PASS
				RB75#0	22.53	23.56	30.00	PASS
				RB1#0	23.87	24.90	30.00	PASS
				RB1#38	23.33	24.36	30.00	PASS
				RB1#74	23.36	24.39	30.00	PASS
			HCH	RB36#0	22.55	23.58	30.00	PASS
				RB36#18	22.40	23.43	30.00	PASS
				RB36#39	22.26	23.29	30.00	PASS
				RB75#0	22.56	23.59	30.00	PASS



Report No.: SZEM170300261304 Page: 12 of 176

r				1	Page:	12 of 1	170	
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	23.30	24.33	30.00	PASS
				RB1#38	22.61	23.64	30.00	PASS
				RB1#74	22.49	23.52	30.00	PASS
			LCH	RB36#0	21.59	22.62	30.00	PASS
				RB36#18	21.42	22.45	30.00	PASS
				RB36#39	21.43	22.46	30.00	PASS
				RB75#0	21.57	22.60	30.00	PASS
				RB1#0	23.52	24.55	30.00	PASS
				RB1#38	22.18	23.21	30.00	PASS
BAND4				RB1#74	22.25	23.28	30.00	PASS
	LTE/TM2	15M	MCH	RB36#0	21.50	22.53	30.00	PASS
				RB36#18	21.54	22.57	30.00	PASS
				RB36#39	21.19	22.22	30.00	PASS
				RB75#0	21.40	22.43	30.00	PASS
				RB1#0	22.78	23.81	30.00	PASS
				RB1#38	22.21	23.24	30.00	PASS
				RB1#74	22.54	23.57	30.00	PASS
			HCH	RB36#0	21.44	22.47	30.00	PASS
				RB36#18	21.38	22.41	30.00	PASS
				RB36#39	21.34	22.37	30.00	PASS
				RB75#0	21.44	22.47	30.00	PASS



Report No.: SZEM170300261304 Page: 13 of 176

					Page:	13 of 1	170	
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	23.89	24.92	30.00	PASS
				RB1#50	23.70	24.73	30.00	PASS
				RB1#99	23.78	24.81	30.00	PASS
			LCH	RB50#0	22.77	23.80	30.00	PASS
				RB50#25	22.69	23.72	30.00	PASS
				RB50#50	22.74	23.77	30.00	PASS
				RB100#0	22.72	23.75	30.00	PASS
				RB1#0	23.96	24.99	30.00	PASS
				RB1#50	23.61	24.64	30.00	PASS
				RB1#99	23.44	24.47	30.00	PASS
BAND4	LTE/TM1	20M	МСН	RB50#0	22.96	23.99	30.00	PASS
				RB50#25	22.68	23.71	30.00	PASS
				RB50#50	22.66	23.69	30.00	PASS
				RB100#0	22.74	23.77	30.00	PASS
				RB1#0	23.88	24.91	30.00	PASS
				RB1#50	23.53	24.56	30.00	PASS
				RB1#99	23.52	24.55	30.00	PASS
			НСН	RB50#0	22.79	23.82	30.00	PASS
				RB50#25	22.69	23.72	30.00	PASS
				RB50#50	22.68	23.71	30.00	PASS
				RB100#0	22.73	23.76	30.00	PASS



Report No.: SZEM170300261304 Page: 14 of 176

					Page:	14 of ⁻	176			
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict		
				RB1#0	23.22	24.25	30.00	PASS		
						RB1#50	22.75	23.78	30.00	PASS
		2 20M	LCH	RB1#99	22.94	23.97	30.00	PASS		
				RB50#0	21.80	22.83	30.00	PASS		
				RB50#25	21.68	22.71	30.00	PASS		
				RB50#50	21.60	22.63	30.00	PASS		
				RB100#0	21.75	22.78	30.00	PASS		
	LTE/TM2		МСН	RB1#0	23.18	24.21	30.00	PASS		
				RB1#50	22.54	23.57	30.00	PASS		
				RB1#99	22.34	23.37	30.00	PASS		
BAND4				RB50#0	21.71	22.74	30.00	PASS		
				RB50#25	21.43	22.46	30.00	PASS		
				RB50#50	21.30	22.33	30.00	PASS		
				RB100#0	21.57	22.60	30.00	PASS		
			нсн	RB1#0	22.70	23.73	30.00	PASS		
				RB1#50	22.71	23.74	30.00	PASS		
				RB1#99	22.55	23.58	30.00	PASS		
				RB50#0	21.73	22.76	30.00	PASS		
				RB50#25	21.50	22.53	30.00	PASS		
				RB50#50	21.44	22.47	30.00	PASS		
				RB100#0	21.59	22.62	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 x RBW.

Detector: RMS

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-enDocument.aspx. Attention is drawn to the limitation of liability, indemnification 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 30 days only.



Report No.: SZEM170300261304 Page: 15 of 176

2 Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
		LCH	4.90	13	PASS
	TM1/20M	MCH	4.87	13	PASS
Band 4		НСН	5.01	13	PASS
Danu 4		LCH	5.91	13	PASS
	TM2/20M	MCH	5.80	13	PASS
		НСН	6.03	13	PASS

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-enDocument.aspx. Attention is drawn to the limitation of liability, indemnification 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 30 days only.



Report No.: SZEM170300261304 Page: 16 of 176

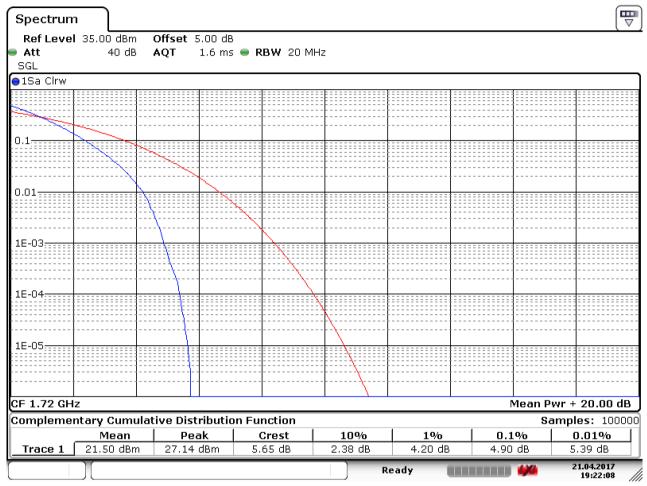
Part II - Test Plots

2.1 For LTE

2.1.1 Test Band = LTE band4



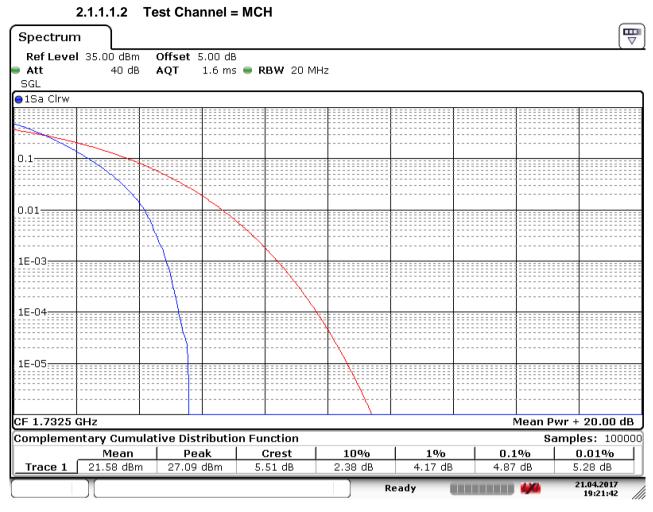
2.1.1.1.1 Test Channel = LCH



Date: 21.APR.2017 19:22:08



Report No.: SZEM170300261304 Page: 17 of 176

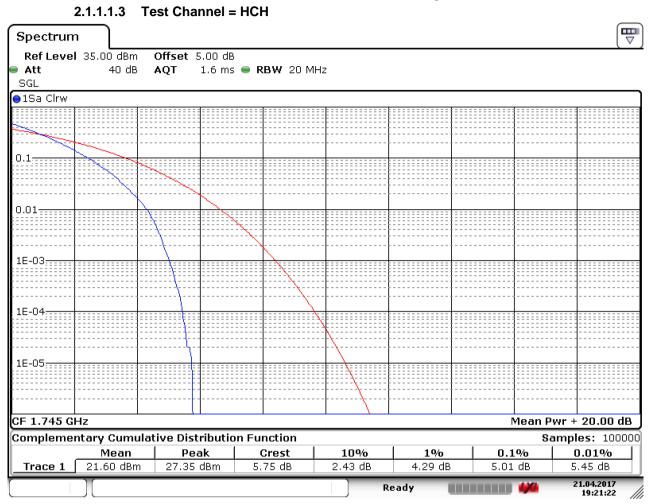


Date: 21.APR.2017 19:21:43

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-enDocument.aspx. Attention is drawn to the limitation of liability, indemnification 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 30 days only.



Report No.: SZEM170300261304 Page: 18 of 176

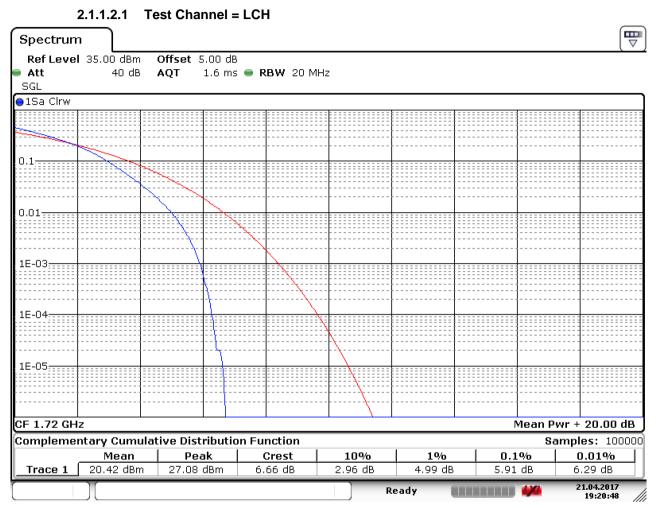


Date: 21.APR.2017 19:21:23



Report No.: SZEM170300261304 Page: 19 of 176

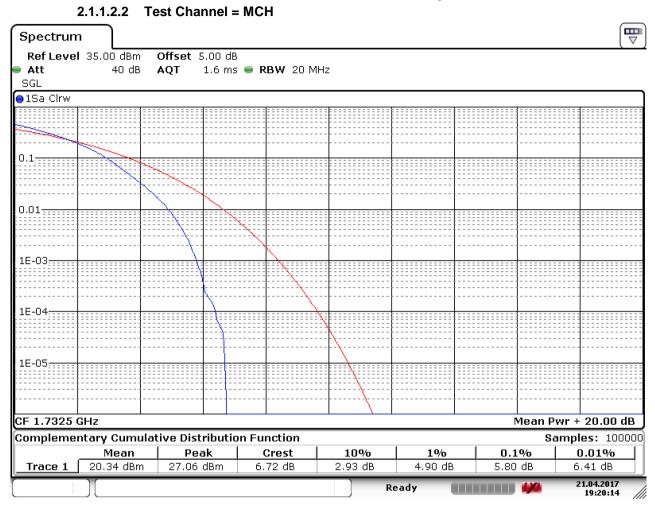
2.1.1.2 Test Mode = LTE/TM2.Bandwidth=20MHz



Date: 21.APR.2017 19:20:48



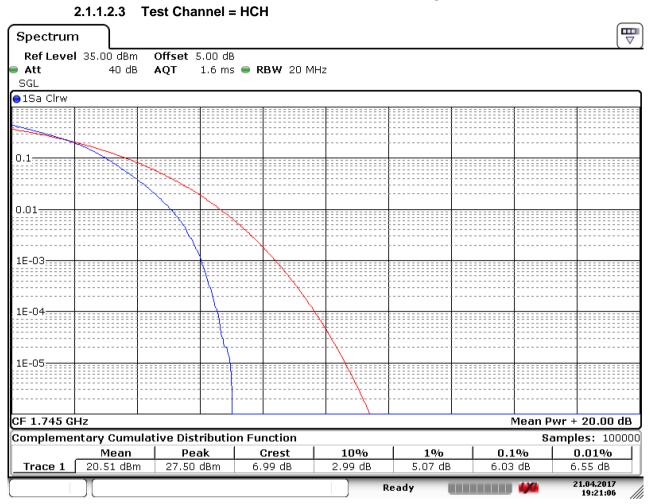
Report No.: SZEM170300261304 Page: 20 of 176



