

Report No.: SZEM170300261304 Page: 1 of 177

Appendix B

E-UTRA Band 25

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 documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or faisification 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 177

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 band25	16
3	MODULATION CHARACTERISTICS	22
	3.1 For LTE	22
	3.1.1 Test Band = LTE band25	22
4	BANDWIDTH	34
	4.1 For LTE	35
	4.1.1 Test Band = LTE band25	35
5	BAND EDGES COMPLIANCE	71
	5.1 For LTE	71
	5.1.1 Test Band = LTE band25	71
6	SPURIOUS EMISSION AT ANTENNA TERMINAL	119
	6.1 For LTE	. 119
	6.1.1 Test Band = LTE band25	. 119
7	FIELD STRENGTH OF SPURIOUS RADIATION	174
	7.1 For LTE	. 174
	7.1.1 Test Band = LTE band25	. 174
8	FREQUENCY STABILITY	175
	8.1 FREQUENCY ERROR VS. VOLTAGE	. 175
	8.2 FREQUENCY ERROR VS. TEMPERATURE	. 176



Report No.: SZEM170300261304 Page: 3 of 177

1 Effective (Isotropic) Radiated Power Output Data

Effective Isotropic Radiated Power of Transmitter (EIRP) for LTE BAND 25

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	23.49	24.64	33.00	PASS
				RB1#2	23.68	24.83	33.00	PASS
				RB1#5	23.59	24.74	33.00	PASS
			LCH	RB3#0	23.47	24.62	33.00	PASS
				RB3#2	23.55	24.70	33.00	PASS
				RB3#3	23.59	24.74	33.00	PASS
				RB6#0	22.71	23.86	33.00	PASS
				RB1#0	23.67	24.82	33.00	PASS
				RB1#2	23.71	24.86	33.00	PASS
				RB1#5	23.51	24.66	33.00	PASS
BAND25	LTE/TM1	1.4M	MCH	RB3#0	23.69	24.84	33.00	PASS
				RB3#2	23.64	24.79	33.00	PASS
				RB3#3	23.67	24.82	33.00	PASS
				RB6#0	22.74	23.89	33.00	PASS
				RB1#0	23.50	24.65	33.00	PASS
				RB1#2	23.60	24.75	33.00	PASS
				RB1#5	23.44	24.59	33.00	PASS
			НСН	RB3#0	23.53	24.68	33.00	PASS
				RB3#2	23.64	24.79	33.00	PASS
				RB3#3	23.58	24.73	33.00	PASS
				RB6#0	22.68	23.83	33.00	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 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: 4 of 177

		ſ	1		Page:	4 OT 1 /		1
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.50	23.65	33.00	PASS
				RB1#2	22.85	24.00	33.00	PASS
				RB1#5	22.93	24.08	33.00	PASS
			LCH	RB3#0	22.91	24.06	33.00	PASS
				RB3#2	22.75	23.90	33.00	PASS
				RB3#3	22.81	23.96	33.00	PASS
				RB6#0	21.64	22.79	33.00	PASS
				RB1#0	22.98	24.13	33.00	PASS
				RB1#2	22.90	24.05	33.00	PASS
				RB1#5	22.88	24.03	33.00	PASS
BAND25	LTE/TM2	1.4M	MCH	RB3#0	22.92	24.07	33.00	PASS
				RB3#2	22.86	24.01	33.00	PASS
				RB3#3	22.92	24.07	33.00	PASS
				RB6#0	21.50	22.65	33.00	PASS
				RB1#0	22.76	23.91	33.00	PASS
				RB1#2	22.46	23.61	33.00	PASS
				RB1#5	22.47	23.62	33.00	PASS
			НСН	RB3#0	22.52	23.67	33.00	PASS
				RB3#2	22.67	23.82	33.00	PASS
				RB3#3	22.91	24.06	33.00	PASS
				RB6#0	21.44	22.59	33.00	PASS



Report No.: SZEM170300261304 Page: 5 of 177

			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	23.71	24.86	33.00	PASS
				RB1#7	23.64	24.79	33.00	PASS
				RB1#14	23.64	24.79	33.00	PASS
			LCH	RB8#0	22.75	23.90	33.00	PASS
				RB8#4	22.65	23.80	33.00	PASS
				RB8#7	22.75	23.90	33.00	PASS
				RB15#0	22.63	23.78	33.00	PASS
				RB1#0	23.77	24.92	33.00	PASS
				RB1#7	23.70	24.85	33.00	PASS
				RB1#14	23.84	24.99	33.00	PASS
BAND25	LTE/TM1	3M	MCH	RB8#0	22.70	23.85	33.00	PASS
				RB8#4	22.77	23.92	33.00	PASS
				RB8#7	22.71	23.86	33.00	PASS
				RB15#0	22.71	23.86	33.00	PASS
				RB1#0	23.81	24.96	33.00	PASS
				RB1#7	23.61	24.76	33.00	PASS
				RB1#14	23.70	24.85	33.00	PASS
			НСН	RB8#0	22.79	23.94	33.00	PASS
				RB8#4	22.77	23.92	33.00	PASS
				RB8#7	22.75	23.90	33.00	PASS
				RB15#0	22.69	23.84	33.00	PASS



Report No.: SZEM170300261304 Page: 6 of 177

			1		Page:	6 Of 1/		1
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.97	24.12	33.00	PASS
				RB1#7	22.93	24.08	33.00	PASS
				RB1#14	22.97	24.12	33.00	PASS
			LCH	RB8#0	21.86	23.01	33.00	PASS
				RB8#4	21.73	22.88	33.00	PASS
				RB8#7	21.84	22.99	33.00	PASS
				RB15#0	21.79	22.94	33.00	PASS
				RB1#0	23.08	24.23	33.00	PASS
				RB1#7	22.83	23.98	33.00	PASS
				RB1#14	23.03	24.18	33.00	PASS
BAND25	LTE/TM2	ЗМ	MCH	RB8#0	21.85	23.00	33.00	PASS
				RB8#4	21.91	23.06	33.00	PASS
				RB8#7	21.84	22.99	33.00	PASS
				RB15#0	21.91	23.06	33.00	PASS
				RB1#0	23.36	24.51	33.00	PASS
				RB1#7	22.95	24.10	33.00	PASS
				RB1#14	22.76	23.91	33.00	PASS
			НСН	RB8#0	21.96	23.11	33.00	PASS
				RB8#4	21.94	23.09	33.00	PASS
				RB8#7	21.89	23.04	33.00	PASS
				RB15#0	21.79	22.94	33.00	PASS



Report No.: SZEM170300261304 Page: 7 of 177

			1		Page:	7 of 17	1	1
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	23.62	24.77	33.00	PASS
				RB1#13	23.48	24.63	33.00	PASS
				RB1#24	23.43	24.58	33.00	PASS
			LCH	RB12#0	22.58	23.73	33.00	PASS
				RB12#6	22.60	23.75	33.00	PASS
				RB12#13	22.58	23.73	33.00	PASS
				RB25#0	22.57	23.72	33.00	PASS
				RB1#0	23.72	24.87	33.00	PASS
				RB1#13	23.42	24.57	33.00	PASS
				RB1#24	23.52	24.67	33.00	PASS
BAND25	LTE/TM1	5M	МСН	RB12#0	22.71	23.86	33.00	PASS
				RB12#6	22.75	23.90	33.00	PASS
				RB12#13	22.73	23.88	33.00	PASS
				RB25#0	22.71	23.86	33.00	PASS
				RB1#0	23.43	24.58	33.00	PASS
				RB1#13	23.43	24.58	33.00	PASS
				RB1#24	23.36	24.51	33.00	PASS
			НСН	RB12#0	22.74	23.89	33.00	PASS
				RB12#6	22.63	23.78	33.00	PASS
				RB12#13	22.57	23.72	33.00	PASS
				RB25#0	22.68	23.83	33.00	PASS



Report No.: SZEM170300261304 Page: 8 of 177

					Page:	8 of 17	1	
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.97	24.12	33.00	PASS
				RB1#13	22.81	23.96	33.00	PASS
				RB1#24	22.80	23.95	33.00	PASS
			LCH	RB12#0	21.66	22.81	33.00	PASS
				RB12#6	21.60	22.75	33.00	PASS
				RB12#13	21.45	22.60	33.00	PASS
				RB25#0	21.74	22.89	33.00	PASS
				RB1#0	23.02	24.17	33.00	PASS
				RB1#13	22.87	24.02	33.00	PASS
				RB1#24	22.96	24.11	33.00	PASS
BAND25	LTE/TM2	5M	МСН	RB12#0	21.81	22.96	33.00	PASS
				RB12#6	21.72	22.87	33.00	PASS
				RB12#13	21.66	22.81	33.00	PASS
				RB25#0	21.89	23.04	33.00	PASS
				RB1#0	23.00	24.15	33.00	PASS
				RB1#13	22.89	24.04	33.00	PASS
				RB1#24	22.32	23.47	33.00	PASS
			НСН	RB12#0	21.74	22.89	33.00	PASS
				RB12#6	21.73	22.88	33.00	PASS
				RB12#13	21.64	22.79	33.00	PASS
				RB25#0	21.71	22.86	33.00	PASS



Report No.: SZEM170300261304 Page: 9 of 177

r					Page:	9 of 1 <i>1</i>	1	I
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	23.65	24.80	33.00	PASS
				RB1#25	23.44	24.59	33.00	PASS
				RB1#49	23.36	24.51	33.00	PASS
			LCH	RB25#0	22.70	23.85	33.00	PASS
				RB25#13	22.55	23.70	33.00	PASS
				RB25#25	22.52	23.67	33.00	PASS
				RB50#0	22.58	23.73	33.00	PASS
				RB1#0	23.77	24.92	33.00	PASS
				RB1#25	23.64	24.79	33.00	PASS
				RB1#49	23.94	25.09	33.00	PASS
BAND25	LTE/TM1	10M	MCH	RB25#0	22.83	23.98	33.00	PASS
				RB25#13	22.82	23.97	33.00	PASS
				RB25#25	22.73	23.88	33.00	PASS
				RB50#0	22.79	23.94	33.00	PASS
				RB1#0	23.76	24.91	33.00	PASS
				RB1#25	23.50	24.65	33.00	PASS
				RB1#49	23.47	24.62	33.00	PASS
			НСН	RB25#0	22.85	24.00	33.00	PASS
				RB25#13	22.71	23.86	33.00	PASS
				RB25#25	22.74	23.89	33.00	PASS
				RB50#0	22.72	23.87	33.00	PASS



Report No.: SZEM170300261304 Page: 10 of 177

Page: 10 of 177								
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.96	24.11	33.00	PASS
				RB1#25	22.69	23.84	33.00	PASS
				RB1#49	22.73	23.88	33.00	PASS
			LCH	RB25#0	21.63	22.78	33.00	PASS
				RB25#13	21.56	22.71	33.00	PASS
				RB25#25	21.43	22.58	33.00	PASS
				RB50#0	21.60	22.75	33.00	PASS
				RB1#0	23.06	24.21	33.00	PASS
				RB1#25	23.01	24.16	33.00	PASS
				RB1#49	23.10	24.25	33.00	PASS
BAND25	LTE/TM2	10M	МСН	RB25#0	21.76	22.91	33.00	PASS
				RB25#13	21.85	23.00	33.00	PASS
				RB25#25	21.76	22.91	33.00	PASS
				RB50#0	21.89	23.04	33.00	PASS
				RB1#0	23.18	24.33	33.00	PASS
				RB1#25	23.14	24.29	33.00	PASS
				RB1#49	22.54	23.69	33.00	PASS
			НСН	RB25#0	21.90	23.05	33.00	PASS
				RB25#13	21.60	22.75	33.00	PASS
				RB25#25	21.69	22.84	33.00	PASS
				RB50#0	21.71	22.86	33.00	PASS



Report No.: SZEM170300261304 Page: 11 of 177

		1		1	Page:	11 of 1		
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	24.08	25.23	33.00	PASS
				RB1#38	23.41	24.56	33.00	PASS
				RB1#74	23.57	24.72	33.00	PASS
			LCH	RB36#0	22.73	23.88	33.00	PASS
				RB36#18	22.49	23.64	33.00	PASS
				RB36#39	22.53	23.68	33.00	PASS
				RB75#0	22.68	23.83	33.00	PASS
				RB1#0	23.99	25.14	33.00	PASS
				RB1#38	23.48	24.63	33.00	PASS
				RB1#74	24.17	25.32	33.00	PASS
BAND25	LTE/TM1	15M	MCH	RB36#0	22.72	23.87	33.00	PASS
				RB36#18	22.77	23.92	33.00	PASS
				RB36#39	22.80	23.95	33.00	PASS
				RB75#0	22.75	23.90	33.00	PASS
				RB1#0	24.00	25.15	33.00	PASS
				RB1#38	23.67	24.82	33.00	PASS
				RB1#74	23.52	24.67	33.00	PASS
			HCH	RB36#0	22.84	23.99	33.00	PASS
				RB36#18	22.68	23.83	33.00	PASS
				RB36#39	22.70	23.85	33.00	PASS
				RB75#0	22.74	23.89	33.00	PASS



Report No.: SZEM170300261304 Page: 12 of 177

·		1			Page:	12 of 1		
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	23.10	24.25	33.00	PASS
				RB1#38	22.80	23.95	33.00	PASS
				RB1#74	22.79	23.94	33.00	PASS
			LCH	RB36#0	21.71	22.86	33.00	PASS
				RB36#18	21.43	22.58	33.00	PASS
				RB36#39	21.48	22.63	33.00	PASS
				RB75#0	21.66	22.81	33.00	PASS
				RB1#0	23.11	24.26	33.00	PASS
				RB1#38	22.89	24.04	33.00	PASS
BAND25				RB1#74	23.14	24.29	33.00	PASS
	LTE/TM2	15M	MCH	RB36#0	21.80	22.95	33.00	PASS
				RB36#18	21.50	22.65	33.00	PASS
				RB36#39	21.85	23.00	33.00	PASS
				RB75#0	21.81	22.96	33.00	PASS
				RB1#0	23.23	24.38	33.00	PASS
				RB1#38	22.89	24.04	33.00	PASS
				RB1#74	22.78	23.93	33.00	PASS
			HCH	RB36#0	21.92	23.07	33.00	PASS
				RB36#18	21.85	23.00	33.00	PASS
				RB36#39	21.73	22.88	33.00	PASS
				RB75#0	21.88	23.03	33.00	PASS



