

Report No.: SZEM161201085001 Page: 1 of 178

Appendix B

Test Data for SZEM161201085001RG



Report No.: SZEM161201085001 Page: 2 of 178

CONTENT

1	EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA	3
2	PEAK-TO-AVERAGE RATIO	15
	2.1 For LTE	
	2.1.1 Test Band = LTE band4	
3	MODULATION CHARACTERISTICS	22
	3.1 For LTE	22
	3.1.1 Test Band = LTE band4	22
4	BANDWIDTH	34
	4.1 For LTE	
	4.1.1 Test Band = LTE band4	36
5	BAND EDGES COMPLIANCE	72
	5.1 For LTE	
	5.1.1 Test Band = LTE band4	
6	SPURIOUS EMISSION AT ANTENNA TERMINAL	
	6.1 FOR LTE	121
	6.1.1 Test Band = LTE band4	121
7	FIELD STRENGTH OF SPURIOUS RADIATION	
	7.1 For LTE	175
	7.1.1 Test Band = LTE band4	175
8	FREQUENCY STABILITY	
	8.1 FREQUENCY ERROR VS. VOLTAGE	176
	8.2 FREQUENCY ERROR VS. TEMPERATURE	



Report No.: SZEM161201085001 Page: 3 of 178

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	22.39	22.39	30.00	PASS
				RB1#2	22.48	22.48	30.00	PASS
				RB1#5	22.37	22.37	30.00	PASS
			LCH	RB3#0	21.41	21.41	30.00	PASS
				RB3#2	21.45	21.45	30.00	PASS
				RB3#3	21.48	21.48	30.00	PASS
				RB6#0	21.47	21.47	30.00	PASS
				RB1#0	22.44	22.44	30.00	PASS
				RB1#2	22.53	22.53	30.00	PASS
				RB1#5	22.45	22.45	30.00	PASS
BAND4	LTE/TM1	1.4M	MCH	RB3#0	21.46	21.46	30.00	PASS
				RB3#2	21.44	21.44	30.00	PASS
				RB3#3	21.46	21.46	30.00	PASS
				RB6#0	21.44	21.44	30.00	PASS
				RB1#0	22.49	22.49	30.00	PASS
				RB1#2	22.57	22.57	30.00	PASS
				RB1#5	22.51	22.51	30.00	PASS
			НСН	RB3#0	21.43	21.43	30.00	PASS
				RB3#2	21.47	21.47	30.00	PASS
				RB3#3	21.41	21.41	30.00	PASS
				RB6#0	21.46	21.46	30.00	PASS

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



Report No.: SZEM161201085001 Page: 4 of 178

Page: 4 of 178								
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	21.47	21.47	30.00	PASS
				RB1#2	21.47	21.47	30.00	PASS
				RB1#5	21.45	21.45	30.00	PASS
			LCH	RB3#0	21.45	21.45	30.00	PASS
				RB3#2	21.40	21.40	30.00	PASS
				RB3#3	21.41	21.41	30.00	PASS
				RB6#0	20.51	20.51	30.00	PASS
				RB1#0	21.45	21.45	30.00	PASS
	LTE/TM2	1.4M		RB1#2	21.45	21.45	30.00	PASS
			МСН	RB1#5	21.45	21.45	30.00	PASS
BAND4				RB3#0	21.48	21.48	30.00	PASS
				RB3#2	21.48	21.48	30.00	PASS
				RB3#3	21.49	21.49	30.00	PASS
				RB6#0	20.57	20.57	30.00	PASS
				RB1#0	21.40	21.40	30.00	PASS
				RB1#2	21.41	21.41	30.00	PASS
				RB1#5	21.42	21.42	30.00	PASS
			НСН	RB3#0	21.46	21.46	30.00	PASS
				RB3#2	21.44	21.44	30.00	PASS
				RB3#3	21.46	21.46	30.00	PASS
				RB6#0	20.56	20.56	30.00	PASS



Report No.: SZEM161201085001 Page: 5 of 178

Page: 5 of 178								
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.49	22.49	30.00	PASS
				RB1#7	22.48	22.48	30.00	PASS
				RB1#14	22.45	22.45	30.00	PASS
			LCH	RB8#0	21.41	21.41	30.00	PASS
				RB8#4	21.49	21.49	30.00	PASS
				RB8#7	21.47	21.47	30.00	PASS
				RB15#0	21.49	21.49	30.00	PASS
				RB1#0	22.48	22.48	30.00	PASS
		И1 ЗМ		RB1#7	22.43	22.43	30.00	PASS
			МСН	RB1#14	22.44	22.44	30.00	PASS
BAND4	LTE/TM1			RB8#0	21.41	21.41	30.00	PASS
				RB8#4	21.41	21.41	30.00	PASS
				RB8#7	21.48	21.48	30.00	PASS
				RB15#0	21.40	21.40	30.00	PASS
				RB1#0	22.41	22.41	30.00	PASS
				RB1#7	22.44	22.44	30.00	PASS
				RB1#14	22.49	22.49	30.00	PASS
			НСН	RB8#0	21.48	21.48	30.00	PASS
				RB8#4	21.43	21.43	30.00	PASS
				RB8#7	21.43	21.43	30.00	PASS
				RB15#0	21.44	21.44	30.00	PASS



Report No.: SZEM161201085001 Page: 6 of 178

Page: 6 of 178								
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	21.48	21.48	30.00	PASS
				RB1#7	21.45	21.45	30.00	PASS
				RB1#14	21.41	21.41	30.00	PASS
			LCH	RB8#0	20.62	20.62	30.00	PASS
				RB8#4	20.59	20.59	30.00	PASS
				RB8#7	20.58	20.58	30.00	PASS
		ЗМ		RB15#0	20.56	20.56	30.00	PASS
				RB1#0	21.46	21.46	30.00	PASS
				RB1#7	21.44	21.44	30.00	PASS
			МСН	RB1#14	21.45	21.45	30.00	PASS
BAND4	LTE/TM2			RB8#0	20.73	20.73	30.00	PASS
				RB8#4	20.71	20.71	30.00	PASS
				RB8#7	20.70	20.70	30.00	PASS
				RB15#0	20.67	20.67	30.00	PASS
				RB1#0	21.41	21.41	30.00	PASS
				RB1#7	21.43	21.43	30.00	PASS
				RB1#14	21.49	21.49	30.00	PASS
			НСН	RB8#0	20.66	20.66	30.00	PASS
				RB8#4	20.66	20.66	30.00	PASS
				RB8#7	20.69	20.69	30.00	PASS
				RB15#0	20.65	20.65	30.00	PASS



Report No.: SZEM161201085001 Page: 7 of 178

					Page:	7 of 17	8	
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.48	22.48	30.00	PASS
				RB1#13	22.48	22.48	30.00	PASS
				RB1#24	22.41	22.41	30.00	PASS
			LCH	RB12#0	21.46	21.46	30.00	PASS
				RB12#6	21.44	21.44	30.00	PASS
				RB12#13	21.42	21.42	30.00	PASS
	LTE/TM1	5M		RB25#0	21.49	21.49	30.00	PASS
				RB1#0	22.46	22.46	30.00	PASS
				RB1#13	22.49	22.49	30.00	PASS
			МСН	RB1#24	22.40	22.40	30.00	PASS
BAND4				RB12#0	21.43	21.43	30.00	PASS
				RB12#6	21.44	21.44	30.00	PASS
				RB12#13	21.43	21.43	30.00	PASS
				RB25#0	21.49	21.49	30.00	PASS
				RB1#0	22.44	22.44	30.00	PASS
				RB1#13	22.45	22.45	30.00	PASS
				RB1#24	22.42	22.42	30.00	PASS
			НСН	RB12#0	21.41	21.41	30.00	PASS
				RB12#6	21.40	21.40	30.00	PASS
				RB12#13	21.42	21.42	30.00	PASS
				RB25#0	21.49	21.49	30.00	PASS



Report No.: SZEM161201085001 Page: 8 of 178

Page: 8 of 178								
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	21.49	21.49	30.00	PASS
				RB1#13	21.44	21.44	30.00	PASS
				RB1#24	21.46	21.46	30.00	PASS
			LCH	RB12#0	20.61	20.61	30.00	PASS
				RB12#6	20.59	20.59	30.00	PASS
				RB12#13	20.58	20.58	30.00	PASS
				RB25#0	20.56	20.56	30.00	PASS
		5M		RB1#0	21.45	21.45	30.00	PASS
				RB1#13	21.49	21.49	30.00	PASS
			МСН	RB1#24	21.40	21.40	30.00	PASS
BAND4	LTE/TM2			RB12#0	20.68	20.68	30.00	PASS
				RB12#6	20.70	20.70	30.00	PASS
				RB12#13	20.67	20.67	30.00	PASS
				RB25#0	20.65	20.65	30.00	PASS
				RB1#0	21.46	21.46	30.00	PASS
				RB1#13	21.49	21.49	30.00	PASS
				RB1#24	21.48	21.48	30.00	PASS
			НСН	RB12#0	20.65	20.65	30.00	PASS
				RB12#6	20.65	20.65	30.00	PASS
				RB12#13	20.66	20.66	30.00	PASS
				RB25#0	20.62	20.62	30.00	PASS



Report No.: SZEM161201085001 Page: 9 of 178

Page: 9 of 178								
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.47	22.47	30.00	PASS
				RB1#25	22.38	22.38	30.00	PASS
				RB1#49	22.34	22.34	30.00	PASS
			LCH	RB25#0	21.46	21.46	30.00	PASS
				RB25#13	21.44	21.44	30.00	PASS
				RB25#25	21.41	21.41	30.00	PASS
				RB50#0	21.48	21.48	30.00	PASS
				RB1#0	22.48	22.48	30.00	PASS
		I 10M		RB1#25	22.45	22.45	30.00	PASS
			МСН	RB1#49	22.44	22.44	30.00	PASS
BAND4	LTE/TM1			RB25#0	21.49	21.49	30.00	PASS
				RB25#13	21.40	21.40	30.00	PASS
				RB25#25	21.40	21.40	30.00	PASS
				RB50#0	21.42	21.42	30.00	PASS
				RB1#0	22.41	22.41	30.00	PASS
				RB1#25	22.40	22.40	30.00	PASS
				RB1#49	22.43	22.43	30.00	PASS
			НСН	RB25#0	21.45	21.45	30.00	PASS
				RB25#13	21.44	21.44	30.00	PASS
				RB25#25	21.43	21.43	30.00	PASS
				RB50#0	21.40	21.40	30.00	PASS



Report No.: SZEM161201085001 Page: 10 of 178

				Page: 10 of 178				
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	21.46	21.46	30.00	PASS
				RB1#25	21.48	21.48	30.00	PASS
				RB1#49	21.44	21.44	30.00	PASS
			LCH	RB25#0	20.48	20.48	30.00	PASS
				RB25#13	20.43	20.43	30.00	PASS
				RB25#25	20.43	20.43	30.00	PASS
				RB50#0	20.48	20.48	30.00	PASS
		10M		RB1#0	21.48	21.48	30.00	PASS
				RB1#25	21.49	21.49	30.00	PASS
			МСН	RB1#49	21.44	21.44	30.00	PASS
BAND4	LTE/TM2			RB25#0	20.52	20.52	30.00	PASS
				RB25#13	20.52	20.52	30.00	PASS
				RB25#25	20.49	20.49	30.00	PASS
				RB50#0	20.54	20.54	30.00	PASS
				RB1#0	21.48	21.48	30.00	PASS
				RB1#25	21.45	21.45	30.00	PASS
				RB1#49	21.41	21.41	30.00	PASS
			НСН	RB25#0	20.46	20.46	30.00	PASS
				RB25#13	20.44	20.44	30.00	PASS
				RB25#25	20.43	20.43	30.00	PASS
				RB50#0	20.50	20.50	30.00	PASS



Report No.: SZEM161201085001 Page: 11 of 178

	Page: 11 of 178							
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.44	22.44	30.00	PASS
				RB1#38	22.34	22.34	30.00	PASS
				RB1#74	22.32	22.32	30.00	PASS
			LCH	RB36#0	21.46	21.46	30.00	PASS
				RB36#18	21.41	21.41	30.00	PASS
				RB36#39	21.39	21.39	30.00	PASS
				RB75#0	21.43	21.43	30.00	PASS
				RB1#0	22.43	22.43	30.00	PASS
		15M		RB1#38	22.43	22.43	30.00	PASS
			МСН	RB1#74	22.39	22.39	30.00	PASS
BAND4	LTE/TM1			RB36#0	21.49	21.49	30.00	PASS
				RB36#18	21.48	21.48	30.00	PASS
				RB36#39	21.49	21.49	30.00	PASS
				RB75#0	21.46	21.46	30.00	PASS
				RB1#0	22.42	22.42	30.00	PASS
				RB1#38	22.33	22.33	30.00	PASS
				RB1#74	22.40	22.40	30.00	PASS
			HCH	RB36#0	21.45	21.45	30.00	PASS
				RB36#18	21.44	21.44	30.00	PASS
				RB36#39	21.40	21.40	30.00	PASS
				RB75#0	21.44	21.44	30.00	PASS

