

Report No.: SZEM1701001110301

Page: 1 of 29

Appendix B

CDMA BC0/BC1



Report No.: SZEM1701001110301

Page

Page: 2 of 29

CONTENT

1	EFFE(CTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA	3
2	PEAK.	-TO-AVERAGE RATIO	4
	2.1 F	For CDMA	5
	2.1.1	Test Band = CDMA BC0	
	2.1.2	Test Band = CDMA BC1	
3	MODL	JLATION CHARACTERISTICS	8
	3.1 F	For CDMA	8
	3.1.1	Test Band = CDMA BC0	
	3.1.2	Test Band = CDMA BC1	
4	BAND	WIDTH	10
	4.1 F	FOR CDMA	11
	4.1.1	Test Band = CDMA BC0	
	4.1.2	Test Band = CDMA BC1	12
5	BAND	EDGES COMPLIANCE	14
	5.1 F	For CDMA	14
	5.1.1	Test Band = CDMA BC0	14
	5.1.2	Test Band = CDMA BC1	15
6	SPUR	IOUS EMISSION AT ANTENNA TERMINAL	17
	6.1 F	For CDMA	17
	6.1.1	Test Band = CDMA BC0	17
	6.1.2	Test Band = CDMA BC1	20
7	FIELD	STRENGTH OF SPURIOUS RADIATION	25
	7.1 F	For CDMA	25
	7.1.1	Test Band = CDMA BC0	25
	7.1.2	Test Band = CDMA BC1	26
8	FREQ	UENCY STABILITY	27
	8.1 F	FREQUENCY ERROR VS. VOLTAGE	27
	8.2 F	FREQUENCY ERROR VS. TEMPERATURE	28



Report No.: SZEM1701001110301

Page: 3 of 29

1 Effective (Isotropic) Radiated Power Output Data

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	EIRP[dB]	Limit[dBm]	Verdict
	CDMA /TM1	LCH	21.74	20.94	33	PASS
CDMA BC1		MCH	21.59	20.79	33	PASS
		HCH	21.20	20.40	33	PASS

Note:

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

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

b: SGP=Signal Generator Level

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

Detector: RMS

Test Band	Test Mode	Test Channel	Measured[dB]	ERP[dB]	Limit[dBm]	Verdict
	CDMA /TM1	LCH	21.57	20.57	38.45	PASS
CDMA BC0		MCH	21.54	20.54	38.45	PASS
		HCH	21.46	20.46	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 x RBW.

Detector: RMS



Report No.: SZEM1701001110301

Page: 4 of 29

2 Peak-to-Average Ratio

Part I - Test Results

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict					
		LCH	5.30	13	PASS					
BC0	CDMA /TM1	MCH	5.71	13	PASS					
		HCH	5.57	13	PASS					
		LCH	5.83	13	PASS					
BC1	CDMA /TM1	MCH	6.12	13	PASS					
		HCH	5.48	13	PASS					