Date: 21.APR.2017 19:20:14



Report No.: SZEM170300261304 Page: 21 of 176



Date: 21.APR.2017 19:21:07



Report No.: SZEM170300261304 Page: 22 of 176

3 Modulation Characteristics

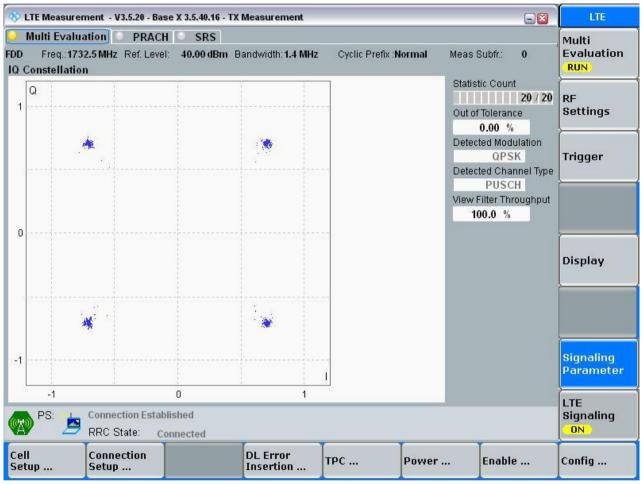
Part I - Test Plots

3.1 For LTE

3.1.1 Test Band = LTE band4

3.1.1.1 Test Mode = LTE /TM1 1.4MHz

3.1.1.1.1 Test Channel = MCH





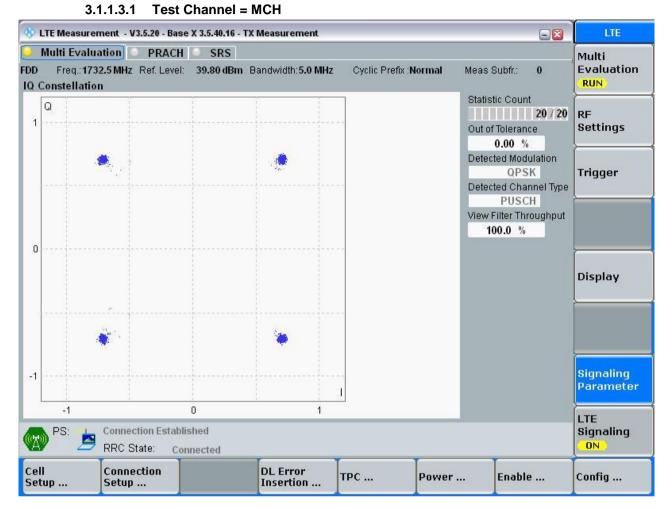
Report No.: SZEM170300261304 Page: 23 of 176

3.1.1.2.1 Test Channel = MCH (LTE Measurement - V3.5.20 - Base X 3.5.40.16 - TX Measurement LTE - 2 Multi Evaluation 💿 PRACH 🕓 SRS Multi FDD Freq.: 1732.5 MHz Ref. Level: 40.00 dBm Bandwidth: 3.0 MHz Cyclic Prefix :Normal Meas Subfr.: 0 Evaluation RUN **IQ** Constellation Statistic Count Q 20 / 20 RF 1 Settings Out of Tolerance 0.00 % Detected Modulation QPSK Trigger Detected Channel Type PUSCH View Filter Throughput 100.0 % 0 Display Signaling -1 Parameter -1 0 1 I TE Connection Established PS: Signaling RRC State: ON Connected Cell Connection **DL Error** трс ... Power ... Enable ... Config ... Setup ... Setup ... Insertion ...

3.1.1.2 Test Mode = LTE /TM1 3MHz



Report No.: SZEM170300261304 Page: 24 of 176

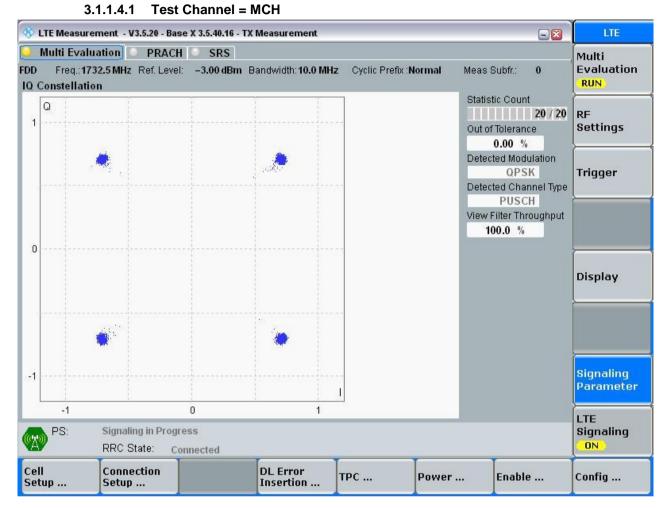


3.1.1.3 Test Mode = LTE /TM1 5MHz

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx 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 30 days only.



Report No.: SZEM170300261304 Page: 25 of 176

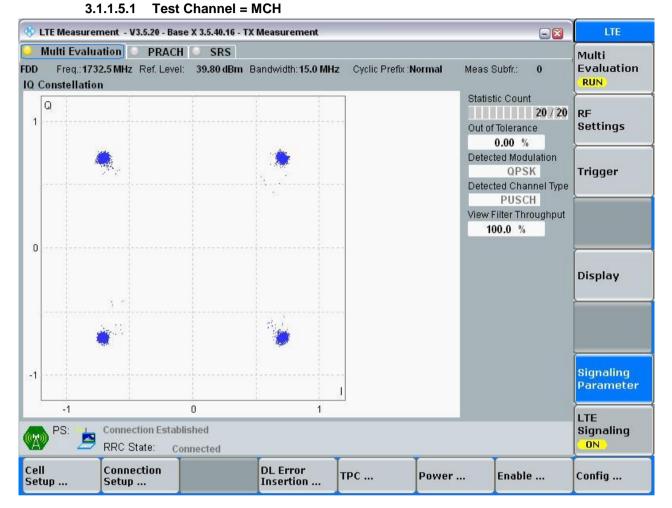


3.1.1.4 Test Mode = LTE /TM1 10MHz

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx 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 30 days only.



Report No.: SZEM170300261304 Page: 26 of 176

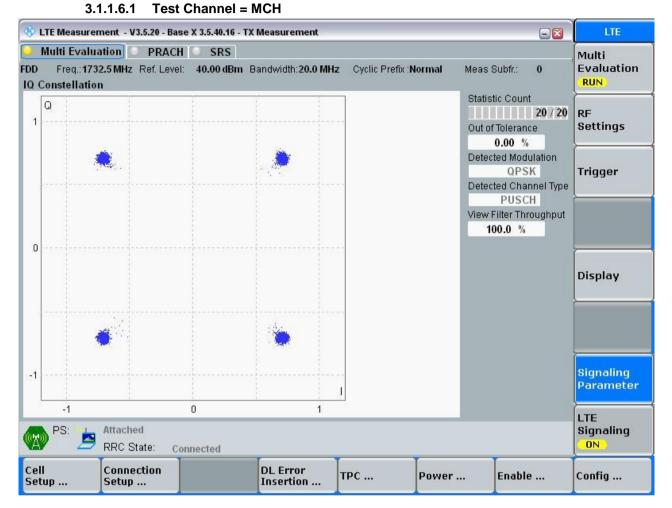


3.1.1.5 Test Mode = LTE /TM1 15MHz

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx 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 30 days only.



Report No.: SZEM170300261304 Page: 27 of 176

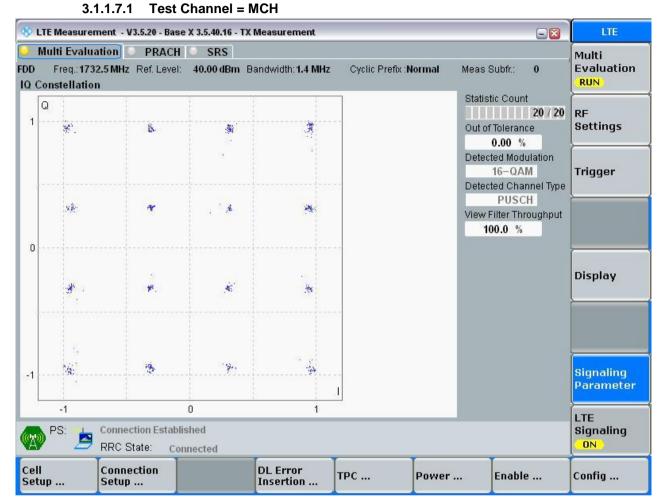


3.1.1.6 Test Mode = LTE /TM1 20MHz

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx. 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 interventions 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 document. 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 30 days only.



Report No.: SZEM170300261304 Page: 28 of 176

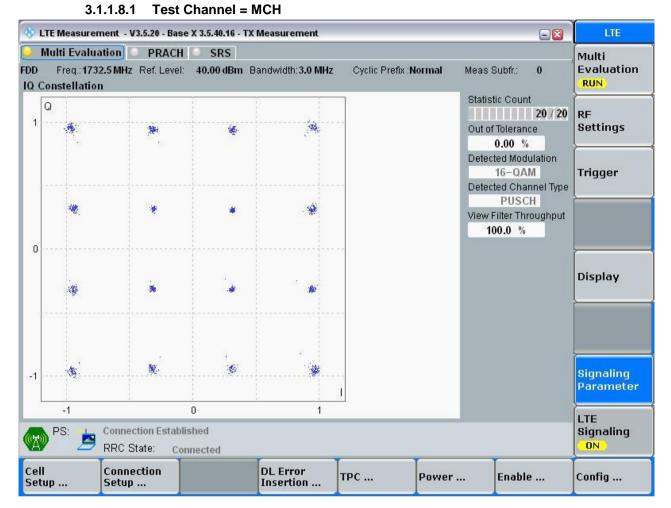


3.1.1.7 Test Mode = LTE /TM2 1.4MHz

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx. 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 document. 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 30 days only.



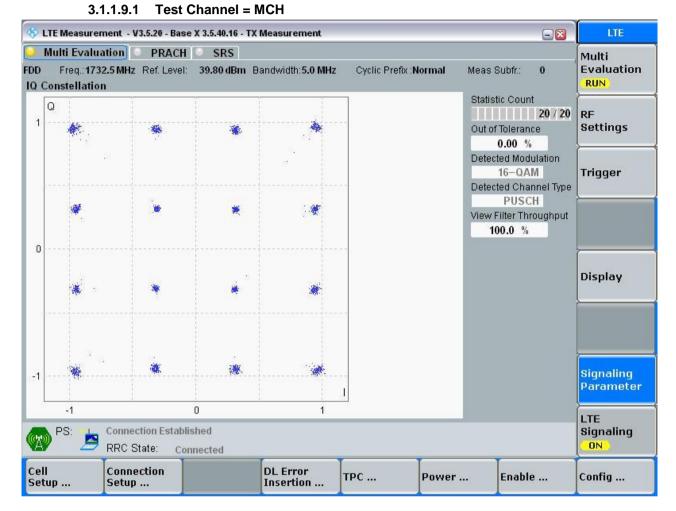
Report No.: SZEM170300261304 Page: 29 of 176



3.1.1.8 Test Mode = LTE /TM2 3MHz



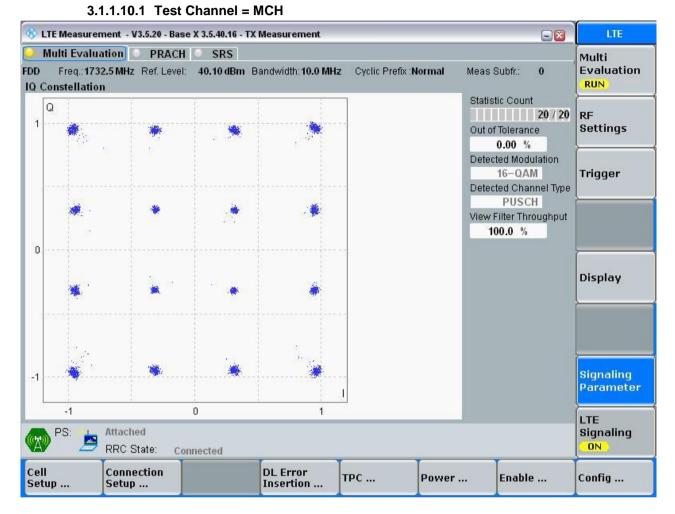
Report No.: SZEM170300261304 Page: 30 of 176