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



Report No.: SZEM161201085001 Page: 12 of 178

Page: 12 of 178								
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	21.47	21.47	30.00	PASS
				RB1#38	21.46	21.46	30.00	PASS
				RB1#74	21.45	21.45	30.00	PASS
			LCH	RB36#0	20.48	20.48	30.00	PASS
				RB36#18	20.44	20.44	30.00	PASS
				RB36#39	20.42	20.42	30.00	PASS
				RB75#0	20.45	20.45	30.00	PASS
				RB1#0	21.44	21.44	30.00	PASS
		15M		RB1#38	21.48	21.48	30.00	PASS
			МСН	RB1#74	21.42	21.42	30.00	PASS
BAND4	LTE/TM2			RB36#0	20.51	20.51	30.00	PASS
				RB36#18	20.52	20.52	30.00	PASS
				RB36#39	20.52	20.52	30.00	PASS
				RB75#0	20.50	20.50	30.00	PASS
				RB1#0	21.45	21.45	30.00	PASS
				RB1#38	21.43	21.43	30.00	PASS
				RB1#74	21.41	21.41	30.00	PASS
			HCH	RB36#0	20.49	20.49	30.00	PASS
				RB36#18	20.45	20.45	30.00	PASS
				RB36#39	20.44	20.44	30.00	PASS
				RB75#0	20.44	20.44	30.00	PASS



Report No.: SZEM161201085001 Page: 13 of 178

		Page: 13 of 178						
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict
				RB1#0	22.61	22.61	30.00	PASS
				RB1#50	22.41	22.41	30.00	PASS
				RB1#99	22.45	22.45	30.00	PASS
			LCH	RB50#0	21.41	21.41	30.00	PASS
				RB50#25	21.38	21.38	30.00	PASS
				RB50#50	21.43	21.43	30.00	PASS
				RB100#0	21.42	21.42	30.00	PASS
				RB1#0	22.59	22.59	30.00	PASS
				RB1#50	22.54	22.54	30.00	PASS
				RB1#99 22.55	22.55	22.55	30.00	PASS
BAND4	LTE/TM1	20M	MCH	RB50#0	21.45	21.45	30.00	PASS
				RB50#25	21.44	21.44	30.00	PASS
				RB50#50	21.47	21.47	30.00	PASS
				RB100#0 2	21.47	21.47	30.00	PASS
				RB1#0	22.65	22.65	30.00	PASS
				RB1#50	22.51	22.51	30.00	PASS
				RB1#99	22.56	22.56	30.00	PASS
			НСН	RB50#0	21.54	21.54	30.00	PASS
				RB50#25	21.45	21.45	30.00	PASS
				RB50#50	21.49	21.49	30.00	PASS
				RB100#0	21.46	21.46	30.00	PASS



Report No.: SZEM161201085001 Page: 14 of 178

—	Page: 14 01 1						170		
Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	EIRP (dBm)	limit (dBm)	Verdict	
				RB1#0	22.04	22.04	30.00	PASS	
				RB1#50	21.87	21.87	30.00	PASS	
				RB1#99	21.74	21.74	30.00	PASS	
			LCH	RB50#0	20.43	20.43	30.00	PASS	
				RB50#25	20.36	20.36	30.00	PASS	
				RB50#50	20.40	20.40	30.00	PASS	
				RB100#0	20.38	20.38	30.00	PASS	
				RB1#0	21.65	21.65	30.00	PASS	
				RB1#50	B1#50 21.75	21.75	30.00	PASS	
	LTE/TM2		20M MCH RB50#0 20 RB50#25 20 RB50#50 20 RB100#0 20	RB1#99	22.01	22.01	30.00	PASS	
BAND4		20M		RB50#0	20.48	20.48	30.00	PASS	
				RB50#25	20.46	20.46	30.00	PASS	
				20.43	20.43	30.00	PASS		
				RB100#0	20.43	20.43	30.00	PASS	
				RB1#0	21.80	21.80	30.00	PASS	
				RB1#50	21.63	21.63	30.00	PASS	
				RB1#99	21.69	21.69	30.00	PASS	
			НСН	RB50#0	20.45	20.45	30.00	PASS	
				RB50#25	20.39	20.39	30.00	PASS	
				RB50#50	20.45	20.45	30.00	PASS	
Noto:				RB100#0	20.47	20.47	30.00	PASS	

Note:

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

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

b: SGP=Signal Generator Level

c: RBW > emission bandwidth, VBW > $3 \times RBW$.

Detector: RMS

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



Report No.: SZEM161201085001 Page: 15 of 178

2 Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
		LCH	4.96	13	PASS
	TM1/20M	MCH	4.99	13	PASS
Band 4		НСН	5.04	13	PASS
Danu 4	TM2/20M	LCH	5.86	13	PASS
		MCH	5.83	13	PASS
		НСН	5.86	13	PASS



Report No.: SZEM161201085001 Page: 16 of 178

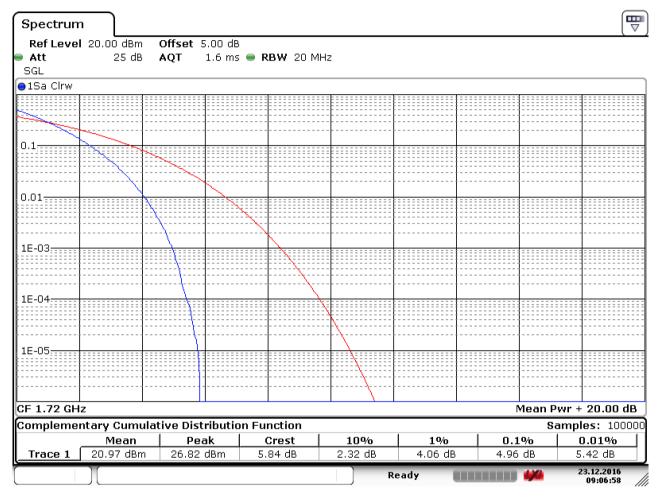
Part II - Test Plots

2.1 For LTE

2.1.1 Test Band = LTE band4

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

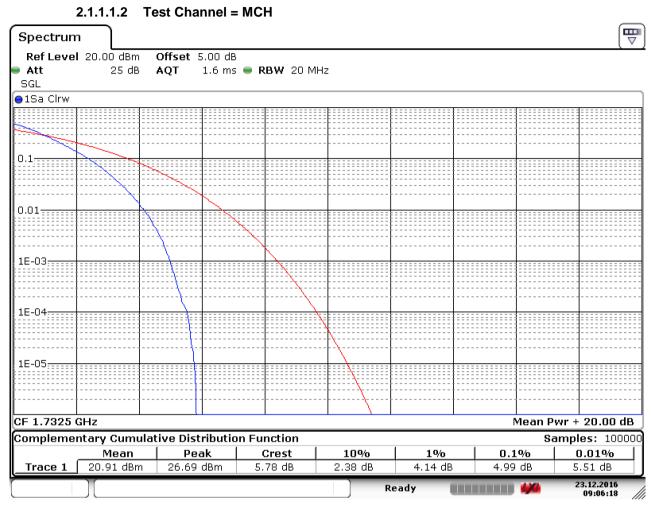
2.1.1.1.1 Test Channel = LCH



Date: 23.DEC.2016 09:06:58



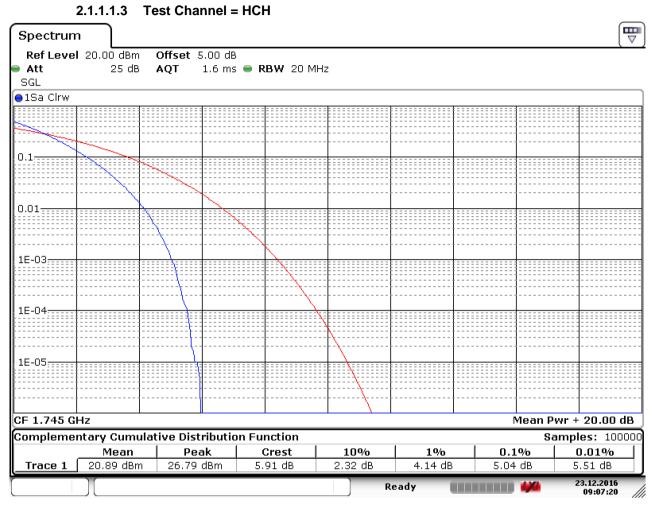
Report No.: SZEM161201085001 Page: 17 of 178



Date: 23.DEC.2016 09:06:19



Report No.: SZEM161201085001 Page: 18 of 178

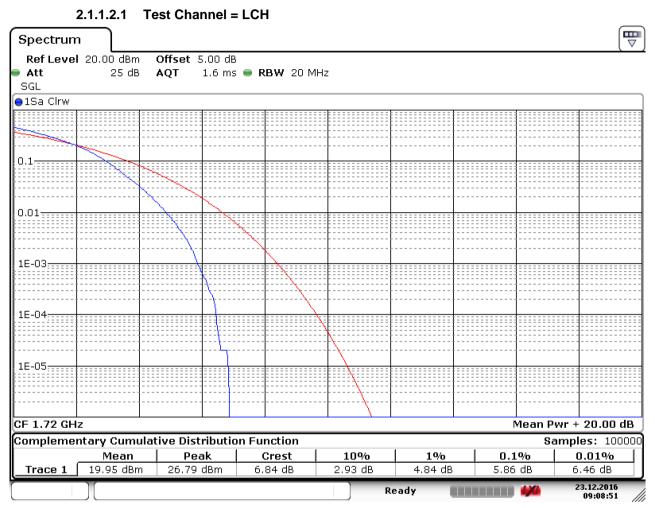


Date: 23.DEC.2016 09:07:20



Report No.: SZEM161201085001 Page: 19 of 178

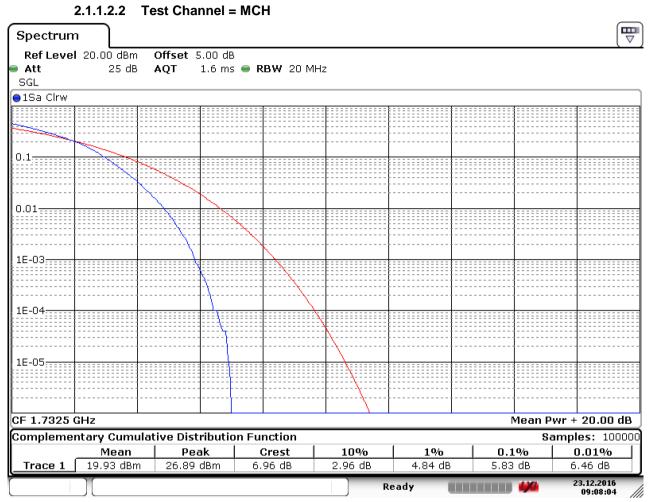
2.1.1.2 Test Mode = LTE/TM2.Bandwidth=20MHz



Date: 23.DEC.2016 09:08:52



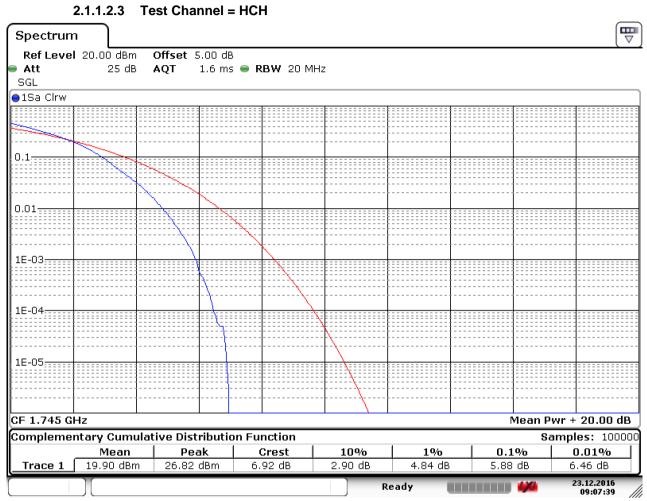
Report No.: SZEM161201085001 Page: 20 of 178



