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Appendix C

E-UTRA Band 5_CA



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Effective (Isotropic) Radiated Power Output Data 1

Effective Radiated Power of Transmitter (ERP) for LTE BAND 5									
Test Band(LTE)	Test Bandwid th	Test channel	Test Mode	PCC RB	SCC RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				P_1@0	S_0@0	24.09	21.69	38.45	PASS
			LTE/TM1	P_8@0	S_0@0	24.08	21.68	38.45	PASS
				P_25@0	S_0@0	23.05	20.65	38.45	PASS
				P_25@0	S_50@0	22.02	19.62	38.45	PASS
				P_1@0	S_0@0	23.37	20.97	38.45	PASS
				P_8@0	S_0@0	23.12	20.72	38.45	PASS
		LCH	LTE/TM2	P_25@0	S_0@0	21.12	18.72	38.45	PASS
				P_25@0	S_50@0	19.92	17.52	38.45	PASS
			LTE/TM3	P_1@0	S_0@0	22.23	19.83	38.45	PASS
				P_8@0	S_0@0	22.14	19.74	38.45	PASS
				P_25@0	S_0@0	21.09	18.69	38.45	PASS
				P_25@0	S_50@0	20.98	18.58	38.45	PASS
BAND5	5+10M		LTE/TM1	P_1@0	S_0@0	24.03	21.63	38.45	PASS
				P_8@0	S_0@0	24.05	21.65	38.45	PASS
				P_25@0	S_0@0	23.03	20.63	38.45	PASS
				P_25@0	S_50@0	21.93	19.53	38.45	PASS
				P_1@0	S_0@0	23	20.6	38.45	PASS
		MOLL		P_8@0	S_0@0	24.02	21.62	38.45	PASS
		MCH	LTE/TM2	P_25@0	S_0@0	24.01	21.61	38.45	PASS
				P_25@0	S_50@0	19.89	17.49	38.45	PASS
				P_1@0	S_0@0	22.18	19.78	38.45	PASS
				P_8@0	S_0@0	22.01	19.61	38.45	PASS
			LTE/TM3	P_25@0	S_0@0	20.95	18.55	38.45	PASS
				P_25@0	S_50@0	20.88	18.48	38.45	PASS

Effective Redicted Rewar of Transmitter (ERR) for LTE RAND 5



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				P_1@0	S_0@0	24.15	21.75	38.45	PASS
				P_8@0	S_0@0	23.9	21.5	38.45	PASS
			LTE/TM1	P_25@0	S_0@0	22.81	20.41	38.45	PASS
				P_25@0	S_50@0	21.8	19.4	38.45	PASS
	5+10M	НСН	LTE/TM2	P_1@0	S_0@0	24.46	22.06	38.45	PASS
DANDS				P_8@0	S_0@0	23.91	21.51	38.45	PASS
BAND5				P_25@0	S_0@0	20.81	18.41	38.45	PASS
				P_25@0	S_50@0	19.76	17.36	38.45	PASS
				P_1@0	S_0@0	23.83	21.43	38.45	PASS
				P_8@0	S_0@0	23.97	21.57	38.45	PASS
			LTE/TM3	P_25@0	S_0@0	20.81	18.41	38.45	PASS
				P_25@0	S_50@0	20.77	18.37	38.45	PASS



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Test Band(LTE)	Test Bandwid th	Test channel	Test Mode	PCC RB	SCC RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				P_1@0	S_0@0	24.22	21.82	38.45	PASS
			LTE/TM1	P_12@0	S_0@0	24.27	21.87	38.45	PASS
				P_50@0	S_0@0	22.05	19.65	38.45	PASS
				P_50@0	S_25@0	21.95	19.55	38.45	PASS
				P_1@0	S_0@0	23.28	20.88	38.45	PASS
				P_12@0	S_0@0	21.18	18.78	38.45	PASS
		LCH	LTE/TM2	P_50@0	S_0@0	19.99	17.59	38.45	PASS
				P_50@0	S_25@0	19.88	17.48	38.45	PASS
				P_1@0	S_0@0	22.47	20.07	38.45	PASS
			LTE/TM3	P_12@0	S_0@0	21.19	18.79	38.45	PASS
	10+5M			P_50@0	S_0@0	21.15	18.75	38.45	PASS
				P_50@0	S_25@0	20.91	18.51	38.45	PASS
BAND5			LTE/TM1	P_1@0	S_0@0	24.21	21.81	38.45	PASS
				P_12@0	S_0@0	23.13	20.73	38.45	PASS
				P_50@0	S_0@0	21.91	19.51	38.45	PASS
				P_50@0	S_25@0	21.84	19.44	38.45	PASS
				P_1@0	S_0@0	23.05	20.65	38.45	PASS
		MOU		P_12@0	S_0@0	21.25	18.85	38.45	PASS
		MCH	LTE/TM2	P_50@0	S_0@0	19.86	17.46	38.45	PASS
				P_50@0	S_25@0	19.82	17.42	38.45	PASS
				P_1@0	S_0@0	22.38	19.98	38.45	PASS
				P_12@0	S_0@0	21.13	18.73	38.45	PASS
			LTE/TM3	P_50@0	S_0@0	20.89	18.49	38.45	PASS
				P_50@0	S_25@0	20.83	18.43	38.45	PASS



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				P_1@0	S_0@0	24.04	21.64	38.45	PASS
			LTE/TM1	P_12@0	S_0@0	23.02	20.62	38.45	PASS
				P_50@0	S_0@0	21.91	19.51	38.45	PASS
	10+5M	нсн		P_50@0	S_25@0	21.84	19.44	38.45	PASS
			LTE/TM2	P_1@0	S_0@0	23.26	20.86	38.45	PASS
PANDE				P_12@0	S_0@0	20.99	18.59	38.45	PASS
BAND5				P_50@0	S_0@0	19.83	17.43	38.45	PASS
				P_50@0	S_25@0	19.78	17.38	38.45	PASS
				P_1@0	S_0@0	22.02	19.62	38.45	PASS
			LTE/TM3	P_12@0	S_0@0	21.06	18.66	38.45	PASS
			LTE/TIVI3	P_50@0	S_0@0	20.91	18.51	38.45	PASS
				P_50@0	S_25@0	20.87	18.47	38.45	PASS



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Test Band(LTE)	Test Bandwid th	Test channel	Test Mode	PCC RB	SCC RB	Measured (dBm)	ERP (dBm)	limit (dBm)	Verdict
				P_1@0	S_0@0	24.12	21.72	38.45	PASS
			LTE/TM1	P_12@0	S_0@0	24.22	21.82	38.45	PASS
				P_50@0	S_0@0	23.11	20.71	38.45	PASS
				P_50@0	S_50@0	21.91	19.51	38.45	PASS
				P_1@0	S_0@0	23.59	21.19	38.45	PASS
				P_12@0	S_0@0	23.24	20.84	38.45	PASS
		LCH	LTE/TM2	P_50@0	S_0@0	20.96	18.56	38.45	PASS
				P_50@0	S_50@0	19.84	17.44	38.45	PASS
				P_1@0	S_0@0	22.33	19.93	38.45	PASS
			LTE/TM3	P_12@0	S_0@0	22.29	19.89	38.45	PASS
	10+10M			P_50@0	S_0@0	21.03	18.63	38.45	PASS
				P_50@0	S_50@0	20.91	18.51	38.45	PASS
BAND5			LTE/TM1	P_1@0	S_0@0	24.31	21.91	38.45	PASS
				P_12@0	S_0@0	24.17	21.77	38.45	PASS
				P_50@0	S_0@0	23.02	20.62	38.45	PASS
				P_50@0	S_50@0	21.89	19.49	38.45	PASS
				P_1@0	S_0@0	23.18	20.78	38.45	PASS
		MOU		P_12@0	S_0@0	23.18	20.78	38.45	PASS
		MCH	LTE/TM2	P_50@0	S_0@0	20.97	18.57	38.45	PASS
				P_50@0	S_50@0	19.86	17.46	38.45	PASS
				P_1@0	S_0@0	22.39	19.99	38.45	PASS
				P_12@0	S_0@0	22.26	19.86	38.45	PASS
			LTE/TM3	P_50@0	S_0@0	21.01	18.61	38.45	PASS
				P_50@0	S_50@0	20.82	18.42	38.45	PASS



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				P_1@0	S_0@0	24.11	21.71	38.45	PASS
			LTE/TM1	P_12@0	S_0@0	24.18	21.78	38.45	PASS
				P_50@0	S_0@0	23.04	20.64	38.45	PASS
		НСН		P_50@0	S_50@0	21.84	19.44	38.45	PASS
	10+10M			P_1@0	S_0@0	23.58	21.18	38.45	PASS
BAND5			LTE/TM2	P_12@0	S_0@0	23.17	20.77	38.45	PASS
BANDS				P_50@0	S_0@0	20.92	18.52	38.45	PASS
				P_50@0	S_50@0	19.84	17.44	38.45	PASS
				P_1@0	S_0@0	22.15	19.75	38.45	PASS
			LTE/TM3	P_12@0	S_0@0	22.16	19.76	38.45	PASS
			LTE/TIVI3	P_50@0	S_0@0	21.04	18.64	38.45	PASS
				P_50@0	S_50@0	20.91	18.51	38.45	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
	TM1/5+10M	MCH	6.03	13	PASS
	TM2/5+10M	MCH	6.64	13	PASS
	TM3/5+10M	MCH	6.61	13	PASS
	TM1/10+5M	MCH	6.00	13	PASS
Band 5	TM2/10+5M	MCH	6.52	13	PASS
	TM3/10+5M	MCH	6.46	13	PASS
	TM1/10+10M	MCH	6.29	13	PASS
	TM2/10+10M	MCH	6.87	13	PASS
	TM3/10+10M	MCH	6.78	13	PASS



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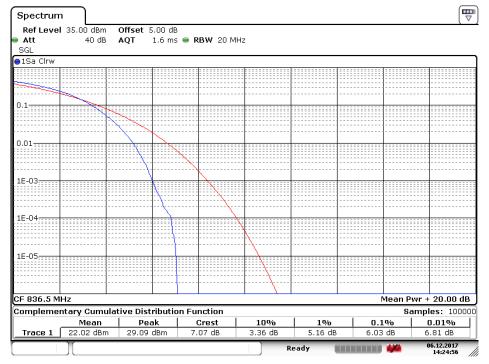
Part II - Test Plots