Report No.: SZEM170300261304 Page: 13 of 177

			1		Page:	13 of 1		I
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	23.92	25.07	33.00	PASS
				RB1#50	23.61	24.76	33.00	PASS
				RB1#99	23.42	24.57	33.00	PASS
			LCH	RB50#0	22.70	23.85	33.00	PASS
				RB50#25	22.67	23.82	33.00	PASS
				RB50#50	22.66	23.81	33.00	PASS
				RB100#0	22.77	23.92	33.00	PASS
				RB1#0	23.95	25.10	33.00	PASS
				RB1#50	23.70	24.85	33.00	PASS
				RB1#99	23.94	25.09	33.00	PASS
BAND25	LTE/TM1	20M	МСН	RB50#0	22.77	23.92	33.00	PASS
				RB50#25	22.75	23.90	33.00	PASS
				RB50#50	22.68	23.83	33.00	PASS
				RB100#0	22.74	23.89	33.00	PASS
				RB1#0	24.16	25.31	33.00	PASS
				RB1#50	23.62	24.77	33.00	PASS
				RB1#99	23.74	24.89	33.00	PASS
			НСН	RB50#0	22.89	24.04	33.00	PASS
				RB50#25	22.66	23.81	33.00	PASS
				RB50#50	22.72	23.87	33.00	PASS
				RB100#0	22.79	23.94	33.00	PASS



Report No.: SZEM170300261304 Page: 14 of 177

				r	Page:	14 of 1		
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
			LCH	RB1#0	23.22	24.37	33.00	PASS
				RB1#50	22.96	24.11	33.00	PASS
				RB1#99	22.82	23.97	33.00	PASS
				RB50#0	21.99	23.14	33.00	PASS
				RB50#25	21.90	23.05	33.00	PASS
				RB50#50	21.73	22.88	33.00	PASS
				RB100#0	21.87	23.02	33.00	PASS
				RB1#0	23.01	24.16	33.00	PASS
	LTE/TM2	20M	МСН	RB1#50	22.93	24.08	33.00	PASS
				RB1#99	23.17	24.32	33.00	PASS
BAND25				RB50#0	21.83	22.98	33.00	PASS
				RB50#25	21.68	22.83	33.00	PASS
				RB50#50	21.80	22.95	33.00	PASS
				RB100#0	21.85	23.00	33.00	PASS
				RB1#0	23.42	24.57	33.00	PASS
		RB50#50	RB1#50	22.89	24.04	33.00	PASS	
			нсн	RB1#99	23.01	24.16	33.00	PASS
				RB50#0	21.94	23.09	33.00	PASS
				RB50#25	21.80	22.95	33.00	PASS
				RB50#50	21.74	22.89	33.00	PASS
				RB100#0	21.83	22.98	33.00	PASS

Note:

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

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

b: SGP=Signal Generator Level

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

Detector: RMS

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: 15 of 177

2 Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
		LCH	4.43	13	PASS
	TM1/20M	MCH	4.58	13	PASS
Dond 25		НСН	4.38	13	PASS
Band 25		LCH	5.30	13	PASS
	TM2/20M	MCH	5.48	13	PASS
		НСН	5.33	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 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: 16 of 177

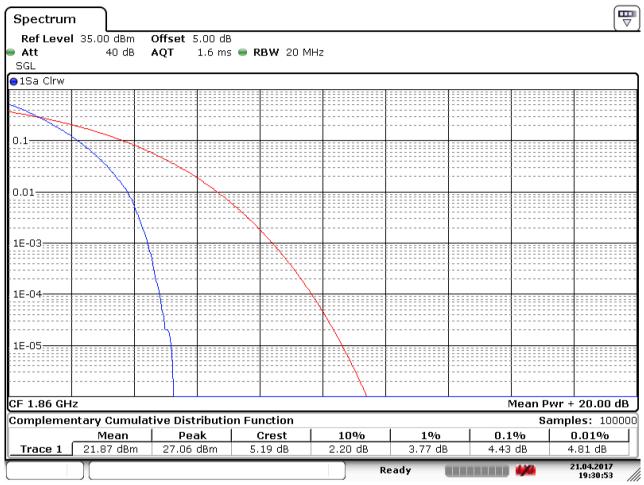
Part II - Test Plots

2.1 For LTE

2.1.1 Test Band = LTE band25



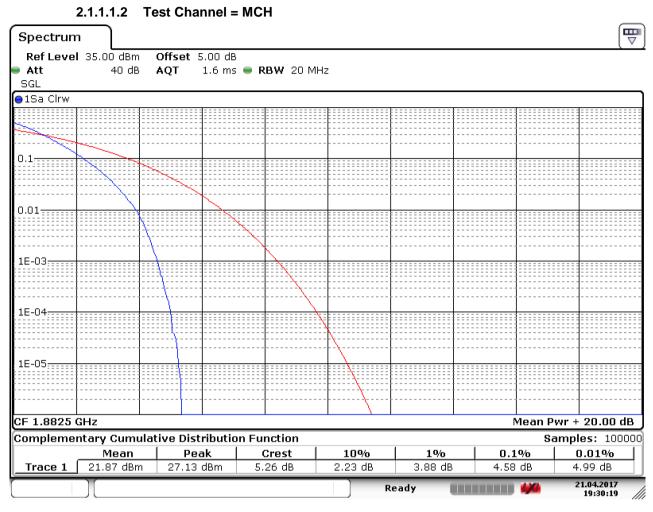
2.1.1.1.1 Test Channel = LCH



Date: 21.APR.2017 19:30:53



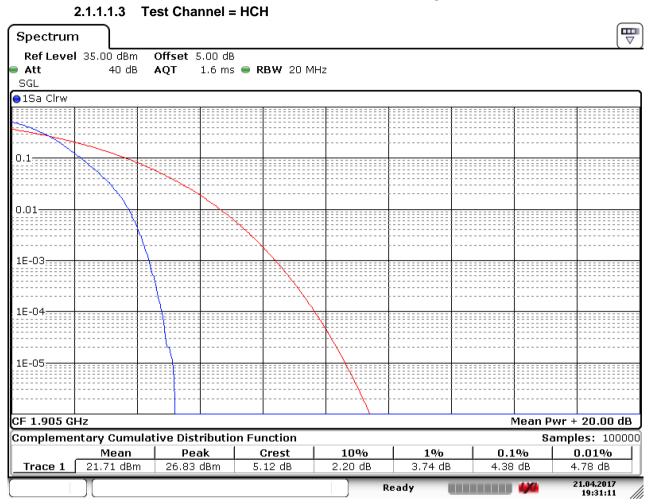
Report No.: SZEM170300261304 Page: 17 of 177



Date: 21.APR.2017 19:30:18



Report No.: SZEM170300261304 Page: 18 of 177

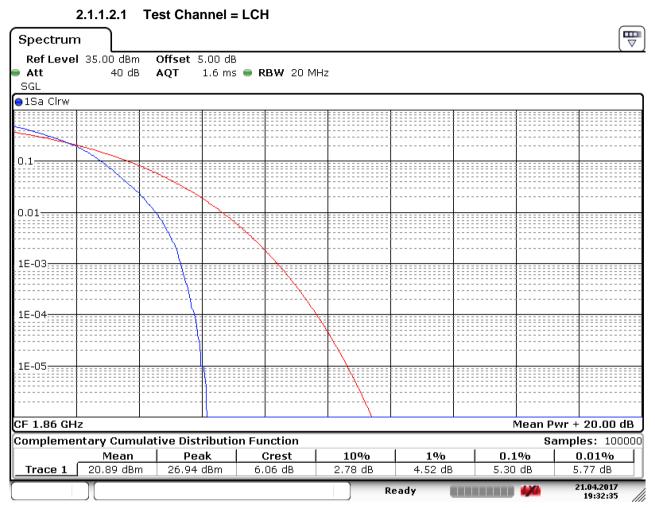


Date: 21.APR.2017 19:31:12



Report No.: SZEM170300261304 Page: 19 of 177

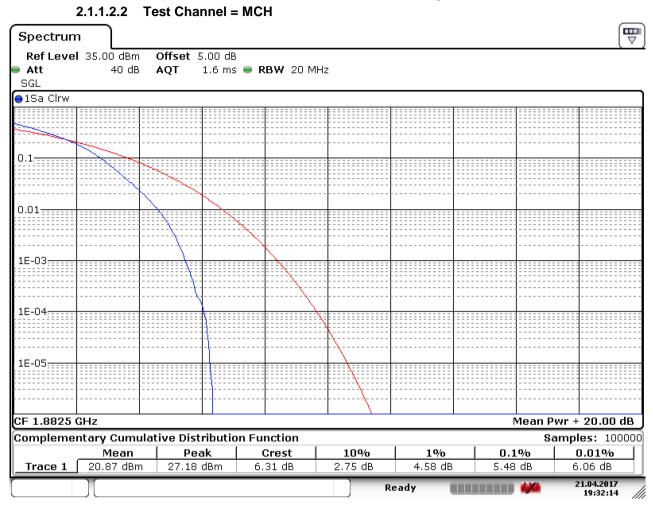
2.1.1.2 Test Mode = LTE/TM2.Bandwidth=20MHz



Date: 21.APR.2017 19:32:36



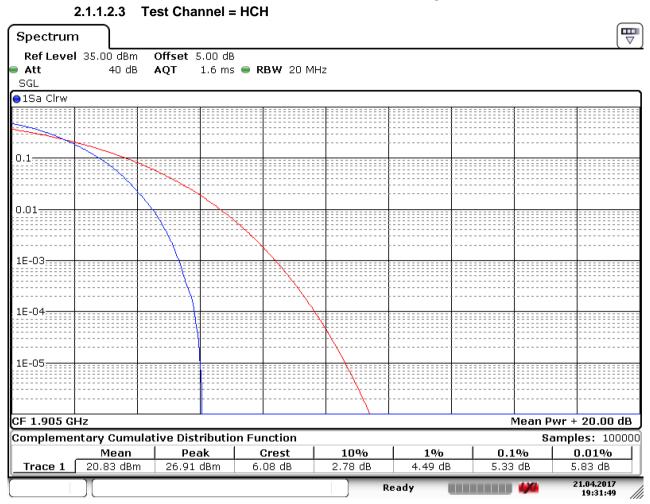
Report No.: SZEM170300261304 Page: 20 of 177



Date: 21.APR.2017 19:32:14



Report No.: SZEM170300261304 Page: 21 of 177



Date: 21.APR.2017 19:31:49



Report No.: SZEM170300261304 Page: 22 of 177

3 Modulation Characteristics

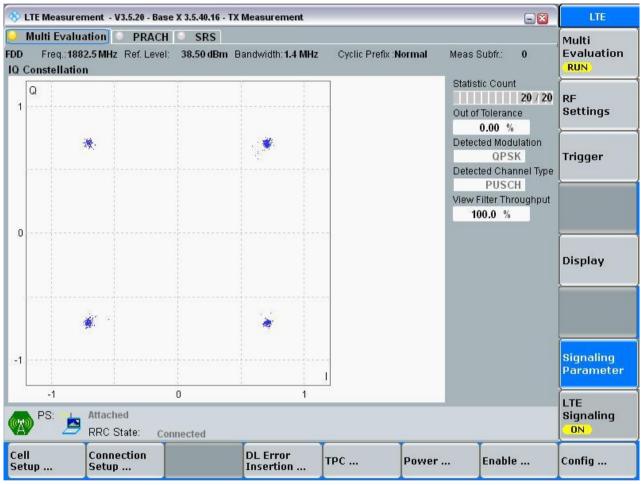
Part I - Test Plots

3.1 For LTE

3.1.1 Test Band = LTE band25

3.1.1.1 Test Mode = LTE /TM1 1.4MHz

3.1.1.1.1 Test Channel = MCH





-1

Cell

Setup ...

-1

Attached

RRC State:

Connection

Setup ...

PS:

0

Connected

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

Report No.: SZEM170300261304 23 of 177 Page:

- 2

LTE

Evaluation RUN

Settings

Trigger

Display

Signaling

Signaling

I TE

ON

Config ...

Enable ...

Parameter

Multi

RF

3.1.1.2 Test Mode = LTE /TM1 3MHz 3.1.1.2.1 Test Channel = MCH (LTE Measurement - V3.5.20 - Base X 3.5.40.16 - TX Measurement Multi Evaluation 💿 PRACH 🕓 SRS FDD Freq.: 1882.5 MHz Ref. Level: 38.10 dBm Bandwidth: 3.0 MHz Cyclic Prefix :Normal Meas Subfr.: 0 **IQ** Constellation Statistic Count Q 20 / 20 1 Out of Tolerance 0.00 % Detected Modulation QPSK Detected Channel Type PUSCH View Filter Throughput 100.0 % 0

1

трс ...

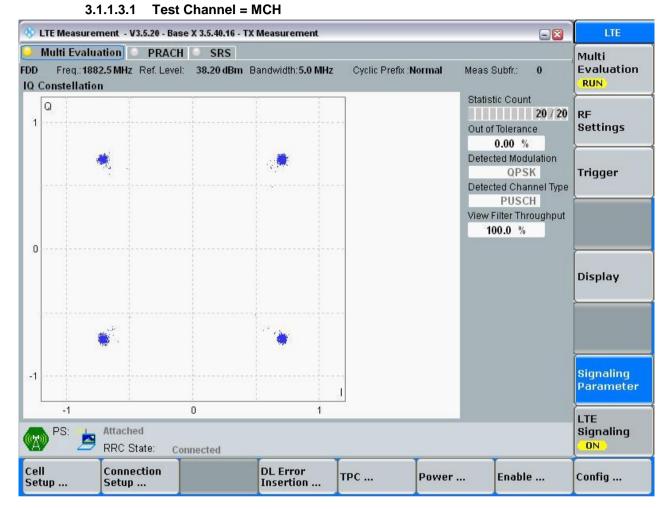
Power ...

DL Error

Insertion ...



Report No.: SZEM170300261304 Page: 24 of 177

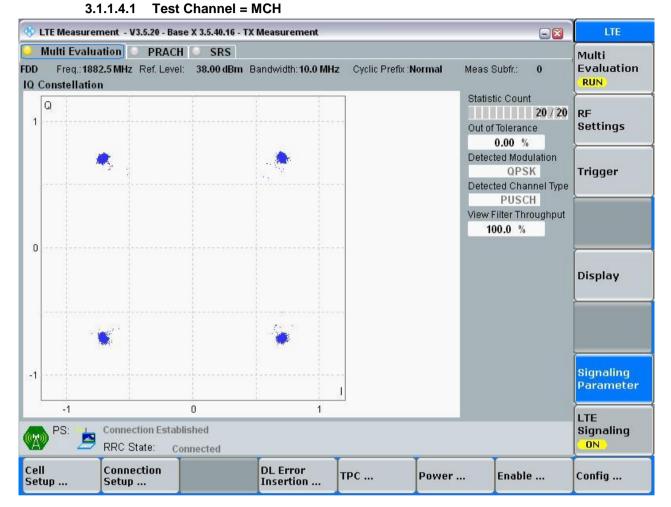


3.1.1.3 Test Mode = LTE /TM1 5MHz

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.