Date: 23.DEC.2016 09:08:05



Report No.: SZEM161201085001 Page: 21 of 178



Date: 23.DEC.2016 09:07:40



Report No.: SZEM161201085001 Page: 22 of 178

3 Modulation Characteristics

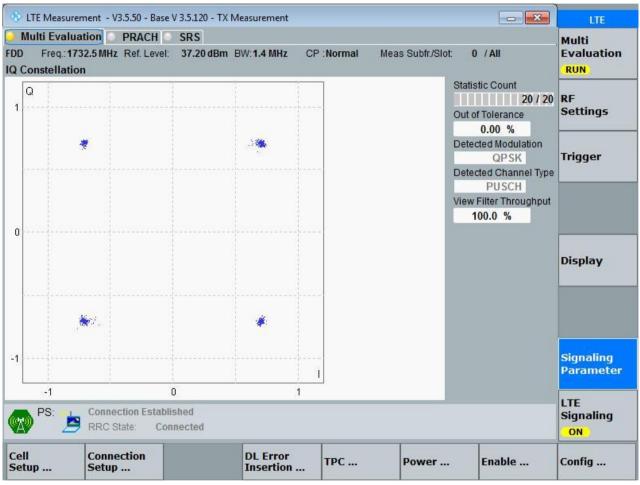
Part I - Test Plots

3.1 For LTE

3.1.1 Test Band = LTE band4

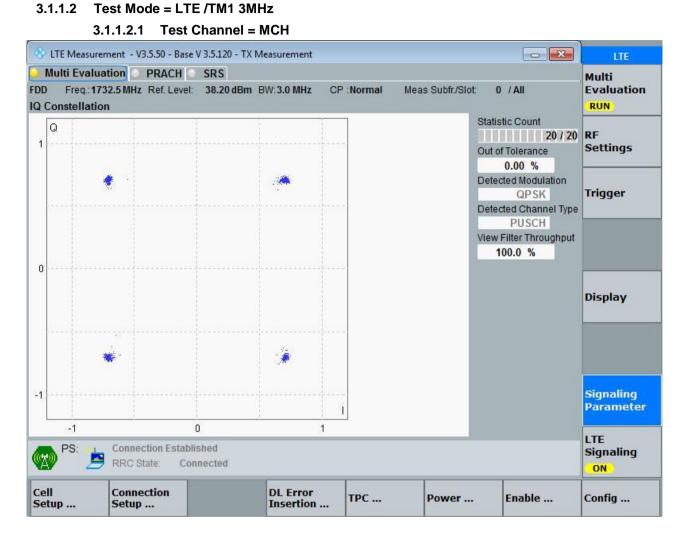
3.1.1.1 Test Mode = LTE /TM1 1.4MHz

3.1.1.1.1 Test Channel = MCH



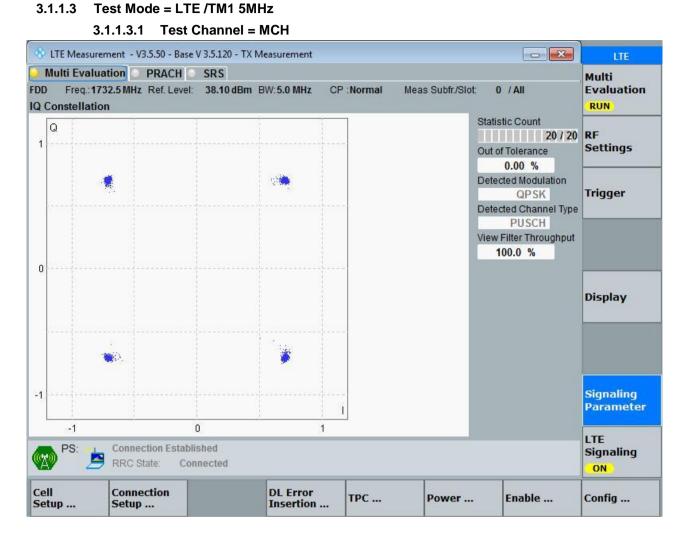


Report No.: SZEM161201085001 Page: 23 of 178



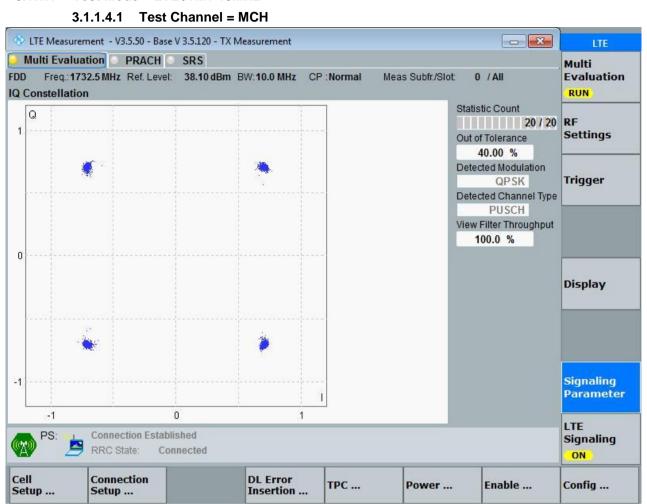


Report No.: SZEM161201085001 Page: 24 of 178





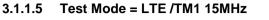
Report No.: SZEM161201085001 Page: 25 of 178



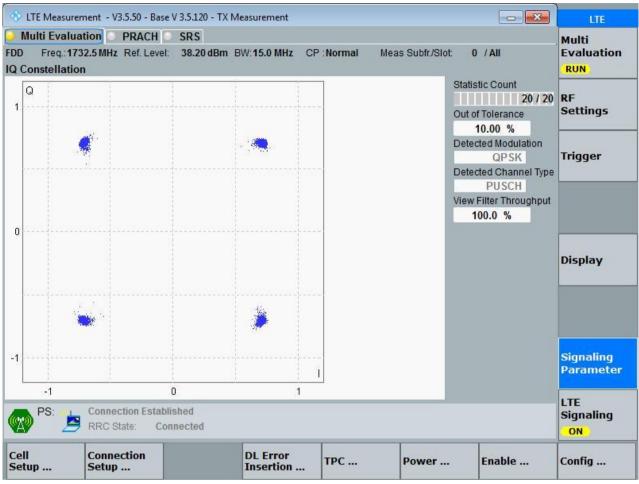
3.1.1.4 Test Mode = LTE /TM1 10MHz



Report No.: SZEM161201085001 Page: 26 of 178

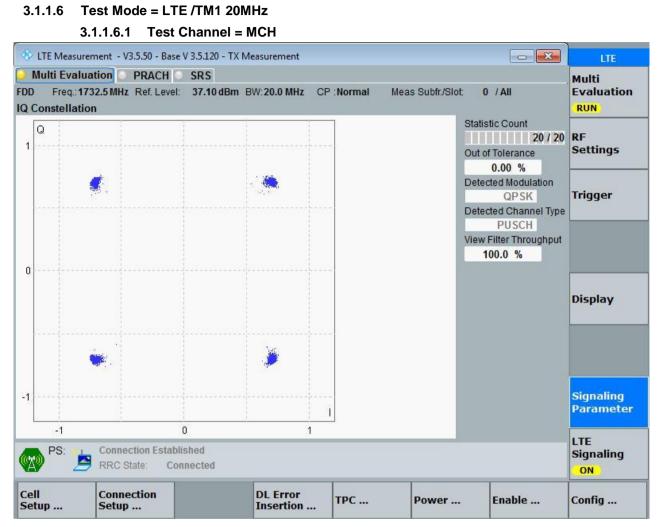


3.1.1.5.1 Test Channel = MCH





Report No.: SZEM161201085001 Page: 27 of 178

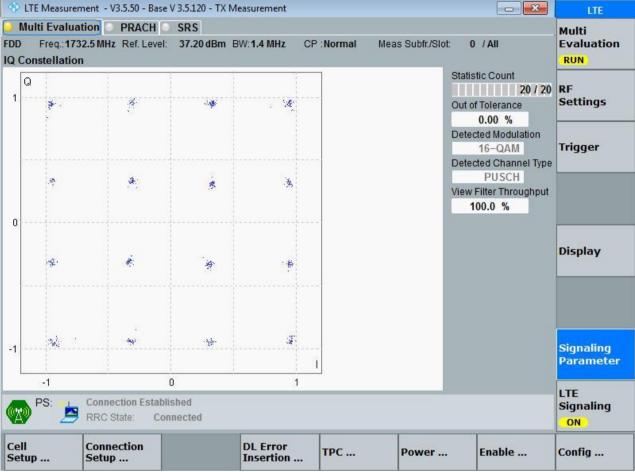




Report No.: SZEM161201085001 28 of 178 Page:

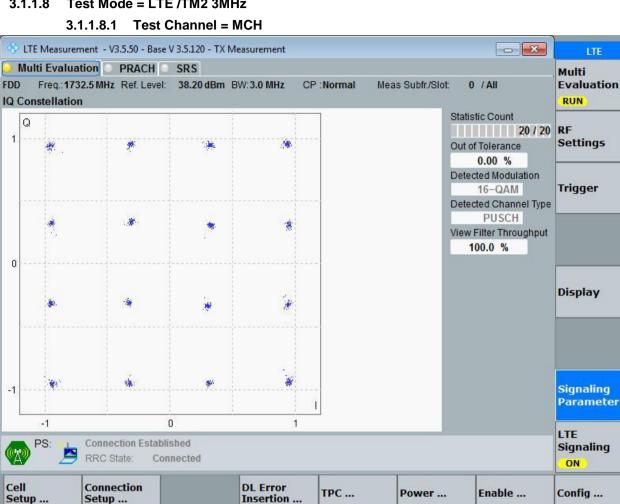
3.1.1.7 Test Mode = LTE /TM2 1.4MHz







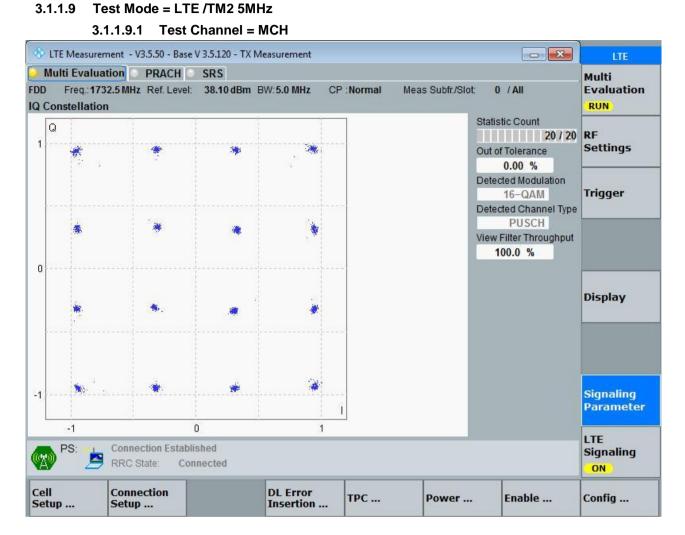
Report No.: SZEM161201085001 29 of 178 Page:



3.1.1.8 Test Mode = LTE /TM2 3MHz

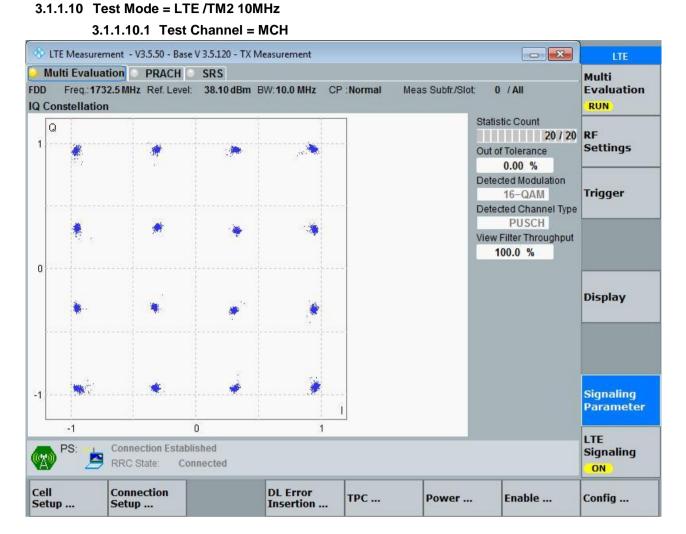


Report No.: SZEM161201085001 Page: 30 of 178



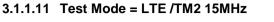


Report No.: SZEM161201085001 Page: 31 of 178

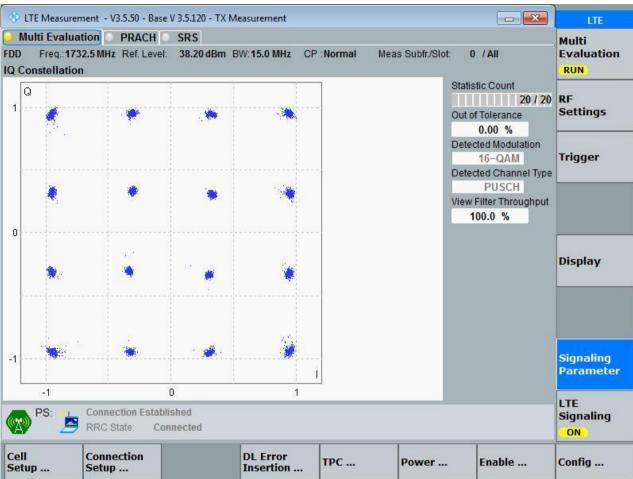




Report No.: SZEM161201085001 Page: 32 of 178

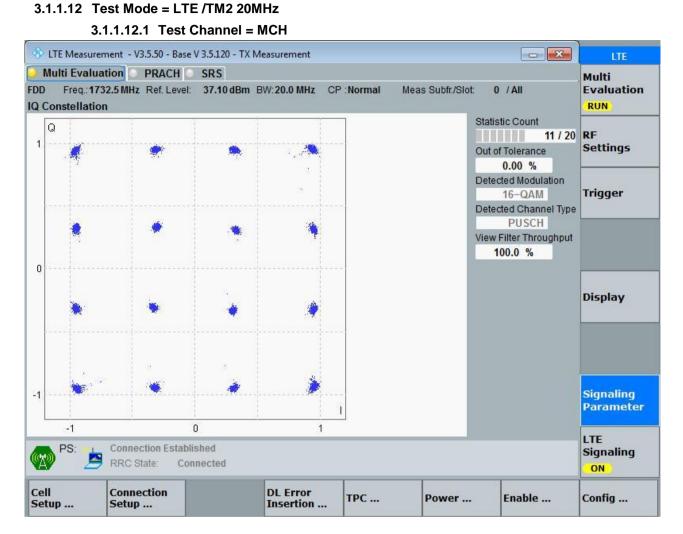








Report No.: SZEM161201085001 Page: 33 of 178





Report No.: SZEM161201085001 Page: 34 of 178

4 Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
		LCH	1.09	1.27	PASS
	TM1/1.4MHz	MCH	1.10	1.27	PASS
		HCH	1.10	1.28	PASS
		LCH	1.10	1.29	PASS
	TM2/1.4MHz	MCH	1.10	1.27	PASS
		HCH	1.09	1.27	PASS
		LCH	2.69	2.90	PASS
	TM1/ 3MHz	MCH	2.69	2.91	PASS
	HCH 2.69	2.93	PASS		
		LCH	2.69	2.91	PASS
	TM2/ 3MHz	MCH	2.69	2.94	PASS
		HCH	2.68	2.91	PASS
		LCH	4.50	4.97	PASS
	TM1/ 5MHz	MCH	4.50	4.98	PASS
		HCH	4.48	4.95	PASS
		LCH	4.49	4.99	PASS
Band 4	TM2/ 5MHz	MCH	4.49	4.95	PASS
		HCH	4.50	5.00	PASS
		LCH	8.93	9.71	PASS
	TM1/ 10MHz	MCH	8.97	9.80	PASS
		HCH	8.93	9.75	PASS
		LCH	8.95	9.73	PASS
	TM2/ 10MHz	MCH	8.95		PASS
		HCH	8.93	9.71	PASS
		LCH	13.46	14.87	PASS
	TM1/ 15MHz	MCH	13.52	14.95	PASS
		HCH	13.49	14.96	PASS
		LCH	13.52	14.90	PASS
	TM2/ 15MHz	MCH	13.52	14.83	PASS
		HCH	13.52	14.87	PASS
		LCH	17.90	19.42	PASS
	TM1/ 20MHz	MCH	17.94	19.46	PASS
		HCH	17.94	19.72	PASS



Report No.: SZEM161201085001 Page: 35 of 178

	5						
Test Band	Test Mode	Test Channel	Occupied Bandwidth Emission [MHz] Bandwidth [MHz]		Verdict		
		LCH	17.90	19.58	PASS		
	TM2/ 20MHz	MCH	17.98	19.42	PASS		
		HCH	17.94	19.60	PASS		



Report No.: SZEM161201085001 Page: 36 of 178

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	I 35.00 dBn 40 dB	n Offset B e SWT	5.00 dB 👄 I 10 ms 👄 '	RBW 30 kH: VBW 100 kH:		Auto FFT			`
⊖1Pk View									
30 dBm					D1				-0.49 dB 27070 MHz
20 dBm	D1 16 400				Ос М1	c Bw [1]			06094 MHz -9.28 dBm 106760 GHz
10 dBm	D1 16.420		T1mm		~~~~	t t			
0 dBm						\			
-10 dBm	D2 -9.	580 dBm							
-20 dBm		~~~					\square	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
/ -30 dBm									
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.7107	GHz	1		1001	pts			ı Spa	n 3.0 MHz
)[)	uring		4/4	22.12.2016 10:25:55 //

Date: 22.DEC.2016 10:25:55



4.1.1.1.2 Test Channel = MCH

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

Report No.: SZEM161201085001 Page: 37 of 178

Spectrum	,)								
Ref Level	35.00 dBm	Offset	5.00 dB 🔵	RBW 30 k	Hz				
🕳 Att	40 dB	s 🔵 SWT	10 ms 😑	VBW 100 k	Hz Mode	Auto FFT			
●1Pk View			-	-					
30 dBm						1[1]			-0.10 dB 27070 MHz
20 dBm	D1 16.850					cc Bw 1[1]			97103 MHz -9.05 dBm 86460 GHz
10 dBm	DI 10.830		Thur	m	·····	m T2			
0 dBm			/						
-10 dBm	D2 -9.	м/ 150 dBm					1		
-20 dBm		m					han	ma	
	~							0	r ~~~
-30 dBm									
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.7325	GHz			1001	l pts			 Spa	n 3.0 MHz
(][suring			2.12.2016 10:24:52

Date: 22.DEC.2016 10:24:52



Report No.: SZEM161201085001 Page: 38 of 178

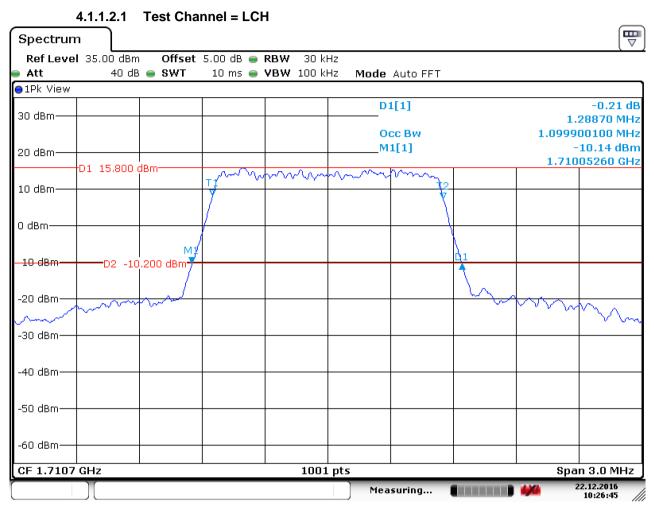
	4.1.1.1.3	Test Cha	nnel = HCl	H					
Spectrun	n								
Ref Leve	l 35.00 dBr	n Offset	5.00 dB 🔵	RBW 30 kł	Ηz				
🗕 Att	40 di	B 👄 SWT	10 ms 👄	VBW 100 kł	Hz Mode	Auto FFT			
●1Pk View									
					D	1[1]			-0.38 dB
30 dBm									27970 MHz
						cc Bw		1.0999	00100 MHz
20 dBm——					M	1[1]		1 759	-9.67 dBm 65860 GHz
	D1 16.070	dBm	TIM	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	man	m		1.733	
10 dBm			\₹			T2			
						}			
0 dBm			1/						
		M≱					A1		
-10 dBm	D2 -9	.930 dBm 🥇					X		
							1 m		
-20 dBm-		⊷~					· ~	$\sim \sim $	\sim
~~~~									V V
-30 dBm—									
So abiii									
-40 dBm—									
-50 dBm—									
-60 dBm—									
CF 1.7543	GHz			1001	pts				n 3.0 MHz
[	Л				Mea	suring		- <mark>4/4</mark> 2	2.12.2016 10:28:34

Date: 22.DEC.2016 10:28:35



Report No.: SZEM161201085001 Page: 39 of 178

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



Date: 22.DEC.2016 10:26:46



Report No.: SZEM161201085001 Page: 40 of 178

	4.1.1.2.2	Test Cha	nnel = MC	н					
Spectru	m								
Ref Lev	el 35.00 dBn	n Offset	5.00 dB 😑 I	<b>RBW</b> 30 kł	Ηz				
🔵 Att	40 di	B 🔵 SWT	10 ms 👄 '	<b>VBW</b> 100 kł	Hz Mode	Auto FFT			
😑 1Pk View									
					D	1[1]			-0.14 dB
30 dBm—						_			27070 MHz
						CC BW		1.0969	03097 MHz -9.69 dBm
20 dBm—					IYI	1[1]		1 731	-9.69 UBM 86160 GHz
	D1 15.850	dBm	TIM	$\sim$	mm	$- m_{\tau^2}$		1.1.01	
10 dBm—			-7 -			· ¥			
0 dBm			/						
			/						
10 dBm-		0.150 dBm 🕇					<b>Q</b> 1		
TO GDIII	02 -10	0.150 ubiii7					1		
							m	m	
-20 dBm—	/how						Ť		$\Delta \alpha$
$\mathcal{V}^{++}$									- ~ ~
-30 dBm—									
-40 dBm—									
-50 dBm—									
-60 dBm—									
-00 abiii									
CF 1.732	5 GHz			1001	pts			Spa	n 3.0 MHz
[					) Mea	suring		<b>4/4</b> 2	2.12.2016 10:23:32

Date: 22.DEC.2016 10:23:32



Report No.: SZEM161201085001 Page: 41 of 178

	4.1.1.2.3	Test Cha	innel = HCl	H					
Spectru	m								
Ref Lev	el 35.00 dE	3m Offset	5.00 dB 👄	<b>RBW</b> 30 ki	Hz				
🔵 Att	40	dB 👄 SWT	10 ms 👄	<b>VBW</b> 100 ki	Hz Mode	Auto FFT			
😑 1Pk View	i								
					D	1[1]			-0.12 dB
30 dBm—									26770 MHz
						cc Bw			06094 MHz
20 dBm—					M	1[1]			10.36 dBm 66460 GHz
	D1 15.62	0 dBm	TIM	~~~~~	~~~ ~ ~ ~	man		1.733	00400 GHZ
10 dBm—			l	F-Q-	· · · · · · · · · · · · · · · · · · ·	τ <u>2</u>			
0 dBm									
			/			1			
		M	4				61		
-10 dBm—	- D2 -	10.380 dBm <del>- )</del>	r				A		
		ha					hm		
-20 dBm-							ľ í	A CONTO	$\sim$
~~~~									- V
-30 dBm—									
-40 dBm—									
-50 dBm—									
-30 abiii									
-60 dBm—									
CF 1.754	3 GHz	I	1	1001	. pts	1	I	Spa	n 3.0 MHz
						suring		-	2.12.2016 10:27:44

Date: 22.DEC.2016 10:27:44



Report No.: SZEM161201085001 Page: 42 of 178

4.1.1.3 Test Mode = LTE/TM1 3MHz

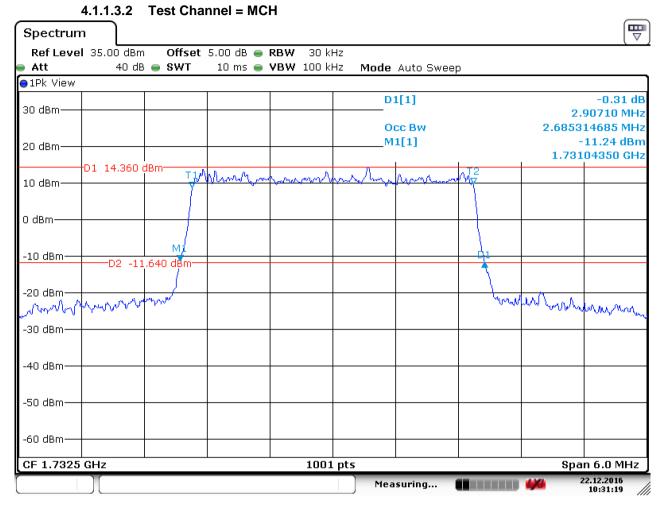
4.1.1.3.1 Test Channel = LCH

Spectrun	n]								
	l 35.00 dBm		5.00 dB 👄						
Att	40 dB	s 🔵 SWT	10 ms 😑	VBW 100 kł	Hz Mode	Auto Swee	ep		
⊖1Pk View	1	1							
30 dBm					D	1[1]			-0.26 dB 90110 MHz
00 40					0	cc Bw			14685 MHz
00 JD						1[1]			12.09 dBm
20 dBm——									04950 GHz
	D1 13.500	dBm T1_	a make D	monmond	о М о А		T2		
10 dBm		70	<u> vyv vyr</u>	an record and the second	W My M V M	<u> </u>			
0 dBm							+ $-$		
-10 dBm—		Mi					<u> d1</u>		
	D2 -12	2.500 dBm					1		
-20 dBm—									
		and					In how	A A MA	
~ <u></u>	Annonement	124						mm	monor
-30 4011									
10 10									
-40 dBm—									
-50 dBm—									
-60 dBm—									
CF 1.7115	i GHz			1001	pts			Spa	n 6.0 MHz
)(suring	1		22.12.2016
(isaring			10:32:56

Date: 22.DEC.2016 10:32:56



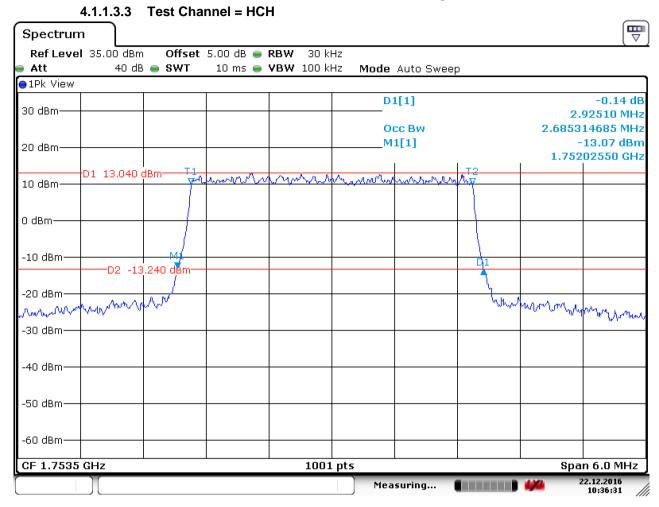
Report No.: SZEM161201085001 Page: 43 of 178