2.1 For LTE

2.1.1 Test Band = LTE band5



2.1.1.1.1 Test Channel = MCH

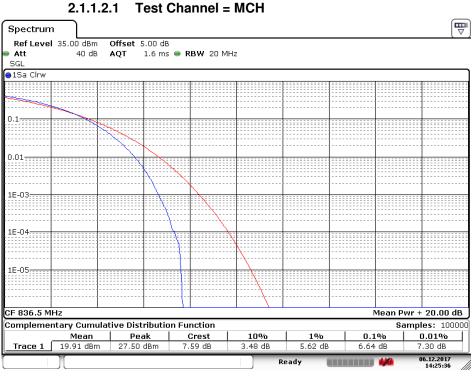


Date: 6.DEC.2017 14:24:56



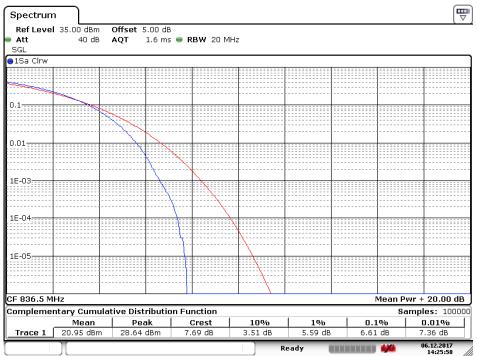
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2.1.1.2 Test Mode = LTE/TM2.Bandwidth=5+10MHz



Date: 6.DEC.2017 14:25:36

2.1.1.3 Test Mode = LTE/TM3.Bandwidth=5+10MHz 2.1.1.3.1 Test Channel = MCH

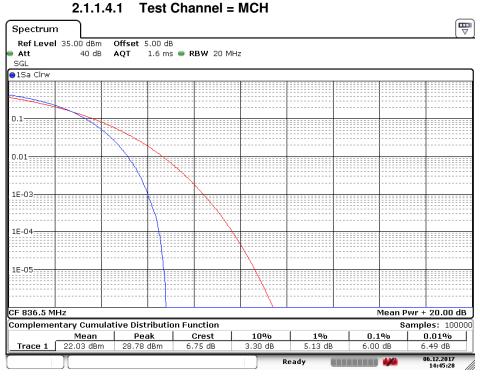


Date: 6.DEC.2017 14:25:59



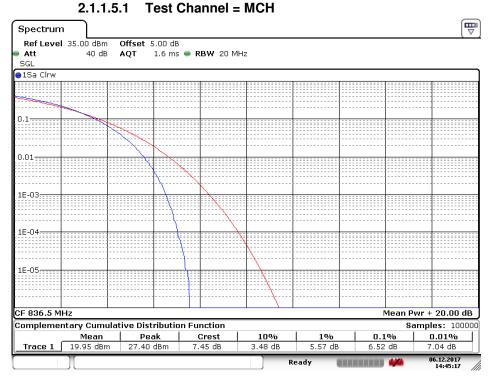
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2.1.1.4 Test Mode = LTE/TM1.Bandwidth=10+5MHz



Date: 6.DEC.2017 14:45:29

2.1.1.5 Test Mode = LTE/TM2.Bandwidth=10+5MHz

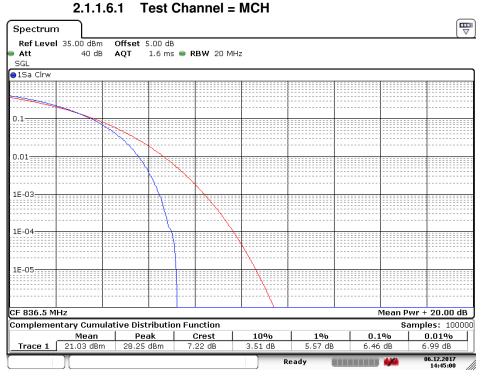


Date: 6.DEC.2017 14:45:17



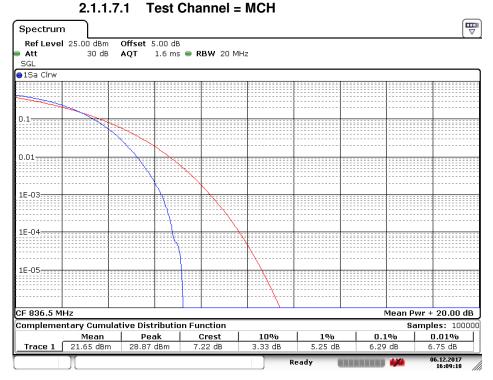
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2.1.1.6 Test Mode = LTE/TM3.Bandwidth=10+5MHz



Date: 6.DEC.2017 14:45:00

2.1.1.7 Test Mode = LTE/TM1.Bandwidth=10+10MHz

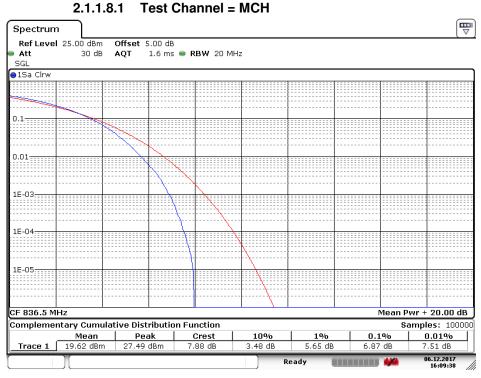


Date: 6.DEC.2017 16:09:18



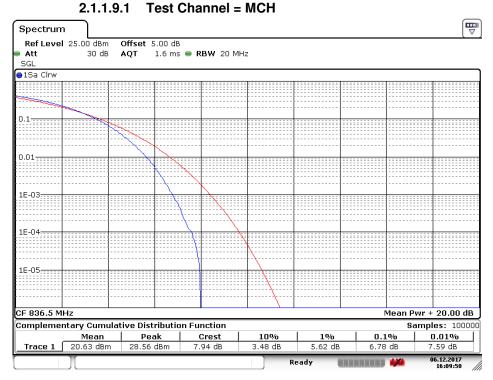
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2.1.1.8 Test Mode = LTE/TM2.Bandwidth=10+10MHz



Date: 6.DEC.2017 16:09:39

2.1.1.9 Test Mode = LTE/TM3.Bandwidth=10+10MHz



Date: 6.DEC.2017 16:09:51



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3 Modulation Characteristics

3.1 For LTE

3.1.1 Test Band = LTE band5

3.1.1.1 Test Mode = LTE /TM1 10MHz + 10MHz

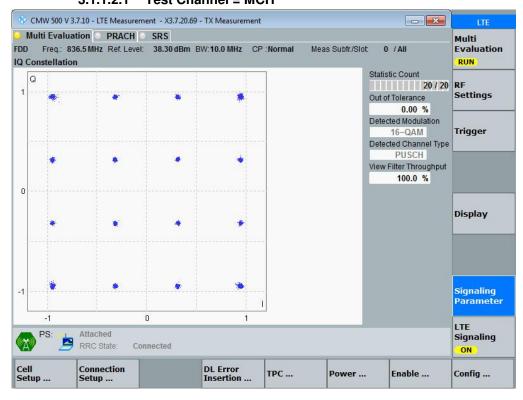
3.1.1.1.1 Test Channel = MCH

Multi I	Evaluation 💿 PRACH	SRS				Multi
DD Fr	a filing a second s	38.30 dBm BW:10.0 MHz	CP :Normal	Meas Subfr./Slot:	0 / All	Evaluation RUN
0					Statistic Count 20 / 20 Out of Tolerance 0.00 % Detected Modulation QPSK Detected Channel Type PUSCH /iew Filter Throughput 100.0 %	RF Settings Trigger Display
1 -1 PS	Attached	0 nnected	1			Signaling Paramete LTE Signaling ON
ell	Connection	DL Error	трс	Power	Enable	Config



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3.1.1.2 Test Mode = LTE /TM2 10MHz + 10MHz

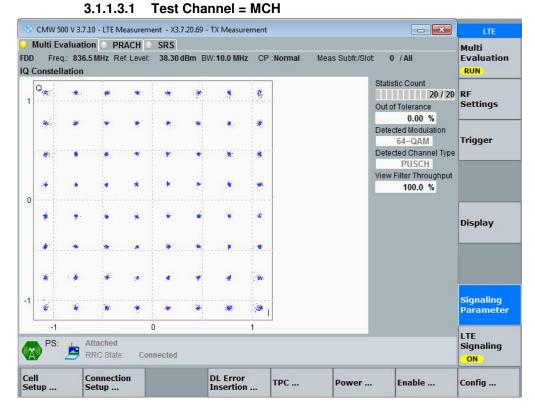


3.1.1.2.1 Test Channel = MCH



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3.1.1.3 Test Mode = LTE /TM3 10MHz + 10MHz





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4 Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
	TM1/5+10MHz	MCH	13.88	14.81	PASS
	TM2/5+10MHz	MCH	13.85	14.75	PASS
	TM3/5+10MHz	MCH	13.85	14.81	PASS
	TM1/10+5MHz	MCH	13.85	14.78	PASS
Band 5	TM2/10+5MHz	MCH	13.85	14.75	PASS
	TM3/10+5MHz	MCH	13.85	14.81	PASS
	TM1/10+10MHz	MCH	18.74	19.94	PASS
	TM2/10+10MHz	MCH	18.74	19.90	PASS
	TM3/10+10MHz	MCH	18.70	19.82	PASS



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Part II – Test Plots

4.1 For LTE

4.1.1 Test Band = LTE band5

4.1.1.1 Test Mode = LTE/TM1 5+10MHz

4.1.1.1.1 Test Channel = MCH

Spectrun	n								
Ref Leve Att	1 35.00 dBm) Offset	5.00 dB 👄 10 ms 👄	RBW 300 k VBW 1 M		S			
■ ALL ●1Pk View	40 UB	S 🖶 SWI	to ms 🖷	ARM TIM	H2 Mode	Sweep			
30 dBm						1[1] cc Bw			-3.60 dt 1.8050 MH 23876 MH
20 dBm	D1 18.270	dBm ⊁w ∾	hterplaced and an and a second second	Μ.	M	1[1]	I T2		-4.87 dBn 9.1570 MH
10 dBm				manualphin	dflootlikeur-1944bred	-ant property life	h-wig		
0 dBm		M							
-10 dBm	D2 -7.	730 dBm							
(Hadiyaday)	wolneythalladal	peteresserve					uulta.	add the state of t	allethan day
-30 dBm									
-40 dBm—									
-50 dBm									
-60 dBm									
CF 836.5 M				1001		suring			30.0 MHz 06.12.2017 14:27:06