3.1.1.9 Test Mode = LTE /TM2 5MHz



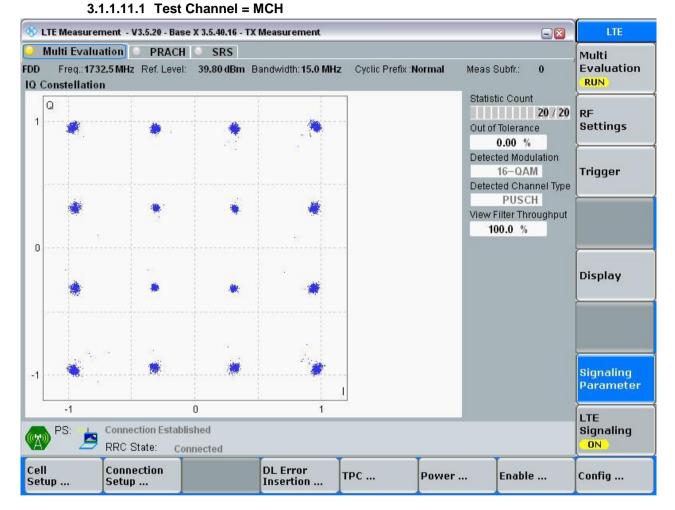
Report No.: SZEM170300261304 Page: 31 of 176



3.1.1.10 Test Mode = LTE /TM2 10MHz



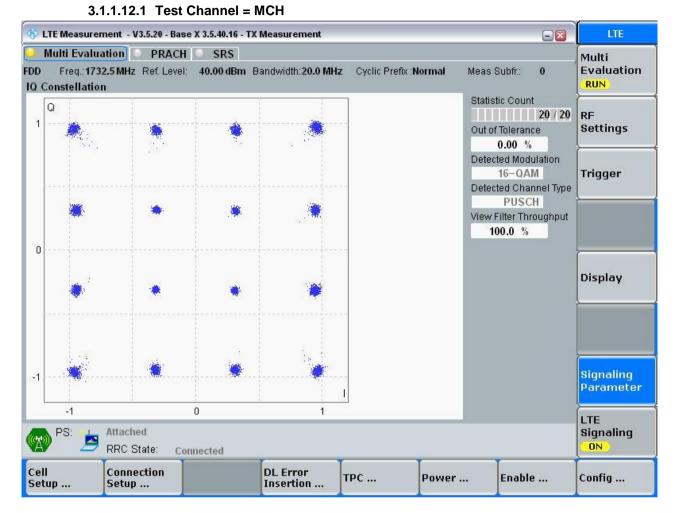
Report No.: SZEM170300261304 Page: 32 of 176



3.1.1.11 Test Mode = LTE /TM2 15MHz



Report No.: SZEM170300261304 Page: 33 of 176



3.1.1.12 Test Mode = LTE /TM2 20MHz



Report No.: SZEM170300261304 Page: 34 of 176

4 Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
		LCH	1.10	1.32	PASS
	TM1/1.4MHz	MCH	1.09	1.31	PASS
		HCH	1.11	1.30	PASS
		LCH	1.09	1.29	PASS
	TM2/1.4MHz	MCH	1.10	1.31	PASS
		HCH	1.10	1.35	PASS
		LCH	2.69	2.94	PASS
	TM1/ 3MHz	MCH	2.69	2.93	PASS
		HCH	2.69	2.95	PASS
		LCH	2.69	2.94	PASS
	TM2/3MHz	MCH	2.69	2.94	PASS
		HCH	2.69	2.94	PASS
		LCH	4.50	4.96	PASS
	TM1/ 5MHz	MCH	4.50	4.95	PASS
		HCH	4.48	4.96	PASS
		LCH	4.49	4.95	PASS
Band 2	TM2/ 5MHz	MCH	4.48	4.92	PASS
		HCH	4.49	4.98	PASS
		LCH	8.93	9.73	PASS
	TM1/10MHz	MCH	8.95	9.79	PASS
		HCH	8.93	9.73	PASS
		LCH	8.95	9.73	PASS
	TM2/ 10MHz	MCH	8.95	9.67	PASS
		HCH	8.93	9.71	PASS
		LCH	13.46	14.81	PASS
	TM1/ 15MHz	MCH	13.52	14.93	PASS
		HCH	13.49	14.93	PASS
		LCH	13.52	14.81	PASS
	TM2/ 15MHz	MCH	13.49	14.78	PASS
		HCH	13.52	14.87	PASS
		LCH	17.90	19.38	PASS
	TM1/20MHz	MCH	17.90	19.30	PASS
		HCH	17.94	19.68	PASS
		LCH	17.90	19.50	PASS
	TM2/ 20MHz	MCH	17.94	19.38	PASS
		HCH	17.90	19.52	PASS

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx. 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 30 days only.



Report No.: SZEM170300261304 Page: 35 of 176

4.1 For LTE

4.1.1 Test Band = LTE band4

4.1.1.1 Test Mode = LTE/TM1 1.4MHz

4.1.1.1.1 Test Channel = LCH

Spectrun	n]								[₩
Ref Leve Att	1 35.00 dBm		5.00 dB 👄	RBW 30 ki VBW 100 ki					
• All	40 UB	s 🥌 SWT	IU MS 🖶	YBW 100 K	H2 MODE	Auto FFT			
30 dBm						1[1] cc Bw			-0.33 dB 32170 MHz 97103 MHz
20 dBm——	D1 17.020	dBm	0.700	~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	м	1[1]			-8.95 dBm 04970 GHz
10 dBm									
0 dBm		, 	/						
-10 dBm	D2 -8.	980 dBm							
-20 dBm									
᠂᠊᠍ᠣᠦᢅ᠔ᡰᢄᡢᢇᠴ		~					<i>۲</i>	m	h
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.7107	GHz			1001	. pts			Spa	n 3.0 MHz
)[Mea	isuring		444	14.04.2017 11:38:48

Date: 14.APR.2017 11:38:49

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-enDocument.aspx. Attention is drawn to the limitation of liability, indemnification 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 30 days only.



Report No.: SZEM170300261304 Page: 36 of 176

	4.1.1.1.2	Test Cha	nnel = MC	Н					
Spectru	m								E □ □
Ref Leve	el 35.00 dBm	n Offset	5.00 dB 🔵	RBW 30 ki	Hz				
🔵 Att	40 dE	B 🔵 SWT	10 ms 👄	VBW 100 ki	Hz Mode	Auto FFT			
😑 1Pk View									
					D	1[1]			-0.32 dB
30 dBm—									30670 MHz
						cc Bw		1.0939	06094 MHz
20 dBm—					M	1[1]		1 791	-8.66 dBm 85560 GHz
	D1 17.170	dBm	TJ~~~~	$\sim\sim\sim$	www	$\gamma \gamma $		1.731	
10 dBm			ļ y			12			
0 dBm						1			
			/						
		M¥ 830 dBm 🛨					b 1		
-10 dBm—	U2 -8.								
-20 dBm—									
\sim	h	\sim					×	www.	m
-30 dBm—	· · ·								
-40 dBm—									
-+0 ubiii									
-50 dBm—									
-60 dBm—									
CF 1.732	5 CH2			1001	nts			 	n 3.0 MHz
UCF 1.732.				1001				-	11 3.0 14112
l	Ц				Mea	suring			11:35:12

Date: 14.APR.2017 11:35:12

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx. 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 30 days only.



Report No.: SZEM170300261304 Page: 37 of 176

	4.1.1.1.3	Test Cha	nnel = HC	Н					
Spectru	m								
Ref Lev	el 35.00 dBn	n Offset	5.00 dB 🔵	RBW 30 kł	Ηz				
🔵 Att	40 dE	B 🔵 SWT	10 ms 🔵	VBW 100 kł	Hz Mode	Auto FFT			
😑 1Pk View	/								
					D	1[1]			-0.28 dB
30 dBm—									30370 MHz
						cc Bw		1.1088	91109 MHz
20 dBm—	D1 18.070	dB m			M	1[1]		1 750	-7.77 dBm 64970 GHz
	DI 18.070		There	man and a second	m	$m_{\pi 2}$		1.753	04970 GHZ
10 dBm—	_		\∳			Ý			
			17						
			1						
0 dBm			1						
	D2 7	M/ .930 dBm 🗡					Q1		
-10 dBm—	02 -7.						Mr.		
	from						~~~~	m	m s-
-20 dBm—	· · · ·								- marine
-30 dBm—									
-30 ubiii—									
-40 dBm—									
-50 dBm—									
-60 dBm—									
-00 abiii									
CF 1.754	3 GHz		•	1001	pts			Spa	n 3.0 MHz
					Mea	suring		4/4	14.04.2017 11:40:00

Date: 14.APR.2017 11:40:00



Report No.: SZEM170300261304 Page: 38 of 176

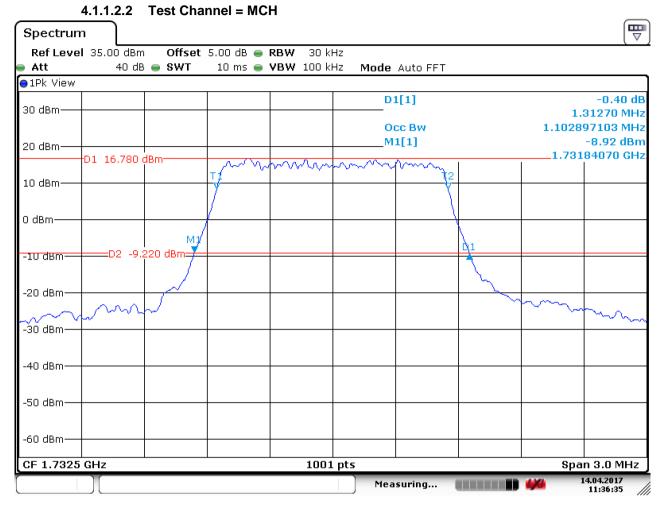
4.1.1.2 Test Mode = LTE/TM2 1.4MHz

	4.1.1.2.1	Test Cha	nnel = LC	H					_
Spectrur	n]								[₩
Ref Leve	el 35.00 dBm	n Offset	5.00 dB 🔵	RBW 30 kł	Ηz				
🛛 Att	40 dE	B 🔵 SWT	10 ms 🔵	VBW 100 kł	Hz Mode	Auto FFT			
⊖1Pk View									
					D	1[1]			-0.39 dB
30 dBm									29170 MHz
						cc Bw		1.0939	06094 MHz
20 dBm—					M	1[1]		1.710	-9.76 dBm 05860 GHz
	D1 15.970	dBm	TIMON	m	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	hmm.		1.710	103800 GH2
10 dBm			₩.	· · · ·	~~~	· ··· τ ₂			
- I-									
0 dBm			/				V		
		M≱	1				h1		
-10 dBm	D2 -10).030 dBm /							
-20 dBm—		<u> </u>					4		
		a d							
20 dBm	\sim	~~					$ \sim$	m	
-30-dBm									
-40 dBm—									
-50 dBm—									
-60 dBm									
-00 4011									
CF 1.7107	7 GHz	•	·	1001	pts		•	Spa	n 3.0 MHz
					Mea	suring		4/4	14.04.2017 11:37:50 /
								_	11:37:50

Date: 14.APR.2017 11:37:51



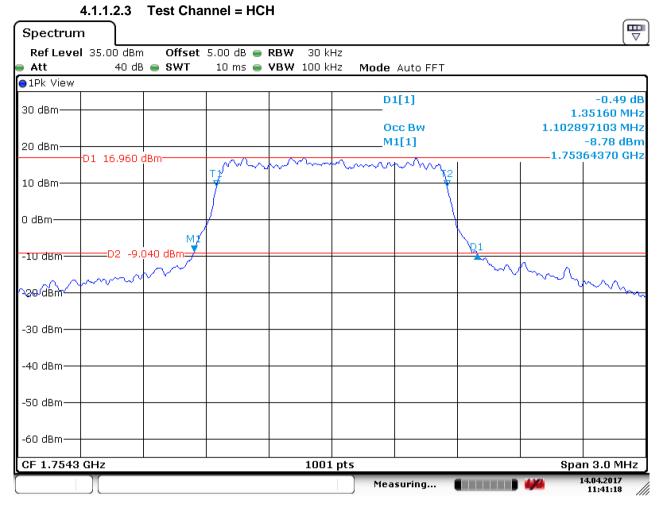
Report No.: SZEM170300261304 Page: 39 of 176



Date: 14.APR.2017 11:36:36



Report No.: SZEM170300261304 Page: 40 of 176



Date: 14.APR.2017 11:41:18



Report No.: SZEM170300261304 Page: 41 of 176

	4.1.1.3.1	Test Cha	nnel = LCH	ł					
Spectru	m								
Ref Lev	el 35.00 dBm	n Offset	5.00 dB 👄 I	RBW 30 kł	Ηz				
e Att		B 🔵 SWT	10 ms 👄 '	VBW 100 kł	Hz Mode	Auto Swe	еер		
⊖1Pk View	/	1	I						
30 dBm—					D	1[1]		0	-0.82 dB 93710 MHz
					0	CC BW			93710 MHz
20 dBm—						1[1]			11.67 dBm
20 0011							L T2	1.710	03150 GHz
10 40	-D1 14.130	dBm <u> </u>	month	romment	when	mm	www.		
10 dBm—		T Y							
0 dBm									
		M							
-10 dBm—	D2 -11	L.870 dBm					<u>d</u> 1		
							T I		
-20 dBm—									
							$1 \rightarrow \lambda$		
-30 dBm -	a mountain						- Por	man tora	1. A A
mathereduced	w							i n A Ala	Mar March
-40 dBm—									
-50 dBm—									
-60 dBm—									
CF 1.711	.5 GHz			1001	pts			_	n 6.0 MHz
					Mea	asuring		4/4	14.04.2017 11:31:09