Report No.: SZEM1701001110301

Page: 5 of 29

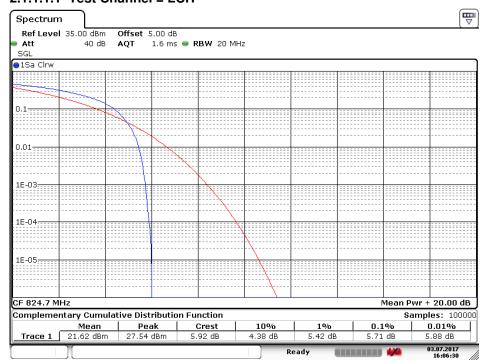
Part II - Test Plots

2.1 For CDMA

2.1.1 Test Band = CDMA BC0

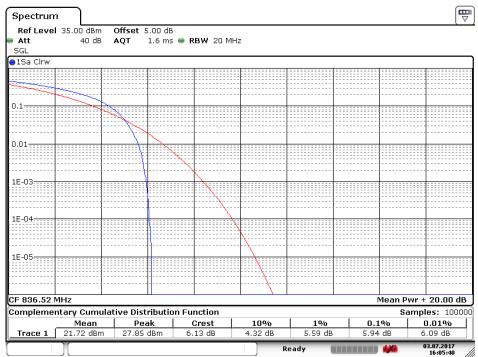
2.1.1.1 Test Mode = CDMA /TM1

2.1.1.1.1 Test Channel = LCH



Date: 3.JUL.2017 16:06:31

2.1.1.1.2 Test Channel = MCH



Date: 3.JUL.2017 16:05:40

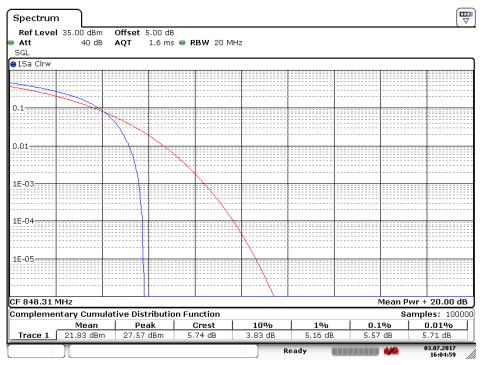
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Report No.: SZEM1701001110301

Page: 6 of 29

2.1.1.1.3 Test Channel = HCH

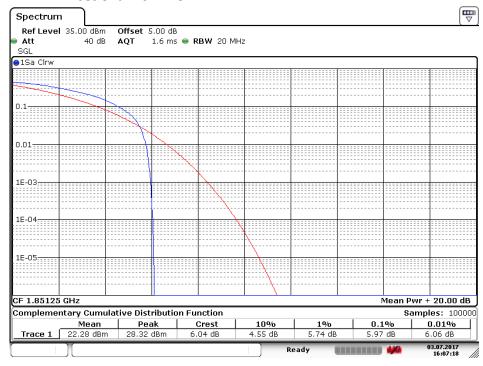


Date: 3.JUL.2017 16:04:59

2.1.2 Test Band = CDMA BC1

2.1.2.1 Test Mode = CDMA /TM1

2.1.2.1.1 Test Channel = LCH



Date: 3.JUL.2017 16:07:17

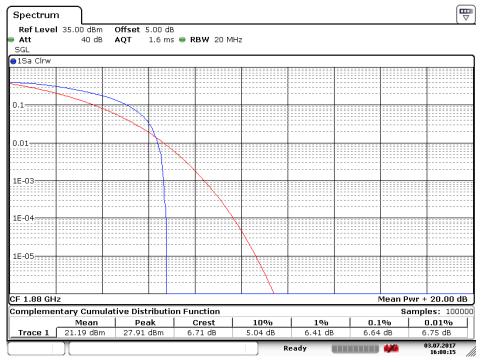
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Report No.: SZEM1701001110301

