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Appendix B

Test Data for SZEM170100023101



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1 Effective (Isotropic) Radiated Power Output Data

Effective Radiated Power of Transmitter (ERP) for LTE BAND 26(814-824)

Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				RB1#0	21.3	22.90	50.00	PASS
				RB1#2	20.97	22.57	50.00	PASS
				RB1#5	20.92	22.52	50.00	PASS
			LCH	RB3#0	20.99	22.59	50.00	PASS
				RB3#2	21.00	22.60	50.00	PASS
				RB3#3	20.98	22.58	50.00	PASS
				RB6#0	20.94	22.54	50.00	PASS
				RB1#0	21.13	22.73	50.00	PASS
	LTE/TM1	1.4M		RB1#2	20.99	22.59	50.00	PASS
DANDAG			MCH	RB1#5	21.02	22.62	50.00	PASS
BAND26 (814-824)				RB3#0	20.94	22.54	50.00	PASS
· · · · ·					RB3#2	21.03	22.63	50.00
				RB3#3	21.00	22.60	50.00	PASS
				RB6#0	20.98	22.58	50.00	PASS
				RB1#0	21.15	22.75	50.00	PASS
				RB1#2	21.07	22.67	50.00	PASS
				RB1#5	21.04	22.64	50.00	PASS
			HCH	RB3#0	21.02	22.62	50.00	PASS
				RB3#2	21.01	22.61	50.00	PASS
				RB3#3	21.06	22.66	50.00	PASS
				RB6#0	20.94	22.54	50.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				RB1#0	21.26	22.86	50.00	PASS
				RB1#2	21.33	22.93	50.00	PASS
			LCH	RB1#5	21.27	22.87	50.00	PASS
				RB3#0	21.02	22.62	50.00	PASS
				RB3#2	21.08	22.68	50.00	PASS
				RB3#3	21.01	22.61	50.00	PASS
				RB6#0	20.05	21.65	50.00	PASS
				RB1#0	21.36	22.96	50.00	PASS
	LTE/TM2	1.4M		RB1#2	21.32	22.92	50.00	PASS
			МСН	RB1#5	21.29	22.89	50.00	PASS
BAND26 (814-824)				RB3#0	21.03	22.63	50.00	PASS
				RB3#2	21.05	22.65	50.00	PASS
				RB3#3	21.04	22.64	50.00	PASS
				RB6#0	20.03	21.63	50.00	PASS
				RB1#0	21.40	23.00	50.00	PASS
				RB1#2	21.31	22.91	50.00	PASS
				RB1#5	21.25	22.85	50.00	PASS
			HCH	RB3#0	21.04	22.64	50.00	PASS
				RB3#2	21.18	22.78	50.00	PASS
				RB3#3	21.12	22.72	50.00	PASS
				RB6#0	20.15	21.75	50.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				RB1#0	20.28	21.88	50.00	PASS
				RB1#2	20.39	21.99	50.00	PASS
				RB1#5	20.27	21.87	50.00	PASS
			LCH	RB3#0	20.17	21.77	50.00	PASS
				RB3#2	20.16	21.76	50.00	PASS
				RB3#3	20.15	21.75	50.00	PASS
				RB6#0	19.10	20.70	50.00	PASS
				RB1#0	20.33	21.93	50.00	PASS
				RB1#2	20.34	21.94	50.00	PASS
	LTE/TM3	1.4M	МСН	RB1#5	20.25	21.85	50.00	PASS
BAND26 (814-824)				RB3#0	20.18	21.78	50.00	PASS
				RB3#2	20.16	21.76	50.00	PASS
				RB3#3	20.12	21.72	50.00	PASS
				RB6#0	19.13	20.73	50.00	PASS
				RB1#0	20.24	21.84	50.00	PASS
				RB1#2	20.33	21.93	50.00	PASS
				RB1#5	20.28	21.88	50.00	PASS
			НСН	RB3#0	20.15	21.75	50.00	PASS
				RB3#2	20.17	21.77	50.00	PASS
			RB3#3	20.15	21.75	50.00	PASS	
				RB6#0	19.20	20.80	50.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				RB1#0	21.01	22.61	50.00	PASS
				RB1#7	21.09	22.69	50.00	PASS
				RB1#14	20.94	22.54	50.00	PASS
			LCH	RB8#0	21.04	22.64	50.00	PASS
				RB8#4	21.06	22.66	50.00	PASS
				RB8#7	20.99	22.59	50.00	PASS
				RB15#0	21.03	22.63	50.00	PASS
				RB1#0	21.08	22.68	50.00	PASS
				RB1#7	21.11	22.71	50.00	PASS
	LTE/TM1	ЗМ	МСН	RB1#14	20.96	22.56	50.00	PASS
BAND26 (814-824)				RB8#0	21.14	22.74	50.00	PASS
(0				RB8#4	21.16	22.76	50.00	PASS
				RB8#7	21.07	22.67	50.00	PASS
				RB15#0	21.05	22.65	50.00	PASS
				RB1#0	21.13	22.73	50.00	PASS
				RB1#7	21.08	22.68	50.00	PASS
				RB1#14	21.14	22.74	50.00	PASS
			НСН	RB8#0	21.04	22.64	50.00	PASS
				RB8#4	21.04	22.64	50.00	PASS
				RB8#7	20.99	22.59	50.00	PASS
				RB15#0	21.02	22.62	50.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				RB1#0	21.29	22.89	50.00	PASS
				RB1#7	21.47	23.07	50.00	PASS
				RB1#14	21.29	22.89	50.00	PASS
			LCH	RB8#0	20.06	21.66	50.00	PASS
				RB8#4	20.12	21.72	50.00	PASS
				RB8#7	20.06	21.66	50.00	PASS
				RB15#0	20.07	21.67	50.00	PASS
				RB1#0	21.35	22.95	50.00	PASS
	LTE/TM2	ЗМ		RB1#7	21.43	23.03	50.00	PASS
			МСН	RB1#14	21.39	22.99	50.00	PASS
BAND26 (814-824)				RB8#0	20.16	21.76	50.00	PASS
				RB8#4	20.10	21.70	50.00	PASS
				RB8#7	20.08	21.68	50.00	PASS
				RB15#0	20.06	21.66	50.00	PASS
				RB1#0	21.39	22.99	50.00	PASS
				RB1#7	21.42	23.02	50.00	PASS
				RB1#14	21.26	22.86	50.00	PASS
			НСН	RB8#0	20.18	21.78	50.00	PASS
				RB8#4	20.11	21.71	50.00	PASS
				RB8#7	20.17	21.77	50.00	PASS
				RB15#0	20.12	21.72	50.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				RB1#0	20.37	21.97	50.00	PASS
				RB1#7	20.52	22.12	50.00	PASS
				RB1#14	20.31	21.91	50.00	PASS
			LCH	RB8#0	19.09	20.69	50.00	PASS
				RB8#4	19.12	20.72	50.00	PASS
				RB8#7	19.09	20.69	50.00	PASS
				RB15#0	19.13	20.73	50.00	PASS
				RB1#0	20.27	21.87	50.00	PASS
	LTE/TM3	ЗМ		RB1#7	20.32	21.92	50.00	PASS
			МСН	RB1#14	20.33	21.93	50.00	PASS
BAND26 (814-824)				RB8#0	19.19	20.79	50.00	PASS
				RB8#4	19.10	20.70	50.00	PASS
				RB8#7	19.13	20.73	50.00	PASS
				RB15#0	19.12	20.72	50.00	PASS
				RB1#0	20.34	21.94	50.00	PASS
				RB1#7	20.42	22.02	50.00	PASS
				RB1#14	20.33	21.93	50.00	PASS
			НСН	RB8#0	19.29	20.89	50.00	PASS
				RB8#4	19.15	20.75	50.00	PASS
				RB8#7	19.07	20.67	50.00	PASS
				RB15#0	19.11	20.71	50.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict					
				RB1#0	20.98	22.58	50.00	PASS					
				RB1#13	21.01	22.61	50.00	PASS					
				RB1#24	20.91	22.51	50.00	PASS					
			LCH	RB12#0	20.99	22.59	50.00	PASS					
				RB12#6	21.00	22.60	50.00	PASS					
				RB12#13	20.97	22.57	50.00	PASS					
				RB25#0	20.97	22.57	50.00	PASS					
				RB1#0	21.08	22.68	50.00	PASS					
				RB1#13	21.03	22.63	50.00	PASS					
	LTE/TM1	5M	MCH	RB1#24	20.99	22.59	50.00	PASS					
BAND26 (814-824)				RB12#0	20.98	22.58	50.00	PASS					
				RB12#6	21.03	22.63	50.00	PASS					
				RB12#13	20.99	22.59	50.00	PASS					
				RB25#0	20.94	22.54	50.00	PASS					
				RB1#0	21.08	22.68	50.00	PASS					
				RB1#13	21.03	22.63	50.00	PASS					
									RB1#24	21.02	22.62	50.00	PASS
			HCH	RB12#0	20.99	22.59	50.00	PASS					
				RB12#6	21.06	22.66	50.00	PASS					
				RB12#13	21.11	22.71	50.00	PASS					
				RB25#0	21.10	22.70	50.00	PASS					



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict				
				RB1#0	21.23	22.83	50.00	PASS				
				RB1#13	21.29	22.89	50.00	PASS				
				RB1#24	21.16	22.76	50.00	PASS				
			LCH	RB12#0	20.07	21.67	50.00	PASS				
				RB12#6	20.03	21.63	50.00	PASS				
				RB12#13	20.05	21.65	50.00	PASS				
				RB25#0	20.08	21.68	50.00	PASS				
				RB1#0	21.33	22.93	50.00	PASS				
				RB1#13	21.28	22.88	50.00	PASS				
	LTE/TM2	5M	МСН	RB1#24	21.19	22.79	50.00	PASS				
BAND26 (814-824)				RB12#0	20.11	21.71	50.00	PASS				
				RB12#6	20.06	21.66	50.00	PASS				
				RB12#13	20.08	21.68	50.00	PASS				
				RB25#0	20.09	21.69	50.00	PASS				
				RB1#0	21.36	22.96	50.00	PASS				
				RB1#13	21.32	22.92	50.00	PASS				
								RB1#24	21.26	22.86	50.00	PASS
			HCH	RB12#0	20.09	21.69	50.00	PASS				
				RB12#6	20.23	21.83	50.00	PASS				
				RB12#13	20.15	21.75	50.00	PASS				
				RB25#0	20.18	21.78	50.00	PASS				



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict			
				RB1#0	20.36	21.96	50.00	PASS			
				RB1#13	20.45	22.05	50.00	PASS			
				RB1#24	20.32	21.92	50.00	PASS			
			LCH	RB12#0	19.14	20.74	50.00	PASS			
				RB12#6	19.12	20.72	50.00	PASS			
				RB12#13	19.05	20.65	50.00	PASS			
				RB25#0	19.03	20.63	50.00	PASS			
				RB1#0	20.32	21.92	50.00	PASS			
				RB1#13	20.46	22.06	50.00	PASS			
	LTE/TM3	5M	МСН	RB1#24	20.36	21.96	50.00	PASS			
BAND26 (814-824)				RB12#0	19.12	20.72	50.00	PASS			
				RB12#6	19.16	20.76	50.00	PASS			
				RB12#13	19.11	20.71	50.00	PASS			
				RB25#0	19.13	20.73	50.00	PASS			
				RB1#0	20.56	22.16	50.00	PASS			
				RB1#13	20.46	22.06	50.00	PASS			
							RB1#24	20.42	22.02	50.00	PASS
			HCH	RB12#0	19.24	20.84	50.00	PASS			
				RB12#6	19.22	20.82	50.00	PASS			
				RB12#13	19.20	20.80	50.00	PASS			
				RB25#0	19.23	20.83	50.00	PASS			



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				RB1#0	21.85	23.45	50.00	PASS
				RB1#25	20.90	22.50	50.00	PASS
				RB1#49	20.87	22.47	50.00	PASS
	LTE/TM1	10M	MCH	RB25#0	20.97	22.57	50.00	PASS
				RB25#13	20.95	22.55	50.00	PASS
				RB25#25	20.92	22.52	50.00	PASS
				RB50#0	21.95	23.55	50.00	PASS
	LTE/TM2	10M		RB1#0	21.36	22.96	50.00	PASS
			МСН	RB1#25	21.22	22.82	50.00	PASS
				RB1#49	21.18	22.78	50.00	PASS
BAND26 (814-824)				RB25#0	20.17	21.77	50.00	PASS
,				RB25#13	20.12	21.72	50.00	PASS
				RB25#25	20.11	21.71	50.00	PASS
				RB50#0	20.08	21.68	50.00	PASS
				RB1#0	20.81	22.41	50.00	PASS
				RB1#25	20.71	22.31	50.00	PASS
				RB1#49	20.64	22.24	50.00	PASS
	LTE/TM3	10M	MCH	RB25#0	19.19	20.79	50.00	PASS
				RB25#13	19.17	20.77	50.00	PASS
				RB25#25	19.15	20.75	50.00	PASS
				RB50#0	19.11	20.71	50.00	PASS

Note:

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

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

b: SGP=Signal Generator Level

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

Detector: RMS



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2 Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
	TM1/10M	MCH	5.25	13	PASS
Band 26(814-824)	TM2/10M	MCH	6.14	13	PASS
	TM3/10M	MCH	6.70	13	PASS



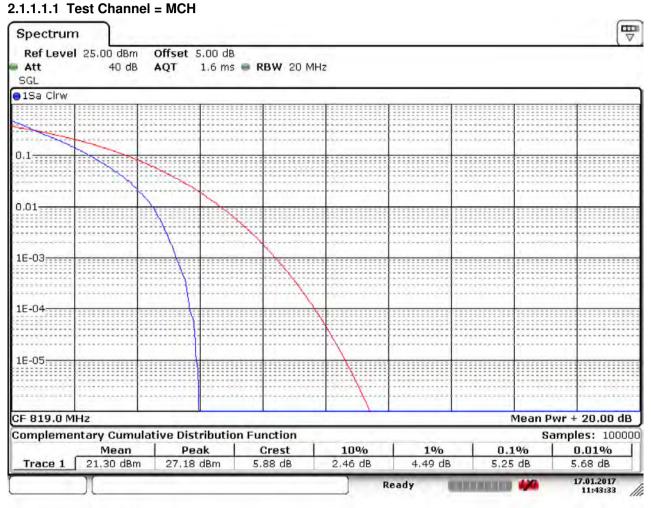
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Part II - Test Plots

2.1 For LTE

2.1.1 Test Band = LTE band26

2.1.1.1 Test Mode = LTE/TM1.Bandwidth=10MHz

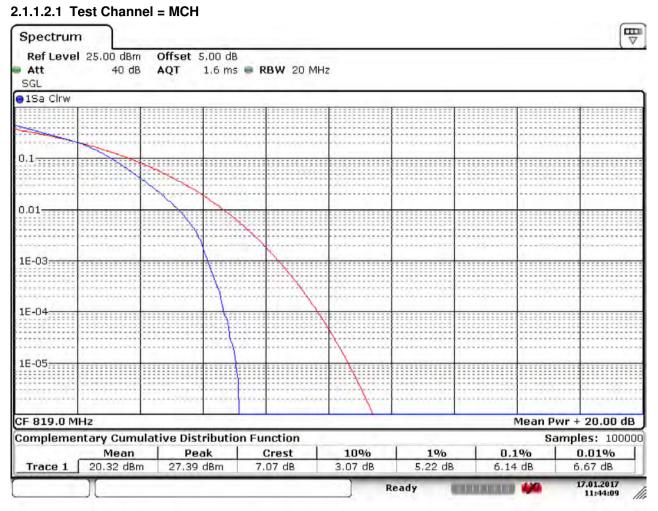


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2.1.1.2 Test Mode = LTE/TM2.Bandwidth=10MHz

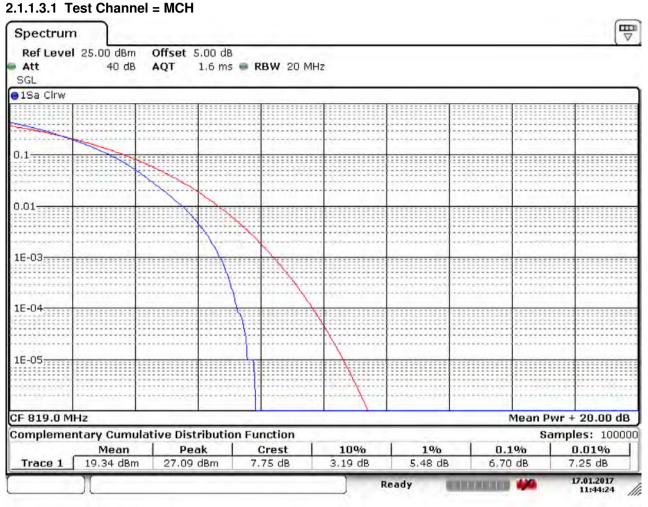


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2.1.1.3 Test Mode = LTE/TM3.Bandwidth=10MHz