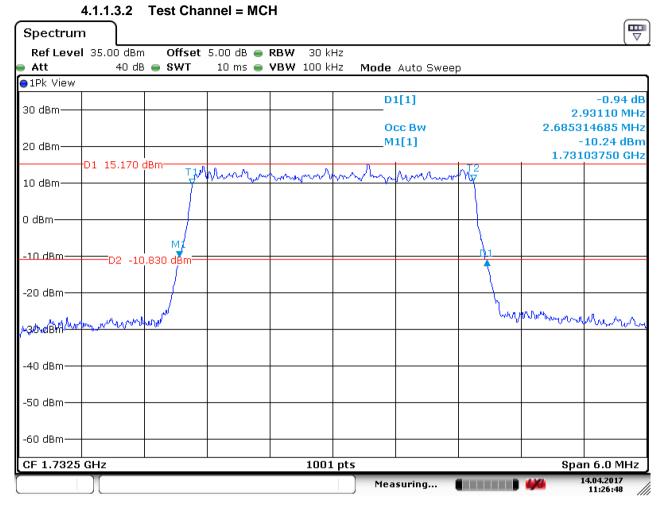
4.1.1.3 Test Mode = LTE/TM1 3MHz

Date: 14.APR.2017 11:31:09

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="http://www.sgs.com/en/Terms-and-Conditions/Terms-an



Report No.: SZEM170300261304 Page: 42 of 176



Date: 14.APR.2017 11:26:48



Report No.: SZEM170300261304 Page: 43 of 176

	4.1.1.3.3	Test Cha	nnel = HCl	H					
Spectrun	n								
Ref Leve	I 35.00 dBm	n Offset	5.00 dB 👄	RBW 30 kł	Ηz				
🔵 Att	40 dE	B 🔵 SWT	10 ms 😑	VBW 100 kł	Hz Mode	Auto Swee	р		
⊖1Pk View									
30 dBm					D	1[1]			-0.50 dB
50 GDIII					0	CC BW			94910 MHz 08691 MHz
00 JD						1[1]			11.41 dBm
20 dBm									02550 GHz
	D1 14.200	dBm T1	anno an	www.	manne	mont	Mar 1		
10 dBm——							1		
0 dBm							$\left \right $		
-10 dBm—	D2 11	<u>M1</u> 1.800 dBm					41		
	02 -11	1 7					1 N.	man	
-20 dBm	to mar March	a Crandon					··· VH	mul mund	mahama
CHCH WOW									
-30 dBm									
-40 dBm									
10 abiii									
-50 dBm									
-50 UBIII									
co in									
-60 dBm									
CF 1.7535	GHz	I	I	1001	pts	I	I	Spa	n 6.0 MHz
)[) Mea	suring		4/4	14.04.2017 11:32:47

Date: 14.APR.2017 11:32:48



Report No.: SZEM170300261304 Page: 44 of 176

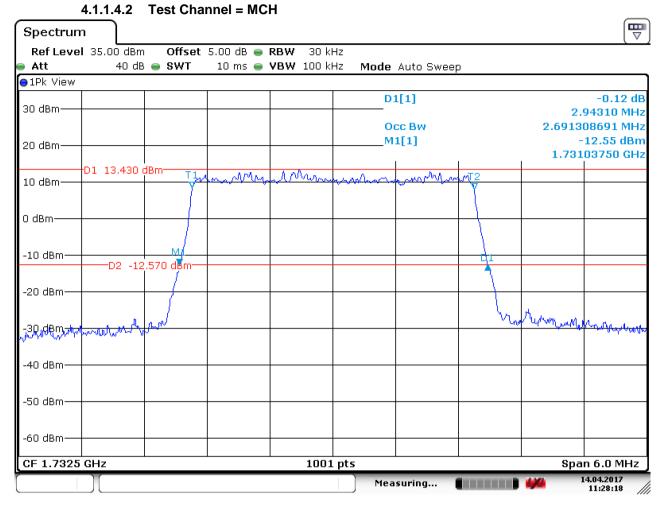
	4.1.1.4.1	Test Cha	nnel = LCH						_
Spectru	m								
Ref Lev	el 35.00 dBm	1 Offset	5.00 dB 🥌 RB	W 30 kHz					
🔵 Att	40 dE	B 👄 SWT	10 ms 👄 VB	W 100 kHz	Mode	Auto Swe	ер		
😑 1Pk View	i i i i i i i i i i i i i i i i i i i								
					D	1[1]			-0.61 dB
30 dBm—						_			94310 MHz
						CC BW			14685 MHz
20 dBm—					IVI	1[1]			12.68 dBm 03150 GHz
	D1 13.180	 dp::::::::::::::::::::::::::::::::::::						1.710	00100 0112
10 dBm—	DI 13.180	4 7 ~	amore Asam	and sounds	314Aa	مهمدمهمهم	wrt ²		
0 dBm									
		M							
-10 dBm—		2,820 dBm-					L 1		
-20 dBm—		<u>├ </u>							
							1		
-30 dBm—		- m					- lut	b	
when	varment and	~					~~~	Muture w	wy Murthine
-40 dBm—									
-40 0011									
-50 dBm—									
-60 dBm—									
CF 1.711	5 CU2			 1001 p	te				n 6.0 MHz
				1001 h	<u> </u>			-	4.04.2017
					Mea	suring		4	11:29:52

4.1.1.4 Test Mode = LTE/TM2 3MHz

Date: 14.APR.2017 11:29:52



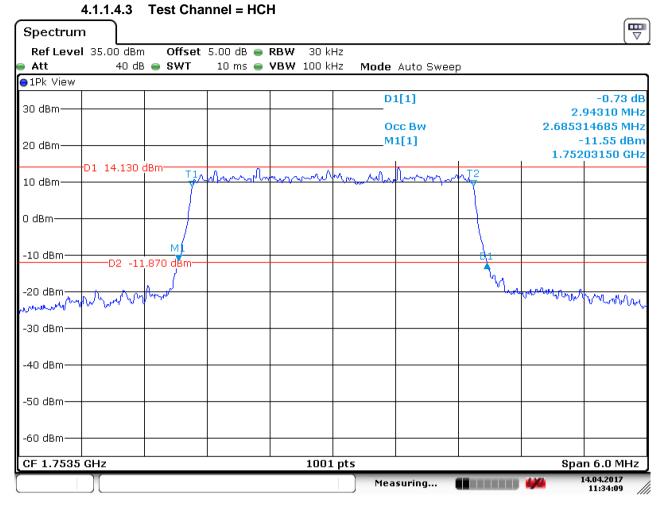
Report No.: SZEM170300261304 Page: 45 of 176



Date: 14.APR.2017 11:28:18



Report No.: SZEM170300261304 Page: 46 of 176



Date: 14.APR.2017 11:34:10



4.1.1.5 Test Mode = LTE/TM1 5MHz

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

Report No.: SZEM170300261304 Page: 47 of 176

4.1.1.5.1 Test Channel = LCH ₽ Spectrum Ref Level 35.00 dBm Offset 5.00 dB 👄 RBW 50 kHz 40 dB 🖷 SWT 10 ms 👄 **VBW** 200 kHz Att Mode Auto Sweep ●1Pk View D1[1] -1.06 dB 30 dBm-4.95500 MHz Occ Bw 4.495504496 MHz -12.31 dBm M1[1] 20 dBm-1.71002200 GHz Τ1 D1 13.680 dBm-Filland mark the way were and monun 10 dBm-0 dBm--10 dBm--D2 -12.320 d8m--20 dBm--30 dBm WHE Leven more the лJr -40 dBm· -50 dBm--60 dBm-Span 10.0 MHz CF 1.7125 GHz 1001 pts 14.04.2017 Measuring... 11:21:06

Date: 14.APR.2017 11:21:07



Report No.: SZEM170300261304 Page: 48 of 176

	4.1.1.5.2	Test Cha	nnel = MC	н					
Spectru	m								
Ref Levo	el 35.00 dBm	n Offset	5.00 dB 🔵	RBW 50 ki	Ηz				
🗕 Att	40 dE	B 👄 SWT	10 ms 😑	VBW 200 ki	Hz Mode	Auto Swee	р		
⊖1Pk View									
20 40					D	1[1]			-0.64 dB
30 dBm—						_			94500 MHz
						CC BW			04496 MHz 11.71 dBm
20 dBm—						1[1]			03200 GHz
	D1 13.810	dBm	na. A A 1	0.8 A . 0			<u> </u>		
10 dBm—			row www.	Munn	www.www.wc	www.ww	The second secon		
0 dBm									
10 40		мź							
-10 dBm—	D2 -12	2.190 dBm							
-20 dBm—									
	a she as a						1 Wa	W Marchenson	the second
₩96VasAnt	and any my man	1n/ ^w							mumu
-40 dBm—									
-50 dBm—									
-JU UBIII—									
-60 dBm—									
CF 1.732	」 5 GHz	1	1	1001	pts	1	1	 Span	10.0 MHz
	Υ					suring			14.04.2017
						5 an ingin			11:03:11

Date: 14.APR.2017 11:03:11



Report No.: SZEM170300261304 Page: 49 of 176

	4.1.1.5.3	Test Cha	nnel = HCF	1					
Spectru	m								
Ref Leve	el 35.00 dBn	n Offset	5.00 dB 🔵 F	RBW 50 kH	Ηz				
🖷 Att	40 d£	B 😑 SWT	10 ms 👄	/BW 200 kł	Hz Mode	Auto Swee	р		
😑 1Pk View									
					D	1[1]			-0.57 dB
30 dBm—									95500 MHz
						CC BW			24476 MHz
20 dBm					W	1[1]			11.48 dBm 02200 GHz
	D1 14.450	dBm T1					1.72	1.750	02200 0112
10 dBm—		F 7	ann han hann	and when	, and a should be	www.www	1/7 		
0 dBm									
		M					$ \rangle$		
-10 dBm—	D2 -1:	1.550 dem							
							1		
-20 dBm—		and a					7,000,0	A And Marine A	to marshe have
when the	mann								1. 202
-30 dBm—									
-40 dBm—									
-40 ubiii—									
-50 dBm—									
-60 dBm—									
				1001	nte			0	10.0 MU-
CF 1.752	o GHZ			1001	prs		_		10.0 MHz
l					Mea	suring			14.04.2017 11:22:46

Date: 14.APR.2017 11:22:46



Report No.: SZEM170300261304 Page: 50 of 176

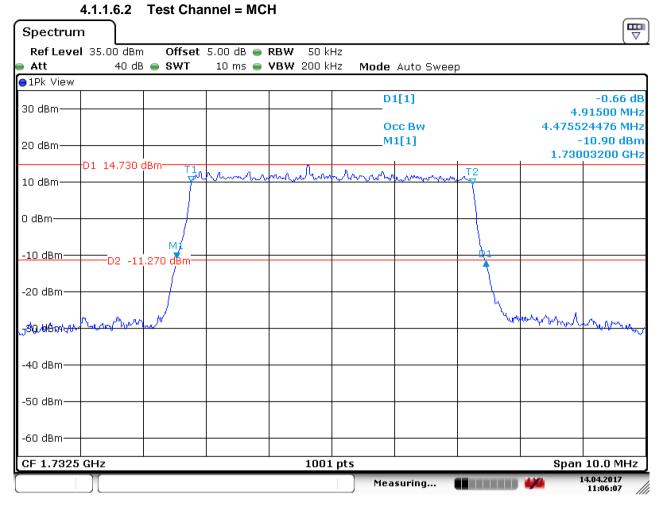
4.1.1.6.1 Test Channel = LCH ₽ Spectrum Ref Level 35.00 dBm Offset 5.00 dB 👄 RBW 50 kHz 40 dB 🖷 SWT 10 ms 👄 **VBW** 200 kHz Att Mode Auto Sweep ●1Pk View D1[1] -1.71 dB 30 dBm-4.94500 MHz Occ Bw 4.485514486 MHz -12.36 dBm M1[1] 20 dBm-1.71004200 GHz тs D1 12.720 dBmthe Man where a compart to reason wanna 10 dBm-0 dBm--10 dBmñн -D2 -13.280 dBm⁻ -20 dBm--30 dBm-Mart When have mark ul mouth present -40 dBm--50 dBm--60 dBm-Span 10.0 MHz CF 1.7125 GHz 1001 pts 14.04.2017 Measuring... 11:20:02