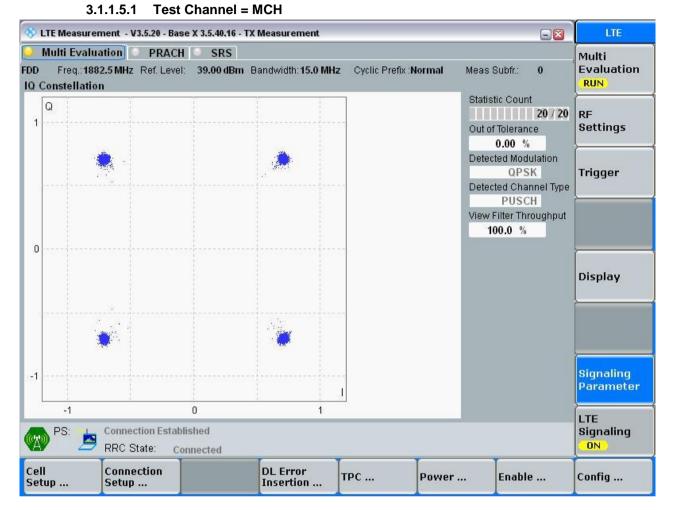
Report No.: SZEM170300261304 Page: 25 of 177



3.1.1.4 Test Mode = LTE /TM1 10MHz



Report No.: SZEM170300261304 Page: 26 of 177

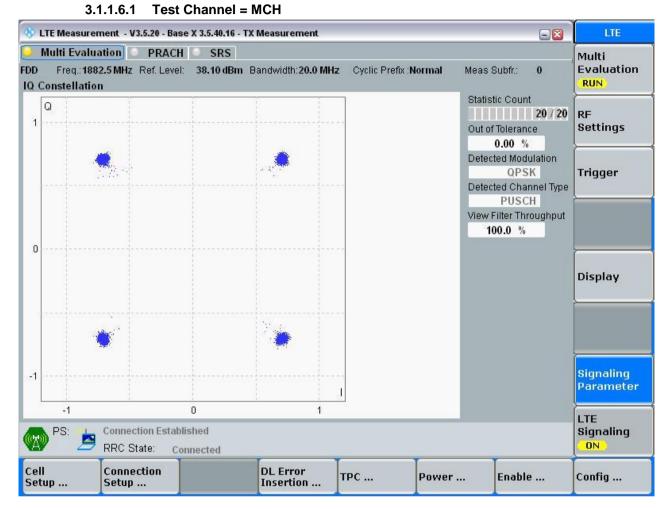


3.1.1.5 Test Mode = LTE /TM1 15MHz

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.



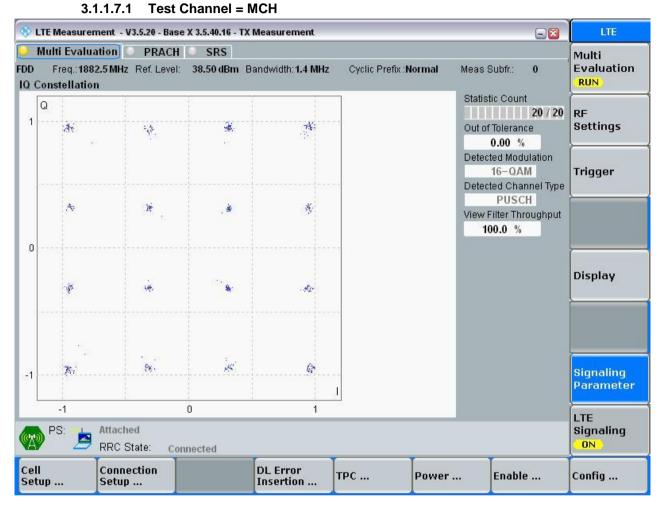
Report No.: SZEM170300261304 Page: 27 of 177



3.1.1.6 Test Mode = LTE /TM1 20MHz



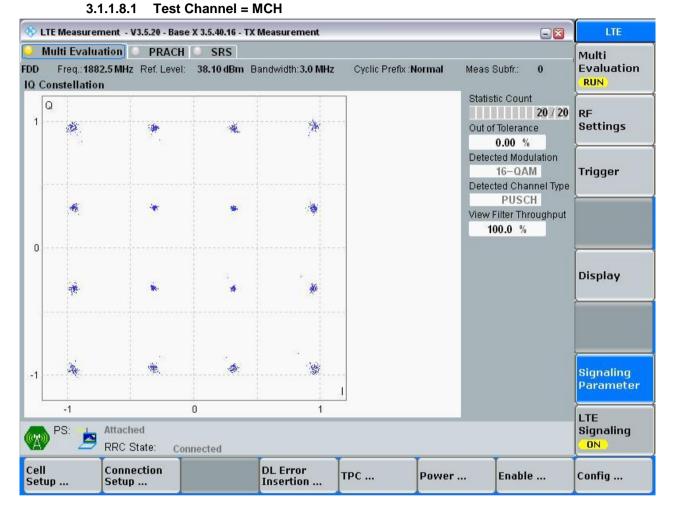
Report No.: SZEM170300261304 Page: 28 of 177



3.1.1.7 Test Mode = LTE /TM2 1.4MHz



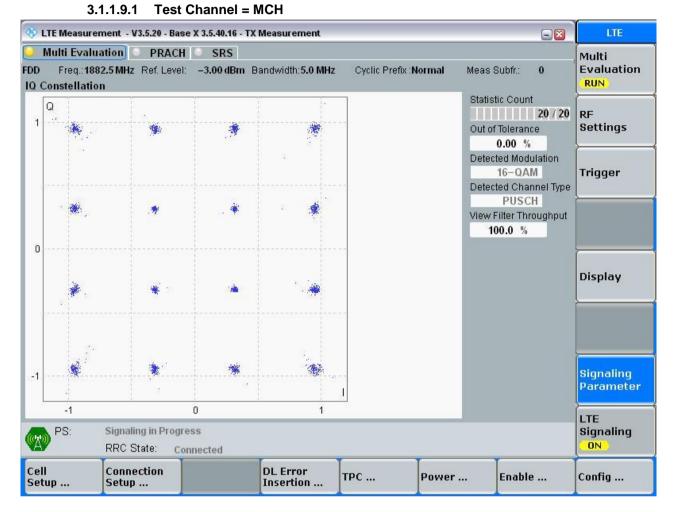
Report No.: SZEM170300261304 Page: 29 of 177



3.1.1.8 Test Mode = LTE /TM2 3MHz



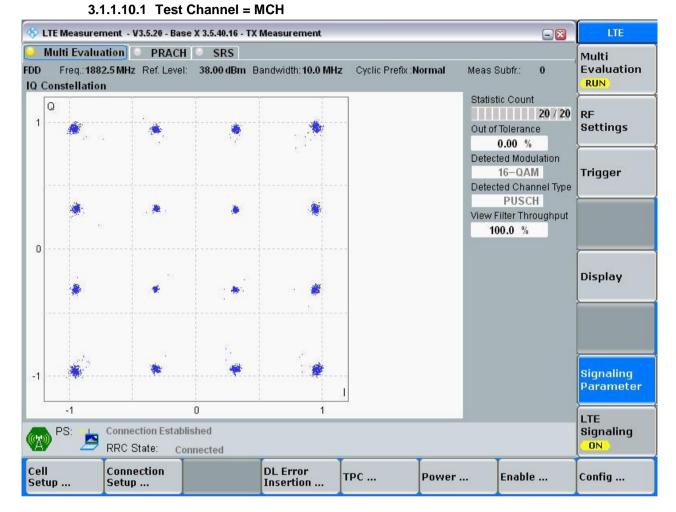
Report No.: SZEM170300261304 Page: 30 of 177



3.1.1.9 Test Mode = LTE /TM2 5MHz



Report No.: SZEM170300261304 Page: 31 of 177

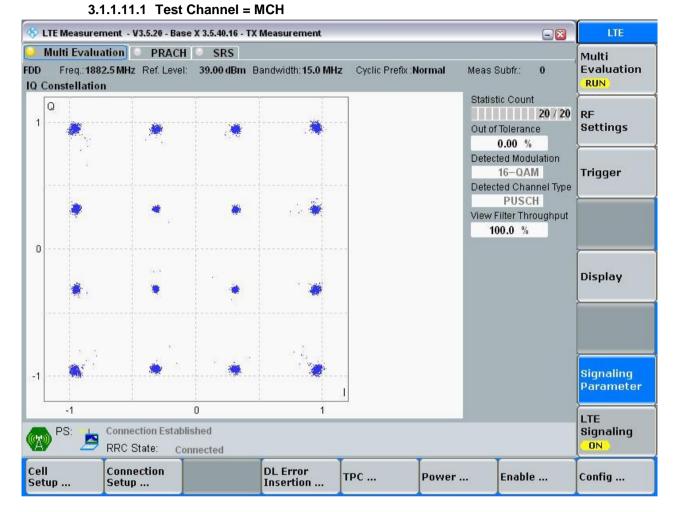


3.1.1.10 Test Mode = LTE /TM2 10MHz

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 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 diraw 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.



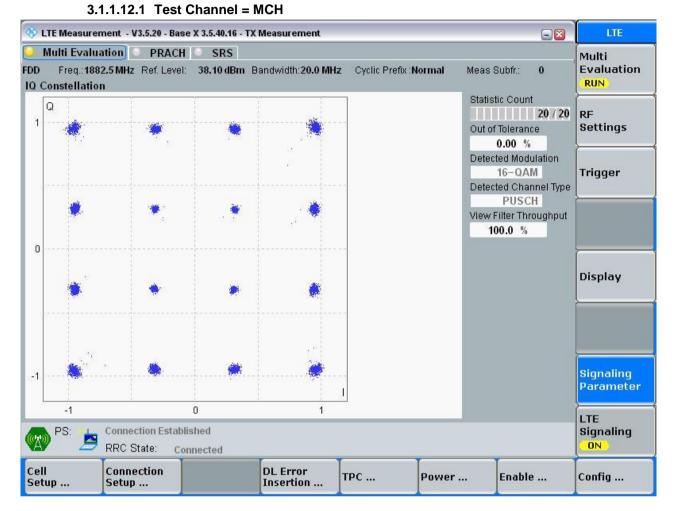
Report No.: SZEM170300261304 Page: 32 of 177



3.1.1.11 Test Mode = LTE /TM2 15MHz



Report No.: SZEM170300261304 Page: 33 of 177



3.1.1.12 Test Mode = LTE /TM2 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 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: 34 of 177

4 Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
		LCH	1.11	1.39	PASS
	TM1/1.4MHz	MCH 1.10 1.34		1.34	PASS
		HCH	1.11	1.32	PASS
		LCH	1.10	1.32	PASS
	TM2/1.4MHz	MCH	1.10	1.33	PASS
		HCH	1.10	1.35	PASS
		LCH	2.70	2.96	PASS
	TM1/ 3MHz	MCH	2.69	2.94	PASS
		HCH	2.69	2.97	PASS
		LCH	2.69	2.96	PASS
	TM2/3MHz	MCH	2.69	2.96	PASS
		HCH	2.68	2.97	PASS
		LCH	4.50	5.01	PASS
	TM1/ 5MHz	MCH	4.50	4.99	PASS
		HCH	4.48	4.94	PASS
		LCH	4.50	4.99	PASS
	TM2/ 5MHz	MCH	4.48	4.93	PASS
		HCH	4.50	4.99	PASS
Band 25		LCH	8.93	9.73	PASS
	TM1/10MHz	MCH	8.95	9.87	PASS
		HCH	8.93	9.75	PASS
		LCH	8.95	9.73	PASS
	TM2/ 10MHz	MCH	8.93	9.69	PASS
		HCH	8.93	9.69	PASS
		LCH	13.46	14.96	PASS
	TM1/ 15MHz	MCH	13.52	14.93	PASS
		HCH	13.46	14.93	PASS
		LCH	13.52	14.84	PASS
	TM2/ 15MHz	MCH	13.49	14.81	PASS
		HCH	13.49	14.93	PASS
		LCH	17.90	19.42	PASS
	TM1/ 20MHz	MCH	17.90	19.38	PASS
		HCH	17.90	19.54	PASS
		LCH	17.90	19.62	PASS
	TM2/ 20MHz	MCH	17.94	19.42	PASS
		HCH	17.86	19.42	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 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 177

4.1 For LTE

4.1.1 Test Band = LTE band25

4.1.1.1 Test Mode = LTE/TM1 1.4MHz

	4.1.1.1.1	Test Cha	nnel = LCH					
Spectru	m							
Ref Levo	el 35.00 dBm	n Offset	5.00 dB 👄 RBV	V 30 kHz				
Att 🗧		B 🔵 SWT	10 ms 👄 🛛 🛛 🖌	₩ 100 kHz	Mode Auto FFT			
●1Pk View								
30 dBm—					D1[1]		1.	-0.23 dB 39060 MHz
								94106 MHz
20 dBm—					M1[1]			-9.03 dBm
	-D1 16.960	dBm	TJ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	www.	when	2	1.850	01070 GHz
10 dBm—								
0 dBm						¥		
-10 dBm—		040 dBm				R1		
						~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	m	
-28.dBm	w D							
-30 dBm—								
-40 dBm—								
-50 dBm—								
-60 dBm—								
CF 1.850	 7 GHz			 1001 pt	<u> </u>		Sna	n 3.0 MHz
				p	Measuring		-	14.04.2017 16:33:32

Date: 14.APR.2017 16:33:32

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> 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-enDocument.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> 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-enDocument.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-enDocument.aspx</a>. 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: 36 of 177