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3 Modulation Characteristics

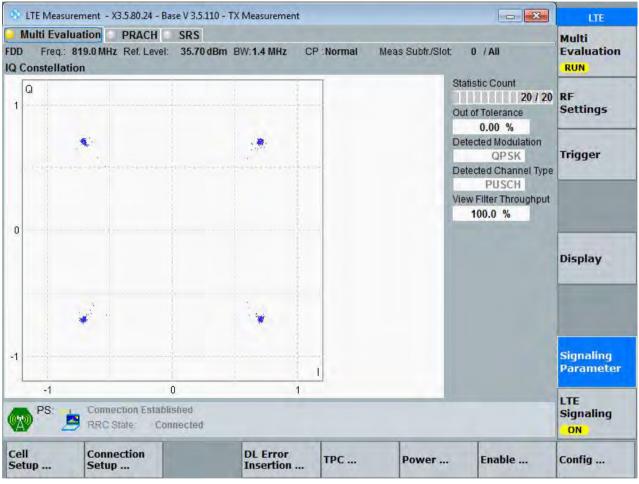
Part I - Test Plots

3.1 For LTE

3.1.1 Test Band = LTE band26

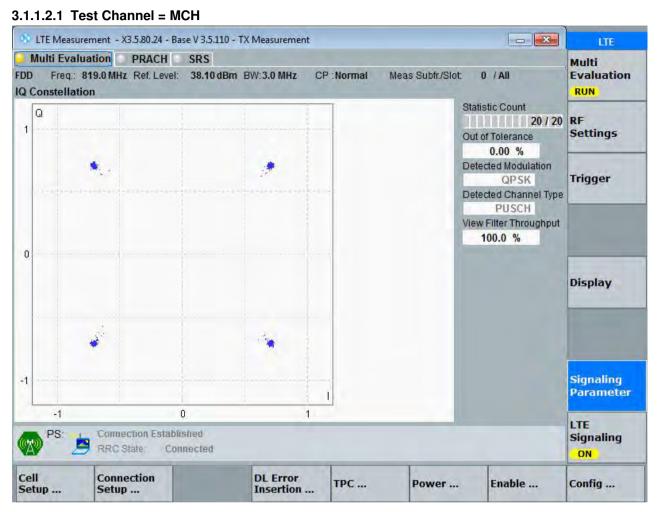
3.1.1.1 Test Mode = LTE /TM1 1.4MHz

3.1.1.1.1 Test Channel = MCH





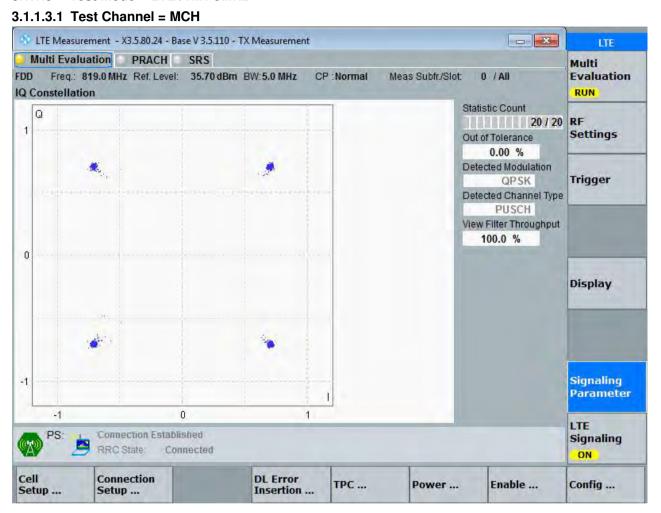
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3.1.1.2 Test Mode = LTE /TM1 3MHz



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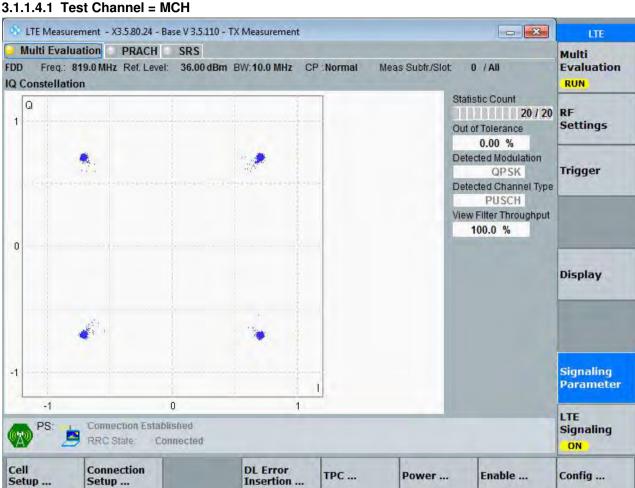
3.1.1.3 Test Mode = LTE /TM1 5MHz



3.1.1.4

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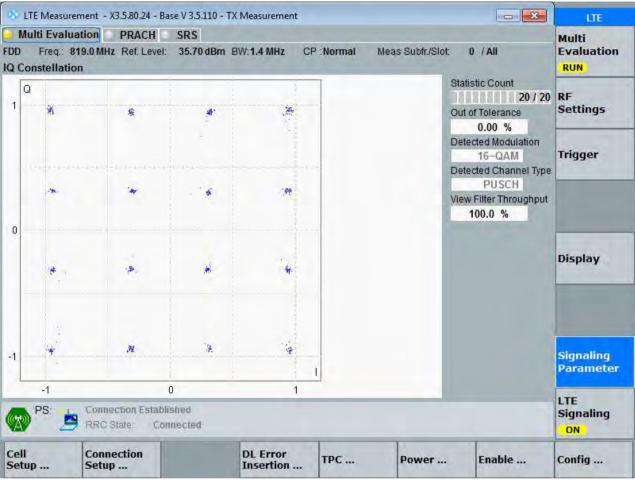
Test Mode = LTE /TM1 10MHz



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3.1.1.5 Test Mode = LTE /TM2 1.4MHz

3.1.1.5.1 Test Channel = MCH

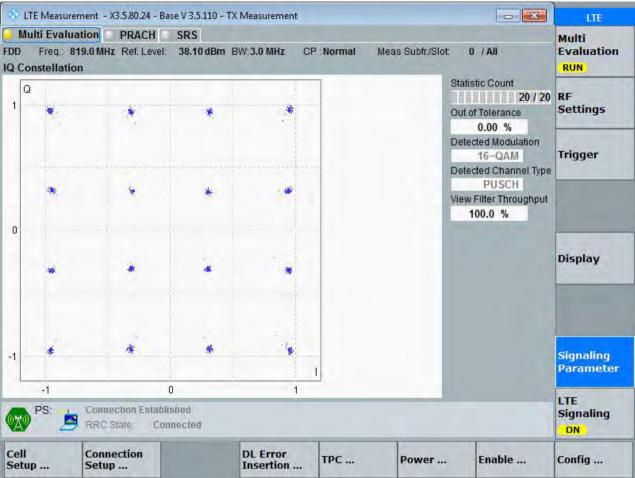




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3.1.1.6 Test Mode = LTE /TM2 3MHz

3.1.1.6.1 Test Channel = MCH

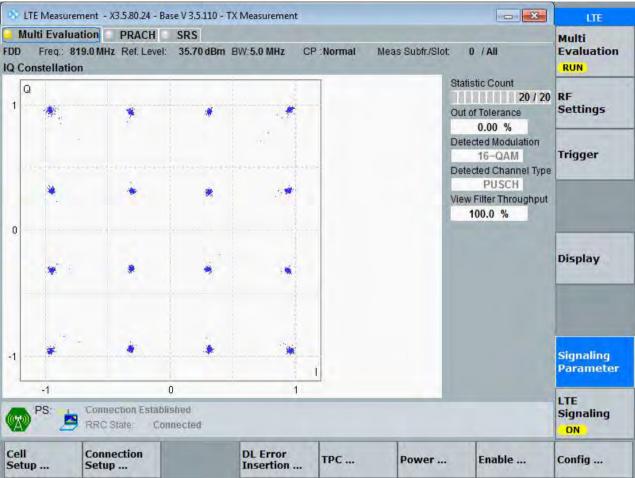




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3.1.1.7 Test Mode = LTE /TM2 5MHz

3.1.1.7.1 Test Channel = MCH

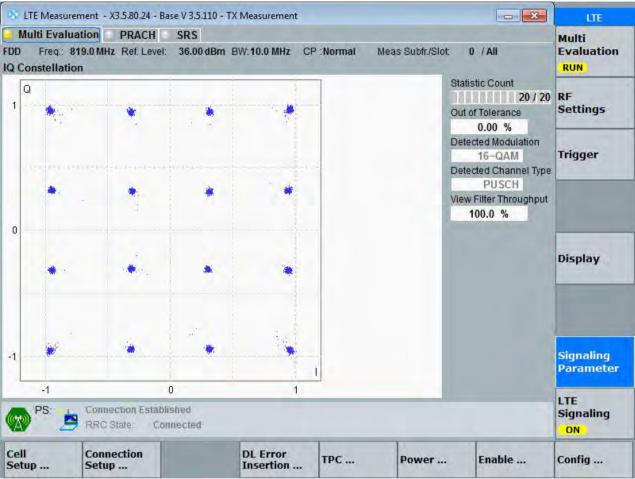




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3.1.1.8 Test Mode = LTE /TM2 10MHz

3.1.1.8.1 Test Channel = MCH





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3.1.1.9 Test Mode = LTE /TM3 1.4MHz

3.1.1.9.1 Test Channel = MCH

	Aulti	Evalua	ation	DE	ACH	SRS						in the second second
D	F		19.0 M		f. Level:		dBm B	W:1.4 MHz	CP :Normal	Meas Subfr./Slot:	0 / All	Multi Evaluation RUN
1	Q.,	ý		×	12	<i>N</i> .	t	<u>}</u>	8		Statistic Count 20 / 20 Out of Tolerance	RF Settings
	**	2		*	4	4	4-8) -	1.85. 1.86.	2 2 4•		0.00 % Detected Modulation 64–QAM	Trigger
				-	đ,	*	9	ĸ	v ¹		Detected Channel Type PUSCH /iew Filter Throughput	
	й:			ų.	÷	J	\$	8	1 1		100.0 %	
	Ť	2-3		2.	Sec.	e	4	-4	4			Display
ł	.v.	X	1	#	÷	4 ⁶ 1	*					
	1			4	5		14	-\$J				Signaling
1	143	14		N	12	ie.		4				Parameter
T A) PS	1 S:	100000	nectio C State	(n Establi: : Con	-			1			LTE Signaling ON
el	ll tup		and the second second	nection	on			DL Error	трс	Power	Enable	Config



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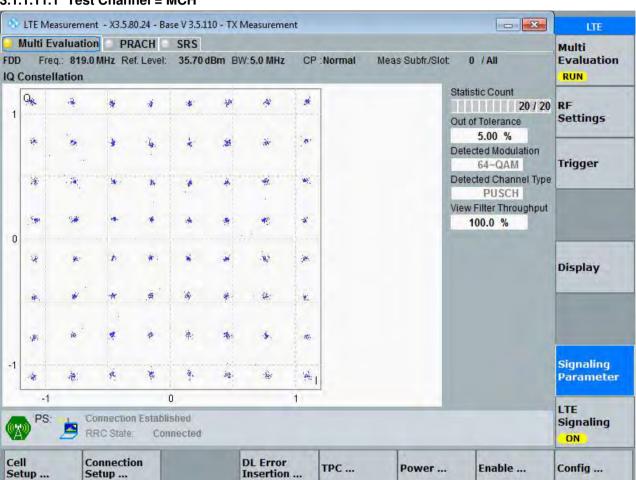
3.1.1.10 Test Mode = LTE /TM3 3MHz

3.1.1.10.1 Test Channel = MCH

	In the second	Freeburg		DDACU	CDC						LTE
D	Fr	Evalua req.: 81 ellation	9.0 MHz	PRACH Ref. Level:	SRS 38.10	dBm E	W: 3.0 MHz	CP :Normal	Meas Subfr./Slot.	0 / All	Multi Evaluation RUN
1	Q	7.	4	÷	*	<u> </u>	*	×		Statistic Count 20 / 20 Out of Tolerance	RF Settings
	*	nte.	4	a q	¥.	*	4.	*		0.00 % Detected Modulation 64–QAM	Trigger
	Ħ	÷\$		8. 8.	*	*	X	N ²		Detected Channel Type PUSCH View Filter Throughput	
)		'A;		t é	8	4	,Ž).			100.0 %	
	.97	31	3	• *	٠	*	*	×			Display
	*	i#.		* *	*	*	14	*			
	-21.	Ł	ġ	₩ ¥	*	4	*	4			Cianalina
1	÷.	ţ.	ź	. w.'	*	5	¥.	1 **			Signaling Parameter
	PS		Conne RRC S	ction Establ	0 Tshed nnected			1			LTE Signaling ON
	ll tup		Conne	ection			DL Error Insertion	трс	Power	Enable	Config



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3.1.1.11 Test Mode = LTE /TM3 5MHz

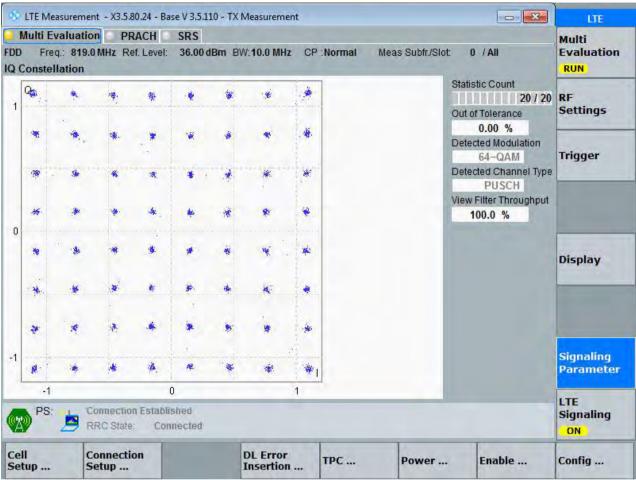
3.1.1.11.1 Test Channel = MCH



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3.1.1.12 Test Mode = LTE /TM3 10MHz

3.1.1.12.1 Test Channel = MCH





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4 Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
		LCH	1.09	1.25	PASS
	TM1/1.4MHz	MCH	1.09	1.24	PASS
		HCH	1.10	1.23	PASS
		LCH	1.09	1.23	PASS
	TM2/1.4MHz	MCH	1.09	1.25	PASS
		HCH	1.10	1.23	PASS
		LCH	1.10	1.26	PASS
	TM3/1.4MHz	MCH	1.09	1.23	PASS
		HCH	1.09	1.24	PASS
		LCH	2.69	2.94	PASS
	TM1/3MHz	MCH	2.69	2.94	PASS
		HCH	2.69	2.94	PASS
		LCH	2.69	2.95	PASS
	TM2/3MHz	MCH	2.69	2.95	PASS
		HCH	2.68	2.93	PASS
		LCH	2.69	2.94	PASS
	TM3/3MHz	MCH	2.69	2.94	PASS
Band 26		HCH	2.68	2.90	PASS
(814-824)		LCH	4.49	4.91	PASS
	TM1/5MHz	MCH	4.49	4.91	PASS
		HCH	4.47	4.88	PASS
		LCH	4.49	4.91	PASS
	TM2/ 5MHz	MCH	4.48	4.87	PASS
		HCH	4.48	4.92	PASS
		LCH	4.48	4.91	PASS
	TM3/5MHz	MCH	4.48	4.90	PASS
		HCH	4.48	4.86	PASS
		LCH	/	/	PASS
	TM1/10MHz	MCH	8.95	9.66	PASS
		HCH	/	/	PASS
		LCH	/	/	PASS
	TM2/ 10MHz	MCH	8.93	9.57	PASS
		HCH	/	/	PASS
		LCH	/	/	PASS
	TM3/ 10MHz	MCH	8.93	9.63	PASS
		HCH	/	/	PASS