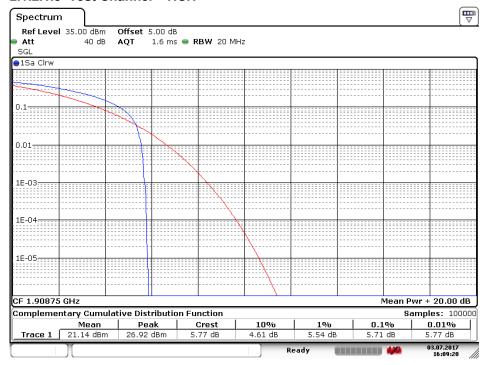
Page: 7 of 29

2.1.2.1.2 Test Channel = MCH



Date: 3.JUL.2017 16:08:15

2.1.2.1.3 Test Channel = HCH



Date: 3.JUL.2017 16:09:20



Report No.: SZEM1701001110301

Page: 8 of 29

3 Modulation Characteristics

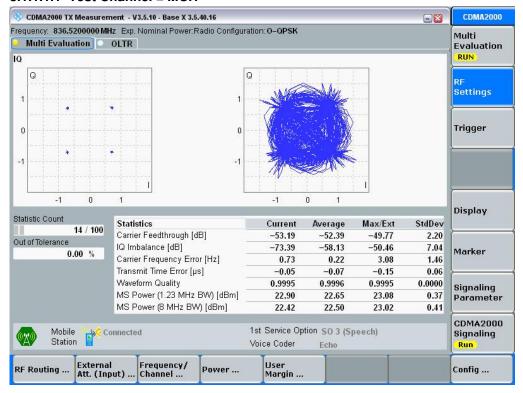
Part I - Test Plots

3.1 For CDMA

3.1.1 Test Band = CDMA BC0

3.1.1.1 Test Mode = CDMA /TM1

3.1.1.1.1 Test Channel = MCH





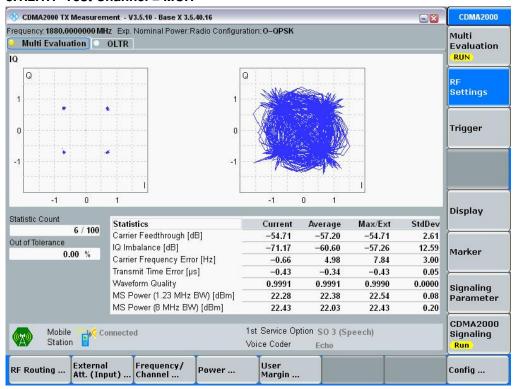
Report No.: SZEM1701001110301

Page: 9 of 29

3.1.2 Test Band = CDMA BC1

3.1.2.1 Test Mode = CDMA /TM1

3.1.2.1.1 Test Channel = MCH





Report No.: SZEM1701001110301

Page: 10 of 29

4 Bandwidth

Part I - Test Results

Test Band	Test Mode	Test Channel	Occupied Bandwidth [MHz]	Emission Bandwidth [MHz]	Verdict
		LCH	1.27	1.43	PASS
CDMA BC0	CDMA/TM1	MCH	1.28	1.43	PASS
		HCH	1.28	1.43	PASS
		LCH	1.29	1.47	PASS
CDMA BC1	CDMA/TM1	MCH	1.28	1.44	PASS
		HCH	1.28	1.45	PASS



Report No.: SZEM1701001110301

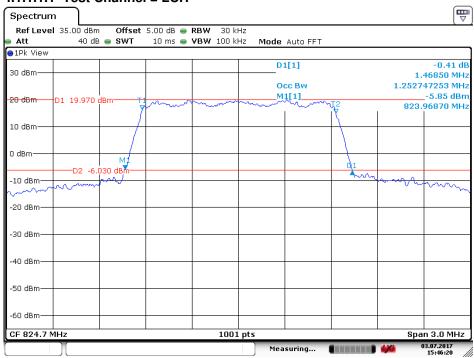
Page: 11 of 29

4.1 For CDMA

4.1.1 Test Band = CDMA BC0

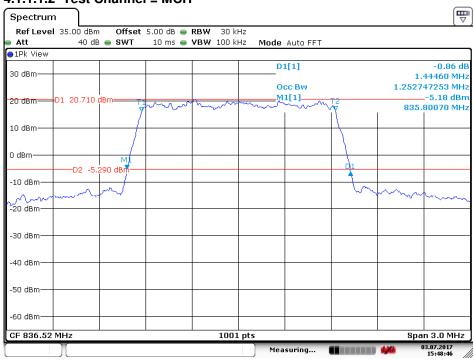
4.1.1.1 Test Mode = CDMA /TM1

4.1.1.1.1 Test Channel = LCH



Date: 3.JUL.2017 15:46:20

4.1.1.1.2 Test Channel = MCH



Date: 3.JUL.2017 15:48:46

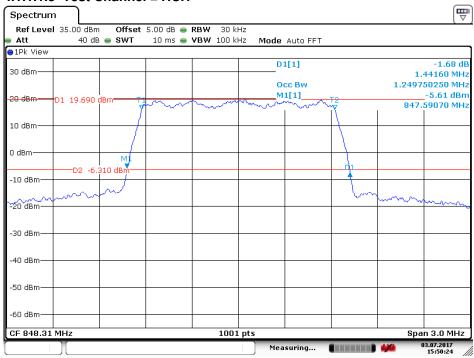
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Report No.: SZEM1701001110301

