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# Appendix B

E-UTRA Band 26(814-824)



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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	23.08	22.06	50.00	PASS
				RB1#2	23.18	22.16	50.00	PASS
				RB1#5	23.01	21.99	50.00	PASS
			LCH	RB3#0	23.25	22.23	50.00	PASS
				RB3#2	23.27	22.25	50.00	PASS
				RB3#3	23.22	22.20	50.00	PASS
				RB6#0	22.20	21.18	50.00	PASS
				RB1#0	23.07	22.05	50.00	PASS
	LTE/TM1	1.4M		RB1#2	23.20	22.18	50.00	PASS
			МСН	RB1#5	23.05	22.03	50.00	PASS
BAND26 (814-824)				RB3#0	23.11	22.09	50.00	PASS
				RB3#2	23.15	22.13	50.00	PASS
				RB3#3	23.06	22.04	50.00	PASS
				RB6#0	22.18	21.16	50.00	PASS
				RB1#0	23.09	22.07	50.00	PASS
				RB1#2	23.16	22.14	50.00	PASS
				RB1#5	23.06	22.04	50.00	PASS
			НСН	RB3#0	23.11	22.09	50.00	PASS
				RB3#2	23.13	22.11	50.00	PASS
				RB3#3	23.05	22.03	50.00	PASS
				RB6#0	22.25	21.23	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	22.47	21.45	50.00	PASS
				RB1#2	22.43	21.41	50.00	PASS
				RB1#5	22.47	21.45	50.00	PASS
			LCH	RB3#0	22.51	21.49	50.00	PASS
				RB3#2	22.52	21.50	50.00	PASS
				RB3#3	22.45	21.43	50.00	PASS
		1.4M		RB6#0	21.14	20.12	50.00	PASS
	LTE/TM2			RB1#0	22.59	21.57	50.00	PASS
				RB1#2	22.43	21.41	50.00	PASS
			МСН	RB1#5	22.44	21.42	50.00	PASS
BAND26 (814-824)				RB3#0	22.36	21.34	50.00	PASS
				RB3#2	22.43	21.41	50.00	PASS
				RB3#3	22.40	21.38	50.00	PASS
				RB6#0	21.19	20.17	50.00	PASS
				RB1#0	22.49	21.47	50.00	PASS
				RB1#2	22.40	21.38	50.00	PASS
				RB1#5	22.52	21.50	50.00	PASS
			НСН	RB3#0	22.37	21.35	50.00	PASS
				RB3#2	22.43	21.41	50.00	PASS
				RB3#3	22.45	21.43	50.00	PASS
				RB6#0	21.24	20.22	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	23.30	22.28	50.00	PASS
				RB1#7	23.38	22.36	50.00	PASS
				RB1#14	23.32	22.30	50.00	PASS
			LCH	RB8#0	22.28	21.26	50.00	PASS
				RB8#4	22.24	21.22	50.00	PASS
				RB8#7	22.29	21.27	50.00	PASS
				RB15#0	22.37	21.35	50.00	PASS
	LTE/TM1	ЗМ		RB1#0	23.32	22.30	50.00	PASS
				RB1#7	23.30	22.28	50.00	PASS
			МСН	RB1#14	23.22	22.20	50.00	PASS
BAND26 (814-824)				RB8#0	22.36	21.34	50.00	PASS
				RB8#4	22.24	21.22	50.00	PASS
				RB8#7	22.23	21.21	50.00	PASS
				RB15#0	22.28	21.26	50.00	PASS
				RB1#0	23.28	22.26	50.00	PASS
				RB1#7	23.30	22.28	50.00	PASS
				RB1#14	23.18	22.16	50.00	PASS
			НСН	RB8#0	22.34	21.32	50.00	PASS
				RB8#4	22.27	21.25	50.00	PASS
				RB8#7	22.24	21.22	50.00	PASS
				RB15#0	22.27	21.25	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	22.56	21.54	50.00	PASS
				RB1#7	22.52	21.50	50.00	PASS
				RB1#14	22.64	21.62	50.00	PASS
			LCH	RB8#0	21.49	20.47	50.00	PASS
				RB8#4	21.44	20.42	50.00	PASS
				RB8#7	21.53	20.51	50.00	PASS
		ЗМ		RB15#0	21.43	20.41	50.00	PASS
	LTE/TM2			RB1#0	22.58	21.56	50.00	PASS
				RB1#7	22.51	21.49	50.00	PASS
			МСН	RB1#14	22.53	21.51	50.00	PASS
BAND26 (814-824)				RB8#0	21.46	20.44	50.00	PASS
				RB8#4	21.43	20.41	50.00	PASS
				RB8#7	21.45	20.43	50.00	PASS
				RB15#0	21.37	20.35	50.00	PASS
				RB1#0	22.64	21.62	50.00	PASS
				RB1#7	22.52	21.50	50.00	PASS
				RB1#14	22.53	21.51	50.00	PASS
			НСН	RB8#0	21.46	20.44	50.00	PASS
				RB8#4	21.41	20.39	50.00	PASS
				RB8#7	21.40	20.38	50.00	PASS
				RB15#0	21.33	20.31	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	23.23	22.21	50.00	PASS
				RB1#13	23.06	22.04	50.00	PASS
				RB1#24	23.17	22.15	50.00	PASS
			LCH	RB12#0	22.28	21.26	50.00	PASS
				RB12#6	22.19	21.17	50.00	PASS
	LTE/TM1			RB12#13	22.19	21.17	50.00	PASS
				RB25#0	22.23	21.21	50.00	PASS
				RB1#0	23.03	22.01	50.00	PASS
		5M		RB1#13	22.99	21.97	50.00	PASS
			МСН	RB1#24	22.97	21.95	50.00	PASS
BAND26 (814-824)				RB12#0	22.33	21.31	50.00	PASS
				RB12#6	22.18	21.16	50.00	PASS
				RB12#13	22.15	21.13	50.00	PASS
				RB25#0	22.23	21.21	50.00	PASS
				RB1#0	23.05	22.03	50.00	PASS
				RB1#13	23.01	21.99	50.00	PASS
				RB1#24	22.97	21.95	50.00	PASS
			HCH	RB12#0	22.30	21.28	50.00	PASS
				RB12#6	22.24	21.22	50.00	PASS
				RB12#13	22.22	21.20	50.00	PASS
				RB25#0	22.20	21.18	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	22.68	21.66	50.00	PASS
				RB1#13	22.01	20.99	50.00	PASS
				RB1#24	22.42	21.40	50.00	PASS
			LCH	RB12#0	21.42	20.40	50.00	PASS
				RB12#6	21.17	20.15	50.00	PASS
				RB12#13	21.18	20.16	50.00	PASS
	LTE/TM2			RB25#0	21.20	20.18	50.00	PASS
				RB1#0	22.56	21.54	50.00	PASS
		5M		RB1#13	22.07	21.05	50.00	PASS
			МСН	RB1#24	22.41	21.39	50.00	PASS
BAND26 (814-824)				RB12#0	21.38	20.36	50.00	PASS
				RB12#6	21.27	20.25	50.00	PASS
				RB12#13	21.26	20.24	50.00	PASS
				RB25#0	21.30	20.28	50.00	PASS
				RB1#0	22.66	21.64	50.00	PASS
				RB1#13	22.14	21.12	50.00	PASS
				RB1#24	22.42	21.40	50.00	PASS
			НСН	RB12#0	21.39	20.37	50.00	PASS
				RB12#6	21.27	20.25	50.00	PASS
				RB12#13	21.26	20.24	50.00	PASS
				RB25#0	21.23	20.21	50.00	PASS



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Test Band(LTE)	Test Mode	Test Bandwidth	Test channel	Test RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdic t
				RB1#0	23.23	22.21	50.00	PASS
				RB1#25	23.21	22.19	50.00	PASS
				RB1#49	23.32	22.30	50.00	PASS
	LTE/TM1	10M	MCH	RB25#0	22.22	21.20	50.00	PASS
				RB25#13	22.19	21.17	50.00	PASS
				RB25#25	22.16	21.14	50.00	PASS
BAND26				RB50#0	22.22	21.20	50.00	PASS
(814-824)				RB1#0	22.54	21.52	50.00	PASS
				RB1#25	22.24	21.22	50.00	PASS
				RB1#49	22.17	21.15	50.00	PASS
	LTE/TM2	10M	MCH	RB25#0	21.30	20.28	50.00	PASS
				RB25#13	21.23	20.21	50.00	PASS
				RB25#25	21.24	20.22	50.00	PASS
				RB50#0	21.23	20.21	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 >  $3 \times RBW$ .

Detector: RMS



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### 2 Peak-to-Average Ratio

#### Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
		LCH	\	13	PASS
	TM1/10M	MCH	4.75	13	PASS
Band 26/914 924)		НСН	\	13	PASS
Band 26(814-824)		LCH	١	13	PASS
	TM2/10M	MCH	5.45	13	PASS
		НСН	١	13	PASS



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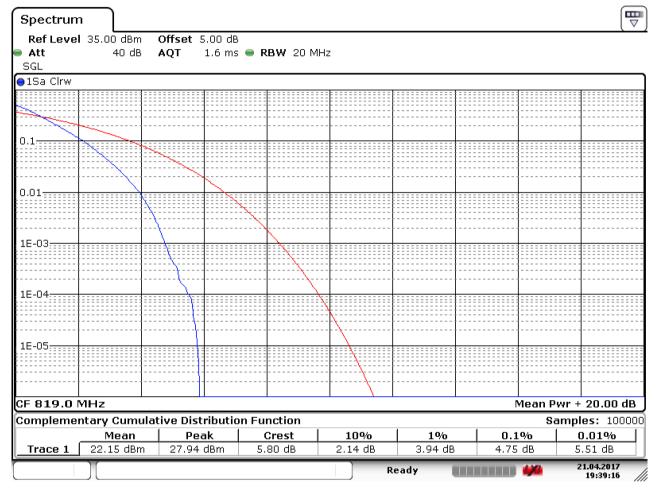
Part II - Test Plots

### 2.1 For LTE

### 2.1.1 Test Band = LTE band26(814-824)

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

2.1.1.1.1 Test Channel = MCH

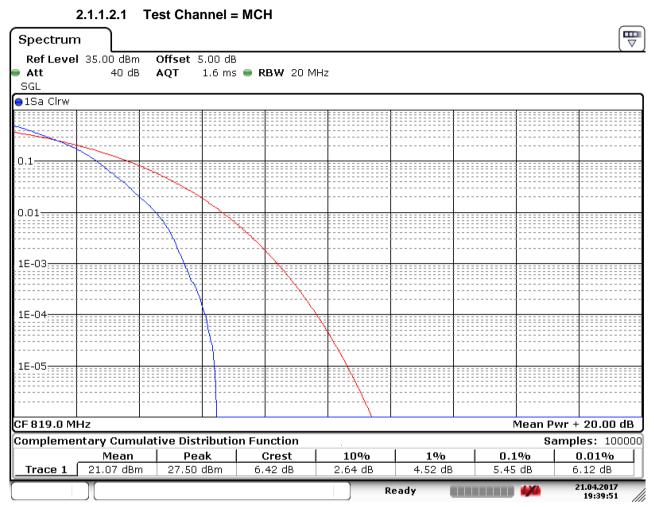


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#### 2.1.1.2 Test Mode = LTE/TM2.Bandwidth=10MHz



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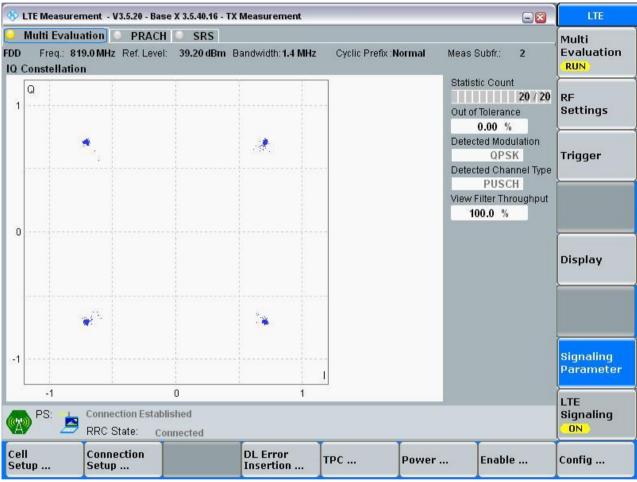
### **3 Modulation Characteristics**