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4.1 For LTE

4.1.1 Test Band = LTE band26(814-824)

4.1.1.1 Test Mode = LTE/TM1 1.4MHz

4.1.1.1.1 Test Channel = LCH

Ref Leve Att	el 35.00 dBn 40 dB	n Offset 3 🖷 SWT	5.00 dB 👄 10 ms 🖷	RBW 30 kHz VBW 100 kHz		FT		
1Pk View	N							
30 dBm					D1[1] OCC BW M1[1]		1.093	-0.91 dB 1.24980 MHz 906094 MHz -10.61 dBm 1.07960 MHz
10 dBm	D1 15.270	dBm	Tymor	mmm	mun	-To	011	1.07900 (1112
0 dBm							-	
-10 d8m—	D2 -10	.730 dBm				4	-	
-20 dBm—	m	m				h	A.M.	mm
-30 dBm—		-						
-50 dBm-								
-60 dBm								
CF 814.7	MHz		-	1001 p	ots		Sp	an 3.0 MHz

Date: 12.JAN.2017 14:50:29



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	el 35.00 dBn		5.00 dB 🖷		Contraction of the second sec second second sec			
Att	inter lette	B 🗑 SWT	10 ms 🥃	VBW 100 kH;	z Mode Auto FFT			
9 1Pk View 30 dBm					D1[1] Occ Bw M1[1]		1,093	-0.50 dB 1.24080 MHz 906094 MHz -10.09 dBm 3.37960 MHz
10 dBm	-D1 15,760	dBm	Tim	man	mound	2		
0 dBm					_			
-10 d8m	D2 -10	0.240 dBm	1			i	-	
-20 dBm-	m	man				han	m	man
-30 dBm—								
-40 dBm—	-			· · · · · · · · · · · · ·		-		1
-50 dBm—	-						-	_
-60 dBm—		_						<u>.</u>
CF 819.0	MHz		1	1001	ots		Sp	an 3.0 MHz
					Measuring		-	12.01.2017 14:49:27

4 1 1 1 0 Test Channel MCU

Date: 12.JAN.2017 14:49:27



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4.1.1.1.3 Test Channel = HCH

1Pk View									
30 dBm					0	1[1] cc BW 1[1]			-1.04 dB 23180 MHz 03097 MHz -8.83 dBm
20 ubm	01 16.420	dBm			a M	14 X 1		822	.68560 MHz
10 dBm			1 minus	www	a de la come	mil			
0 dBm			1						
-10 dBm-	D2 -9.	580 dBm-					1		
-20 dBm—	1	mont					han	-	
-30 dBm—	m							h	mm
-40 dBm—	-								
-50 dBm—							-		
-60 dBm—		_							

Date: 12.JAN.2017 14:53:20



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Spectrur Ref Leve	1 35.00 dBr	n Offset B e SWT	5.00 dB 🖷 10 ms 🖷	RBW 30 kH	· · · · · · · · · · · · · · · · · · ·	Auto FFT			
01Pk View	1					- 1 - T			
30 dBm					0	1[1] cc Bw 1[1]		1.0879	-1.02 dB .22580 MHz 12088 MHz -10.42 dBm .08860 MHz
	D1 14.970	dBm	TIMM		Number of N	toman	-	814	.08800 MP12
10 dBm			Ť	1011 11.01	10.00	12			
0 dBm			/					-	
-10 dBm		1.030 dBm	ł				1	-	
-20 dBm—	0	hand					June	-	-
-30 dBm-	m							war	m
oc abili									
-40 dBm—								-	
-50 dBm								-	
-60 dBm—								-	
CF 814.7	MH2			1001	pts			Spa	an 3.0 MHz

4.1.1.2 Test Mode = LTE/TM2 1.4MHz

Date: 12.JAN.2017 14:51:26



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4.1.1.2.2 Test Channel = MCH

Att	40 dB	SWT	10 ms 🖷	VBW 100 kH	z Mode Au	to FFT		
1Pk View			-					
30 dBm					D1[1] Occ E	3₩	1,093	-0.12 d .24980 MH 906094 MH
20 dBm	Sec. 1				M1[1	1		-10,71 dBi .37360 MF
10 dBm	D1 15.230 (dBm-	Thomas	mm	man	my		
0 dBm			/				-	
10.dBm	-10 D2 -10	.770 dBm			-		-	
-20 dBm	m	mod				Los		1.0
-30 dBm							-	mm
-40 dBm								
-50 dBm							-	
60 dBm								
CF 819.0 M	H7	-		1001	nts		Sn	an 3.0 MHz

Date: 12.JAN.2017 14:48:11



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Spectru	im							
Att		Offset	5.00 dB 👄 10 ms 👄	RBW 30 kHz VBW 100 kHz	Mode Auto FFT			
1 Pk View	V	114 11						
30 dBm—					D1[1] Occ Bw			-1.32 dB .23180 MHz 903097 MHz
20 dBm	01 16.560	dBm	~	10	M1[1]			-8.68 dBm .68560 MHz
10 dBm			Imme	mm	munut	2		
0 dBm			/				-	
-10 dBm-	02 <mark></mark> 9.	440 dBm				1		
-20 dBm—								
~30- 0 8/1/~	m					~~	m	-
-40 dBm—						-	-	
-50 dBm—						-	-	
-60 dBm—			<u></u>					
CF 823.3	MHz			1001 pt	s		Sp	an 3.0 MHz
)(Measuring	THE OWNER		22.01.2017 10:14:36

4.1.1.2.3 Test Channel = HCH

Date: 22.JAN.2017 10:14:36



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4.1.1.3 Test Mode = LTE/TM3 1.4MHz

4.1.1.3.1 Test Channel = LCH

Att 1Pk View	40 08	B 🖷 SWT	10 ms 🖷	VBW 100 kHz	Mode Au	to FF1		
					D1[1		1.0	-0.79 dE 1.25570 MH: 99900100 MH;
0 dBm					M1[1			-11.95 dBn 14.07360 MH
0 dBm	1 13.910	dBm	From	mm	mm	WWY2		
dBm			/				-	-
10 dBm		M 2.090 dBm						
20 dBm	m	mont				h	m	
30 dBm-								mm
40 dBm								
50 dBm	-							
50 dBm								

Date: 15.JAN.2017 15:25:08



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4.1.1.3.2 Test Channel = MCH

1Pk View	C			_					
30 dBm					0	1[1] CC BW 1[1]		1,0879	-1.51 dB 23180 MHz 12088 MHz 10.47 dBm 38860 MHz
10 dBm	D1 14.900	dBm	Thur	mm	hum	monts			
) dBm			/					-	-
-10 d8m		M 1.100 dBm			1		4	-	
-20 dBm	~~~~	most					part	m	m
-40 dBm									
-50 dBm								¢	
-60 dBm		<u></u>							

Date: 15.JAN.2017 15:26:01



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4.1.1.3.3 Test Channel = HCH

1Pk View						1.1			
30 dBm					0	1(1) CC BW 1(1)		1,0879	-0.08 dB 23480 MHz 12088 MHz 10.49 dBm .68260 MHz
10 dBm	-01 15,340	dBm	The	m	www	myz			
0 dBm			/					-	
-10 d8m—	D2 -10	.660 dBm					1	-	
-20 dBm—	m	m					how	5	
-30,08m	y							m	m
-40 dBm—	-								
-50 dBm—	14				-				
-60 dBm—			1						

Date: 15.JAN.2017 15:26:46



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4.1.1.4 Test Mode = LTE/TM1 3MHz

4.1.1.4.1 Test Channel = LCH

Ref Level Att	35.00 dBm 40 dB	Offset	5.00 dB 👄 10 ms 🖷	RBW 30 kH VBW 100 kH		Auto Swe	eo		
1Pk View							2P.C		
30 dBm					0	1[1] CC BW		2.6913	-0.18 df 93710 MH 08691 MH
20 dBm						1[1]	1 N 1		-12.76 dBn .03150 MH
10 dBm	D1 12,890	dBm T	up more the fu	Dathappenel	with on the	بمهداليمم	T2		
0 dBm								-	
-10 dBm	D2 -13	M					- di		
-20 dBm					-		The		
	mann	war						man	nym
-40 dBm									
-50 dBm								()	
-60 dBm									
CF 815.5 N	IHz	-	1	1001	pts		4	Spa	n 6.0 MHz

Date: 12.JAN.2017 14:58:26



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Spectru	m el 35.00 dBm	Offcot	5.00 d8 🖷 I	RBW 30 kHz				
Att		SWT		BW 100 kHz		еер		
01Pk View	r -				1. T			
30 dBm					D1[1] Occ Bw			-0.48 dB 93710 MHz 14685 MHz
20 dBm					M1[1]			-12.14 dBm .53750 MHz
10 dBm	D1 13.790	JBm T1	Manna -	Same a May	as how print	-MJ2		
0 dBm								-
-10 dBm—	D2 -12	M 210 dBm-				di		
-20 dBm—						lyn		
-30 dBm-	monorman	w ~		_			manul	www.www
-40 dBm—								
-50 dBm—								
-60 dBm—		-					_	
CF 819.0	MHz		1 1	1001 p	ts		Spa	n 6.0 MHz
)[]				Measuring		444	12.01.2017 14:56:34

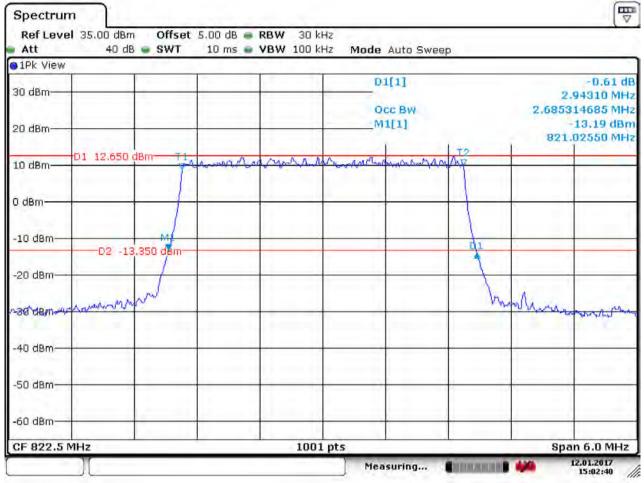
A 1 1 4 0 Test Chemnel MOU

Date: 12.JAN.2017 14:56:34



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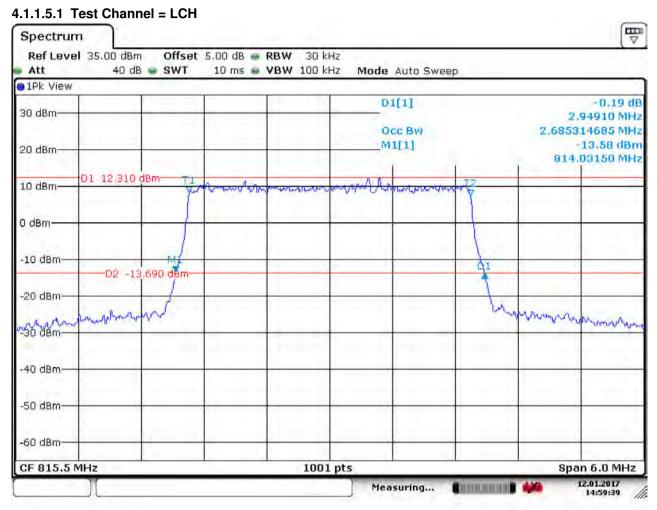
4.1.1.4.3 Test Channel = HCH



Date: 12.JAN.2017 15:02:40



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4.1.1.5 Test Mode = LTE/TM2 3MHz

Date: 12.JAN.2017 14:59:40



4.1.1.5.2 Test Channel = MCH

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

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H 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] -0.49 dB 30 dBm-2.94910 MHz OCC BW 2.685314685 MHz -13.67 dBm M1[1] 20 dBm 817.53750 MHz 12.080 dBm 10 dBm-0 dBm -10 dBm-D2 -13,920 dBm -20 dBm--30 dBm-40 dBm -50 dBm· -60 dBm-CF 819.0 MHz 1001 pts Span 6.0 MHz 12.01.2017 Measuring... 💼 tan manana manana ing 🗈 🛛 🦀 11. 14:55:02

Date: 12.JAN.2017 14:55:03



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Spectrum	ſ						
Ref Level 35.0 Att	00 dBm Offse 40 dB 🛥 SWT	t 5.00 dB 👄 R 10 ms 🖷 V	BW 30 kHz BW 100 kHz	Mode Auto Swi	еер		
1Pk View				1			
30 dBm				D1[1]			-1.91 dB 2.92510 MHz 320679 MHz
20 dBm				M1[1]	1		-12.11 dBm .03750 MHz
10 dBm 01 1	2.640 dBm		www.warbolast	en to the former more	m 12		
0 dBm	-+					-	-
-10 dBm	M/ D2 -13,360 dBm-				dı	-	
-20 dBm					1		
N30'28MLANN	mound	-			m	manner	who are and
-40 dBm	_					-	
-50 dBm	-				-		
-60 dBm							
CF 822.5 MHz		1 1	1001 pt	s		Sp	an 6.0 MHz
				Measuring		-	12.01.2017 15:01:27

4 1 1 5 2 Test Chappel - HCH

Date: 12.JAN.2017 15:01:27



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4.1.1.6 Test Mode = LTE/TM3 3MHz

4.1.1.6.1 Test Channel = LCH

31Pk View									
30 dBm					0	1[1] cc BW 1[1]		2.6853	-0.92 dE .94310 MH: 14685 MH: -14.21 dBn .02550 MH:
10 dBm 01	11.140 dB	m ti	mourne	man	-	an this	work		
0 dBm								-	
-10 dBm	-D2 -14,8					-	d1	-	
-20 dBm		_					h		
-ap.98. Warden	Munhap	v	-		-			mumm	mandamar
-40 dBm							-		
-50 dBm	-								
-60 dBm		<u> </u>	1						

Date: 15.JAN.2017 15:24:14



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4.1.1.6.2 Test Channel =MCH

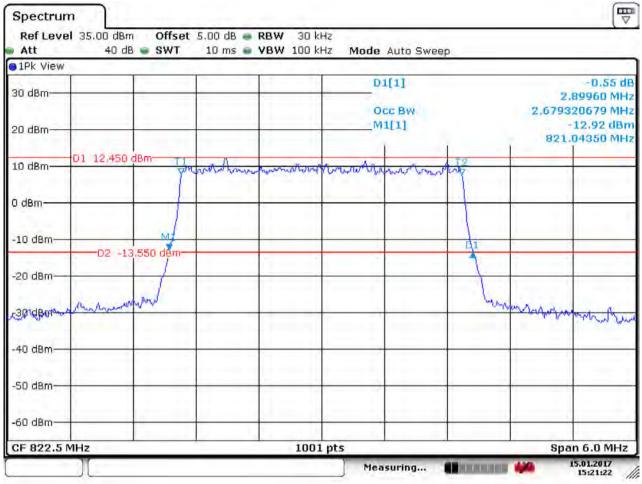
31Pk View					
30 dBm			D1[1] Occ Bw M1[1]	I. I	-0.50 dB 2.94310 MHz 2.691308691 MHz -15.20 dBm 817.53150 MHz
10 dBm-01	10,780 dBm	mummum	Vingeland Vander Mander	Nuntz	
0 dBm			2		
-10 dBm	M			B1	
-20 dBm	-D2 -15.220 dam			- Constant	
430 ABM	mannand		_		armining harman
-40 dBm					
-50 dBm				-	

Date: 15. JAN. 2017 15:22:45



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4.1.1.6.3 Test Channel = HCH



Date: 15.JAN.2017 15:21:22



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4.1.1.7 Test Mode = LTE/TM1 5MHz

4.1.1.7.1 Test Channel = LCH

1Pk View	1		1.11.17						
30 dBm					0	1[1] cc BW 1[1]		4.4855	-1.06 df 91100 MH 14486 MH 13.48 dBn
10 dBm	D1 12,400	dBm TJ	lass A para	Munhau	Manuan,	manman	LANP	814.	05200 MH
0 dBm									
-10 d8m—	D2 -13	.600 dBm-					dı.		
-20 dBm—	mount						line	Munan	
-30 dBm-	man a							an an amount	
-40 dBm—	-							1	
-50 dBm—									
-60 dBm—		1000	1	1.0.000.00					