Date: 6.DEC.2017 14:27:07



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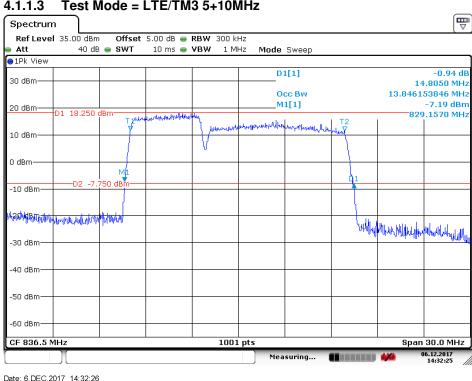
	4.1.1	.2.1 7	Fest Cha	annel =	= MC	Н			
Spectru	m								I □
Ref Leve	el 35.00 dBm	n Offset	5.00 dB 👄	RBW 300	kHz				(
🗕 Att	40 dB	B 👄 SWT	10 ms 👄	VBW = 1	MHz	Mode Sweep			
⊖1Pk View									
30 dBm					_	D1[1]		14	-3.32 dB 4.7450 MHz
						Occ Bw		13.8461	53846 MHz
20 dBm						M1[1]			-5.79 dBm
	D1 17.370	dBm	e pour word	A JULY		1	1	829	9.1870 MHz
10 dBm				Junit	hand the state of	and the second star and the second	Mul T2		
				I V –			N N		
0 dBm				-	_				
		¥					1		
-10 dBm—	D2 -8.	630 dBm <u></u>							
-20 dBm—	1.0				-				
harden frankrigen (* 1914)	whentertaken	Julium .					- Lata	و بارو د	e duntas
-30 dBm—							પુત્તાય	he Hender burber	<u>Mhrandhail</u> hailt
									1 1
-40 dBm—									
-50 dBm—									
-60 dBm—					_				
CF 836.5	MU-3			10	01 pts				30.0 MHz
UCF 838.3				10	orpus				06.12.2017
						Measuring		-	14:31:10

4.1.1.2 Test Mode = LTE/TM2 5+10MHz

Date: 6.DEC.2017 14:31:10

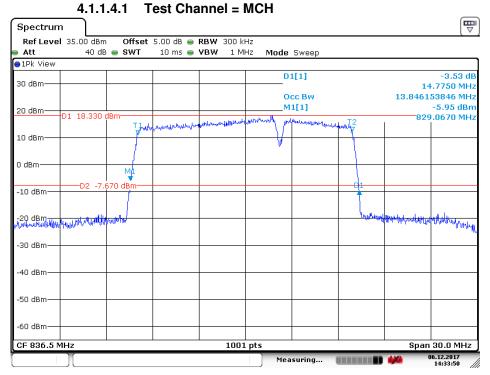


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Test Mode = LTE/TM3 5+10MHz 4.1.1.3

4.1.1.4 Test Mode = LTE/TM1 10+5MHz



Date: 6.DEC.2017 14:33:50



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	4.1.1	.5.1 T	est Cha	nnel = M	СН				
Spectrum	,)								
Ref Level	35.00 dBm	Offset	5.00 dB 😑 I	RBW 300 kHz					
🗕 Att	40 dB	s 🕳 SWT	10 ms 😑 '	VBW 1 MHz	Mode	Sweep			
●1Pk View									
30 dBm					D	1[1]		14	-2.05 dB 4.7450 MHz
					0	cc Bw		13.8461	.53846 MHz
20 dBm						1[1]		829	-9.02 dBm 9.0670 MHz
10 dBm	D1 15.620	dBm	West must would	monipolarhadada	arinned for	hann what it the	-unit 2		
					V				
0 dBm									1
-10 dBm	D2 -9.3	<u>M</u> 1 380 dBm===							
-20 dBm	<u></u>								
-20 dBm	Mhallahala	ellm(Hell					MARIN	allowed low and a	WILMAN AND L
-30 dBm									* W(H
-40 dBm									
-50 dBm									
-60 dBm									
CF 836.5 M	IHz	1		1001 p	ts	1	-	Span	30.0 MHz
	Ϊ				Mea	suring		. 444	06.12.2017 14:35:13

4.1.1.5 Test Mode = LTE/TM2 10+5MHz

Date: 6.DEC.2017 14:35:13

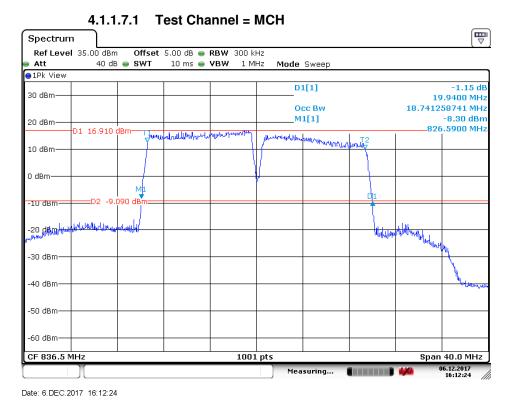
4.1.1.6 Test Mode = LTE/TM3 10+5MHz

Spectrum							
Ref Level 35.00 dBn					,		
	B 🛑 SWT 10 ms (● VBW 1 MHz	Mode Sweep				
●1Pk View			D1[1]		-4.07 di		
30 dBm			01[1]		14.8050 MH		
			Occ Bw		13.846153846 MH		
20 dBm			M1[1]		-6.50 dBm		
D1 16.780	dBm Thillippened both	white the state of the second second	und population	T2	829.0370 MH		
10 dBm	Aufline an 110 al 400						
			V				
0 dBm							
	M						
-10 dBm D2 -9.	.220 dBm	_		01			
				<u> </u>			
-20 BRAND	-wally			⁹ \\n \\	Sue-luniherederfytentheredetwerten jerken		
"APD ADD ADD ADD ADD ADD ADD ADD ADD ADD							
-30 dBm							
-40 dBm							
-50 dBm							
-60 dBm							
CF 836.5 MHz			its		Span 30.0 MHz		
		1001	Measuring		06.12.2017 14:35:57		

Date: 6.DEC.2017 14:35:58

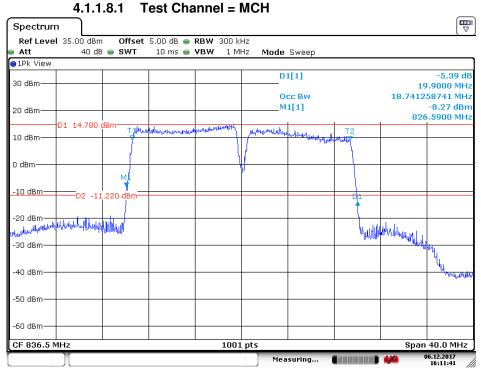


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4.1.1.7 Test Mode = LTE/TM1 10+10MHz

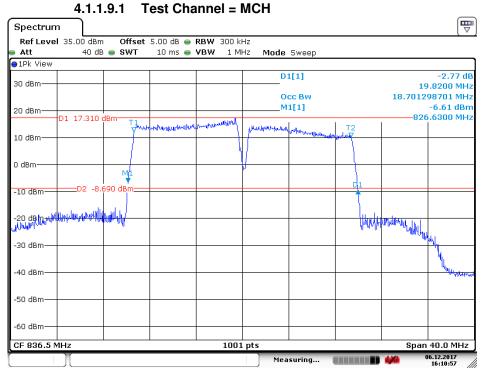
4.1.1.8 Test Mode = LTE/TM2 10+10MHz



Date: 6.DEC.2017 16:11:41



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4.1.1.9 Test Mode = LTE/TM3 10+10MHz

Date: 6.DEC.2017 16:10:57



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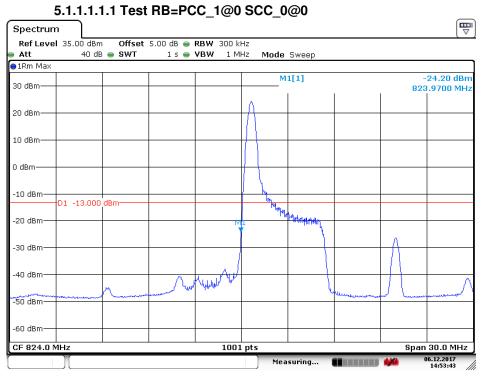
5 Band Edges Compliance

5.1 For LTE

5.1.1 Test Band = LTE band5

5.1.1.1 Test Mode = LTE/TM1 5+10MHz

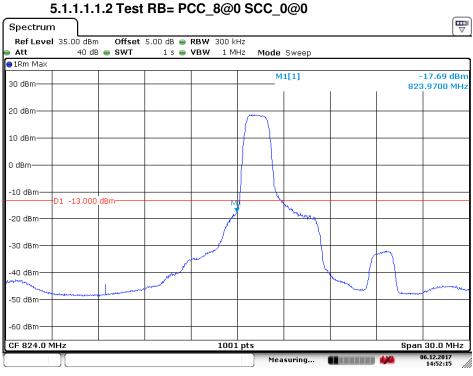
5.1.1.1.1 Test Channel = LCH



Date: 6.DEC.2017 14:53:44



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Date: 6.DEC.2017 14:52:15

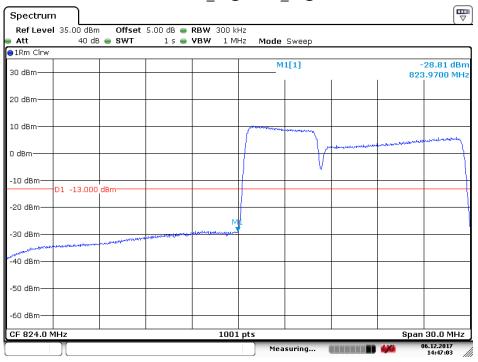


Spectrun									
Ref Leve Att	1 35.00 dB 40 c	m Offset 18 🖷 SWT	5.00 dB 👄 1 s 👄			Sweep			
⊖1Rm Max									
30 dBm					M	1[1]	1		21.09 dBr 3.9700 MH
20 dBm									
10 dBm									
0 dBm									
-10 dBm	D1 -13.00	0 dBm							
-20 dBm				M	ļ				
-30 dBm									
-40 dBm	- marine m	- warmen	and the second						
-50 dBm—									
-60 dBm									
CF 824.0 M	мнz	· · · · · · · · · · · · · · · · · · ·	·	1001	pts			Span	30.0 MHz
					Mea	suring		470	06.12.2017 14:51:52

Date: 6.DEC.2017 14:51:52



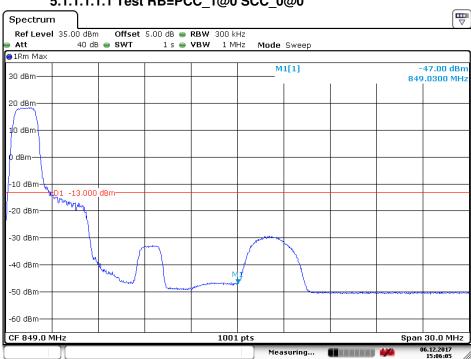
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5.1.1.1.1.4 Test RB= PCC_25@0 SCC_50@0