4.1.1.6 Test Mode = LTE/TM2 5MHz

Date: 14.APR.2017 11:20:03



Report No.: SZEM170300261304 Page: 51 of 176



Date: 14.APR.2017 11:06:07



Report No.: SZEM170300261304 Page: 52 of 176

Spectrum									
	35.00 dBm		5.00 dB 😑						
Att	40 dB	🖷 SWT	10 ms 👄	VBW 200 kł	Hz Mode	Auto Swe	ер		
⊖1Pk View									
30 dBm					D	1[1]		4.	-0.43 dB 97500 MHz
					0	cc Bw			14486 MHz
20 dBm					M	1[1]			12.70 dBm
						1	1	1.750	02200 GHz
10 dBm	D1 13.060 (dBm T1, קייי	month	mmmm	multh	much	$\sqrt{\frac{12}{7}}$		
0 dBm									
		Ma							
-10 dBm							<u> </u>		
00 40							L L		
-20 dBm	warman	w					- Contraction	mound	nahan
UNNED BOOM									
-30 dBm——									
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.7525	GHz	l	I	1001	pts	I		Span	10.0 MHz
					Mea	isuring		4/4	14.04.2017 11:24:28

4.1.1.6.3 Test Channel = HCH

Date: 14.APR.2017 11:24:29



Report No.: SZEM170300261304 Page: 53 of 176

4.1.1.7.1 Test Channel = LCH ₽ Spectrum Ref Level 35.00 dBm Offset 5.00 dB 👄 RBW 100 kHz 40 dB 🖷 SWT 10 ms 👄 **VBW** 300 kHz Att Mode Auto Sweep ●1Pk View D1[1] -0.85 dB 30 dBm-9.7300 MHz Occ Bw 8.931068931 MHz -10.82 dBm M1[1] 20 dBm-1.7101650 GHz D1 14.590 dBm τ. monwhan monthe mond WA. 10 dBm-0 dBm-M -10 dBm--D2 -11.410 dBm--20 dBm-Burn hangya -30 dBm----40 dBm· -50 dBm--60 dBm-Span 20.0 MHz CF 1.715 GHz 1001 pts 14.04.2017 Measuring... 11. 10:57:34

4.1.1.7 Test Mode = LTE/TM1 10MHz

Date: 14.APR.2017 10:57:35



Report No.: SZEM170300261304 Page: 54 of 176

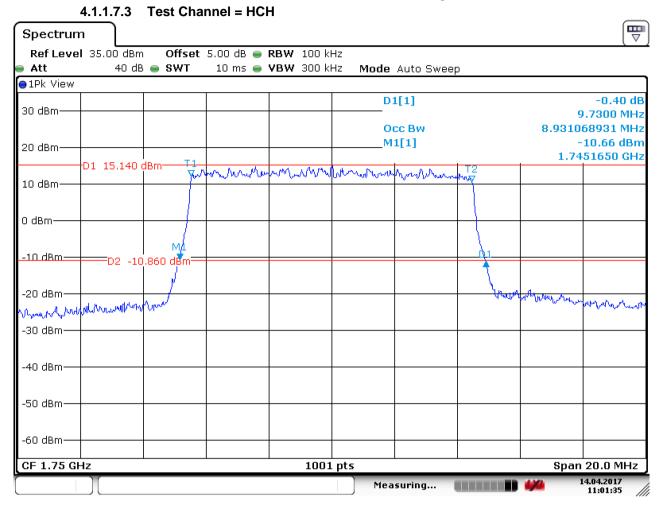
Spectrum	ı)								
	35.00 dBm			RBW 100 k					
● Att ●1Pk View	40 aB	s 👄 SWT	10 ms 👄	VBW 300 k	Hz Mode	Auto Swee	ep		,
30 dBm						1[1] cc Bw			-0.36 dB 9.7900 MHz 48951 MHz
20 dBm						1[1]	L TO	-	11.70 dBm 75650 GHz
10 dBm	D1 13.960 (www.www.w	- AND	MARINAN	Longe Clark	www		
0 dBm									
-10 dBm—	D212	M1 2.040 dBm					<u>dı</u>		
-20 dBm								ille a	
ABONYBAN	al and the second states and the	r\0					т~W,	Maurin	madelinan
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.7325	GHz			100	1 pts			_	20.0 MHz
					Mea	isuring		4/4	14.04.2017

4.1.1.7.2 Test Channel = MCH

Date: 14.APR.2017 10:56:08



Report No.: SZEM170300261304 Page: 55 of 176



Date: 14.APR.2017 11:01:35



4.1.1.8 Test Mode = LTE/TM2 10MHz

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

Report No.: SZEM170300261304 Page: 56 of 176

4.1.1.8.1 Test Channel = LCH ₽ Spectrum Ref Level 35.00 dBm Offset 5.00 dB 👄 RBW 100 kHz 40 dB 🖷 SWT 10 ms 👄 **VBW** 300 kHz Att Mode Auto Sweep ●1Pk View D1[1] -1.46 dB 30 dBm-9.7300 MHz Occ Bw 8.951048951 MHz M1[1] -12.01 dBm 20 dBm-1.7101450 GHz D1 13.480 dBm-T 1 wyhand buch war with when when w 10 dBm-0 dBm-M -10 dBmri 1 -D2 -12.520 dBm--20 dBmտ $c^{30}dBn = c$ Amer -40 dBm· -50 dBm--60 dBm-Span 20.0 MHz CF 1.715 GHz 1001 pts 14.04.2017 Measuring... 11. 10:58:42

Date: 14.APR.2017 10:58:42



Report No.: SZEM170300261304 Page: 57 of 176

Spectrum	,)								
Ref Level	35.00 dBm	Offset	5.00 dB 👄	RBW 100 kH	z				``````````````````````````````````
e Att	40 dB	🖷 SWT	10 ms 👄	VBW 300 kH	z Mode	Auto Swee	р		
●1Pk View			1						
30 dBm						1[1]			-1.21 dB 9.6700 MHz
20 dBm						сс Вw 1[1]		-	48951 MHz 11.69 dBm 76650 GHz
10 dBm	D1 14.240 (houhan	mmun	munu	www.A			
0 dBm									
-10 dBm	D2 -11	 760 dBm—							
-20 dBm									
~ ^{;30,} d&n,~~~	₁ 44.JulN	w						Mryans	www.
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.7325	GHz			1001	pts			-	20.0 MHz
					Mea	suring		4/4	14.04.2017 10:54:43 //

4.1.1.8.2 Test Channel = MCH

Date: 14.APR.2017 10:54:43



Report No.: SZEM170300261304 Page: 58 of 176

	4.1.1.8.3	Test Cha	nnel = HCH						
Spectru	m								
Ref Leve	el 35.00 dBm	n Offset	5.00 dB 🥌 RI	BW 100 kł	Ηz				<u>`</u>
🗕 Att	40 dE	B 👄 SWT	10 ms 🥃 V l	BW 300 kł	Hz Mode	Auto Sweej	р		
⊖1Pk View									
00 JP					D	1[1]			-0.40 dB
30 dBm—						_			0.7100 MHz
						CC BW			68931 MHz
20 dBm—					IVI	1[1]			11.60 dBm 51450 GHz
	D1 14.090	dBm 			1		L 19	1.74	01400 0112
10 dBm		y ym	Manuna	man	mmm	monday	wit		
0 dBm									
		M							
-10 dBm—	D2 -11	1.910 dBm					<u> <u>1</u></u>		
		1 (7		
-20 dBm—		<u> </u>					$ \rightarrow $		
ь. В	Jan Summer	Mar Mar					Willow	and more and	manhal
ኢ/አቀላሌላሳ -30 dBm—	Area and a								· · · • •
40. d0									
-40 dBm—									
-50 dBm—									
-60 dBm—									
CF 1.75 G	Hz			1001	pts				20.0 MHz
l	П				Mea	suring		444	14.04.2017 11:00:25

Date: 14.APR.2017 11:00:25



Report No.: SZEM170300261304 Page: 59 of 176

4.1.1.9.1 Test Channel = LCH ₽ Spectrum Ref Level 35.00 dBm Offset 5.00 dB 👄 RBW 300 kHz 40 dB 👄 SWT 10 ms 👄 **VBW** Att 1 MHz Mode Auto Sweep ●1Pk View -0.76 dB D1[1] 30 dBm-14.8050 MHz Occ Bw 13.456543457 MHz -8.05 dBm M1[1] 20 dBm-1.7101270 GHz D1 17.170 dBm-10 dBm-0 dBm-M -D2 -8.830 dBm -10 dBm--20 dBm--30 dBm--40 dBm· -50 dBm--60 dBm-Span 30.0 MHz CF 1.7175 GHz 1001 pts 14.04.2017 Measuring... (.) 🦇 10:49:38

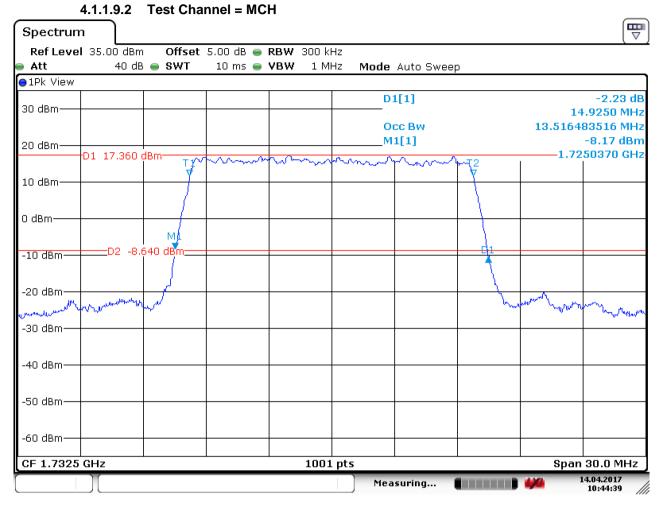
Date: 14.APR.2017 10:49:38

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.Terms-en-Document.aspx Attention is draven 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 is ensybely to the company 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 30 days only.

4.1.1.9 Test Mode = LTE/TM1 15MHz



Report No.: SZEM170300261304 Page: 60 of 176



Date: 14.APR.2017 10:44:40



Report No.: SZEM170300261304 Page: 61 of 176

	4.1.1.9.3	Test Cha	nnel = HCH						
Spectrur	n								
Ref Leve	el 35.00 dBn	n Offset	5.00 dB 🔵 R	.BW 300 kH	Ηz				
🗕 Att	40 d£	B 👄 SWT	10 ms 👄 V	' BW 1 MH	Hz Mode	Auto Swe	ер		
⊖1Pk View	-								
30 dBm					D	1[1]			-1.54 dB
30 UDIII						cc Bw			13487 MHz
						сс вw 1[1]		13,4805	-8.15 dBm
20 dBm	D1 17.300	dBm	m	~~~ ^^				1.74	00070 GHz
		7 ~				m	Υ¥ [°]		
10 dBm							+ +		
0 dBm		\vdash					+		
		M							
-10 dBm—	D2 -8.	.700 dBm <u></u>							
-20 dBm~~	· · · · · · · · · · · · · · · · · · ·						Min	mary	- And the second
- Winter	m	mannet							
-30 dBm—									
-30 ubiii—									
-40 dBm—									
-50 dBm—									
-60 dBm—									
				1001	nte				20.0 MU-
CF 1.7475				1001					30.0 MHz
					Mea	asuring			10:51:00

Date: 14.APR.2017 10:51:01



Report No.: SZEM170300261304 Page: 62 of 176

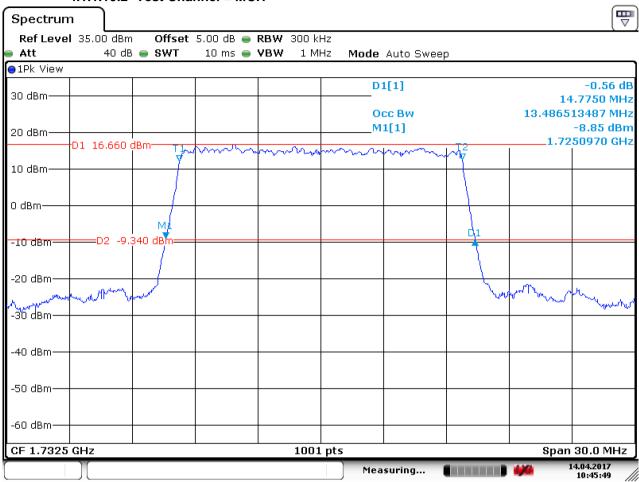
4.1.1.10.1 Test Channel = LCH ₽ Spectrum Ref Level 35.00 dBm Offset 5.00 dB 👄 RBW 300 kHz 40 dB 👄 SWT 10 ms 👄 **VBW** Att 1 MHz Mode Auto Sweep ●1Pk View D1[1] -1.16 dB 30 dBm-14.8050 MHz Occ Bw 13.516483516 MHz -8.78 dBm M1[1] 20 dBm-1.7101270 GHz D1 16.470 dBm-10 dBm-0 dBm-M) =D2 -9.530 dBm -10 dBm--20 dBm--30 dBm--40 dBm· -50 dBm--60 dBm-Span 30.0 MHz CF 1.7175 GHz 1001 pts 14.04.2017 Measuring... 10:47:27