Date: 12.JAN.2017 15:09:09



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Ref Level Att		Offset	5.00 dB 👄 10 ms 👄	RBW 50 kH	The second	вер		
1Pk View		1.1.1.1.1						
30 dBm					D1[1] Occ Bw			-0.48 dB 90900 MHz 14486 MHz
20 dBm					M1[1]			12.76 dBm 56200 MHz
10 dBm	1 12,860	dBm T1	and and	Mar and	wanter the man man	many TE		
0 dBm				-				
-10 dBm		M 140 d8m-				- dr		
-20 dBm		rent				Linth	mm	m m
-20 aBm	he manua de							rr W
-40 dBm								
-50 dBm							(<u> </u>	
-60 dBm		-						
CF 819.0 M	Hz			1001	pts		Span	10.0 MHz

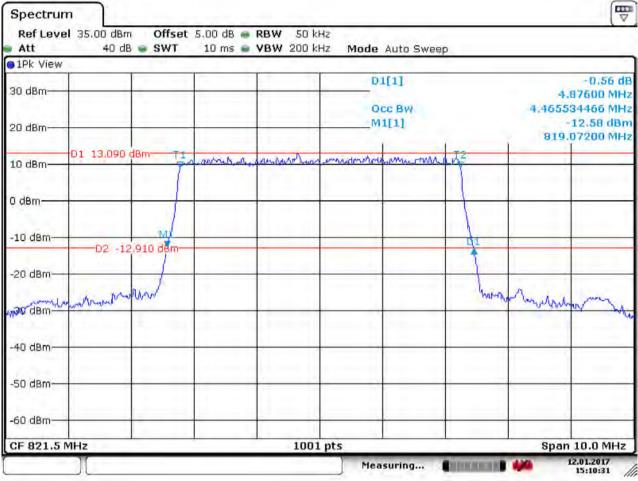
4.1.1.7.2 Test Channel = MCH

Date: 12.JAN.2017 15:04:40



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4.1.1.7.3 Test Channel = HCH



Date: 12.JAN.2017 15:10:32



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Spectrum Ref Level 35.0			u robu-				
Att	40 dB 🖷 SWT	t 5.00 dB 👄 RB 10 ms 👄 VB		Mode Auto Swa	зер		
1Pk View				1. T			
30 dBm				D1[1] Occ BW			-0.27 dB 91100 MHz
20 dBm	-			M1[1]	7		-14.70 dBm .05200 MHz
10 dBm 01 1	1.280 dBm	aller and a contract	<mark>Bay Barnado na Danago</mark>	-Cherages and a second	T2		
0 dBm			_				-
-10 dBm	D2 -14.720 dBm-				dı		
-20 dBm	1 1				hur	man	human
-30 dBm-							
-40 dBm							
-50 dBm					-		
-60 dBm	-						
CF 816.5 MHz			1001 pt	s		Spar	10.0 MHz

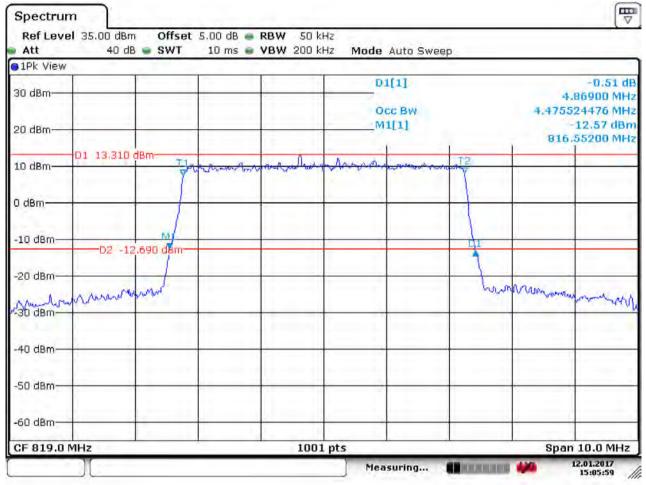
4.1.1.8 Test Mode = LTE/TM2 5MHz

Date: 12.JAN.2017 15:07:34



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4.1.1.8.2 Test Channel = MCH



Date: 12.JAN.2017 15:05:59



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Spectrum	<u>]</u>							
Ref Level 35 Att	40 dB SWT	t 5.00 dB 👄 I 10 ms 👄 '	RBW 50 kH: VBW 200 kH:	2 · · · · · · · · · · · · · · · · · · ·	Auto Swee	p		
91Pk View								
30 dBm			-	D1	[1] c Bw			-0.06 dB .91600 MHz 524476 MHz
20 dBm				M1				-14.09 dBm .04200 MHz
10 dBm D1	11.750 dBm	and the server	welshirt to a the s	and the all a state	machylleve.	ANT -	-	
0 dBm								
-10 dBm	-D2 -14.250 d8m-	1				dı	1	
-20 dBm				-				
Norther Mar	howman					What	monord	alaman Jaco
-40 dBm								
-50 dBm						-	-	
-60 dBm								
CF 821.5 MHz		1	1001	pts		1	Spar	n 10.0 MHz
				Meas	uring		-	12.01.2017 15:11:36

4 1 1 9 2 Test Chappel - HCH

Date: 12.JAN.2017 15:11:37



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4.1.1.9 Test Mode = LTE/TM3 5MHz

4.1.1.9.1 Test Channel = LCH

D1[1] Occ BW M1[1]	IS	4.4755	-1.05 d 90800 MH 24476 MH 13.92 dBr 06200 MH
1	- IP		
	TP IS		
	di		
	- Come		
		a orange	mun
-		¢	
		tim	- touround

Date: 15.JAN.2017 15:18:25



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4.1.1.9.2 Test Channel = MCH

30 dBm 0 20 dBm 0 12 dBm 01 11.390 dBm 11.0 m 14	1[1] -0.42 df 4.89500 MH 9cc Bw 4.475524476 MH 11[1] -14.58 dBn 816.55200 MH
20 dBm 0	4.89500 MH 9cc Bw 4.475524476 MH 91[1] -14.58 dBn
10 dBm 01 11,390 dBm	
TO ABIL	trompha my
0 dBm	
-10 dBm D2 -14.610 dBm	
-20 dBm	tomarine
ed Bm mm mm	
40 dBm	
S0 dBm	
-60 dBm	· · · · · · · · · · · · · · · · · · ·

Date: 15. JAN. 2017 15:17:01



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4.1.1.9.3 Test Channel = HCH

Att 1Pk View	10 01	B 🖷 SWT	10 1112	VBW 200 kHz	Mode Auto Sw	cop		
30 dBm					D1[1] Occ Bw		4.86	-0.87 dE 300 MH 476 MH 3.79 dBn
20 dBm					M1[1]	3		200 MH
10 dBm	01 12.030	dBm The	anter month	-	and and the states	water -		
0 dBm								_
-10 dBm		3.970 dBm-				dı		
-20 dBm		+				1		
130-HBH2000	white has and	hund				Viv	mound	ane of the
-40 dBm			-					_
-50 dBm								
-60 dBm								_

Date: 15.JAN.2017 15:19:57



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4.1.1.10 Test Mode = LTE/TM1 10MHz

4.1.1.10.1 Test Channel = MCH

1Pk View				1.						
30 dBm					00	(1) x Bw [1]			81 8,9510	-11.46 dBn 4.1850 MH 048951 MH -2.68 dB 9.6540 MH
10 dBm	D1 12,750	dBm Th	And the march	alphanon	M.M.M.M.	marder	When P	-		
0 dBm								_	_	
-10 dBm—	D2 -13	ML 3.250 dBm-								-
-20 dBm—	I M						9	have		
-30rdem	when non-when	pro-							ann who will	in the hannes
-40 dBm—							_			-
-50 dBm						_		-	_	

Date: 12.JAN.2017 15:13:07



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4.1.1.11 Test Mode = LTE/TM2 10MHz

4.1.1.11.1 Test Channel = MCH

-1.14 9.5740 M 8,931068931 M -11.61 dE 814.2450 M -11.61 dE 814.2450 M		1Pk View 30 dBm 20 dBm 10 dBm 0 dBm
814.2450 MI	you want was a solution of the section of the secti	10 dBm
un Al Az	you want was a solution of the section of the secti	10 dBm
4		0 dBm
4		
	D2 -12,460 dBm	-10 dBm
Whomannener	imanuel	-20 dBm
		490'dBm
		-40 dBm
		-50 dBm
		-60 dBm
		-50 dBm

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4.1.1.12 Test Mode = LTE/TM3 10MHz

4.1.1.12.1 Test Channel = MCH

1Pk View				VBW 300 kH	Iz Mode Auto S			
30 dBm					D1[1] Occ Bw M1[1]		8,9310	-0.30 de 9.6300 MH: 068931 MH: -13.87 dBm 4.1850 MH:
10 dBm	D1 11.980	dBm	wardtraat	and the contraction of the	Manage Constanting	and the	-	
0 dBm								
-10 dBm—		4.020 dBm-				c ₁		
-20 dBm—						Them		
1990udem-	particularit	and the					nonahantaria	mannengag
-40 dBm				-			-	
-50 dBm								
-60 dBm		_						

Date: 15 JAN 2017 15:15:26



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5 Band Edges Compliance

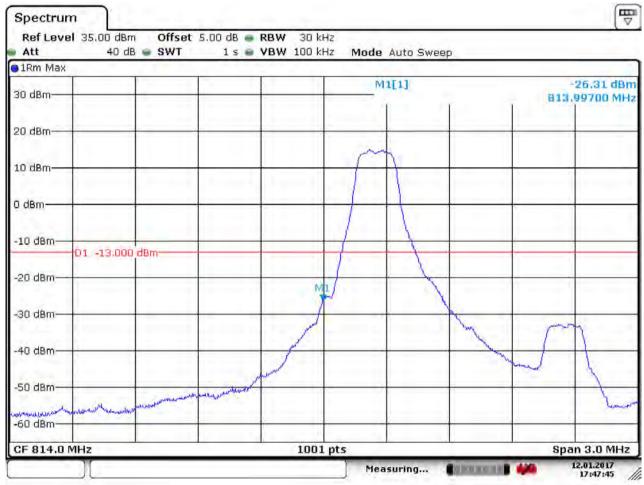
5.1 For LTE

5.1.1 Test Band = LTE band26(814-824)

5.1.1.1 Test Mode = LTE/TM1 1.4MHz

5.1.1.1.1 Test Channel = LCH

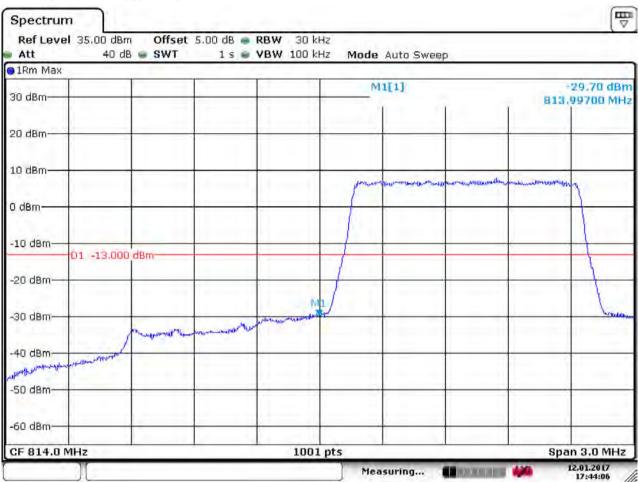
5.1.1.1.1.1 Test RB=1RB



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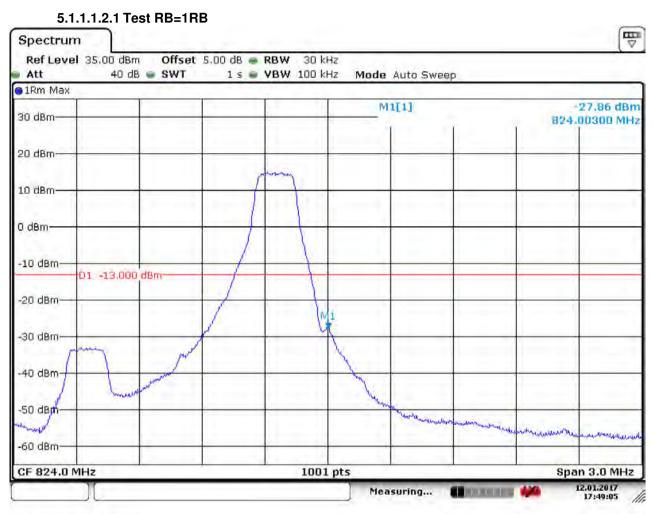
Date: 12 JAN 2017 17:44:06

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5.1.1.1.1.2 Test RB=6RB



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5.1.1.1.2 Test Channel = HCH

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Date: 12 JAN 2017 17:51:11

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5.1.1.1.2.2 Test RB=6RB



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5.1.1.2 Test Mode = LTE/TM2 1.4MHz

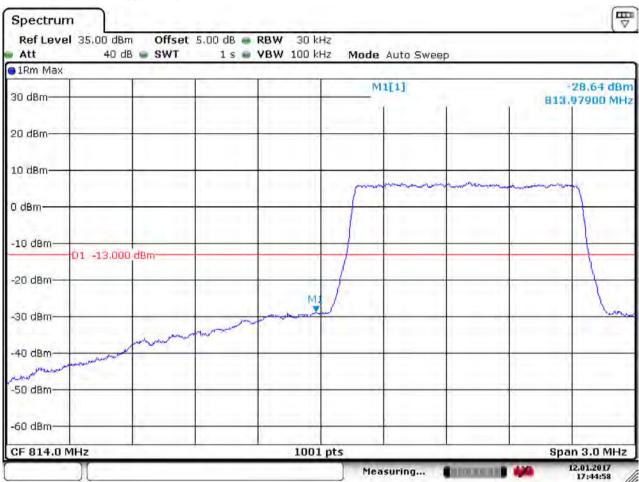
5.1.1.2.1 Test Channel = LCH

5.1.1.2.1.1 Test RB=1RB -Spectrum Ref Level 35.00 dBm Offset 5.00 dB - RBW 30 kHz Att 40 dB 🖷 SWT 1 s 🝙 VBW 100 kHz Mode Auto Sweep 1Rm Max M1[1] 26.10 dBm 30 dBm 813,99700 MHz 20 dBm-10 dBm-0 dBm -10 d8m-01 -13.000 dBm -20 dBm-M -30 dBm--40 dBm--50 dBm -60 dBm-1001 pts CF 814.0 MHz Span 3.0 MHz 12.01.2017 Measuring... 11. 17:45:45

Date: 12 JAN 2017 17:45:45



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Date: 12.JAN.2017 17:44:58

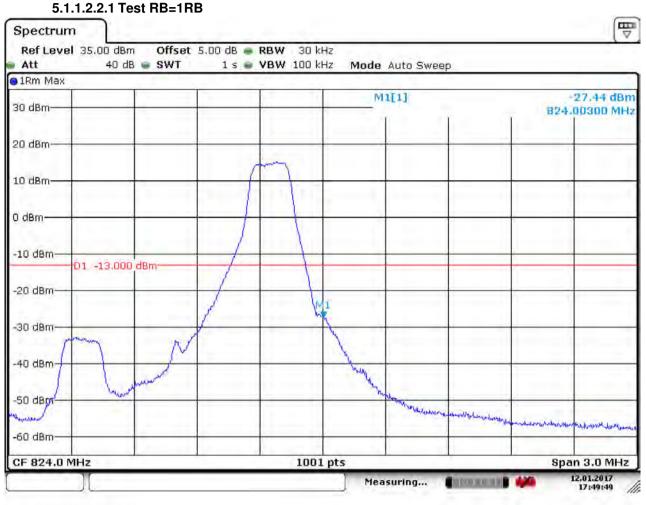
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5.1.1.2.1.2 Test RB=6RB



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5.1.1.2.2 Test Channel = HCH



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5.1.1.2.2.2 Test RB=6RB

Date: 12.JAN.2017 17:50:33



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5.1.1.3 Test Mode = LTE/TM3 1.4MHz