### 3.1 For LTE

#### 3.1.1 Test Band = LTE band26(814-824)

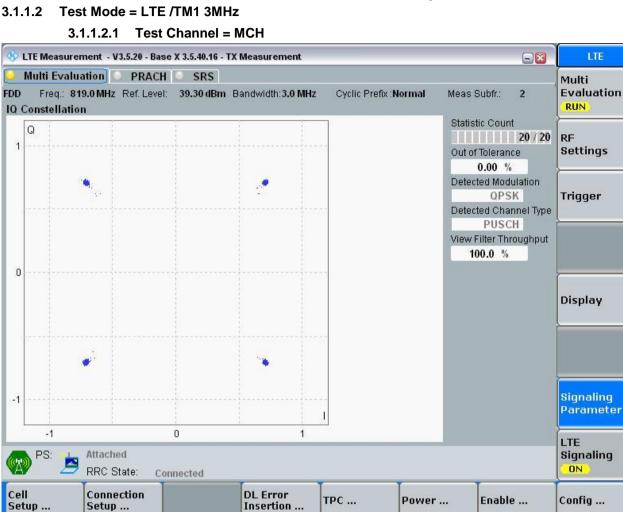
#### 3.1.1.1 Test Mode = LTE /TM1 1.4MHz

#### 3.1.1.1.1 Test Channel = MCH



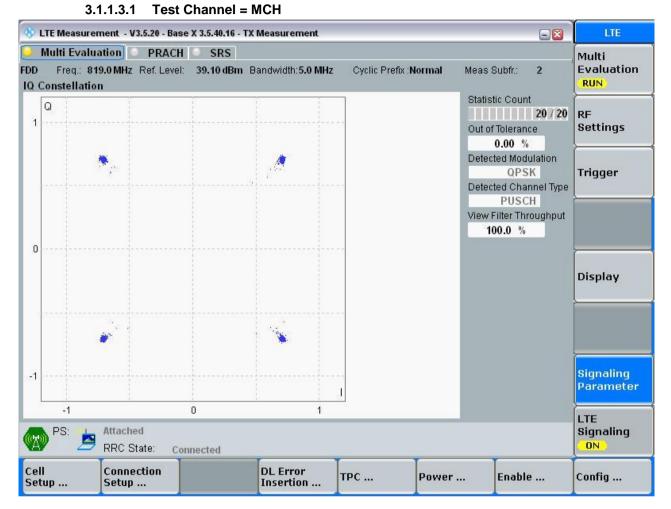


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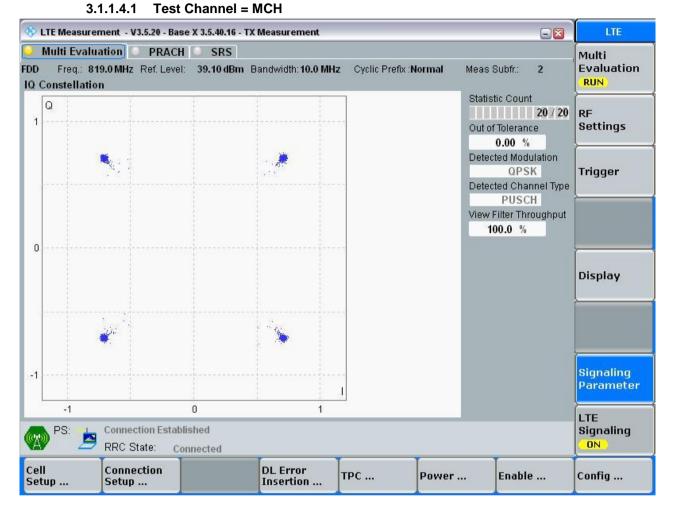
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### 3.1.1.3 Test Mode = LTE /TM1 5MHz



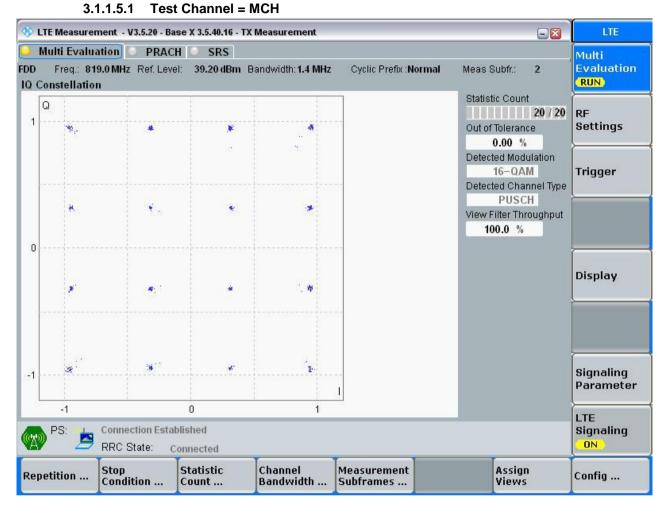
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### 3.1.1.4 Test Mode = LTE /TM1 10MHz



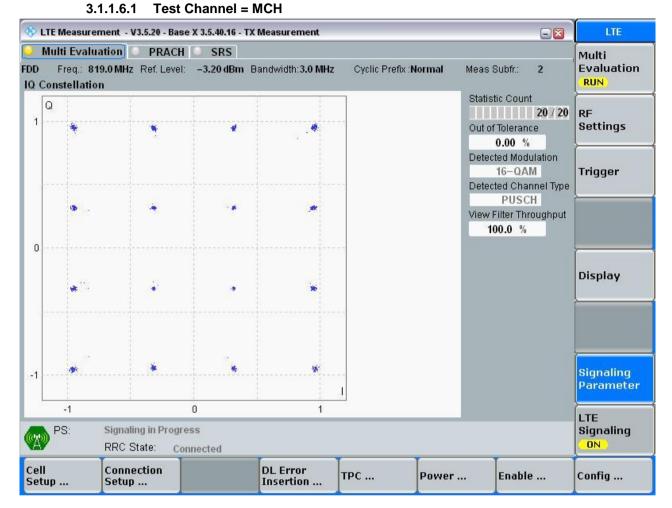
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### 3.1.1.5 Test Mode = LTE /TM2 1.4MHz



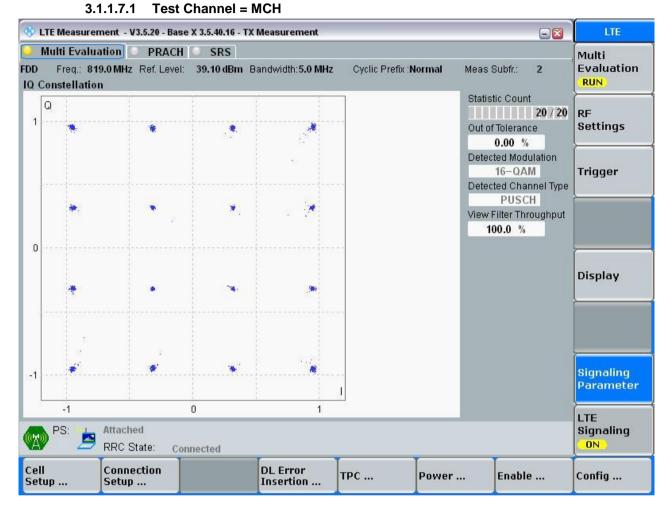
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### 3.1.1.6 Test Mode = LTE /TM2 3MHz



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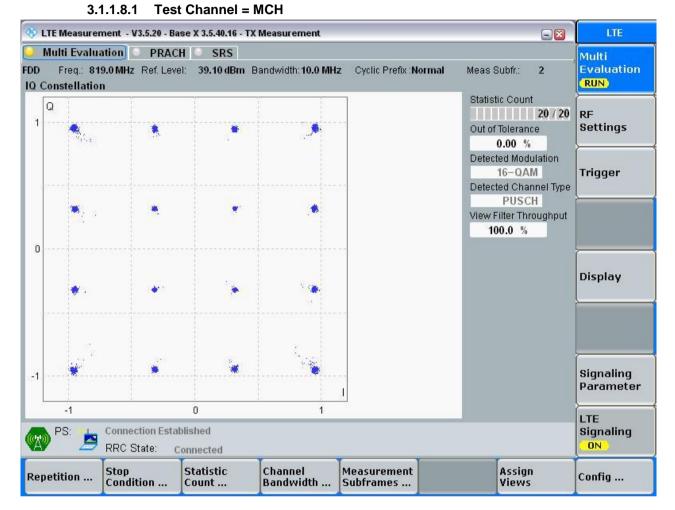


### 3.1.1.7 Test Mode = LTE /TM2 5MHz

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



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### 4 Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
		LCH	1.10	1.36	PASS
	TM1/1.4MHz	MCH	1.11	1.32	PASS
		HCH	1.10	1.33	PASS
		LCH	1.10	1.31	PASS
	TM2/1.4MHz	MCH	1.10	1.33	PASS
		HCH	1.10	1.33	PASS
		LCH	2.69	2.97	PASS
	TM1/ 3MHz	MCH	2.69	2.96	PASS
		HCH	2.69	2.93	PASS
		LCH	2.69	2.97	PASS
	TM2/3MHz	MCH	2.69	2.94	PASS
Band26		HCH	2.69	2.93	PASS
(814-824)		LCH	4.50	4.98	PASS
(0	TM1/ 5MHz	MCH	4.50	4.98	PASS
		HCH	4.48	4.94	PASS
		LCH	4.50	4.95	PASS
	TM2/ 5MHz	MCH	4.49	4.95	PASS
		HCH	4.49	4.95	PASS
		LCH	١	١	PASS
	TM1/10MHz	MCH	8.99	9.89	PASS
		HCH	/	١	PASS
		LCH	/	١	PASS
	TM2/ 10MHz	MCH	8.97	9.69	PASS
		HCH	١	١	PASS



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#### Part II -Test Plots

### 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

Spectrun	n								
	l 35.00 dBm		5.00 dB 👄						
Att 1Pk View	40 dB	SWT 😑 SWT	10 ms 😑	<b>VBW</b> 100 ki	Hz Mode	Auto FFT			
OIPK VIEW					D	1[1]			-0.20 dB
30 dBm——					U	1[1]		1.	36360 MHz
					Occ Bw			1.1028	97103 MHz
20 dBm					M	1[1]			-8.53 dBm
	D1 17.350	dBm	TIMM	~~~~~~	m		1	814. I	00170 MHz
10 dBm			\ <del>7</del>			V V			
						\			
0 dBm			/			(			
0 0.0111		м1 /					Ν		
-10 dBm—	D2 -8,	650 dBm					Q1		
10 0.011		$\sim$					m	h	
	$\sim$							~~~	$\sim\sim\sim$
-20 4011									
00 d0									
-30 dBm—									
10 10									
-40 dBm—									
-50 dBm—									
-60 dBm—									
CF 814.7 M	⊥ MHz	1	1	1001	pts	1	1	Spa	n 3.0 MHz
					Mea	isuring		4/4	14.04.2017 17:33:50

Date: 14.APR.2017 17:33:51



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	4.1.1.1.2	Test Cha	nnel = MC	н					
Spectru	m								
Ref Lev	el 35.00 dBr	n Offset	5.00 dB 👄	<b>RBW</b> 30 kH	łz				
🔵 Att	40 di	B 👄 SWT	10 ms 👄	<b>VBW</b> 100 kH	lz Mode	Auto FFT			
😑 1Pk View	/								
					D	1[1]			-0.33 dB
30 dBm—								1.	31870 MHz
						cc Bw		1.1058	94106 MHz
20 dBm—					M	1[1]			-8.03 dBm
	D1 17.900	dBm	TIM	$\sim$	$\sim\sim\sim\sim$	$m_{\pi 2}$	1		33770 MHz I
10 dBm—			Ý			₹ V			
			17			1			
0 dBm			1			,			
		M1	1				01		
-10 dBm—	D2 -8	.100 dBm 🗡					T T		
		land					$ $ $\sim \sim$	~	
-20 dBm-	to and	Y~~					~ • • •	1 how	m
-20 ubiii—									
-30 dBm—									
-40 dBm—									
-50 dBm—									
-50 übili—									
-60 dBm—									
CF 819.0	 MHz			1001	nts			 Şna	n 3.0 MHz
	1 12			1001				•	
L					Mea	suring			17:34:53

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	4.1.1.1.3	Test Cha	nnel = HC	Н					
Spectru	n								
Ref Leve	el 35.00 dBn	n Offset	5.00 dB 🔵	<b>RBW</b> 30 ki	Ηz				
🔵 Att	40 dE	B 👄 SWT	10 ms 👄	<b>VBW</b> 100 k	Hz Mode	Auto FFT			
😑 1Pk View									
					D	1[1]			-0.34 dB
30 dBm—									33370 MHz
						CC BW		1.1028	97103 MHz
20 dBm	-D1 17.380				M	1[1]		000	-8.38 dBm 64670 MHz
	TUI 17,380	цыпі І	Time	mm	~~~~~	ma.		022.	
10 dBm			1			12			
0 dBm						\			
o abiii			l i				N		
	o	M1/ 620 dBm					<b>Q</b> 1		
-10 dBm—	02 -0.						1	a .	
0							$\sim$	M	
,∠2\ordBm/_,	<b>-</b> ~~~~								m
-30 dBm—									
-40 dBm—									
-+0 ubiii									
-50 dBm—									
-60 dBm—									
CF 823.3	 MHz			1001	nts			 Sna	n 3.0 MHz
				1001					11 3.0 11112
L					Mea	suring			17:37:34

Date: 14.APR.2017 17:37:35



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₽

Span 3.0 MHz

14.04.2017

17:32:50

#### 4.1.1.2.1 Test Channel = LCH Spectrum Ref Level 35.00 dBm Offset 5.00 dB 👄 RBW 30 kHz 40 dB 🖷 SWT 10 ms 👄 **VBW** 100 kHz Att Mode Auto FFT ●1Pk View D1[1] -0.42 dB 30 dBm-1.31270 MHz Occ Bw 1.099900100 MHz -9.48 dBm M1[1] 20 dBm-814.04370 MHz D1 16.350 dBm-Τ1 10 dBm-0 dBm-М‡ =D2 -9.650 dBm= -10 dBm--20 dBm--30 dBm--40 dBm· -50 dBm--60 dBm-

1001 pts

Measuring...