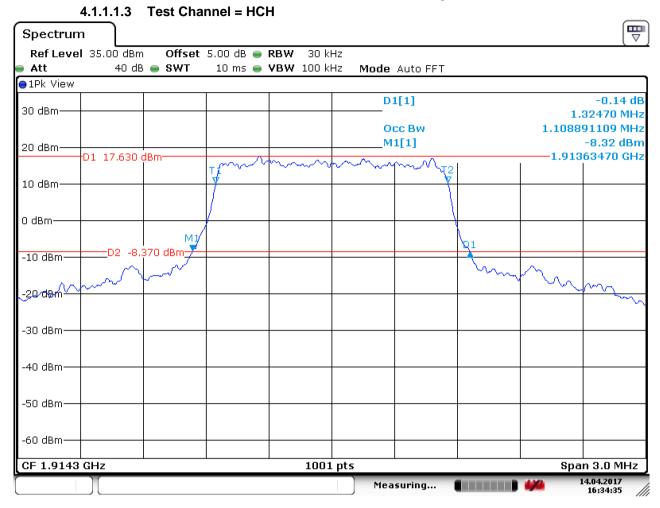
	4.1.1.1.2	Test Cha	nnel = MC	Н					
Spectrur	n								
Ref Leve	el 35.00 dBm	n Offset	5.00 dB 🔵	<b>RBW</b> 30 kł	Ηz				
🖷 Att	40 dE	B 👄 SWT	10 ms 👄	<b>VBW</b> 100 kł	Hz Mode	Auto FFT			
⊖1Pk View									
30 dBm					D	1[1]			-0.44 dB
30 UBIII						D			34270 MHz
						CC BW 1[1]		1.0999	00100 MHz -8.29 dBm
20 dBm—	D1 17.270	 dBm						1.881	83170 GHz
	01 17.270		I Im m	m	www.	T2			
10 dBm—			1			7			
0 dBm			/			\ \			
		M1/	1						
-10 dBm—	D2 -8.	730 dBm 📕					01		
		~							
-20 dBm		m -					m	$\sim_{\sim}$	
	m'							~~	mm
-30 dBm—									
-40 dBm—									
-50 dBm—									
-60 dBm—									
05 1 0001				1001					
CF 1.8825	GHZ			1001				-	n 3.0 MHz
					Mea	asuring		4/4	14.04.2017 16:30:42

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

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> 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-en-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> 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-en-Document.aspx">http://www.sgs.com/en/Terms-and-Conditions/Terms-en-Document.aspx</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction 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 177



Date: 14.APR.2017 16:34:36



Report No.: SZEM170300261304 Page: 38 of 177

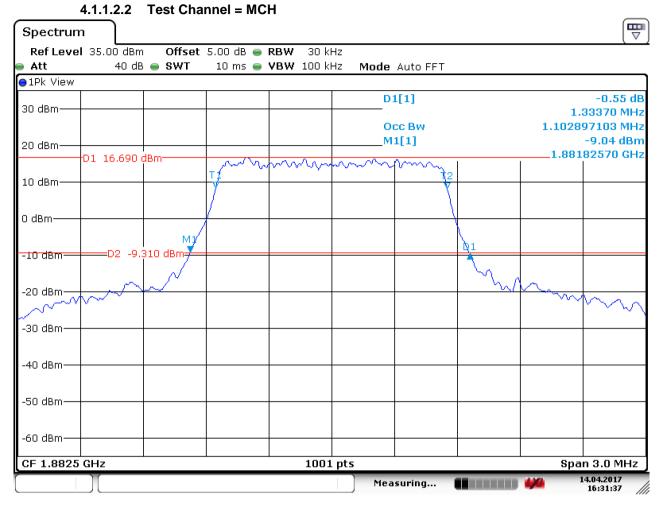
#### 4.1.1.2.1 Test Channel = LCH ₽ Spectrum Ref Level 35.00 dBm Offset 5.00 dB 👄 RBW 30 kHz 40 dB 👄 SWT 10 ms 👄 **VBW** 100 kHz Att Mode Auto FFT ●1Pk View D1[1] -0.58 dB 30 dBm-1.32170 MHz Occ Bw 1.099900100 MHz -9.78 dBm M1[1] 20 dBm-1.85003770 GHz D1 16.190 dBm T1 10 dBm-0 dBm-M1 -D2 -9.810 dBm<del>-</del>] -10 dBm -20 dBm7 -30 dBm--40 dBm· -50 dBm--60 dBm-Span 3.0 MHz CF 1.8507 GHz 1001 pts 14.04.2017 Measuring... 16:32:43

4.1.1.2 Test Mode = LTE/TM2 1.4MHz

Date: 14.APR.2017 16:32:43



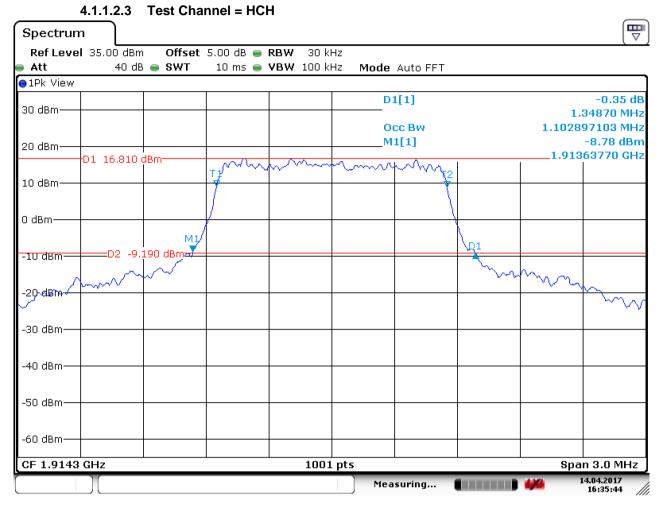
Report No.: SZEM170300261304 Page: 39 of 177



Date: 14.APR.2017 16:31:37



Report No.: SZEM170300261304 Page: 40 of 177



Date: 14.APR.2017 16:35:45



Report No.: SZEM170300261304 Page: 41 of 177

	4.1.1.3.1	Test Cha	nnel = LCH	ł					
Spectru	m								
Ref Lev	el 35.00 dBm	n Offset	5.00 dB 👄 I	<b>RBW</b> 30 kł	Ηz				
e Att		B 🔵 SWT	10 ms 😑 '	<b>VBW</b> 100 kł	Hz Mode	Auto Swe	ер		
⊖1Pk View	/	1							
30 dBm—					D	1[1]			-0.76 dB
00 4011					0	cc Bw			96100 MHz 02697 MHz
20 dBm—						1[1]			11.63 dBm
20 ubiii—								1.850	01950 GHz
	D1 14.360		monoraly	www.	www.ww	mm	marge -		
10 dBm—		7							
0 dBm							+		
		and a							
-10 dBm—	D2 -11	<u>M1</u> L.640 d8m					41		
							- Un	A .	
-20 dBpo	mour and	WL AN						Monungo	Mohmon
ar water of									
-30 dBm—									
-40 dBm—									
-50 dBm—									
-60 dBm—									
CF 1.851	5 GHz			1001	pts				n 6.0 MHz
[					Mea	suring		4/4	14.04.2017 16:26:37

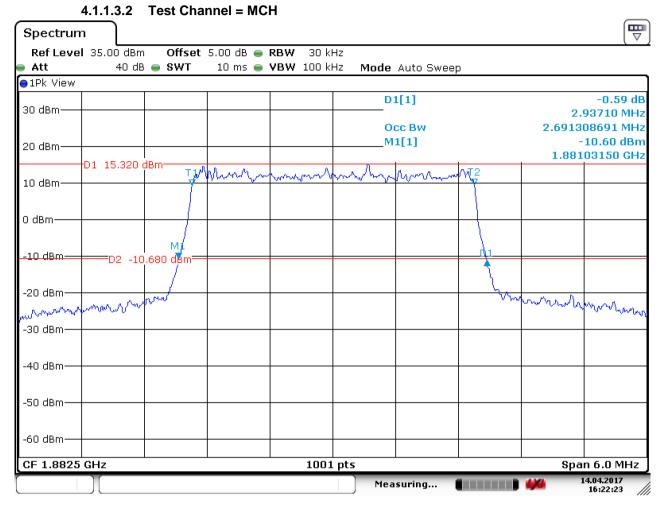
#### 4.1.1.3 Test Mode = LTE/TM1 3MHz

Date: 14.APR.2017 16:26:37

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



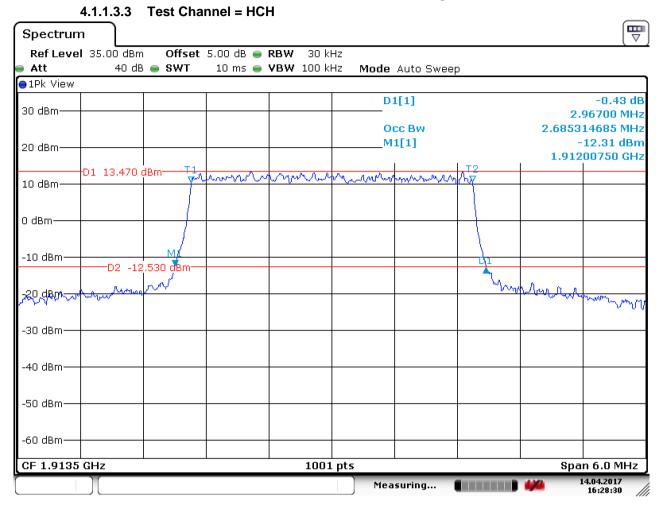
Report No.: SZEM170300261304 Page: 42 of 177



Date: 14.APR.2017 16:22:23



Report No.: SZEM170300261304 Page: 43 of 177



Date: 14.APR.2017 16:28:30



Report No.: SZEM170300261304 Page: 44 of 177

#### 4.1.1.4.1 Test Channel = LCH ₽ Spectrum Ref Level 35.00 dBm Offset 5.00 dB 👄 RBW 30 kHz 40 dB 🖷 SWT 10 ms 👄 **VBW** 100 kHz Att Mode Auto Sweep ●1Pk View D1[1] -0.80 dB 30 dBm-2.96100 MHz Occ Bw 2.685314685 MHz -12.50 dBm M1[1] 20 dBm-1.85001350 GHz D1 13.410 dBmmargaret Asmar A Anterna marine 10 dBm-Acres 10.00 0 dBm--10 dBm--D2 -12.590 dBm--20 dBmand a (Thomas and mount Mert -30 dBm--40 dBm--50 dBm--60 dBm-Span 6.0 MHz CF 1.8515 GHz 1001 pts 14.04.2017 Measuring... 16:25:25

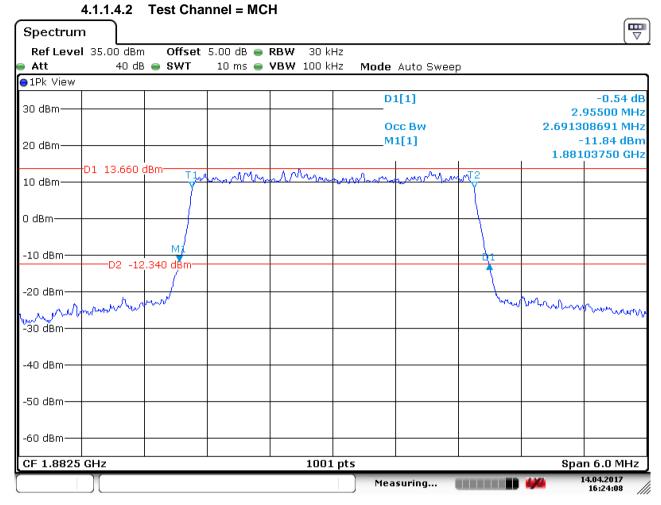
Date: 14.APR.2017 16:25:25

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

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



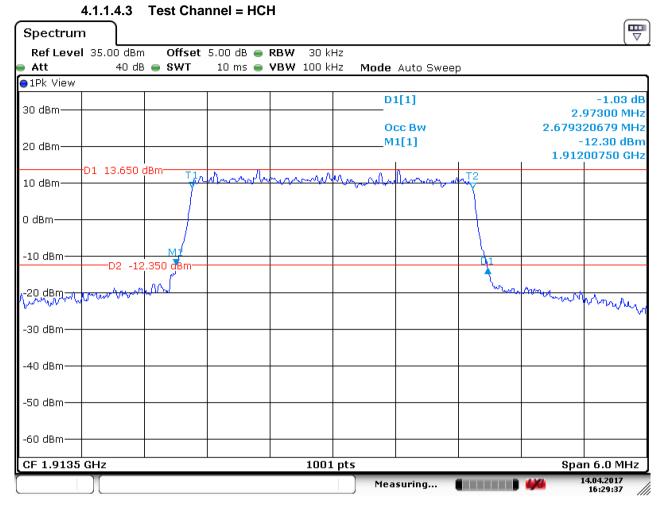
Report No.: SZEM170300261304 Page: 45 of 177