Page: 12 of 29

4.1.1.1.3 Test Channel = HCH

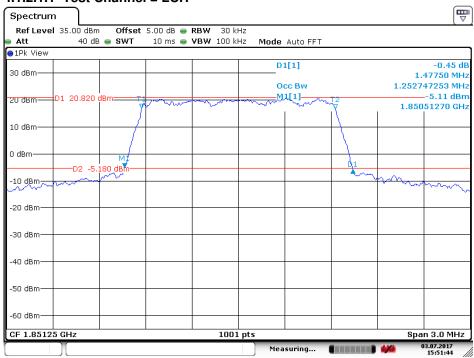


Date: 3.JUL.2017 15:50:24

4.1.2 Test Band = CDMA BC1

4.1.2.1 Test Mode = CDMA /TM1

4.1.2.1.1 Test Channel = LCH



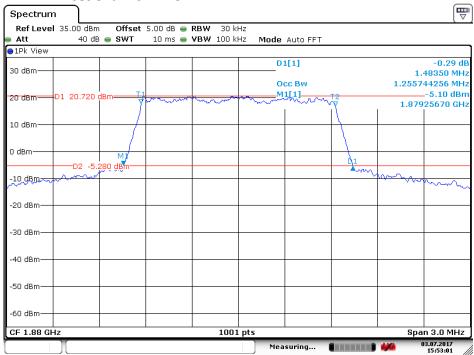
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Report No.: SZEM1701001110301

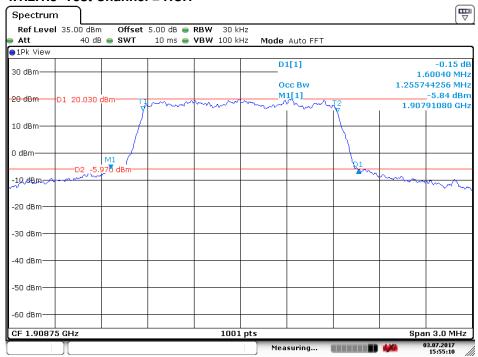
Page: 13 of 29

4.1.2.1.2 Test Channel = MCH



Date: 3.JUL.2017 15:53:01

4.1.2.1.3 Test Channel = HCH



Date: 3.JUL.2017 15:55:10



Report No.: SZEM1701001110301

Page: 14 of 29

5 Band Edges Compliance

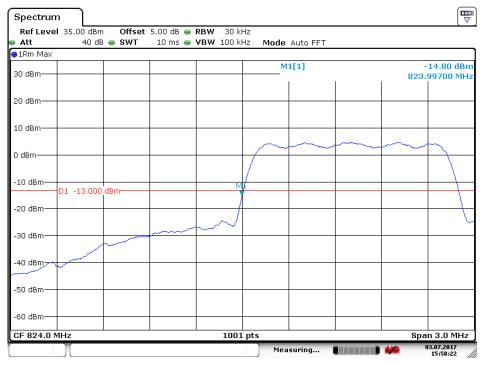
Part I - Test Plots

5.1 For CDMA

5.1.1 Test Band = CDMA BC0

5.1.1.1 Test Mode = CDMA /TM1

5.1.1.1.1 Test Channel = LCH



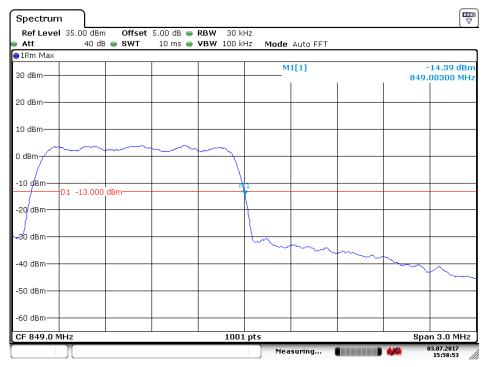
Date: 3.JUL.2017 15:58:23



Report No.: SZEM1701001110301

Page: 15 of 29

5.1.1.1.2 Test Channel = HCH

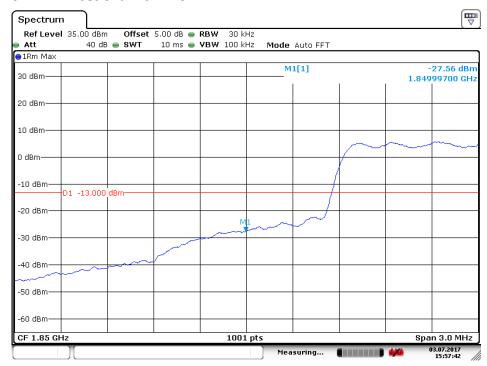


Date: 3.JUL.2017 15:58:53

5.1.2 Test Band = CDMA BC1

5.1.2.1 Test Mode = CDMA /TM1

5.1.2.1.1 Test Channel = LCH



Date: 3.JUL.2017 15:57:42



Report No.: SZEM1701001110301

Page: 16 of 29

5.1.2.1.2 Test Channel = HCH



Date: 3.JUL.2017 15:56:57



Report No.: SZEM1701001110301

Page: 17 of 29

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 = 4 * (Span / RBW) with k = 4 * (Span / RBW).