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

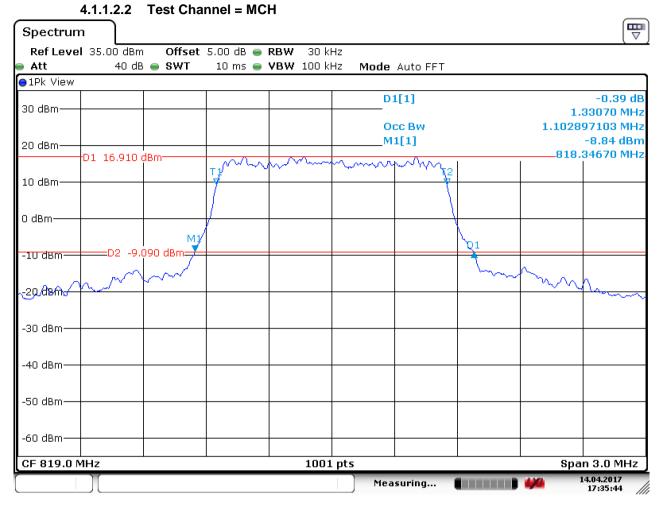
Date: 14.APR.2017 17:32:51

CF 814.7 MHz

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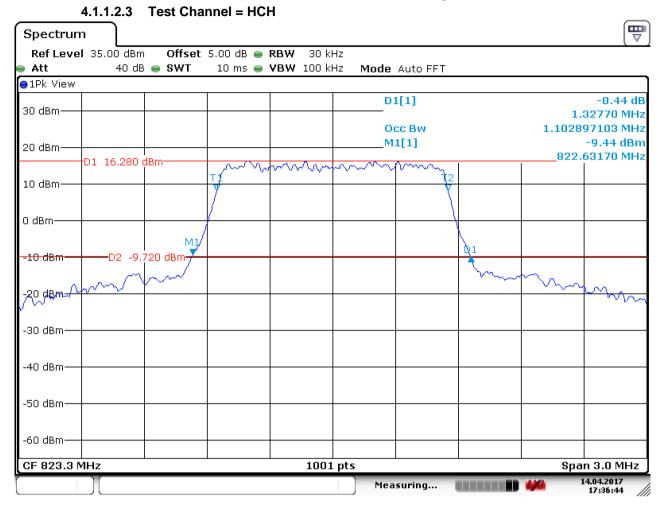
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Date: 14.APR.2017 17:36:44



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	4.1.1.3.1	Test Cha	nnel = LCH						_
Spectru	im 🗋								
Ref Lev	el 35.00 dBn	n Offset	5.00 dB 🥃 RB	<b>W</b> 30 kHz					
🔵 Att	40 dB	B 🔵 SWT	10 ms 👄 <b>VB</b>	<b>W</b> 100 kHz	Mode	Auto Sweep	כ		
😑 1Pk View	V								
					D1	l[1]			-1.35 dB
30 dBm—									97300 MHz
						cc Bw			08691 MHz
20 dBm—					M	1[1]			11.53 dBm 00750 MHz
	D1 13.820	dBm <del></del>					T2	014.	
10 dBm—			www.w	www.w	monthly	mhrwhh	/\v7		
0 dBm									
o abiii									
		Mź							
-10 dBm—	D2 -12	2.180 dBm					- ģī		
							₹	Λ	
᠕ᡒᢆᢩᠿᢦᡌᡛ᠓ᡪᢇ	and the second	177° Y					"Unga	wallowed allow	n man man
-30 dBm—									
-40 dBm—									
-50 dBm—									
-60 dBm—									
CF 815.5	 . MHz			1001 p	ts			Sna	n 6.0 MHz
				1001 h	<u> </u>			-	4.04.2017
L					Mea	suring		44	17:31:26

4.1.1.3 Test Mode = LTE/TM1 3MHz

Date: 14.APR.2017 17:31:27



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	4.1.1.3.2	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		B 🔵 SWT	10 ms 😑 '	<b>VBW</b> 100 kł	Hz Mode	Auto Swee	р			
●1Pk View	·									
30 dBm—					D	1[1]			-0.23 dB	
30 ubiii										
						1[1]			08691 MHz 11.61 dBm	
20 dBm—						-[-]			51950 MHz	
	D1 14.340	dBm T1a	minh	A atalan ara l	n.M. An	and war an	172 1 m 177			
10 dBm—		7	1.000 .010	· // · // /// //	w	4 4 · · · · · ·				
0 dBm										
-10 dBm—		M1					41			
	D2 -1:	1.660 dBm								
-20.dBm-+		hind					here			
~20-dBMJ	man							rowwww	monthing	
-30 dBm—										
-30 ubiii—										
-40 dBm—										
-50 dBm—										
-60 dBm—										
CF 819.0	 MHz			1001	nts			 Sna	n 6.0 MHz	
				1001						
L					Mea	suring		440	17:27:42 //	

Date: 14.APR.2017 17:27:42



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	4.1.1.3.3	3 Tes	t Chan	nel = HCł	-					
Spectru	m									
Ref Lev	el 35.00 d	lBm C	offset s	5.00 dB 😑 I	<b>RBW</b> 30 k	Hz				
🔵 Att	40	dB 🔵 S	WT	10 ms 😑 '	<b>VBW</b> 100 k	Hz Mode	Auto Swee	p		
😑 1Pk View	1									
						D	1[1]			-1.24 dB
30 dBm—										93110 MHz
							cc Bw		2.6913	08691 MHz
20 dBm—						M	1[1]		0.0.1	-9.61 dBm 03750 MHz
	D1 15.34	40 dBm—				N.	I.	D T 2	821.	U373U MHZ
10 dBm—			- Thu	hann	mound	may	Mr.	- Witz		
			- [ ]							
0 dBm			- [ ]							
U UBIII										
			M#					1		
-10 dBm—	D2	-10.660 (	d₿m <del>=</del>							
			1					$1 \leq 1$		
-20 dBm—	A sate of	- Anart							mount	
mound	all a start									my year vou
-30 dBm—										
SO GDIII										
-40 dBm—										
-50 dBm—										
-60 dBm—								-		
CF 822.5	MHz				1001	l pts				n 6.0 MHz
	L J					Mea	suring		444	14.04.2017 17:26:14

Date: 14.APR.2017 17:26:15



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#### 4.1.1.4.1 Test Channel = LCH ₽ Spectrum Ref Level 35.00 dBm Offset 5.00 dB 👄 RBW 30 kHz 40 dB 🖷 SWT 10 ms 👄 **VBW** 100 kHz Att Mode Auto Sweep ●1Pk View D1[1] -1.14 dB 30 dBm-2.96700 MHz Occ Bw 2.691308691 MHz -11.97 dBm M1[1] 20 dBm-814.00750 MHz D1 13.980 dBmmound month TIA role 10 dBm-10000 0 dBm-M -10 dBm--D2 -12.020 aBm-M AD AM ℊ₴₢₊₫₿₥ℯℯ∕⁴ man L A -30 dBm--40 dBm· -50 dBm--60 dBm-CF 815.5 MHz 1001 pts Span 6.0 MHz 14.04.2017 Measuring... 17:30:17

4.1.1.4 Test Mode = LTE/TM2 3MHz

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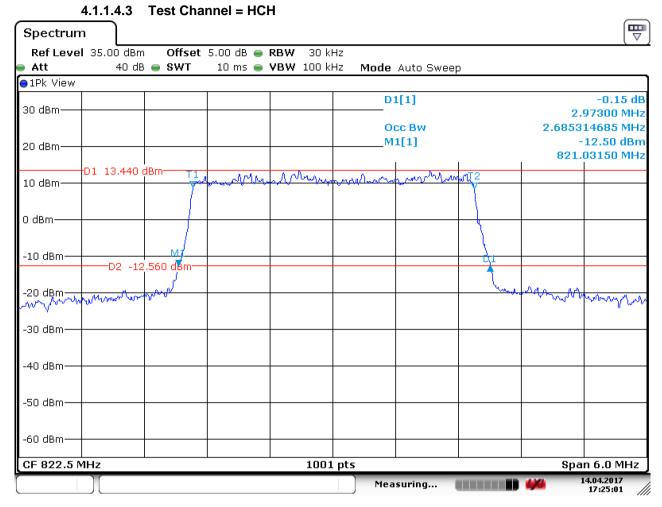
Spectrum	<u>,                                     </u>								
	I 35.00 dBm		5.00 dB 👄						
Att 1Pk View	40 aB	e swt	IU ms 📟	<b>VBW</b> 100 kł	HZ Mode	Auto Swee	эр		
30 dBm						1[1] cc Bw			-0.52 dB 93710 MHz 08691 MHz
20 dBm						1[1]		-	12.41 dBm 52550 MHz
10 dBm	D1 13.500 (	dBm T1	2mmrA.A.	ക്രഹംവുകുഷ്ണം.	manMAs	n	murt <sup>2</sup>		
0 dBm							+		
-10 dBm	D2 -12	.500 dBm-					<u> </u>		
-20 dBm	Joner and the second	Asserved					- Trace	Monoral y	www.
-30 dBm									
-40 dBm									
-50 dBm									
-60 dBm									
CF 819.0 M	1Hz			1001	pts			Spa	n 6.0 MHz
	)[					suring		-	14.04.2017 17:29:03

4.1.1.4.2 Test Channel = MCH

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#### 4.1.1.5.1 Test Channel = LCH ₽ Spectrum Ref Level 35.00 dBm Offset 5.00 dB 👄 RBW 50 kHz 40 dB 🖷 SWT 10 ms 👄 **VBW** 200 kHz Att Mode Auto Sweep ●1Pk View D1[1] -0.53 dB 30 dBm-4.97500 MHz Occ Bw 4.495504496 MHz -11.49 dBm M1[1] 20 dBm-813.99300 MHz FI War have a mar and the market and the second D1 14.480 dBm mon 10 dBm-0 dBm-M3 -10 dBm--D2 -11.520 dBm<sup>.</sup> 120 d8m-5 -30 dBm--40 dBm· -50 dBm--60 dBm-Span 10.0 MHz CF 816.5 MHz 1001 pts 14.04.2017 Measuring... ----17:19:22

4.1.1.5 Test Mode = LTE/TM1 5MHz

Date: 14.APR.2017 17:19:22



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	4.1.1.5.2	Test Cha	nnel = MC	н					
Spectru	m								
Ref Leve	el 35.00 dBn	n Offset	5.00 dB 👄	<b>RBW</b> 50 ki	Ηz				
🗕 Att	40 dE	B 👄 SWT	10 ms 👄	<b>VBW</b> 200 ki	Hz Mode	Auto Swee	р		
⊖1Pk View									
00 JD					D	1[1]			-1.70 dB
30 dBm—					_	_			97500 MHz
						CC BW			04496 MHz
20 dBm—					IVI	1[1]			11.43 dBm 53200 MHz
	D1 14.070	dBm <del>T</del>			, ոնս	-	<u>  72</u>	010.	
10 dBm—	_	Dar	monand	Winhow	multin and	~~~~~~~~~~~~	1 V V		
0 dBm									
0 0.0111							$  \rangle$		
10.10		мź							
-10 dBm—	D2 -1:	1.930 dBm—					<u>n</u>		
							٦.		
<sub>ч</sub> -20∕ḋ₿тҥ <sub>Ҁ</sub> ∕	and the second and th	front -					1.00/14	warman and	m m
									- vri
-30 dBm—									
-40 dBm—									
FO do-									
-50 dBm—									
-60 dBm—									
CF 819.0	 MHz			1001	pts		1	Span	10.0 MHz
(	) (					suring			14.04.2017
						surniy			17:17:43