Date: 14.APR.2017 16:24:09



Report No.: SZEM170300261304 Page: 46 of 177



Date: 14.APR.2017 16:29:38



Report No.: SZEM170300261304 Page: 47 of 177

Spectrum     Product of the state		4.1.1.5.1	Test Cha	nnel = LCH	4					_
Att     40 dB     SWT     10 ms     VBW 200 kHz     Mode Auto Sweep       1Pk View     30 dBm	Spectru	m								
1Pk View   0   D1[1]   -0.86 dB     30 dBm   0 cc Bw   4.495504496 MHz     20 dBm   01 13.870 dBm   11.71 dBm     0 dBm   0   0.00 mm     0 dBm   0   0     0 dBm   0   0     -10 dBm   02 -12.130 dBm   0     -20 dBm   0   0     -30 dBm   0   0     -50 dBm   0   0     -60 dBm   0   0     -60 dBm   0   0     -60 dBm   0   0     -1001 pts   Span 10.0 MHz										`````````````````````````````````
30 dBm   01[1]   -0.86 dB     20 dBm   0cc Bw   4.495504496 MHz     20 dBm   01 13.870 dBm   11.71 dBm     01 13.870 dBm   11   1.84999300 GHz     10 dBm   0.1 13.870 dBm   1.84999300 GHz     0 dBm   0.1 13.870 dBm   1.84999300 GHz     10 dBm   0.1 13.870 dBm   1.84999300 GHz     -0 dBm   0.1 13.870 dBm   0.1 10 dBm     -10 dBm   0.2 -12.130 dBm   0.1 10 dBm     -30 dBm   0.1 10 dBm   0.1 10 dBm     -30 dBm   0.1 10 dBm   0.1 10 dBm     -40 dBm   0.1 10 dBm   0.1 10 dBm     -50 dBm   0.1 10 dBm   0.1 10 dBm     -60 dBm   0.1 10 1pts   Span 10.0 MHz			B 🔵 SWT	10 ms 😑	<b>VBW</b> 200 kH	Iz Mode	Auto Swee	ep		
30 dBm   5.00500 MHz     20 dBm   0cc Bw   4.495504496 MHz     20 dBm   01 13.870 dBm   1.84999300 GHz     10 dBm   0.1 13.870 dBm   1.84999300 GHz     0 dBm   0.1 13.870 dBm   1.84999300 GHz     10 dBm   0.2 -12.130 dBm   1.9     -10 dBm   0.2 -12.130 dBm   1.1     -20 dBm   0.1   0.1     -20 dBm   0.1   0.1     -10 dBm   0.2 -12.130 dBm   0.1     -20 dBm   0.1   0.1     -20 dBm   0.1   0.1     -20 dBm   0.1   0.1     -20 dBm   0.1   0.1     -30 dBm   0.1   0.1     -40 dBm   0.1   0.1     -50 dBm   0.1   0.1     -60 dBm   0.1   0.1     -50 dBm   0.1   0.1     -60 dBm   0.1   0.1     -100 pts   Span 10.0 MHz	⊖1Pk View	/	1	I						
20 dBm   T1   M1[1]   -11.71 dBm     10 dBm   T1   T1   T1   T1     0 dBm   M1   T1   T1   T1   T1     0 dBm   M1   T1   T1   T1   T1   T1     0 dBm   M1   T1   T1   T1   T1   T1   T1     0 dBm   M1   T1   T1 <td< td=""><td>30 dBm—</td><td></td><td></td><td></td><td></td><td>D</td><td>1[1]</td><td></td><td>5.</td><td></td></td<>	30 dBm—					D	1[1]		5.	
01   13.870 dBm   1.84999300 GHz     10 dBm   13.870 dBm   1.84999300 GHz     0 dBm   10 dBm   10 dBm   10 dBm     -10 dBm   02 -12.130 dBm   10 dBm   10 dBm     -20 dBm   02 -12.130 dBm   10 dBm   10 dBm     -30 dBm   10 dBm   10 dBm   10 dBm     -30 dBm   10 dBm   10 dBm   10 dBm     -50 dBm   10 dBm   10 dBm   10 dBm     -60 dBm   10 dBm   10 dBm   10 dBm     -10 dBm   10 dBm   10 dBm   10 dBm						0	cc Bw		4.4955	04496 MHz
10 dBm 11.84999300 GHz   10 dBm 11.84999300 GHz   0 dBm 11.8499300 GHz   -0 dBm 11.8499300 GHz   -10 dBm 11.8499300 GHz   -20.dBm 11.8499300 GHz   -20.dBm 11.8499300 GHz   -30 dBm 11.8499300 GHz   -50 dBm 11.8499300 GHz   -60 dBm 11.8499300 GHz   -60 dBm 11.8499300 GHz   100 tpt 100 tpt	20 dBm—					M	1[1]		-	11.71 dBm
10 dBm   11 3.8/0 dBm   10 dBm<			Т1				1	1 ===	1.849	99300 GHz
0 dBm -10 dBm -10 dBm -20 dBm -20 dBm -20 dBm -30 dBm -40 dBm -50 dBm -50 dBm -60 dBm -60 dBm -60 dBm -60 dBm -60 dBm -10 d	10 dBm	D1 13.870	dBm 🚽	www.	Munhow	umm	mmm	n y		
-10 dBm D2 -12.130 dBm										
-10 dBm D2 -12.130 dBm20 dBm20 dBm20 dBm30 dBm30 dBm30 dBm30 dBm50 dBm	0 dBm									
-10 dBm D2 -12.130 dBm								$  \rangle$		
-20, dBm	-10 dBm—	_								
-30 dBm		D2 -12	2.130 dBm							
-30 dBm	00 d0 m .	roturn	Mount					' have the	monther	manus
-40 dBm	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	with more than the second s								
-40 dBm										
-50 dBm -60 dBm -60 dBm CF 1.8525 GHz 1001 pts Span 10.0 MHz Measuring 14.04.2017	-30 aBm—									
-50 dBm50 dB										
-60 dBm60 dB	-40 dBm—									
-60 dBm60 dB										
CF 1.8525 GHz     1001 pts     Span 10.0 MHz       Measuring     14.04.2017	-50 dBm—									
CF 1.8525 GHz     1001 pts     Span 10.0 MHz       Measuring     14.04.2017										
Measuring 14.04.2017	-60 dBm—									
Measuring 14.04.2017	CF 1.852	5 GHz	1		1001	pts	1	1	l Span	10.0 MHz
		) (					surina			

4.1.1.5 Test Mode = LTE/TM1 5MHz

Date: 14.APR.2017 16:17:47

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



Report No.: SZEM170300261304 Page: 48 of 177

	4.1.1.5.2	Test Cha	nnel = MC	н					
Spectru	m								
Ref Lev	el 35.00 dBn	n Offset	5.00 dB 🔵	<b>RBW</b> 50 ki	Ηz				
🗕 Att	40 di	B 👄 SWT	10 ms 👄	<b>VBW</b> 200 ki	Hz Mode	Auto Swee	р		
⊖1Pk View									
00 JD					D	1[1]			-0.69 dB
30 dBm—					_	_			98500 MHz
						CC BW			04496 MHz
20 dBm—					IVI	1[1]			11.87 dBm
	D1 13.840	dBm T1	0 × 6 × 6 /	0.04 · · ·			<u>. T2</u>	1.000	02200 (112
10 dBm—		- Ann	mann	Whink	m man m	mannum	The second secon		
0 dBm									
o abiii									
		M					$  \rangle$		
-10 dBm—	D2 -1:	2.160 dBm-					<u>di</u>		
							1		
-20 dBm—	, ali	- Anderson					- hardy	Mary	man and
montant	homenny							· m	and with
-30 dBm—	_								
-40 dBm—									
10 abiii									
-50 dBm—									
-60 dBm—									
CF 1.882	 5 GHz			1001	nts			l Snan	10.0 MHz
						curing			14.04.2017
L						suring			16:11:11

Date: 14.APR.2017 16:11:11



Report No.: SZEM170300261304 Page: 49 of 177

	4.1.1.5.3	Test Cha	nnel = HCH					
Spectru	n							
Ref Leve	el 35.00 dBn	n Offset	5.00 dB 🥃 RBW	50 kHz				
🗕 Att	40 dE	B 👄 SWT	10 ms 👄 <b>VBW</b>	200 kHz	Mode Auto Swee	p		
⊖1Pk View								
00 d0					D1[1]			-0.69 dB
30 dBm—								93500 MHz
					Occ Bw			24476 MHz
20 dBm—					M1[1]			11.62 dBm 02200 GHz
	D1 14.100	dBm <del>T1</del>				++	1.910	
10 dBm			and which which where the	munn	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	₩¥		
0 dBm								
		M						
-10 dBm—	D2 -1:	1.900 dBm						
		a set						
r2Q,dBmA	madament	nsnyr -				- Un la	200 month of A	mmun
								0 ÇAVAA
-30 dBm—								
-40 dBm—								
-+0 0011								
-50 dBm—								
-60 dBm—								
CF 1.912				1001 ptc				10.0 MU~
CE 1'915:	JGHZ			1001 pts				10.0 MHz
L					Measuring		4/4	4.04.2017 16:19:13 //

Date: 14.APR.2017 16:19:13



Report No.: SZEM170300261304 Page: 50 of 177

#### 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 -0.25 dB D1[1] 30 dBm-4.98500 MHz Occ Bw 4.495504496 MHz -13.14 dBm M1[1] 20 dBm-1.85001200 GHz D1 12.670 dBm Marchan hul White Alexander n 10 dBm-0 dBm--10 dBmľù 1. -D2 -13.330 aBm -20 dBmmorne met Whow that he -30 dBm--40 dBm--50 dBm--60 dBm-Span 10.0 MHz CF 1.8525 GHz 1001 pts 14.04.2017 Measuring... ----16:15:33

Date: 14.APR.2017 16:15:34

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

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



Report No.: SZEM170300261304 Page: 51 of 177

Spectrum	<u> </u>								
Ref Level	35.00 dBm	Offset	5.00 dB 👄	<b>RBW</b> 50 kł	Ηz				
Att	40 dB	🖷 SWT	10 ms 👄	<b>VBW</b> 200 kł	Hz Mode	: Auto Swei	ер		
●1Pk View			1						
30 dBm					0	1[1]		4	-0.87 dB 92500 MHz
					c	CC Bw			24476 MHz
20 dBm						11[1]			10.95 dBm
	D1 14.500 a					1	1	1.880	04200 GHz
10 dBm	DI 14.500 (		mm	man	Marin	Annonnan	m T2		
0 dBm									
-10 dBm—	D011	.500 dBm—					<u>b</u> 1		
							1 1		
-20 dBm							the	monterner	
-20 dBm	rownew	www.						·····	where where
-30 dBm——									
-40 dBm									
-50 dBm—									
-60 dBm									
CF 1.8825	GHz	ı	ı	1001	pts		1	Span	10.0 MHz
	)[				Me	asuring		4/4	4.04.2017 16:12:41

4.1.1.6.2 Test Channel = MCH

Date: 14.APR.2017 16:12:41



Report No.: SZEM170300261304 Page: 52 of 177

Spectrum										
Ref Level	35.00 dBm	Offset	5.00 dB 👄	<b>RBW</b> 50 kH	łz					
🗕 Att	40 dB	🖷 SWT	10 ms 🔵	<b>VBW</b> 200 kH	lz Mode	Auto Swe	ер			
●1Pk View										
30 dBm						1[1]			-0.79 dB 98500 MHz	
20 dBm						cc Bw 1[1]	I	-	04496 MHz 12.69 dBm 02200 GHz	
10 dBm	D1 12.720 (	dBm──⊤ <u>t</u> ∧r	monne	www.www.hays	مسموسك	man	what?			
0 dBm										
-10 dBm—							Q1			
r~20rdBmathr		.280 dBm					- Contraction of the second	theman	mandy	
-30 dBm										
-40 dBm										
-50 dBm										
-60 dBm										
CF 1.9125	GHz			1001	pts			_	10.0 MHz	
	][]				Mea	suring		4/4	14.04.2017 16:20:40	

#### 4.1.1.6.3 Test Channel = HCH

Date: 14.APR.2017 16:20:40



Report No.: SZEM170300261304 Page: 53 of 177

#### 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] -0.33 dB 30 dBm-9.7300 MHz Occ Bw 8.931068931 MHz -11.00 dBm M1[1] 20 dBm-1.8501250 GHz D1 14.930 dBm mound monthing when have no margaret w. ١٨٨ 10 dBm-0 dBm· M1 -10 dBm--D2 -11.070 dBm hond -20 dBm الم -30 dBm--40 dBm--50 dBm--60 dBm-Span 20.0 MHz CF 1.855 GHz 1001 pts 14.04.2017 Measuring... 16:07:02

4.1.1.7 Test Mode = LTE/TM1 10MHz

Date: 14.APR.2017 16:07:02



Report No.: SZEM170300261304 Page: 54 of 177

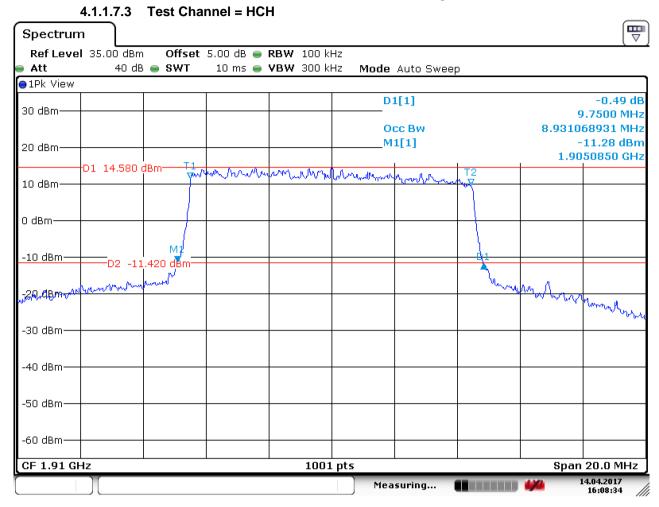
Spectrun	ı )								
	l 35.00 dBm			<b>RBW</b> 100 kH					
e Att	40 dB	🛛 🔵 SWT	10 ms 😑	<b>VBW</b> 300 kH	z Mode	Auto Swee	эр		
⊖1Pk View									
30 dBm					D	1[1]			-0.99 dB
30 UBIII						_			0.8700 MHz
						CC BW			48951 MHz
20 dBm					I¥I	1[1]			11.91 dBm 75450 GHz
	D1 14.050 (	l dBm <del></del>					T2	1.07	70400 0112
10 dBm		The second secon	Mayner and	manand	man	hand	<u>~~</u>		
0 dBm									
		ма					$  \rangle$		
-10 dBm—	D2 -11	950 d8m					t du		
		1 1							
-20 dBm—		W. R. W.						and and some as a	
-20 dBm	with the hard	~~~~						man	mound
-30 dBm									
00 00111									
-40 dBm									
-50 dBm—									
-60 dBm									
CF 1.8825	GHz			1001	pts			-	20.0 MHz
					Mea	suring		4/4	14.04.2017 16:02:40 //

#### 4.1.1.7.2 Test Channel = MCH

Date: 14.APR.2017 16:02:40



Report No.: SZEM170300261304 Page: 55 of 177



Date: 14.APR.2017 16:08:33



Report No.: SZEM170300261304 Page: 56 of 177

#### 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] -0.87 dB 30 dBm-9.7300 MHz Occ Bw 8.951048951 MHz -11.86 dBm M1[1] 20 dBm-1.8501250 GHz D1 13.790 dBm-mar produce to a horal and the second of the dame. 10 dBm-0 dBm-M -10 dBm--D2 -12.210 dBm[.] W١ -20 dBm-Mr. Andara mour -30 dBm--40 dBm--50 dBm--60 dBm-Span 20.0 MHz CF 1.855 GHz 1001 pts 14.04.2017 Measuring... 16:05:51

4.1.1.8 Test Mode = LTE/TM2 10MHz

Date: 14.APR.2017 16:05:51



Report No.: SZEM170300261304 Page: 57 of 177

	4.1.1.8.2	Test Cha	nnel = MCI	Н					
Spectru	m								
Ref Leve	el 35.00 dBm	n Offset	5.00 dB 😑 I	<b>RBW</b> 100 ki	Hz				
🖷 Att	40 dE	B 👄 SWT	10 ms 😑 '	<b>VBW</b> 300 ki	Hz Mode	Auto Swee	p		
⊖1Pk View									
00 JD					D	1[1]			-0.57 dB
30 dBm—					_	_			.6900 MHz
						CC BW			68931 MHz
20 dBm—					IVI	1[1]			11.72 dBm 76650 GHz
	D1 14.230	I dBm <del>T1</del>				l	<u>1 T2</u>	1.07	70000 0112
10 dBm—		- Yor	hand	montheline	mun	monst	w		
							1.1		
0 dBm									
		мź							
-10 dBm—	D2 -11	L.770 dBm					<u> </u>		
							1 1		
-20 dBm—							- Www	wommun	
a winn	man	from the second se							www.www.worky
-30 dBm-									
10.10									
-40 dBm—									
-50 dBm—									
-60 dBm—									
CF 1.882	5 GHz			1001	. pts			•	20.0 MHz
					Mea	suring		444	4.04.2017 16:04:20 //