Date: 6.DEC.2017 14:47:03

5.1.1.1.1 Test Channel = HCH

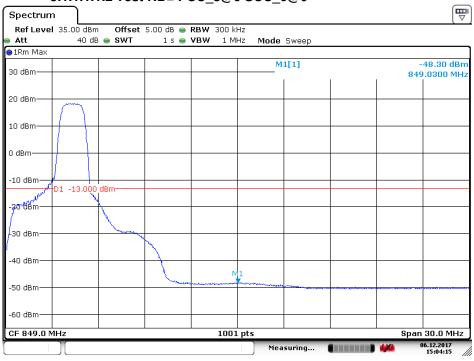


5.1.1.1.1 Test RB=PCC_1@0 SCC_0@0

Date: 6.DEC.2017 15:06:06



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5.1.1.1.1.2 Test RB= PCC_8@0 SCC_0@0

Date: 6.DEC.2017 15:04:15



5.1.1.1.3 Test RB= PCC_25@0 SCC_0@0

Date: 6.DEC.2017 15:03:24



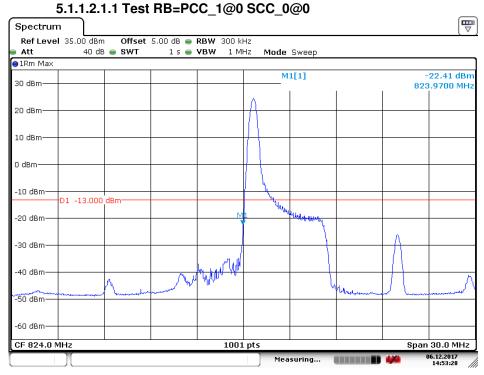
Report No.: SZEM1701001122301 Page: 29 of 72



5.1.1.1.1.4 Test RB= PCC_25@0 SCC_50@0

Date: 6.DEC.2017 14:59:24

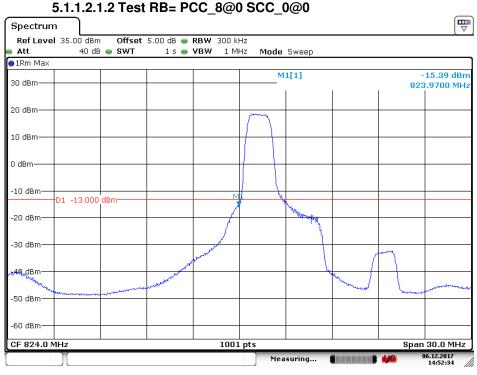
5.1.1.2 Test Mode = LTE/TM2 5+10MHz 5.1.1.2.1 Test Channel = LCH



Date: 6.DEC.2017 14:53:28



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Date: 6.DEC.2017 14:52:35

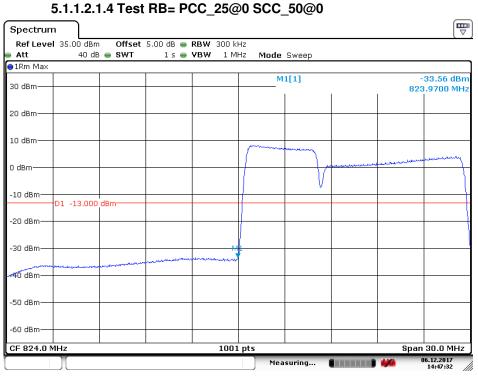




Date: 6.DEC.2017 14:51:36

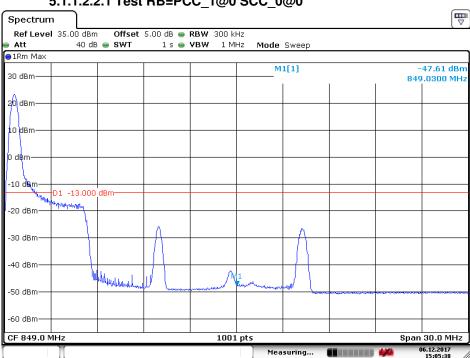


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Date: 6.DEC.2017 14:47:32

5.1.1.2.2 Test Channel = HCH

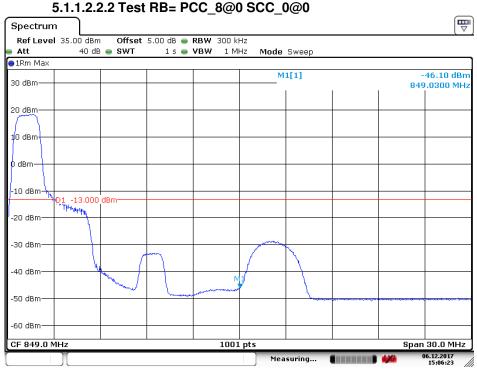


5.1.1.2.2.1 Test RB=PCC 1@0 SCC 0@0

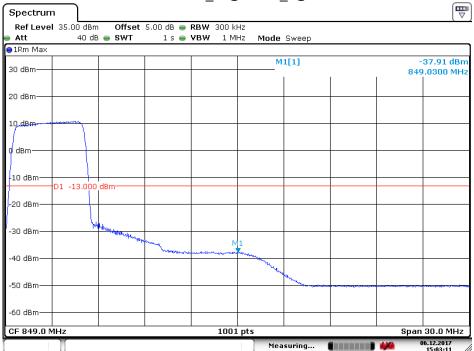
Date: 6.DEC.2017 15:05:38



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Date: 6.DEC.2017 15:06:23

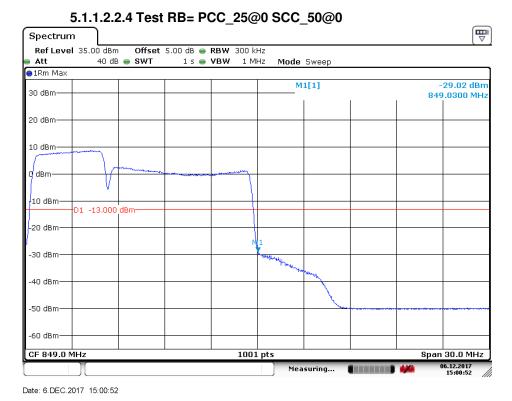


5.1.1.2.2.3 Test RB= PCC_25@0 SCC_0@0

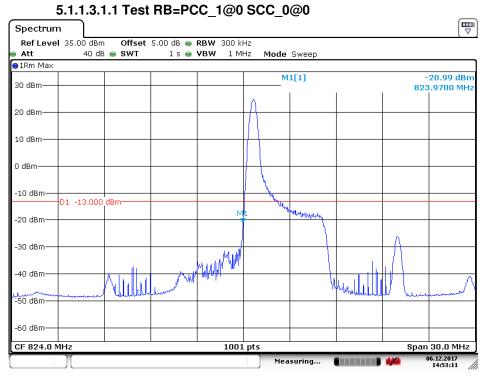
Date: 6.DEC.2017 15:03:11



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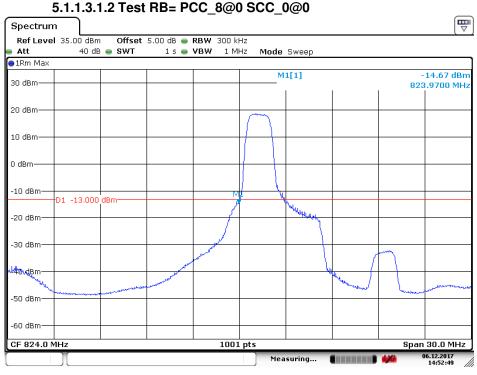
5.1.1.3 Test Mode = LTE/TM3 5+10MHz 5.1.1.3.1 Test Channel = LCH



Date: 6.DEC.2017 14:53:11



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Date: 6.DEC.2017 14:52:50

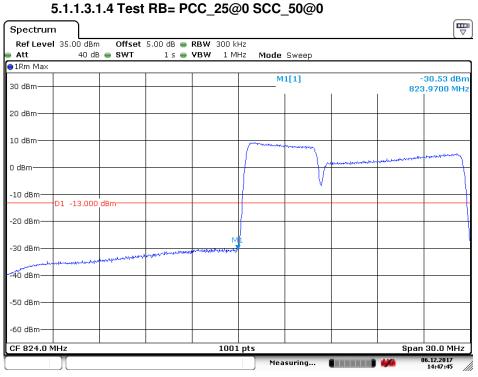




Date: 6.DEC.2017 14:51:05

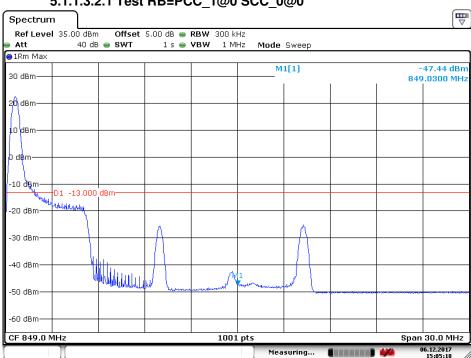


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Date: 6.DEC.2017 14:47:46

5.1.1.3.2 Test Channel = HCH

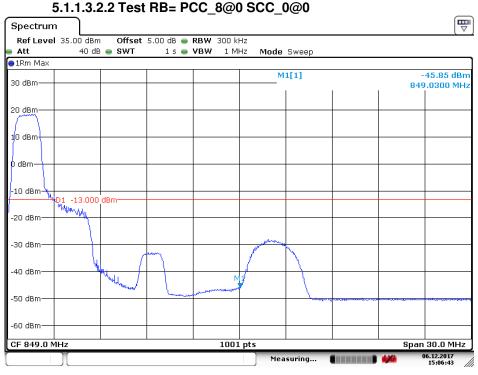


5.1.1.3.2.1 Test RB=PCC 1@0 SCC 0@0

Date: 6.DEC.2017 15:05:18



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Date: 6.DEC.2017 15:06:43

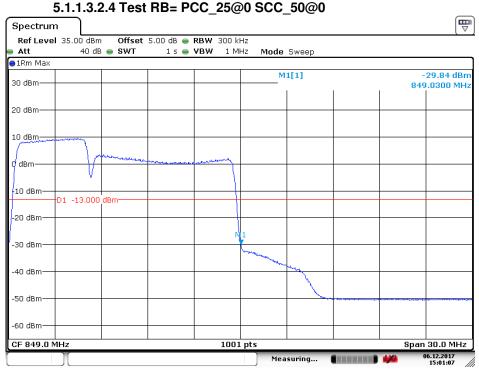


5.1.1.3.2.3 Test RB= PCC_25@0 SCC_0@0

Date: 6.DEC.2017 15:02:41

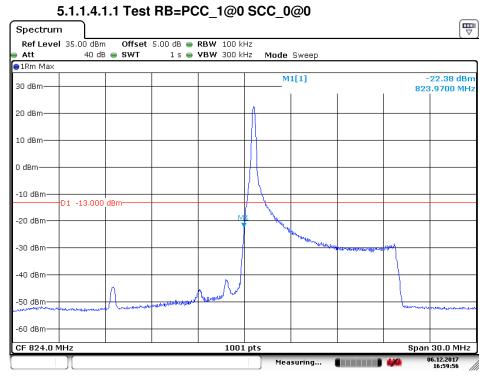


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Date: 6.DEC.2017 15:01:08

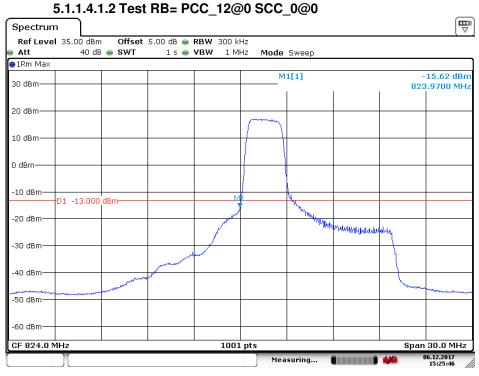
5.1.1.4 Test Mode = LTE/TM1 10+5MHz 5.1.1.4.1 Test Channel = LCH