Date: 14.APR.2017 17:17:43



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	4.1.1.5.3	Test Cha	nnel = HCl	4					
Spectrur	n								
Ref Leve	el 35.00 dBn	n Offset	5.00 dB 😑	<b>RBW</b> 50 kł	Ηz				
🖷 Att	40 dB	B 👄 SWT	10 ms 👄	<b>VBW</b> 200 kł	Hz Mode	Auto Swee	р		
⊖1Pk View									
00 d0					D	1[1]			-0.21 dB
30 dBm—					_				94100 MHz
						CC BW			24476 MHz
20 dBm—					IVI	1[1]			11.81 dBm 05200 MHz
	D1 14.150	I dBm <del>T1</del>		dı		- Do	1 J2	019.	
10 dBm		- W	www.m	unnumber	mana	norder own	ην <del>Υ</del>		
0 dBm									
		MI							
-10 dBm—	D2 -1:	L.850 dBm					<u><u><u>q</u>1</u></u>		
							T <sub>u</sub>		
-20 dBm	for the second	Aura					bother	monologa	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
~~~ 'V									m ha
-30 dBm—									
-40 dBm—									
-40 ubiii—									
-50 dBm—									
-60 dBm—									
05 004 5	<u> </u>								
CF 821.5	MHZ			1001	pts				10.0 MHz
	Л				Mea	suring		4/4	14.04.2017 17:23:26

Date: 14.APR.2017 17:23:27



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	4.1.1.6.1	Test Cha	nnel = LCF	1					_	
Spectru	m									
Ref Lev	el 35.00 dBn	1 Offset	5.00 dB 🥌 I	<b>RBW</b> 50 ki	Hz				`	
🔵 Att	40 dE	B 🔵 SWT	10 ms 👄 '	<b>VBW</b> 200 ki	Hz Mode	Auto Swee	р			
😑 1Pk View	/									
					D	1[1]			-0.36 dB	
30 dBm—									94500 MHz	
									04496 MHz	
20 dBm—					M	1[1]			12.39 dBm 02200 MHz	
	D1 13.370	l dBm								
10 dBm—	DI 13.370	40m fra	Marka	mon	margara	mon	WY			
0 dBm										
o abiii										
		M					$  \rangle$			
-10 dBm—	D2 -12	2.630 dBm-					<u> </u>			
	0. 0. 0	h W								
,-20 <sup>7</sup> ∂8m <sup>™</sup>	unaman						ma	man	wwwwwww	
									~	
-30 dBm—										
-40 dBm—										
-50 dBm—										
-50 ubiii—										
-60 dBm—										
CF 816.5	MHz			1001	. pts	1	1	l Span	10.0 MHz	
(						suring		-	14.04.2017	
						surniy			17:20:42	

4.1.1.6 Test Mode = LTE/TM2 5MHz

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Spectrum	, )								
	35.00 dBm		5.00 dB 👄						
Att	40 dB	🖷 SWT	10 ms 👄	<b>VBW</b> 200 kł	Hz Mode	Auto Swee	р		
●1Pk View									
30 dBm					D	1[1]		4.	-1.63 dB 94500 MHz
	c					cc Bw			14486 MHz
20 dBm—					M	1[1]			11.47 dBm 53200 MHz
	D1 14.460 (	dBm		Λ			70	010.	50200 1112
10 dBm		- Jer	Mmm	mandum	3 Augure	Re_Allow	unge		
0 dBm									
-10 dBm	D211	M1 540 dBm—							
	02 -11						<b>₹</b>		
-20 dBm		a la					- Japa	the second second	www.
-30 dBm									
-30 UBIII									
-40 dBm									
-50 dBm									
-60 dBm									
CF 819.0 M	IHz		·	1001	pts	•		Span	10.0 MHz
					Mea	asuring		<b>4/4</b>	14.04.2017 17:16:35

4.1.1.6.2 Test Channel = MCH

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Spectrum	'n								
Ref Level	35.00 dBm	n Offset	5.00 dB 👄	<b>RBW</b> 50 ki	Ηz				
Att	40 dE	B 😑 SWT	10 ms 😑	<b>VBW</b> 200 ki	Hz Mode	Auto Swe	ер		
●1Pk View									
30 dBm					D	1[1]		4.	-0.50 dB 95100 MHz
						cc Bw			14486 MHz
20 dBm					W	1[1]			12.32 dBm 04200 MHz
10 dBm	D1 13.320	dBm <u>Tim</u>	mm	-	noun	munt	ww.		
		j j							
0 dBm									
-10 dBm		м							
10 0.011		2.680 dBm-							
-20 dBm	which the Art	ww						ob <del>ran vin</del>	man hard
-30 dBm									
-40 dBm									
-50 dBm									
-60 dBm									
CF 821.5 M	1Hz	1	1	1001	pts	1			10.0 MHz
					Mea	suring		<b>4/4</b>	14.04.2017 17:22:16

#### 4.1.1.6.3 Test Channel = HCH

Date: 14.APR.2017 17:22:16



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#### 4.1.1.7.1 Test Channel = MCH ₽ Spectrum Ref Level 35.00 dBm Offset 5.00 dB 👄 RBW 100 kHz 40 dB 🖷 SWT 10 ms 👄 **VBW** 300 kHz Att Mode Auto Sweep ●1Pk View D1[1] -0.69 dB 30 dBm-9.8900 MHz Occ Bw 8.991008991 MHz -11.26 dBm M1[1] 20 dBm-814.0450 MHz D1 14.410 dBm-TIN man marine way way advant 10 dBm-0 dBm-M1 -10 dBm--D2 -11.590 dBm<sup>.</sup> Monn Just -20 dBm the manufacture of the second -30 dBm--40 dBm· -50 dBm--60 dBm-Span 20.0 MHz CF 819.0 MHz 1001 pts 14.04.2017 Measuring... 17:15:05

4.1.1.7 Test Mode = LTE/TM1 10MHz

Date: 14.APR.2017 17:15:05



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	4.1.1.8.1	Test Cha	nnel = MCH						
Spectrun	n								
Ref Leve	I 35.00 dBr	n Offset	5.00 dB 🥌 RI	<b>BW</b> 100 kH	Ηz				
🖷 Att	40 di	B 👄 SWT	10 ms 🔵 <b>V</b> l	<b>BW</b> 300 kH	lz Mode	Auto Swee	p		
⊖1Pk View									
					D	1[1]			-0.52 dB
30 dBm									.6900 MHz
						cc Bw		8.971028971 MHz	
20 dBm					M	1[1]			10.87 dBm 1650 MHz
	D1 15.050	dBm T1				1 6	1 70	014	F. 1030 MHZ
10 dBm		- Vin	howhang	money	manhan	numul	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
							11		
0 dBm							1 1		
0 46111									
		мź					7		
-10 dBm—	D2 -1	0.950 d <mark>8</mark> m—							
	0	المور و م					1 2		