4.1.1.10 Test Mode = LTE/TM2 15MHz

Date: 14.APR.2017 10:47:27



Report No.: SZEM170300261304 Page: 63 of 176



4.1.1.10.2 Test Channel = MCH

Date: 14.APR.2017 10:45:49



Report No.: SZEM170300261304 Page: 64 of 176

Spectrum	ı								
Ref Level				RBW 300 kH					
Att 1Pk View	40	dB 👄 SWT	10 ms 👄	VBW 1 MH	HZ Mode	Auto Swei	ер		,
30 dBm					D	1[1]		14	-0.54 dB I.8650 MHz
20 dBm	D1 16.81	0.d8m			M	CC BW 11[1]			83516 MHz -8.81 dBm 00670 GHz
10 dBm	01 10.01			-	·····		₩ ²		
0 dBm							+		
-10 dBm	D2 -	9.190 dBm=							
-20 dBm	Mayland and and and and and and and and and							and the second	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
-30 dBm									
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.7475	GHz			1001				-	30.0 MHz
					Mea	asuring		4/4	10:52:17

4.1.1.10.3 Test Channel = HCH

Date: 14.APR.2017 10:52:18



Report No.: SZEM170300261304 Page: 65 of 176

4.1.1.11 Test Mode = LTE/TM1 20MHz

4.1.1.11.1 Test Channel = LCH

Spectrur	n]								
Ref Leve Att	1 35.00 dBm) Offset		RBW 300 ki		Auto C			
• All • 1Pk View	40 UE	5WI	10 ms 👄	VBW 1 M	H2 MOQE	Auto Swe	зер		
30 dBm						1[1] cc Bw			-0.72 dB 0.3810 MHz 97902 MHz
20 dBm	D1 16.830	dBm		man	M	1[1] mm	~~ ~ }		-8.92 dBm 03700 GHz
10 dBm									
0 dBm		M							
-10 dBm—	D2 -9.	170 dBm===							
	whenthe	rhout					- www	www.www.	WWWWWWW
-40 dBm—									
-50 dBm—									
-60 dBm—									
CF 1.72 G	Hz			1001		curina	6	-	40.0 MHz
L					Mea	suring			10:39:46

Date: 14.APR.2017 10:39:47



Report No.: SZEM170300261304 Page: 66 of 176

Spectrum	ı								
	l 35.00 dBm			RBW 300 k					`
Att	40 dB	e swt	10 ms 👄	VBW 1 M	Hz Mode	Auto Swee	p		
⊖1Pk View	1		1	1	1				
30 dBm					D	1[1]			-0.77 dB
oo abiii						cc Bw	19.3010 MHz 17.902097902 MHz		
						1[1]		17.9020	-8.78 dBm
20 dBm	D1 16.760 (1.72	28300 GHz
	DI 10.700 (y y w	hammen	mound	manual	manue	4~7₽		
10 dBm							+		
							1 {		
0 dBm		/					+		
		м							
-10 dBm	D2 -9.:	240 dBm ====					<u>D1</u>		
							T		
-20 dBm									
-20 ubiii		, d					line in the second s	.ut	
-30 dBm	and by correction when	Mail					M. M.	" Universite	mun
-30 dBm									
-40 dBm——									
-50 dBm									
-60 dBm									
								_	
CF 1.7325	GHz			1001	L pts				40.0 MHz
[Д				Mea	suring		4/4	14.04.2017 10:34:40

4.1.1.11.2 Test Channel = MCH

Date: 14.APR.2017 10:34:41



Report No.: SZEM170300261304 Page: 67 of 176

Spectrun	n)								
	I 35.00 dBm			RBW 300 k					
Att	40 dB	SWT 😑 SWT	10 ms 👄	VBW 1 M	Hz Mode	Auto Swee	ер		
⊖1Pk View		1	1	1		4541			
30 dBm					D.	1[1]		10	-0.92 dB 9.6750 MHz
					0	cc Bw			57942 MHz
20 dBm					M	1[1]			-9.29 dBm
20 00111	D1 16.250	۱ dBm 	hand	1. M 01		man	1.12	1.73	52100 GHz
10 -10		∀	No Correction	me m	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	and we want	Mr.		
10 dBm									
							$ \rangle$		
0 dBm							+		
		M					1		
-10 dBm	D2 -9.1	750 dBm							
-20 dBm	a deer man	nor -					- Longer	mound	. 0
wary browner									and the
-30 dBm									
-40 dBm									
-+0 ubm									
-50 dBm—									
-60 dBm—									
CF 1.745 (L GHz	1		1001	. pts			l Span	40.0 MHz
) (suring		-	14.04.2017
									10:41:57 //

4.1.1.11.3 Test Channel = HCH

Date: 14.APR.2017 10:41:58



Report No.: SZEM170300261304 Page: 68 of 176

4.1.1.12 Test Mode = LTE/TM2 20MHz

4.1.1.12.1	Test Channel = LCH	

Spectrun	n]								
Ref Leve Att	l 35.00 dBm 40 dB		5.00 dB 👄 10 ms 👄	RBW 300 k VBW 1 M		A			
ALL 1Pk View	40 UE) 🖶 อพา	IU MS 🖷	ARM T M	HZ MODE	Auto Swee	p		
30 dBm						1[1] cc Bw			-0.37 dB 9.5000 MHz 97902 MHz
20 dBm	D1 15.540	dBm			M	1[1]	1 T2	-	10.09 dBm 02100 GHz
10 dBm			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Mar Marine M Marine Marine M Marine Marine M	mm				
0 dBm									
-10 dBm	D2 -10).460 dBm 							
-20 dBm							home	myrrining	non o
~430 dBm	e have north	1,44,400 ·							a marine line
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.72 GI	Hz			1001		suring	.	-	40.0 MHz
(isuring			10:38:13

Date: 14.APR.2017 10:38:13



Report No.: SZEM170300261304 Page: 69 of 176

Spectrum	ι								E
Ref Level	I 35.00 dBm	n Offset	5.00 dB 👄	RBW 300 k	Hz				`
🔵 Att	40 dB	s 🔵 SWT	10 ms 👄	VBW 1 M	Hz Mode	Auto Swee	эр		
●1Pk View									
30 dBm						1[1] cc Bw			-0.29 dB 3810 MHz 57942 MHz
20 dBm	D1 15.600				M	1[1]		-	10.18 dBm 28300 GHz
10 dBm	51 13.000		h	hand	-~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	how them	vnvž		
0 dBm									
-10 dBm	D2 -10).400 dBm 					<u>d1</u>		
-20 dBm							+		
-20 0Bm 	mark mark	hard					- we	mun	www.
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.7325	GHz		·	1001	pts	·		Span	40.0 MHz
					Mea	suring) 🧰 🧵	14.04.2017 10:36:05

4.1.1.12.2 Test Channel = MCH

Date: 14.APR.2017 10:36:05



Report No.: SZEM170300261304 Page: 70 of 176

Spectrum									
	l 35.00 dBm			RBW 300 ki					(-
Att	40 dE	B 👄 SWT	10 ms 👄	VBW 1 M	Hz Mode	Auto Swee	р		
⊖1Pk View									
30 dBm						1[1] cc Bw			-1.11 dB 5150 MHz 97902 MHz
20 dBm					M	1[1]			-9.34 dBm 52900 GHz
10 dBm	D1 16.280		van	mmm	mann	warran			
0 dBm									
-10 dBm	D2 -9.	м <u>і</u> 720 dвт							
-20 dBm-							- Contraction of the second se	Alleria	
	work for the the	nutr						Multure	1 with which
-30 dBm									
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.745 G	Hz			1001	pts			 Span	40.0 MHz
(][suring			4.04.2017 10:43:13