Date: 6.DEC.2017 16:59:57



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Date: 6.DEC.2017 15:25:46

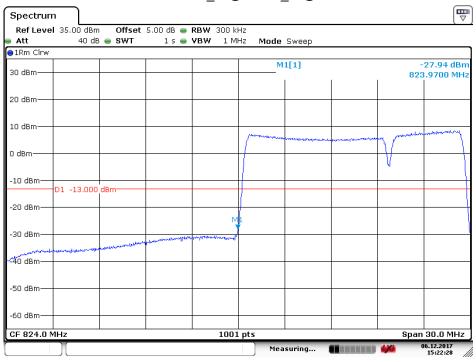




Date: 6.DEC.2017 15:25:19



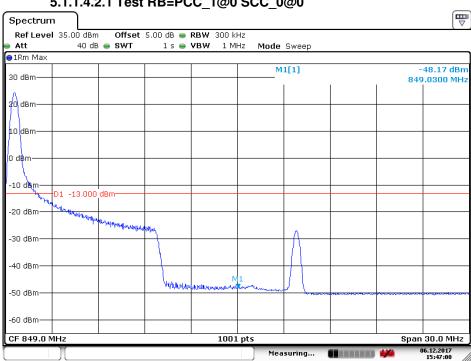
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5.1.1.4.1.4 Test RB= PCC_50@0 SCC_25@0

Date: 6.DEC.2017 15:22:29

5.1.1.4.2 Test Channel = HCH

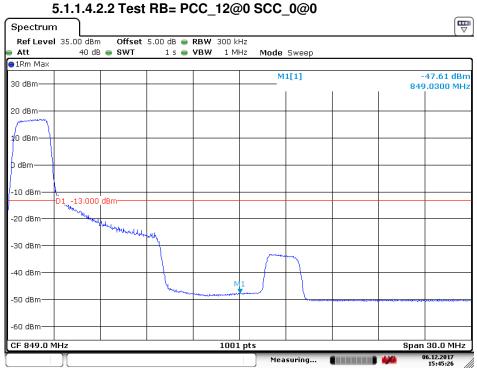


5.1.1.4.2.1 Test RB=PCC_1@0 SCC_0@0

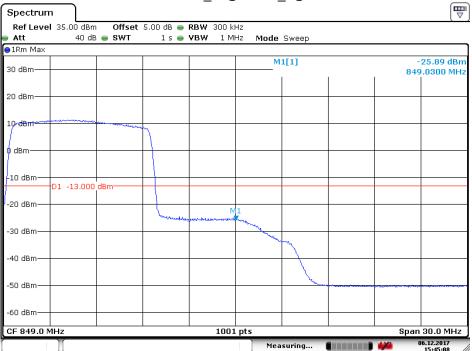
Date: 6.DEC.2017 15:47:01



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Date: 6.DEC.2017 15:45:27

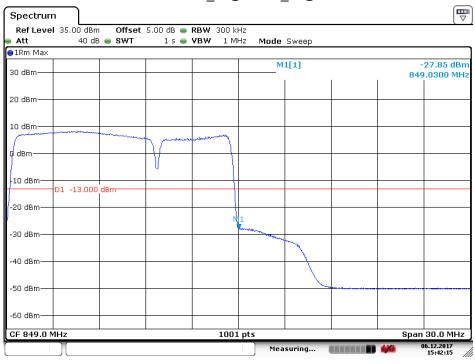


5.1.1.4.2.3 Test RB= PCC_50@0 SCC_0@0

Date: 6.DEC.2017 15:45:08



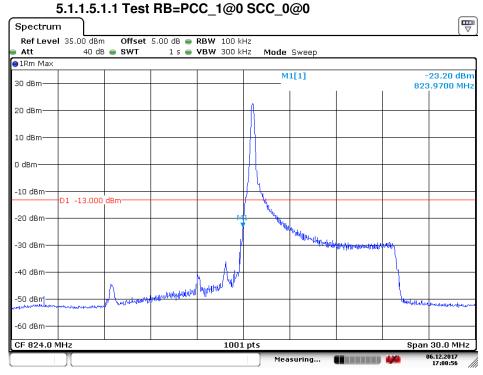
Report No.: SZEM1701001122301 Page: 41 of 72



5.1.1.4.2.4 Test RB= PCC_50@0 SCC_25@0

Date: 6.DEC.2017 15:42:16

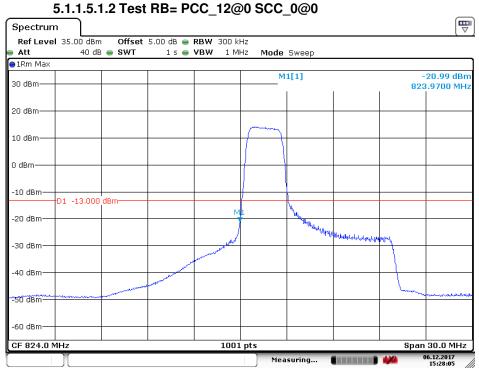
5.1.1.5 Test Mode = LTE/TM2 10+5MHz 5.1.1.5.1 Test Channel = LCH



Date: 6.DEC.2017 17:00:57



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Date: 6.DEC.2017 15:28:05

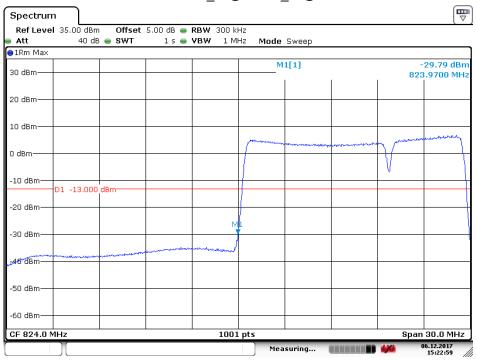


5.1.1.5.1.3 Test RB= PCC_50@0 SCC_0@0

Date: 6.DEC.2017 15:24:20



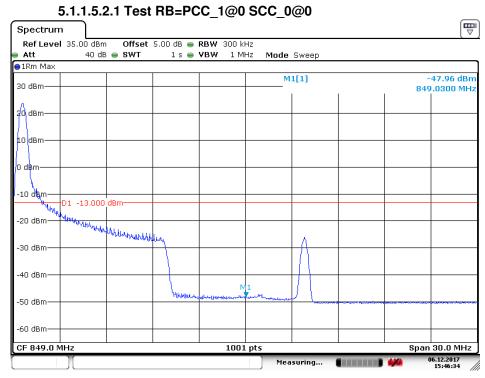
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5.1.1.5.1.4 Test RB= PCC_50@0 SCC_25@0

Date: 6.DEC.2017 15:23:00

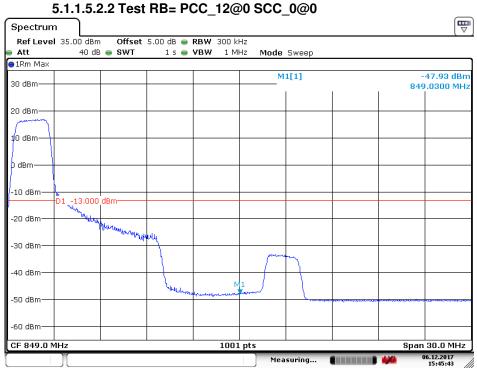
5.1.1.5.2 Test Channel = HCH



Date: 6.DEC.2017 15:46:35



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Date: 6.DEC.2017 15:45:43

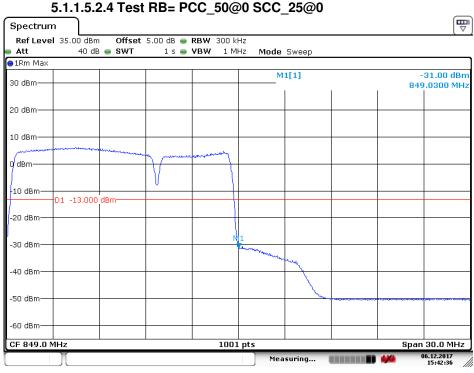




Date: 6.DEC.2017 15:44:54

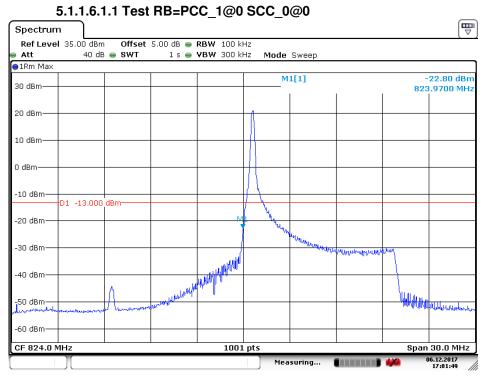


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Date: 6.DEC.2017 15:42:36

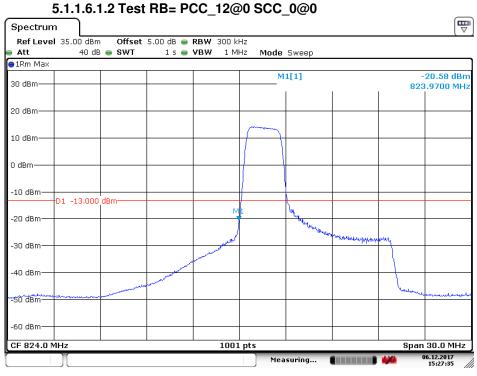
5.1.1.6 Test Mode = LTE/TM3 10+5MHz 5.1.1.6.1 Test Channel = LCH