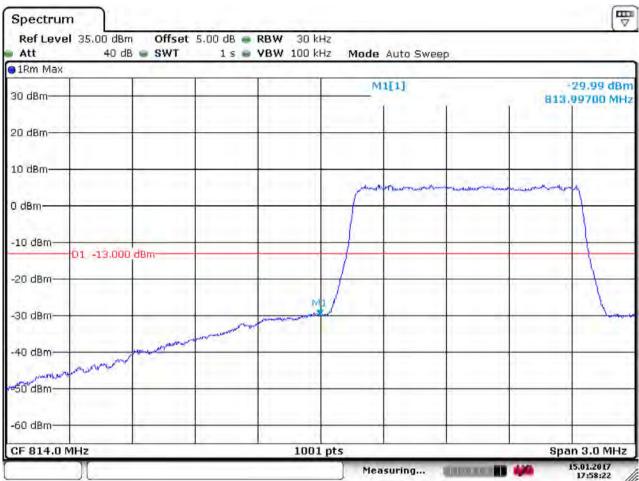
5.1.1.3.1 Test Channel = LCH

5.1.1.3.1.1 Test RB=1RB -Spectrum Ref Level 35.00 dBm Offset 5.00 dB 🖷 RBW 30 kHz Att 40 dB 🖷 SWT 1 s 🝙 VBW 100 kHz Mode Auto Sweep 1Rm Max M1[1] 29.13 dBm 30 dBm 813,99700 MHz 20 dBm-10 dBm-0 dBm -10 d8m-01 -13.000 dBm -20 dBm--30 dBm--40 dBm--50 dBm -60 dBm-1001 pts CF 814.0 MHz Span 3.0 MHz 15.01.2017 Measuring... 11. 17:59:40

Date: 15. JAN. 2017 17:59:41



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5.1.1.3.1.2 Test RB=6RB

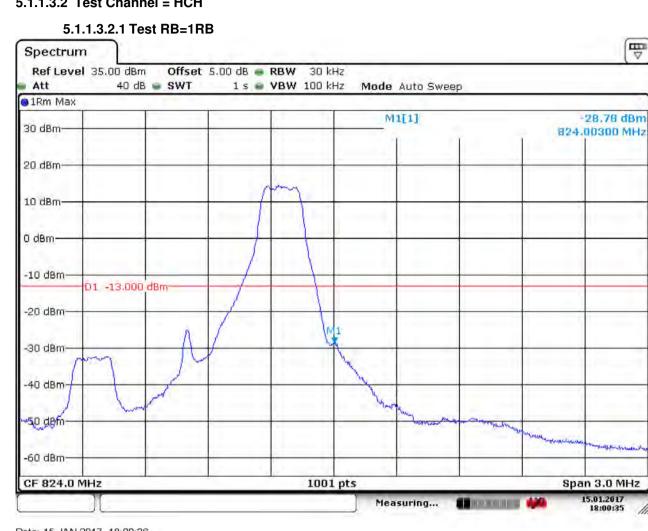
Date: 15.JAN.2017 17:58:22



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11

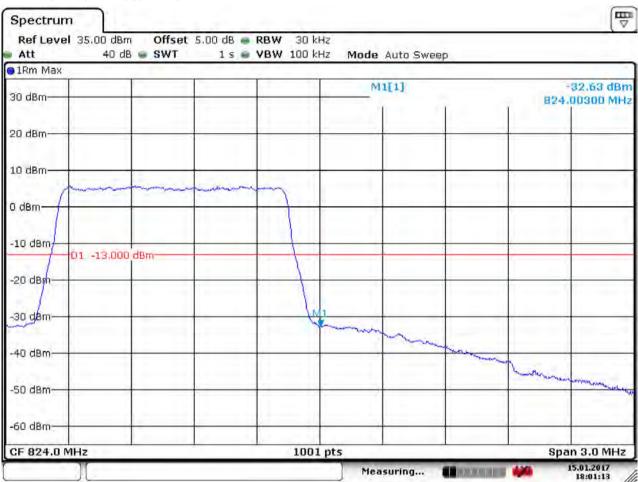
5.1.1.3.2 Test Channel = HCH



Date: 15 JAN 2017 18:00:36



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5.1.1.3.2.2 Test RB=6RB

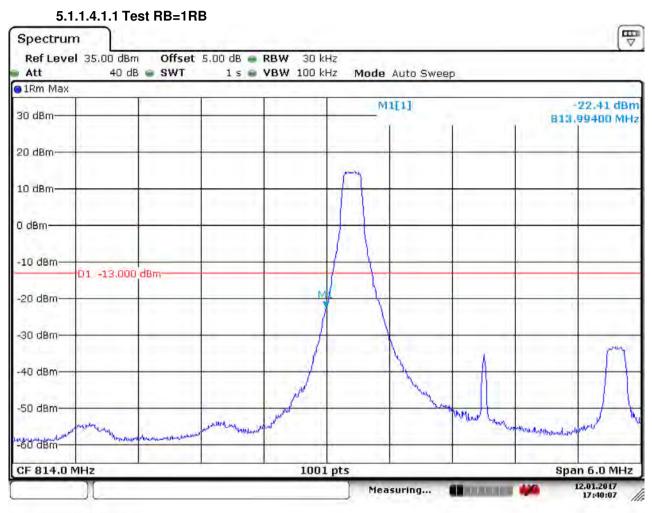
Date: 15. JAN. 2017 18:01:13



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5.1.1.4 Test Mode = LTE/TM1 3MHz

5.1.1.4.1 Test Channel = LCH



Date: 12.JAN.2017 17:40:07



5 1 1 4 1 2 Test BB-15BB

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

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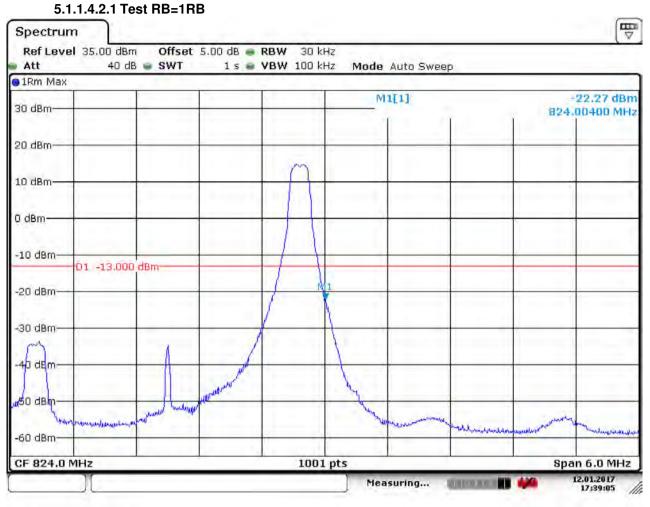
Spectrur	n								
Ref Leve Att	el 35.00 dBr 40 d		t 5.00 dB 👄 1 s 👄	RBW 30 k VBW 100 k		lode Auto Swe	ер		
●1Rm Max	3					1.00			
30 dBm		-				M1[1]	<u>.</u>		-27.52 dBm ,99400 MHz
20 dBm	a	-			-				
10 dBm						_			
0 dBm		-			from	man	innin	water for and	man
-10 dBm—	-01/-13.00) dBm						-	
-20 dBm—	01710.000								1
-30 dBm—				man	-		-	1	
-40 dBm7+	and the market	mm			-		-		
-50 dBm—								¢.	
-60 dBm—		-					-		
CF 814.0	MHz	-1	1	1001	pts	1.		Spa	an 6.0 MHz
	1				1	Measuring	CONTRACTOR NO.	444	12.01.2017 17:43:02

Date: 12.JAN.2017 17:43:02



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5.1.1.4.2 Test Channel = HCH



Date: 12.JAN.2017 17:39:06



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Spectru	m	St HD= It								
Ref Lev Att	el 35.00 dBn 40 dB	Offsei	t 5.00 dB 👄 1 s 👄	RBW 30 kH VBW 100 kH		de Auto Swi	вер			
1Rm Max						14.0				
30 dBm						M1[1]	à d	824	+28.76 dBm 824.00400 MHz	
20 dBm		-			-					
10 dBm						-		_		
0 dBm	websele the description of the	encertaine matte	an sample and the second and the second and the second second second second second second second second second	Shatamaaniikhaastaay		-	-	5		
-10 d8m—	-D1 -13.000	dBm								
20 dBm—	017-13.000	abm								
/ -30 dBm—				Ň	1			1		
-40 dBm—					handwhyphan	when all have been to be	and the man and the state	and to and the section of	upor li	
-50 dBm—				i i		-			francismic	
-60 dBm—									-	
CF 824.0	MHz			1001	pts			Sp	an 6.0 MHz	
) •	leasuring		-	12.01.2017 17:36:26	

Date: 12 JAN 2017 17:36:26

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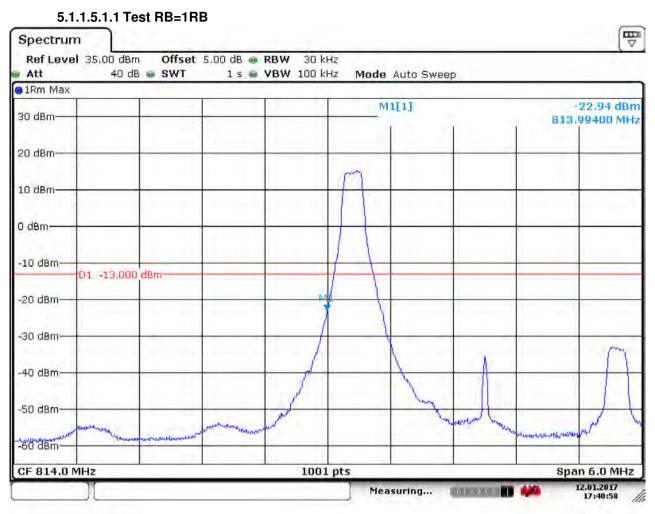
5.1.1.4.2.2 Test RB=15RB



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5.1.1.5 Test Mode = LTE/TM2 3MHz

5.1.1.5.1 Test Channel = LCH



Date: 12 JAN 2017 17:40:58



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Spectru		TCST TID=1									
Ref Leve Att	el 35.00 4(dBm Offso D dB 🖷 SWT	et 5.00 dB 👄 1 s 👄	RBW 30 k VBW 100 k		ode Auto Swe	вер				
●1Rm Max		1.1				100					
30 dBm						M1[1]	ñ		-27.18 dBm 813,99400 MHz		
20 dBm											
10 dBm		_				_					
0 dBm			-		pro	contractions	V-manalement	un horastrucket	many		
-10 dBm—	-01 -13	000 dBm				11		-			
-20 dBm—				M	/		-				
-30 dBm—			م میالین	anoral							
-40 dBm-	hornow	un all many	and a second and a second as the second as t		-		-				
-50 dBm—		_						6			
-60 dBm—					1						
CF 814.0	MHz			1001	pts			Spa	an 6.0 MHz		
)[]	Measuring	OTO NO. IN	444	12.01.2017 17:42:18		

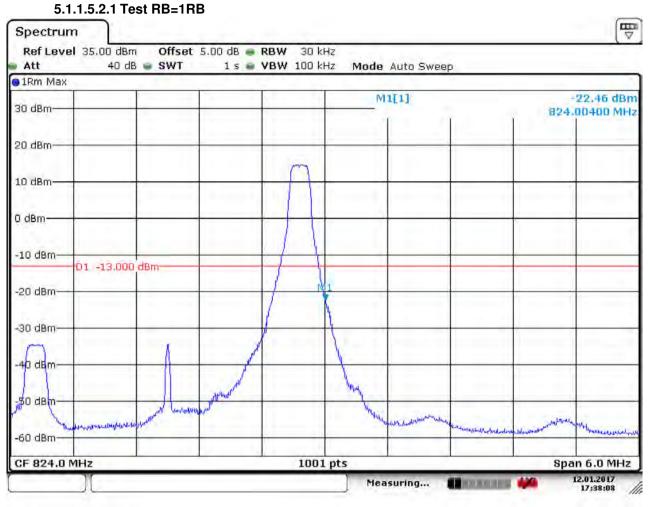
5.1.1.5.1.2 Test RB=15RB

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5.1.1.5.2 Test Channel = HCH



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5.1.1.5.3 Test RB=15RB

1Rm Max	2								
30 dBm					M	11[1]	Î.		28.67 dBm 00400 MHz
20 dBm									
10 dBm								-	
0 dBm	and a second second and a second s	allessen and a second	and a second and the second	Americanth				÷	
-10 d8m—	-D1 -13.000	dBm						-	
-20 dBm-									
-30 dBm—		-			Maria				
-40 dBm—					and provide the	an the state of the second	And a second and a second	and a second and a second	m.
-50 dBm—			-						and another assumed
-60 dBm—									

Date: 12.JAN.2017 17:37:11

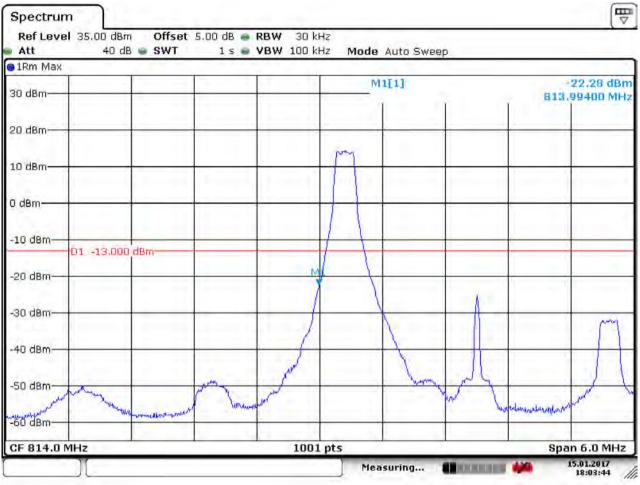


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5.1.1.6 Test Mode = LTE/TM3 3MHz

5.1.1.6.1 Test Channel = LCH

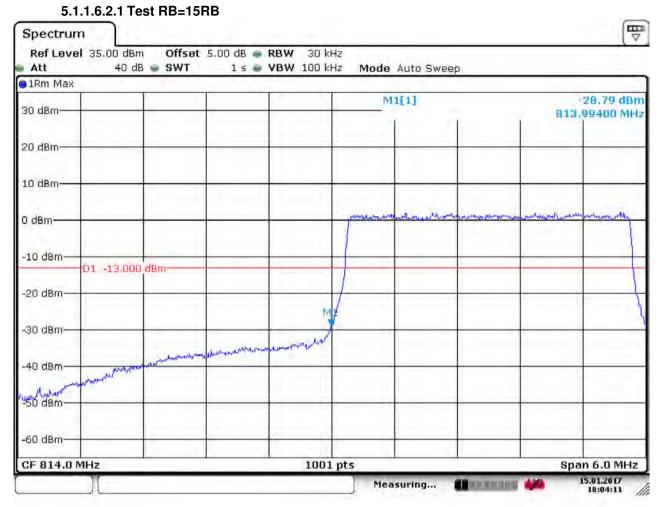
5.1.1.6.2 Test RB=1RB



Date: 15. JAN. 2017 18:03:45



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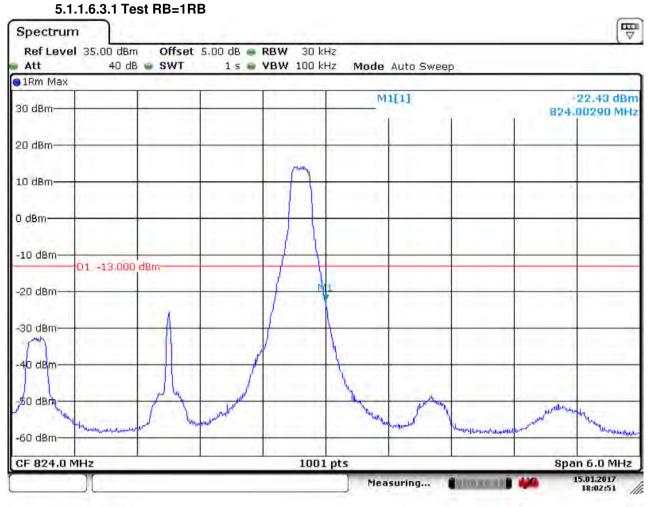


Date: 15 JAN 2017 18:04:11



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5.1.1.6.3 Test Channel = HCH



Date: 15.JAN.2017 18:02:51



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Spectrum		STILLE							
Ref Leve Att	1 35.00 dBm 40 dB		5.00 dB 🖷 1 s 🖷	RBW 30 k VBW 100 k		e Auto Swe	ер		
●1Rm Max	5	111				14. 2			
30 dBm					!	M1[1]	i i		-29.62 dBm .00290 MHz
20 dBm					_	-			
10 dBm					_				
o gen	mann	Source	mun	anno	1	-			
-10 d8m	01 -13.000	dBm							
20 dBm	01 -13,000					-		-	-
/ -30 dBm—		-		K	1				
-40 dBm					herewarder and	manner.	have and a south and the		
-50 dBm								and and former	my wears
-60 dBm	<u> </u>			<u> </u>					
CF 824.0 M	4Hz		1	1001	pts	1.	1	Spa	n 6.0 MHz
)(1	asuring	CONTRACTOR NO.		15.01.2017 18:02:06