4.1.1.12.3 Test Channel = HCH

Date: 14.APR.2017 10:43:14



Report No.: SZEM170300261304 Page: 71 of 176

5 Band Edges Compliance

Part I –

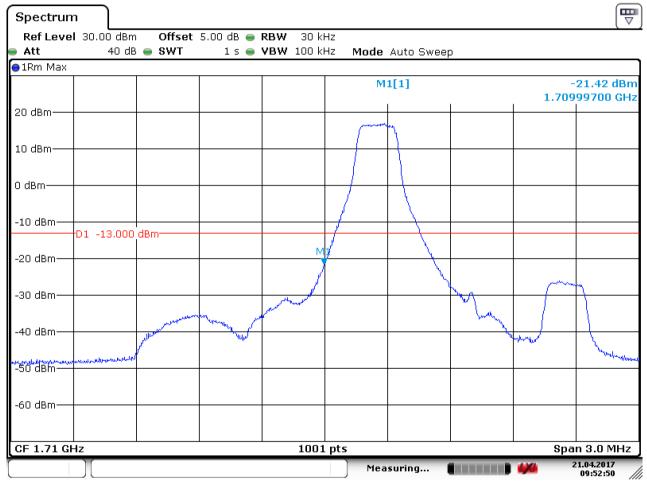
5.1 For LTE

5.1.1 Test Band = LTE band4

5.1.1.1 Test Mode = LTE/TM1 1.4MHz

5.1.1.1.1 Test Channel = LCH

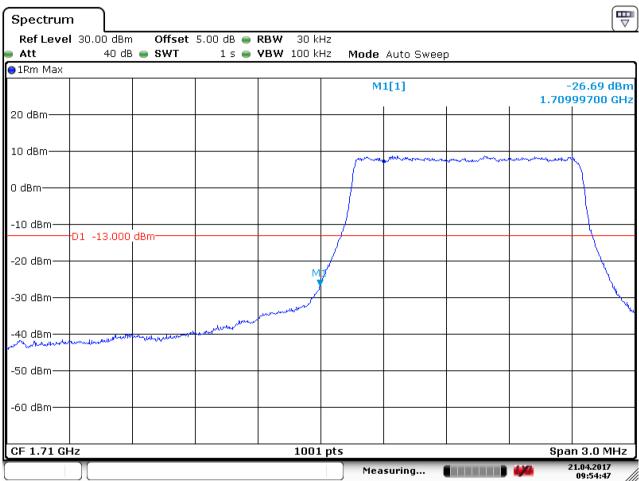
5.1.1.1.1.1 Test RB=1RB



Date: 21.APR.2017 09:52:50



Report No.: SZEM170300261304 Page: 72 of 176

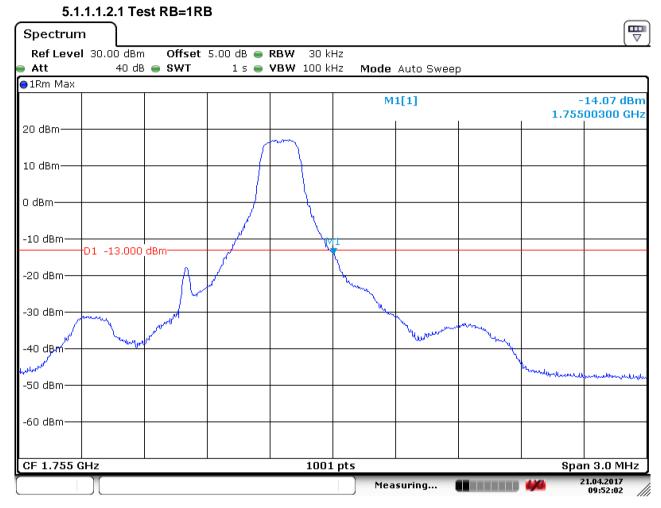


5.1.1.1.1.2 Test RB=6RB

Date: 21.APR.2017 09:54:47



Report No.: SZEM170300261304 Page: 73 of 176

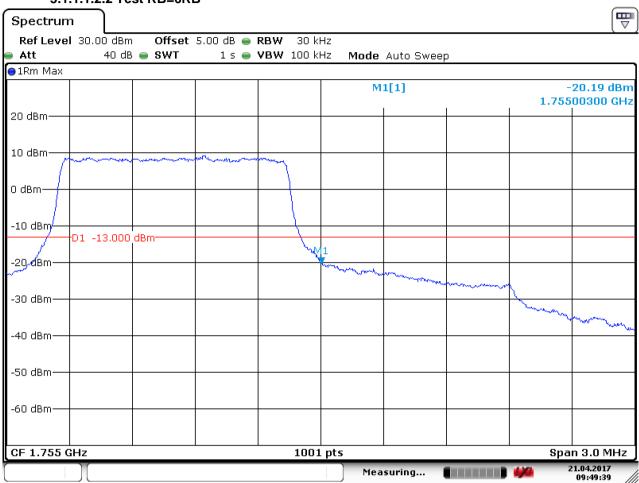


5.1.1.1.2 Test Channel = HCH

Date: 21.APR.2017 09:52:03



Report No.: SZEM170300261304 Page: 74 of 176



5.1.1.1.2.2 Test RB=6RB

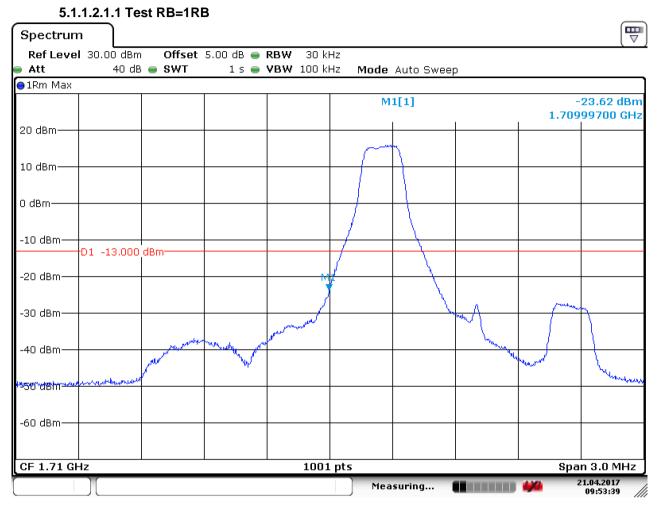
Date: 21.APR.2017 09:49:39



Report No.: SZEM170300261304 Page: 75 of 176

5.1.1.2 Test Mode = LTE/TM2 1.4MHz

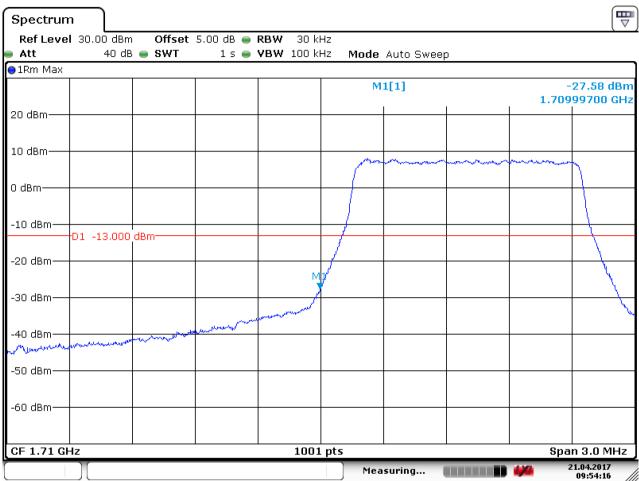
5.1.1.2.1 Test Channel = LCH



Date: 21.APR.2017 09:53:39



Report No.: SZEM170300261304 Page: 76 of 176

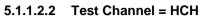


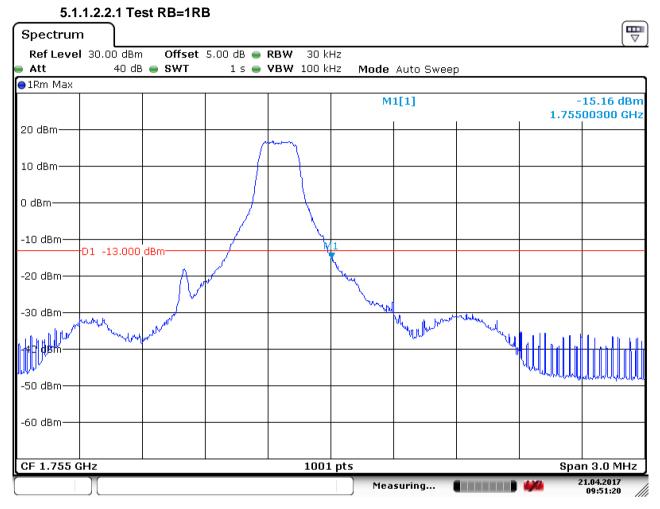
5.1.1.2.1.2 Test RB=6RB

Date: 21.APR.2017 09:54:17



Report No.: SZEM170300261304 Page: 77 of 176

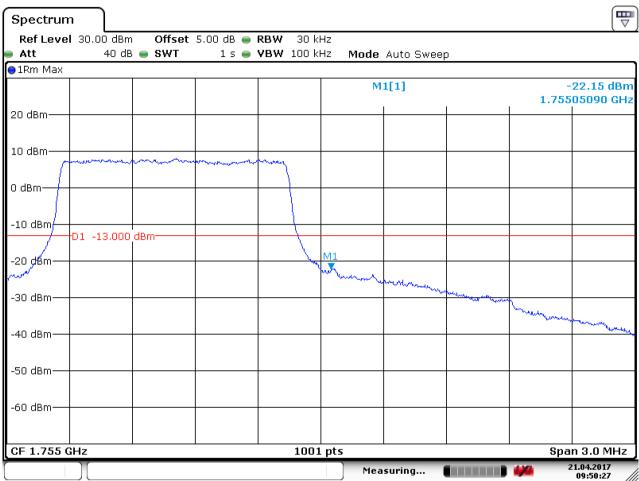




Date: 21.APR.2017 09:51:20



Report No.: SZEM170300261304 Page: 78 of 176



5.1.1.2.2.2 Test RB=6RB

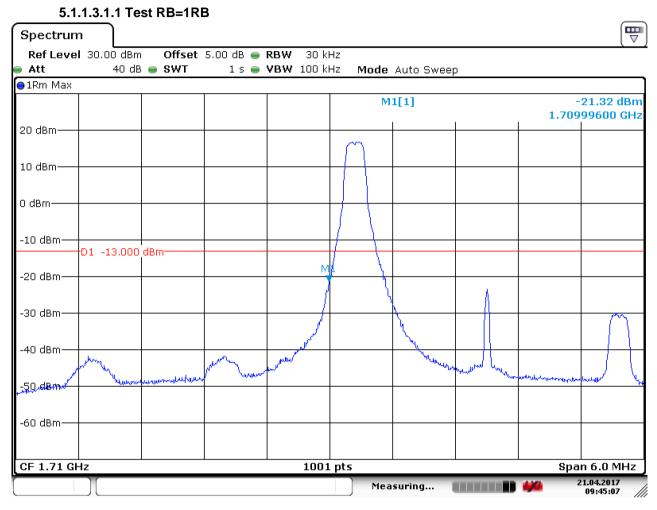
Date: 21.APR.2017 09:50:28



Report No.: SZEM170300261304 Page: 79 of 176

5.1.1.3 Test Mode = LTE/TM1 3MHz

5.1.1.3.1 Test Channel = LCH



Date: 21.APR.2017 09:45:07



Report No.: SZEM170300261304 Page: 80 of 176

Spectrum		31110-131								
	l 30.00 dBm	Offset	5.00 dB 👄 1 s 👄	RBW 30 ki VBW 100 ki		Mode	Auto Swee	p		(`
😑 1Rm Max										
						M	1[1]			26.91 dBr 99600 GH
20 dBm										
10 dBm										
0 dBm					ſ	~~~~~	www.	mor the gas where	المسقور بالمعادلية ويعاقبهم	many
-10 dBm										
-20 dBm	D1 -13.000	dBm			/					
				м	ŧ					
-30 dBm										
-40 dBm	and a subsection and from the	monterent	for the second of the second second second	alauter						
-50 dBm										
-60 dBm										
CF 1.71 GH	lz			1001	. pts					n 6.0 MHz
į I	Л					Mea	suring		- 444	21.04.2017 09:43:05

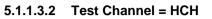
Date: 21.APR.2017 09:43:05

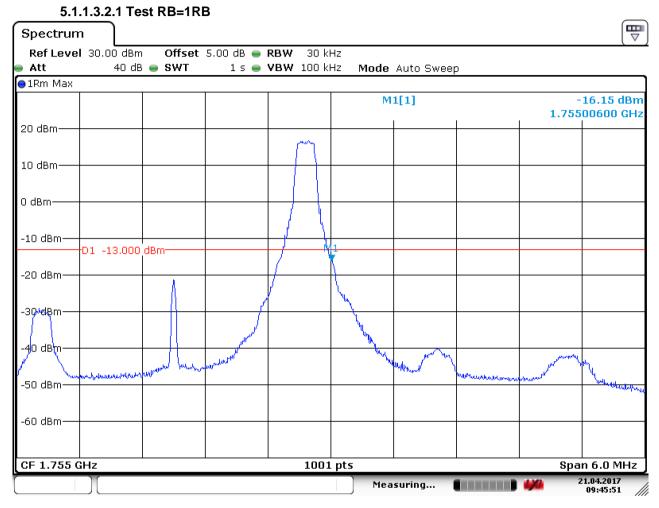
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions/Terms-enDocument.aspx. Attention is drawn to the limitation of liability, indemnification 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 30 days only.

5.1.1.3.1.2 Test RB=15RB



Report No.: SZEM170300261304 Page: 81 of 176





Date: 21.APR.2017 09:45:52



Report No.: SZEM170300261304 Page: 82 of 176

Spectrum	<u> </u>								
Ref Level • Att	30.00 dBm 40 dB	Offset	5.00 dB 👄 1 s 👄	RBW 30 k VBW 100 k		Auto Swee	p		
●1Rm Max									
					М	1[1]			23.84 dBm 00600 GHz
20 dBm									
10 dBm									
0 dBm	ULD-LOCE ^{LA} LOOK ^{LA} LOOK	with a with the with the with the second	man man and a second	monority					
-10 dBm	D1 -13.000	dBm							
/20 dBm					1				
-30 dBm					When we wanted a second	Mar Muslama	the brite of the second second	wh ^{olo} w when the second	
-40 dBm									hyuran
-50 dBm									
-60 dBm									
CF 1.755 G	Hz			1001	l Lpts			 Spa	n 6.0 MHz
	Π					suring			21.04.2017 09:48:17

5.1.1.3.2.2 Test RB=15RB

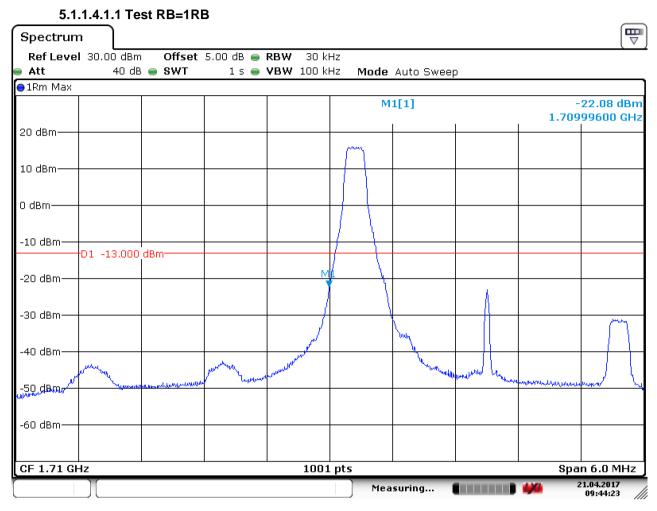
Date: 21.APR.2017 09:48:18



Report No.: SZEM170300261304 Page: 83 of 176

5.1.1.4 Test Mode = LTE/TM2 3MHz

5.1.1.4.1 Test Channel = LCH



Date: 21.APR.2017 09:44:24



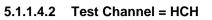
Report No.: SZEM170300261304 Page: 84 of 176