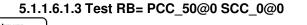
Date: 6.DEC.2017 17:01:49



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Date: 6.DEC.2017 15:27:35

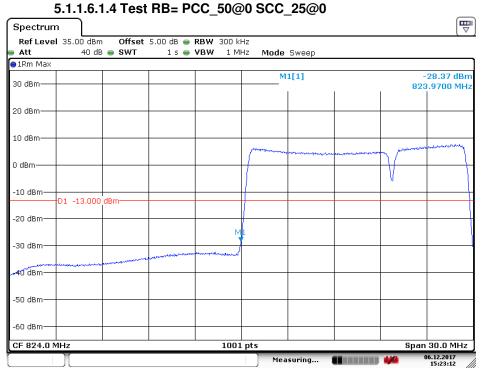




Date: 6.DEC.2017 15:25:01



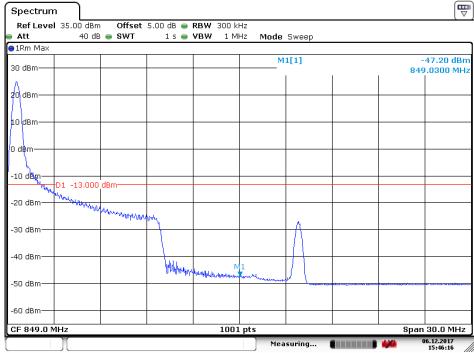
Report No.: SZEM1701001122301 Page: 47 of 72



Date: 6.DEC.2017 15:23:12

5.1.1.6.2 Test Channel = HCH

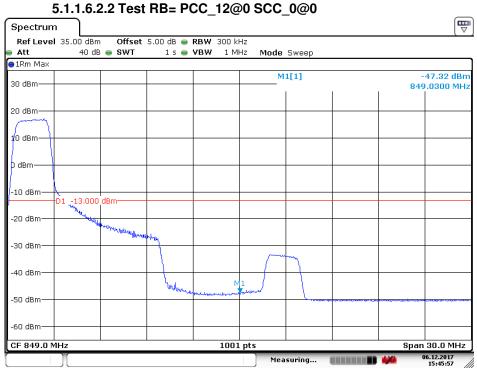
5.1.1.6.2.1 Test RB=PCC_1@0 SCC_0@0



Date: 6.DEC.2017 15:46:16



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Date: 6.DEC.2017 15:45:58

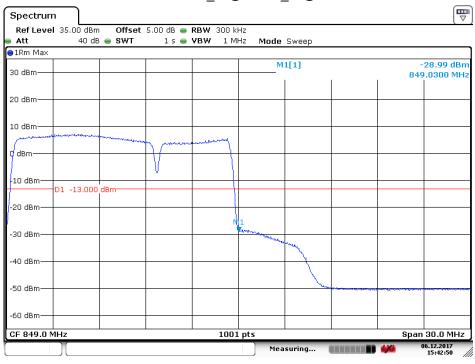


5.1.1.6.2.3 Test RB= PCC_50@0 SCC_0@0

Date: 6.DEC.2017 15:44:38



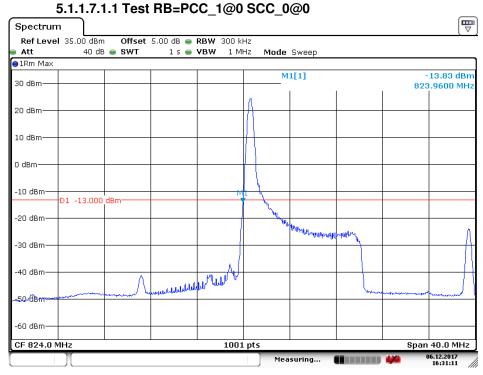
Report No.: SZEM1701001122301 Page: 49 of 72



5.1.1.6.2.4 Test RB= PCC_50@0 SCC_25@0

Date: 6.DEC.2017 15:42:50

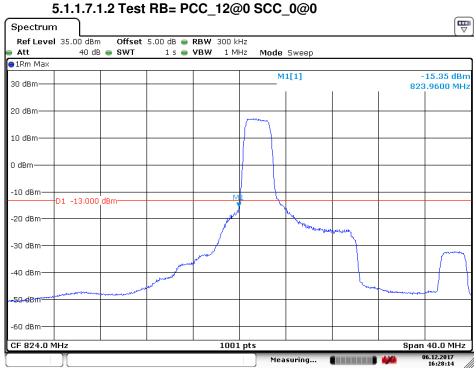
5.1.1.7 Test Mode = LTE/TM1 10+10MHz 5.1.1.7.1 Test Channel = LCH



Date: 6.DEC.2017 16:31:11

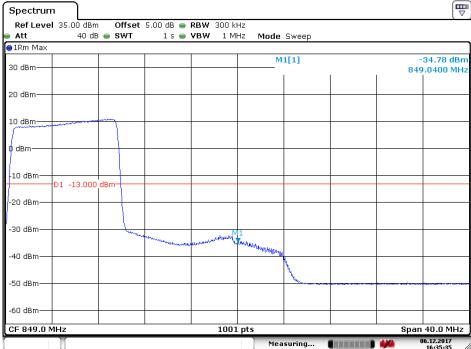


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Date: 6.DEC.2017 16:28:14

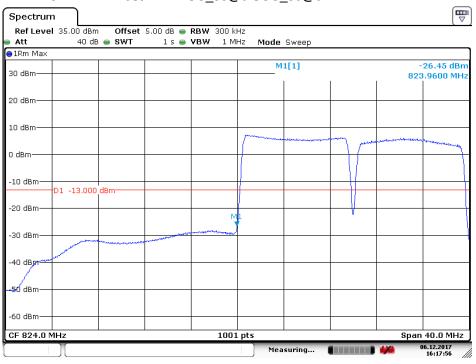




Date: 6.DEC.2017 16:35:36



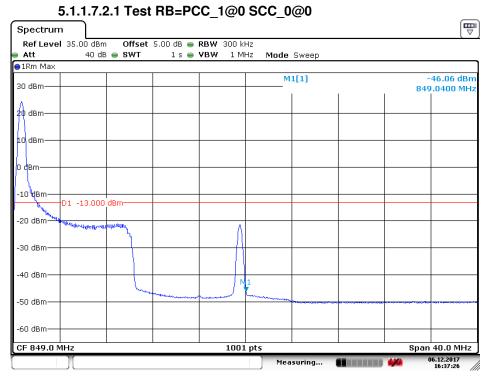
Report No.: SZEM1701001122301 Page: 51 of 72



5.1.1.7.1.4 Test RB= PCC_50@0 SCC_50@0

Date: 6.DEC.2017 16:17:57

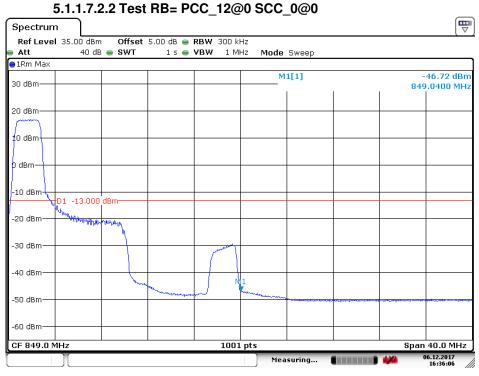
5.1.1.7.2 Test Channel = HCH



Date: 6.DEC.2017 16:37:26



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Date: 6.DEC.2017 16:36:06

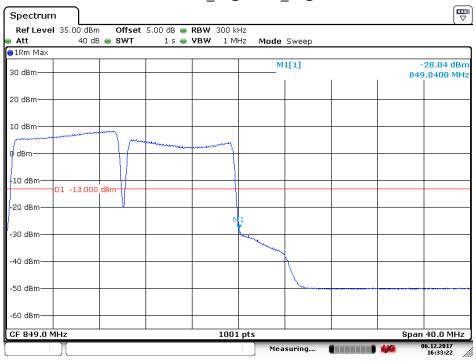


5.1.1.7.2.3 Test RB= PCC_50@0 SCC_0@0

Date: 6.DEC.2017 16:35:36



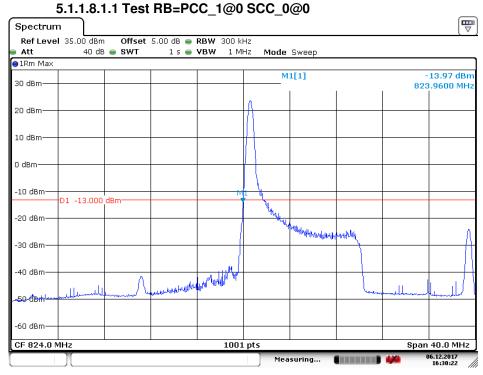
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5.1.1.7.2.4 Test RB= PCC_50@0 SCC_50@0

Date: 6.DEC.2017 16:33:22

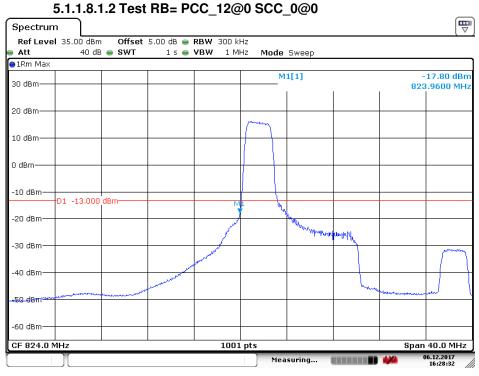
5.1.1.8 Test Mode = LTE/TM2 10+10MHz 5.1.1.8.1 Test Channel = LCH



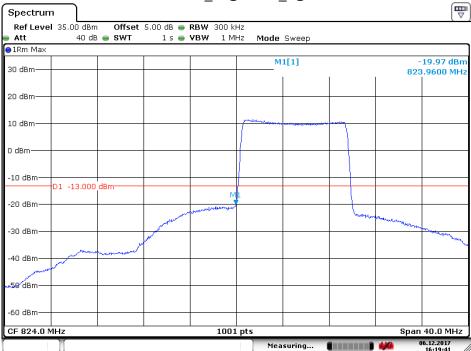
Date: 6.DEC.2017 16:30:22



Report No.: SZEM1701001122301 Page: 54 of 72



Date: 6.DEC.2017 16:28:32

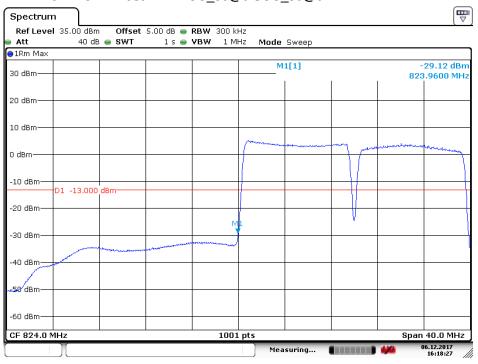


5.1.1.8.1.3 Test RB= PCC_50@0 SCC_0@0

Date: 6.DEC.2017 16:19:42



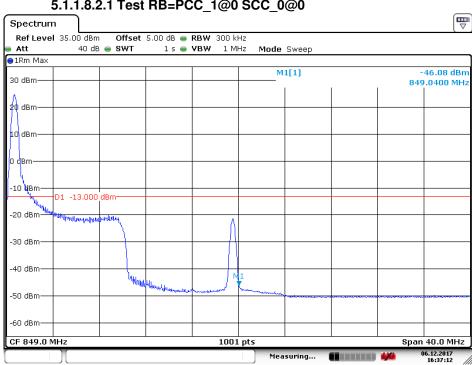
Report No.: SZEM1701001122301 55 of 72 Page:



5.1.1.8.1.4 Test RB= PCC_50@0 SCC_50@0

Date: 6.DEC.2017 16:18:28



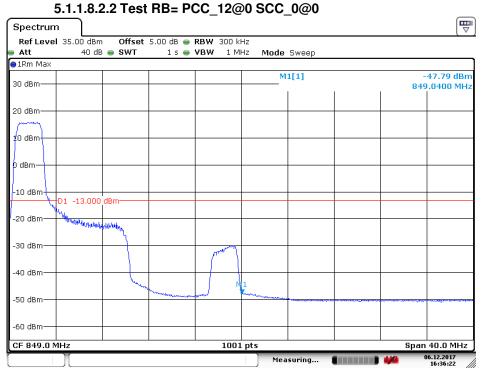


5.1.1.8.2.1 Test RB=PCC 1@0 SCC 0@0

Date: 6 DEC 2017 16:37:12



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Date: 6.DEC.2017 16:36:23

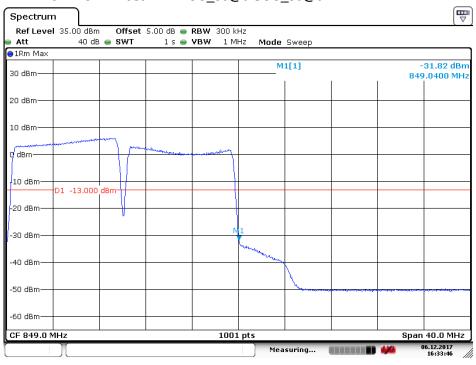


5.1.1.8.2.3 Test RB= PCC_50@0 SCC_0@0

Date: 6.DEC.2017 16:35:19



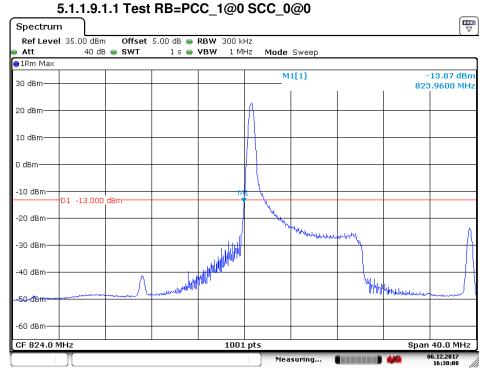
Report No.: SZEM1701001122301 Page: 57 of 72



5.1.1.8.2.4 Test RB= PCC_50@0 SCC_50@0

Date: 6.DEC.2017 16:33:46

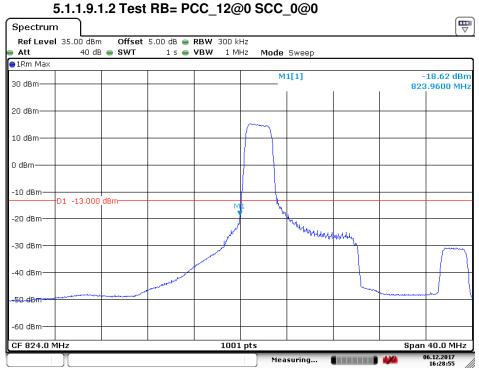
5.1.1.9 Test Mode = LTE/TM3 10+10MHz 5.1.1.9.1 Test Channel = LCH



Date: 6.DEC.2017 16:30:08



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Date: 6.DEC.2017 16:28:55

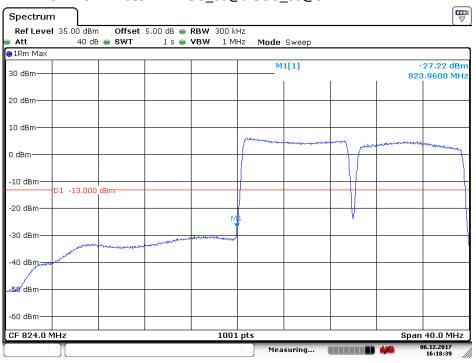


5.1.1.9.1.3 Test RB= PCC_50@0 SCC_0@0

Date: 6.DEC.2017 16:19:15



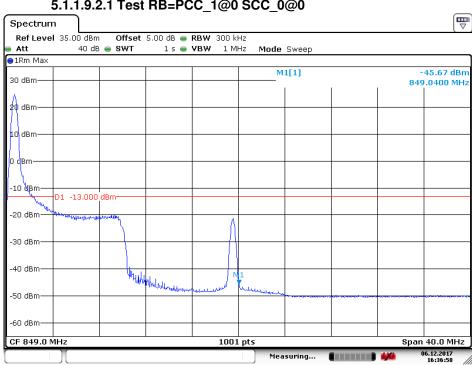
Report No.: SZEM1701001122301 59 of 72 Page:



5.1.1.9.1.4 Test RB= PCC_50@0 SCC_50@0

Date: 6.DEC.2017 16:18:40



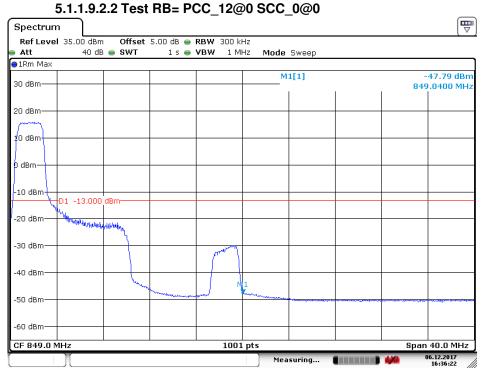


5.1.1.9.2.1 Test RB=PCC 1@0 SCC 0@0

Date: 6 DEC 2017 16:36:58



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Date: 6.DEC.2017 16:36:23

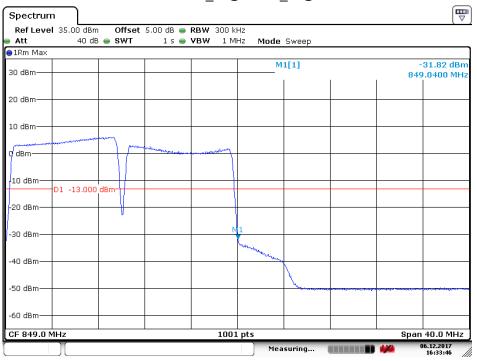


5.1.1.9.2.3 Test RB= PCC_50@0 SCC_0@0

Date: 6.DEC.2017 16:35:19



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5.1.1.9.2.4 Test RB= PCC_50@0 SCC_50@0

Date: 6.DEC.2017 16:33:46



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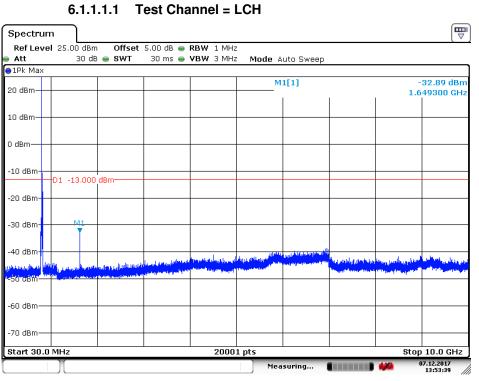
6 Spurious Emission at Antenna Terminal

Test Mode = LTE / TM1 5+10MHz

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

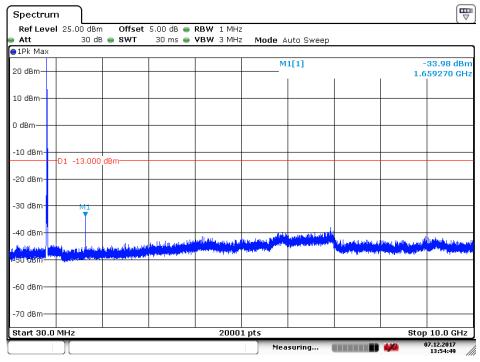
6.1.1.1



Date: 7.DEC.2017 13:53:40



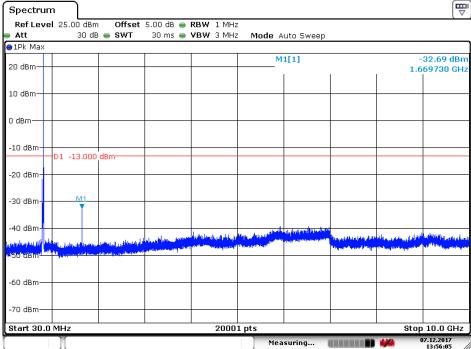
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6.1.1.1.2 Test Channel = MCH

Date: 7.DEC.2017 13:54:50

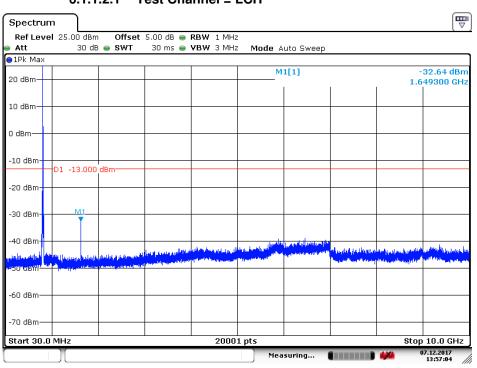




Date: 7.DEC.2017 13:56:05



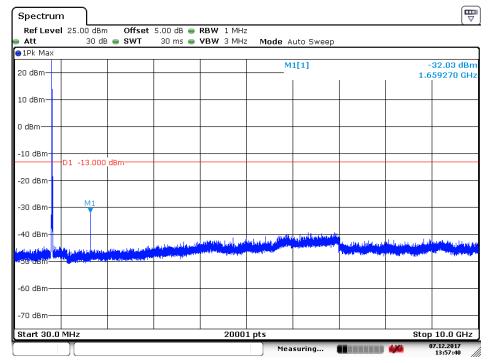
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6.1.1.2 Test Mode = LTE / TM1 10+5MHz 6.1.1.2.1 Test Channel = LCH