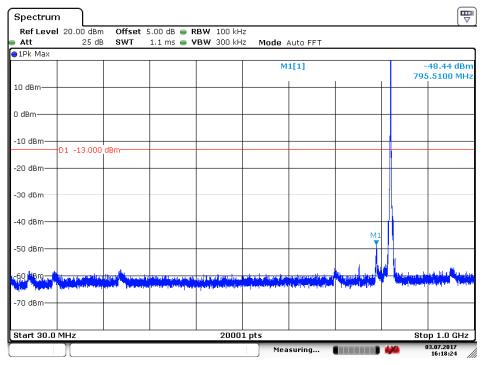
Part I - Test Plots

6.1 For CDMA

6.1.1 Test Band = CDMA BC0

6.1.1.1 Test Mode = CDMA /TM1

6.1.1.1.1 Test Channel = LCH

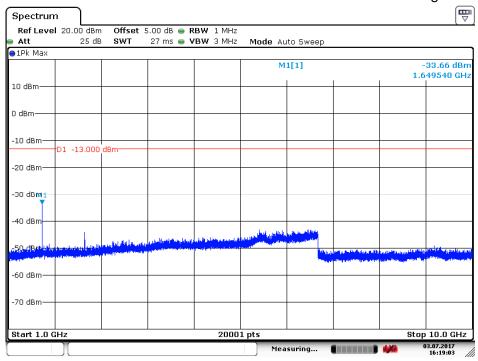


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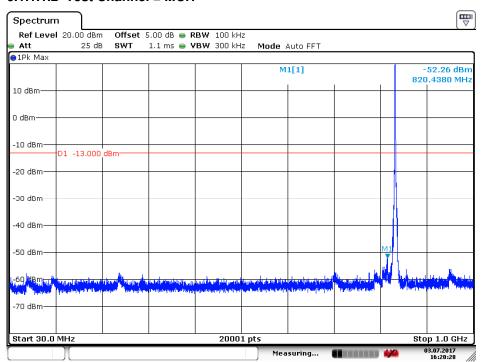
Report No.: SZEM1701001110301