5.1.1.6.3.2 Test RB=15RB

Date: 15. JAN. 2017 18:02:07

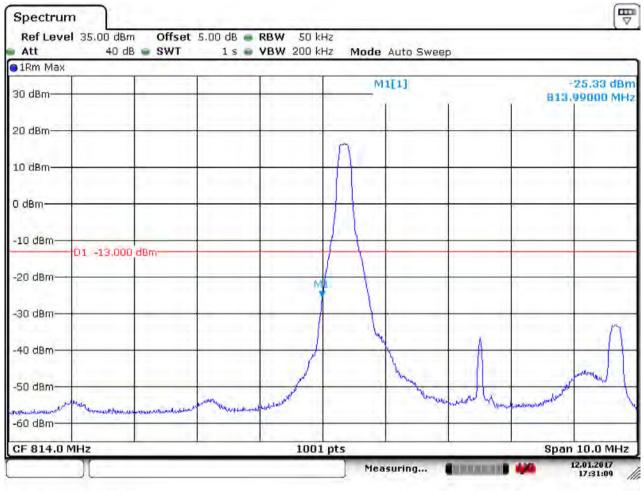


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5.1.1.7 Test Mode = LTE/TM1 5MHz

5.1.1.7.1 Test Channel = LCH

5.1.1.7.1.1 Test RB=1RB



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Ref Leve Att	el 35.00 dBn 40 dB	Offse	et 5.00 dB 🖷 1 s 🖷	RBW 50 ki VBW 200 ki		ode Auto S	weep		
●1Rm Max	2								
30 dBm					-	M1[1]	i.	81	-80.26 dBm 3.99000 MHz
20 dBm					-				
10 dBm						_	_		
0 dBm					from	worder whindrich	mon	un from an	manning
-10 d8m—	-01 -13.000	dBm							
-20 dBm—	01-15.000				1				
-30 dBm—				M	1		_	_	
-40 dBm	and a superior	min	and the second s	mort of	-			-	-
-50 dBm-									
-60 dBm—	_			<u> </u>					-
CF 814.0	MUS		1	1001	nte			Sn	an 10.0 MHz

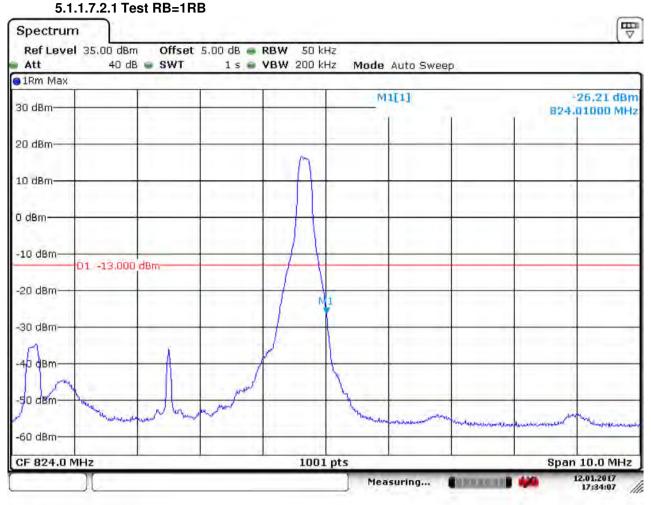
5.1.1.7.1.2 Test RB=25RB

Date: 12.JAN.2017 17:30:37



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5.1.1.7.2 Test Channel = HCH



Date: 12.JAN.2017 17:34:07



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Spectru	m	.5(110=20							
Ref Lev Att	el 35.00 dBm 40 dB		5.00 dB 🖷 1 s 🖷	RBW 50 ki VBW 200 ki		de Auto Swi	вер		
1Rm Max	:	1.1				14. 1			
30 dBm						M1[1]	3		-30.65 dBm .01000 MHz
20 dBm	-	-			-				
10 dBm						_	-		
0 dBm		m	menne	my	1		-	-	
-10 d8m—	-D1 -13.000	dBm							
-20 dBm—	017-15.000				-			-	-
-30 dBm—		-		À	1 June		_		
-40 dBm—						man	man man man	-	m
-50 d8m—			-						himporto
-60 dBm—		-							
CF 824.0	MHz			1001	pts			Spai	n 10.0 MHz
						leasuring		-	12.01.2017 17:34:47

5.1.1.7.2.2 Test RB=25RB

Date: 12.JAN.2017 17:34:47



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5.1.1.8 Test Mode = LTE/TM2 5MHz

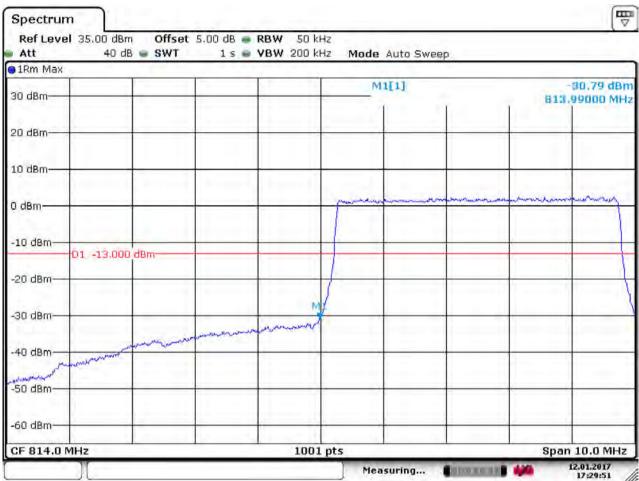
5.1.1.8.1 Test Channel = LCH

5.1.1.8.1.1 Test RB=1RB E North Spectrum Ref Level 35.00 dBm Offset 5.00 dB - RBW 50 kHz Att 40 dB 🖷 SWT 1 s 🝙 VBW 200 kHz Mode Auto Sweep 1Rm Max M1[1] 24.87 dBm 30 dBm 813.99000 MHz 20 dBm 10 dBm-0 dBm -10 d8m-01 -13.000 dBm -20 dBm--30 dBm--40 dBm--50 dBm mund -60 dBm-1001 pts Span 10.0 MHz CF 814.0 MHz 12.01.2017 17:31:46 Measuring... 11

Date: 12.JAN.2017 17:31:47



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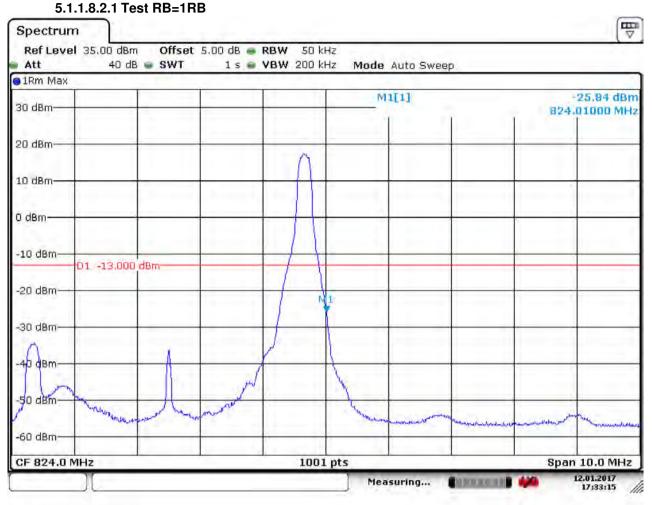
5.1.1.8.1.2 Test RB=25RB

Date: 12.JAN.2017 17:29:51



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5.1.1.8.2 Test Channel = HCH



Date: 12.JAN.2017 17:33:16



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Att	35.00 dBm 40 dB	SWT	5.00 dB 🖷 1 s 🖷	RBW 50 k VBW 200 k		Auto Swee	ep.			
31Rm Max	_		1	r	1					
30 dBm					M	1[1]	r.	-30,79 dBm 824,01000 MHz		
20 dBm										
10 dBm										
0 dBm	m	um and		hum	-		-	-		
-10 dBm	01 -13.000	dBm								
-20 dBm									-	
-30 dBm	-	-		}	1 more					
-40 dBm						man	montes	hand		
-50 dBm			-						manne	
-60 dBm				-					-	

5.1.1.8.2.2 Test RB=25RB

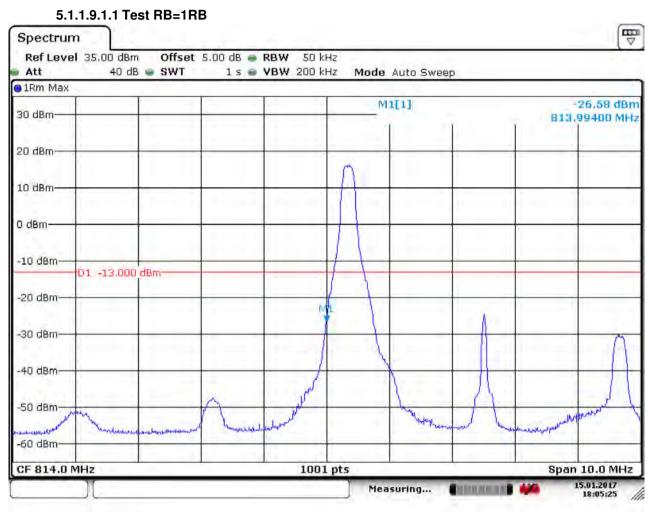
Date: 12 JAN 2017 17:35:25



Report No.: SZEM170100023101 Page: 92 of 130

5.1.1.9 Test Mode = LTE/TM3 5MHz

5.1.1.9.1 Test Channel = LCH



Date: 15.JAN.2017 18:05:26



Report No.: SZEM170100023101 Page: 93 of 130

Ref Leve Att	1 35.00 dBr 40 d	n Offse B e SWT	t 5.00 dB 🖷 1 s 🖷	RBW 50 ki VBW 200 ki		de Auto Sw	еер		
1Rm Max	5-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1					14.4			
30 dBm		-			*	M1[1]	â.		-30.70 dBm ,99400 MHz
20 dBm					-		-		
10 dBm						_			
0 dBm		-	-		round	minana	makin mary Marine	mont	many
-10 d8m—	D1 -13.000) dBm							
-20 dBm					-	_			
-30 dBm				m	1		-		1
-40 dBm	man	-	Mummann					1	
-50'dBm					-	-		¢	-
-60 dBm									
CF 814.0 M	Hz	1	1	1001	pts	1		Spar	10.0 MHz

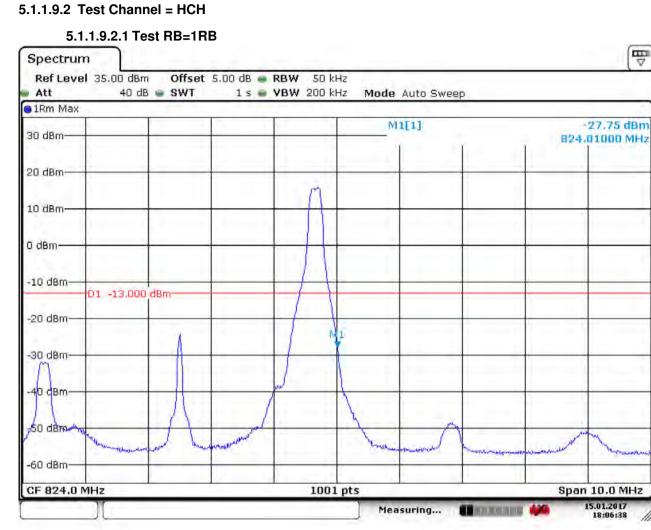
5.1.1.9.1.2 Test RB=25RB

Date: 15 JAN 2017 18:04:55



Report No.: SZEM170100023101 Page: 94 of 130

11



Date: 15.JAN.2017 18:06:38



Report No.: SZEM170100023101 Page: 95 of 130

Att	1 35.00 dBm 40 dB	Offset	5.00 dB 🥌 1 s 🖷	RBW 50 k VBW 200 k		Auto Sw	еер			
●1Rm Max		1.11								
30 dBm		-			M	1[1]	a	-31,88 dBm 824,01000 MHz		
20 dBm							-			
10 dBm					-		_		-	
	a the second second manual	muchine	www.weerman	m	-					
-10 d8m-	D1 -13.000	dBm								
-20 dBm			-		-			-		
-30 dBm—			-	4	1				-	
-40 dBm		-			former	Anena	- man money	and the second sec		
-50 dBm								and the second second	and Marcines	
-60 dBm—		-								
CF 824.0	MHz		1	1001	pts	1	-1,	Spar	n 10.0 MHz	

5.1.1.9.2.2 Test RB=25RB

Date: 15. JAN. 2017 18:07:11



Report No.: SZEM170100023101 Page: 96 of 130

5.1.1.10 Test Mode = LTE/TM1 10MHz

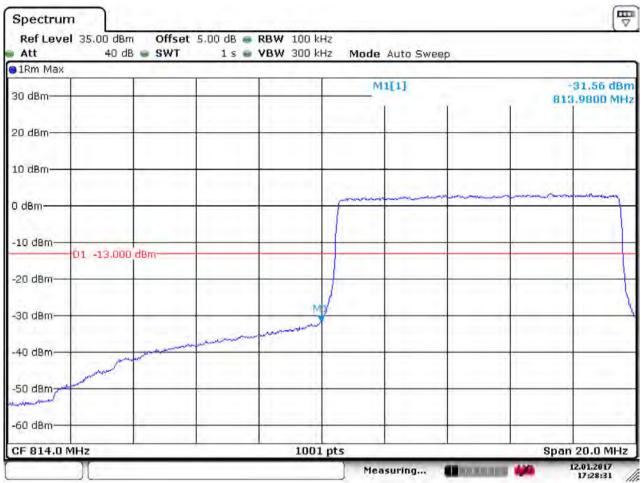
5.1.1.10.1 Test Channel = LCH

5.1.1.10.1.1 Test RB=1RB Spectrum Ref Level 35.00 dBm Offset 5.00 dB 📾 RBW 100 kHz 40 dB 🖷 SWT 1 s 🖷 VBW 300 kHz Att Mode Auto Sweep 1Rm Max M1[1] 37.69 dBm 30 dBm 813.9800 MHz 20 dBm 10 dBm 0 dBm· -10 d8m-01 -13.000 dBm -20 dBm--30 dBm--40 dBm -50 dBm--60 dBm 1001 pts CF 814.0 MHz Span 20.0 MHz 12.01.2017 Measuring.... A DE LA CARL 17:23:59 11.