-20 dBm	Amender	www.					Mark	hall how have	and white
Second .									- Mar
-30 dBm									
-40 dBm									
-40 ubiii									
-50 dBm—									
-60 dBm—									
CF 819.0 r				1001	nte				00.0 MU-
[ CF 019.0				1001			-		20.0 MHz
					Mea	suring		4/4	17:13:19

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

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#### 5 Band Edges Compliance

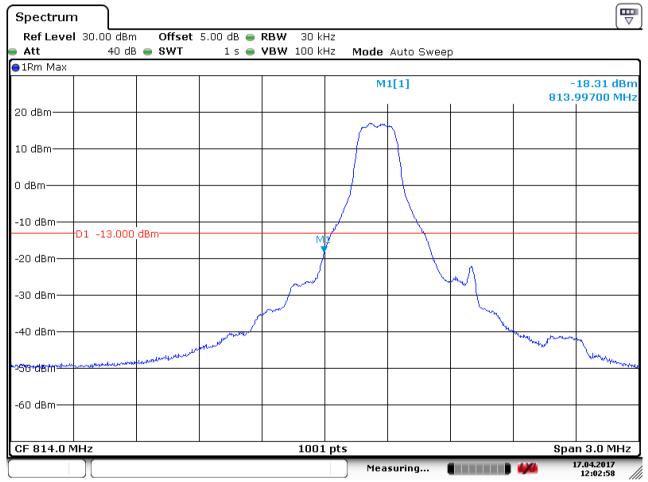
#### 5.1 For LTE

#### 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 Test RB=1RB

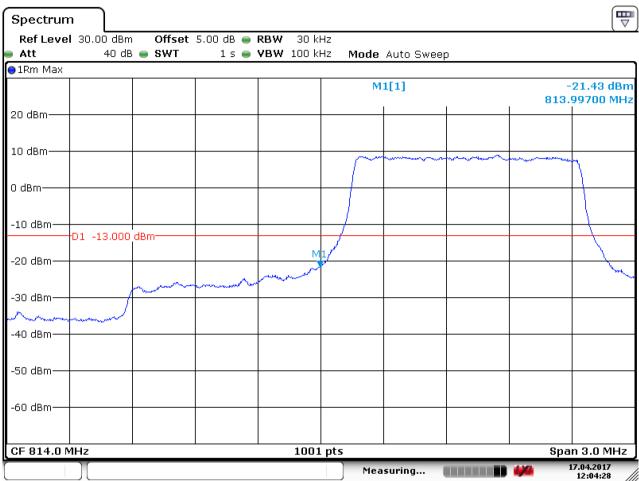


Date: 17.APR.2017 12:02:59

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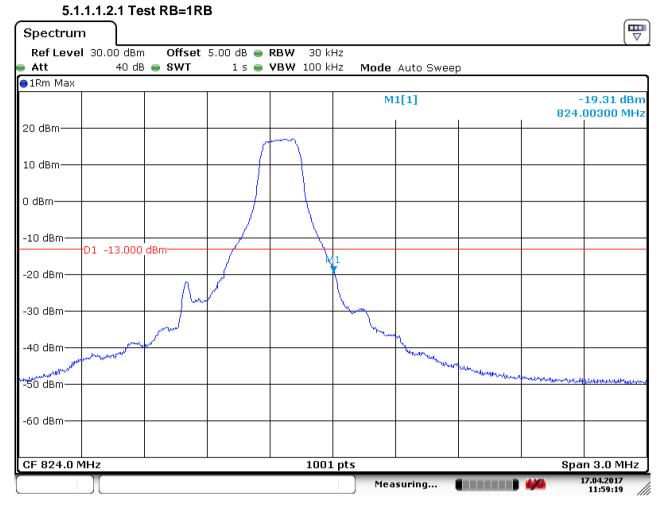


5.1.1.1.1.2 Test RB=6RB

Date: 17.APR.2017 12:04:28



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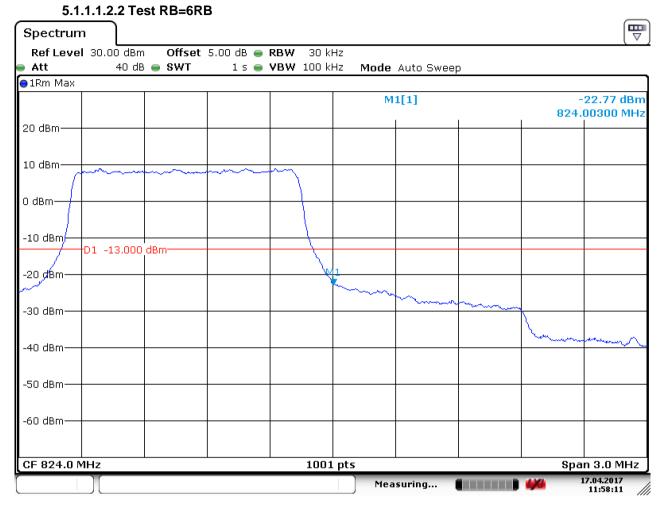


#### 5.1.1.1.2 Test Channel = HCH

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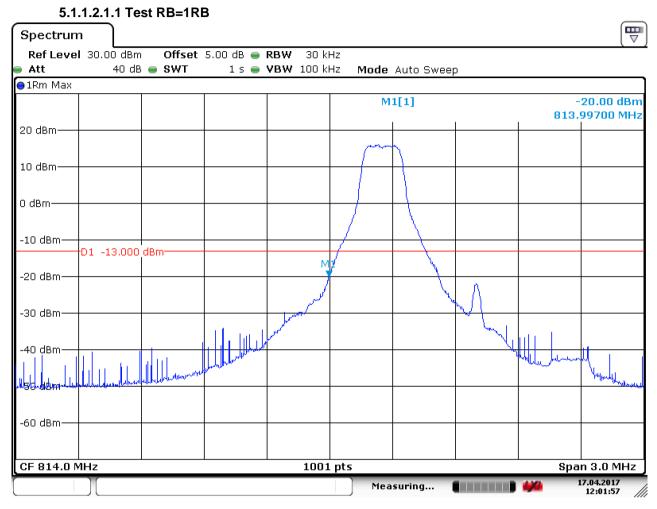
Date: 17.APR.2017 11:58:12



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

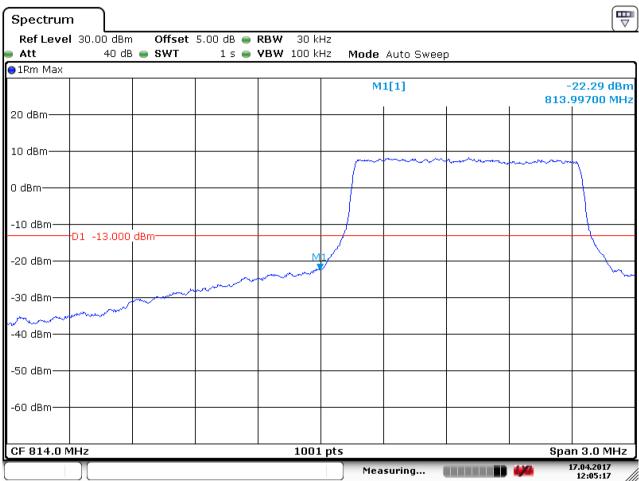
#### 5.1.1.2.1 Test Channel = LCH



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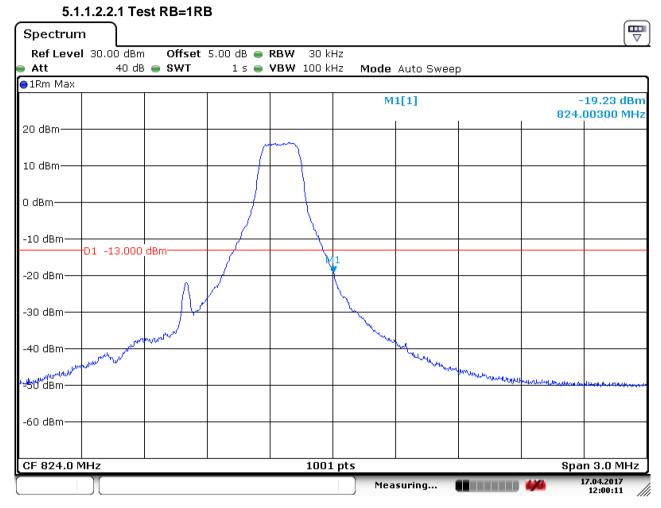


5.1.1.2.1.2 Test RB=6RB

Date: 17.APR.2017 12:05:17



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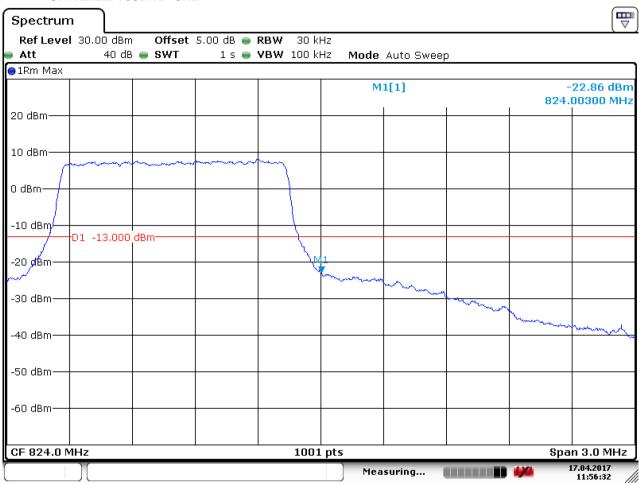


#### 5.1.1.2.2 Test Channel = HCH

Date: 17.APR.2017 12:00:11



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5.1.1.2.2.2 Test RB=6RB

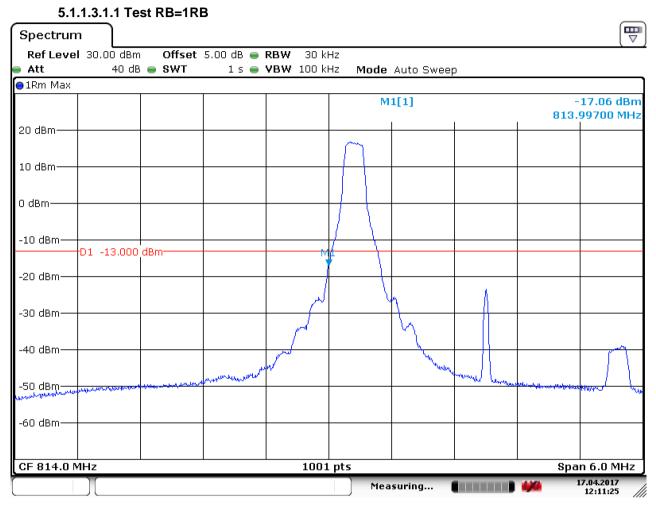
Date: 17.APR.2017 11:56:33



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

#### 5.1.1.3.1 Test Channel = LCH



Date: 17.APR.2017 12:11:25



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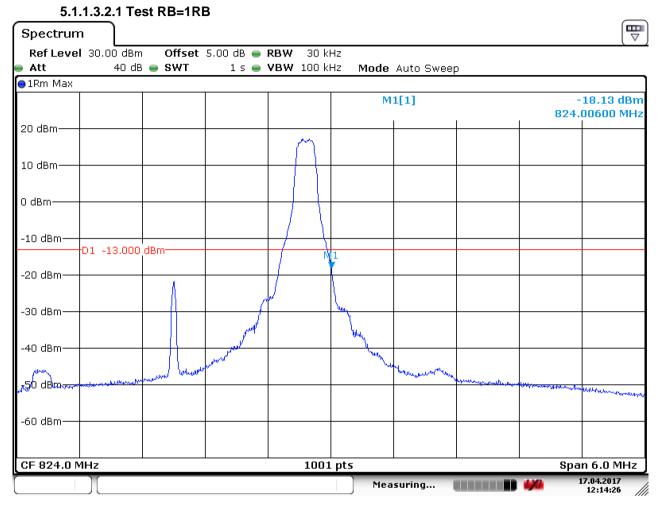
5.1.	.1.3.1.2 Te	st RB=15	RB							
Spectrum	ι									
Ref Level	30.00 dBm	o Offset	5.00 dB 👄	<b>RBW</b> 30 ki	Hz					
e Att	40 dB	s 🔵 SWT	1 s 👄	<b>VBW</b> 100 ki	Hz	Mode	Auto Swee	o		
⊖1Rm Max										
						M	1[1]			23.87 dBm
20 dBm									813.	99700 MHz 
20 0011										
10 dBm										
a 15					ſ	rano	marine	munh	man	mont
0 dBm										
-10 dBm—	D1 -13.000	dBm								
	01 10,000									
-20 dBm—				M	ţ					$\vdash$
				mont	ĺ					` ا
-30 dBm	and the second		and the second	person a constant						
~40.dBm										
-50 dBm—										
-60 dBm—										
CF 814.0 M	111-7			1001	nte					n 6.0 MHz
				1001	. prs				-	11 0.0 11112
						Mea	suring		444	12:10:45 //

Date: 17.APR.2017 12:10:45



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Date: 17.APR.2017 12:14:27



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Spectrum									
Ref Level	30.00 dBm	Offset	5.00 dB 👄	<b>RBW</b> 30 k	Hz				(
Att 🗧	40 dB	🖷 SWT	1 s 👄	<b>VBW</b> 100 k	Hz Mode	Auto Swe	ер		
😑 1Rm Max									
					M1[1] -25 824.00				
20 dBm									
10 dBm									
0 dBm	wante warde	han an a	manner	and we wanted and a second					
-10 dBm	D1 -13.000	dBm							
-20 dBm				$ \rightarrow $	1				
-30 dBm					human	all marker and a second	-		
-40 dBm								man	- Contraction
-50 dBm									
-60 dBm									
CF 824.0 M	Hz			1001	pts			 Spa	n 6.0 MHz
	][					suring		-	7.04.2017 12:15:13 //

5.1.1.3.2.2 Test RB=15RB

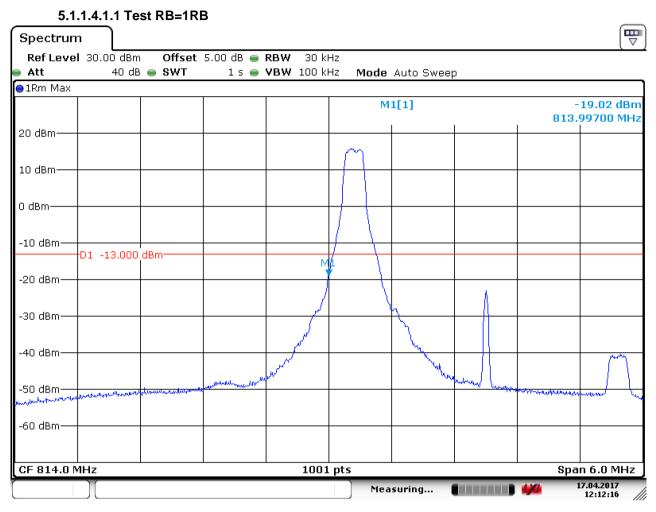
Date: 17.APR.2017 12:15:13



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

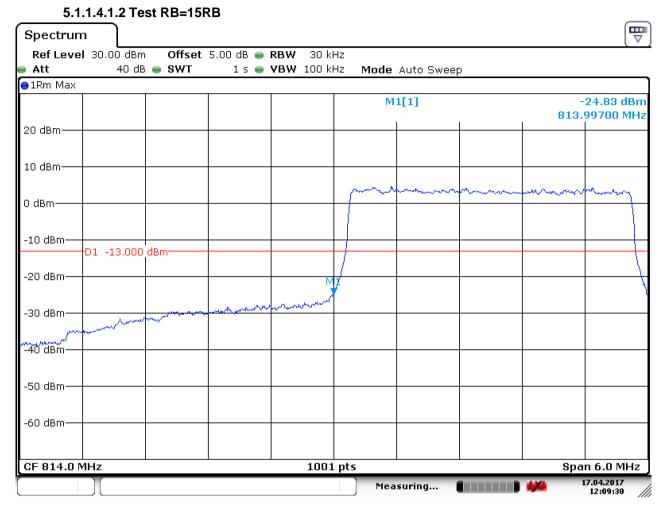
#### 5.1.1.4.1 Test Channel = LCH



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



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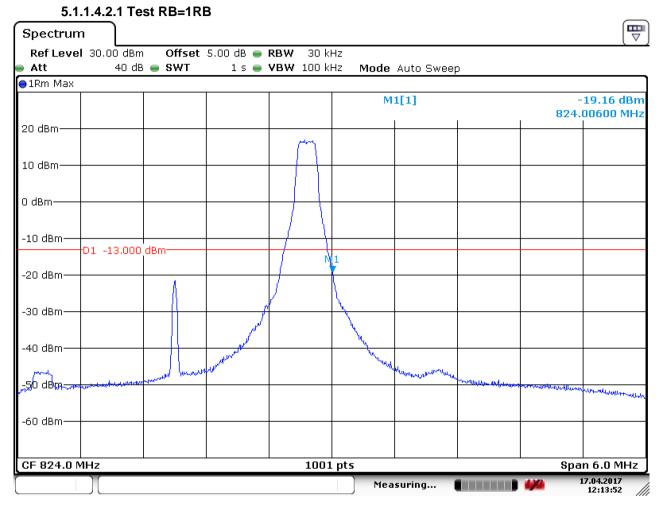


Date: 17.APR.2017 12:09:31



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Date: 17.APR.2017 12:13:51



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Spectrum	, J								
Ref Level	30.00 dBm	Offset	5.00 dB 👄	<b>RBW</b> 30 k	:Hz				
🖷 Att	40 dB	🔵 SWT	1 s 👄	<b>VBW</b> 100 k	Hz Mode	Auto Swee	р		
⊖1Rm Max									
					M	1[1]			24.87 dBm 00600 MHz
20 dBm									
10 dBm									
0 dBm	- Ann Maharan	-nyayanaa ya yaa	adje ware and more	manan					
-10 dBm									
-20 dBm	D1 -13.000	dBm							
/				Ą	1 Mulana				
-30 dBm——						and and a second se	when we wanted	month	\$
-40 dBm									South of the second
-50 dBm									
-60 dBm									
CE 024 0 M				100	1 ptc				n 6 0 MU-
CF 824.0 M				100.	1 pts	_	-	-	n 6.0 MHz
	Л				Mea	isuring		<b>4/4</b>	12:15:48

#### 5.1.1.4.3 Test RB=15RB

Date: 17.APR.2017 12:15:49

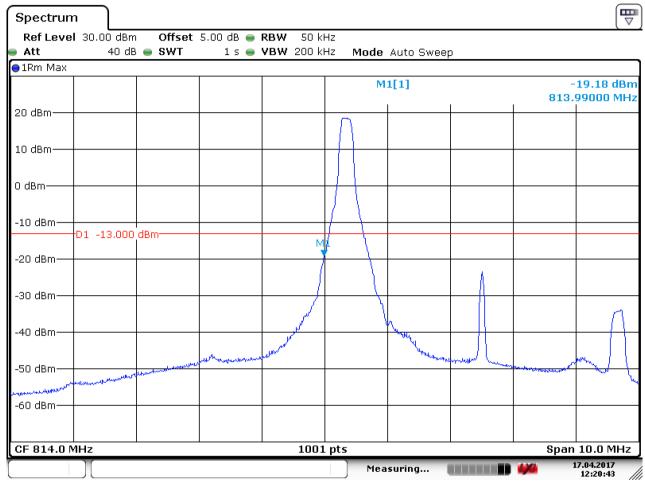


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#### 5.1.1.5 Test Mode = LTE/TM1 5MHz

#### 5.1.1.5.1 Test Channel = LCH

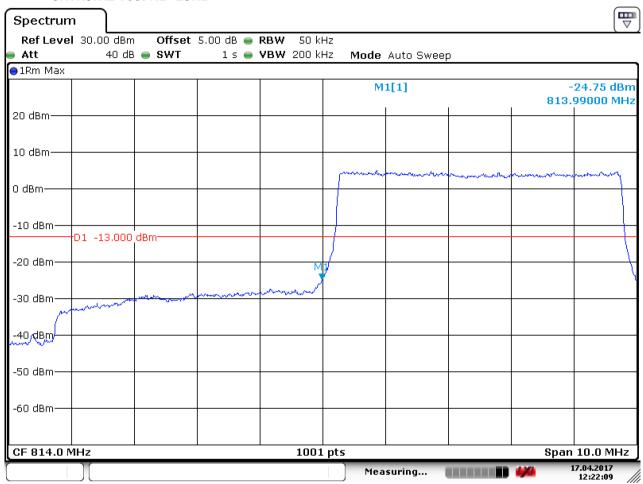