Date: 22.DEC.2016 10:31:20



Report No.: SZEM161201085001 Page: 44 of 178

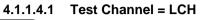


Date: 22.DEC.2016 10:36:31



Report No.: SZEM161201085001 Page: 45 of 178

4.1.1.4 Test Mode = LTE/TM2 3MHz

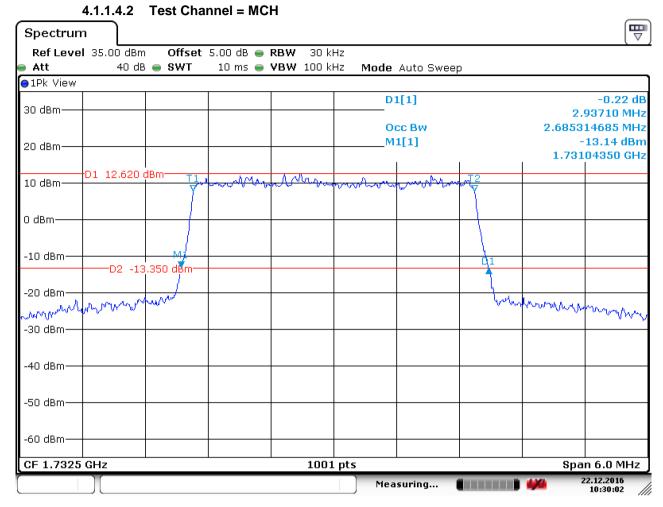


Spectrun	n)								
Ref Leve Att	1 35.00 dBm			RBW 30 ki VBW 100 ki		1			· · · ·
Att 1Pk View	40 dE	B 🔵 SWT	10 ms 👄	VBW 100 KI	HZ MODE	Auto Swe	еер		
30 dBm						1[1] cc Bw			-0.19 dB 91310 MHz 14685 MHz
20 dBm						1[1]	I	-	-12.85 dBm)04350 GHz
10 dBm	D1 12.740	dBm 1	Q. march A. A.	ᢏ ^{ᡰᡣ} ᡊᡒ᠊ᡊᡂᡊᢑᢧᡘᡆ᠇ᡃᠧ	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	http:/ttp:/ttp:/thittp:/ttp:/ttp:/ttp:/ttp:/ttp:/ttp:/ttp:	vn vl2		
0 dBm									
-10 dBm	D2 -13	3.260 dBm-							
-20 dBm— 190 പ്രഹംസം 190 പ്രംസം	nnum	want					hour	other	howally
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.7115	 GHz			1001	. pts			 Spa	n 6.0 MHz
][📄 Mea	suring		444	22.12.2016 10:34:06

Date: 22.DEC.2016 10:34:07



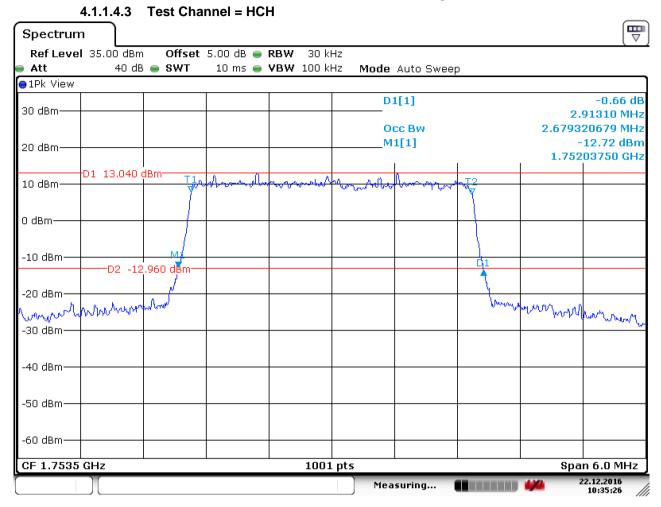
Report No.: SZEM161201085001 Page: 46 of 178



Date: 22.DEC.2016 10:30:03



Report No.: SZEM161201085001 Page: 47 of 178

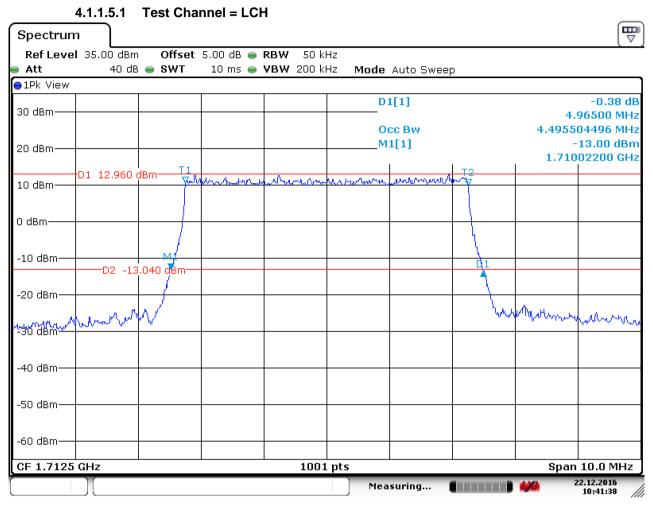


Date: 22.DEC.2016 10:35:26



Report No.: SZEM161201085001 Page: 48 of 178

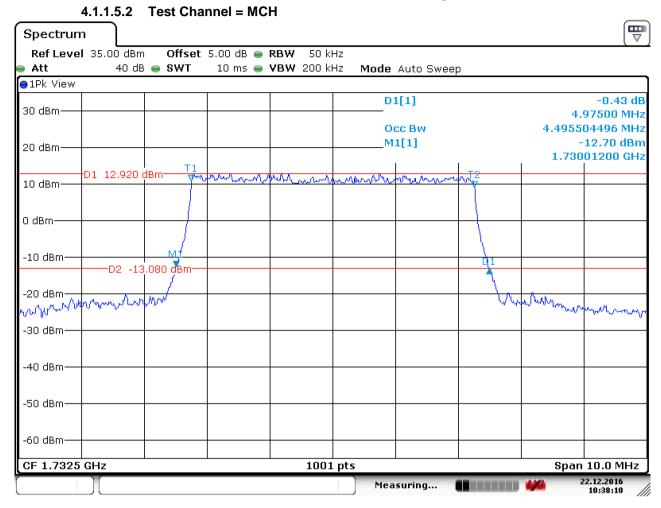
4.1.1.5 Test Mode = LTE/TM1 5MHz



Date: 22.DEC.2016 10:41:38



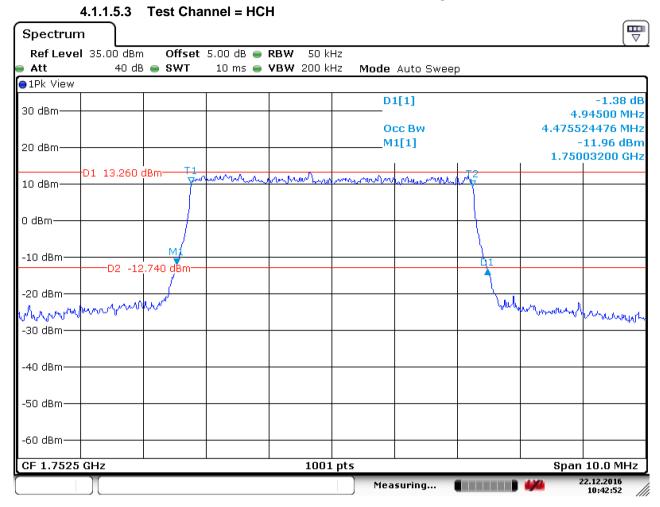
Report No.: SZEM161201085001 Page: 49 of 178



Date: 22.DEC.2016 10:38:11



Report No.: SZEM161201085001 Page: 50 of 178



Date: 22.DEC.2016 10:42:52



Report No.: SZEM161201085001 Page: 51 of 178

4.1.1.6 Test Mode = LTE/TM2 5MHz

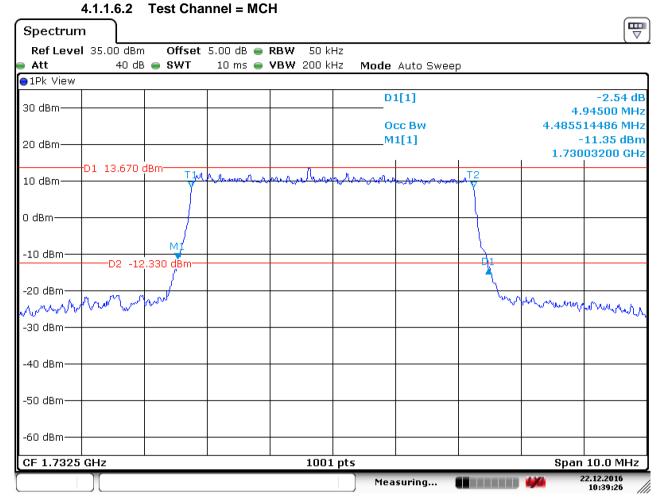
4.1.1.6.1 Test Channel = LCH

Spectrun	ı]								
	I 35.00 dBm		5.00 dB 👄						
Att 1Pk View	40 aE	B 🖷 SWT	IU MS 🖷	VBW 200 ki	HZ MODE	Auto Swee	p		
30 dBm					D	1[1]		4.	-0.85 dB 98500 MHz
20 dBm						cc Bw 1[1]		-	14486 MHz 14.15 dBm 03200 GHz
10 dBm	D1 11.520	 dBm <u></u> 	when the state	and the second	m Waterale	-		1.710	
0 dBm									
-10 dBm		m							
-20 dBm		i.480 dBm							
230 dBm	withart	lugend					hrung	underward	Windows
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.7125	GHz			1001	pts			 Span	10.0 MHz
][]				Mea	isuring		- 444 2	22.12.2016 10:40:39

Date: 22.DEC.2016 10:40:39



Report No.: SZEM161201085001 Page: 52 of 178



Date: 22.DEC.2016 10:39:27



Report No.: SZEM161201085001 Page: 53 of 178

Spectrum									
	35.00 dBm		5.00 dB 😑						(-
e Att	40 dB	s 😑 SWT	10 ms 😑	VBW 200 k	Hz Mode	Auto Swe	ер		
●1Pk View			1	-					
30 dBm						1[1]			-0.01 dB 99500 MHz
20 dBm						cc Bw 1[1]		-	04496 MHz 14.23 dBm 99300 GHz
10 dBm	D1 11.680 (l dBm T m l	م میں میں میں میں میں میں میں میں میں می	-	-	المحمودهم			
0 dBm							$\left \right $		
-10 dBm		M							
-20 dBm		1.320 dBm-							
-30 dBm	www.M	n w					~~~	w Yur Had	month
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.7525	GHz	·	·	1001	. pts	·		Span	10.0 MHz
][]				Mea	suring		4/4 2	2.12.2016 10:43:59

4.1.1.6.3 Test Channel = HCH

Date: 22.DEC.2016 10:43:59



Report No.: SZEM161201085001 Page: 54 of 178

4.1.1.7 Test Mode = LTE/TM1 10MHz



Spectrun	n								
Ref Leve Att	l 35.00 dBm 40 dB			RBW 100 k VBW 300 k		A			
Att 1Pk View	40 UD) - 3WI	10 1115 💻	Y D YY 300 K	nz Moue	Auto Swee	þ		
30 dBm						1[1] cc Bw			-0.85 dB).7100 MHz 68931 MHz
20 dBm	D1 13.590(M	1[1]	<u>L тр</u>	-	11.84 dBm 01850 GHz
10 dBm	DI 13.3901		and a second and a s	monormal/	man	wenterman	hun y		
0 dBm									
-10 dBm—	D2 -12	.410 dBm					<u>t</u>		
-20 dBm								d . 6	
ພ ອອາຊຸ <mark>ທ_{ີ່} ແມ່ນ</mark>	NUMBER	www						ann ann thailte	whitewhere
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.715 (GHZ			1001					20.0 MHz
Ĺ					Mea	suring		444	10:51:33