Date: 14.APR.2017 16:04:21



Report No.: SZEM170300261304 Page: 58 of 177

	4.1.1.8.3	Test Cha	nnel = HCH						
Spectrur	n								
Ref Leve	I 35.00 dBm	n Offset	5.00 dB 🥌 RBW	/ 100 kHz	:				
🔵 Att	40 dE	B 🔵 SWT	10 ms 🔵 VBV	/ 300 kHz	Mode	Auto Swee	p		
⊖1Pk View									
					Di	l[1]			-0.60 dB
30 dBm									.6900 MHz
						cc Bw			68931 MHz
20 dBm					M	1[1]			11.68 dBm 51450 GHz
	D1 13.950	 dBm						1.90	31430 GHZ
10 dBm	DI 13.930		monumero	andra	mound	Margar Harry	T2		
0 dBm									
0 UBIII									
		м							
-10 dBm—		2.050 dBm					41		
-20 dBm <del>#0</del>	hann	ntwo/					ware	Mr. Ward a	
And the product of the								the work of the	manh
-30 dBm—									and a second
30 abiii									
-40 dBm—									
-50 dBm—									
-60 dBm—									
CF 1.91 G	Hz			1001 p	its			•	20.0 MHz
	][				Mea	suring		4/4	4.04.2017 16:09:40

Date: 14.APR.2017 16:09:41



Report No.: SZEM170300261304 Page: 59 of 177

#### 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 D1[1] -0.36 dB 30 dBm-14.9550 MHz Occ Bw 13.456543457 MHz -8.25 dBm M1[1] 20 dBm--1.8500070 GHz D1 17.650 dBm 10 dBm-0 dBm-M. <u>50</u> dB -8 -10 dBm-<del>م</del>را ሎ -20/dBra<u>^^</u> -30 dBm--40 dBm· -50 dBm--60 dBm-Span 30.0 MHz CF 1.8575 GHz 1001 pts 14.04.2017 Measuring... 15:57:35

4.1.1.9 Test Mode = LTE/TM1 15MHz

Date: 14.APR.2017 15:57:36



Report No.: SZEM170300261304 Page: 60 of 177

	4.1.1.9.2	Test Cha	nnel = MCH						
Spectru	m								
Ref Lev	el 35.00 dBr	m Offset	5.00 dB 🥃 RI	<b>BW</b> 300 kH	łz				
🗕 Att	40 d	IB 😑 SWT	10 ms 👄 <b>V</b>	BW 1 MH	lz Mode	Auto Swee	р		
⊖1Pk View	/								
30 dBm—					D	1[1]			-0.73 dB
SU UDIII									-9250 MHz
						cc Bw 1[1]		13.3104	83516 MHz -8.15 dBm
20 dBm—	D1 17.330			A .		-[-] ~ /	1	1.87	50370 GHz
			- man	~~~~~	man	run	<u>m</u> 72		
10 dBm—									
		1 1							
0 dBm—							+		
		M							
-10 dBm—	D2 -8	1.670 dBm <del></del>							
-20 dBm—		And					- m	mon	and the second
Mun	mont								
-30 dBm—									
-30 ubiii—									
-40 dBm—									
-50 dBm—									
-60 dBm—			<u> </u>						
CF 1.882	5 CH7			1001	nts			 Snan	30.0 MHz
				1001					30.0 MHZ
					Mea	suring			15:32:05

Date: 14.APR.2017 15:32:06



Report No.: SZEM170300261304 Page: 61 of 177

	4.1.1.9.3	Test Cha	nnel = HCH							
Spectru	n									
Ref Leve	el 35.00 dBr	m Offset	5.00 dB 🥌 RI	<b>3W</b> 300 kH	Ηz					
🗕 Att	40 d	B 👄 SWT	10 ms 👄 VI	BW 1 MH	lz Mode	Auto Swee	p			
⊖1Pk View	_	_								
30 dBm—					D	1[1]				-0.33 dB
30 UBIII										.9250 MHz
						cc Bw 1[1]			13,4303	43457 MHz -8.40 dBm
20 dBm—	D1 17.470	dBm	m. or m	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	0.0	+[+]	<b>T</b> 0		1.89	99780 GHz
		T ₹		- war	www	mm	$\uparrow^{T2}_{\nabla}$			
10 dBm—										
0 dBm							+			
		мĹ					}	1		
-10 dBm—	D2 -8	.530 dBm						÷		
	1 mm	mend						2m		
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1 card a m								man	A.,
20 00.0										and the second
-30 dBm—										<u>```</u>
-40 dBm—										
-50 dBm—										
-60 dBm—										
-00 abiii										
CF 1.907	5 GHz			1001	pts				Span	30.0 MHz
					Mea	suring			444	4.04.2017 15:59:06

Date: 14.APR.2017 15:59:07



Report No.: SZEM170300261304 Page: 62 of 177

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] -1.13 dB 30 dBm-14.8350 MHz 13.516483516 MHz Occ Bw -8.97 dBm M1[1] 20 dBm-1.8500970 GHz D1 16.440 dBm 10 dBm-0 dBm-M -D2 -9.560 dBm -10 dBm--20 dBm --30 dBm--40 dBm· -50 dBm--60 dBm-Span 30.0 MHz CF 1.8575 GHz 1001 pts 14.04.2017 Measuring... 15:34:48

4.1.1.10 Test Mode = LTE/TM2 15MHz

Date: 14.APR.2017 15:34:48



Report No.: SZEM170300261304 Page: 63 of 177

Spectrum	')								
Ref Level	35.00 dBm	Offset	5.00 dB 👄	RBW 300 kH	Ηz				
🔵 Att	40 dB	🖷 SWT	10 ms 👄	VBW 1 MH	Hz Mode	Auto Swee	эр		
●1Pk View			1						
30 dBm					D	1[1]		14	-0.55 dB I.8050 MHz
						CC BW		13.4865	13487 MHz -9.15 dBm
20 dBm	D1 16.810 (1[1]		1.87	-9.13 uBm 50970 GHz
10 dBm	DI 10.810 (Jun Mar	monten	man	mm	ant -		
0 dBm							+		
	D00.	MÍ 190 dBm===					D1		
-10 dBm——	D2 -9,.						1 1		
-20 dBm	,	and a					mas	mannan	www.
monneyer	Low Ward								
-30 dBm									
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.8825	GHz			1001	pts			 Span	30.0 MHz
][isuring			14.04.2017 15:33:11

4.1.1.10.2 Test Channel = MCH

Date: 14.APR.2017 15:33:12



Report No.: SZEM170300261304 Page: 64 of 177

Spectrun	n								
	I 35.00 dBm			RBW 300 k					
Att	40 dB) 🛑 SWT	10 ms 👄	VBW 1 M	Hz Mode	Auto Swee	ep		
⊖1Pk View			1		_				0.05.10
30 dBm					U	1[1]		14	-0.85 dB 1.9250 MHz
					0	cc Bw			13487 MHz
20 dBm					M	1[1]			-8.80 dBm
	D1 16.860	dBm	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		000- o	1 -	1.70	1.90	00970 GHz
10 dBm		\ ∳				$ \longrightarrow $	$\sqrt{\frac{1}{2}}$		
0 dBm——									
	o	MÅ 140 dBm====					d 1		
-10 dBm—	U2 -9,						1		
0	money	\sim					ny	mon	
<u>~28-dBm∕∽∕</u>									my
									No.
-30 dBm—									<u>ک</u>
-40 dBm—									
-50 dBm									
-60 dBm									
CF 1.9075	CU-2			1001	nte			Cnan	30.0 MHz
0.1.2019				1001				-	30.0 MHZ
L					Mea	asuring		4	16:00:34

4.1.1.10.3 Test Channel = HCH

Date: 14.APR.2017 16:00:34



Report No.: SZEM170300261304 Page: 65 of 177

4.1.1.11.1 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] -1.10 dB 30 dBm-19.4210 MHz Occ Bw 17.902097902 MHz -8.04 dBm M1[1] 20 dBm-1.8503300 GHz D1 17.190 dBm-1 Sm mm hun I 10 dBm-0 dBm-M. -D2 -8.810 dBm -10 dBm--20 dBm--30 dBm--40 dBm· -50 dBm--60 dBm-Span 40.0 MHz CF 1.86 GHz 1001 pts 14.04.2017 Measuring... 15:28:01

4.1.1.11 Test Mode = LTE/TM1 20MHz

Date: 14.APR.2017 15:28:01



Report No.: SZEM170300261304 Page: 66 of 177

Spectrun	ı									
Ref Leve	l 35.00 dBm	o Offset	5.00 dB 👄	RBW 300 ki	Hz				`	
🖷 Att	40 dB	SWT 😑	10 ms 👄	VBW 1 M	Hz Mode	Auto Swee	эр			
⊖1Pk View										
30 dBm					D	l[1]		19	-1.52 dB .3810 MHz	
					0	cc Bw		17.902097902 MHz		
20 dBm		15 T1				1[1]			-8.82 dBm 27900 GHz	
	D1 16.510	dBm 	moun	mann	milling	hormon	M^2	1.01		
10 dBm										
0 dBm										
		M								
-10 dBm	D2 -9.	490 dBm								
							how	Jun .		
-20 dBm	manon	and the second							manna	
-30 dBm-	φ υ									
-30 ubiii—										
-40 dBm—										
-50 dBm——										
-60 dBm—										
CF 1.8825	CH2			1001	nte				40.0 MHz	
				1001			4		40.0 11112	
L					Mea	suring		4/4	15:23:49 //	

4.1.1.11.2 Test Channel = MCH

Date: 14.APR.2017 15:23:50



Report No.: SZEM170300261304 Page: 67 of 177

Spectrum	<u> </u>								
	35.00 dBm			RBW 300 kH					
Att	40 dB	SWT	10 ms 😑	VBW 1 MH	lz Mode	Auto Swee	эр		
●1Pk View									
30 dBm						1[1]			-1.55 dB 0.5400 MHz
20 dBm					M	сс Вw 1[1]			97902 MHz -9.26 dBm 52500 GHz
10 dBm	D1 16.340 (ABM TIN	m	• · · ·	have	hhum	↓ ^{T2}		
0 dBm									
-10 dBm	——D2 -9.6	560 dBm							
-20 dBm	Jowhanalana	and a second					- un	marking	×.
-30 dBm									- Two way
-40 dBm									Ներե
-50 dBm									
-60 dBm									
CF 1.905 G	Hz		1	1001	pts	1	1	Span	40.0 MHz
)[Mea	isuring		444	14.04.2017 15:29:20

4.1.1.11.3 Test Channel = HCH

Date: 14.APR.2017 15:29:21



Report No.: SZEM170300261304 Page: 68 of 177

4.1.1.12.1 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] -0.85 dB 30 dBm-19.6200 MHz Occ Bw 17.902097902 MHz -9.84 dBm M1[1] 20 dBm-1.8502100 GHz D1 15.860 dBm $\mathbb{T}_{\mathcal{N}}$ monten When man \sim 10 dBm-0 dBm-M) 10 dBm--D2 -10.140 dBm N -20 dBmherow n N ಷ್ಟರ лM -30 dBm--40 dBm· -50 dBm--60 dBm-Span 40.0 MHz CF 1.86 GHz 1001 pts 14.04.2017 Measuring... 15:26:37

4.1.1.12 Test Mode = LTE/TM2 20MHz

Date: 14.APR.2017 15:26:37



Report No.: SZEM170300261304 Page: 69 of 177

Spectrum	<u>`</u>								
	35.00 dBm			RBW 300 k					
Att	40 dB	s 👄 SWT	10 ms 😑	VBW 1 M	Hz Mode	Auto Swe	ер		
⊖1Pk View									
30 dBm						1[1]			-0.30 dB).4210 MHz
20 dBm						cc Bw 1[1]			57942 MHz -9.84 dBm 28300 GHz
10 dBm	D1 15.680)		Am	mm		· · · · · · · · · · · · · · · · · · ·	- T2 - mr/V		
0 dBm									
- 10 dBm	D2 -10).320 dBm							
-20 dBm	wwww	rand					- hora	MY China and a Chart	mun
-30 dBm									
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.8825	GHz		1	1001	L pts			Span	40.0 MHz
()[suring			14.04.2017 15:25:18

4.1.1.12.2 Test Channel = MCH

Date: 14.APR.2017 15:25:18



Report No.: SZEM170300261304 Page: 70 of 177

Spectrum	1								
Ref Level	35.00 dBm	Offset	5.00 dB 👄	RBW 300 k	Hz				(*
🗕 Att	40 dB	🗉 SWT	10 ms 👄			Auto Swee	р		
●1Pk View									
30 dBm						1[1] cc Bw			-1.27 dB 0.4210 MHz 37862 MHz
20 dBm	D1 16.300 (dB m			M	1[1]			-9.20 dBm 53300 GHz
10 dBm	DI 10,300 (nn	mmm	mont	mm	~T2		
0 dBm									
-10 dBm	——D2 -9.1	м і 700 dBm					dı -		
-20 dBm	ىھىمى مەر ىس	www					hno	Sandy -	
-30 dBm								Same to Ving	n y
									hundhar
-40 dBm									×***
-50 dBm									
-60 dBm									
CF 1.905 G	Hz	1	1	1001	, pts	1	1	Span	40.0 MHz
)[]				Mea	suring		4/0 1	14.04.2017 15:30:34 //