Page: 18 of 29



Date: 3.JUL.2017 16:19:03

6.1.1.1.2 Test Channel = MCH

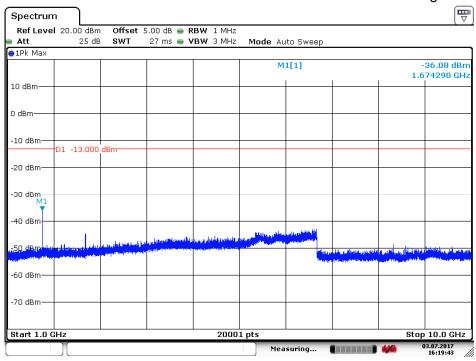


Date: 3.JUL.2017 16:20:28



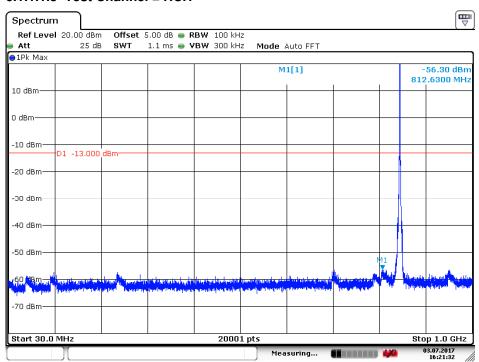
Report No.: SZEM1701001110301

Page: 19 of 29



Date: 3.JUL.2017 16:19:43

6.1.1.1.3 Test Channel = HCH

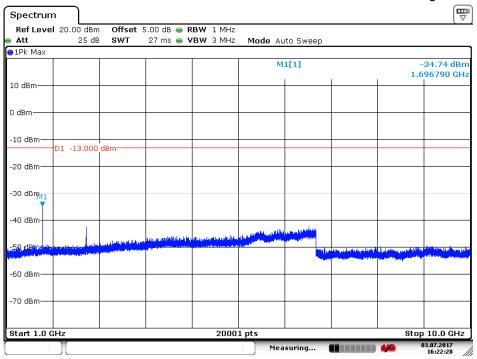


Date: 3.JUL.2017 16:21:32



Report No.: SZEM1701001110301

Page: 20 of 29

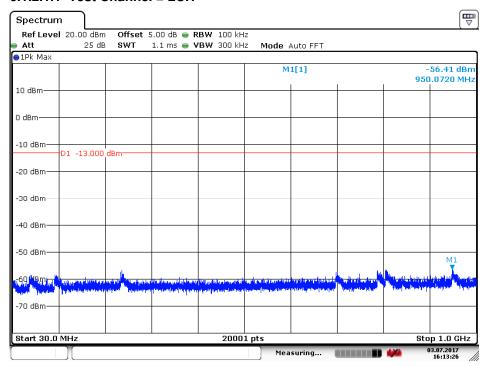


Date: 3.JUL.2017 16:22:29

6.1.2 Test Band = CDMA BC1

6.1.2.1 Test Mode = CDMA /TM1

6.1.2.1.1 Test Channel = LCH

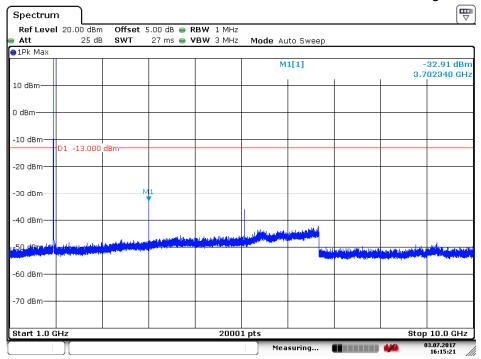


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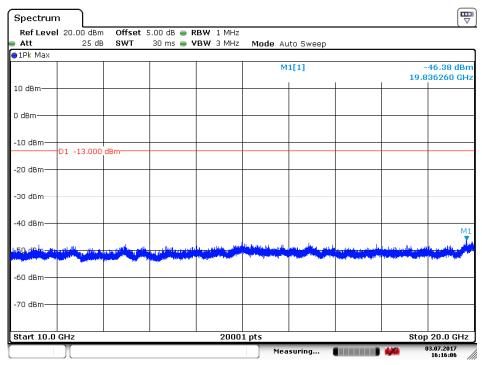


Report No.: SZEM1701001110301

Page: 21 of 29



Date: 3.JUL.2017 16:15:21



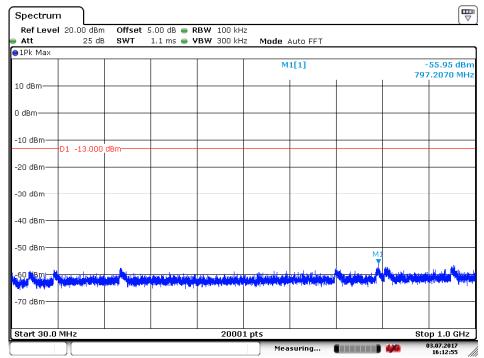
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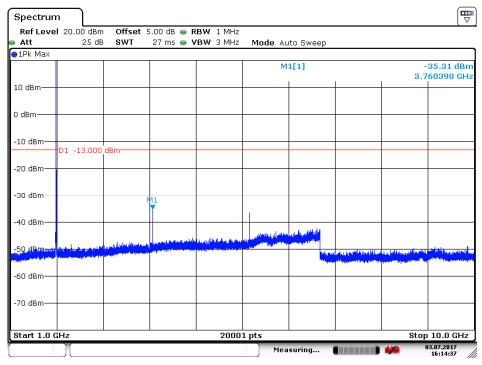
Report No.: SZEM1701001110301