Date: 22.DEC.2016 10:51:34



Report No.: SZEM161201085001 Page: 55 of 178

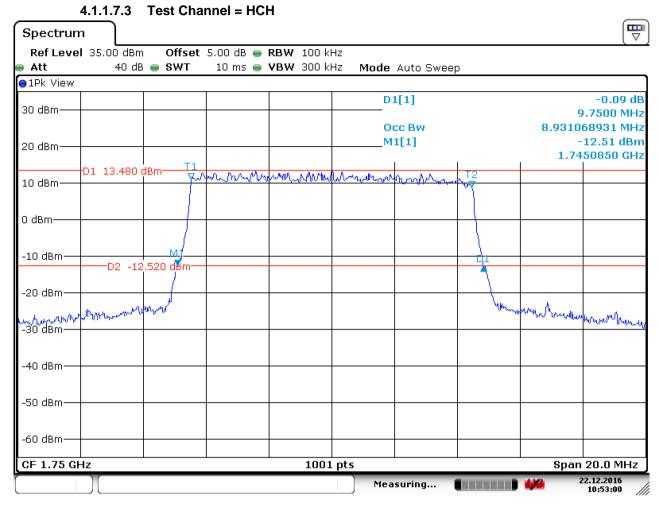
Spectrum	ı)								
Ref Level	35.00 dBm	n Offset	5.00 dB 👄	RBW 100 k	Hz				
🖷 Att	40 dB	B 👄 SWT	10 ms 👄	VBW 300 k	Hz Mode	Auto Sweej	D		
⊖1Pk View									
					D	1[1]			-0.74 dB
30 dBm									.7950 MHz
						CC BW			28971 MHz
20 dBm					M	1[1]			11.85 dBm
						I	1	1.72	75650 GHz
10 dBm	D1 13.500)	asm <u>t</u>	munn	makensky	mound	www. where	12		
10 0.011		I Y				ľ			
0 dBm									
-10 dBm—		M1					<u>dı</u>		
		2.500 dBm					1 1		
-20 dBm—									
-20 dBm	y turner w	Lur					maria	anuthornews	where the states
									 1
-30 dBm—									
-40 dBm—									
-50 dBm									
-60 dBm									
CF 1.7325	GHz	1	1	100:	L pts	1	1	Span	20.0 MHz
	Υ					suring		2	2.12.2016
									10:46:15

4.1.1.7.2 Test Channel = MCH

Date: 22.DEC.2016 10:46:15



Report No.: SZEM161201085001 Page: 56 of 178

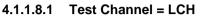


Date: 22.DEC.2016 10:53:01



Report No.: SZEM161201085001 Page: 57 of 178

4.1.1.8 Test Mode = LTE/TM2 10MHz

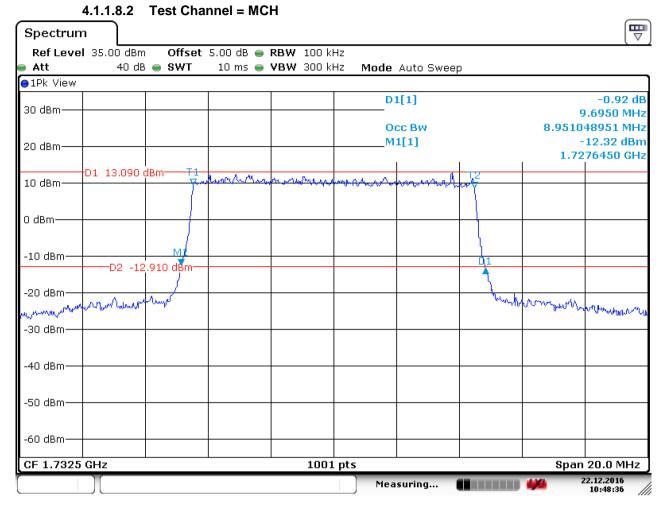


Spectrun	n								
	I 35.00 dBm			RBW 100 ki					
Att Int View	40 dB	SWT 🖷	10 ms 👄	VBW 300 ki	Hz Mode	Auto Swe	ер		
⊖1Pk View					D	1[1]			-0.62 dB
30 dBm					U	1[1]		c	-0.02 ив 9.7300 MHz
					0	cc Bw			48951 MHz
20 dBm					M	1[1]		-	13.20 dBm
						1	1	1.71	01450 GHz
10 dBm	D1 12.410 (dBm 	an sand	M.D Mary one	an a late March	u hamora i			
10 aBm		m							
0 dBm									
-10 dBm—		⊢ M <u>4</u>					<u> </u>		
	D2 -13	1.590 d <mark>B</mark> m					1		
-20 dBm—		<u> </u>					+		
	Acres	anam					new	how with	althour thousand
₩36/dBM	Maria address	0							
-40 dBm									
-+0 abiii									
-50 dBm									
-60 dBm—									
CF 1.715 (i GHz	1		1001	pts	1		ı Span	20.0 MHz
	Υ					suring		_	22.12.2016
						-			10:50:16

Date: 22.DEC.2016 10:50:16



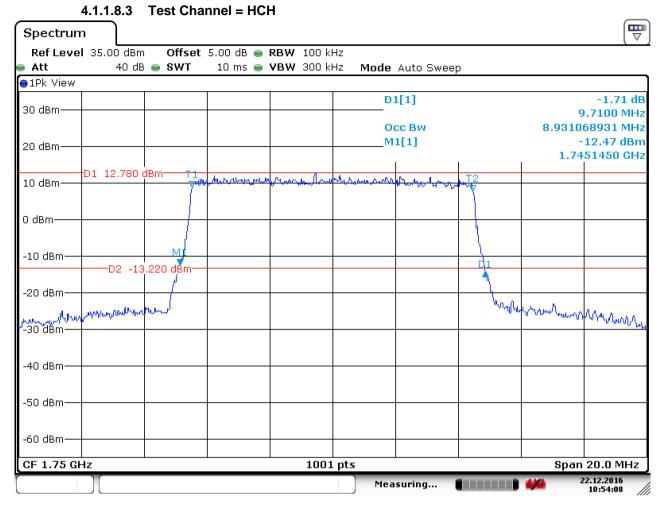
Report No.: SZEM161201085001 Page: 58 of 178



Date: 22.DEC.2016 10:48:36



Report No.: SZEM161201085001 Page: 59 of 178



Date: 22.DEC.2016 10:54:09



Report No.: SZEM161201085001 Page: 60 of 178

4.1.1.9 Test Mode = LTE/TM1 15MHz

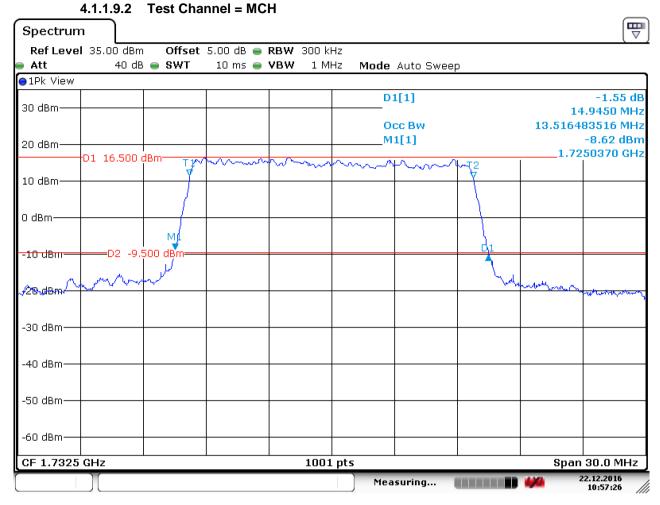


Spectrun	n								
	l 35.00 dBm			RBW 300 ki					
Att	40 dE	B 🔵 SWT	10 ms 😑	VBW 1 M	Hz Mode	Auto Swe	ep		
⊖1Pk View	1	1		1					
30 dBm					D	1[1]			-1.39 dB
SS abiii						cc Bw			1.8650 MHz 43457 MHz
						1[1]		10.4000	-8.85 dBm
20 dBm——	D1 10 000					-[-]		1.71	01270 GHz
	D1 16.260	авт <u>т</u> і~	m	h	and the com	han	-ruz		
10 dBm——									
0 dBm——									
		₩					<u> </u>		
- 10 dBm	D2 -9.	740 dBm					4		
		{							
-20 dBm—	with work of me	1 m					"HM P	y the second	Herry Marine Marine with
www.herether	pensor a c								
-30 dBm—									
-40 dBm—									
-50 dBm									
-60 dBm									
CF 1.7175	GHz			1001	pts			-	30.0 MHz
					Mea	suring		4/4	2.12.2016 10:58:51

Date: 22.DEC.2016 10:58:52



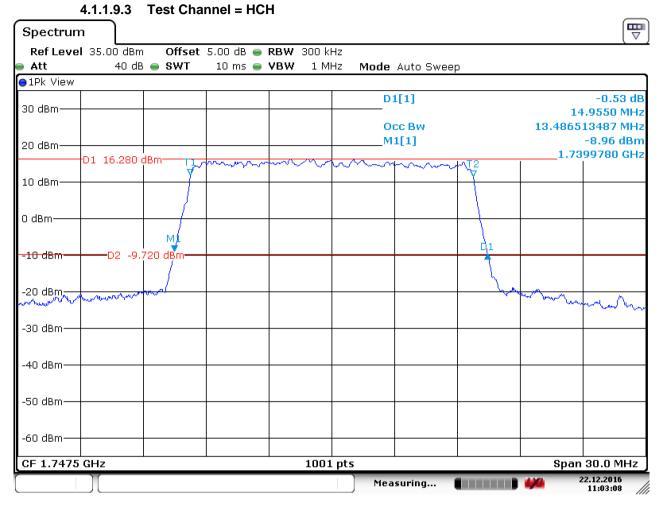
Report No.: SZEM161201085001 Page: 61 of 178



Date: 22.DEC.2016 10:57:27



Report No.: SZEM161201085001 Page: 62 of 178



Date: 22.DEC.2016 11:03:08



Report No.: SZEM161201085001 Page: 63 of 178

4.1.1.10 Test Mode = LTE/TM2 15MHz

4.1.1.10.1 Test Channel = LCH

n]								
								``
40 dE	B 🔵 SWT	10 ms 👄	VBW 1 M	Hz Mode	Auto Swee	ер		
1	1	1	1	1				
				D	1[1]		1.0	-0.08 dB 1.8950 MHz
				0	cc Bw			
								10.38 dBm
D1 15 600	dD ==							00670 GHz
DI 15.600		m	m	$\sim\sim\sim$	from	~~~¥2 ▼		
	MŹ					1 7.		
D2 -10).400 dBm 							
Bu	Mul					Wardson	- And the second second	man
mar and the second second	*							· · · · · · · · · · · · · · · · · · ·
						_		
GHz			1001	l pts			_	30.0 MHz
				Mea	suring		4/4	22.12.2016 11:00:04
	1 35.00 dBn 40 dE	I 35.00 dBm Offset 40 dB ● SWT D1 15.600 dBm T1 D2 -10.400 dBm 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	D2 -10.400 dBm	I 35.00 dBm Offset 5.00 dB • RBW 300 k 40 dB • SWT 10 ms • VBW 10 ms VBW 11 15.600 dBm T1 D1 15.600 dBm T1 D2 -10,400 dBm Image: Comparison of the second secon	I 35.00 dBm Offset 5.00 dB • RBW 300 kHz 40 dB • SWT 10 ms • VBW 1 MHz Mode 0 0 0 01 15.600 dBm 11 0 0 02 -10.400 dBm 0 0 0 02 -10.400 dBm 0 0 0 04 0 0 0 0 05 -10.400 dBm 0 0 0 0 05 -10.400 dBm 0 0 0 0 07 -10.400 dBm 0 0 0 0 08 -10.400 dBm 0 0 0 0 0 09 -10.400 dBm 0 0 0 0 0 0 09 -10.400 dBm 0 0 0 0 0 0 0 09 -10.400 dBm 0	I 35.00 dBm Offset 5.00 dB RBW 300 kHz 40 dB SWT 10 ms VBW 1 MHz Mode Auto Sweit D1[1] Occ Bw M1[1] D1 15.600 dBm T1 M1[1] D2 -10,400 dBm Image: Sum and su	1 35.00 dBm Offset 5.00 dB • RBW 300 kHz 40 dB • SWT 10 ms • VBW 1 MHz Mode Auto Sweep D1[1] 0cc Bw M1[1] 0cc Bw M1[1] 0cc Bw D1 15.600 dBm T1 T1 T1 D2 -10.400 dBm M4 Image: Sweet state	1 35.00 dBm Offset 5.00 dB RBW 300 kHz 40 dB SWT 10 ms VBW 1 MHz Mode Auto Sweep 10 D1[1] 14 0cc Bw 13.5164 M1[1] 171 15.600 dBm T1 1.71 02 10.400 dBm 01 02 10.400 dBm 01 01 0 01 02 100 dBm 01 03 04 04 04 04 04 05 04 04 04 04 04 05 04 04 04 04 04 05 04 04 04 04 04 05 04 04 04 04 04 05 04 04 04 04 04 05 04 04 04 04 04 05 04 04 04 04 04 <td< td=""></td<>