4.1.1.12.3 Test Channel = HCH

Date: 14.APR.2017 15:30:35



Report No.: SZEM170300261304 Page: 71 of 177

5 Band Edges Compliance

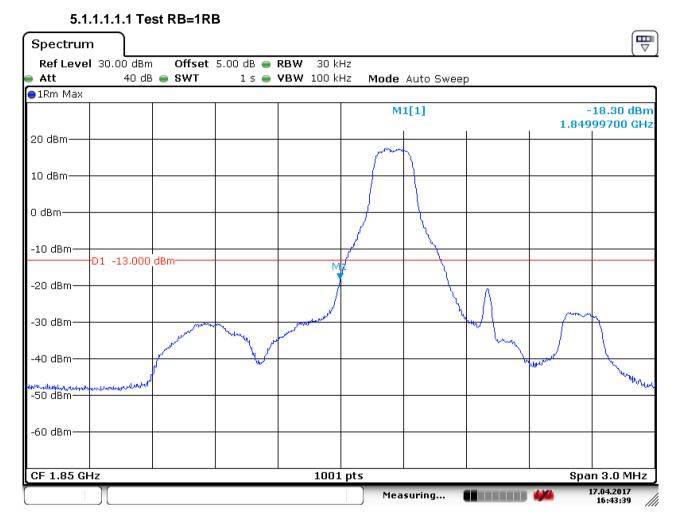
Part I –

5.1 For LTE

5.1.1 Test Band = LTE band25

5.1.1.1 Test Mode = LTE/TM1 1.4MHz

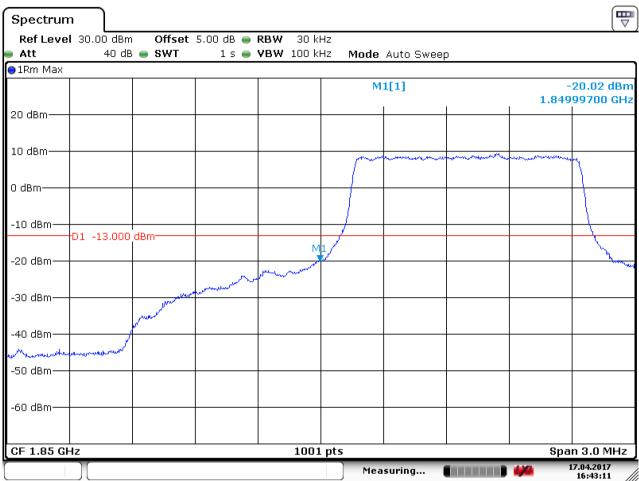
5.1.1.1.1 Test Channel = LCH



Date: 17.APR.2017 16:43:40



Report No.: SZEM170300261304 Page: 72 of 177

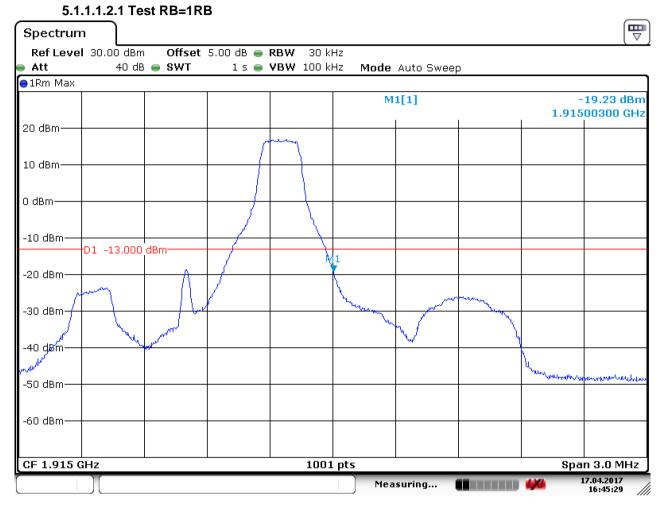


5.1.1.1.1.2 Test RB=6RB

Date: 17.APR.2017 16:43:11



Report No.: SZEM170300261304 Page: 73 of 177

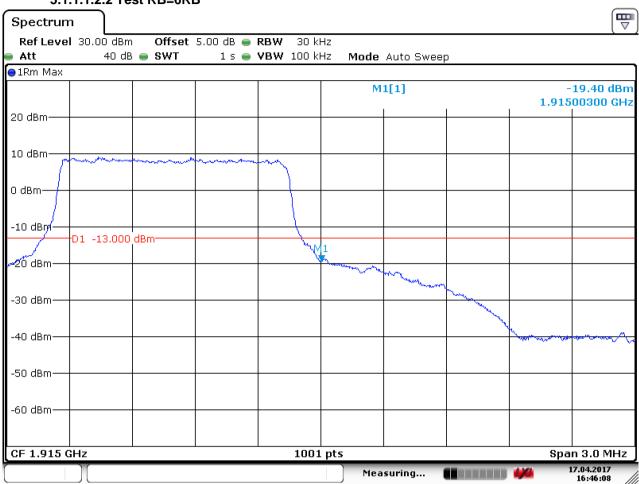


5.1.1.1.2 Test Channel = HCH

Date: 17.APR.2017 16:45:29



Report No.: SZEM170300261304 Page: 74 of 177



5.1.1.1.2.2 Test RB=6RB

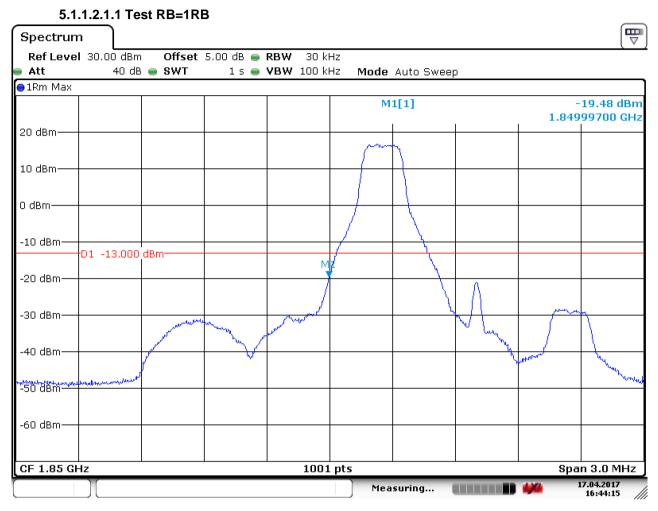
Date: 17.APR.2017 16:46:09



Report No.: SZEM170300261304 Page: 75 of 177

5.1.1.2 Test Mode = LTE/TM2 1.4MHz

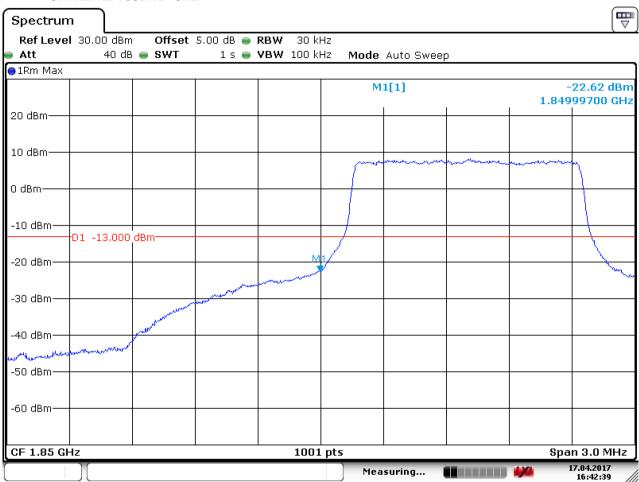
5.1.1.2.1 Test Channel = LCH



Date: 17.APR.2017 16:44:15



Report No.: SZEM170300261304 Page: 76 of 177

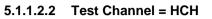


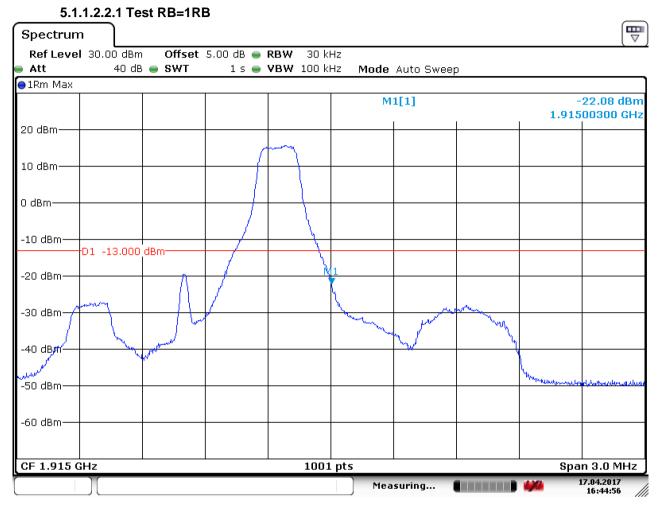
5.1.1.2.1.2 Test RB=6RB

Date: 17.APR.2017 16:42:39



Report No.: SZEM170300261304 Page: 77 of 177

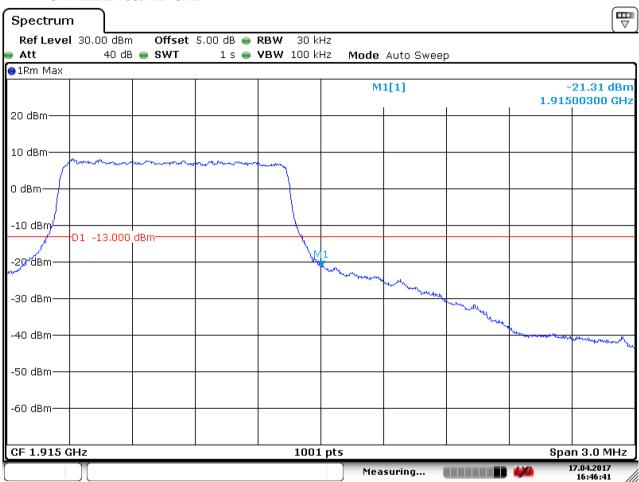




Date: 17.APR.2017 16:44:57



Report No.: SZEM170300261304 Page: 78 of 177



5.1.1.2.2.2 Test RB=6RB

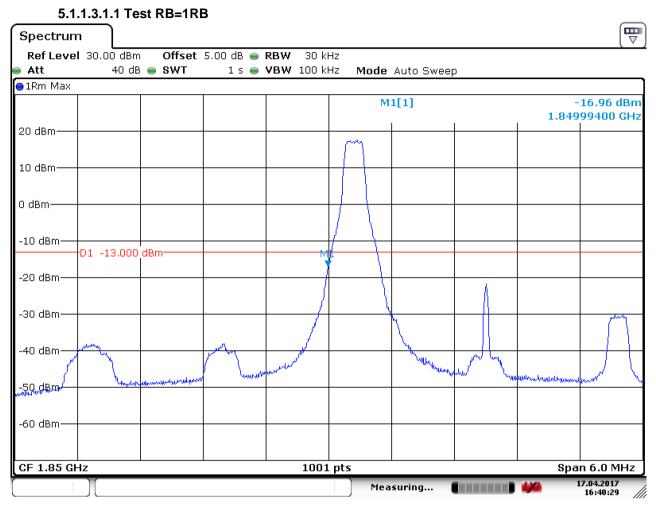
Date: 17.APR.2017 16:46:40



Report No.: SZEM170300261304 Page: 79 of 177

5.1.1.3 Test Mode = LTE/TM1 3MHz

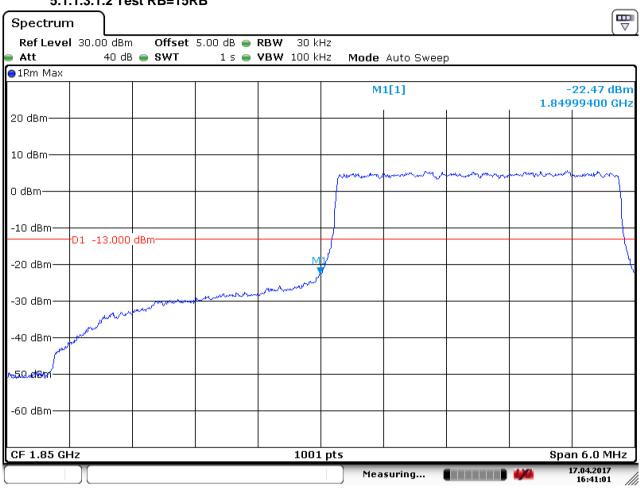
5.1.1.3.1 Test Channel = LCH



Date: 17.APR.2017 16:40:29



Report No.: SZEM170300261304 Page: 80 of 177

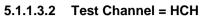


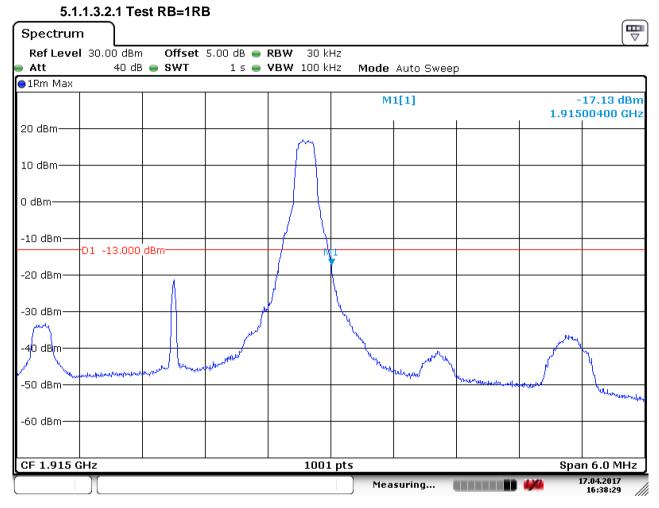
5.1.1.3.1.2 Test RB=15RB

Date: 17.APR.2017 16:41:01



Report No.: SZEM170300261304 Page: 81 of 177





Date: 17.APR.2017 16:38:29



Report No.: SZEM170300261304 Page: 82 of 177

Spectrum									
Ref Level Att	30.00 dBm	Offset SWT	5.00 dB 👄	RBW 30 k VBW 100 k		A			
1Rm Max	40 UB	ויינ	15 🛑	YDYY IUU K	nz Muue	Auto Swee	μ		
						1[1]	-23.38 dBm 1.91500400 GHz		
20 dBm									
10 dBm	Juchnaman	and a start and a start and a start a s	-	wheeling					
				an Hanna uman and					
-10 dBm	D1 -13.000	dBm							
-20 dBm					1				
					mound	Murmun on			
-30 dBm							- marken bernowned	willing through and	
-40 dBm								"wlag	mum
-50 dBm——									www.www.r
-60 dBm									
CF 1.915 G	Hz		1	1001	l pts		1	l Spa	n 6.0 MHz
][suring			17.04.2017 16:37:57

5.1.1.3.2.2 Test RB=15RB

Date: 17.APR.2017 16:37:58

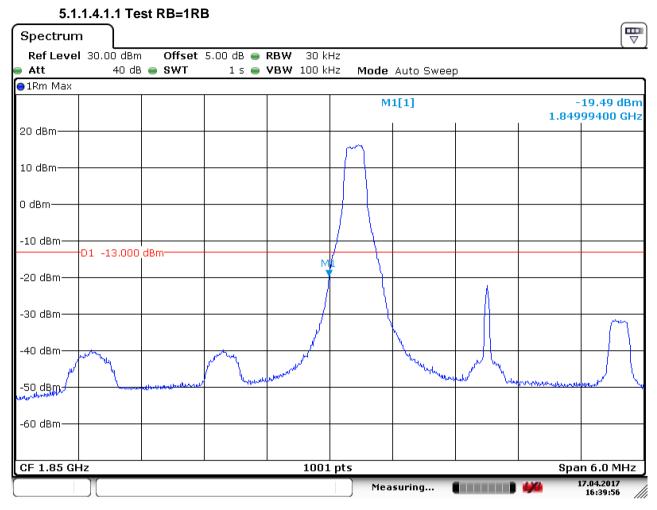
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-and-Conditions.aspx 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 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: 83 of 177