Date: 12.JAN.2017 17:24:00



Report No.: SZEM170100023101 Page: 97 of 130



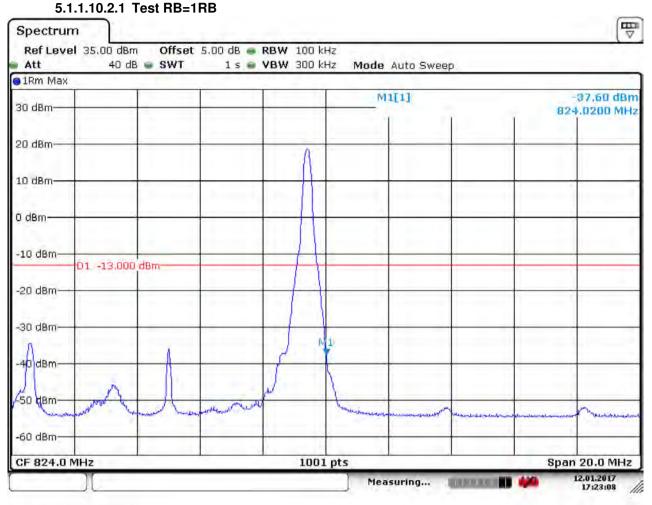
5.1.1.10.1.2 Test RB=50RB

Date: 12.JAN.2017 17:28:31



Report No.: SZEM170100023101 Page: 98 of 130

5.1.1.10.2 Test Channel = HCH



Date: 12 JAN 2017 17:23:09



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Spectrun	n								
Ref Leve Att	l 35.00 dBr 40 d	n Offset B e SWT	5.00 dB 🖷 1 s 🖷	RBW 100 k VBW 300 k		lode Auto Swi	вер		
1Rm Max	3			2022		100			
30 dBm		-				M1[1]	à d		-30.81 dBm 4.0200 MHz
20 dBm								-	
10 dBm								_	
0 ØBm		n since firm in m	n and the second second	of work-many					
-10 d8m—	D1 -13.000) dBm			-			Č.	
-20 dBm									
-30 dBm				1	1 mum		_	1	
-40 dBm						a dramon	and many many	de como	and the
-50 dBm			-						man
-60 dBm									
CF 824.0 M	MHz			100	1 pts			Spa	n 20.0 MHz
	N]	Measuring	In the second se	444	12.01.2017 17:21:20

5.1.1.10.2.2 Test RB=50RB

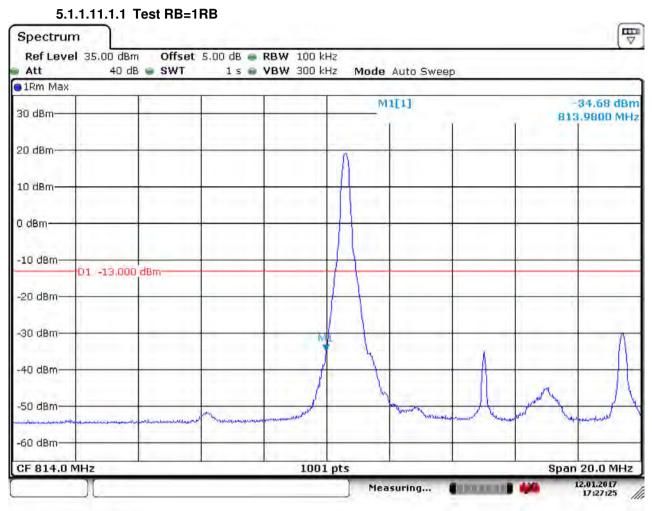
Date: 12.JAN.2017 17:21:20



Report No.: SZEM170100023101 Page: 100 of 130

5.1.1.11 Test Mode = LTE/TM2 10MHz

5.1.1.11.1 Test Channel = LCH



Date: 12.JAN.2017 17:27:25



Report No.: SZEM170100023101 Page: 101 of 130

Spectrur	n								
Ref Leve Att	el 35.00 dBr 40 d	m Offse B e SWT	t 5.00 dB 👄 1 s 🖷	RBW 100 k VBW 300 k		ode Auto Sw	/eep		
🛚 1Rm Max	2			1 - A - A - A - A - A - A - A - A - A -					
30 dBm						M1[1]	<u>.</u>	1 81	-32.35 dBm 13.9800 MHz
20 dBm		-					-	-	
10 dBm									
0 dBm		-	-		fran				manning
-10 dBm—	-D1/-13.00	0 dBm							
-20 dBm—								-	+ +
-30 dBm—				M			_		
-40 dBm—		- martine	man		_				1
-50 dBm-	and man						-	-	
-60 dBm—					1				
CF 814.0	MHz			1001	pts			Spa	n 20.0 MHz
)[]	Measuring	THE REAL PROPERTY IN	-	12.01.2017 17:28:02

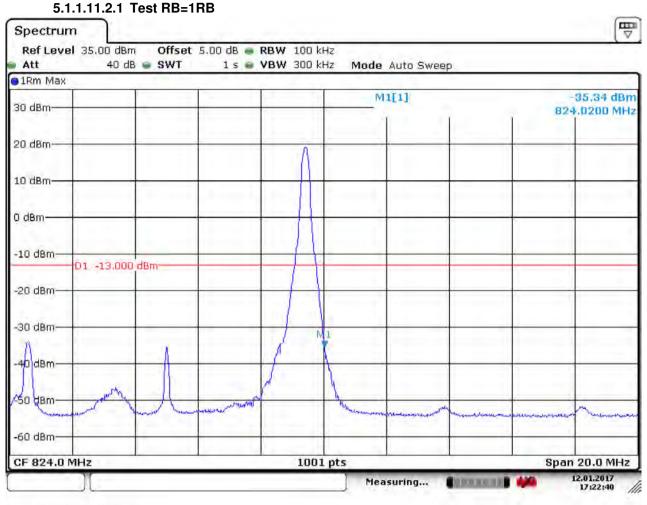
5.1.1.11.1.2 Test RB=50RB

Date: 12.JAN.2017 17:28:03



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5.1.1.11.2 Test Channel = HCH



Date: 12 JAN 2017 17:22:40



Report No.: SZEM170100023101 Page: 103 of 130

Spectrur	n										
Ref Leve Att	el 35.00 dBn 40 dB	n Offset B SWT	:5.00 dB 🖷 1 s 🖷	RBW 100 k VBW 300 k		ode Auto Swe	ер				
🛚 1Rm Max	3			112.11							
30 dBm						M1[1]			-31,42 dBm 824,0200 MHz		
20 dBm					-		-				
10 dBm											
0 0 0	n	a dha yacada a dhaanaa baar	a provinsion and the second	mining			-				
-10 dBm-	D1 -13.000	l_dBm						-			
-20 dBm—					-						
/30 dBm—			-	X	1	man					
-40 dBm	*				-		and	many	unn.		
-50 dBm			-					0	- Lowerson		
-60 dBm—					-						
CF 824.0	MHz		-	1001	pts			Spa	n 20.0 MHz		
_)[Measuring	CONTRACT IN	444	12.01.2017 17:21:47		

5.1.1.11.2.2 Test RB=50RB

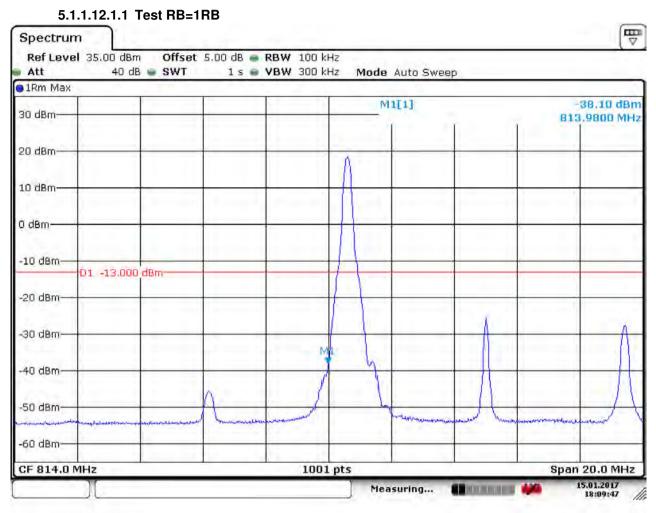
Date: 12.JAN.2017 17:21:47



Report No.: SZEM170100023101 Page: 104 of 130

5.1.1.12 Test Mode = LTE/TM3 10MHz

5.1.1.12.1 Test Channel = LCH



Date: 15.JAN.2017 18:09:47



Report No.: SZEM170100023101 Page: 105 of 130

Spectrur	n									
Ref Leve Att	el 35.00 dBr 40 dl	n Offse B e SWT	t 5.00 dB 👄 1 s 🖷	RBW 100 k VBW 300 k		lode Auto Sw	еер			
🖯 1Rm Max	3	1.1	· · · · · ·	1.						
30 dBm					M1[1]			-33.23 dBm 813.9800 MHz		
20 dBm					1. 		-			
10 dBm									-	
0 dBm			-		1				my	
-10 dBm—	-D1 -13.000)_dBm								
-20 dBm—										
-30 dBm—				M	/					
-40 dBm—	-	-						-		
-50 dBm—	- warmen of							÷	_	
-60 dBm—										
CF 814.0	MHz			1001	pts			Spa	an 20.0 MHz	
					1	Measuring		-	15.01.2017 18:10:13	

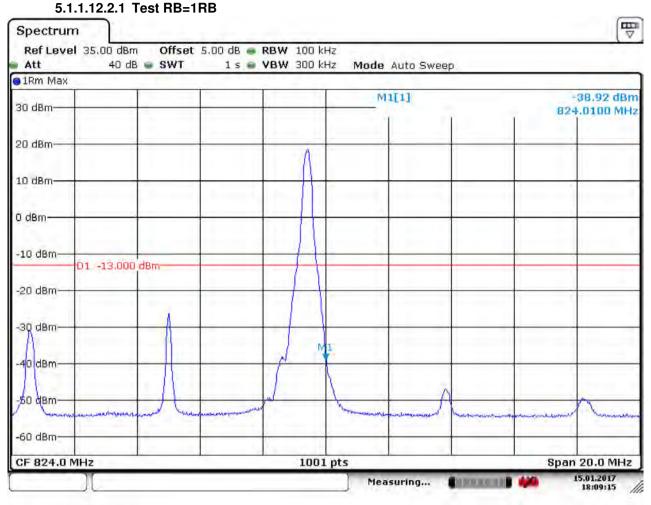
5.1.1.12.1.2 Test RB=50RB

Date: 15 JAN 2017 18:10:14



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5.1.1.12.2 Test Channel = HCH



Date: 15. JAN. 2017 18:09:16



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Spectru	m										
Ref Leve Att	el 35.00 dBn 40 dl			RBW 100 k VBW 300 k		e Auto Swe	ep				
🛚 1Rm Max	5										
30 dBm					M1[1]				-33,33 dBm 824,0100 MHz		
20 dBm	-				-	-		-			
10 dBm											
0 d8m	- ort. morten	- in the second			-		-				
-10 dBm—	D1 -13.000) dBm			-						
-20 dBm—								-			
)30 dBm—		-			1						
-40 dBm—	-					and and and a second	man				
-50 dBm			-						where have a service		
-60 dBm—											
CF 824.0	MHz			1003	l pts			Spar	n 20.0 MHz		
	T				Me	asuring	Concern a	444	15.01.2017 18:08:42		

5.1.1.12.2.2 Test RB=50RB

Date: 15 JAN 2017 18:08:43



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6 Spurious Emission at Antenna Terminal

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

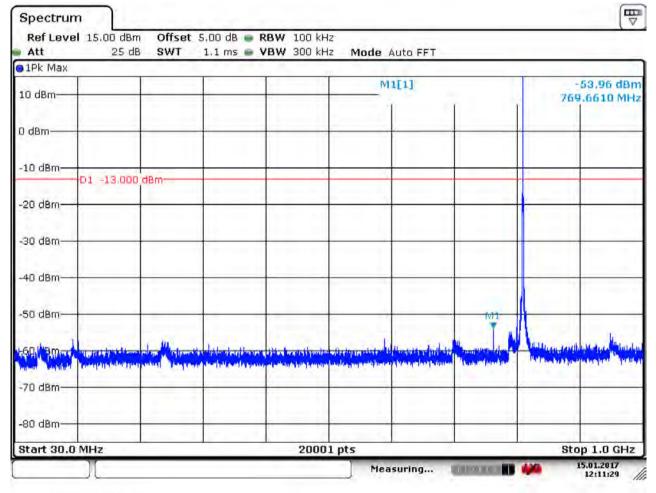
Part I - Test Plots

6.1 For LTE

6.1.1 Test Band = LTE band26 (814-824)

6.1.1.1 Test Mode = LTE / TM1 1.4MHz RB1#0

6.1.1.1.1 Test Channel = LCH



Date: 15.JAN.2017 12:11:30



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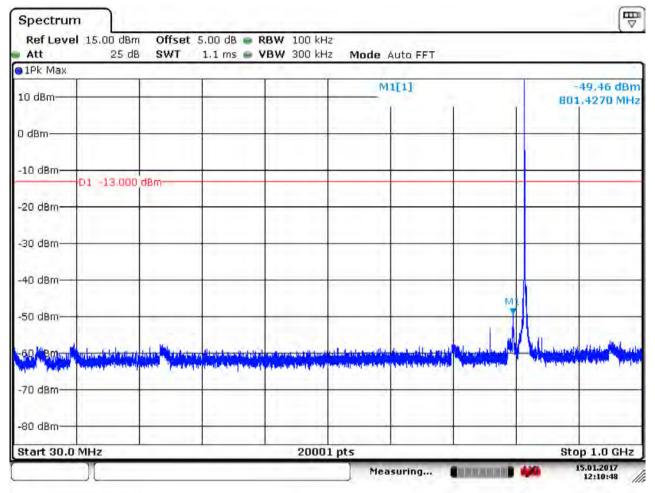
Spectrur Ref Leve	m el 15.00 dBr 25 dl		5.00 dB 🖷 F	RBW 1 MHz /BW 3 MHz	Mode A	uto Sweep			
1Pk Max	25 0	5 5771	27 1115	DW J MILL	Moue At	ito aweeb	3		
10 dBm		1			M	1[1]	1		-37.30 dBm 28390 GHz
0 dBm	-					-			
-10 dBm	-D1 -13.000) dBm							
-20 dBm—							-	-	
-30 d8m—	-				-			-	_
-40 dBm-					4			-	-
50 dates the	الاعلاق ومعروفا المعاورة ال	and the station	and the property of the billing	al kan di sa kalin ka ka ka ka		un Mile un die fait	Contra Ballaneral Concerts	a the second second	the state of the second state
-60 dBm—								his _{an a} ndika an an bh	
-70 dBm—							-		
-80 dBm—		-					-		
Start 1.0	GHz	1	1	2000	1 pts	1	-1	Sto	0 10.0 GHz

Date: 15.JAN.2017 12:12:12



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6.1.1.1.2 Test Channel = MCH



Date: 15.JAN.2017 12:10:49



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Spectrur	August and								
Ref Leve	el 15.00 dBn 25 dB		5.00 dB 👄 🖡 27 ms 👄 🕅	BW 1 MHz BW 3 MHz	Mode Au	uto Sweep	6.		
1Pk Max.									
10 dBm					M	1[1]	<u>.</u>		-36.29 dBm 537390 GHz
0 dBm						-		+	
-10 dBm	-D1 -13.000	l dBm			_				
-20 dBm—							-	-	
-30 d8m		1		· · · · · · · ·				-	
-40 dBm—	n.		and an address of the state of the	و بن السرائين	Carlos and the state of the sta	and the last of		1	
HERAH	de a calle a presidente de la composition de la	a casa batta da sa		apper and a feature of the second			and a second stranger		a al de la companya a construction de la construcción de la construcción de la construcción de la construcción
-60 dBm				· · · · · · · · · ·			-		
-70 dBm		-							
-80 dBm—		-					-		
Start 1.0	GHz	1	1	2000	1 pts	1.	4	Stop	p 10.0 GHz
					Mea	isuring		a 🚧	15.01.2017 12:09:58

Date: 15.JAN.2017 12:09:58



6.1.1.1.3 Test Channel = HCH

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

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E ⊂ Spectrum Ref Level 15.00 dBm Offset 5.00 dB - RBW 100 kHz Att 25 dB SWT 1.1 ms 🖝 VBW 300 kHz Mode Auto FFT 1Pk Max M1[1] 49.81 dBm 10 dBm-796.7710 MHz 0 dBm -10 dBm-D1 -13.000 dBm -20 dBm--30 dBm--40 dBm M -50 dBm--60 HBm-THE DELETION OF THE -70 dBm -80 dBm-Start 30.0 MHz Stop 1.0 GHz 20001 pts 15.01.2017 Measuring... CALIFICATION OF A CALIFORNIA OF A CALIFICALI O CALIFICALIFICALIFICALIFICALIFICALIFIC 11 12:08:28

Date: 15.JAN.2017 12:08:29



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Spectrur Ref Leve	Sec. 1	dBm	Offset	5.00 dB	RBW	1 MHz					
Att		25 dB				3 MHz	Mode A	uto Sweep	16		
1Pk Max.						_					
10 dBm							N	11[1]	1		-85.80 dBm 645940 GHz
0 d8m				-				-		-	
-10 dBm—	+D1 -13	2000	dBm				_				
-20 dBm—			GBII				-	-	-		
-30 dBm		_									
-40 dBm							السور والقارب				
50 databili	Siles and a	adala	alas di statan	la Andertatellas	Line Lipse	Landa na kala kala Mang Landa na kala kala kala kala kala kala kala	all provide the second second	a particular for the	We when you want	and a planting	The second states
-60 dBm		_				_					
-70 dBm		_					-			-	
-80 dBm—				-	-						
Start 1.0	GHz			1	1	2000	1 pts		4	Sto	p 10.0 GHz
							Me	asuring	Concerned and	444	15.01.2017 12:09:08

Date: 15.JAN.2017 12:09:08



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6.1.1.2 Test Mode = LTE / TM1 3MHz RB1#0