Page: 22 of 29

6.1.2.1.2 Test Channel = MCH



Date: 3.JUL.2017 16:12:55

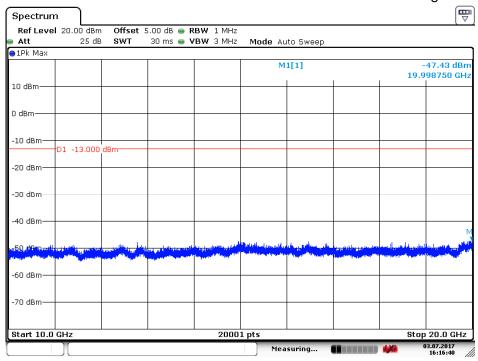


Date: 3.JUL.2017 16:14:37



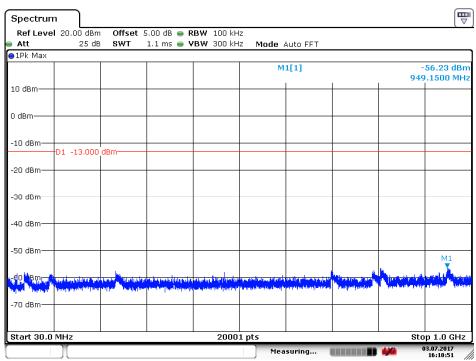
Report No.: SZEM1701001110301

Page: 23 of 29



Date: 3.JUL.2017 16:16:41

6.1.2.1.3 Test Channel = HCH

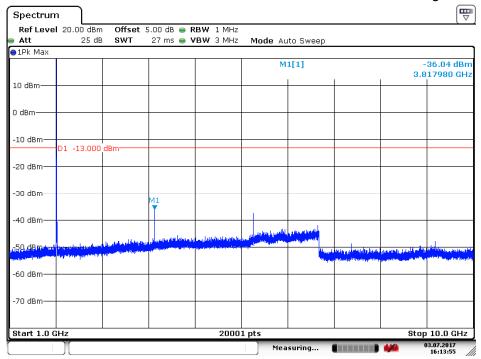


Date: 3.JUL.2017 16:10:52

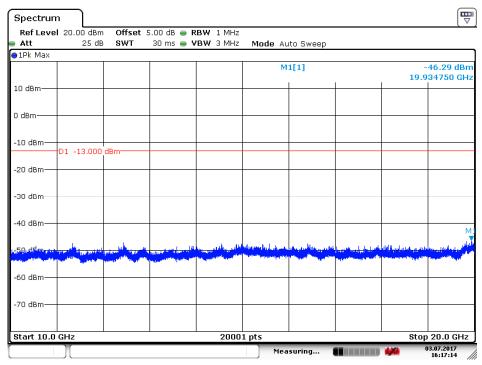


Report No.: SZEM1701001110301

Page: 24 of 29



Date: 3.JUL.2017 16:13:56



Date: 3.JUL.2017 16:17:14



Report No.: SZEM1701001110301

Page: 25 of 29

7 Field Strength of Spurious Radiation

Part I - Test Plots

7.1 For CDMA

7.1.1 Test Band = CDMA BC0

7.1.1.1 Test Mode = CDMA /TM1

7.1.1.1.1 Test Channel = HCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
39.900000	-67.91	-13.00	54.91	Vertical
73.250000	-68.10	-13.00	55.10	Vertical
165.100000	-68.63	-13.00	55.63	Vertical
1696.500000	-48.30	-13.00	35.30	Vertical
2545.000000	-54.00	-13.00	41.00	Vertical
3392.925000	-66.94	-13.00	53.94	Vertical
74.400000	-73.57	-13.00	60.57	Horizontal
165.000000	-73.61	-13.00	60.61	Horizontal
297.300000	-75.89	-13.00	62.89	Horizontal
1696.000000	-46.26	-13.00	33.26	Horizontal
2544.500000	-54.02	-13.00	41.02	Horizontal
3392.925000	-61.74	-13.00	48.74	Horizontal



Report No.: SZEM1701001110301

Page: 26 of 29

7.1.2 Test Band = CDMA BC1

7.1.2.1 Test Mode = LCH

Frequency (MHz)	Level (dBm)	Limit Line (dBm)	Over Limit (dB)	Polarization
38.850000	-58.30	-13.00	45.30	Vertical
165.150000	-59.91	-13.00	46.91	Vertical
296.600000	-60.09	-13.00	47.09	Vertical
1271.000000	-48.43	-13.00	35.43	Vertical
3702.000000	-49.21	-13.00	36.21	Vertical
5553.525000	-45.32	-13.00	32.32	Vertical
66.000000	-62.70	-13.00	49.70	Horizontal
166.150000	-62.10	-13.00	49.10	Horizontal
299.300000	-65.53	-13.00	52.53	Horizontal
3702.487500	-42.16	-13.00	29.16	Horizontal
5553.037500	-42.44	-13.00	29.44	Horizontal
7404.075000	-46.90	-13.00	33.90	Horizontal

NOTE:

1) 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.