5.1.1.4 Test Mode = LTE/TM2 3MHz

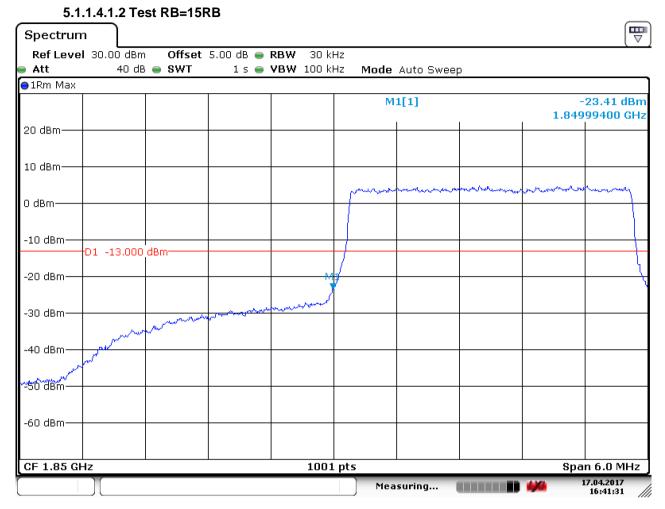
5.1.1.4.1 Test Channel = LCH



Date: 17.APR.2017 16:39:56



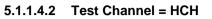
Report No.: SZEM170300261304 Page: 84 of 177

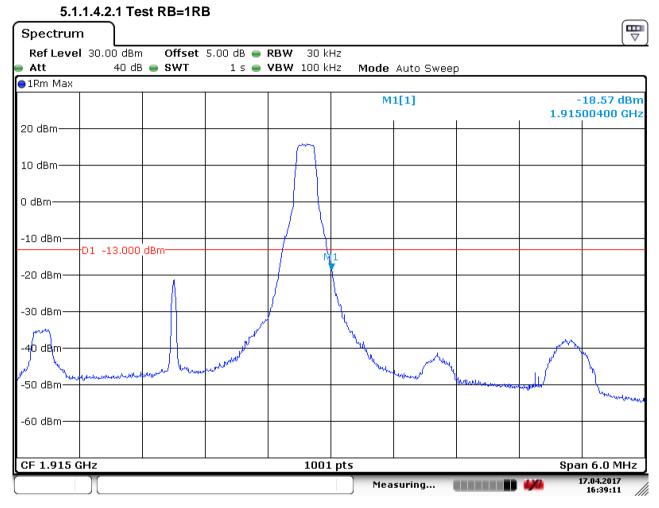


Date: 17.APR.2017 16:41:32



Report No.: SZEM170300261304 Page: 85 of 177





Date: 17.APR.2017 16:39:12



Report No.: SZEM170300261304 Page: 86 of 177

Spectrum	<u> </u>								Ē	
Ref Level	30.00 dBm	Offset	: 5.00 dB 🔵	RBW 30 k	Hz					
🖷 Att	40 dE	s 🔵 SWT	1 s 👄	VBW 100 k	Hz Mode	Auto Sweej	b			
⊖1Rm Max										
					M1[1]				-25.59 dBm 1.91500400 GHz	
20 dBm										
10 dBm										
0 dBm	hamana	methorna	mann	Among						
-10 dBm	D1 -13.000									
20 dBm-	DI -13.000	ивш								
/ -30 dBm——				۲. ۲	1					
						and and a second second	monter	mery.		
-40 dBm								Prove all all all all all all all all all al	manner	
-50 dBm										
-60 dBm										
CF 1.915 G	Hz			1001	pts			Spa	n 6.0 MHz	
)[]				Mea	suring		4/4 1	7.04.2017 16:37:11	

5.1.1.4.3 Test RB=15RB

Date: 17.APR.2017 16:37:11

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 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.

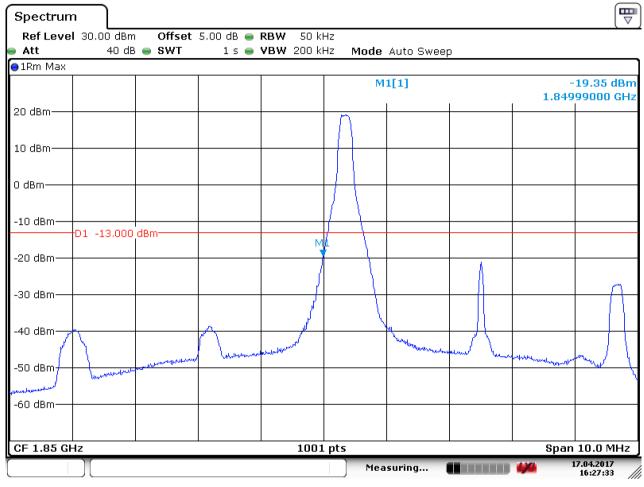


Report No.: SZEM170300261304 Page: 87 of 177

5.1.1.5 Test Mode = LTE/TM1 5MHz

5.1.1.5.1 Test Channel = LCH

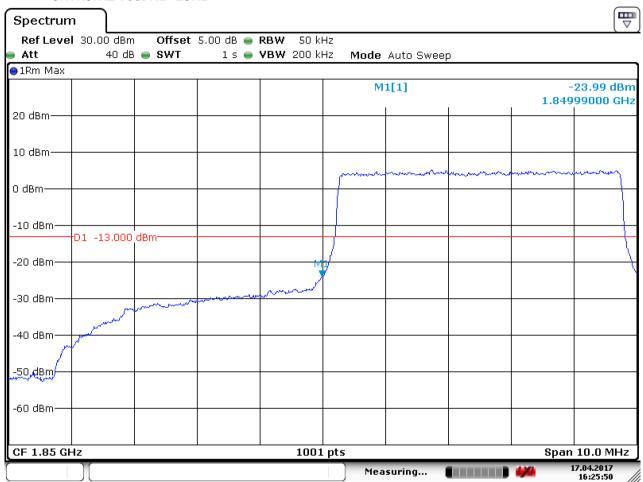
5.1.1.5.1.1 Test RB=1RB



Date: 17.APR.2017 16:27:33



Report No.: SZEM170300261304 Page: 88 of 177



5.1.1.5.1.2 Test RB=25RB

Date: 17.APR.2017 16:25:51



Report No.: SZEM170300261304 Page: 89 of 177

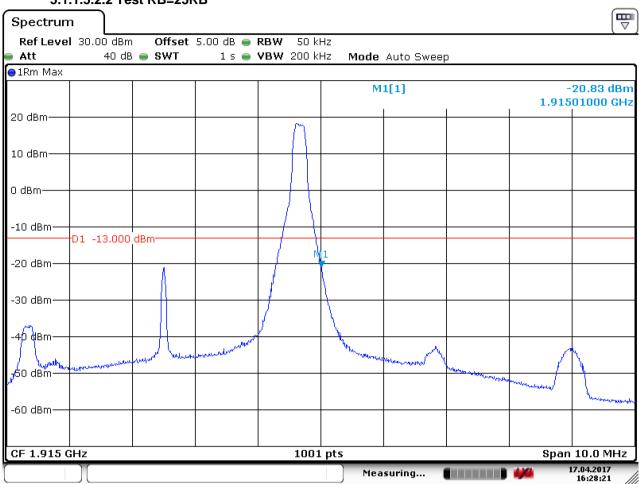
5.1.1.5.2 Test Channel = HCH



Date: 17.APR.2017 16:29:57



Report No.: SZEM170300261304 Page: 90 of 177



5.1.1.5.2.2 Test RB=25RB

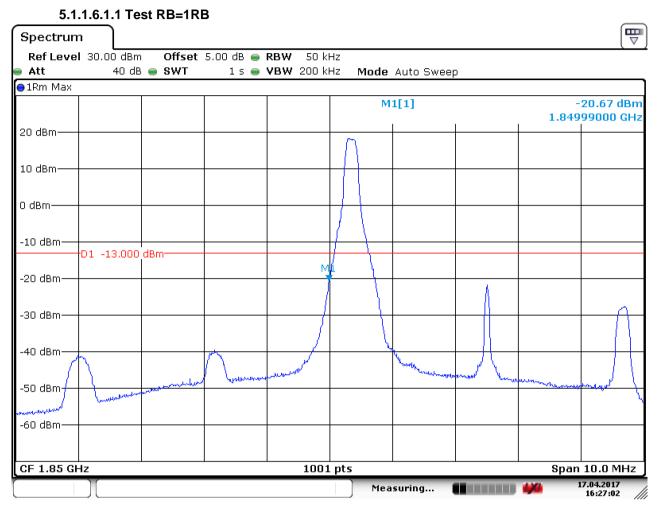
Date: 17.APR.2017 16:28:21



Report No.: SZEM170300261304 Page: 91 of 177

5.1.1.6 Test Mode = LTE/TM2 5MHz

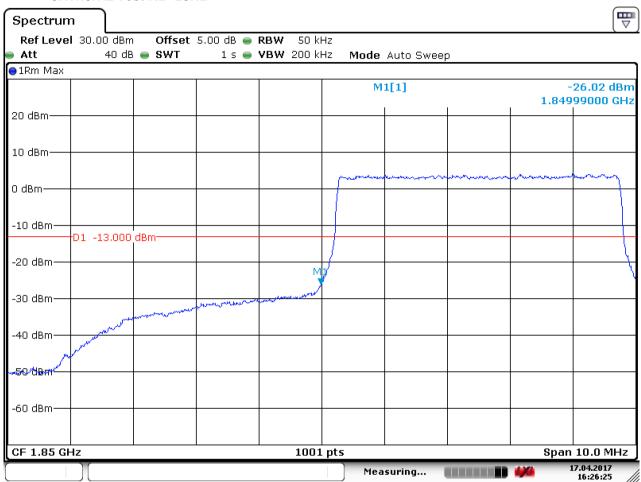
5.1.1.6.1 Test Channel = LCH



Date: 17.APR.2017 16:27:03



Report No.: SZEM170300261304 Page: 92 of 177



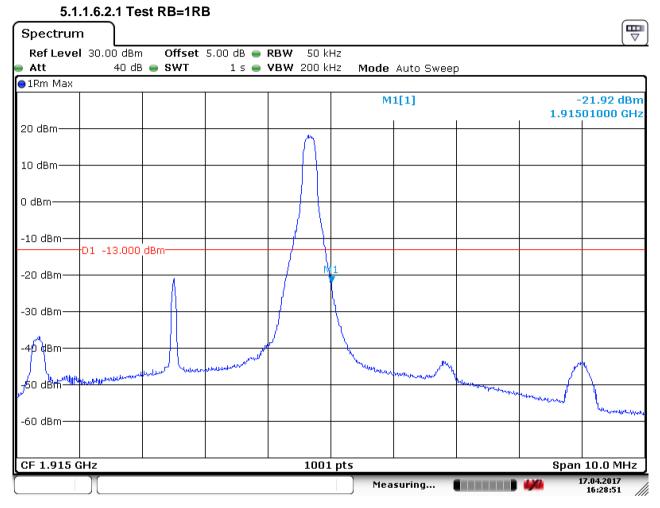
5.1.1.6.1.2 Test RB=25RB

Date: 17.APR.2017 16:26:25



Report No.: SZEM170300261304 Page: 93 of 177

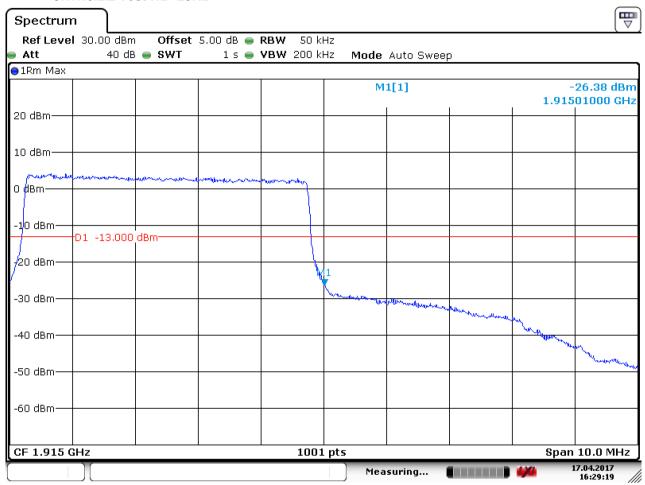




Date: 17.APR.2017 16:28:52



Report No.: SZEM170300261304 Page: 94 of 177



5.1.1.6.2.2 Test RB=25RB

Date: 17.APR.2017 16:29:20

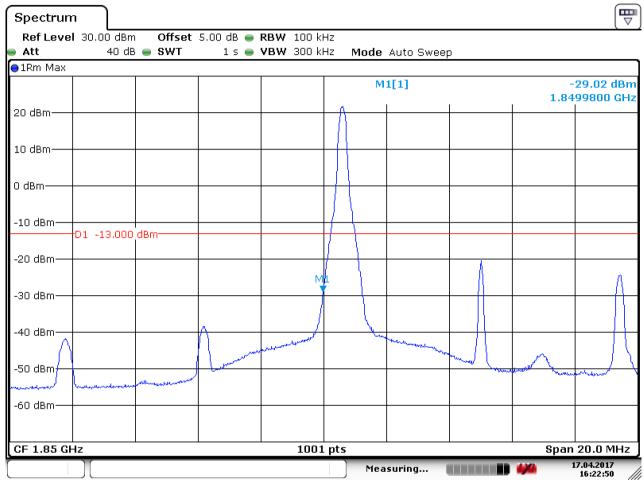


Report No.: SZEM170300261304 Page: 95 of 177

5.1.1.7 Test Mode = LTE/TM1 10MHz

5.1.1.7.1 Test Channel = LCH

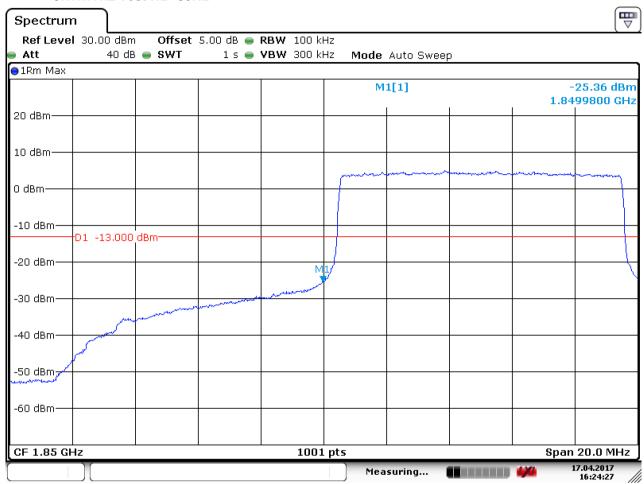
5.1.1.7.1.1 Test RB=1RB



Date: 17.APR.2017 16:22:50



Report No.: SZEM170300261304 Page: 96 of 177



5.1.1.7.1.2 Test RB=50RB

Date: 17.APR.2017 16:24:28