Date: 22.DEC.2016 11:00:05



Report No.: SZEM161201085001 Page: 64 of 178

	4.1.1.10.2	Test Cha	nnel = MC	н					
Spectrur	n								
Ref Leve	el 35.00 dBm	n Offset	5.00 dB 😑	RBW 300 kł	Ηz				
🗕 Att	40 dE	8 👄 SWT	10 ms 😑	VBW 1 Mł	Hz Mode	Auto Swe	ер		
●1Pk View	-								
30 dBm					D	1[1]			-0.06 dB
30 ubiii					0	cc Bw			F.8250 MHz 83516 MHz
						1[1]		13.3104	-9.66 dBm
20 dBm—	D1 15 000	d D				-[-]		1.72	50670 GHz
	D1 15.990	asm <u> </u>	m	mm	man	hum	$\sim \sim^2$		
10 dBm		t j							
0 dBm									
		M							
-10 dBm	D2 -10).010 dBm					<u> </u>		
							$\langle \cdot \rangle$		
-20.dBm	monther	and we are the					have	and many and	-
and the second of the second	1								- www.
-30 dBm—									
-30 ubiii—									
-40 dBm—									
-50 dBm—									
-60 dBm—									
CF 1.7328	 5.CHz			1001	nts				30.0 MHz
UCF 1.7328				1001				-	22.12.2016
					Mea	isuring			10:56:11

Date: 22.DEC.2016 10:56:11



Report No.: SZEM161201085001 Page: 65 of 178

Spectrun	ı								
	l 35.00 dBm			RBW 300 ki					
Att	40 dB	SWT 💿	10 ms 😑	VBW 1 MI	Hz Mode	Auto Swe	ер		
⊖1Pk View	1	1	1		1				
30 dBm						1[1]			-0.36 dB 1.8650 MHz
20 dBm	D1 15 200				M	cc Bw 1[1]		-	83516 MHz 10.09 dBm 00670 GHz
10 dBm	D1 15.320 (h	W		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
0 dBm									
-10 dBm	D2 -10	M1 0.680 dBm ==							
-20 dBm-	work was						- Law	marger the free of	however
-30 dBm									· ··•
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.7475	GHz	·	·	1001	pts	·	1	Span	30.0 MHz
					Mea	isuring		444 2	2.12.2016 11:01:35

4.1.1.10.3 Test Channel = HCH

Date: 22.DEC.2016 11:01:35



Report No.: SZEM161201085001 Page: 66 of 178

4.1.1.11 Test Mode = LTE/TM1 20MHz

4.1.1.11.1 Test Channel = LCH

Spectrun	n]								
	1 35.00 dBm			RBW 300 ki					
Att 1Pk View	40 dB	3 🖷 SWT	10 ms 👄	VBW 1 MH	HZ Mode	Auto Swee	ер		
30 dBm					D	1[1]		10	-0.88 dB 9.4210 MHz
						cc Bw			97902 MHz
20 dBm	D1 15.790	dB m				1[1]		1.71	-9.61 dBm .03700 GHz
10 dBm	DI 13.790		mon	www.	mouther	man	York?		
0 dBm——		м							
10 dBm	D2 -10).210 dBm							
-20 dBm								•	
-20 dBm ~	phanether mus	www.					Part of	olworderhan allowy	Warner
~-'30 dBm									
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.72 G	Hz			1001					40.0 MHz
					Mea	asuring		4/4	11:08:58

Date: 22.DEC.2016 11:08:59



4.1.1.11.2 Test Channel = MCH

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

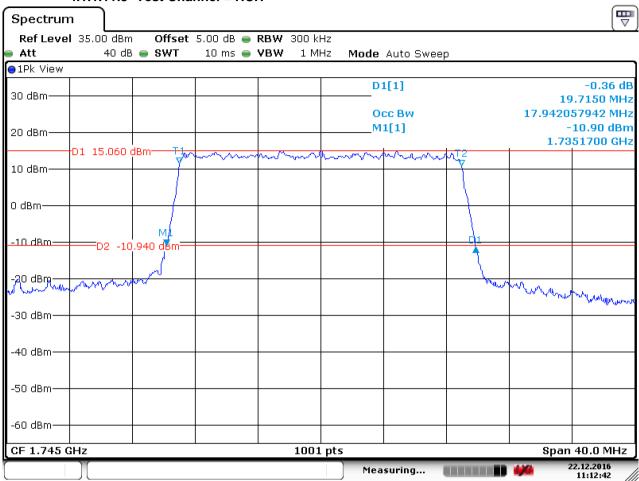
Report No.: SZEM161201085001 Page: 67 of 178

Spectrum	ı								
Ref Leve	l 35.00 dBm	n Offset	5.00 dB 👄	RBW 300 ki	Ηz				
Att 🖉	40 dE	B 🔵 SWT	10 ms 👄	VBW 1 M	Hz Mode	Auto Swee	эр		
⊖1Pk View									
30 dBm						1[1]			-0.44 dB 0.4610 MHz
20 dBm	D1 15 010	dp T1			M	CC BW 1[1]		-	57942 MHz 10.08 dBm 27100 GHz
10 dBm	D1 15.810		- March	himme	million	n			
0 dBm									
<u>10 dBm</u>	D2 -10	M1).190 dBm 							
-20 dBm	hand the second second	non					han	and the second	monuna
-30 dBm									
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.7325	GHz	1		1001	pts			Span	40.0 MHz
()[suring		-	22.12.2016 11:06:55

Date: 22.DEC.2016 11:06:56



Report No.: SZEM161201085001 Page: 68 of 178



4.1.1.11.3 Test Channel = HCH

Date: 22.DEC.2016 11:12:42



Report No.: SZEM161201085001 Page: 69 of 178

4.1.1.12 Test Mode = LTE/TM2 20MHz

4.1.1.12.1 Test Channel = LCH

Spectrum]						
Ref Level 35.		5.00 dB 👄 RBW 🗧					
Att	40 dB 🥃 SWT	10 ms 👄 VBW	1 MHz Mode	Auto Sweep)		
●1Pk View				4541			0.40.40
30 dBm			U	1[1]		19	-0.42 dB .5800 MHz
			0	CC BW			97902 MHz
20 dBm			N	11[1]			10.92 dBm
	 ۲۰۰۱ L4.530 dBm			1	<u>−⊤2</u>	1.71	01700 GHz
10 dBm		mannen	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	mm	γ		
0 dBm							
-10 dBm	. 🌿				<u>dı</u>		
	D2 -11.470 dBm				1		
-20 dBm					<u> </u>		-
-20 dBm	Newhow				Tranky (and have a	Mar Mar ma
VSD dBm	·						
-40 dBm							
-40 0011							
-50 dBm							
-50 abiii							
-60 dBm							
-00 uBIII-							
CF 1.72 GHz			1001 pts			-	40.0 MHz
			Mea	asuring		4/4 2	2.12.2016 11:10:07

Date: 22.DEC.2016 11:10:07



Report No.: SZEM161201085001 Page: 70 of 178

Spectrum	<u> </u>								
	35.00 dBm			RBW 300 k					(-
Att	40 dB	SWT 😑 SWT	10 ms 👄	VBW 1 M	Hz Mode	Auto Swee	p		
●1Pk View						1[1]			0.51.40
30 dBm					U	1[1]		19	-0.51 dB 4210 MHz.
					0	cc Bw			17982 MHz
20 dBm——					M	1[1]			-9.96 dBm
	D1 15.250)	l dBm 	0				+ T2	1.72	27900 GHz
10 dBm			and and a	www	- www	n	my		
0 dBm									
-10 dBm	no 10	M <u>i</u>					dı		
).750 dBm 							
-20 dBm	Mar Anne	mound					V.M.	and man and the	thomas and and
with a construction of the									a second for
-30 dBm									
-40 dBm——									
-50 dBm									
60 d0 m									
-60 dBm									
CF 1.7325	GHz			1001	pts				40.0 MHz
][Mea	suring		- 444 - ²	22.12.2016 11:04:57

4.1.1.12.2 Test Channel = MCH

Date: 22.DEC.2016 11:04:58



Report No.: SZEM161201085001 Page: 71 of 178

Spectrum				••					
•	35.00 dBm	Offset	5 00 dB 👄	RBW 300 k	H7				(~
Att		SWT	10 ms 👄			Auto Swee	ep		
●1Pk View							•		
30 dBm						1[1] cc Bw			-0.68 dB).5950 MHz 57942 MHz
20 dBm	D1 14 000 -				M	1[1]	1	-	11.15 dBm 52500 GHz
10 dBm	D1 14.800 (man	www.www.	-non an	www.com	unt² {		
0 dBm									
-10 dBm	D2 -11	M 200 dBm=							
-20 dBm	mun/Annon						- Constan	Manne	when when
-30 dBm									
-40 dBm									
-50 dBm									
-60 dBm									
CF 1.745 G	iHz		1	1001	. pts			l Span	40.0 MHz
][Mea	suring		- - 2	22.12.2016 11:11:28

4.1.1.12.3 Test Channel = HCH

Date: 22.DEC.2016 11:11:28



Report No.: SZEM161201085001 Page: 72 of 178

5 Band Edges Compliance

Part I –

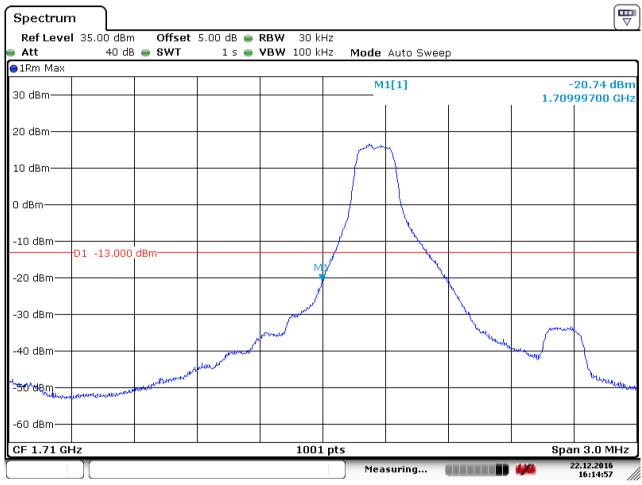
5.1 For LTE

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: 22.DEC.2016 16:14:57



Report No.: SZEM161201085001 Page: 73 of 178

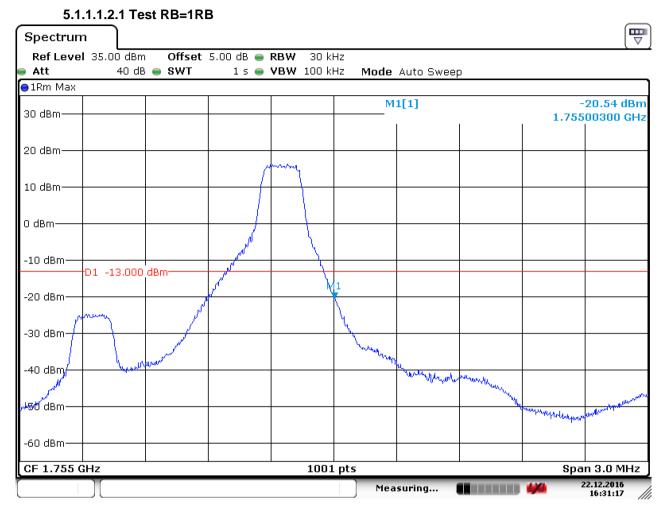
Spectrum	,								
	35.00 dBm		5.00 dB 👄						
Att 1Rm Max	40 dB	SWT 🖷	1 S 🖷	VBW 100 kł	Hz Mode	Auto Swee	ep		
30 dBm					M	1[1]			28.43 dBm 99700 GHz
20 dBm									
10 dBm						human	an and the second se		
0 dBm									
-10 dBm	D1 -13.000	dBm							
-20 dBm									
-30 dBm		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	a man and a mark	M	7				Lagu
_48_d8m									
-50 dBm									
-60 dBm									
CF 1.71 GH	lz	·	·	1001	pts			Spa	n 3.0 MHz
					Mea	suring		4/4 2	22.12.2016 16:12:27