6.1.1.2.1 Test Channel = LCH

Att	el 15.00 dBr 25 di		5.00 dB 👄 R 1.1 ms 👄 V	BW 300 kHz		Auto FFT			
31Pk Max			-		1. 1. 1.				
10 dBm					M	1[1]			53.84 dBn 9.6120 MH:
0 dBm		-							
-10 dBm	-D1 -13.000	dBoo			_			-	
-20 dBm	13.000		· · · · · ·		- '				
-30 d8m					_				
-40 dBm—					-			 	
-50 dBm—							IVI1		
160 BMm			postate the section of the				And the second second	-	interfect Martin
-70 dBm—									
-80 dBm								-	
Start 30.0	MHz	1-		20001	ots			Sto	p 1.0 GHz

Date: 15.JAN.2017 12:03:39



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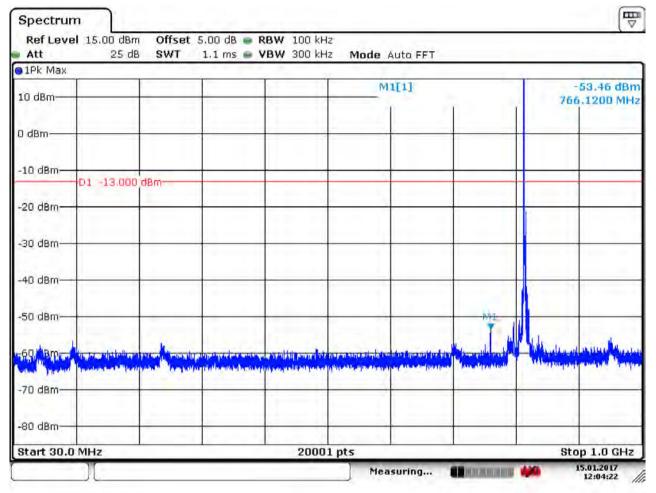
Spectrur Ref Leve	n el 15.00 dBr	n Offset	5.00 dB 🖷 I	RBW 1 MHz			_		
Att 1Pk Max	25 d	B SWT	27 ms 🝙 🕻	VBW 3 MHz	Mode Au	ito Sweep			-
• 19к мах 10 dBm			-		M	1[1]			-36.76 dBm 628390 GHz
0 dBm						-			
-10 dBm-	-D1 -13.000) dBm					-		
-20 dBm							-		
-30 dBm									-
-40 dBm —				and with spatiated	- I mb a flad	Alberts and a			
-50 dbm	and the second sec		and the second s	P. P		2	ALL PROPERTY AND	and count and particular	and the state of the second
-60 dBm					$ \rightarrow $				
-70 dBm							-	+	
-80 dBm—		-							
Start 1.0	GHz		1	2000	1 pts			Sto	p 10.0 GHz
					Mea	isuring			15.01.2017 12:03:02

Date: 15.JAN.2017 12:03:03



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6.1.1.2.2 Test Channel = MCH



Date: 15.JAN.2017 12:04:22



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Ref Leve Att	el 15.00 dBr 25 d		5.00 dB 🖷 27 ms 🖷	RBW 1 MHz VBW 3 MHz	Mode Au	ito Sweep			
91Pk Max		1							
10 dBm					M	1[1]	r.		36.12 dBm 35590 GHz
0 d8m		-						-	
-10 dBm—	-D1 -13.00	0 dBm							
-20 dBm-								-	1
-30 d8m	-								
-40 dBm	1			in a result former	يعتقد والملتحد وم				
Sal da UN			and the second second second						
-60 dBm—		-							
-70 dBm—					$ \rightarrow $				
-80 dBm—		-							
Start 1.0	GHz	1	1	2000	1 pts		0	Stop	0 10.0 GHz

Date: 15.JAN.2017 12:05:15



6.1.1.2.3 Test Channel = HCH

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

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Spectrum Ref Level 15.00 dBm Offset 5.00 dB - RBW 100 kHz Att 25 dB SWT 1.1 ms 🖝 VBW 300 kHz Mode Auto FFT 1Pk Max M1[1] 50.21 dBm 10 dBm 798.2260 MHz 0 dBm -10 dBm-D1 -13.000 dBm -20 dBm--30 dBm--40 dBm M -50 dBm -60 Bm--70 dBm -80 dBm-Start 30.0 MHz 20001 pts Stop 1.0 GHz 15.01.2017 Measuring... 11. 12:06:46

Date: 15.JAN.2017 12:06:46



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• Att • 1Pk Max	OF dp			RBW 1 MHz	1.7	10.0			
	25 dB	SWT	27 ms 🥌 V	BW 3 MHz	Mode Au	ito Sweep		_	
10 dBm	_				M	1[1]	î.		-86.18 dBm 42790 GHz
0 dBm									
-10 dBm-01	-13.000	dBm			-				
-20 dBm							1		
-30 dBm	_	-							
-40 dBm			a succession of the second		and a line of the second				
HSD HAR Parts	ala half militar	A parts of a first of the	100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100		a and a first statement	1000	Sector of the Local Designation	manalaring gand well in	of Arthogas Innon
-60 dBm									
-70 dBm	-								
-80 dBm									
Start 1.0 GHz	z			2000	1 pts				0 10.0 GHz

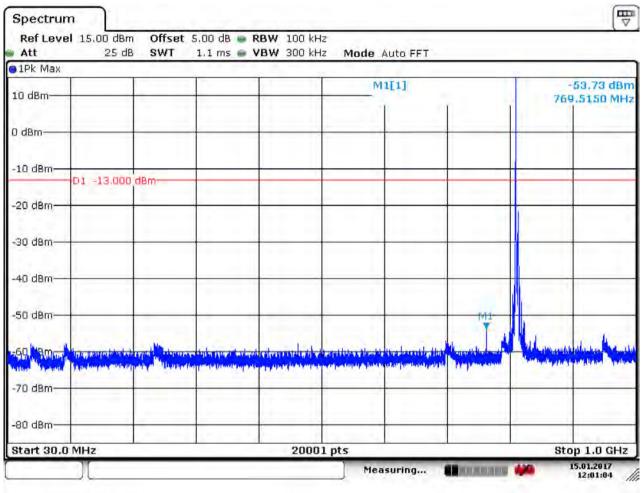
Date: 15.JAN.2017 12:06:10



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6.1.1.3 Test Mode = LTE / TM1 5MHz RB1#0

6.1.1.3.1 Test Channel = LCH



Date: 15.JAN.2017 12:01:04



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1Pk Max [1] -37.42		el 15.00 dBn		5.00 dB 🖷			90.1			
10 dBm 11.62884 0 dBm 10 dBm -10 dBm 11.62884 -10 dBm 11.62884 -20 dBm 11.62884 -20 dBm 11.62884 -30 dBm 11.62884 -30 dBm 11.62884 -60 dBm 11.62884		25 di	B SWT	27 ms 📟	VBW 3 MHZ	Mode Au	ito Sweep	6		-
-10 dBm - D1 -13.000 dBm - C C C C C C C C C C C C C C C C C C	10 dBm					M	1[1]	1		-37.42 dBm 628840 GHz
-20 dBm -20 dBm	0 dBm									
-30 dBm M1 -40 dBm -50 dBm -60 dBm -60 dBm	-10 dBm—	-D1 -13.000) dBm							
-40 dBm -50 dBm -60 dBm	-20 dBm—									
-60 dBm									-	
-60 dBm	1					a life and a			-	
	1750.da/- JI		A Street Healthe	Hall Hard Kare down drawn				ertimene openeous		A de la constitution de
-70 dBm	-60 dBm—	-								
	-70 dBm—									
-80 dBm	-80 dBm—		-					-		
Start 1.0 GHz 20001 pts Stop 10.0	Start 1.0	GHz		1	2000	1 pts	1-	-	Sto	p 10.0 GHz

Date: 15. JAN 2017 12:01:36



6.1.1.3.2 Test Channel = MCH

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

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E ⊂ Spectrum Ref Level 15.00 dBm Offset 5.00 dB - RBW 100 kHz Att 25 dB SWT 1.1 ms 🖝 VBW 300 kHz Mode Auto FFT 1Pk Max M1[1] 53.85 dBm 10 dBm-766.9930 MHz 0 dBm -10 dBm-D1 -13.000 dBm -20 dBm--30 dBm--40 dBm -50 dBm--60, Bm-Manual A the stand of the stand of -70 dBm -80 dBm-Start 30.0 MHz 20001 pts Stop 1.0 GHz 15.01.2017 Measuring... A DE LA CARLANCIA MANDA 12:00:24 11.

Date: 15.JAN.2017 12:00:24



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Spectrur	n	offect	5.00 dB 🖷 I						
Att	15.00 ut 25			VBW 3 MHz	Mode Au	uto Sweep			
1Pk Max									
10 dBm					M	1[1]	à l		-36.47 dBm 533790 GHz
0 d8m		-				-		-	
-10 dBm	-D1 -13.00	0 dBm							
-20 dBm							-	-	-
-30 d8m					-		-		-
-40 dBm—			s. Methods to	han data da		and a light station			
50 da	Contraction and	Lan al grants to be					tunia baipenendenden	in protometric	
-60 dBm									
-70 dBm		-			$ \longrightarrow $				
-80 dBm—									
Start 1.0	GHz	-1-	1	2000	1 pts	L		Sto	p 10.0 GHz
					Mea	isuring		-	15.01.2017 11:59:44

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6.1.1.3.3 Test Channel = HCH

Spectrur Ref Leve	1 15.00 dB			RBW 100 kHz VBW 300 kHz		T.		
1Pk Max					induc indiciti		x	- 1 - 2
10 dBm					M1[1]	Ť.		0.33 dBm 5510 MHz
0 dBm								
-10 dBm	-D1 -13.00	0 dBm						
-20 dBm		-	-		_			-
-30 dBm—								
-40 dBm			-		_			-
-50 dBm—						M	4	_
-69. 8mm		The second second second	1 Prov 1		an a state and a second as a state of the second as a second as			
-70 dBm								
-80 dBm—								
Start 30.0	MHz			20001	pts	4	Stop	1.0 GHz

Date: 15.JAN.2017 11:58:05



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Spectrur Ref Leve	n II 15.00 dBn	n Offset	5.00 dB 🖷 1	RBW 1 MHz					
Att	25 di			VBW 3 MHz	Mode Au	uto Sweep	6		
1Pk Max		_	-						
10 dBm					M	1[1]	1	1	-35.97 dBm 638740 GHz
0 d8m						-		-	
-10 dBm	-D1 -13.000	dBm							
-20 dBm								-	
-30 dBm								-	
-40 dBm	1				a plantin porta	I langered at			
50 How	A Construction of the second sec	Derkandersenter Stelle		a daga daga katalah katalah katalah Angga katalah k Angga katalah k					The second second second second
-60 dBm					$ \rightarrow $		-		-
-70 dBm					$ \longrightarrow $		-	6	
-80 dBm—		-							
Start 1.0 (GHz	1	1	2000	1 pts			Sto	p 10.0 GHz
					Mea	isuring	- Internet		15.01.2017 11:58:52

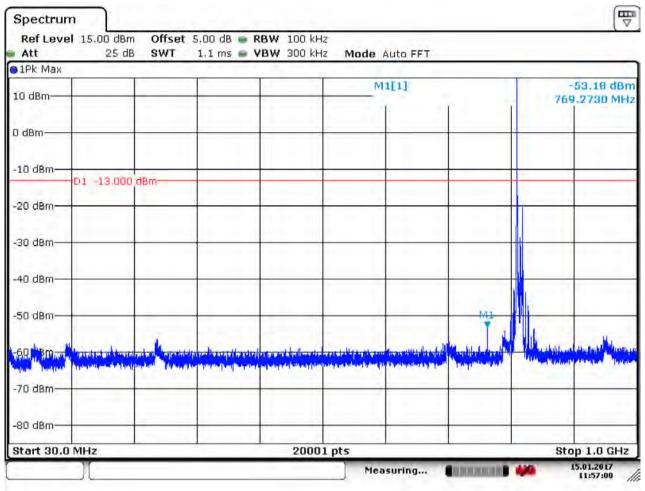
Date: 15.JAN.2017 11:58:53



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6.1.1.4 Test Mode = LTE / TM1 10MHz RB1#0

6.1.1.4.1 Test Channel = MCH



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Spectrur	the second se								
Att	el 15.00 dB 25 d		t 5.00 dB 👄 27 ms 👄	VBW 3 MHz	Mode Au	uto Sweep			
1Pk Max.									
10 dBm					M	1[1]	à l		-36.99 dBm 629290 GHz
0 d8m		-				-			
-10 dBm—	-D1 -13.00	0 dBm							
-20 dBm			-						
-30 d8m			-					-	
-40 dBm —	T			, Person and particular to the line of	و المعامل المعام	. Katalang pulatkan		1	
50HR		dia de interition		Alexandra discrimination	A serie that a lot of the series of the seri		an la se linite and	Calence of Street and	and the party rath
-60 dBm							and the second s	and produced and the second	Contraction of the second s
-70 dBm					$ \longrightarrow $			-	
-80 dBm—									
Start 1.0	GHz	1.	1	2000	1 pts			Sto	p 10.0 GHz
					Mea	isuring	distance of		15.01.2017 11:56:01

Date: 15. JAN. 2017 11:56:01



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7 Field Strength of Spurious Radiation

7.1 For LTE

7.1.1 Test Band = LTE 26(814-824)

7.1.1.1.1 Test Channel = LCH

Frequency (MHz)	Frequency (MHz) Level (dBm)		Over Limit (dB)	Polarization	
1903.000	-59.18	-13.00	-46.18	Vertical	
2320.000	-59.61 -13.00		-46.61	Vertical	
4657.500	-68.03	-13.00	-55.03	Vertical	
1837.000	-63.13	-13.00	-50.13	Horizontal	
2488.000	-59.08	-13.00	-46.08	Horizontal	
3390.000	-70.45	-13.00	-57.45	Horizontal	

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1434.000	-66.54	-13.00	-53.54	Vertical
2652.000	-57.22	-13.00	-44.22	Vertical
4930.000	-67.17	-13.00	-54.17	Vertical
1958.500	-63.26	-13.00	-50.26	Horizontal
3975.000	-68.77	-13.00	-55.77	Horizontal
6540.000	-66.64	-13.00	-53.64	Horizontal

7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization	
895.000	-65.24	-13.00	-52.24	Vertical	
1752.000	2.000 -58.72 -13.00		-45.72	Vertical	
5145.000	-67.43	-13.00 -54.43		Vertical	
2616.000	-58.55	-13.00	-45.55	Horizontal	
4267.500	-66.63	-13.00	3.00 -53.63 Horizontal		
7310.000	7310.000 -66.57		-53.57	Horizontal	

NOTE:

1) All modes are tested, but the data presented above is the worst case. the disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed.



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8 Frequency Stability

8.1 Frequency Error VS. Voltage

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE Band 26 (814-824)	LTE/TM1 10MHz	МСН	TN	VL	-1.12	-0.00137	PASS
				VN	6.38	0.00779	PASS
				VH	-4.03	-0.00493	PASS
	LTE/TM2 10MHz	МСН	TN	VL	2.78	0.00340	PASS
				VN	5.11	0.00624	PASS
				VH	-0.73	-0.00089	PASS
	LTE/TM3 10MHz	МСН	TN	VL	0.73	0.00090	PASS
				VN	-2.44	-0.00298	PASS
				VH	3.49	0.00426	PASS



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8.2 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		мсн	VN	-30	-0.71	-0.00087	PASS
				-20	-5.18	-0.00633	PASS
				-10	-6.46	-0.00789	PASS
				0	-6.34	-0.00774	PASS
	LTE/TM1 10MHz			10	-0.41	-0.00051	PASS
				20	5.93	0.00724	PASS
				30	0.85	0.00104	PASS
				40	-5.52	-0.00674	PASS
				50	-1.22	-0.00149	PASS
	LTE/TM2 10MHz	МСН	VN	-30	-6.12	-0.00747	PASS
				-20	3.38	0.00413	PASS
				-10	2.38	0.00291	PASS
LTE				0	4.02	0.00491	PASS
band26				10	0.56	0.00068	PASS
(814-824)				20	-1.86	-0.00227	PASS
				30	1.80	0.00219	PASS
				40	5.66	0.00691	PASS
				50	0.03	0.00004	PASS
	LTE/TM3 10MHz	МСН	VN	-30	-1.50	-0.00183	PASS
				-20	-3.18	-0.00389	PASS
				-10	-3.76	-0.00459	PASS
				0	-4.88	-0.00596	PASS
				10	-0.48	-0.00058	PASS
				20	5.05	0.00616	PASS
				30	2.93	0.00358	PASS
				40	6.67	0.00814	PASS
				50	5.32	0.00649	PASS

The End