Date: 7.DEC.2017 13:57:04

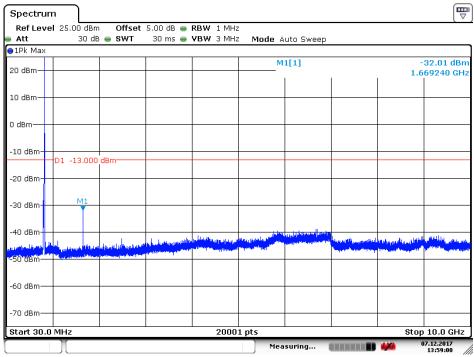




Date: 7.DEC.2017 13:57:40



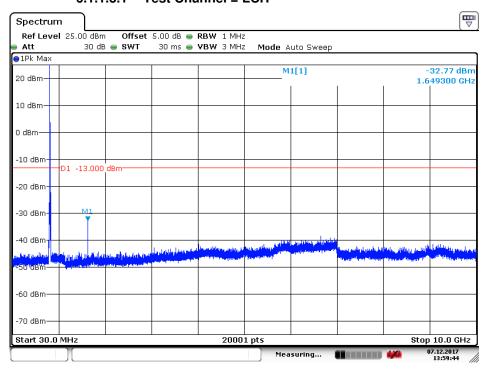
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6.1.1.2.3 Test Channel = HCH

Date: 7.DEC.2017 13:59:00

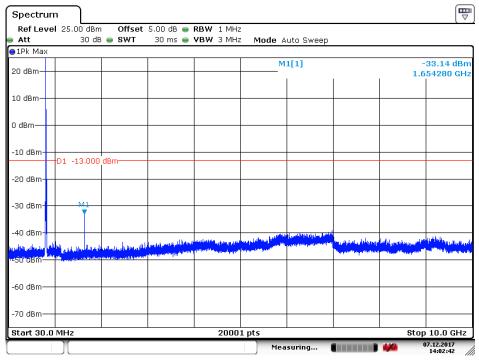
6.1.1.3 Test Mode = LTE / TM1 10+10MHz 6.1.1.3.1 Test Channel = LCH



Date: 7.DEC.2017 13:59:45



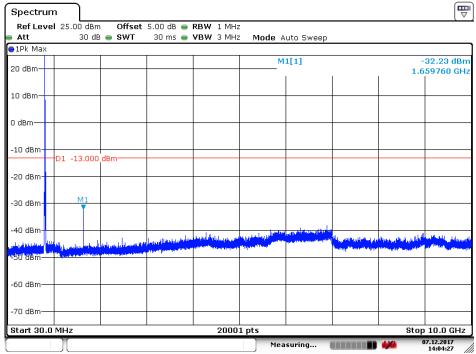
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6.1.1.3.2 Test Channel = MCH

Date: 7.DEC.2017 14:02:42





Date: 7.DEC.2017 14:04:28



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7 Field Strength of Spurious Radiation

7.1 For LTE

7.1.1 Test Band = LTE band5

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

Diversity antenna

7.1.1.1.1	Test Channel = LC	H		
Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1656.500	-64.95	-13.00	-51.95	Vertical
2725.000	-57.82	-13.00	-44.82	Vertical
3812.662	-67.87	-13.00	-54.87	Vertical
1684.500	-64.63	-13.00	-51.63	Horizontal
2741.000	-57.44	-13.00	-44.44	Horizontal
4118.325	-67.43	-13.00	-54.43	Horizontal

7.1.1.1.2 Test Channel = MCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization			
1024.500	-63.80	-13.00	-50.80	Vertical			
3381.225	-68.98	-13.00	-55.98	Vertical			
5620.800	-66.50	-13.00	-53.50	Vertical			
1192.500	-67.12	-13.00	-54.12	Horizontal			
2780.500	-57.16	-13.00	-44.16	Horizontal			
4879.312	-66.42	-13.00	-53.42	Horizontal			

7.1.1.1.3 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1065.000	-63.68	-13.00	-50.68	Vertical
2881.000	-57.15	-13.00	-44.15	Vertical
4968.037	-66.49	-13.00	-53.49	Vertical
1103.000	-66.55	-13.00	-53.55	Horizontal
4206.562	-67.08	-13.00	-54.08	Horizontal
6093.675	-65.59	-13.00	-52.59	Horizontal

Main antenna

7.1.1.1.4	Test Channel = LC	н		
Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1649.000	-63.34	-13.00	-50.34	Vertical
2782.500	-57.69	-13.00	-44.69	Vertical
4381.087	-67.11	-13.00	-54.11	Vertical
1649.000	-62.03	-13.00	-49.03	Horizontal
2812.000	-56.85	-13.00	-43.85	Horizontal
3817.050	-67.99	-13.00	-54.99	Horizontal



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7.1.1.1.5	Test Channel = MC	СН		
Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
1623.500	-65.24	-13.00	-52.24	Vertical
2799.000	-57.36	-13.00	-44.36	Vertical
5034.337	-66.44	-13.00 -53.44		Vertical
1755.000	-53.67	-13.00	-40.67	Horizontal
2800.000	-56.84	-13.00	-43.84	Horizontal
4273.350	-66.70	-13.00	-53.70	Horizontal

7.1.1.1.6 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization		
1763.500	-54.83	-13.00	-41.83	Vertical		
2662.500	-57.43	43 -13.00 -44.43		.43 -13.00 -44.43		Vertical
4977.787	-66.51	-13.00	-53.51	Vertical		
1753.000	-53.34	-13.00	-40.34	Horizontal		
2684.000	-57.46	-13.00	-44.46	Horizontal		
4203.150	-67.12	-13.00	-54.12	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	-2.36	-0.00285	PASS
		LCH	TN	VN	1.76	0.00212	PASS
				VH	-2.73	-0.00329	PASS
				VL	-4.59	-0.00552	PASS
	LTE/TM1 10+10MHz	MCH	TN	VN	-2.80	-0.00337	PASS
				VH	1.87	0.00225	PASS
				VL	-5.32	-0.00638	PASS
		HCH	TN	VN	-4.55	-0.00545	PASS
				VH	-7.83	-0.00939	PASS
				VL	-2.48	-0.00299	PASS
	LTE/TM2 10+10MHz	LCH	TN	VN	-4.32	-0.00521	PASS
				VH	-3.17	-0.00382	PASS
		МСН	TN	VL	1.58	0.00190	PASS
LTE band5				VN	-3.25	-0.00391	PASS
				VH	3.70	0.00445	PASS
		нсн	TN	VL	-2.37	-0.00284	PASS
				VN	-3.48	-0.00417	PASS
				VH	5.42	0.00650	PASS
				VL	3.51	0.00423	PASS
		LCH	TN	VN	2.93	0.00353	PASS
				VH	4.24	0.00511	PASS
				VL	5.44	0.00654	PASS
	LTE/TM3 10+10MHz	MCH	TN	VN	3.18	0.00382	PASS
				VH	4.50	0.00541	PASS
				VL	-3.40	-0.00408	PASS
		HCH	TN	VN	-6.43	-0.00771	PASS
				VH	-3.68	-0.00441	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
				-30	-5.38	-0.00649	PASS
				-20	-2.32	-0.00280	PASS
				-10	-2.47	-0.00298	PASS
				0	1.27	0.00153	PASS
		LCH	VN	10	1.20	0.00145	PASS
				20	0.55	0.00066	PASS
				30	2.68	0.00323	PASS
				40	-2.10	-0.00253	PASS
				50	-4.02	-0.00485	PASS
				-30	-5.04	-0.00606	PASS
		МСН	VN	-20	-3.10	-0.00373	PASS
				-10	-3.30	-0.00397	PASS
				0	-1.25	-0.00150	PASS
LTE band5	LTE/TM1 10+10MHz			10	-2.07	-0.00249	PASS
				20	-1.66	-0.00200	PASS
				30	-3.99	-0.00480	PASS
				40	-4.83	-0.00581	PASS
				50	-5.92	-0.00712	PASS
				-30	-6.06	-0.00727	PASS
				-20	-5.24	-0.00628	PASS
				-10	3.69	0.00442	PASS
				0	-2.43	-0.00291	PASS
		HCH	VN	10	2.24	0.00269	PASS
				20	-1.39	-0.00167	PASS
				30	-2.42	-0.00290	PASS
				40	-4.39	-0.00526	PASS
				50	-3.84	-0.00460	PASS



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Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
				-30	-4.30	-0.00519	PASS
				-20	-2.42	-0.00292	PASS
				-10	1.22	0.00147	PASS
				0	2.41	0.00291	PASS
		LCH	VN	10	2.00	0.00241	PASS
				20	-1.43	-0.00172	PASS
				30	-3.03	-0.00366	PASS
				40	2.27	0.00274	PASS
				50	-4.08	-0.00492	PASS
	LTE/TM2 10+10MHz			-30	-1.32	-0.00159	PASS
		МСН	VN	-20	-2.66	-0.00320	PASS
				-10	-2.14	-0.00257	PASS
				0	-1.83	-0.00220	PASS
LTE band5				10	-2.92	-0.00351	PASS
				20	1.35	0.00162	PASS
				30	-2.14	-0.00257	PASS
				40	-6.58	-0.00791	PASS
				50	-4.49	-0.00540	PASS
				-30	-3.50	-0.00420	PASS
				-20	-4.33	-0.00519	PASS
				-10	2.25	0.00270	PASS
				0	-3.40	-0.00408	PASS
		HCH	VN	10	2.46	0.00295	PASS
				20	-1.53	-0.00183	PASS
				30	-2.32	-0.00278	PASS
				40	-3.90	-0.00468	PASS
				50	-4.11	-0.00493	PASS



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Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
				-30	-3.57	-0.00431	PASS
				-20	-2.43	-0.00293	PASS
				-10	1.22	0.00147	PASS
				0	2.41	0.00291	PASS
		LCH	VN	10	1.76	0.00212	PASS
				20	-0.43	-0.00052	PASS
				30	-3.03	-0.00366	PASS
				40	2.27	0.00274	PASS
				50	-4.85	-0.00585	PASS
	LTE/TM3 10+10MHz			-30	-3.32	-0.00397	PASS
		МСН	VN	-20	-2.66	-0.00318	PASS
				-10	-2.14	-0.00256	PASS
				0	-1.83	-0.00219	PASS
LTE band5				10	-0.72	-0.00086	PASS
				20	1.33	0.00159	PASS
				30	-2.24	-0.00268	PASS
				40	-6.58	-0.00787	PASS
				50	-5.49	-0.00656	PASS
				-30	-3.04	-0.00360	PASS
				-20	-4.69	-0.00556	PASS
				-10	2.49	0.00295	PASS
				0	-3.46	-0.00410	PASS
		HCH	VN	10	2.46	0.00291	PASS
				20	-1.93	-0.00229	PASS
				30	-3.32	-0.00393	PASS
				40	-5.70	-0.00675	PASS
				50	-4.32	-0.00512	PASS

The End