#### 5.1.1.5.1.1 Test RB=1RB



Date: 17.APR.2017 12:20:43



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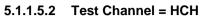


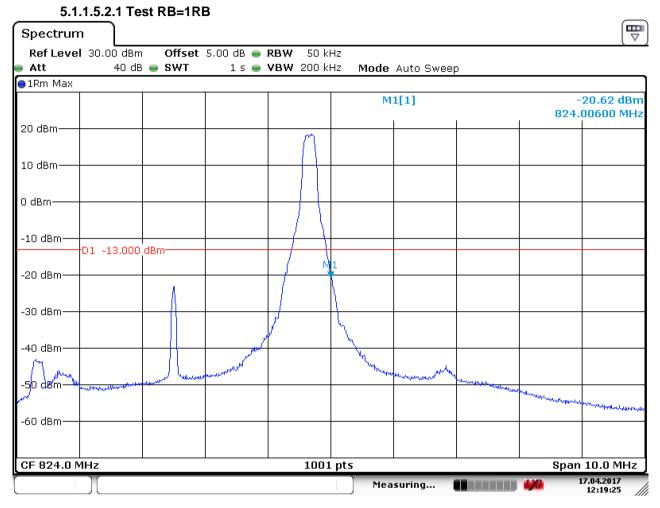
5.1.1.5.1.2 Test RB=25RB

Date: 17.APR.2017 12:22:10



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Date: 17.APR.2017 12:19:26



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Spectrum									
Ref Level Att	30.00 dBm 40 dB	Offset SWT	5.00 dB 👄 1 s 👄	<b>RBW</b> 50 k <b>VBW</b> 200 k		Auto Swee	90		
●1Rm Max							- F		
					м	1[1]			25.41 dBm 00600 MHz
20 dBm									
10 dBm									
0 dBm									
-10 dBm	D1 -13.000	dBm							
-20 dBm				<u>}</u>	1				
-30 dBm									~
-40 dBm									han
-50 dBm									
-60 dBm									
CF 824.0 M	Hz			100	l pts			 Span	10.0 MHz
(	][					isuring			7.04.2017 12:17:03

5.1.1.5.2.2 Test RB=25RB

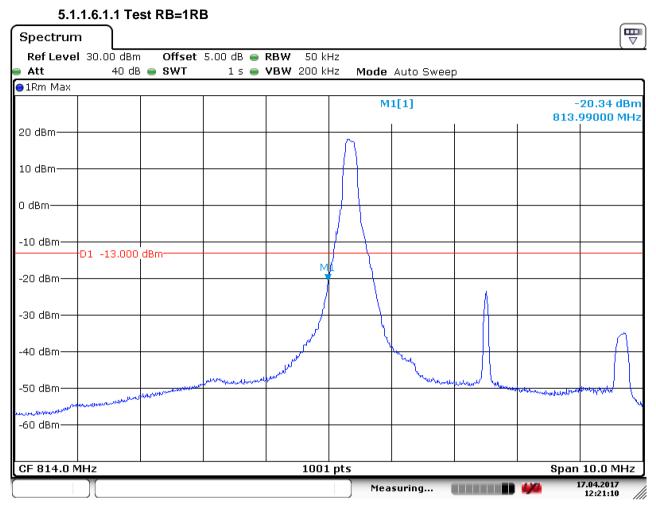
Date: 17.APR.2017 12:17:04



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

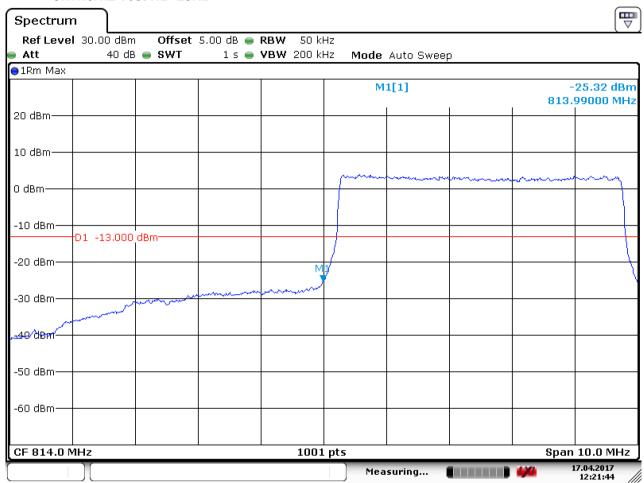
#### 5.1.1.6.1 Test Channel = LCH



Date: 17.APR.2017 12:21:10



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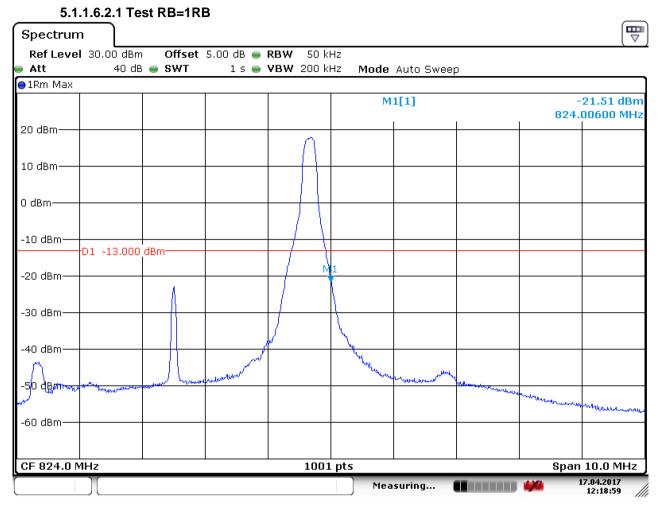
5.1.1.6.1.2 Test RB=25RB

Date: 17.APR.2017 12:21:44



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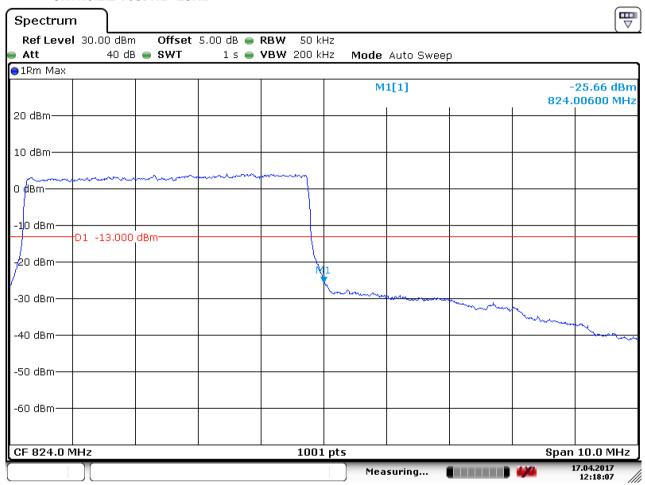




Date: 17.APR.2017 12:18:59



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5.1.1.6.2.2 Test RB=25RB

Date: 17.APR.2017 12:18:07

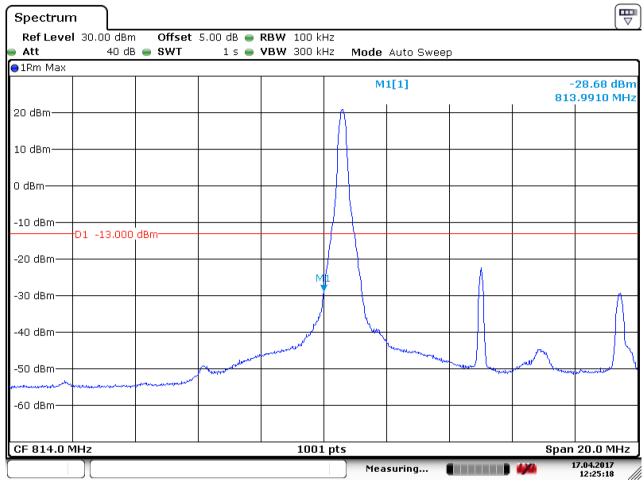


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#### 5.1.1.7 Test Mode = LTE/TM1 10MHz

#### 5.1.1.7.1 Test Channel = LCH

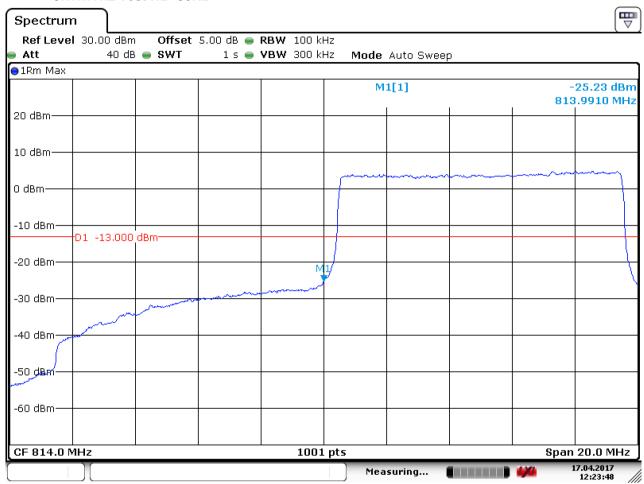
#### 5.1.1.7.1.1 Test RB=1RB



Date: 17.APR.2017 12:25:18



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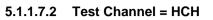


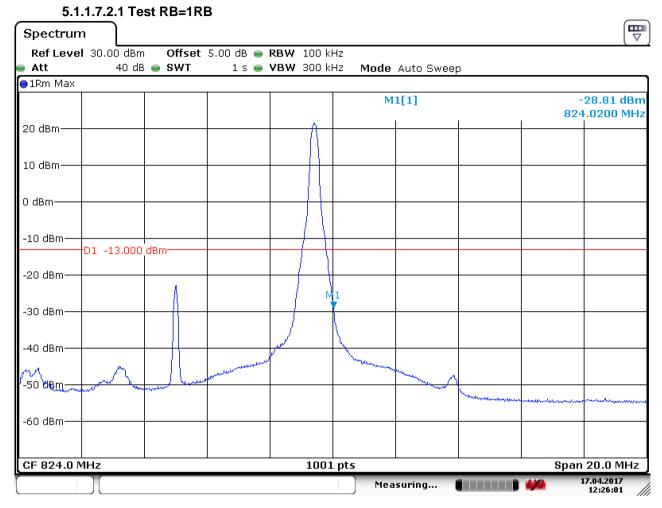
5.1.1.7.1.2 Test RB=50RB

Date: 17.APR.2017 12:23:48



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Date: 17.APR.2017 12:26:01



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Spectrum		31110-30							
Ref Level e Att	30.00 dBm 40 dB	Offset	5.00 dB 👄 1 s 👄	<b>RBW</b> 100 k <b>VBW</b> 300 k		Auto Swee	p		
⊖1Rm Max									•
					M	1[1]			26.87 dBm .0200 MHz
20 dBm——									
10 dBm									
0 dBm		gadad you and a second s		- entration -					
-10 dBm	D1 -13.000	dBm							
-20 dBm					1				
-30 dBm				``````````````````````````````````````			-		
-40 dBm									- Junior
-50 dBm									
-60 dBm									
CF 824.0 M	IHz			1001	L pts			 Span	20.0 MHz
(	)[				) Mea	suring		444	7.04.2017 12:27:38

5.1.1.7.2.2 Test RB=50RB

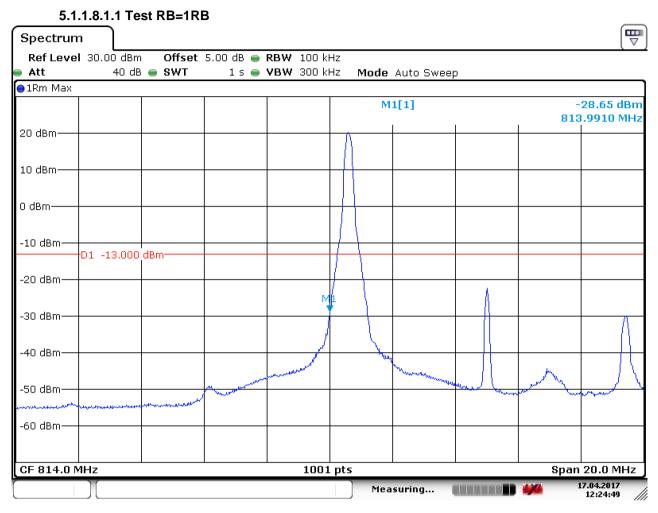
Date: 17.APR.2017 12:27:38



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

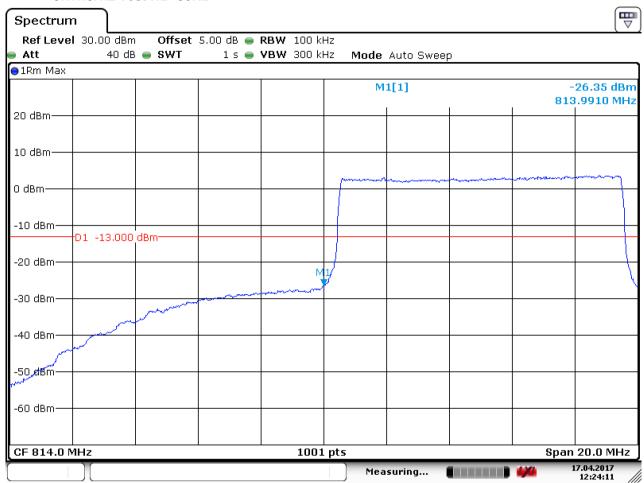
#### 5.1.1.8.1 Test Channel = LCH



Date: 17.APR.2017 12:24:49



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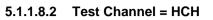


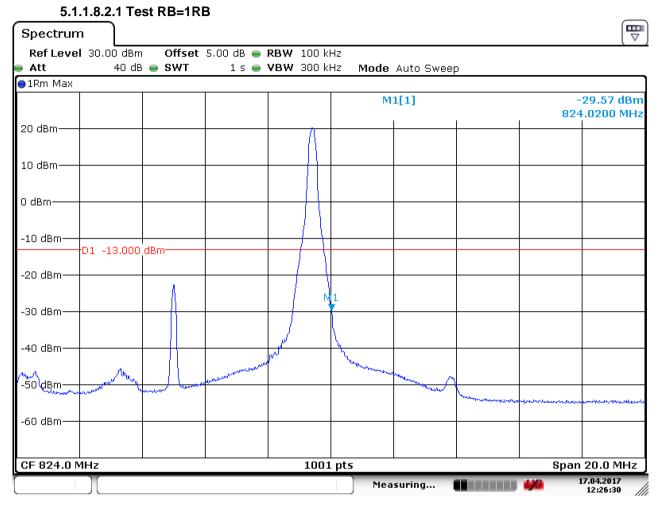
5.1.1.8.1.2 Test RB=50RB

Date: 17.APR.2017 12:24:12



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Date: 17.APR.2017 12:26:30



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5.1.1.8.2.2 Test RB=50RB

Date: 17.APR.2017 12:27:11



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#### 6 Spurious Emission at Antenna Terminal

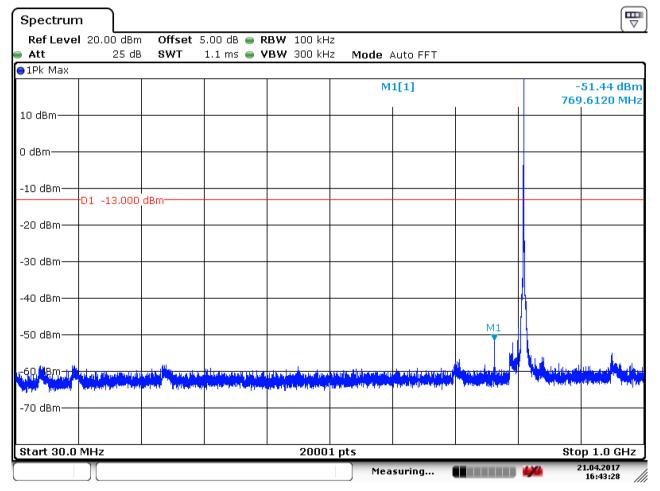
NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of < RBW/2 so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = k \* (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: 21.APR.2017 16:43:29

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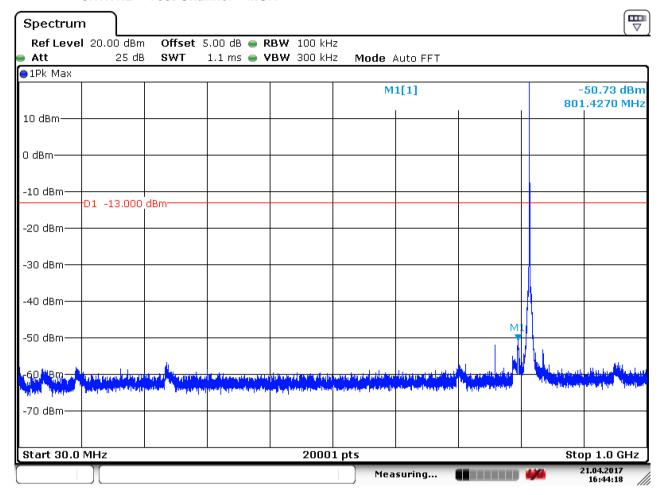
Report No.: SZEM170300261304 Page: 75 of 95

Spectrun	n							
	l 20.00 dBm		5.00 dB 👄 R					
Att 1Pk Max	25 dE	SWT	27 ms 🖷 🛛	BW 3 MHz	Mode Au	ito Sweep		
ULEK MON					м	1[1]		 32.80 dBm
								28840 GHz
10 dBm								
0 dBm——								
-10 dBm—								
-10 000	D1 -13.000	dBm						
-20 dBm								
-30 dB <mark>M</mark> 1								
-40 dBm					والملاقين والعلميان	in destitions		
		المعلمة معارطة سامران	a talah sa bi da taa in	ومنازله إسابته معريات				
₁ <mark>50,d8m</mark> ente	(And a standard standard	and the second second					n and factors and another the second	 Contracting in the later of
-60 dBm—								
-00 00111								
-70 dBm								
Start 1.0 (	 GHz			2000	1 pts			 10.0 GHz
	Υ					suring		1.04.2017
					·	-		16:41:51

Date: 21.APR.2017 16:41:51



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#### 6.1.1.1.2 Test Channel = MCH

Date: 21.APR.2017 16:44:18



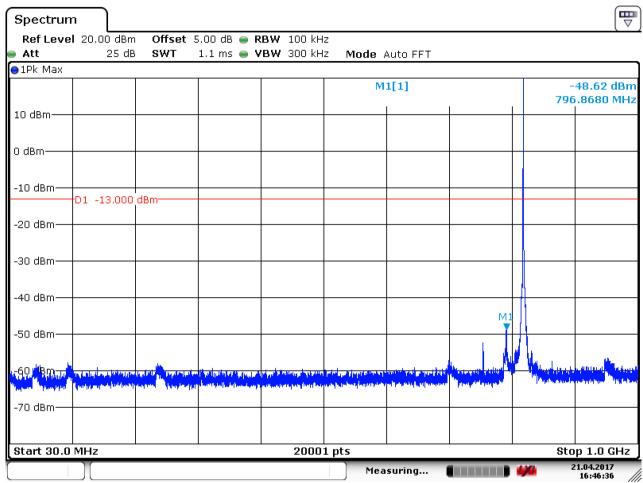