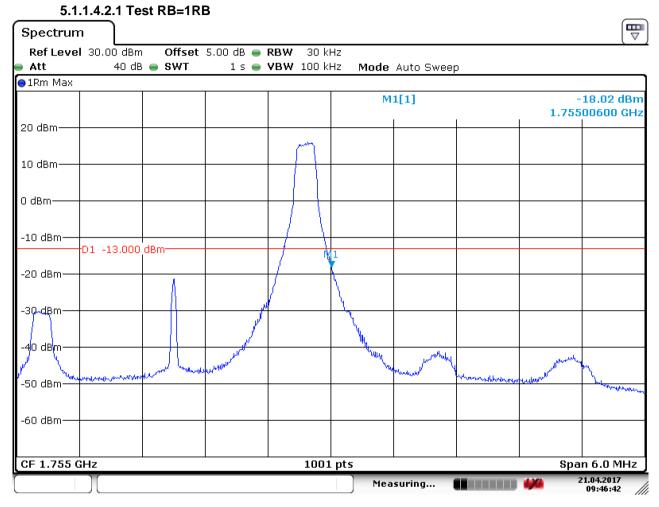
5.1.	1.4.1.2 T	est RB=1	5RB							_	_
Spectrum										ļ	∇
Ref Level	30.00 dB	m Offse	et 5.00 dB 👄	RBW 30 ki	Hz						_
🗕 Att	40 c	dB 👄 SWT	1 s 👄	VBW 100 k	Hz	Mode	Auto Swe	ер			
⊖1Rm Max											
						M	1[1]			28.75 dB	
20 dBm—							I	1	1.709	99600 GF	ΗZ
20 uBiii											
10 dBm											_
					l r	monun	man	- moundary man	mon	my	
0 dBm											
-10 dBm——	D1 -13.00										
	DI -13.00				1						
-20 dBm					+						╉
				M	1						
-30 dBm					<u> </u>						_
				/							
-40 dBm			- A manan	Mary Marked South and South and South							
nummun	hoperandoral	montener	u Çul v								
-50 dBm											
-60 dBm								_		ļ	
CF 1.71 GH	Iz			1001	. pt:	s			-	n 6.0 MH:	z
	Л					Mea	suring		- 444 2	1.04.2017 09:43:40	

Date: 21.APR.2017 09:43:41



Report No.: SZEM170300261304 Page: 85 of 176





Date: 21.APR.2017 09:46:42



Report No.: SZEM170300261304 Page: 86 of 176

Spectrum	ı I								
Ref Level	30.00 dBm	Offset	5.00 dB 👄	RBW 30 k	Ηz				
🖷 Att	40 dB	SWT	1 s 👄	VBW 100 ki	Hz Mode	Auto Swee	р		
⊖1Rm Max									
					М	1[1]			26.61 dBm 00600 GHz
20 dBm									
10 dBm									
0 dBm	walk ward he	n Marine	m	mony					
-10 dBm	D1 -13.000	dBm							
20 dBm	DI 13.000			\					
/ -30 dBm——				γ	1				
-40 dBm					~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	and a designed	and the strength	mon	we wanter
-50 dBm									
-60 dBm									
CF 1.755 G	iHz			1001	. pts		1	l Spa	n 6.0 MHz
][suring			21.04.2017 09:47:37

5.1.1.4.3 Test RB=15RB

Date: 21.APR.2017 09:47:37

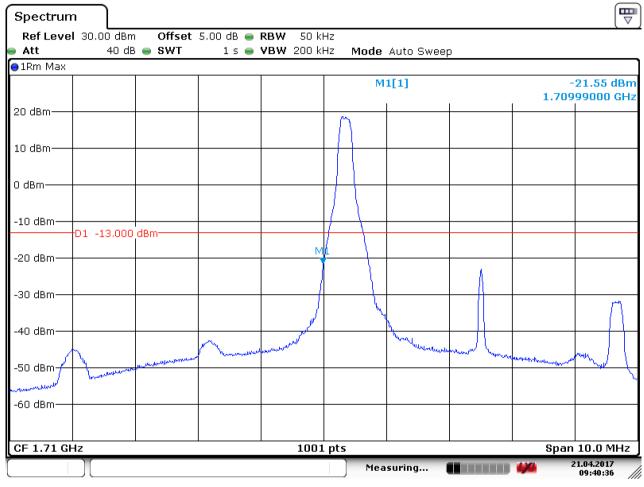


Report No.: SZEM170300261304 Page: 87 of 176

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: 21.APR.2017 09:40:37



Report No.: SZEM170300261304 Page: 88 of 176

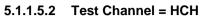
Spectrum														
Ref Level				Offset										
Att		40 dB	•	SWT	1	s 😑	VBW	200 k	Hz	Mode	Auto Swe	еер		,
●1Rm Max					1									
										м	1[1]			28.55 dBm 99000 GHz
20 dBm——														
10 dBm														
										mone	-	mann	المريب والمعادي والمعادية والمعاد	how and
0 dBm										[
-10 dBm														
	D1 -13	3.000	dBm)										
-20 dBm									Ļ					<u> </u>
								M	1					\
-30 dBm									Ĺ					
-40 dBm				<u>^</u>	-	and the	and the second	and a start of the second						
manahama	pulling alogen	~~~~	Surger of Streemer,	- terter (pt -										
-50 dBm														
co do-														
-60 dBm														
CF 1.71 GH	z							1001	. pt	ts				10.0 MHz
[)[][Mea	suring		- 440	21.04.2017 09:42:14

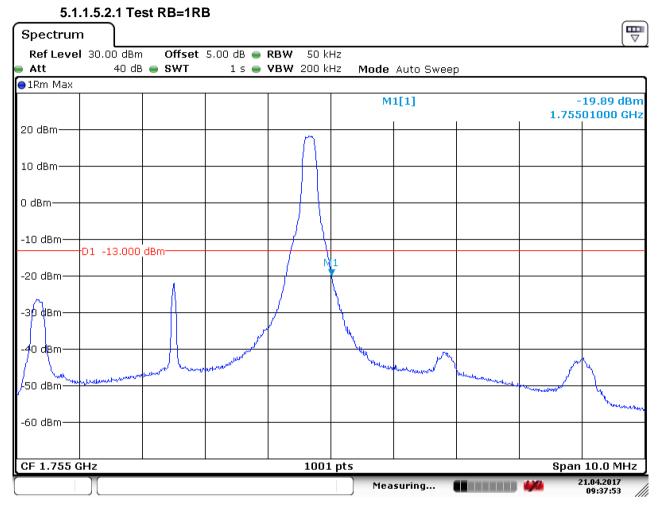
5.1.1.5.1.2 Test RB=25RB

Date: 21.APR.2017 09:42:15



Report No.: SZEM170300261304 Page: 89 of 176





Date: 21.APR.2017 09:37:53



Report No.: SZEM170300261304 Page: 90 of 176

Spectrum	')								
	30.00 dBm		5.00 dB 👄						
e Att	40 dB	🖷 SWT	1 s 👄	VBW 200 ki	Hz Mode	Auto Sweep	0		
●1Rm Max			1						
					м	1[1]			26.03 dBm 01000 GHz
20 dBm									
10 dBm									
0 dBm	mennenter	m		unny					
-10 dBm	D1 -13.000	dBm							
/				<u>۲</u>	1				
-30 dBm						mun	mon	m	man
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.755 G	Hz			1001	pts			Span	10.0 MHz
	Υ					suring			21.04.2017 09:35:49

5.1.1.5.2.2 Test RB=25RB

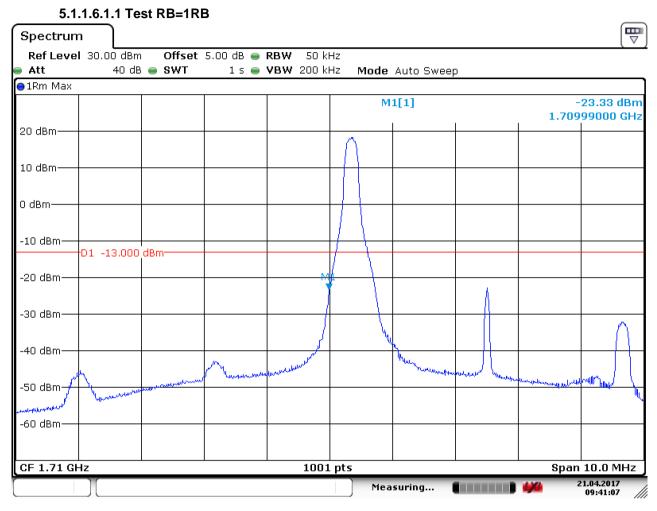
Date: 21.APR.2017 09:35:50



Report No.: SZEM170300261304 Page: 91 of 176

5.1.1.6 Test Mode = LTE/TM2 5MHz

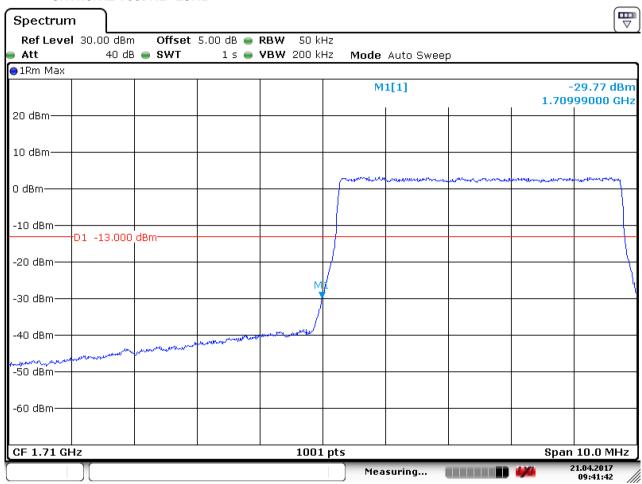
5.1.1.6.1 Test Channel = LCH



Date: 21.APR.2017 09:41:08



Report No.: SZEM170300261304 Page: 92 of 176

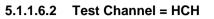


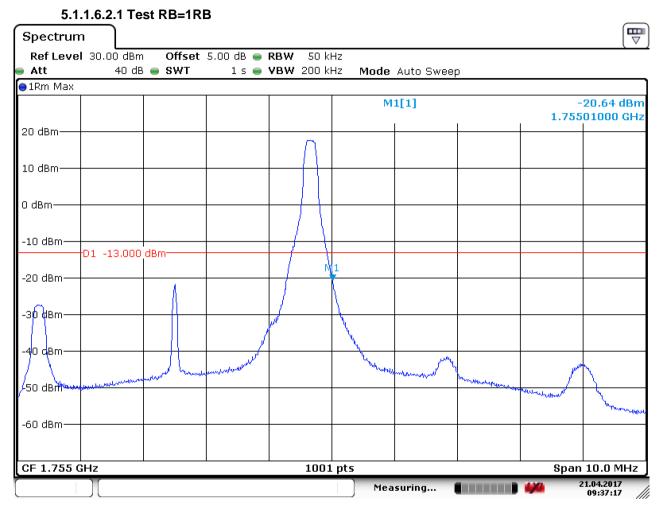
5.1.1.6.1.2 Test RB=25RB

Date: 21.APR.2017 09:41:42



Report No.: SZEM170300261304 Page: 93 of 176

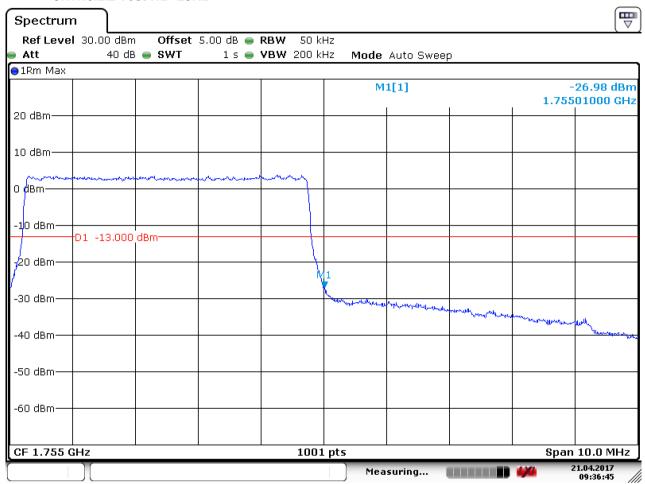




Date: 21.APR.2017 09:37:17



Report No.: SZEM170300261304 Page: 94 of 176



5.1.1.6.2.2 Test RB=25RB

Date: 21.APR.2017 09:36:45

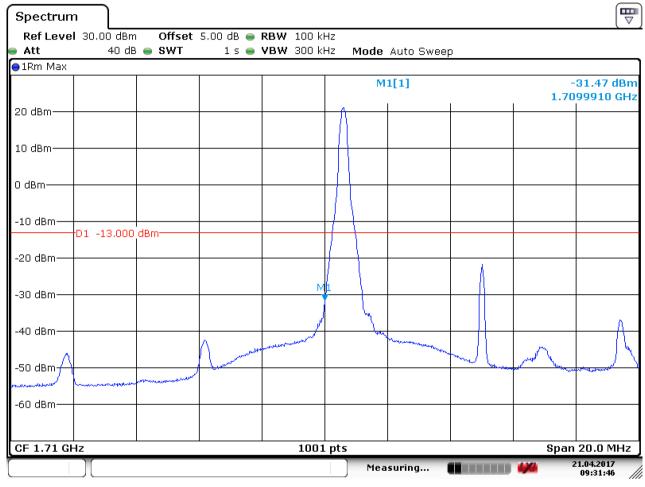


Report No.: SZEM170300261304 Page: 95 of 176

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: 21.APR.2017 09:31:46