Report No.: SZEM1701001110301

Page: 27 of 29

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	3.25	0.00394	PASS					
		LCH	TN	VN	-0.38	-0.00046	PASS					
									VH	2.02	0.00245	PASS
				VL	4.83	0.00577	PASS					
CDMA BC0	CDMA/TM1	MCH	TN	VN	2.75	0.00329	PASS					
B00				VH	-1.37	-0.00164	PASS					
				VL	1.62	0.00191	PASS					
		HCH	TN	VN	-2.59	-0.00305	PASS					
				VH	-4.34	-0.00512	PASS					

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
				VL	-4.32	-0.00233	PASS		
	LCH	LCH	TN	VN	-1.54	-0.00083	PASS		
						VH	2.32	0.00125	PASS
CDMA						VL	-5.84	-0.00311	PASS
CDMA BC1	CDMA/TM1	MCH	TN	VN	1.66	0.00088	PASS		
ВСТ	501			VH	-0.75	-0.00040	PASS		
					VL	1.65	0.00086	PASS	
		HCH	TN	VN	-3.42	-0.00179	PASS		
				VH	3.44	0.00180	PASS		



Report No.: SZEM1701001110301

Page: 28 of 29

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	-4.63	-0.00561	PASS				
				-20	2.60	0.00315	PASS				
				-10	1.67	0.00202	PASS				
				0	-2.68	-0.00325	PASS				
		LCH	VN	10	3.56	0.00432	PASS				
				20	-4.80	-0.00582	PASS				
				30	1.60	0.00194	PASS				
				40	-2.03	-0.00246	PASS				
				50	-6.21	-0.00753	PASS				
				-30	-3.20	-0.00383	PASS				
	CDMA/TM1 MCF							-20	-5.08	-0.00607	PASS
		MCH	VN	-10	-1.39	-0.00166	PASS				
CDMA				0	-3.38	-0.00404	PASS				
BC0				10	1.37	0.00164	PASS				
ВОО				20	2.72	0.00325	PASS				
				30	1.61	0.00192	PASS				
				40	3.23	0.00386	PASS				
				50	-4.35	-0.00520	PASS				
				-30	-2.17	-0.00256	PASS				
				-20	3.68	0.00434	PASS				
				-10	2.55	0.00301	PASS				
				0	-5.52	-0.00651	PASS				
		HCH	VN	10	1.32	0.00156	PASS				
				20	-2.78	-0.00328	PASS				
				30	3.28	0.00387	PASS				
				40	-4.63	-0.00546	PASS				
				50	-2.50	-0.00295	PASS				



Report No.: SZEM1701001110301

Page: 29 of 29

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict				
				-30	-4.49	-0.00243	PASS				
				-20	1.93	0.00104	PASS				
				-10	-5.97	-0.00322	PASS				
				0	0.59	0.00032	PASS				
		LCH	VN	10	-4.65	-0.00251	PASS				
				20	-4.11	-0.00222	PASS				
				30	-3.96	-0.00214	PASS				
				40	-6.72	-0.00363	PASS				
				50	-2.74	-0.00148	PASS				
				-30	-1.94	-0.00103	PASS				
				-20	3.29	0.00175	PASS				
	LCDMA/TM1 L MCH			-10	-4.34	-0.00231	PASS				
CDMA					IA/TM1 MCH			0	1.68	0.00089	PASS
BC1		MCH	MCH	MCH		DMA/TM1 MCH	MCH VN	VN	10	-5.10	-0.00271
DO1				20	-3.43	-0.00182	PASS				
				30	-1.13	-0.00060	PASS				
				40	-2.25	-0.00120	PASS				
				50	-3.50	-0.00186	PASS				
				-30	-3.25	-0.00170	PASS				
				-20	-6.54	-0.00343	PASS				
				-10	-2.73	-0.00143	PASS				
				0	-5.34	-0.00280	PASS				
		HCH	VN	10	4.62	0.00242	PASS				
				20	-4.03	-0.00211	PASS				
				30	-3.22	-0.00169	PASS				
				40	-2.84	-0.00149	PASS				
				50	-5.27	-0.00276	PASS				

The End