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Spectrun	n								
	l 20.00 dBn		5.00 dB 😑 R						· · · ·
Att	25 df	B SWT	27 ms 🖷 V	BW 3 MHz	Mode Au	ito Sweep			
⊖1Pk Max	1		1		54	1[1]			31.57 dBm
					171	1[1]			37390 GHz
10 dBm									
0 dBm									
-10 dBm—	-D1 -13,000	dBm							
-20 dBm—									
-30 dBm									
-40 dBm					h				
		والإسبانية فتراقعهم ويرار	and philiplemetries	والاستحابة المسجع		and the second second			
50µdBm <mark>ulu</mark>	dennen substitutere	Name of a strike to a	a a a a a a a a a a a a a a a a a a a	أمط مطولية إيكم الأمر المرابع مسروح			a dila a della diretta d		
-60 dBm									
-70 dBm									
Start 1.0 C	GHz			2000	1 pts			-	10.0 GHz
					Mea	suring		- <b>4/4</b> 2	1.04.2017 16:45:06

Date: 21.APR.2017 16:45:06



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6.1.1.1.3 Test Channel = HCH

Date: 21.APR.2017 16:46:36



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Spectrun	n ]									[₩
Ref Leve Att		dBm :5 dB	Offset SWT	5.00 dB 👄 <b>R</b> 27 ms 👄 <b>V</b>		<b>Mode</b> Au	ito Sweep			
⊖1Pk Max							I			
						М	1[1]	1		30.88 dBm 45940 GHz
10 dBm										
0 dBm										
-10 dBm—	D1 -13	.000 d	dBm							
-20 dBm										
-30 dBm										
-40 dBm			a adult fra	ر میں ایر	والمتأسرة والمتاريخ والم	والملاوين أواوله والمراد				
, z≌QL¢Bm oda accuración de la	ter offered	land and a		The second s	<u>ىيە بەرە مىڭ مەمەرلىق مەرىپەرە</u>				and the second sec	
-60 dBm——										
-70 dBm——										
Start 1.0 C	Hz				2000:	1 pts	·		Stop	10.0 GHz
						Mea	suring		4/4	1.04.2017 16:45:53

Date: 21.APR.2017 16:45:53



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

#### 6.1.1.2.1 Test Channel = LCH ₩ Spectrum Ref Level 20.00 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] -49.47 dBm 803.1730 MHz 10 dBm-0 dBm--10 dBm-D1 -13.000 dBm -20 dBm--30 dBm--40 dBm-M -50 dBm--60 <mark>48</mark>m----70 dBm-Start 30.0 MHz 20001 pts Stop 1.0 GHz 21.04.2017 Measuring... 16:50:59

Date: 21.APR.2017 16:50:59



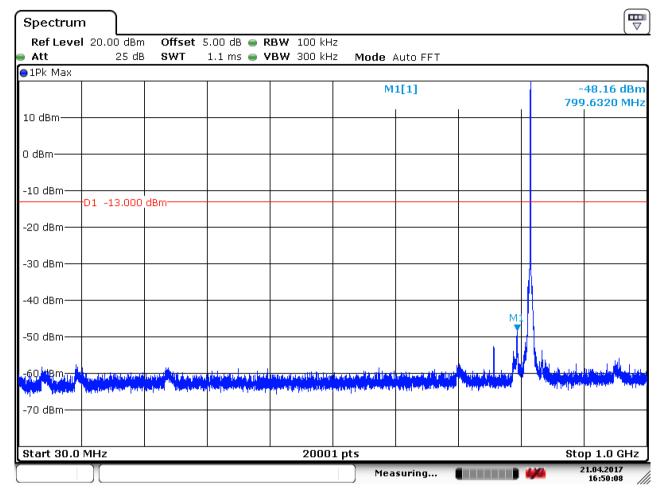
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Spectrum	ιÌ								
Ref Level Att	l 20.00 dBm 25 dB		5.00 dB 👄 R	<b>(BW</b> 1 MHz <b>/BW</b> 3 MHz	Banda A.				
All 1Pk Max	25 UB	5 <b>5</b> W I	27 ms 🔳 🖣	<b>'BW</b> 3 MH2	MOGE AU	ito Sweep			
					М	1[1]			33.19 dBm 33790 GHz
10 dBm									
0 dBm									
-10 dBm—	D1 -13.000	dBm							
-20 dBm—									
-30 dBM <del>1</del>									
-40 dBm			المرابعة الم	al and the state					
,¦¦SQ₁dBn <mark>r - </mark>		Contraction of posterior		tala di Kanada da Katika	- يتقول كالتر <sub>كيل</sub> ي	l de la companya de	واللعور فعأطيه وموزومه		
-60 dBm						"Thu <sub>per</sub>		riga a mitti ann an faoil a bhlia.	an a
-70 dBm									
Start 1.0 G	Hz			2000	1 pts			 Ston	10.0 GHz
[	)[					suring		-	1010 0112 1.04.2017 16:51:31

Date: 21.APR.2017 16:51:32



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#### 6.1.1.2.2 Test Channel = MCH

Date: 21.APR.2017 16:50:08



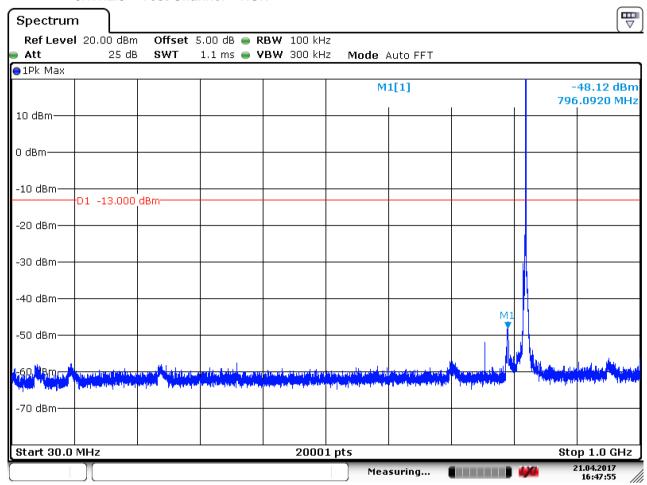
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Spectrun	n									
Ref Leve				5.00 dB 🥃 F		_				
Att 1Pk Max	2	5 dB	SWT	27 ms 🖷 🛾	BW 3 MHz	Mode Au	ito Sweep			
UPK Max						M	1[1]			31.52 dBm
							1[1]			40540 GHz
10 dBm										
0 dBm——										
-10 dBm—	-D1 -13	000 (								
-20 dBm—										
-30 dBn										
-40 dBm										
<sub>in</sub> 50.d8mmbb		ماراسا		المراجع ال <sup>اس</sup> ان المراجع المراجع		All and a specific strength				
a been directed by a second shifts by		June of the	and a state of the second s							and the second s
-60 dBm—										
-70 dBm—										
Start 1.0 (	GHz			1	2000	1 pts	·	1	Stop	10.0 GHz
						Mea	suring		2 2	1.04.2017 16:49:29

Date: 21.APR.2017 16:49:30



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6.1.1.2.3 Test Channel = HCH

Date: 21.APR.2017 16:47:56



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Spectrun	n )								
Ref Leve Att	l 20.00 dBm 25 dB		5.00 dB 👄 R		na-d- A.				
All 1Pk Max	25 UE	5 8 1	27 ms 🔲 ¥	BW 3 MHz	MODE AL	ito Sweep			
					М	1[1]			31.02 dBm 47740 GHz
10 dBm									
0 dBm									
-10 dBm—	D1 -13.000	dBm							
-20 dBm—									
-30 dBm									
-40 dBm			و منه و منه و الم		و و المحلفة الم				
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-60 dBm—									
-70 dBm—									
Start 1.0 (	 GHz			2000	1 pts			Stop	10.0 GHz
						suring			21.04.2017 16:48:40

Date: 21.APR.2017 16:48:39



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

#### 6.1.1.3.1 Test Channel = LCH ₩ Spectrum Ref Level 20.00 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] -50.01 dBm 796.8190 MHz 10 dBm-0 dBm--10 dBm-D1 -13.000 dBm -20 dBm--30 dBm--40 dBm-M -50 dBm-الم ( الألم -60 Sm--70 dBm-Start 30.0 MHz 20001 pts Stop 1.0 GHz 21.04.2017 Measuring... 16:57:18

Date: 21.APR.2017 16:57:18