5.1.1.1.1.2 Test RB=6RB

Date: 22.DEC.2016 16:12:28



Report No.: SZEM161201085001 Page: 74 of 178

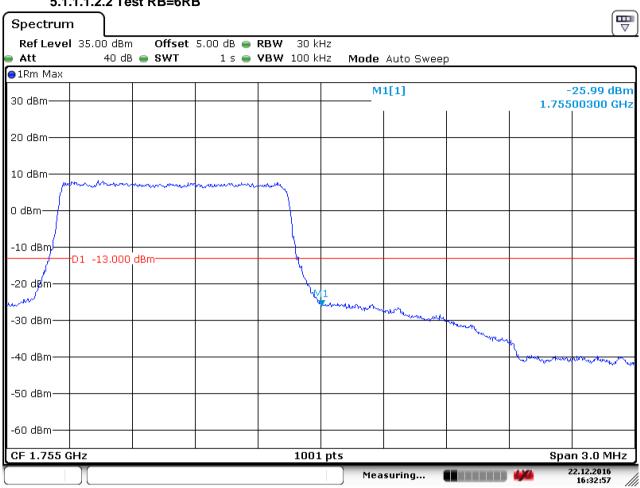


5.1.1.1.2 Test Channel = HCH

Date: 22.DEC.2016 16:31:17



Report No.: SZEM161201085001 Page: 75 of 178



Date: 22.DEC.2016 16:32:58

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

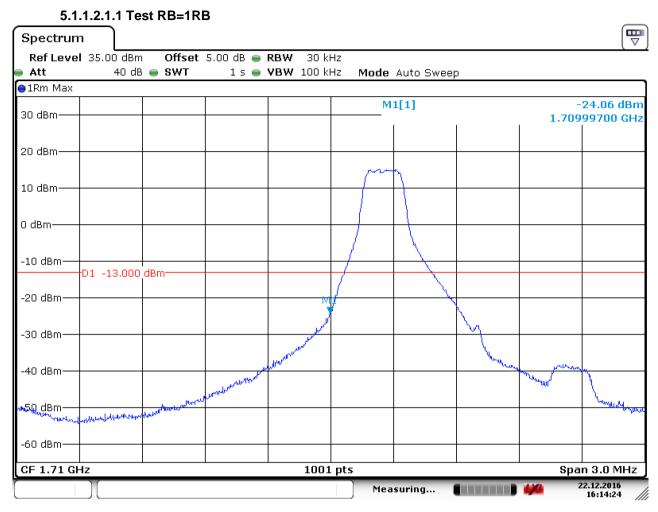
5.1.1.1.2.2 Test RB=6RB



Report No.: SZEM161201085001 Page: 76 of 178

5.1.1.2 Test Mode = LTE/TM2 1.4MHz

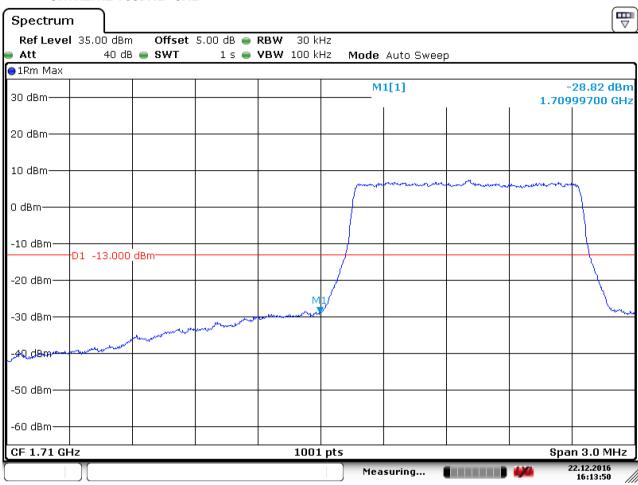
5.1.1.2.1 Test Channel = LCH



Date: 22.DEC.2016 16:14:24



Report No.: SZEM161201085001 Page: 77 of 178



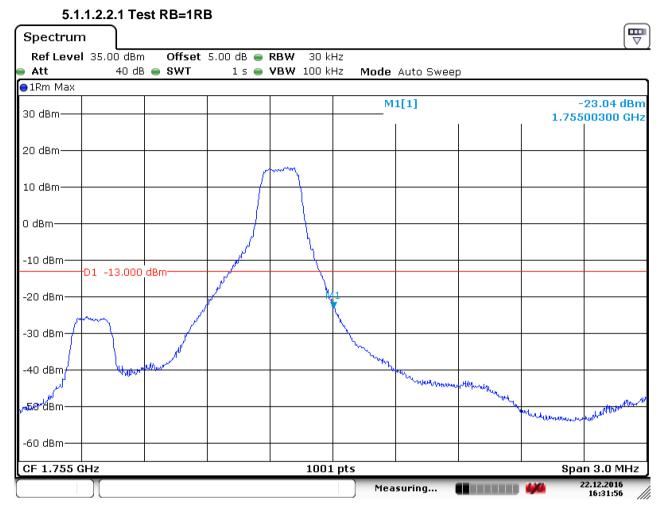
Date: 22.DEC.2016 16:13:50

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

5.1.1.2.1.2 Test RB=6RB



Report No.: SZEM161201085001 Page: 78 of 178

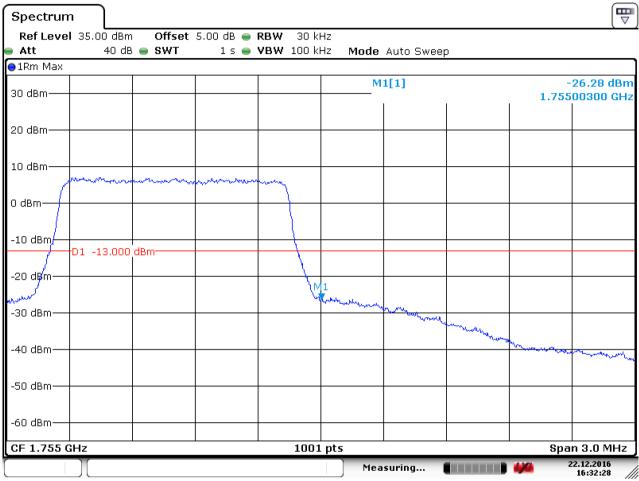


5.1.1.2.2 Test Channel = HCH

Date: 22.DEC.2016 16:31:57



Report No.: SZEM161201085001 Page: 79 of 178



5.1.1.2.2.2 Test RB=6RB

Date: 22.DEC.2016 16:32:28



Report No.: SZEM161201085001 Page: 80 of 178

5.1.1.3.1.1 Test RB=1RB ₽ Spectrum Ref Level 35.00 dBm Offset 5.00 dB 曼 RBW 30 kHz 40 dB 🔵 SWT 1 s 🔵 **VBW** 100 kHz Att Mode Auto Sweep . ●1Rm Max M1[1] -16.92 dBm 30 dBm-1.70999400 GHz 20 dBm-10 dBm-0 dBm--10 dBm-D1 -13.000 dBm[.] -20 dBm--30 dBm--40 dBm 40 4 William Mark -50 dBm[.] -60 dBm 1001 pts CF 1.71 GHz Span 6.0 MHz 22.12.2016 Measuring... 11 16:37:35

5.1.1.3 Test Mode = LTE/TM1 3MHz

5.1.1.3.1 Test Channel = LCH

Date: 22.DEC.2016 16:37:35



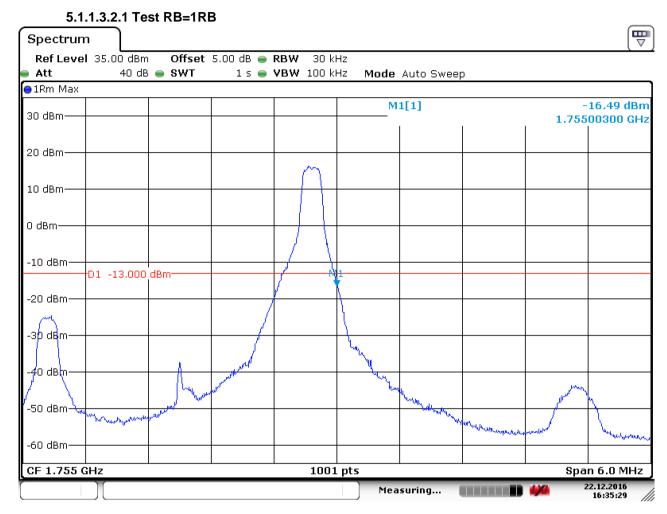
Report No.: SZEM161201085001 Page: 81 of 178

5.1.	.1.3.1.2 Te	est RB=15	RB							_	_
Spectrum	ı]									T T	$\overline{\nabla}$
Ref Level e Att	l 35.00 dBm 40 dB	n Offset 3 e SWT	5.00 dB 👄 1 s 👄	RBW 30 ki VBW 100 ki		Mode	Auto Swee	эр		`	
⊖1Rm Max											_
30 dBm						M	1[1] 	1		28.89 dBi 99400 GH	
20 dBm											
10 dBm											
0 dBm						honor	and a start and a start and a start a s	and a second and a second s	وسينوه والمراجع	mannen	
-10 dBm—	D1 -13.000	dBm									
-20 dBm					}						ł
-30 dBm				M	ŧ						
-40 dBm 7-4	monorton	man Awardy a	an and the second								
more much											
-50 dBm											
-60 dBm											
CF 1.71 GF	lz	ı	1	1001	. pt	s	·	1	Spa	n 6.0 MHz	z
)[) Mea	suring		4/4 2	22.12.2016 16:38:02	

Date: 22.DEC.2016 16:38:03



Report No.: SZEM161201085001 Page: 82 of 178



5.1.1.3.2 Test Channel = HCH

Date: 22.DEC.2016 16:35:29



Report No.: SZEM161201085001 Page: 83 of 178

	.1.3.2.2 10	SUNDEID								_
Spectrun	n]									
Ref Leve	l 35.00 dBm	0ffset	5.00 dB 😑	RBW 30 k	:Hz					`
🖷 Att	40 dE	s 🔵 SWT	1 s 👄	VBW 100 k	:Hz	Mode	Auto Swee	р		
😑 1 Rm Max										
						M	1[1]			28.84 dBm
30 dBm							1	1	1.755	00300 GHz
20 dBm										
10 dBm										
0 dBm	manner	m man	and the second second second	wound						
l (
-10 dBm—	D.4 . 40.000									
]	D1 -13.000	abm								
20 dBm										
1					41					
-30 dBm					1					
oo abiii						M. Trank	marine and	man		
								and the second sec	which we wanted	
-40 dBm—									14000	1.000 A
										how we have
-50 dBm										
-60 dBm										
CF 1.755 C	GHz			100	1 pts				· · · · ·	n 6.0 MHz
						Mea	suring		- 🚧 2	22.12.2016 16:34:43

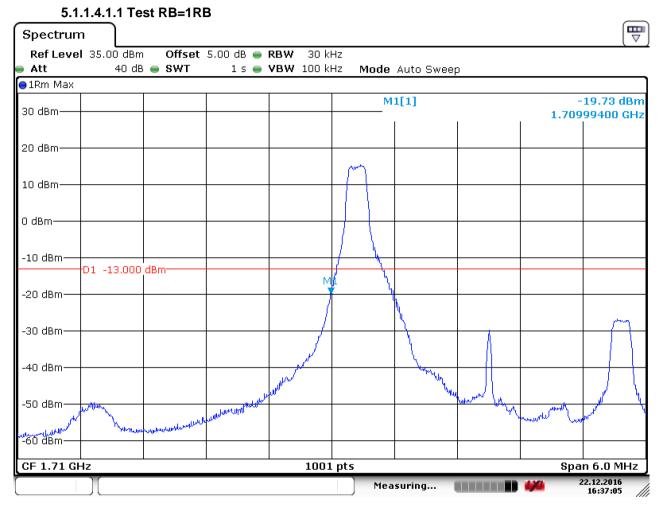
5.1.1.3.2.2 Test RB=15RB

Date: 22.DEC.2016 16:34:43



Report No.: SZEM161201085001 Page: 84 of 178

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



Date: 22.DEC.2016 16:37:05



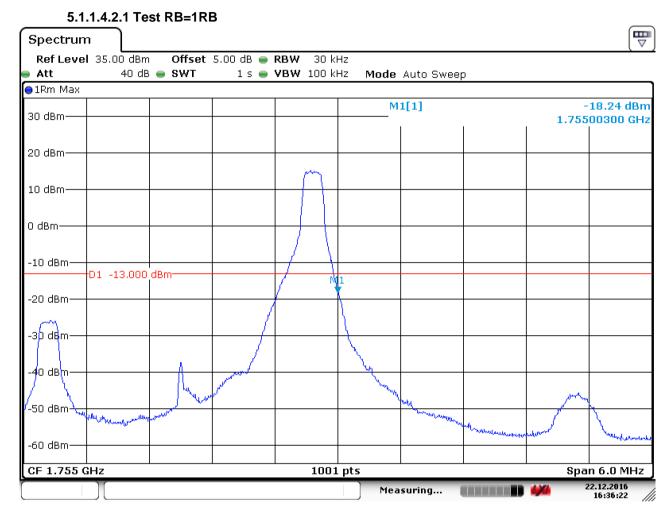
Report No.: SZEM161201085001 Page: 85 of 178

5.1.	.1.4.1.2 Te	St RB=15	КB							_
Spectrum	ר ו ו									
Ref Level e Att	l 35.00 dBm 40 dE) Offset S 👄 SWT	5.00 dB 👄 1 s 👄	RBW 30 ki VBW 100 ki		Mode	Auto Swee	p		`
⊖1Rm Max				_						
30 dBm						M	1[1]	1		28.30 dBn 99400 GHa
20 dBm										
10 dBm										
0 dBm						hours	and the second	- Martine	- Contraction	mon
-10 dBm	D1 -13.000	dBm								
-20 dBm										
-30 dBm			a and the mental and	M	7					
-40 dBm	and the state of the	and and the second								
-50 dBm										
-60 dBm										
CF 1.71 GH	lz	·		1001	. pt	ts			Spa	n 6.0 MHz
						Mea	suring		4/4 2	22.12.2016 16:38:30

Date: 22.DEC.2016 16:38:30



Report No.: SZEM161201085001 Page: 86 of 178



5.1.1.4.2 Test Channel = HCH

Date: 22.DEC.2016 16:36:22