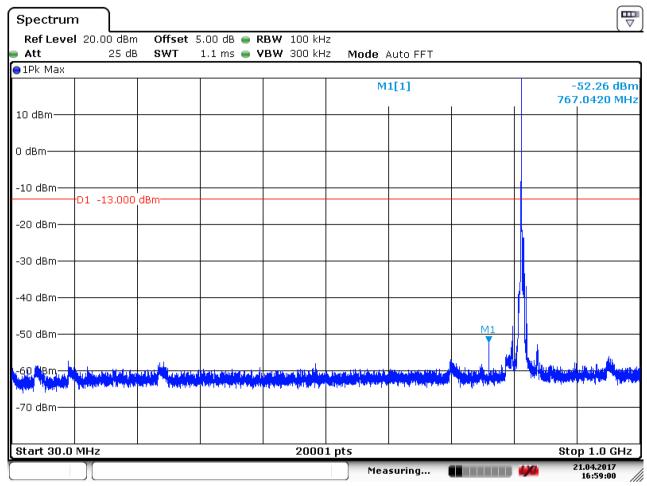
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Spectrun	n							(₩
	l 20.00 dBm		5.00 dB 😑 R					
Att	25 dE	B SWT	27 ms 👄 V	BW 3 MHz	Mode Au	ito Sweep		
⊖1Pk Max						1[1]		33.08 dBm
					IVI	1[1]		28840 GHz
10 dBm								
0 dBm								
-10 dBm—	-D1 -13.000	dBm						
-20 dBm—	10.000							
-30 dBM								
-40 dBm —								
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-60 dBm—								
-70 dBm—								
Start 1.0 (	 GHz			2000	1 pts			10.0 GHz
(	Υ			2000		suring	-	21.04.2017
								16:54:11

Date: 21.APR.2017 16:54:11



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#### 6.1.1.3.2 Test Channel = MCH

Date: 21.APR.2017 16:59:01



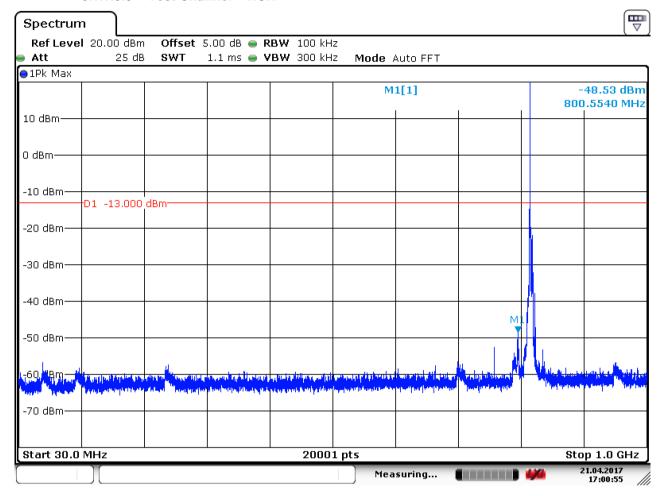
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Spectrun	n )								
	l 20.00 dBm		5.00 dB 👄 R						
Att 1Pk Max	25 dE	SWT	27 ms 🖷 🎙	BW 3 MHz	Mode Au	ito Sweep			
					М	1[1]		-	32.05 dBm
							1		33790 GHz
10 dBm——									
0 dBm——									
-10 dBm—									
-10 übiii	D1 -13.000	dBm							
-20 dBm									
-30 dBM									
-40 dBm—									
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-60 dBm									
70 40									
-70 dBm—									
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					Mea	suring		- <b>4/4</b> 2	21.04.2017 16:59:32

Date: 21.APR.2017 16:59:32



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#### 6.1.1.3.3 Test Channel = HCH

Date: 21.APR.2017 17:00:55



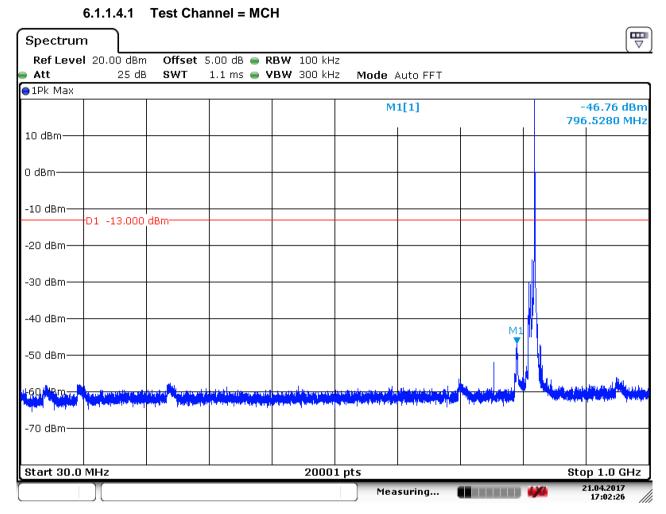
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Spectrun	n									[₩
Ref Leve				5.00 dB 😑 I						
Att	2	25 dB	SWT	27 ms 😑 🛚	/BW 3 MHz	Mode Au	ito Sweep			
⊖1Pk Max	1			1	1	1				
						M	1[1]			31.21 dBm
10 dBm									1.6	38740 GHz
0 dBm										
-10 dBm	D1 -13	2 000	dBm							
-20 dBm—										
-30 dBm										
-40 dBm										
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<sup>™⊉</sup> Ö™dBromer		اردیا کیا ہے۔ راب پیشن		·	د د به به به به ک <sup>ر</sup> ان است. <sub>مورو</sub> به کران است. مراجع است	a state in the second	Leading and Lead		United in such as the first of the	and and a shirt shirt shirts
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-60 dBm—										
-70 dBm—										
Start 1.0 C	l GHz				2000	1 pts	1	1	Stop	10.0 GHz
(						Mea	suring		<b>4/4</b> 2	21.04.2017 17:00:17

Date: 21.APR.2017 17:00:17



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

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Spectrun	n ]								
Ref Leve Att		dBm Offset 5 dB SWT	: 5.00 dB 👄 F		<b>11</b> - <b>1</b> - <b></b>				
All 1Pk Max	25	ub SWI	27 ms 🔳 🕯	BW 3 MHz	MOGE AU	ito Sweep			
					М	1[1]			30.12 dBm 46840 GHz
10 dBm									
0 dBm									
-10 dBm—	D1 -13.0	000 dBm							
-20 dBm—									
-30 dBm									
-40 dBm					دفاليول والقصى ال	ىلىم ھ يارلى ،			
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-60 dBm—									
-70 dBm—									
Start 1.0 (	 GHz			2000	1 pts			Stop	10.0 GHz
					Mea	suring		· 🦗 2	21.04.2017 17:03:33

Date: 21.APR.2017 17:03:33



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#### 7 Field Strength of Spurious Radiation

#### 7.1 For LTE

#### 7.1.1 Test Band = LTE band26(814-824)

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

7.1.1.1.1	Test Channel = MC	<u>CH</u>		
Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
2366.500000	-54.43	-13.00	45.47	Vertical
3475.000000	-66.25	-13.00	55.45	Vertical
5925.000000	-68.35	-13.00	54.02	Vertical
1652.000000	-58.94	-13.00	53.44	Horizontal
2312.500000	-63.06	-13.00	49.19	Horizontal
5476.000000	-64.48	-13.00	44.30	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
				VL	-3.48	-0.00425	PASS
	LTE/TM1 10MHz	MCH	TN	VN	-2.30	-0.00281	PASS
LTEband26				VH	-5.76	-0.00703	PASS
(814-824)				VL	1.10	0.00134	PASS
	LTE/TM2 10MHz	MCH	ΤN	VN	-2.24	-0.00274	PASS
				VH	-4.13	-0.00504	PASS

#### 8.2 Frequency Error VS. Temperature

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
LTE band26 (814-824)	LTE/TM1 10MHz	МСН	VN	-30	-4.34	-0.00530	PASS
				-20	-2.38	-0.00291	PASS
				-10	-1.77	-0.00216	PASS
				0	1.20	0.00147	PASS
				10	2.20	0.00269	PASS
				20	4.59	0.00560	PASS
				30	-1.62	-0.00198	PASS
				40	-2.70	-0.00330	PASS
				50	-4.01	-0.00490	PASS
	LTE/TM2 10MHz	МСН	VN	-30	-5.44	-0.00664	PASS
				-20	-3.20	-0.00391	PASS
				-10	-2.42	-0.00295	PASS
				0	-1.55	-0.00189	PASS
				10	-2.24	-0.00274	PASS
				20	-1.89	-0.00231	PASS
				30	-3.09	-0.00377	PASS
				40	-4.88	-0.00596	PASS
				50	-7.42	-0.00906	PASS

#### The End